

SOBRE A – ORIGINAL ROMACA INDUSTRIAL



Comité de Compras y Contrataciones
Consejo del Poder Judicial Dominicano
Referencia: **LPN-CPJ-35-2023**

Dirección: Av. Enrique Jiménez Moya, esq.
Juan de Dios Ventura Simó, núm. 1485,
Centro de los Héroes, de Constanza, Maimón
y Estero Hondo, Sto. Dgo., R.D.

Fax: 809-532-2906

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CONSEJO DEL PODER JUDICIAL DOMINICANO

LICITACIÓN PÚBLICA NACIONAL LPN-CPJ-35-2023 - ADQUISICIÓN E INSTALACIÓN DE ACONDICIONADORES DE AIRE EN LAS DIFERENTES DEPENDENCIAS DEL PODER JUDICIAL

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El Jefe



PRESENTACIÓN DE OFERTA

13 de febrero de 2024

Señores

CONSEJO DE PODER JUDICIAL

Nosotros, los suscritos, declaramos que:

- a. Hemos examinado y no tenemos reservas a el pliego de condiciones para el proceso de licitación pública nacional, para la *adquisición e instalación de acondicionadores de aire en las diferentes dependencias del Poder Judicial*, incluyendo las adendas realizadas a los mismos:
SIN ADENDAS.
- b. De conformidad con el pliego de condiciones y cronograma de ejecución, nos comprometemos a cumplir con los servicios conexos para la *adquisición e instalación de acondicionadores de aire en las diferentes dependencias del Poder Judicial*.
- c. Para este Procedimiento no somos partícipes en calidad de oferentes en más de una oferta, excepto en el caso de ofertas alternativas, de conformidad con el pliego de condiciones del proceso de licitación pública nacional.
- d. Nuestra firma, sus afiliadas o subsidiarias, incluyendo cualquier subcontratista o proveedor de cualquier parte del contrato, no han sido declarados inelegibles por el comprador para presentar ofertas.
- e. Entendemos que esta oferta, junto con su aceptación por escrito que se encuentra incluida en la notificación de adjudicación, constituirán una obligación contractual, hasta la preparación y ejecución del contrato formal.
- f. Entendemos que el comprador no está obligado a aceptar la oferta evaluada como la más baja ni ninguna otra de las ofertas que reciba.

EDGAR LÓPEZ en calidad de **GERENTE** debidamente autorizado para actuar en nombre y representación de **ROMACA INDUSTRIAL, S.A.**





Edgar López – Romaca Industrial





No. EXPEDIENTE

LPN-CPJ-35-2023

CONSEJO DEL PODER JUDICIAL
FORMULARIO DE INFORMACIÓN SOBRE EL OFERENTE

Fecha: 13/2/2024

1. Nombre/ Razón Social del Oferente: ROMACA INDUSTRIAL, S. A.
2. Si se trata de una asociación temporal o Consorcio, nombre jurídico de cada miembro: N/A
3. RNC/ Cédula/ Pasaporte del Oferente: 1-01-09203-3
4. RPE del Oferente: 496
5. Domicilio legal del Oferente: CALLE JOSE JOAQUIN PUELLO NO. 14, VILLA CONSUELO, SANTO DOMINGO, REPUBLICA DOMINICANA
6. Información del Representante autorizado del Oferente: Nombre: EDGAR LÓPEZ Dirección: CALLE JOSE JOAQUIN PUELLO NO. 14, VILLA CONSUELO, SANTO DOMINGO, REPUBLICA DOMINICANA Números de teléfono y fax: TEL: 809-688-8760; FAX: 809-689-4716 Dirección de correo electrónico: INFO@ROMACAINDUSTRIAL.COM



Edgar López

Registro de Proveedores del Estado (RPE)
Constancia de inscripción
RPE: 496

Fecha de registro: 29/11/2005

Razón social: Romaca Industrial, SA

Género: Masculino

Certificación MIPYME: No

Clasificación empresa:

Ocupación:

Domicilio: Calle José Joaquín Puello , 14, Villa Consuelo

10308 - REPÚBLICA DOMINICANA

Persona de contacto: Juan Luciano Machado Amadis

Fecha actualización: 30/3/2023

No. Documento: 101092033 - RNC

Provee: Servicios, Bienes

Registro de beneficiario: Sí

Estado: Activo

Motivo:

Observaciones:



Actividad comercial

CÓDIGO	DESCRIPCIÓN
4010000	Calefacción, ventilación y circulación del aire
4015000	Bombas y compresores industriales
4016000	Filtrado y purificación industrial
7210000	Servicios de mantenimiento y reparaciones de construcciones e instalaciones

Portal Transaccional - 31/3/2023 9:00:28 a.m.



eslgm

Registro de Proveedores del Estado (RPE) Constancia de inscripción RPE: 496

Fecha de registro: 29/11/2005

Razón social: Romaca Industrial, SA

Género: Masculino

Certificación MIPYME: No

Clasificación empresa:

Ocupación:

Domicilio: Calle José Joaquín Puello, 14, Villa Consuelo
10308 - REPÚBLICA DOMINICANA

Persona de contacto: Juan Luciano Machado Amadis

Fecha actualización: 30/3/2023

No. Documento: 101092033 - RNC

Provee: Servicios, Bienes

Registro de beneficiario: Sí

Estado: Activo

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40160000	Filtrado y purificación industrial
72100000	Servicios de mantenimiento y reparaciones de construcciones e instalaciones

Portal Transaccional - 31/3/2023 9:00:28 a.m.





República Dominicana
 MINISTERIO DE HACIENDA
 DIRECCIÓN GENERAL DE IMPUESTOS INTERNOS
 RNC: 4-01-50625-4
CERTIFICACIÓN

No. de Certificación: **C0224950687522**

La Dirección General de Impuestos Internos **CERTIFICA** que el o la contribuyente **ROMACA INDUSTRIAL S A**, RNC No. **101092033**, con su domicilio y asiento fiscal en **SANTO DOMINGO DE GUZMAN**, Administración Local **ADM LOCAL SAN CARLOS**, está al día en la declaración y/o pago de los impuestos correspondientes a las obligaciones fiscales siguientes:

Nombre del Impuesto	
• ANTICIPO IMPUESTO A LAS RENTAS	• ACTIVOS IMPONIBLES
• OTRAS RETENCIONES Y RETRIB COM	• IMPUESTO A LA RENTA SOCIEDADES
• RETENCIONES Y RETRIB. EN RENTA	• ANTICIPO RENTA 3 CUOTAS
• CONT RESIDUOS SOLIDOS IR2-ISFL	• IMP REVALORIZACION PATRIMONIAL
• ITBIS	

Dada en la OFICINA VIRTUAL, a los trece (13) días del mes de febrero del año dos mil veinticuatro (2024).

NOTAS:

- La presente certificación tiene una vigencia de treinta (30) días a partir de la fecha y se emite a solicitud del o de la contribuyente o su representante.
- Esta certificación no constituye un juicio de valor sobre la veracidad de las declaraciones presentadas por el o la contribuyente, ni excluye cualquier proceso de verificación posterior.
- Este documento no requiere firma ni sello.

	Código de firma: R1ER-R51T-FM71-7079-3397-7293 slug: sluyGZ7+HghDvuwWtd7JHROVx DGS - OFICINA VIRTUAL DIRECCION GENERAL DE IMPUESTOS INTERNOS DIRECCION GENERAL DE IMPUESTOS INTERNOS

R1ER-R51T-FM71-7079-3397-7293



Verifique la legitimidad de la presente certificación en <http://www.dgi.gov.do/verifica> o llamando a los teléfonos 809-689-3444 y 1-809-200-6060 (desde el interior sin cargos).





República Dominicana
MINISTERIO DE HACIENDA
DIRECCIÓN GENERAL DE IMPUESTOS INTERNOS
RNC: 4-01-50625-4

CERTIFICACIÓN

No. de Certificación: **C0224950687522**

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Nombre del Impuesto	
• ANTICIPO IMPUESTO A LAS RENTAS	• ACTIVOS IMPONIBLES
• OTRAS RETENCIONES Y RETRIB COM	• IMPUESTO A LA RENTA SOCIEDADES
• RETENCIONES Y RETRIB. EN RENTA	• ANTICIPO RENTA 3 CUOTAS
• CONT RESIDUOS SOLIDOS IR2-1SFL	• IMP REVALORIZACION PATRIMONIAL
• ITBIS	

Dada en la **OFICINA VIRTUAL**, a los **trece (13) días del mes de febrero del año dos mil veinticuatro (2024)**.

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- La presente certificación tiene una vigencia de treinta (30) días a partir de la fecha y se emite a solicitud del o de la contribuyente o su representante.
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- Este documento no requiere firma ni sello.



Verifique la legitimidad de la presente certificación en <http://www.dgi.gov.do/verifica> o llamando a los teléfonos 809-609-3444 y 1-809-200-0060 (desde el interior sin cargos).



e Luján



DECLARACIÓN JURADA

Quien suscribe, **EDGAR ALEJANDRO LÓPEZ SALCEDO** en calidad de **GERENTE**, actuando en nombre y representación de **ROMACA INDUSTRIAL, S.A.** registrada bajo el **RNC No. 1-01-09203-3** con domicilio en la **Calle Jose Joaquín Puello No. 14, Villa Consuelo, Distrito Nacional, República Dominicana**, conforme a los poderes que me fueran otorgados, en virtud de mis facultades estatutarias, por medio del presente documento, y en respuesta a los requerimientos de la convocatoria de licitación pública nacional núm. **LPN-CPJ-35-2023**, del Consejo del Poder Judicial para la **adquisición e instalación de acondicionadores de aire en las diferentes dependencias del Poder Judicial**, declaro **BAJO LAS MÁS SOLEMNE FE DEL JURAMENTO**, lo siguiente:

1. No nos encontramos en ninguna de las situaciones de prohibiciones de contratar establecidas en el artículo 14 del Reglamento de Compras de Bienes y Contrataciones de Obras y Servicios del Poder Judicial y el artículo 14 de la Ley 340-06 sobre Compras y Contrataciones del Estado.
2. Que ningún funcionario o empleado del Poder Judicial tiene interés pecuniario en la oferta.
3. Que no hay ningún acuerdo de parte de **ROMACA INDUSTRIAL** con persona particular, sociedad, corporación o firma para someter varias ofertas bajo nombres distintos.
4. Que ni nosotros ni nuestro personal directivo ha sido sometido ni condenado por un delito relativo a su conducta profesional o por declaración falsa o fraudulenta acerca de su idoneidad para firmar un contrato adjudicado.
5. Que no tenemos juicios pendientes con el Estado Dominicano.
6. Que no estamos sometidos a un proceso de quiebra ni liquidación.
7. Que estamos al día en el pago de nuestras obligaciones Fiscales de la Seguridad Social y Tributarias, conforme a la legislación vigente.
8. Que no estamos embargados; nuestros negocios no han sido puestos bajo administración judicial, y nuestras actividades comerciales no han sido suspendidas ni se ha iniciado procedimiento judicial en nuestra contra por cualquiera de los motivos precedentes;

La presente **DECLARACIÓN JURADA** ha sido realizada en la ciudad de Santo Domingo, República Dominicana a los 13 días del mes de febrero del año dos mil veinticuatro (2024).



Edgar López

Edgar López – Romaca Industrial



13 de febrero de 2024
Santo Domingo, R.D.

Señores
Consejo del Poder Judicial
Santo Domingo


Atención: Comité de Compras y Contrataciones

Distinguidos señores,

Tenemos a bien presentarles nuestra propuesta para el servicio de **ADQUISICION E INSTALACION DE ACONDICIONADORES DE AIRE EN LAS DIFERENTES DEPENDENCIAS DEL PODER JUDICIAL** bajo el No. de Expediente **LPN-CPJ-35-2023**. La propuesta incluye todos los requisitos expresados en el "Pliego de Condiciones" y las "Especificaciones Técnicas" elaborado por ustedes, ubicado en su portal web.

Queda de ustedes con sentimientos de alta estima y consideración,

Cordialmente,



Edgar López
Gerente Romaca Industrial





TESORERÍA DE LA SEGURIDAD SOCIAL

4-01-51707-8

CERTIFICACION No. 3996062

A QUIEN PUEDA INTERESAR

Por medio de la presente hacemos constar que en los registros de la Tesorería de la Seguridad Social, la empresa **ROMACA INDUSTRIAL S A** con RNC/Cédula **1-01-09203-3**, a la fecha no presenta balance con atrasos en los pagos de los aportes a la Seguridad Social.

La presente certificación no significa necesariamente que **ROMACA INDUSTRIAL S A** haya realizado sus pagos en los plazos que establece la Ley 87-01, ni constituye un juicio de valor sobre la veracidad de las declaraciones hechas por este empleador a la Tesorería de la Seguridad Social, ni le exime de cualquier verificación posterior.

Esta certificación no requiere firma ni sello, tiene una vigencia de 30 días a partir de la fecha y se expide **totalmente gratis sin costo alguno** a solicitud de la parte interesada.

Dado en la ciudad de Santo Domingo, Republica Dominicana, a los 13 dias del mes de Febrero del año 2024.

Para verificar la autenticidad de esta certificación dirijase a la siguiente dirección:

<https://suir.gob.do/sys/VerificarCertificacion.aspx>

Datos de verificación:

- Código de firma digital: **3996062-Y4316951-52024**
- Pin: **8474**

NO HAY NADA ESCRITO DEBAJO DE ESTA LINEA





TESORERÍA DE LA SEGURIDAD SOCIAL

4-01-51707-8

CERTIFICACION No. 3996062

A QUIEN PUEDA INTERESAR

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La presente certificación no significa necesariamente que **ROMACA INDUSTRIAL S A** haya realizado sus pagos en los plazos que establece la Ley 87-01, ni constituye un juicio de valor sobre la veracidad de las declaraciones hechas por este empleador a la Tesorería de la Seguridad Social, ni le exime de cualquier verificación posterior.

Esta certificación no requiere firma ni sello, tiene una vigencia de 30 días a partir de la fecha y se expide **totalmente gratis sin costo alguno** a solicitud de la parte interesada.

Dado en la ciudad de Santo Domingo, Republica Dominicana, a los 13 días del mes de Febrero del año 2024.

Para verificar la autenticidad de esta certificación dirijase a la siguiente dirección:

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Datos de verificación:

- Código de firma digital: **3996062-Y4316951-52024**
- Pin: **8474**

NO HAY NADA ESCRITO DEBAJO DE ESTA LINEA



REGISTRO MERCANTIL ROMACA INDUSTRIAL



E. López



ESTE CERTIFICADO FUE GENERADO ELECTRÓNICAMENTE Y CUENTA CON UN CÓDIGO DE VERIFICACIÓN QUE LE PERMITE SER VALIDADO INGRESANDO A WWW.CAMARASANTODOMINGO.DO

EL REGISTRO MERCANTIL DE LA CÁMARA DE COMERCIO Y PRODUCCIÓN DE SANTO DOMINGO DE CONFORMIDAD CON LA LEY NO. 3-02 DEL 18 DE ENERO DEL 2002, EXPIDE EL SIGUIENTE:

CERTIFICADO DE REGISTRO MERCANTIL SOCIEDAD ANÓNIMA - S.A.

REGISTRO MERCANTIL NO. 42796SD

DENOMINACIÓN SOCIAL: ROMACA INDUSTRIAL, S.A.

SOCIEDAD ANÓNIMA - S.A.

RNC: 1-01-09203-3

FECHA DE EMISIÓN: 28/6/06

FECHA DE VENCIMIENTO: 28/6/25

SIGLAS: NO REPORTADO

NACIONALIDAD: REPÚBLICA DOMINICANA

CAPITAL SOCIAL: RD\$201,137,100.00

CAPITAL SUSCRITO Y PAGADO: RD\$192,740,200.00

MONEDA: DOP

FECHA ASAMBLEA CONSTITUTIVA/ACTO: 1/7/80

FECHA ÚLTIMA ASAMBLEA: 6/6/23

DURACIÓN DE LA SOCIEDAD: INDEFINIDA

DOMICILIO DE LA SOCIEDAD:

CALLE: JOSE JOAQUIN PUELLO NO. 14

SECTOR: VILLA CONSUELO

MUNICIPIO: DISTRITO NACIONAL

DATOS DE CONTACTO DE LA SOCIEDAD:

TELÉFONO (1): (809) 688-8760

TELÉFONO (2): (809) 689-7926



CORREO ELECTRÓNICO: INFO@ROMACAINDUSTRIAL.COM

FAX: NO REPORTADO

PÁGINA WEB: www.romacaindustrial.com

ACTIVIDAD DE LA SOCIEDAD: IMPORTACION, SERVICIO, COMERCIO

OBJETO SOCIAL: IMPORTACIÓN, COMPRA, VENTA DE EQUIPOS, REPUESTOS Y ACCESORIOS PARA REFRIGERACIÓN Y AIRES ACONDICIONADOS EN GENERAL. PRINCIPALES PRODUCTOS Y SERVICIOS: AIRES ACONDICIONADOS RESIDENCIALES, COMERCIALES, INDUSTRIALES E INSTITUCIONALES, PLANTAS ELÉCTRICAS RESIDENCIAL, COMERCIAL E INDUSTRIAL, MÁQUINAS FABRICADORAS DE HIELO, REFRIGERADORES Y FREEZERS, MESAS DE PREPARACIÓN PARA COCINAS INDUSTRIALES E INSTITUCIONALES, ASÍ COMO DISEÑO, CONSTRUCCIÓN E INSTALACIÓN DE LOS PRODUCTOS MENCIONADOS Y CUALQUIER OTROS PRODUCTOS AFINES, TAMBIÉN REPARACIÓN, MANTENIMIENTOS Y SERVICIOS DE ESTOS Y TODA ACTIVIDAD RELACIONADA CON EL OBJETO PRINCIPAL Y DE LICITO COMERCIO.

PRINCIPALES PRODUCTOS Y SERVICIOS: AIRES ACONDICIONADOS RESIDENCIALES, COMERCIALES, INDUSTRIALES E INSTITUCIONALES, PLANTAS ELÉCTRICAS RESIDENCIAL, COMERCIAL E INDUSTRIAL, MÁQUINAS FABRICADORAS DE HIELO, REFRIGERADORES Y FREEZERS, MESAS DE PREPARACIÓN PARA COCINAS INDUSTRIALES E INSTITUCIONALES, ASÍ COMO DISEÑO, CONSTRUCCIÓN E INSTALACIÓN DE LOS PRODUCTOS MENCIONADOS Y CUALQUIER OTROS PRODUCTOS AFINES, TAMBIÉN REPARACIÓN, MANTENIMIENTOS Y SERVICIOS DE ESTOS

SISTEMA ARMONIZADO (SA): NO REPORTADO

ACCIONISTAS:



NOMBRE	DIRECCIÓN	RM/CÉDULA /PASAPORTE	NACIONALIDAD	ESTADO CIVIL
JUAN LUCIANO MACHADO AMADIS	JOSE JOAQUIN PUELLO NO. 14, VILLA CONSUELO, SANTO DOMINGO, DISTRITO NACIONAL, REPÚBLICA DOMINICANA	001-1400908-7	DOMINICANA	Soltero/a
JUANA PAMELA MACHADO UBIERA	JOSÉ JOAQUIN PUELLO, NO. 14, VILLA CONSUELO, SANTO DOMINGO, DISTRITO NACIONAL, REPÚBLICA DOMINICANA	402-0075923-7	DOMINICANA	Soltero/a

CANTIDAD ACCIONISTAS: En el presente certificado figuran 2 de 2 accionistas.

CANTIDAD DE ACCIONES: 719,602



CONSEJO DE ADMINISTRACIÓN:

NOMBRE	CARGO	DIRECCIÓN	RM/CÉDULA /PASAPORTE	NACIONALIDAD	ESTADO CIVIL
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EL

JUAN LUCIANO MACHADO AMADIS	Presidente	JOSE JOAQUIN PUELLO NO. 14, VILLA CONSUELO, SANTO DOMINGO, DISTRITO NACIONAL, REPÚBLICA DOMINICANA	001-1400908-7	DOMINICANA	Soltero/a
JUANA PAMELA MACHADO UBIERA	Vicepresidente	JOSÉ JOAQUIN PUELLO, NO. 14, VILLA CONSUELO, SANTO DOMINGO, DISTRITO NACIONAL, REPÚBLICA DOMINICANA	402-0075923-7	DOMINICANA	Soltero/a
DAMIAN ALMONTE GARCIA	Secretaria	CALLE ARABIA NO. 1, ARROYO HONDO, SANTO DOMINGO, DISTRITO NACIONAL, REPÚBLICA DOMINICANA	001-1022437-5	DOMINICANA	Casado/a

DURACIÓN CONSEJO DE ADMINISTRACIÓN: 2 AÑO(S)

ADMINISTRADORES/PERSONAS AUTORIZADAS A FIRMAR:

NOMBRE	DIRECCIÓN	RM/CÉDULA /PASAPORTE	NACIONALIDAD	ESTADO CIVIL
JUAN LUCIANO MACHADO AMADIS	JOSE JOAQUIN PUELLO NO. 14, VILLA CONSUELO, SANTO DOMINGO, DISTRITO NACIONAL, REPÚBLICA DOMINICANA	001-1400908-7	DOMINICANA	Soltero/a

COMISARIO(S) DE CUENTA(S) (SI APLICA):

NOMBRE	DIRECCIÓN	RM/CÉDULA /PASAPORTE	NACIONALIDAD	ESTADO CIVIL
ZALLY ROSANNA RODRIGUEZ MATOS	C/ JOSE JOAQUIN PUELLO NO. 14, VILLA CONSUELO, SANTO DOMINGO, DISTRITO NACIONAL, REPÚBLICA DOMINICANA	001-0811042-0	DOMINICANA	Soltero/a

ÓRGANO LIQUIDADOR:
 NO REPORTADO



NOMBRE	CARGO	DIRECCIÓN	RM/CÉDULA /PASAPORTE	NACIONALIDAD	ESTADO CIVIL
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ENTE REGULADO: NO. RESOLUCIÓN:
NO REPORTADO NO REPORTADO

TOTAL EMPLEADOS: 21 MASCULINOS: 17 FEMENINOS: 4

SUCURSALES/AGENCIAS/FILIALES:
NO REPORTADO

NOMBRE(S) COMERCIAL(ES)

NOMBRE	NO. REGISTRO
ROMACA INDUSTRIAL	278822

REFERENCIAS COMERCIALES

REFRIPARTES, S.A.
COMPANIA DOMINICANA DE TELEFONOS S A (CLARO)
CESAR IGLESIAS S A



REFERENCIAS BANCARIAS

BANK OF NOVA SCOTIA
BANCO DE RESERVAS
ASOCIACION POPULAR DE AHORROS Y PRESTAMOS

COMENTARIO(S)

NO POSEE

Pago

ACTO(S) DE ALGUACIL(ES)

NO POSEE



EL

ES RESPONSABILIDAD DEL USUARIO CONFIRMAR LA VERACIDAD Y LEGITIMIDAD DEL PRESENTE DOCUMENTO A TRAVÉS DE SU CÓDIGO DE VALIDACIÓN EN NUESTRA PÁGINA WEB: WWW.CAMARASANTODOMINGO.DO

ESTE CERTIFICADO FUE GENERADO ELECTRÓNICAMENTE CON FIRMA DIGITAL Y CUENTA CON PLENA VAUDEZ JURÍDICA CONFORME A LA LEY NO. 126-02 SOBRE COMERCIO ELECTRÓNICO, DOCUMENTOS Y FIRMAS DIGITALES.



Santiago Mejia Ortiz
Registrador Mercantil

no hay nada más debajo de esta línea



Digitally signed by Santiago Eugenio Mejia Ortiz
Date: 2021.06.22 08:53:43 -04:00



NOMINA DE ACCIONISTAS ROMACA INDUSTRIAL



[Handwritten signature]

ROMACA INDUSTRIAL, S.A.
 – Sociedad Anónima –
 Capital Social Autorizado:
 RD\$201,137,100.00 Capital Suscrito y
 Pagado RD\$192,740,200.00 Registro
 Mercantil No.42796SD
 Registro Nacional de Contribuyente (RNC) No. 1-01-
 09203-3Santo Domingo, República Dominicana



NÓMINA DE PRESENCIA DE LOS ACCIONISTAS PRESENTES O REPRESENTADOS QUE ASISTIERON A LA ASAMBLEA GENERAL EXTRAORDINARIA DE LA SOCIEDAD ANÓNIMA ROMACA INDUSTRIAL, S.A., CELEBRADA EN FECHASEIS (06) DEL MES DE JUNIO DEL AÑO DOS MIL VEINTITRES (2023).

D. M. G. PM

<u>SOCIOS</u>	<u>CANTIDAD DE ACCIONES</u>	<u>CANTIDAD DE VOTOS</u>
1. _____ JUAN LUCIANO MACHADO AMADIS , dominicano, mayor de edad, soltero, portador de la cédula de identidad y electoral número 001-1400908-7, domiciliado en el número 14 de la calle José Joaquín Puello del sector de Villa Consuelo de la ciudad de Santo Domingo de Guzmán, Distrito Nacional.	719,599	719,599
2. _____ JUANA PAMELA MACHADO UBIERA , dominicana, mayor de edad, soltera, portadora de la cédula de identidad y electoral número 402-0075923-7, domiciliada en el número 14 de la calle José Joaquín Puello del sector de Villa Consuelo de la ciudad de Santo Domingo de Guzmán, Distrito Nacional.	3	3
TOTALES	719,602	719,602

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Total de socios 2
 Total de Acciones: 719,602
 Total de Valor Pagado: RD\$192,740,200.00

Hecho Leído y Firmado en Santo Domingo, Distrito Nacional, Capital de la República Dominicana, a los seis (06) días del mes de junio del año dos mil veintitres (2023)



VISTO BUENO


DAMIAN ALMONTE GARCIA
Secretario


JUAN LUCIANO MACHADO AMADIS
Presidente y Accionista


JUANA PAMELA MACHADO UBIERA
Vicepresidente del Consejo y Accionista

Yo, DAMIAN ALMONTE GARCIA, secretario de la razón social "ROMACA INDUSTRIAL, S.A.;" CERTIFICO Y DOY FE que las firmas que anteceden corresponden a los señores: JUAN LUCIANO MACHADO AMADIS, JUANA PAMELA MACHADO UBIERA, en su calidad de socios y DAMIAN ALMONTE GARCIA, en calidad de secretario del consejo y que las mismas fueron puestas libre y voluntariamente. En Ciudad de Santo Domingo, Distrito Nacional Capital de la República Dominicana, a los seis (06) días del mes de junio del año dos mil veintitrés (2023).


DAMIAN ALMONTE GARCIA
Secretario de la Asamblea y del Consejo de Administración



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FECHA: 19/06/23 HORA: 04:04 PM
NO. EXP: 1120146 R. M.: 4279960
LIBRO: 63 FOLIO: 103
VALOR: 300.00
TAX: ACTA Y NOMINA ASAMBLEA GENERAL EXTRAORDINARIA
R.F.A.: 888771110



W.A.C. RM

EL

ESTATUTOS SOCIALES ROMACA INDUSTRIAL



Edgardo

ROMACA INDUSTRIAL, S. A

ESTATUTOS SOCIALES

TITULO PRIMERO

DENOMINACIÓN SOCIAL | DOMICILIO | OBJETO | DURACIÓN

ARTICULO 1 DENOMINACIÓN SOCIAL Bajo la denominación social "ROMACA INDUSTRIAL S.A." se constituye una sociedad Anónima de Suscripción Privada, que se registrá por las disposiciones de la Ley 479-08 de Sociedades Comerciales y Empresas Individuales de Responsabilidad Limitada y por los presentes Estatutos.

ARTICULO 2 TIPO SOCIAL La sociedad se encuentra organizada como Sociedad Anónima de Suscripción Privada de acuerdo con las Leyes de la República Dominicana, para lo cual se suscriben los presentes estatutos a que estarán sometidos los propietarios de las acciones en los cuales se determinará el régimen.

ARTICULO 3 DOMICILIO El domicilio de la sociedad se establece en la calle José Joaquín Puello No. 14, Villa Consuelo de la ciudad de Santo Domingo de Guzmán, Distrito Nacional, República Dominicana, pudiendo ser trasladado a otro lugar dentro de la República Dominicana, también podrá establecer sucursales y dependencias en cualquier localidad del país, de acuerdo con las necesidades y requerimientos de la sociedad.

ARTICULO 4 OBJETO La sociedad tiene como objeto principal: "Importación, compra, venta y servicios de repuestos y accesorios para refrigeración y aires acondicionados en general, así como toda clase de actividad relacionada con el objeto principal y de lícito comercio".

Como consecuencia de los objetos antes indicados y sin que su enumeración pueda ser considerada como limitativa, la sociedad puede ejercer todas las operaciones que se relacionen directa o indirectamente con el objeto antes mencionados o que fueran de naturaleza tal que favorezcan y faciliten el desarrollo del objeto social.

ARTICULO 5 DURACIÓN La duración de la sociedad es por tiempo limitado. Sólo podrá disolverse por Resolución de la Asamblea General Extraordinaria convocada por accionistas que representen cuando menos el cincuenta y un por ciento (51%) del capital suscrito y pagado.

TITULO SEGUNDO

DEL CAPITAL DE LA SOCIEDAD Y DE LAS ACCIONES

ARTICULO 6 CAPITAL AUTORIZADO. El capital autorizado de la Sociedad se fija en la suma de OCHENTA MILLONES DE PESOS DOMINICANOS (RD\$80,000,000.00), y suscrito y pagado en la suma de SETENTA Y UN MILLON NOVECIENTOS SESENTA MIL CIENTO VEINTISIETE PESOS DOMINICANOS (RD\$71,960,127.00), dividido en SETECIENTOS DIECINUEVE MIL SEISCIENTOS UNO CON 27/100 (719,601.27) acciones, con un valor nominal de CIEN PESOS DOMINICANOS (RD\$100.00) cada una.



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ARTICULO 7. DERECHO INHERENTE A LAS ACCIONES. Cada acción da derecho al propietario a una parte proporcional en la repartición de los beneficios de conformidad con los Estatutos, así como de los activos en caso de liquidación o partición de la sociedad.

ARTICULO 8. FORMA DE LAS ACCIONES. Las acciones serán emitidas en forma nominativa, a la orden o al portador. Los certificados de acciones serán extraídos de un libro talonario de acciones. Todo certificado indicará el número de acciones y la porción del capital que represente. Los certificados de acciones serán firmados por el Presidente o quien ejerza tales funciones y por el Secretario, y se entregarán a los accionistas una vez la sociedad quede definitivamente constituida. Llevarán el sello de la sociedad y el número de orden que les corresponda.

ARTICULO 9. TRANSFERENCIA DE LAS ACCIONES. Toda cesión de acciones estará sujeta al cumplimiento de los requisitos de transferencia exigidos en estos Estatutos y por las leyes en vigor. La transferencia de las acciones nominativas se verificará mediante una declaración de traspaso inscrita en los registros de la compañía, firmada por el cedente y el cesionario. El certificado cedido será cancelado y sustituido por uno nuevo a favor de los accionistas adquirentes.

Las acciones a la orden serán transferidas por el simple endoso del cedente a favor del cesionario, y la entrega del certificado de este último.

La cesión de las acciones al portador se operará por la simple entrega del título por parte del cedente al cesionario.

ARTICULO 10. SUJECIÓN DE LOS ACCIONISTAS A LOS ESTATUTOS. La suscripción o la adquisición de una o más acciones presupone por parte de su tenedor, su conformidad de atenerse a las cláusulas estatutarias, las resoluciones y acuerdos de las Asambleas Generales de Accionistas y del Consejo de Administración, en consonancia con los presentes estatutos.

ARTICULO 11. LIBRO DE ACCIONES. En el libro de Acciones se hará constancia del nombre, la dirección y el número de acciones que posee cada titular de acciones. Las convocatorias a las Asambleas y pagos de dividendos se enviarán a los accionistas a la dirección que consta en el mencionado Libro de Acciones.

ARTICULO 12. PERDIDA DEL CERTIFICADO DE ACCIONES. En caso de pérdida de certificados de acciones, el dueño, para obtener la expedición de los nuevos certificados, deberá notificar a la sociedad, por acto de alguacil, la pérdida ocurrida. El pedimento de anulación de los certificados perdidos y la expedición de los certificados sustitutos. El peticionario publicará un extracto de la notificación conteniendo las menciones esenciales, en un periódico de circulación nacional, una vez por semana, durante cuatro (4) semanas consecutivas. Transcurridos diez (10) días de la última publicación, si no hubiere oposición, se expedirá al solicitante un nuevo certificado, mediante la entrega de ejemplares del periódico.



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en que se hubieren hecho las publicaciones, debidamente certificados por el emisor, los certificados perdidos se considerarán nulos. Si hubiere oposición, la sociedad no entregará los referidos certificados hasta que el asunto sea resuelto entre el reclamante y el oponente, por sentencia judicial que haya adquirido la autoridad de la cosa irrevocablemente juzgada o por transacción, desistimiento o aquiescencia.

Los certificados de acciones que se emitan en el caso de que trata el presente artículo deberán llevar la mención de que sustituyen los extraviados.

ARTICULO 13. AUMENTO Y REDUCCIÓN DE CAPITAL SOCIAL. El capital social podrá ser aumentado o reducido por modificación estatutaria y mediante la decisión de una Asamblea General Extraordinaria convocada para estos fines.

ARTICULO 14. NO DISOLUCIÓN DE LA SOCIEDAD POR MUERTE U OTRA CAUSA PROHIBICIONES. La Sociedad no se disolverá por el fallecimiento, la interdicción o quiebra de uno o varios accionistas. Los herederos, causahabientes o acreedores de un accionista no pueden provocar la colocación de sellos sobre los bienes y valores de la Sociedad o pedir su partición o licitación, ni inmiscuirse en su administración. Ellos deberán remitirse, para el ejercicio de sus derechos, a los inventarios sociales y a las deliberaciones de la Asamblea General y decisiones del Consejo de Directores.

ARTICULO 15. LIMITACIÓN PECUNIARIA DE LOS ACCIONISTAS. Los accionistas no están obligados, aun respecto de los terceros, sino hasta la concurrencia del monto de sus acciones. Los accionistas no pueden ser sometidos a ninguna llamada de fondo ni a restitución de intereses o dividendos regularmente percibidos.

**TITULO TERCERO
DE LA DIRECCIÓN Y ADMINISTRACIÓN DE LA SOCIEDAD**

ARTICULO 16. ADMINISTRACIÓN DE LA SOCIEDAD. La dirección y administración de la sociedad estarán a cargo, en sus respectivos casos, de las Juntas Generales de Accionistas y del Consejo de Administración, quienes pueden ser o no accionistas y ejercerán las funciones establecidas en el presente estatuto y en la ley.

DE LAS ASAMBLEAS GENERALES DE ACCIONISTAS

ARTICULO 17. DIVISIÓN DE LAS ASAMBLEAS. La Asamblea General de Accionistas, es el órgano supremo de la sociedad; podrá acordar y ratificar actos u operaciones de estas. Sus resoluciones son obligatorias para todos los accionistas incluyendo a los disidentes y ausentes.

Las Asambleas generales se dividen en Ordinaria Anual, Ordinaria, Extraordinaria y Asambleas Especiales. Se llaman Ordinarias las que sus decisiones se refieren a hechos de gestión o de administración o a un hecho de interpretación de los Estatutos Sociales. Son



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Extraordinarias las que se refieren a decisiones sobre la modificación de los estatutos
Especiales las que reúnen a los titulares de acciones de una categoría determinada para
modificar los derechos de la misma

ARTICULO 18 FECHA Y LUGAR DE REUNIÓN La Asamblea General Ordinaria Anual se reunirá dentro de los 3 meses del cierre del ejercicio social, de cada año, en el domicilio social de la sociedad, o en otro lugar del territorio nacional siempre que se haya indicado en la convocatoria de la Asamblea

ARTICULO 19 CONVOCATORIA Las Asambleas Ordinarias o Extraordinarias serán convocadas con al menos 20 días de antelación mediante una comunicación física o electrónica o por un aviso en un periódico de circulación nacional.

Sin embargo los accionistas podrán reunirse sin necesidad de convocatoria cuando se encuentren todos presentes o representados

ARTICULO 20 QUÓRUM Y COMPOSICIÓN La Asamblea General Ordinaria Anual y la Asamblea General Ordinaria deliberarán válidamente con accionistas que representen por lo menos $\frac{1}{4}$ parte de las acciones suscritas y pagadas. La Asamblea General Extraordinaria estará compuesta por accionistas que representen cuando menos las $\frac{2}{3}$ partes del capital suscrito y pagado de la Sociedad, y en la segunda convocatoria la mitad ($\frac{1}{2}$). A falta de dicho quórum, la asamblea podrá ser prorrogada para una fecha posterior dentro de los dos (2) meses siguientes

ARTICULO 21 DIRECTIVA, ORDEN DEL DÍA Y LISTAS DE ACCIONISTAS La Asamblea General estará presidida por el Presidente de la Sociedad, en su defecto por el Vicepresidente, o en ausencia o inhabilitación de ambos por la persona elegida por los accionistas como Presidente AD-HOC. En caso de que los Comisarios de Cuentas (u mandatario judicial, o un liquidador sea el que convoque la Asamblea, esta será presidida por el que la convoque

ORDEN DEL DÍA. El orden del día será redactado por el Presidente o por la persona que efectúe la convocatoria de la Asamblea General. La Asamblea General no deliberará más que sobre las proposiciones que figuren en el Orden del Día. Sin embargo, el Presidente de la Asamblea General estará obligado a incluir en el Orden del Día toda proposición que emane de accionistas que representen la décima parte del capital social, siempre que haya sido consignada por escrito y entregada con cinco días de antelación a la Asamblea. Toda proposición que fuere una consecuencia directa de la discusión provocada por un artículo del Orden del Día deberá ser sometida a votación

LISTA DE ACCIONISTAS. El Secretario de la sociedad ejercerá las funciones de Secretario de la Asamblea General y a falta o incapacidad de aquél, por el Secretario ad hoc que designe el Presidente de la Asamblea General. El Secretario deberá preparar antes de iniciarse la Asamblea General una lista que contenga los nombres y domicilios de los



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accionistas concurrentes o representados, el número de acciones de cada uno y el número de votos que le corresponde, y así como los demás requerimientos exigidos en el Artículo 205 de la Ley 478-08. Esta lista deberá ser firmada por los accionistas asistentes o por sus representantes, certificada por Secretario y por el Presidente de la Asamblea General a fin de depositarse en el domicilio social para la comunicación de los accionistas que lo soliciten.

ARTICULO 22 VOTOS Y APODERADOS DE LOS ACCIONISTAS. Cada acción da derecho a un voto. Las resoluciones se tomarán por los votos de la mayoría de los accionistas presentes o debidamente representados. En caso de empate el voto del Presidente de la Asamblea será decisivo si el mismo es accionista de la Sociedad. De lo contrario será decisivo el voto del accionista que represente el mayor número de acciones.

ARTICULO 23 REPRESENTACIÓN ACCIONISTAS. Los accionistas tienen derecho de asistir y de hacerse representar en las Asambleas por cualquier persona, mediante poder que emane de sí mismo. En este caso el poder deberá depositarse en el domicilio de la sociedad, a más tardar el día anterior al fijado para la reunión. El mandatario no puede hacerse sustituir.

ARTICULO 24 ATRIBUCIONES ASAMBLEA GENERAL ORDINARIA ANUAL. Estas asambleas tienen la función de estatuir sobre todas las cuestiones que vayan más allá de la competencia del Consejo de Administración. Para otorgar a estos últimos los poderes necesarios y para determinar de manera absoluta el desempeño de los negocios sociales. Son atribuciones de la Asamblea General Ordinaria Anual las siguientes:

- a. Elegir al Consejo de Administración y al Comisario de Cuentas, cuando correspondiera y fijarles su remuneración en caso de que correspondiera.
- b. Revocar y sustituir en cualquier época al administrador cuando correspondiera.
- c. Conocer del informe anual del Presidente del Consejo de Administración, así como los estados, cuentas y balances y aprobarlos y desaprobados.
- d. Conocer del informe del Comisario de Cuentas, si hubiera, sobre la situación de la sociedad, el balance y las cuentas presentadas por el Presidente del Consejo de Administración.
- e. Discutir, aprobar o rechazar las cuentas mencionadas en el literal precedente, examinar los actos de gestión de los administradores y comisarios y dárles descargo si procede.
- f. Disponer lo relativo a las utilidades, a la repartición o no de los beneficios, su forma de pago o el destino que debe dárseles; y
- g. Regularizar cualquier nulidad, omisión o error cometidos en la deliberación de una Asamblea General Ordinaria anterior.

ARTICULO 25 ATRIBUCIONES ASAMBLEA GENERAL ORDINARIA. Este tipo de Asamblea conoce y decide de todos los actos y operaciones que se refieren a la administración de la Sociedad. Son atribuciones de la Asamblea General Ordinaria las siguientes:



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- a. Ejercer las atribuciones de la Asamblea General Ordinaria Anual cuando no se haya reunido dicha Asamblea o cuando no haya resuelto algunos asuntos de su competencia.
- b. Remover al Consejo de Administración antes del término para el cual han sido nombrados y llenar definitivamente las vacantes que se produzcan, y
- c. Acordar la participación de la Sociedad en la constitución de consorcios, asociaciones, sociedades en participación según convenga a los intereses de la Sociedad

ARTICULO 26 ATRIBUCIONES ASAMBLEA GENERAL EXTRAORDINARIA Este tipo de Asamblea conocerá

- a. Del aumento o disminución del capital social,
- b. De la transformación, fusión o escisión con otra sociedad constituida o que se fuere a constituir,
- c. De la disolución de la sociedad o de la limitación o reducción del término de duración de la misma
- d. De la enajenación o transferencia de todo el activo de la Sociedad, y
- e. De la modificación de cualquier artículo de los presentes estatutos

ARTICULO 27 ASAMBLEAS COMBINADAS La Asamblea General puede ser Ordinaria y Extraordinaria a la vez, si reúne las condiciones indicadas en los presentes estatutos, en ese caso la asamblea será combinada tratando los asuntos que le competen a cada uno por separado

ARTICULO 28. ACTAS DE LAS ASAMBLEAS GENERALES. De cada reunión el Secretario redactará un acta. Las copias de estas actas serán expedidas por el Secretario y el Presidente del Consejo de Administración y servirán de prueba de las deliberaciones de la Asamblea y de los poderes otorgados tanto en justicia como frente a cualquier tercero.

TITULO CUARTO

DEL CONSEJO DE ADMINISTRACIÓN, DE LOS FUNCIONARIOS Y SUS ATRIBUCIONES

ARTICULO 29. CONSEJO DE ADMINISTRACIÓN. El Consejo de Administración estará compuesto en un número de miembros no menor de tres, según lo determine la Asamblea que los elija, podrán ser accionistas o no. Los miembros del Consejo de Administración serán elegidos en la Asamblea General Ordinaria y desempeñarán sus cargos por un período de dos (2) años. Podrán ser reelegidos indefinidamente. Sin embargo, la Asamblea General podrá aumentar o disminuir la integración de dicho Consejo y podrá nombrar otros funcionarios adicionales y les asignará las funciones que desee atribuirles, aunque estas funciones estén ya atribuidas a un funcionario específico; en ese caso la Asamblea General decidirá si esos nuevos funcionarios serán o no miembros deliberantes del Consejo de Administración, o si serán sustitutos de los miembros existentes.



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Los Miembros del Consejo de Administración pueden ser personas físicas o jurídicas, a excepción del Presidente que debe ser una persona física bajo pena de nulidad. En caso de que una persona jurídica sea miembro del consejo deberá nombrar un representante permanente.

Los miembros del Consejo de Administración tienen la dirección y administración de la Sociedad durante el período en que la Asamblea General de Accionistas no estén deliberando, y durante ese período podrá resolver cualquier asunto que no sea de la atribución exclusiva de la Asamblea General.

ARTICULO 30 PODERES DEL CONSEJO El Consejo de Administración tendrá la dirección general de los asuntos y negocios de la sociedad y estará investido de los poderes de administración más extensos para actuar a nombre de la sociedad y hacer o autorizar todos los actos y operaciones relativos a su objeto.

El Consejo de Administración tiene principalmente los poderes indicados a continuación indicación que se hace a título enunciativo y no limitativo.

- a. Autorizar o aprobar los contratos celebrados a nombre de la sociedad.
- b. Otorgar toda clase de nombramientos, mandatos y poderes, sean permanentes, sea por un objeto determinado.
- c. Adquirir o arrendar para la sociedad todos los bienes muebles e inmuebles, derechos y privilegios que considere convenientes.
- d. Representar la sociedad frente a cualquier persona pública o privada.
- e. Abrir, mantener o cerrar cuentas bancarias y determinar quien estará autorizado a firmar en representación de la sociedad, giros, pagarés recibos, aceptaciones, cesiones, cheques, descargos, contratos y documentos de toda clase.
- f. Nombrar y revocar todos los empleados, fijar su remuneración así como las otras condiciones de su admisión y despido.
- g. Fijar los gastos generales.
- h. Recibir y pagar cualquier suma en capital, intereses y accesorios.
- i. Autorizar la apertura de sucursales y el nombramiento de representantes en cualquier ciudad de la República.
- j. Decidir acerca de las construcciones de inmuebles para la sociedad y de sus mejoras.
- k. Garantizar empréstitos con toda clase de seguridades, ya sea prenda con desapoderamiento y prenda sin desapoderamiento, hipotecas o anticresis.
- l. Adoptar acuerdos en todos los asuntos que cualquiera de sus miembros someta a su consideración, siempre que no estén atribuidos a la Asamblea General.
- m. Representar la sociedad en justicia, como demandante o demandada, y obtener sentencias; dar aquiescencia, desistir o hacerlas ejecutar por todos los medios y vías de derecho; autorizar todo acuerdo, transacción, o compromiso; representar a la sociedad en todas las operaciones de quiebra; y
- n. Autorizar las persecuciones judiciales de cualquier naturaleza que juzgue necesarias; nombrar y revocar apoderados especiales que representen a la sociedad en las

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acciones que intente y determinar su retribución, proveer la defensa de la sociedad en toda acción o procedimiento que se siga contra ella

ARTICULO 31. INHABILITACIONES DE LOS MIEMBROS CONSEJO No podrán ser miembros del consejo de la sociedad

- a. Las personas físicas que ejerzan simultáneamente más de cinco (5) mandatos de administradores de cualquier tipo de sociedad comercial.
- b. Los menores no emancipados.
- c. Los Interdictos e Incapacitados.
- d. Los condenados por infracciones criminales y por bancarrota simple o fraudulenta en virtud de una sentencia irrevocable.
- e. Las personas que en virtud de una decisión judicial o administrativa definitiva se les haya inhabilitado para el ejercicio de la actividad comercial.
- f. Los funcionarios al servicio de la administración pública con funciones a su cargo relacionadas con las actividades propias de la sociedad de que se trate

ARTICULO 32. PROHIBICIONES DE LOS MIEMBROS DEL CONSEJO: A pena de nulidad del contrato, operación o transacción, sin autorización expresa y unánime de la asamblea general de socios, estará prohibido a los administradores

- a. tomar en préstamo dinero o bienes de la sociedad.
- b. Usar bienes, servicios o créditos de la misma en provecho propio de parientes representantes o sociedad vinculadas, y
- c. Usar en beneficio propio o de terceros relacionados, las oportunidades comerciales de que tuvieren conocimiento en razón de su cargo y que a la vez constituya un perjuicio para la sociedad

Los miembros del Consejo de Administración tendrán las demás prohibiciones establecidas en el Artículo 227 de la Ley de Sociedades.

ARTICULO 33. REMUNERACIÓN. Las funciones del Consejo de Administradores podrán ser gratuitas o remuneradas, según lo decida la Junta General Ordinaria de Accionistas, o si la Junta decidiere remunerar dichas funciones, la remuneración podrá consistir en un sueldo mensual, un porcentaje que tendrá como referencia los servicios netos anuales de la compañía o ambas cosas a la vez. Dicho porcentaje no podrá exceder para todos los miembros del consejo de administración del diez por ciento (10%) de los beneficios netos anuales, después de deducido el porcentaje de reserva legal y la distribución de los dividendos, en caso de que éste se separe

ARTICULO 34 DEL PRESIDENTE. El Presidente de la Sociedad es el funcionario principal o ejecutivo de la Sociedad quien ejercerá por dos años y será reelegible. Deberá ser una persona física bajo pena de nulidad de la designación. Sin perjuicio de las demás facultades



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que se le confieran al Presidente en estos Estatutos, son atribuciones del Presidente las siguientes:

- a) Presidir las Asambleas Generales de Accionistas.
- b) Ejecutar por sí y velar por la fiel ejecución de las disposiciones y acuerdos tomados por la Asamblea General de Accionistas.
- c) Firmar con el Secretario las actas de las reuniones de la Asamblea General, así como los certificados de acciones de la sociedad.
- d) Redactar los informes que el Consejo de Administración deba someter a la Asamblea General, y
- e) Celebrar cualquier acto o contrato, que tenga el carácter de actos administrativos y que no comprometan el Patrimonio de la Sociedad.

ARTICULO 35 DEL VICEPRESIDENTE El Vicepresidente sustituirá al Presidente en caso de incapacidad, o cuando se halle ausente por cualquier causa y tendrá además atribuciones que le delegue la Asamblea General o el Presidente. Sus funciones tendrán duración de dos años o hasta que sea sustituido por un órgano competente.

ARTICULO 36. DEL SECRETARIO Son funciones del Secretario:

- a) Redactar las actas de la Asamblea General en los libros destinados al efecto.
- b) Llevar el libro de Acciones y anotar en él las transferencias y los cambios de dirección de los accionistas;
- c) Custodiar el sello de la sociedad;
- d) Organizar y preparar las Asambleas Generales.
- e) Firmar con el Presidente los certificados de acciones, las certificaciones de actas de Asamblea General y cualquier otra certificación; y
- f) Desempeñar las funciones que le confie el Consejo de Administración, el Presidente o los Estatutos.

ARTICULO 37. EL TESORERO Es el funcionario principal de la sociedad en cuestiones financieras como tal le corresponderá supervisar todas las operaciones contables y financieras de la Sociedad. Tendrá la responsabilidad de preparar los presupuestos para la administración de los recursos de la Sociedad, así como de velar por el buen manejo financiero de la misma.

ARTICULO 38. RESPONSABILIDAD DE LOS ADMINISTRADORES Los administradores serán responsables, individual o solidariamente, hacia la sociedad o frente a los terceros, por las infracciones a las disposiciones legales o reglamentarias aplicables a las sociedades anónimas, por violación a los estatutos, a sus deberes y obligaciones y por faltas cometidas en su gestión. Así mismo se aplicarán las disposiciones emanadas por la Ley de Sociedades en sus artículos 227 y 228, respecto a las prohibiciones y reservas.

ARTICULO 39. EL COMISARIO La sociedad tendrá un Comisario de Cuentas el cual será designado por las Asambleas Ordinarias Anuales. Deberá tener calidad de contador público.



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autorizado con por lo menos tres años de experiencia en auditoría de Empresas. No tiene que ser un accionista y podrá ser reelegido una o más veces. Su duración será de tres ejercicios sociales (art 241). Son atribuciones del Comisario de Cuentas:

- a) presentar a la Asamblea General de accionistas un informe escrito sobre la situación económica de la sociedad dictaminando sobre las memorias el inventario, el balance y el estado de resultado;
- b) Remitir un informe sobre las partidas del balance y de los demás documentos contables que considere deban ser modificados;
- c) Informar por escrito al Presidente del Consejo de Administración cuando determine la existencia de hechos que por su naturaleza pongan en riesgo la continuidad de la sociedad; y
- d) Dictaminar sobre los proyectos que modifiquen los estatutos sociales, emisión de bonos, transformación, fusión, aumento o disminución de capital, disolución anticipada que se planteen en la Asamblea General Extraordinaria

ARTICULO 40. RESPONSABILIDAD DEL COMISARIO DE CUENTAS Este será responsable frente a la sociedad y a los terceros de las consecuencias perjudiciales cometidas en el ejercicio de sus funciones

ARTICULO 41 El o los Comisarios de Cuentas tendrán las inhabilitaciones y prohibiciones establecidas en los Artículos 211, 243, 244 y 245 de la Ley de Sociedades

TITULO QUINTO

EJERCICIO SOCIAL, FONDO DE RESERVA SOCIAL Y DIVIDENDOS

ARTICULO 42 EJERCICIO SOCIAL El ejercicio social comenzará el día Primero (1ro) del mes de Enero y terminará el día Treinta y Uno (31) del mes de Diciembre de cada año. Por excepción, el primer ejercicio social abarcará el tiempo comprendido entre la fecha de la constitución definitiva de la sociedad y el día Treinta y Uno (31) del mes de Diciembre del presente año

ARTICULO 43 FONDO DE RESERVA LEGAL La sociedad tendrá un fondo de reserva legal que estará integrado por la separación anual de por lo menos el 5% de los beneficios netos obtenidos, hasta que la reserva alcance una décima (1/10) parte del capital social suscrito y pagado de la sociedad

ARTICULO 44 DIVIDENDOS, RESERVAS Y REINVERSIONES Las utilidades que obtenga la Sociedad una vez cubierto los gastos de administración y operación, así como las aportaciones al fondo de reserva legal, deberán ser distribuidas entre los accionistas a título de dividendos



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TITULO SEXTO
DE LA TRANSFORMACIÓN, FUSIÓN Y ESCISIÓN DE LA SOCIEDAD



ARTICULO 45. La transformación, la fusión y la escisión de la sociedad serán decididas mediante una Asamblea General Extraordinaria y de conformidad con lo establecido en la ley 479/08

TITULO SÉPTIMO
DISOLUCIÓN Y LIQUIDACIÓN DE LA SOCIEDAD

ARTICULO 46 DE LA DISOLUCIÓN Y LIQUIDACIÓN DE LA SOCIEDAD Si ocurriese la pérdida de las 3/4 partes del capital social, el Consejo de Administración estará obligado a convocar una Asamblea General Extraordinaria que decidirá sobre la disolución de la sociedad

En caso de proceder la disolución de la sociedad la Asamblea General Extraordinaria regulará el modo de hacer su liquidación y nombrará las personas que se encarguen de ésta, cesando el Presidente y los demás miembros del Consejo de Administración desde entonces en sus funciones.

Cuando la sociedad se encuentre en estado de liquidación, el liquidador presidirá la Asamblea General. Si se nombrare más de un liquidador la presidirá aquél de los liquidadores que tenga mayor edad. En los casos de ausencia, impedimento o negativa del o los liquidadores que tengan por consecuencia la vacante de la Presidencia de la Asamblea, ésta elegirá a su Presidente

Después del pago de todo el pasivo, obligaciones y cargas de la sociedad, el producto neto de la liquidación será empleado para amortizar el capital representado por las acciones. En caso de que sobrare algún excedente, y después del pago íntegro a los accionistas del capital social, éste será repartido a ellos en partes iguales.

TITULO OCTAVO
DISPOSICIONES GENERALES

ARTICULO 47 Contestaciones entre Accionistas o entre Estos y la Sociedad. Todas las contestaciones que puedan suscitarse durante la existencia de la sociedad o en el proceso de su liquidación entre los accionistas y la sociedad o entre los accionistas entre sí, en razón de los negocios sociales, serán sometidas de conformidad con la Ley, a la consideración de tres árbitros designados por las partes. En caso de que las partes no estén de acuerdo con la decisión de los árbitros, podrán ejercer contra ésta los procedimientos descritos en las leyes

PÁRRAFO: Todo accionista, en caso de litigio, deberá hacer elección de domicilio en la jurisdicción del asiento social, donde podrán realizarse válidamente todas las notificaciones a que haya lugar. En caso de que no elegir domicilio dentro de la jurisdicción del domicilio



social, los accionistas mediante los presentes estatutos hacen formal elección de domicilio y los domicilios que aparezcan en los libros sociales llevados por el Secretario de la Sociedad.



ARTÍCULO 48: Comprobación de la Suscripción y Pago de Acciones con Cargo al Capital Autorizado: Cada seis (6) meses la Asamblea General Ordinaria deberá tomar acta de las acciones suscritas y pagadas durante el semestre, con cargo al capital autorizado y el monto de ellas se agregará al capital suscrito y pagado. Dentro del mes de la reunión de dicha Asamblea, se registrarán los documentos en la Cámara de Comercio y Producción correspondiente, a los fines de que sea expedido el Certificado de Registro Mercantil con las modificaciones de lugar. Esta disposición quedará sin efecto tan pronto haya sido suscrito y pagado en su totalidad el capital autorizado.

ARTÍCULO 49 Emisión y Entrega de los Certificados de Acciones: Los certificados de acciones se emitirán y entregarán en un plazo no mayor de noventa (90) días contados a partir del pago de las acciones de la Sociedad.

HECHO Y FIRMADO en cuatro (4) originales manteniendo de un mismo tenor y efecto. Estos Estatutos constan de doce (12) Páginas y 49 artículos. En la ciudad de Santo Domingo, Distrito Nacional, Capital de la República Dominicana, a los veinticinco (25) del mes de junio del año dos mil nueve (2009)

Se declara que los estatutos sociales transcritos precedentemente son los que gobiernan la sociedad

JUAN LUCIANO MACHADO AMADS

FEDÉRICO ANTONIO ALCANTARA TATIS

DAMIAN ALMONTE GARCIA

MELINA YDELSA DIAZ VALERIO

RAUL BENITEZ

MAXIMO ENRIQUE MEJIA

MIGUEL RAMIREZ PEREZ



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ACTA DE ASAMBLEA ROMACA INDUSTRIAL



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ROMACA INDUSTRIAL, S.A.

– Sociedad Anónima –

Capital Social Autorizado: RD\$201,137,100.00

Capital Suscrito y Pagado: RD\$192,740,200.00

Registro Mercantil No.42796SD

Registro Nacional de Contribuyente (RNC)

No. 1-01-09203-3 Santo Domingo,

República Dominicana



ACTA DE LA ASAMBLEA GENERAL EXTRAORDINARIA DE LA SOCIEDAD ANÓNIMA ROMACA INDUSTRIAL, S.A., CELEBRADA EN FECHA, SEIS (06) DEL MES DE JUNIO DEL AÑO DOS MIL VEINTITRES (2023).

En la ciudad de Santo Domingo, Distrito Nacional, capital de la República Dominicana, a los seis (06) días del mes de junio del año dos mil veintitres (2023), siendo las nueve horas de la mañana (09:00 a.m.), los accionistas que figuran en la nómina de presencia que se encuentra en cabeza de esta acta, se han reunido en el asiento social de la sociedad "ROMACA INDUSTRIAL, S.A.", en Asamblea General Extraordinaria, sin necesidad de convocatoria, por encontrarse presentes o representados la totalidad de los accionistas que conforman el capital suscrito y pagado de la Sociedad.

El señor JUAN LUCIANO MACHADO AMADIS, presidente del Consejo de Administración de la Sociedad, asume la Presidencia de la Asamblea, mientras que el señor DAMIAN ALMONTE GARCIA en calidad de secretario del Consejo de Administración es designado secretario de la presente Asamblea.

A seguidas, se extendió la Nómina de Presencia de los accionistas presentes, con indicación del domicilio, del número de acciones y de votos de cada uno que encabeza la presente Acta, la cual fue certificada por el secretario de la Asamblea, con el Visto Bueno del presidente de la Asamblea.

Luego de comprobado con la Nómina de Presencia que se encontraban presentes la totalidad de los accionistas que componen el capital suscrito y pago de la sociedad y a su vez conforman el quórum suficiente, conforme lo establecido por los Estatutos Sociales para la celebración de Asambleas Generales extraordinaria, el presidente de la Asamblea declaró abierta la sesión.

El presidente de la Asamblea exhibe y pone a disposición de los presentes los siguientes documentos:

1. Nómina de Presencia de la Asamblea
2. Estatutos Sociales

A continuación, el presidente de la Asamblea procedió a dar lectura al siguiente Orden del Día:

ORDEN DEL DÍA:

1. Conocer y Aprobar la modificación del artículo (4) de los estatutos sociales referente al objeto de la sociedad.
2. Conocer cualquier Otro asunto que sea competencia de esta asamblea.

A seguidas, el presidente de la Asamblea General Extraordinaria de la entidad ROMACA INDUSTRIAL, S.A., VALIDA Y REGULARMENTE CONSTITUIDA, sugirió someter a discusión y aprobación los puntos indicados en el Orden del Día, y en ese mismo tenor presentó los documentos y los informes que fuesen necesarios para la mejor edificación de esta, así como declarar la validez de la presente Asamblea para deliberar y tomar decisiones válidas como Asamblea General Extraordinaria. Dicha moción fue debidamente secundada y aprobada, pasándose a discutir el primer punto del Orden del Día.



DOCUMENTO
REGISTRADO

UNICA RESOLUCIÓN

La Asamblea General Extraordinaria de ROMACA INDUSTRIAL, S.A RESUELVE: APROBAR la modificación del Artículo (4) de los estatutos de la sociedad, referente al objeto social y que de ahora en adelante se lea de la siguiente manera.

ARTICULO 4. OBJETO. La sociedad tiene como objeto principal: importación, compra, venta de equipos, repuestos y accesorios para refrigeración y aires acondicionados en general. Principales productos y servicios: Aires acondicionados residenciales, comerciales, industriales e institucionales, plantas eléctricas residencial, comercial e industrial, máquinas fabricadoras de hielo, refrigeradores y freezers, mesas de preparación para cocinas industriales e institucionales, así como diseño, construcción e instalación de los productos mencionados y cualquier otros productos afines, también reparación, mantenimientos y servicios de estos y toda actividad relacionada con el objeto principal y de lícito comercio.

Como consecuencia de los objetos antes indicados y sin que su enumeración pueda ser considerada como limitativa, la sociedad puede ejercer todas las operaciones que se relacionen directa o indirectamente con el objeto antes mencionado o que fueran de naturaleza tal que favorezcan y faciliten el desarrollo del objeto social.

Esta Resolución fue aprobada a unanimidad de voto

Agotado el Orden del Día y no habiendo más asuntos que tratar, siendo las doce horas del mediodía (12:00 a.m.), de la misma fecha indicada al inicio, se dio por terminada la Asamblea General Extraordinaria, y se procedió a la redacción de esta Acta, que después de leída y aprobada por los señores accionistas presentes y/o debidamente representados, fue firmada por ellos en señal de aprobación.


DAMIAN ALMONTE GARCIA
Secretario


JUAN LUCIANO MACHADO AMADIS
Presidente Del Consejo y Accionista




JUANA PAMELA MACHADO UBIERA
Vicepresidente del Consejo y Accionista



Yo, DAMIAN ALMONTE GARCIA, secretario de la razón social "ROMACA INDUSTRIAL, S.A.;" CERTIFICO Y DOY FE que las firmas que anteceden corresponden a los señores: JUAN LUCIANO MACHADO AMADIS, JUANA PAMELA MACHADO UBIERA, en su calidad de socios y DAMIAN ALMONTE GARCIA, en calidad de secretario del consejo y que las mismas fueron puestas libre y voluntariamente. En Ciudad de Santo Domingo, Distrito Nacional Capital de la República Dominicana, a los seis (06) días del mes de junio del año dos mil veintitrés (2023)


DAMIAN ALMONTE GARCIA
Secretario de la Asamblea y del Consejo de Administración



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CERTIFICACIÓN DE REGISTRO

Núm.: C0424001359055

La Dirección General de Impuestos Internos **CERTIFICA** que **ROMACA INDUSTRIAL S A**, Registro Nacional de Contribuyente (RNC) No. **101092033** está inscrito con las siguientes informaciones:

DIRECCIÓN: **CALLE JOSE JOAQUIN PUELLO, NO. 14, APTO. EDIFICIO ROMACA, DEL SECTOR VILLA CONSUELO DE LA CIUDAD DE SANTO DOMINGO DE GUZMAN.**

CONDICIÓN: **CONTRIBUYENTE**

ESTADO: **ACTIVO**

ACTIVIDAD(ES) ECONOMICA(S): **REPARACIÓN Y VENTAS DE ARTÍCULOS DE REFRIGERACIÓN**

RÉGIMEN DE PAGO: **ORDINARIO**

CATEGORÍA(S): **NO DISPONIBLE**

La presente certificación tiene una vigencia de treinta (30) días a partir de la fecha. La misma no constituye un juicio de valor sobre la veracidad de las informaciones declaradas, ni excluye cualquier proceso de verificación posterior.

Dada en la **OFICINA VIRTUAL**, a los trece (13) días del mes de febrero del año dos mil veinticuatro (2024).

	Código de firma: F1HM-54KX-E021-7078-3387-4820 eba1KrcQ8icwE3DLu+CBU6muvds+U8r DGE - OFICINA VIRTUAL DIRECCION GENERAL DE IMPUESTOS INTERNOS DIRECCION GENERAL DE IMPUESTOS INTERNOS

F1HM-54KX-E021-7078-3387-4820

La Certificación de Registro es un documento que presenta las principales informaciones de registro de contribuyentes y registrados, tal cual se encuentran en nuestros sistemas de información tributaria.

Condiciones de inscrito: (a) registrados y (b) contribuyentes.

(a) Realizan algún trámite, ciertas operaciones o efectúan declaración o pago de un impuesto o tasa ocasional.

(b) Desarrollan actividad(es) económica(s) que conlleva la presentación periódica de obligaciones tributarias.

Verifique la legitimidad de la presente certificación en <http://www.dgi.gov.do/verifica> o llamando a los teléfonos 809-689-3444 y 1-809-200-6060.

Tu contribución es nuestro principio

Dirección General de Impuestos
 Av. México #48, Gascue, Santo Domingo República Dominicana,
 C.P. 10204 RNC: 401-50625-4

T. 809-689-2181
dgi.gov.do





CERTIFICACIÓN DE REGISTRO

Núm.: C0424001359055

La Dirección General de Impuestos Internos **CERTIFICA** que **ROMACA INDUSTRIAL S.A.** Registro Nacional de Contribuyente (RNC) No. **101092033** está inscrito con las siguientes informaciones:

DIRECCIÓN: CALLE JOSE JOAQUEN PUELLO, NO. 14, APTO. EDIFICIO ROMACA, DEL SECTOR VILLA CONSUELO DE LA CIUDAD DE SANTO DOMINGO DE GUZMAN.

CONDICIÓN: CONTRIBUYENTE

ESTADO: ACTIVO

ACTIVIDAD(ES) ECONOMICA(S): REPARACIÓN Y VENTAS DE ARTÍCULOS DE REFRIGERACIÓN

RÉGIMEN DE PAGO: ORDINARIO

CATEGORÍA(S): NO DISPONIBLE

La presente certificación tiene una vigencia de treinta (30) días a partir de la fecha. La misma no constituye un juicio de valor sobre la veracidad de las informaciones declaradas, ni excluye cualquier proceso de verificación posterior.

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La Certificación de Registro es un documento que presenta las principales informaciones de registro de contribuyentes y registrados, tal cual se encuentran en nuestros sistemas de información tributaria.

Condiciones de inscripción: (a) registrados y (b) contribuyentes.

(a) Realizan algún trámite, ciertas operaciones o efectúan declaración o pago de un impuesto a tasa ordinaria.

(b) Desarrollan actividad(es) económica(s) que conlleva la presentación periódica de obligaciones tributarias.

Verifique la legitimidad de la presente certificación en: <http://www.dgi.gov.do/verifica> o llamando a los teléfonos 809-699-3444 y 1-809-200-6060.

Tu contribución es nuestro principio

Dirección General de Impuestos
Av. México #48, Gascue, Santo Domingo República Dominicana,
C.P. 10204 RNC: 401-50625-4

T. 809-699-2181
dgi.gov.do



DOCUMENTACION FINANCIERA ROMACA INDUSTRIAL



Signature

ROMACA INDUSTRIAL S A
Estados Financieros Comparativos
Al 31 de Diciembre del 2022-2021
Valores Expresados en Dop



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ROMACA INDUSTRIAL, S.A.
Estados Financieros Comparativos
Al 31 de Diciembre del 2022-2021

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Balance General	5
Estados de Resultados	6
Estados de Cambios al Patrimonio	7
Estados de Flujos de Efectivo	8
Notas a los Estados Financieros	9



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Consultores & Asocs. SRL
Auditores, Contadores & Asesores Fiscales

RNC: 131-01850-5

Informe de los Auditores Independientes

Al Consejo de Directores:

ROMACA INDUSTRIAL S A

Opinión

Hemos auditado los estados financieros comparativos de la empresa **ROMACA INDUSTRIAL S. A.**, que comprenden el estado de situación, el estado de resultados, el estado de cambios al patrimonio, el estado de flujos de efectivo y las notas explicativas, desde el 01 de enero hasta el 31 de diciembre del 2022-2021.

En nuestra opinión, los estados financieros auditados adjuntos presentan razonablemente, en todos los aspectos materiales, la situación financiera de la empresa **ROMACA INDUSTRIAL S. A.**, desde el 01 de enero hasta el 31 de diciembre del 2022-2021, su desempeño financiero, de acuerdo con las Normas Internacionales de Información Financiera (IFRS).

Fundamento de la opinión

Hemos llevado a cabo nuestra auditoría de acuerdo con las Normas Internacionales de Auditoría modificadas por el Instituto de Contadores Públicos Autorizados de la República Dominicana (ICPARD). Nuestras responsabilidades bajo estas normas se describen más adelante en la sección "Responsabilidades del auditor en relación con la auditoría de los estados financieros" de nuestro informe. Somos independientes de la Entidad de acuerdo con el Código de Ética para Profesionales de la Contabilidad del Consejo de Normas Internacionales de Ética para Contadores (Código de Ética del IESBA) y los requerimientos de ética que son aplicables a nuestra auditoría de los estados financieros en la República Dominicana emitidos por el ICPARD. Hemos cumplido con los demás responsabilidades éticas de conformidad con el Código de Ética del ICPARD y los requerimientos de ética del IESBA. Consideramos que la evidencia de auditoría que hemos obtenido es suficiente y adecuada para proporcionar una base para nuestra opinión.

Responsabilidades de la administración y de los responsables de gobierno corporativo en relación con los estados financieros

La administración de la Entidad es responsable de la preparación y presentación razonable de los estados financieros de conformidad con las Normas Internacionales de Información Financiera, y del control interno que la administración considere necesario para permitir la preparación de estados financieros libres de errores materiales debido a fraude o error.



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En la preparación de los estados financieros, la administración es responsable de evaluar la capacidad de la entidad para continuar como un negocio en marcha revelando, según corresponda, los asuntos relacionados con negocio en marcha y utilizando la base contable de negocio en marcha, salvo que la administración tenga la intención de liquidar la entidad o cesar sus operaciones, o bien no exista otra alternativa realista.

Los responsables del gobierno corporativo de la entidad son responsables de supervisar el proceso de presentación de los informes financieros de la Entidad.

Responsabilidades del auditor en relación con la auditoría de los estados financieros

Nuestros objetivos son obtener una seguridad razonable de que los estados financieros en su conjunto están libres de errores materiales, debido a fraude o error, y emitir un informe de auditoría que contiene nuestra opinión. Una seguridad razonable es un alto grado de seguridad, pero no garantiza que una auditoría realizada de acuerdo con las Normas Internacionales de Auditoría modificadas por el ICPARD siempre detecte un error material cuando existe. Los errores pueden deberse a fraude o error y se consideran materiales si, individualmente o de forma agregada, podría esperarse razonablemente que influyan en las decisiones económicas que los usuarios toman basándose en los estados financieros.

Como parte de una auditoría de acuerdo con las Normas Internacionales de Auditoría modificadas por el ICPARD, aplicamos nuestro juicio profesional y mantenemos una actitud de escepticismo profesional durante toda la auditoría. También:

- Identificamos y evaluamos los riesgos de errores materiales en los estados financieros, debido a fraude o error, diseñamos y realizamos procedimientos de auditoría para responder a esos riesgos y obtenemos evidencia de auditoría suficiente y adecuada para proporcionar una base para nuestra opinión. El riesgo de no detectar un error material resultante de un fraude es más elevado que en el caso que resulte de un error, ya que el fraude puede implicar colusión, falsificación, omisiones deliberadas, manifestaciones intencionalmente erróneas o anulación del control interno.
- Obtenemos un entendimiento del control interno relevante para la auditoría con el fin de diseñar procedimientos de auditoría que sean apropiados en las circunstancias, pero no con el propósito de expresar una opinión sobre la efectividad del control interno de la Entidad.
- Evaluamos la adecuación de las políticas contables utilizadas y la razonabilidad de las estimaciones contables y revelaciones relacionadas efectuadas por la administración.
- Concluimos sobre el uso adecuado por la administración del principio contable de negocio en marcha y, en base a la evidencia de auditoría obtenida, concluimos sobre si existe o no una incertidumbre material relacionada con hechos o condiciones que puedan generar una duda significativa sobre la capacidad de la entidad para continuar como negocio en marcha. Si llegamos a la conclusión de que existe una incertidumbre material, se requiere que llamemos la atención en nuestro informe de auditoría sobre las correspondientes revelaciones en los estados financieros o, si tales revelaciones no son adecuadas, que expresemos una opinión modificada. Nuestras conclusiones se basan en la evidencia de auditoría obtenida hasta la fecha de nuestro informe de auditoría. Sin embargo, hechos o condiciones futuros pueden ser causa de que la Entidad no pueda continuar como un negocio en marcha.



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- Evaluamos la presentación general, la estructura y el contenido de los estados financieros, incluyendo las revelaciones, y si los estados financieros representan las transacciones y los hechos subyacentes de una forma que logren una presentación razonable.

Nos comunicamos con los responsables del gobierno corporativo de la Entidad en relación con, entre otros asuntos, el alcance y la oportunidad de la auditoría planificada y los hallazgos de auditoría significativos, así como cualquier deficiencia significativa en el control interno que identificamos durante nuestra auditoría.

RAM

Rubén A. Mathis
Registro ICPARD no. 99540



23 de Febrero del 2023

Santo Domingo,
República Dominicana



EL

ROMACA INDUSTRIAL, S.A.
Balances Generales Comparativos
Al 31 de Diciembre del 2022-2021
(Valores Exp. en Dop)

ACTIVOS:	2022	2021
Activos Corrientes:		
Efectivo Caja y Banco (Nota 2)	111,576,004	74,433,491
Cuentas por Cobrar clientes (Nota 3)	88,046,249	91,527,818
Otras Cuentas por Cobrar (Nota 4)	210,343	684,178
Inventario Mercancía en Tránsito	14,252,163	15,225,120
Inventario de Mercancía	283,013,444	186,940,161
Despacho Portuario	24,335	31,117
Seguros Pagados por Anticipados	1,291,272	1,294,895
Anticipos a Proveedores (Nota 5)	-	-
Total Activos Corrientes	400,913,810	350,611,788
Propiedad, Planta y Equipos: (Nota 6)		
Mobiliarios y Equipos de oficinas	3,535,591	3,354,110
Equipos de Transportes	5,000,148	4,008,814
Herramientas y Trameras	301,803	301,803
Maquinarias y Equipos de Taller	1,130,468	1,130,468
Depreciación Acumulada	(7,490,534)	(6,798,119)
Total Propiedad y Equipos Netos (Nota)	2,483,476	2,896,096
Otros Activos: (Nota 7)	20,343,386	20,209,929
Total Activos	423,740,672	373,717,814
PASIVOS:		
Pasivos Corrientes:		
Cuenta por pagar (Nota 8)	18,618,919	8,523,964
Retenciones y Acumulaciones por pagar (Nota 9)	120,554,004	20,401,051
Otras cuentas por pagar (Nota 10)	16,880,428	3,840,210
Línea de Crédito Scotiabank	-	-
Total Pasivos Corrientes	156,062,352	32,765,254
Total Pasivos	156,062,352	32,765,254
PATRIMONIO:		
Capital Suscrito y Pagado	201,137,052	80,000,000
Reservas Legal	7,196,020	7,196,020
Acciones no Emitidas	-	(8,839,800)
Aportes P/futura Capitalización	-	121,729,065
Beneficios y/o Perdidas Acumulados	20,489,968	120,543,036
Beneficios del Periodo	38,855,281	19,522,239
Total Patrimonio	267,678,320	340,952,560
Total Pasivos y Patrimonio	423,740,672	373,717,814

Las notas a estos estados son parte integral de los mismos.



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ROMACA INDUSTRIAL, S.A.
 Estados de Resultados Comparativos
 Para el Periodo Terminado al 31 de Diciembre del 2022-2021
 (Valores Expresados en Dop)

INGRESOS POR:	2022	2021
Ventas de Mercancia	226,052,189	221,376,078
Intereses Financieros	304,812	619,278
Diferencia Cambiaria	0	0
Otros Ingresos	4,006,449	4,107,430
Descuentos y Devoluciones	(5,739,824)	(6,420,813)
Total Ingresos Netos	224,623,626	219,682,883
<i>Menos:</i>		
COSTOS:		
Costo de Ventas (nota 11)	113,749,580	102,662,422
Beneficios Brutos	110,874,045	117,040,461
<i>Menos:</i>		
GASTOS GENERALES Y ADMINISTRATIVOS:		
Gastos de Personal (Nota 12)	21,476,225	19,012,932
Gastos de Ventas (Nota 13)	15,260,939	19,475,467
Gastos por Trabajos, Suministros y Servicios (Nota 14)	11,957,126	5,943,805
Gastos de arrendamientos (Nota 15)	3,235,150	3,096,606
Gastos de activos fijos (Nota 16)	1,433,590	1,258,252
Gastos de representación (Nota 17)	1,744,668	2,978,929
Gastos financieros (Nota 18)	151,637	593,798
Gastos de Seguros (Nota 19)	1,986,981	667,116
Gastos No Deducibles (Nota 20)	161,563	20,372,824
Total Gastos Operacionales	52,587,878	73,399,527
Beneficios del Periodo Antes de ISR	53,286,166	33,640,934
Impuesto Sobre la Renta (Nota 20)	14,430,887	14,118,696
Beneficios Netos despues de ISR	38,855,281	19,522,238

Las notas a estos estados son parte integral de los mismos.



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ROMACA INDUSTRIAL, S.A.

Estados de Patrimonio de los Accionistas Comparativos

Por los años terminados al 31 de Diciembre del 2022 y 2021

(Valores expresados en Dop)

	Acciones Comunes	Valor Nominal	Importes	Reservas Legal	Beneficios Acumulados	Aportes por capitalizar	de los Accionistas
Balance Inicial al 1ro Enero del 2021	719,602	100	71,960,200	7,196,020	120,545,036		199,701,256
Cap. de Utilidades Acumuladas							
Dividendos Pagados	-	-					
Resultados del Periodo					19,522,238		19,522,238
Impuestos Sobre la Renta							
Saldos al 31 de Diciembre del 2021	-	-		-	140,067,274	121,729,065	140,067,274
Balance Inicial al 1ro Enero del 2021	719,602	100	71,960,200	7,196,020	140,067,274	121,729,065	340,952,559
Cap. de Utilidades Acumuladas							
Dividendos Pagados							
Resultados del Periodo					39,855,281		-
Impuestos Sobre la Renta							
Saldos al 31 de Diciembre del 2022	719,602	279.51	201,137,052	7,196,020	20,489,968		267,678,321



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ROMACA INDUSTRIAL, S.A.

Estados de Flujos de Efectivo Comparativos

Por los años terminados al 31 de Diciembre del 2022-2021

(Valores expresados en Dop)

FLUJOS DE EFECTIVO DE LAS ACTIVIDADES OPERATIVAS:	2022	2021
Beneficio Neto	53,286,168	33,640,933.69
Ajustes para Conciliar el Beneficio Neto con el Efectivo Neto provisto en las Actividades Operativas		
Depreciación y Amortización	691,415	890,490
(Aumento) Disminución en Documentos y Cuentas por Cobrar	-23,476,569	57,923,847
(Aumento) Disminución en Inventarios	36,073,284	116,440,176
Aumento (Disminución) Gastos Pagado por Anticipado	-503,624	1,794,895
Aumento (Disminución) Aumento en Impuestos por Pagar	5,247,924	(3,699,411)
Aumento (Disminución) Aumento en Cuentas Por Pagar	-13,049,189	(7,505,236)
(Disminución) Aumento en Otras Cuentas	0	(363,125)
Efectivo Neto Provisto por las Actividades Operativas	4,983,241	165,481,636
FLUJO DE EFECTIVO DE LAS ACTIVIDADES DE INVERSION		
Inversiones	0,00	0,00
Mobiliarios y Equipos de Oficina	181,481	21,510
Equipos de Transportes	-	-
Licencia deSoftware	810,764	1,347,962
Flujo Neto Provisto por las Actividades de Inversion	992,245	1,369,481.00
FLUJO DE EFECTIVO DE LAS ACTIVIDADES DE FINANCIAMIENTO		
Linea de Credito Scotiabank	0	2,500,000
Prestamo Accionistas	0	0
Flujo Provisto por las Actividades de Financiamiento	0	2,500,000
AUMENTO (DISMINUCION) NETA DEL EFECTIVO	39,142,513	-15,310,741
EFFECTIVO NETO al Principio año	74,433,491	89,744,232
EFFECTIVO NETO al Final del año	113,576,004	74,433,491



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ROMACA INDUSTRIAL, S.A.
 Notas a los Estados Financieros Comparativos
 Al 31 de Diciembre del 2022-2021
 (Valores Expresados en Dop)

Nota 2.- Efectivo en Caja y Bancos:	2022	2021
El efectivo en caja y bancos se compone del efectivo disp. y sus equites. Un detalle es como sigue:		
Caja Chica	70,000	0
Banco Scotiabank Cta. Dop No. 120069	-	2,330,097
Banco Scotiabank Cta. Dop No. 120483	81,291,162	48,481,630
Banco Scotiabank Cta. US\$ No. 1205764	359,596	291,669
Prima Scotiabank Cta. US\$ No. 1205764	19,379,678	16,577,591
Banco de Reservas	12,509,740	6,742,262
Asoc. Popular 102696164	15,006	-
Tarjeta Prepago Banco Leon Dop	1,022	1,022
Total Efectivo en caja y bancos	113,576,004	74,433,491

Nota 3.- Cuentas por Cobrar.
 Las cuentas por cobrar se constituyen de la siguiente manera:
 Clientes

Clientes	68,046,249	91,522,818
Total Cuentas por Cobrar Clientes	68,046,249	91,522,818

Otras Cuentas por Cobrar (nota 4)

Esta cuenta se detalla de la siguiente forma:

Varios	10,343	280
Juan L. Machado	-	461,898
Miguel Ramirez Perez	200,000	200,000
Total de Otras Cuentas por Cobrar	210,343	684,178

Nota 5.- Anticipos a Proveedores:
 Los avances a proveedores se componen de:

Tony Rodamientos	0	0
Asenat Investments, S.R.L.	0	0
Galpa Export Corp.	0	0
Total Avances a proveedores	-	-

Nota 6.- Propiedad, Planta y Equipos:
 La Propiedad, planta y equipos está compuesta de la siguiente manera:

Mobiliarios y Equipos de oficina	3,535,591	3,354,110
Equipos de Transportes	5,006,148	4,908,834
Herramientas y Tramerías	301,803	301,803
Maquinarias y Equipos de Taller	1,130,468	1,130,468
	9,974,010	9,695,215
Menos:		
Depreciación Acumulada	(7,490,534)	(6,709,110)
Total Propiedad, Planta y Equipos	2,483,476	2,886,096

Nota 7.- Otros Activos:
 Los Otros Activos no amortizables se componen de:

Mejoras en Propiedad Arrendada	169,754	81,999
Amortización en Propiedad Arrendada	(52,989)	(50,702)
Licencia Software	2,787,466	1,976,702
Amortización Software	(881,800)	(439,598)
Fianzas y Depósitos	277,078	277,078



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 Auditado



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ROMACA INDUSTRIAL, S.A.
 Notas a los Estados Financieros Comparativos
 Al 31 de Diciembre del 2022-2021
 (Valores Expresados en Dop)

Inversiones en Certificados	10,000,000	10,000,000
ITBIS Adelantado en Compras	3,993,611	8,384,511
Incentivos Pagados por Anticipados	4,050,327	-
Total Otros Activos	20,343,386	20,209,929

Nota 08.- Cuentas por pagar:

Un detalle de las Cuentas por Pagar, es como sigue:

Cuentas por Pagar Proveedores Dop	1,022,246	1,172,201
Cuentas por Pagar Proveedores US\$	317,992	127,222
Prima en Cuentas por Pagar Internacional	12,278,074	7,224,335
Total Cuentas por Pagar	18,618,919	8,523,964

Nota 9.- Retenciones y Acumulaciones por Pagar:

Las retenciones y acum. por pagar se detallan de la siguiente manera:

Infotep por Pagar	22,512	8,560
Retenciones ISR a Terceros	213,162	53,493
ISR por Pagar Asalariados	1,067,238	2,848,633
Impuestos Sobre la Renta 27%	3,002,116	8,250,040
Anticipos 1.5%	1,176,558	330,047
Dividendos por Pagar	112,085,672	-
ITBIS por Pagar	2,548,077	8,971,227
100% ITBIS Retenidos a Terceros	402,111	109,328
30% ITBIS Retenidos a Terceros	36,558	20,723
Total Retenciones y Acumulaciones por Pagar	120,554,004	20,401,051

Nota 10.- Otras Cuentas por Pagar:

Un detalle de este rubro es como sigue:

Otras Cuentas por Pagar	-	1,284,056
Avances de Clientes (Proyectos)	16,889,428	2,556,184
Total Otras cuentas por Pagar	16,889,428	3,840,239



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ROMACA INDUSTRIAL, S.A.
 Notas a los Estados Financieros Comparativos
 Al 31 de Diciembre del 2022-2021
 (Valores Exp. en Dop)

Nota 11.- Costo de Ventas:	2022	2021
Inventario Inicial de Mercancías al 01/01/22	166,940,161	50,499,985
Mas		
Compras de Piezas y Partes	69,649,849.90	64,232,573.68
Compra de Equipos	21,127,368.70	90,651,323.71
Costos Diversos	5,878,009	2,759,865
Sub Total	<u>313,595,388</u>	<u>213,143,697</u>
Mas		
Descuentos y Devoluciones	(4,534)	(33,254)
Mano de Obra e Instalaciones	2,022,525	6,837,143
Materiales y Sumistros	-	2,494
Ajuste en inventario inicial	-	59,044,832
Diferencia Cambiaria	-	(32,985)
Otros Costos de Importación	249,645	125,621
Sub Total	<u>1,167,637</u>	<u>65,938,901</u>
Mercancía Disponible para la Venta	<u>316,763,025</u>	<u>329,582,583</u>
Menos:		
Inventario Final al 31/12/2022 y 2021	<u>203,013,444</u>	<u>166,940,161</u>
Costo de Ventas	<u>113,749,580</u>	<u>162,642,422</u>

Nota 12.- Gastos de Personal :
 Los gastos de personal incurridos son los siguientes:

Sueldos	10,038,263	9,276,633
Regalia Pascual	267,763	822,811
Infotep	101,531	31,977
Gastos de AFP y TSS	1,471,650	1,290,791
Seguro Medico Mas	1,732,839	1,193,950
Vacaciones	547,377	176,419
Bonificaciones	1,781,297	1,752,926
Incentivos	845,000	670,000
Horas Extras	238,000	191,000
Otras Remuneraciones	2,853,129	2,804,813
Atenciones Navideñas	574,545	60,758
Almuerzo al Personal	516,810	414,609
Preaviso y Cesantía	-	268,788
Total Gastos de Personal	<u>21,476,225</u>	<u>19,012,932</u>

Nota 13.- Gastos de Ventas:
 Los gastos de personal de ventas incurridos, son los siguientes:

Comisiones	15,162,483	19,117,080
Atenciones a Clientes	-	263,478
Servicios de Data Credito	98,455	96,909
Total Gastos de Personal Operativo	<u>15,260,939</u>	<u>19,475,467</u>

Nota 14.- Gastos por trabajos, Suministros y Servicios:
 Los gastos por trabajos, suministros y servicios, se detallan de la siguiente manera

Agua Luz y Basura	779,988	661,805
Teléfonos y Otros medio de Comunicaciones	1,327,682	565,895
Material y Suministro de Oficina	895,191	818,622
Material Gastable de Limpieza	663,753	500,987
Envios y Correspondencia	377,103	380,899
Honorarios Profesionales PM	1,112,004	292,691



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ROMACA INDUSTRIAL, S.A.
Notas a los Estados Financieros Comparativos
Al 31 de Diciembre del 2022 - 2021
(Valores Exp. en Dop)

Honorarios Profesionales PF	1,014,852	591,579
Servicios de Seguridad	627,318	542,240
Combustibles y Lubricantes	374,491	341,500
Donaciones	-	29,812
Diferencia Cambiaria	1,613,826	696,592
Otras Deducciones	1,577,411	20,700
Gastos de Cuentas Incobrables	1,591,630	-
ITBS no Deducido	271	262
Total de Gastos por Trabajos, Serv. y Suministros	11,957,126	5,943,603

Nota 15.-Gastos de Arrendamientos:

Arrendamientos de Edificios	3,215,150	3,006,606
Total de Gastos de Arrendamiento:	3,215,150	3,006,606

Nota 16.-Gastos de Activos Fijos:

Mant. y Rep. de Edificaciones	4,538	29,829
Mantenimiento Equipo de Transporte	93,634	36,623
Mantenimiento Maquinarias y Equipos	199,517	199,350
Depreciación Categoría Act cat I	2,227	1,644
Depreciación Categoría Act cat II	625,280	913,201
Depreciación Categoría Act cat III	66,135	77,808
Amortización de Software	442,262	-
Total de Gastos de Activos Fijos	1,433,590	1,258,252

Nota 17.-Gastos de Representación:

Publicidad	1,225,520	2,398,583
Cuentas y Suscripciones	519,147	555,916
Representación	-	24,628
Total de Gastos de Viajes	1,744,668	2,978,929

Nota 18.-Gastos Financieros:

Intereses y Comisiones Sobre Préstamos	2,145	159,190
Comisiones por Manejo Cuenta Corrientes Bancarias	92,730	169,544
Impuesto 0.15% cheques Desem. Art. 12 Ley No. 288-04	256,753	265,093
Total Gastos Financieros:	351,628	593,798

Nota 19.-Gastos de Seguros:

Seguros Generales	1,986,981	667,116
Total de Gastos de Seguros:	1,986,981	667,116

Nota 20.- Impuestos sobre la Renta

Beneficio Neto Antes de Impuestos	53,286,168	33,640,934
<i>mas (a menos): Ajustes Fiscales</i>	0.00	-1,722,290.50
Gastos no deducibles	161,563	20,322,824
Total Ajustes	161,563	18,650,534
Renta Neta Imponible (Perdida Fiscal) del Año	53,447,730	52,291,468
ISR (27% de la base imponible)	14,430,887	14,118,696
Anticipos Pagados en el periodo	11,428,771	5,868,656
Impuesto Sobre la Renta a Pagar	3,002,116	8,250,940
Beneficio neto después de impuestos	39,016,843	39,895,062



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ROMACA INDUSTRIAL, S. A.
Estados Financieros Comparativos
Al 31 de Diciembre del 2021 - 2020
Valores Expresados en Dop



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ROMACA INDUSTRIAL, S.A.
Estados Financieros Comparativos
Al 31 de Diciembre del 2021 - 2020

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Consultores & Asocs. SRL
Audidores, Contadores & Asesores Fiscales

RNC: 131-01850-5

Informe de los Auditores Independientes

Al Consejo de Directores:

ROMACA INDUSTRIAL S A

Opinión

Hemos auditado los estados financieros comparativos de la empresa **ROMACA INDUSTRIAL S. A.**, que comprenden el estado de situación, el estado de resultados, el estado de cambios al patrimonio, el estado de flujos de efectivo y las notas explicativas, desde el 01 de enero del 2021-2020, hasta el 31 de diciembre del 2021-2020.

En nuestra opinión, los estados financieros auditados adjuntos presentan razonablemente, en todos los aspectos materiales, la situación financiera de la empresa **ROMACA INDUSTRIAL S. A.**, desde el 01 de enero del 2021-2020, hasta el 31 de diciembre del 2021-2020, su desempeño financiero, de acuerdo con las Normas Internacionales de Información Financiera (IFRS).

Fundamento de la opinión

Hemos llevado a cabo nuestra auditoría de acuerdo con las Normas Internacionales de Auditoría modificadas por el Instituto de Contadores Públicos Autorizados de la República Dominicana (ICPARD). Nuestras responsabilidades bajo estas normas se describen más adelante en la sección "Responsabilidades del auditor en relación con la auditoría de los estados financieros" de nuestro informe. Somos independientes de la Entidad de acuerdo con el Código de Ética para Profesionales de la Contabilidad del Consejo de Normas Internacionales de Ética para Contadores (Código de Ética del IESBA) y los requerimientos de ética que son aplicables a nuestra auditoría de los estados financieros en la República Dominicana emitidos por el ICPARD. Hemos cumplido con las demás responsabilidades éticas de conformidad con el Código de Ética del ICPARD y los requerimientos de ética del IESBA. Consideramos que la evidencia de auditoría que hemos obtenido es suficiente y adecuada para proporcionar una base para nuestra opinión.

Responsabilidades de la administración y de los responsables de gobierno corporativo en relación con los estados financieros

La administración de la Entidad es responsable de la preparación y presentación razonable de los estados financieros de conformidad con las Normas Internacionales de Información Financiera, y del control interno que la administración considere necesario para permitir la preparación de estados financieros libres de errores materiales debido a fraude o error.



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En la preparación de los estados financieros, la administración es responsable de evaluar la capacidad de la entidad para continuar como un negocio en marcha revelando, según corresponda, los asuntos relacionados con negocio en marcha y utilizando la base contable de negocio en marcha, salvo que la administración tenga la intención de liquidar la entidad o cesar sus operaciones, o bien no exista otra alternativa realista.

Los responsables del gobierno corporativo de la entidad son responsables de supervisar el proceso de presentación de los informes financieros de la Entidad.

Responsabilidades del auditor en relación con la auditoría de los estados financieros

Nuestros objetivos son obtener una seguridad razonable de que los estados financieros en su conjunto están libres de errores materiales, debido a fraude o error, y emitir un informe de auditoría que contiene nuestra opinión. Una seguridad razonable es un alto grado de seguridad, pero no garantiza que una auditoría realizada de acuerdo con las Normas Internacionales de Auditoría modificadas por el ICPARD siempre detecte un error material cuando existe. Los errores pueden deberse a fraude o error y se consideran materiales si, individualmente o de forma agregada, podría esperarse razonablemente que influyan en las decisiones económicas que los usuarios toman basándose en los estados financieros.

Como parte de una auditoría de acuerdo con las Normas Internacionales de Auditoría modificadas por el ICPARD, aplicamos nuestro juicio profesional y mantenemos una actitud de escepticismo profesional durante toda la auditoría. También:

- Identificamos y evaluamos los riesgos de errores materiales en los estados financieros, debido a fraude o error, diseñamos y realizamos procedimientos de auditoría para responder a esos riesgos y obtenemos evidencia de auditoría suficiente y adecuada para proporcionar una base para nuestra opinión. El riesgo de no detectar un error material resultante de un fraude es más elevado que en el caso que resulte de un error, ya que el fraude puede implicar colusión, falsificación, omisiones deliberadas, manifestaciones intencionalmente erróneas o anulación del control interno.
- Obtenemos un entendimiento del control interno relevante para la auditoría con el fin de diseñar procedimientos de auditoría que sean apropiados en las circunstancias, pero no con el propósito de expresar una opinión sobre la efectividad del control interno de la Entidad.
- Evaluamos la adecuación de las políticas contables utilizadas y la razonabilidad de las estimaciones contables y revelaciones relacionadas efectuadas por la administración.
- Concluimos sobre el uso adecuado por la administración del principio contable de negocio en marcha y, en base a la evidencia de auditoría obtenida, concluimos sobre si existe o no una incertidumbre material relacionada con hechos o condiciones que puedan generar una duda significativa sobre la capacidad de la entidad para continuar como negocio en marcha. Si llegamos a la conclusión de que existe una incertidumbre material, se requiere que llamemos la atención en nuestro informe de auditoría sobre las correspondientes revelaciones en los estados financieros o, si tales revelaciones no son adecuadas, que expresemos una opinión modificada. Nuestras conclusiones se basan en la evidencia de auditoría obtenida hasta la fecha de nuestro informe de auditoría. Sin embargo, hechos o condiciones futuras pueden ser causa de que la Entidad no pueda continuar como un negocio en marcha.



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- Evaluamos la presentación general, la estructura y el contenido de los estados financieros, incluyendo las revelaciones, y si los estados financieros representan las transacciones y los hechos subyacentes de una forma que logren una presentación razonable.

Nos comunicamos con los responsables del gobierno corporativo de la Entidad en relación con, entre otros asuntos, el alcance y la oportunidad de la auditoría planificada y los hallazgos de auditoría significativos, así como cualquier deficiencia significativa en el control interno que identificamos durante nuestra auditoría.

RAM Consultores

Registro ICPARD no. 99540



16 de Marzo del 2022

Santo Domingo,
República Dominicana



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ROMACA INDUSTRIAL, S.A.
Balances Generales Comparativos
Al 31 de Diciembre del 2021-2020
(Valores Expresados en Dop)

ACTIVOS:	dic-21	dic-20
Activos Corrientes		
Efectivo Caja y Banco (Nota 2)	24,433,491	80,744,232
Cuentas por Cobrar clientes (Nota 3)	91,322,818	13,558,971
Otras Cuentas por Cobrar (Nota 4)	684,178	269,188
Inventario mercancía en Tránsito	15,225,129	7,160,497
Inventario de Mercancía	166,940,161	50,499,985
Despacho Portuario	11,117	15,311
Seguros Pagados por Anticipados	1,794,895	-
Anticipos a Proveedores (Nota 5)	-	2,617
Total Activos Corrientes	350,611,788	181,296,101
Propiedad, Planta y Equipos: (Nota 6)		
Mobiliarios y Equipos de oficinas	3,354,110	3,332,591
Equipos de Transportes	4,908,834	4,908,834
Herramientas y Tráileres	301,803	301,803
Maquinarias y Equipos de Taller	1,130,468	1,130,468
Depreciación Acumulada	(8,799,110)	(5,908,630)
Total Propiedad y Equipos Netos (Nota)	2,886,096	3,765,067
Otros Activos: (Nota 7)	20,209,029	19,213,003
Total Activos	373,717,813	204,274,271
PASIVOS:		
Pasivos Corrientes:		
Cuenta por pagar (Nota 8)	8,523,964	1,018,728
Retenciones y acumulaciones por pagar (Nota 9)	20,401,050	7,040,768
Otras cuentas por pagar (Nota 10)	3,840,239	3,477,115
Línea de Crédito Scotiabank	-	2,500,000
Total Pasivos Corrientes	32,765,254	14,036,611
Total Pasivos	32,765,254	14,036,611
PATRIMONIO:		
Capital Suscrito y Pagado	80,000,000	80,000,000
Reservas Legal	7,196,020	7,196,020
Acciones no Emitidas	(8,039,800)	(8,039,800)
Aportes P/futura Capitalización	121,729,065	-
Beneficios y/o Peridas Acumulados	120,345,036	96,712,790
Beneficios del Período	18,522,238	14,369,150
Total Patrimonio	340,952,559	190,238,160
Total Pasivos y Patrimonio	373,717,813	204,274,271

Las Notas a estos estados son parte integral de los mismos.



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ROMACA INDUSTRIAL, S.A.
 Estados de Resultados Comparativos
 Para el Periodo Terminado al 31 de Diciembre del 2021-2020
 (Valores Expresados en Dop)

INGRESOS POR:	dic-21	dic-20
Ventas de Mercancia	271,376,978	193,707,877
Intereses Financieros	619,278	746,447
Diferencia Cambiaria	0	223,274
Otros Ingresos	4,107,439	7,568
Descuentos y Devoluciones	(6,420,833)	(4,497,175)
Total Ingresos Netos	269,682,863	190,277,992
Años:		
COSTOS:		
Costo de Ventas (nota 11)	162,642,422	106,143,318
Beneficios Brutos	107,040,461	84,134,674
Años:		
GASTOS GENERALES Y ADMINISTRATIVOS		
Gastos de Personal (Nota 12)	19,012,932	21,109,708
Gastos de Ventas (Nota 13)	19,475,467	27,017,261
Gastos por Trabajos, Suministros y Servicios (Nota 14)	5,043,603	8,849,712
Gastos de arrendamientos (Nota 15)	3,096,606	3,095,550
Gastos de activos fijos (Nota 16)	1,258,252	1,140,960
Gastos de representación (Nota 17)	2,078,929	1,686,327
Gastos financieros (Nota 18)	593,798	794,369
Gastos de Seguros (Nota 19)	667,116	1,111,998
Gastos No Deducibles (Nota 20)	20,372,824	-
Total Gastos Operacionales	73,399,527	65,214,895
Beneficios del Periodo Antes de ISR	33,640,934	18,919,779
Impuesto Sobre la Renta (Nota 20)	14,118,696	4,550,629
Beneficios Netos despues de ISR	19,522,238	14,369,150

Las notas a estos estados son parte integral de los mismos.



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ROMACA INDUSTRIAL, S.A.

Estados de Patrimonio de los Accionistas Comparativos

Por los años terminados al 31 de Diciembre del 2021 y 2020

(Valores expresados en Dop)

	Acciones Comunes	Valor Nominal	Importes	Aporte por cap.	Reservas Legal	Beneficios Acumulados	de los Accionistas
Balace Inicial al 1ro Enero del 2020	719.602	100	71.960.200		7.196.020	96.712.790	175.859.010
Cap. de Utilidades Acumuladas							
Dividendos Pagados	-	-					
Resultados del Periodo						18.971.611	18.971.611
Impuestos Sobre la Renta						(4.550.629)	(4.550.629)
Saldos al 31 de Diciembre del 2020	-	-			-	111.133.772	111.133.772
Balace Inicial al 1ro Enero del 2021	719.602	100	71.960.200		7.196.020	111.081.940	190.238.160
Cap. de Utilidades Acumuladas							
Dividendos Pagados							190.238.160
Resultados del Periodo	-	-				33.640.054	-
Impuestos Sobre la Renta						(14.118.696)	-
Saldos al 31 de Diciembre del 2021	719.602	100	71.960.200	121.729.065	7.196.020	140.067.275	340.952.560



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ROMACA INDUSTRIAL, S.A.
Estados de Flujos de Efectivo Comparativos
Por los años terminados al 31 de Diciembre del 2021-2020
(Valores expresados en Dop)

FLUJOS DE EFECTIVO DE LAS ACTIVIDADES OPERATIVAS:	dic-21	dic-20
Beneficio Neto	33,640,934	14,369,149.90
Ajustes para Conciliar el Beneficio Neto con el Efectivo Neto provisto en las Actividades Operativas		
Depreciación y Amortización	890,400	1,241,941
(Aumento) Disminución en Documentos y Cuentas por Cobrar	57,923,847	11,111,082
(Aumento) Disminución en Inventarios	116,440,176	3,644,729
Aumento (Disminución) Gastos Pagado por Anticipado	1,794,895	-
Aumento (Disminución) Aumento en Impuestos por Pagar	-3,899,411	(3,430,135)
Aumento (Disminución) Aumento en Cuentas Por Pagar	-7,505,236	(25,415,736)
(Disminución) Aumento en Otras Cuentas	-363,125	(1,917,566)
Efectivo Neto Provisto por las Actividades Operativas	165,481,637	7,234,316
FLUJO DE EFECTIVO DE LAS ACTIVIDADES DE INVERSION		
Inversiones	0.00	0.00
Mobiliarios y Equipos de Oficina	21,519	(131,166)
Equipos de Transportes	-	-
Licencia deSoftware	1,347,962	-
Herramientas	-	(26,497)
Flujo Neto Provisto por las Actividades de Inversion	1,369,481	-157,657.22
FLUJO DE EFECTIVO DE LAS ACTIVIDADES DE FINANCIAMIENTO		
Linea de Credito Scotiabank	2,500,000	-5,000,000
Prestamo Accionistas	0	-24,162,000
Flujo Provisto por las Actividades de Financiamiento	2,500,000	-29,162,000
AUMENTO (DISMINUCION) NETA DEL EFECTIVO	-15,310,741	-7,716,192
EFFECTIVO NETO al Principio año	89,744,232	97,460,424
EFFECTIVO NETO al Final del año	74,433,491	89,744,232



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ROMACA INDUSTRIAL, S.A.

Notas a los Estados Financieros Comparativos

Al 31 de Diciembre del 2021-2020

(Valores Expresados en Dop)

Nota 2.- Efectivo en Caja y Bancos:	dic-21	dic-20
El efectivo en caja y bancos se compone del efectivo disp. y sus equites. Un detalle es como sigue:		
Caja General	-	0
Banco Scotiabank Cta. Dop No 120069	2,339,057	4,460,989
Banco Scotiabank Cta. Dop No 120483	48,481,690	60,500,961
Banco Scotiabank Cta. US\$ No 1205764	291,869	310,877
Prima Scotiabank Cta. US\$ No 1205764	16,577,591	17,682,306
Banco de Reservas	6,742,262	6,698,026
Tarjeta Prepago Banco Leon Dop	1,022	1,022
Total Efectivo en caja y bancos	74,431,491	89,744,232

Nota 3.- Cuentas por cobrar:

Las cuentas por cobrar se constituyen de la siguiente manera:

Cientes

Cientes	91,522,818	33,598,021
Total Cuentas por Cobrar Clientes	91,522,818	33,598,021

Otras Cuentas por Cobrar (nota 4)

Esta cuenta se detalla de la siguiente forma:

Varios	280	360
Juan Luis Machado	483,898	69,128
Miguel Ramirez Perez	200,000	200,000
Total de Otras Cuentas por Cobrar	684,178	269,488

Nota 5.- Anticipos a Proveedores:

Los avances a proveedores se componen de:

Tony Reclamientos	0	1
Asenat Investments, S.R.L.	0	0
Galpa Export Corp	-	7,617
Total Avances a proveedores	-	7,617

Nota 6.- Propiedad, Planta y Equipos:

La Propiedad, planta y equipos está compuesta de la siguiente manera:

Mobiliarios y Equipos de oficina	3,354,110	3,332,591
Equipos de Transportes	4,908,834	4,908,834
Herramientas y Trameras	301,803	301,803
Maquinarias y Equipos de taller	1,130,468	1,130,468
Total Propiedad, Planta y Equipos	9,695,215	9,673,696

Menos:

Depreciación acumulada	6,799,110	5,908,630
Total Propiedad, Planta y Equipos	16,494,335	15,582,326

Nota 7.- Otros activos:

Los Otros Activos no amortizables se componen de:

Anticipos Impuestos Sobre La Renta 1.5%	5,717,447	4,232,122
Mejoras en Propiedad Arrendada	81,999	81,999
Amortización en Propiedad Arrendada	(50,762)	(49,118)
Licencia Software	1,976,702	628,739



ROMACA INDUSTRIAL, S.A.

Notas a los Estados Financieros Comparativos

Al 31 de Diciembre del 2021 - 2020

(Valores Expresados en Dop)

Amortización Software	(439,598)	(339,082)
Fianzas y Depósitos	277,078	277,078
Inversiones en Certificados	10,000,000	10,000,000
ITBIS Adelantado en compras	8,364,511	1,040,370
Retención 5% del Estado	151,209	3,341,494
Total Otros activos	26,078,586	19,213,603

Nota 08.- Cuentas por pagar:

Un detalle de las Cuentas por Pagar, es como sigue:

Cuentas por Pagar Proveedores Dop	1,172,203	464,898
Cuentas por Pagar Proveedores US\$	127,227	9,467
Prima en Cuentas por Pagar Internacional	2,224,535	544,358
Sobregiro Bancario	-	0
Total Cuentas por Pagar	8,523,964	1,018,723

Nota 9.- Retenciones y acumulaciones por Pagar:

Las retenciones y acumulaciones por pagar se detallan de la siguiente manera:

Infotep por Pagar	8,560	9,423
Retenciones ISR a Terceros	53,493	343,367
ISR por Pagar empleado	2,848,633	814,034
Impuestos Sobre la Renta 27%	8,250,040	4,550,629
Anticipos 1.5%	139,047	667,404
ITBIS por Pagar	8,971,227	-
100% ITBIS Retenidos a Terceros	109,328	631,610
30% ITBIS Retenidos a Terceros	20,723	24,300
Total Retenciones y acumulaciones por pagar	20,401,050	7,040,768

Nota 10.- Otras Cuentas por Pagar:

Un detalle de este rubro es como sigue:

Otras Cuentas por Pagar	1,284,056	1,284,056
Avances de Clientes	2,556,184	2,193,059
Total Otras cuentas por pagar	3,840,240	3,477,115



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ROMACA INDUSTRIAL, S.A.

Notas a los Estados Financieros Comparativos
Al 31 de Diciembre del 2021-2020
(Valores Exp. en Doo)

Nota 11.- Costo de Ventas:	dic-21	dic-20
Inventario Inicial de mercancías al 01/01/20	50,499,985	50,494,204
Más:		
Compras de Piezas y Partes	64,232,523.63	50,766,936
Compra de Equipos	90,655,323.71	55,866,770
Costos Diversos	7,759,665	37,261,392
Sub Total	213,143,697	103,394,100
Más:		
Mercancía en Importación	-	1,158,458
Desfueros y Desvolaciones	133,254	-74
Mano de Obra e Instalaciones	6,832,143	14,685,561
Materiales y Suministros	2,494	10,910
Ajuste en inventario inicial	59,044,832	
Diferencia Cambiaria	(32,986)	820,083
Otros Costos de importación	125,671	29,932
Sub Total	65,538,901	16,754,899
Mercancía Disponible para la venta	329,582,583	156,643,308
Menos:		
Inventario Final de mercancías al 31/12/2020 y 2021	166,940,161	50,499,985
Costo de Ventas	162,642,422	106,143,318

Nota 12.- Gastos de Personal:

Los gastos de personal incurridos son los siguientes:

Sueldos y salarios	9,276,633	10,715,099
Regalía Pascual	822,811	953,812
Bónus	83,977	107,151
Gastos de AFP y TSS	1,290,291	1,296,149
Seguro Médico Max	1,193,950	1,043,311
Vacaciones	176,419	412,010
Bonificaciones	1,752,926	2,010,752
Incentivos	670,600	864,404
Horas Extras	101,600	10,976
Otras Remuneraciones	2,804,813	2,924,947
Atenciones Navideñas	60,718	338,941
Almuerzo al Personal	414,609	336,817
Preaviso y Cesantía	264,784	95,342
Total Gastos de Personal	19,012,932	21,109,708

Nota 13.- Gastos de Ventas:

Los gastos de personal de ventas incurridos, son los siguientes:

Comisiones	19,117,080	26,560,814
Atenciones a Clientes	261,478	-
Servicios de Data Credito	96,905	96,654
Contratista Proyectos	-	255,993
Total Gastos de Personal Operativo	19,475,467	27,017,261

Nota 14.- Gastos por trabajos, Suministros y Servicios:

Los gastos por trabajos, suministros y servicios, se detallan de la siguiente manera:



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ROMACA INDUSTRIAL, S.A.

Notas a los Estados Financieros Comparativos
Al 31 de Diciembre del 2021-2020
(Valores Exp. en Dop)

Aguas Limpi y Basura	661,801	618,142
Teléfonos y Otros medio de Comunicación	568,895	363,248
Material y suministro de oficina	818,622	776,508
Material gastable de Limpieza	500,987	2,480,089
Envíos y Correspondencia	300,899	155,480
Honorarios Profesionales PM	797,691	2,500,000
Honorarios Profesionales PE	591,579	600,156
Servicios de Seguridad	547,340	475,571
Combustibles y Lubricantes	340,500	284,071
Donaciones	29,812	18,902
Diferencia Cambiaria	696,592	-
Otras Deducciones	29,700	38,170
IRBIS no Deducido	282	775
Total de Gastos por Trabajos, Serv. y Suministros	5,943,803	8,849,712

Nota 15.-Gastos de Arrendamientos:

Arrendamientos de Edificio	1,096,606	3,095,550
Total de gastos de arrendamiento:	3,096,606	3,095,550

Nota 16.-Gastos de Activos Fijos:

Mantenimiento y Reparaciones de edificaciones	26,829	49,789
Mantenimiento Equipo de Transporte	36,823	33,811
Mantenimiento Maquinarias y Equipos	189,150	24,429
Depreciación Categoría Act cat I	1,641	1,731
Depreciación Categoría Act cat II	911,201	1,151,282
Depreciación Categoría Act cat III	77,806	88,928
Total de Gastos de Activos Fijos	1,258,252	1,349,969

Nota 17.-Gastos de Representación:

Publicidad	2,198,385	1,258,882
Cuentas y Suscripciones	555,516	427,445
Representación	24,428	-
Total de gastos de viajes	2,978,329	1,686,327

Nota 18.-Gastos Financieros:

Intereses y Comisiones Sobre Préstamos	159,190	399,686
Comisiones por Manejo Cuenta Corrientes Bancarias	169,544	66,051
Impuesto 0.15% cheques Desam. Art. 17 Ley No. 288-04	265,063	328,733
Total gastos financieros:	593,797	794,469

Nota 19.-Gastos de Seguros:

Seguros Generales	667,116	1,311,728
Total de Gastos de Seguros	667,116	1,311,728

Nota 20.- Impuestos sobre la Renta

Beneficio Neto Antes de Impuestos	33,640,934	18,919,779
mas (o menos) Ajustes Fiscales	-1,722,200.50	-
Gastos no deducibles	20,372,824	-
Total Ajustes	18,650,534	-
Renta Neta Imponible (Perdida Fiscal) del Año	52,291,468	18,919,779



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ROMACA INDUSTRIAL, S.A.

Notas a los Estados Financieros Comparativos
Al 31 de Diciembre del 2021-2020
(Valores Exp. en Dop)

ISR (27% de la base imponible)	14,118,696	4,550,629
Anticipos Pagados en el periodo	5,868,657	-
Impuesto Sobre la Renta a Pagar	8,250,040	4,550,629
Beneficio neto después de impuestos	<u>19,895,062</u>	<u>14,369,150</u>
	19,522,238	
	33,640,934	5,717,447



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DOCUMENTACIÓN TÉCNICA



E. Luján

13 de febrero de 2024

Señores:
CONSEJO DEL PODER JUDICIAL

Saludos cordiales,

Por medio de la presente, les informamos que conforme las especificaciones técnicas suministradas bajo el pliego de condiciones con el expediente No. LPN-CPJ-35-2023, nuestra oferta técnica en el **Lote 1** está compuesta por:

- AIRE ACONDICIONADO PORTATIL MARCA CARRIER DE 12,000 BTU R-32 115V 1PH/60HZ MODELO 51KPD121N8.
- A/A MARCA CARRIER TIPO CONSOLA DE PARED DE 12,000 BTU, EVAPORADOR MODELO: 40MHHAC12XA3—3, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38MHRDC12AA3, EFICIENCIA SEER 21, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO CONSOLA DE PARED DE 18,000 BTU, EVAPORADOR MODELO: 40MHHAC18XA3—3, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38MHRDC18AA3, EFICIENCIA SEER 21, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO CONSOLA PISO/TECHO DE 36,000 BTU, EVAPORADOR MODELO: 42KZL036VS, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38KUT036VS, EFICIENCIA SEER 16, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER INFINITY TIPO MANEJADORA DE 36,000 BTU, EVAPORADOR MOD. FE4ANF003L00, CONDENSADOR CON PROTECCION ANTICORROSIVA MOD. 24VNA936A003, EFICIENCIA SEER 17 TERMOSTATO MOD. SYSTXCCITC01-B, 208-230V/1PH/60HZ R-410A.



R.N.C. #1-01-09203-3



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- A/A MARCA CARRIER TIPO CONSOLA PISO/TECHO DE 5 TON - 60,000 BTU, EVAPORADOR MODELO: 42KZL055VS, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38KUT055VS, EFICIENCIA SEER 16, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER INFINITY TIPO MANEJADORA DE 60,000 BTU, EVAPORADOR MOD. FE4ANF005L00, CONDENSADOR CON PROTECCION ANTICORROSIVA MOD. 24VNA960A003, EFICIENCIA SEER 16.5 TERMOSTATO MOD. SYSTXCCITC01-B, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO MANEJADORA DE 7.5 TON, EVAPORADOR MOD. 40RFAA08A2A5-UA0A0, CONDENSADOR CON PROTECCION ANTICORROSIVA MOD. 38AUZD08A0A5-0A0A0, EFICIENCIA SEER 13, 208/230V 3PH/60HZ R-410A.

Adicional, nuestra propuesta técnica incluye la instalación, puesta en operación, mano de obra y materiales a utilizar durante los procesos.

Atentamente,

Edgar López
Gerente Romaca Industrial



13 de febrero de 2024

Señores:
CONSEJO DEL PODER JUDICIAL



Saludos cordiales,

Por medio de la presente, les informamos que conforme las especificaciones técnicas suministradas bajo el pliego de condiciones con el expediente No. LPN-CPJ-35-2023, nuestra oferta técnica en el **Lote 2** está compuesta por:

- A/A MARCA CARRIER TIPO CONSOLA DE PARED DE 12,000 BTU, EVAPORADOR MODELO: 40MHHAC12XA3---3, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38MHRDC12AA3, EFICIENCIA SEER 21, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO CONSOLA DE PARED DE 18,000 BTU, EVAPORADOR MODELO: 40MHHAC18XA3---3, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38MHRDC18AA3, EFICIENCIA SEER 21, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO CONSOLA DE PARED DE 24,000 BTU, EVAPORADOR MODELO: 40MHHAC24XA3---3, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38MHRDC24AA3, EFICIENCIA SEER 20, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO CONSOLA PISO/TECHO DE 36,000 BTU, EVAPORADOR MODELO: 42KZL036VS, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38KUT036VS, EFICIENCIA SEER 16, 208-230V/1PH/60HZ R-410A.



- A/A MARCA CARRIER TIPO CONSOLA PISO/TECHO DE 5 TON - 60,000 BTU, EVAPORADOR MODELO: 42KZL055VS, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38KUT055VS, EFICIENCIA SEER 16, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER INFINITY TIPO MANEJADORA DE 60,000 BTU, EVAPORADOR MOD. FE4ANF005L00, CONDENSADOR CON PROTECCION ANTICORROSIVA MOD. 24VNA960A003, EFICIENCIA SEER 16.5 TERMOSTATO MOD. SYSTXCCITC01-B, 208-230V/1PH/60HZ R-410A.

Adicional, nuestra propuesta técnica incluye la instalación, puesta en operación, mano de obra y materiales a utilizar durante los procesos.

Atentamente,


Edgar López

Gerente Romaca Industrial



13 de febrero de 2024

Señores:
CONSEJO DEL PODER JUDICIAL

Saludos cordiales,

Por medio de la presente, les informamos que conforme las especificaciones técnicas suministradas bajo el pliego de condiciones con el expediente No. LPN-CPJ-35-2023, nuestra oferta técnica en el **Lote 3** está compuesta por:

- A/A MARCA CARRIER TIPO CONSOLA DE PARED DE 18,000 BTU, EVAPORADOR MODELO: 40MHHAC18XA3---3, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38MHRDC18AA3, EFICIENCIA SEER 21, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO MANEJADORA DE 7.5 TON, EVAPORADOR MOD. 40RFAA08A2A5-UA0A0, CONDENSADOR CON PROTECCION ANTICORROSIVA MOD. 38AUZD08A0A5-0A0A0, EFICIENCIA SEER 13, 208/230V 3PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO MANEJADORA DE 10 TON, EVAPORADOR MOD. 40RFAA12A2A6-0A0A0, CONDENSADOR CON PROTECCION ANTICORROSIVA MOD. 38AUZA12A0A5-0A0A0, EFICIENCIA SEER 13, 208/230V 3PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO MANEJADORA DE 15 TON, EVAPORADOR MOD. 40RUAA16A2A6-0A0A0, CONDENSADOR CON PROTECCION ANTICORROSIVA MOD. 38AUZA16A0A5-0A0A0, EFICIENCIA SEER 13, 208/230V 3PH/60HZ R-410A.

Adicional, nuestra propuesta técnica incluye la instalación, puesta en operación, mano de obra y materiales a utilizar durante los procesos.

Atentamente,

Edgar López
Gerente Romaca Industrial



13 de febrero de 2024

Señores:
CONSEJO DEL PODER JUDICIAL



Saludos cordiales,

Por medio de la presente, les informamos que conforme las especificaciones técnicas suministradas bajo el pliego de condiciones con el expediente No. LPN-CPJ-35-2023, nuestra oferta técnica en el **Lote 4** está compuesta por:

- A/A MARCA CARRIER TIPO CONSOLA DE PARED DE 12,000 BTU, EVAPORADOR MODELO: 40MHHAC12XA3---3, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38MHRDC12AA3, EFICIENCIA SEER 21, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO CONSOLA DE PARED DE 18,000 BTU, EVAPORADOR MODELO: 40MHHAC18XA3---3, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38MHRDC18AA3, EFICIENCIA SEER 21, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO CONSOLA DE PARED DE 24,000 BTU, EVAPORADOR MODELO: 40MHHAC24XA3---3, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38MHRDC24AA3, EFICIENCIA SEER 20, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO CONSOLA PISO/TECHO DE 36,000 BTU, EVAPORADOR MODELO: 42KZL036VS, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38KUT036VS, EFICIENCIA SEER 16, 208-230V/1PH/60HZ R-410A.

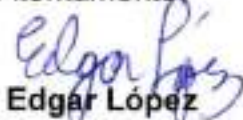


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- A/A MARCA CARRIER TIPO CONSOLA PISO/TECHO DE 5 TON - 60,000 BTU, EVAPORADOR MODELO: 42KZL055VS, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38KUT055VS, EFICIENCIA SEER 16, 208-230V/1PH/60HZ R-410A.

Adicional, nuestra propuesta técnica incluye la instalación, puesta en operación, mano de obra y materiales a utilizar durante los procesos.

Atentamente,



Edgar López

Gerente Romaca Industrial



13 de febrero de 2024


Señores:
CONSEJO DEL PODER JUDICIAL

Saludos cordiales,

Por medio de la presente, les informamos que conforme las especificaciones técnicas suministradas bajo el pliego de condiciones con el expediente No. LPN-CPJ-35-2023, nuestra oferta técnica en el **Lote 5** está compuesta por:

- A/A MARCA CARRIER TIPO CONSOLA DE PARED DE 12,000 BTU, EVAPORADOR MODELO: 40MHHAC12XA3—3, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38MHRDC12AA3, EFICIENCIA SEER 21, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO CONSOLA DE PARED DE 18,000 BTU, EVAPORADOR MODELO: 40MHHAC18XA3—3, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38MHRDC18AA3, EFICIENCIA SEER 21, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO CONSOLA DE PARED DE 24,000 BTU, EVAPORADOR MODELO: 40MHHAC24XA3—3, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38MHRDC24AA3, EFICIENCIA SEER 20, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO CONSOLA PISO/TECHO DE 36,000 BTU, EVAPORADOR MODELO: 42KZL036VS, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38KUT036VS, EFICIENCIA SEER 16, 208-230V/1PH/60HZ R-410A.
- A/A MARCA CARRIER TIPO CONSOLA PISO/TECHO DE 5 TON - 60,000 BTU, EVAPORADOR MODELO: 42KZL055VS, CONDENSADOR CON PROTECCION ANTICORROSIVA MODELO: 38KUT055VS, EFICIENCIA SEER 16, 208-230V/1PH/60HZ R-410A.

Adicional, nuestra propuesta técnica incluye la instalación, puesta en operación, mano de obra y materiales a utilizar durante los procesos.

Atentamente,

Edgar Lopez
Gerente Romaca Industrial



FICHA TECNICA DE EQUIPOS OFERTADOS



es



Turn to the experts

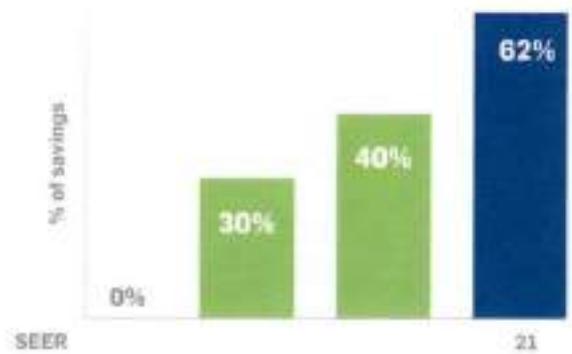


MINI SPLIT SYSTEM 40MHHA / 38MHRD





CARRIER INVERTER VS LOW SEER TRADITIONAL SYSTEM



MINI SPLIT SYSTEM 40MHHA / 38MHRD

- ➔ POWER SAVING OPTION
- ➔ WIND AVOID ME
- ➔ ECO MODE
- ➔ TURBO
- ➔ TIMER
- ➔ SELF-DIAGNOSIS AND AUTO-PROTECTION
- ➔ HD DUST FILTER



- ➔ AUTO RESTART FUNCTION
- ➔ SLEEP MODE
- ➔ FOLLOW ME
- ➔ LOUVER POSITION MEMORY
- ➔ SELF-CLEANING
- ➔ GOLDEN ANTICORROSION TREATMENT
- ➔ WIFI ENABLED*
- ➔ WIFI KIT IS AMAZON ALEXA COMPATIBLE

*Wifi Kit sold separately
PN 17310900A062E1



EXPONENTIAL SAVINGS

With an efficiency rating of up to 21 SEER, the Carrier Inverter can save you up to 58% in your energy bill. This is possible thanks to its DC inverter technology, which allows to maintain a desired temperature with minimum fluctuations.

EXPONENTIAL PRODUCT LIFE

The outdoor unit is built to last with an anti-corrosive treatment, which prolongs the unit's performance and sustains the most severe climates.

TOTAL CONTROL AT YOUR FINGERTIPS

Take control even further. Carrier Inverter has an optional Wi-Fi kit to give you the ability to manage your system's comfort and efficiency from your smartphone. The system can be turned on, off, set the desired temperature, and access other features, all from the convenience of your device. Available for Iphone and Android.

MINI SPLIT SYSTEM SPECIFICATIONS

Indoor Unit Model		40MHHAC12XA1	40MHHAC09XA3	40MHHAC12XA3	40MHHAC16XA3	40MHHAC24XA3	
Outdoor Unit Model		38MHRDC12AA1	38MHRDC09AA3	38MHRDC12AA3	38MHRDC16AA3	38MHRDC24AA3	
Power supply	V/Ph/Hz	110V/1Ph/60Hz	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	208/230V/1Ph/60Hz	
Cooling (Standard conditions)	Capacity (range)	Btu/h	11500(950-10500)	8000(2600-11000)	11500(2600-12500)	17500(2600-17500)	22000(4840-22000)
	Input	W	570(80-1000)	720(125-1100)	970(80-1000)	1600(150-1590)	2100(175-2150)
	Current	A	8.2(1.0-9.2)	3.1(0.5-4.2)	4.2(0.7-4.8)	6.8(1.4-6.5)	9.2(1.7-9.3)
	EER J	Btu/h/W	11.9	12.5	12.0	11.3	10.2
	SEER J	Btu/h/W	21	20.5	21	21	20
MINIMUM CIRCUIT AMPACITY(Indoor)	A	3	3	3	5	3	
MAX.FUSE(Indoor)	A	15	15	15	15	15	
MINIMUM CIRCUIT AMPACITY(Outdoor)	A	18	11	11	18	18	
MAX.FUSE(Outdoor)	A	30	15	15	20	20	
Compressor	Model	KOK103D001E23	KOK103D001E23	KOK103D001E23	KOK140D06F2	KOK140D06F2	
	Type	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	
	Capacity	W	3355	3065	3065	4315	4315
Indoor fan motor	Model	ZKFP-20-B-113	ZKFP-19-B-4	ZKFP-19-B-4	ZKFP-30-B-3-10	ZKFP-30-B-1-8	
	Speed(Hz/Min)	min	1200/1540/960	1350/910/840	1200/1540/960	1200/960/670	1100/960/640
Indoor air flow (HAMEL)	m ³ /h	365/430/590	410/500/590	530/600/590	800/900/520	1000/600/660	
Indoor air flow (HAMEL)	CFM	332/402/540/11.76	346/470/591/47.04	323/530/523/194.12	470/590/323/640/5.80	580/243/323/690/0.90	
Indoor noise level (HAMEL)	dB(A)	49.5/56.5/59.2	55.0/51.0/52.5	49.5/50.5/5	46/50.5/51.0	47.5/59.5/59	
Indoor unit	Dimension(W/D/H)	mm	800x200x236	720x200x232	800x200x236	871x200x232	1042x232x232
	Dimension(W/D/H)	inch	31.5x7.87x9.31	28.70x7.87x9.11	31.5x7.87x9.31	34.29x7.87x9.11	41.02x9.13x9.11
	Packing (W/D/H)	mm	870x280x300	790x270x375	870x280x375	1040x280x400	1150x280x410
	Packing (W/D/H)	inch	34.2x11.02x11.81	31.10x10.63x14.76	34.2x11.02x14.96	41.34x11.02x15.75	45.28x11.02x16.54
	Net/Gross weight	kg	8.7/11.1	7.8/10.11	8.6/11	11.2/14.4	13.0/17.1
	Net/Gross weight	lb	19.18/24.47	17.37/22.29	18.96/24.25	24.59/31.75	29.06/37.78
Outdoor fan motor	Model	ZKFN-34-B-1	ZKFN-34-10-1-3	ZKFN-34-B-1	ZKFN-34-10-1-3	ZKFN-34-10-1-3	
	Speed(Hz/Min)	min	850/660	650/590	850/660	610/660	610/590
Outdoor air flow	m ³ /h	1900	1800	1900	2300	2300	
Outdoor air flow	CFM	1058.82	1058.82	1058.82	1256.29	1256.29	
Outdoor noise level	dB(A)	54.5	53.5	54.5	55.5	56.5	
Outdoor unit	Dimension(W/D/H)	mm	720x720x490	720x720x490	720x720x490	760x920x515	800x920x514
	Dimension(W/D/H)	inch	28.35x28.35x19.30	28.35x28.35x19.30	28.35x28.35x19.30	30.12x36.22x20.28	31.50x36.22x20.28
	Packing (W/D/H)	mm	830x920x640	680x920x540	830x920x540	887x920x610	915x920x610
	Packing (W/D/H)	inch	32.68x36.22x25.20	26.77x36.22x21.26	32.68x36.22x21.26	34.92x36.22x23.98	36.02x36.22x23.98
	Net/Gross weight	kg	25.0/4.7	21.4/23.16	22.0/6.0	27.9/30.3	30.0/33.1
	Net/Gross weight	lb	55.2/10.45	47.26/51.06	48.5/13.27	61.5/66.80	67.2/73.07
Refrigerant type		R410A(0.88kg)	R410A(0.57kg)	R410A(0.88kg)	R410A(0.9kg)	R410A(1.07kg)	
Additional charge per meter	g/m	10	10	10	13	10	
Additional charge for each ft	oz/ft	0.16	0.16	0.16	0.16	0.20	
Design pressure	PSIG	550/340	550/340	550/340	550/340	550/340	
Refrigerant piping	Liquid side / Gas side	mm(inch)	6.35mm(1/4) x 12.7mm(1/2)	6.35mm(1/4) x 9.52mm(3/8)	6.35mm(1/4) x 12.7mm(1/2)	6.35mm(1/4) x 12.7mm(1/2)	9.52mm(3/8) x 12.7mm(1/2)
	Max. refrigerant pipe length	m	25	25	25	30	30
	Max. refrigerant pipe length	ft	82.02	82.02	82.02	98.42	98.42
	Max. difference in level	m	10	10	10	10	10
	Max. difference in level	ft	32.81	32.81	32.81	32.81	32.81
Connection wiring		16AWG	16AWG	16AWG	16AWG	16AWG	
thermostat type		Remote Control	Remote Control	Remote Control	Remote Control	Remote Control	
Room temperature	Indoor(cooling/heating)	°C	16~32	16~32	16~32	16~32	
	Outdoor(cooling/heating)	°C	0~50	0~50	0~50	0~50	



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XPOWERFLEX
INVERTER

Vertical Discharge

The ultimate cooling and heating comfort



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FLOOR / UNDER CEILING MOUNTED SPLIT

- ▶ Slim Profile
- ▶ Two installation method (Floor / Ceiling)
- ▶ Auto-cool-dry-heat Fan
- ▶ Low sound level
- ▶ Automatic air swing in each direction
- ▶ Three fan speed
- ▶ Auto reset function
- ▶ Drain pipe Connector - Left or Right
- ▶ Check, drain ports
- ▶ Wired controller / Weekly controller
- ▶ Central controller ports

INDOOR MODEL			42KZL036VS	42KZL055VS
Power supply		V-ph-Hz	208-230V~, 60Hz, 1Ph	208-230V~, 60Hz, 1Ph
Cooling	Capacity	Btu/h	38000(10000-38000)	55000(17000-55000)
	Input	W	3638	5568
	EER	W/W	2.9	2.9
	SEER		16	16
Indoor air flow(H/Med/Lc)		m3/h	1648/1454/1257	2546/2299/2148
Indoor noise level (sound pressure)(H/Med/Lc)		dB(A)	54/51.6/45.9	58.5/56.4/53.5
Indoor unit	Dimension (WxDxH)	mm	1285x675x235	1850x675x235
	Packing (WxDxH)	mm	1360x755x313	1725x755x313
	Net/Gross weight	kg	31.2/36.7	42.7/48.2
Design pressure		MPa	4.2/1.5	4.2/1.5
Drainage water pipe diameter		mm	ODΦ25	ODΦ25
Refrigerant piping	Liquid side/Gas side	mm(inch)	Φ9.52/Φ15.8(3/8"/5/8")	Φ9.52/Φ19(3/8"/3/4")
Controller			Remote control	Remote control
Operation temperature		°C	17~30	17~30
Room temperature	Cooling	°C	17~32	17~32
Qty per 20' /40' /40HQ (indoor unit)			92/186/213	72/147/167



TECHNICAL SPECIFICATIONS

Outdoor Units



UNIVERSAL OUTDOOR UNIT - COOLING ONLY

OUTDOOR MODEL			38KUT036VS	38KUT055VS
Code			22022716000876	22022716000875
Power supply		V-Ph-Hz	208-230V~, 60Hz, 1Ph	208-230V~, 60Hz, 1Ph
Max. input consumption		W	3700	6400
Max. current		A	20	29.5
Outdoor air flow		m ³ /h	5300	7400
Outdoor noise level (sound pressure)		dB(A)	65.6	66.8
Throttle type			Throttle valve	Throttle valve
Outdoor unit	Dimension(WxDxH)	mm	710x710x843	710x710x843
	Packing (WxDxH)	mm	738x738x872	738x738x872
	Net/Gross weight	kg	61.5/66.6	60.5/65.6
Refrigerant	Type		R410A	R410A
	Charged volume	kg	2.6	4.0
Design pressure		MPa	4.2/1.5	4.2/1.5
Refrigerant piping	Liquid side/ Gas side	mm(inch)	Φ9.52/Φ15.9(3/8"/5/8")	Φ9.52/Φ19(3/8"/3/4")
	Max. refrigerant pipe length	m	30	50
	Max. difference in level	m	20	30
Ambient temperature	Cooling	°C	0-50	0-50
Qty per 20' /40' /40'HQ (outdoor unit)			42/96/142	42/96/142



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A Century of Innovation.

Built on Willis Carrier's invention of modern air conditioning in 1902, Carrier is the world leader in heating, air-conditioning and refrigeration solutions. We constantly build upon our history of proven innovation with new products and services that improve global comfort and efficiency. Carrier Ductless Systems deliver efficiency, performance and control thanks to advanced technology. When it comes to creating comfort, one size or system may not fit all, but one name does: **Carrier**.

www.carriercca.com



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PORTABLE AIR CONDITIONER INSTRUCTION MANUAL

GB INSTALLATION MANUAL
ENGLISH

PL INSTRUKCJA MONTAŻU
POLSKI

NL INSTALLATIEHANDLEIDING
NEDERLANDS

LT MONTAVIMO VADOVAS
LIETUVOS

FR MANUEL D'INSTALLATION
FRANÇAIS

ES MANUAL DE INSTALACIÓN
ESPAÑOL

DA INSTALLATIONSVEJLEDNING
DANSK

SV MONTERINGSHANDBOK
SVENSKA

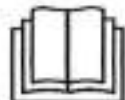
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LATVIJAS

IT MANUALE DI INSTALLAZIONE
ITALIANO

ET PAIGALDUSJUHEND
ESTS

DE INSTALLATIONSHANDBUCH
DEUTSCH



IMPORTANT NOTE:

Read this manual carefully before installing or operating your new air conditioning unit.
Make sure to save this manual for future reference.

This manual only describes the installation of outdoor unit. When installing the indoor unit, refer to the installation manual of indoor unit.

Please check the applicable models, F-GAS and manufacturer information from the 'Owner's Manual - Product Fiche' in the packaging of the outdoor unit.



EL

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**Precaución: Riesgo de incendio
solo para refrigerante R32/R290**



ADVERTENCIA

- Este aparato no está diseñado para ser utilizado por personas (incluidos niños) con discapacidad física, sensorial o mental, o falta de experiencia y conocimiento, a menos que se les haya ofrecido formación o instrucciones sobre el uso del aparato por una persona responsable de su seguridad.
- Los niños deben ser supervisados para asegurarse de que no jueguen con el aparato.
- Las reparaciones solo deben realizarse según las recomendaciones del fabricante del equipo. El mantenimiento y la reparación que requiera la asistencia de otro personal cualificado deberá llevarse a cabo bajo la supervisión de la persona competente en el uso de refrigerantes inflamables.



EL

CONTENIDO

Se ha determinado que este producto cumple la Directiva de Baja Tensión (2014/35/CE) y la Directiva de Compatibilidad Electromagnética (2014/30/EC) de la Unión Europea.



Eliminación correcta de este producto (Residuos de aparatos eléctricos y electrónicos)

(Cuando se usa este aparato de aire acondicionado en los países europeos, hay que seguir estas normas)

- La presencia de este marcado en el producto o en la documentación indica que los aparatos eléctricos y electrónicos (RAEE, tal como se indica en la directiva 2012/19/CE) no deben mezclarse con los desechos domésticos. Está prohibido desechar este aparato con los residuos domésticos. Para su eliminación hay varias posibilidades
 - 1. El municipio ha establecido sistemas de recogida en los que se pueden desechar los residuos electrónicos de forma gratuita para el usuario.
 - 2. En la compra de un nuevo producto, el minorista recogerá el producto usado de forma gratuita como mínimo.
 - 3. El fabricante recogerá el aparato para su eliminación de forma gratuita para el usuario como mínimo.
 - 4. Dado que los productos usados contienen recursos valiosos, se pueden vender a comerciantes de chatarra de metal.
- Tirar de forma incontrolada residuos en bosques y en el campo pone en peligro la salud de las personas cuando las sustancias peligrosas se filtran a las aguas subterráneas y de esta forma llegan a la cadena alimentaria.

Nombre del modelo	Tamaño	Fuente de alimentación
51KPD09N7S	454x365x700	220-240V – 50Hz
51KPD10N7S	467x397x765	
51KPD12N7S	467x397x765	
51QPD12N7S	467x397x765	

• Símbolos utilizados en las unidades y el manual:

	ADVERTENCIA	Este aparato utiliza un refrigerante inflamable. Si el refrigerante se filtra y se expone a una fuente de ignición externa, existe un riesgo de incendio.
	PRECAUCIÓN	El manual de funcionamiento debe leerse cuidadosamente.
	PRECAUCIÓN	Un personal de servicio debe manejar este equipo haciendo referencia al manual de instalación.
	PRECAUCIÓN	La información correspondiente se proporciona en el manual de funcionamiento o el manual de instalación.

El fabricante se reserva el derecho de cambiar las especificaciones del producto sin previo aviso.



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1. PRECAUCIONES DE SEGURIDAD

- Lea este manual antes de utilizar el producto.
- Este aparato puede ser utilizado por niños a partir de 8 años y personas con capacidades físicas, sensoriales o mentales reducidas o con falta de experiencia y conocimientos si antes han sido supervisados o instruidos acerca de cómo usar el aparato de forma segura y comprenden los peligros que su uso implica.
- Los niños no deben jugar con el aparato. La limpieza y el mantenimiento de usuario no debe ser realizada por niños sin supervisión.

ADVERTENCIA

Este símbolo indica la posibilidad de daños personales o incluso la muerte.

- Las tareas de mantenimiento o reparación de este producto sólo deben ser realizadas por personas cualificadas y con experiencia.
Una reparación o un mantenimiento incompletos pueden producir fugas de agua, descargas eléctricas o incendios.
- Mantenga las aberturas de ventilación de la unidad libres de obstrucciones. Asegúrese de que haya al menos 30 cm de espacio libre alrededor de la unidad.
- Todos los cables deben cumplir con los códigos eléctricos locales y nacionales y su instalación debe ser realizada por un agente de mantenimiento calificado.
- Esta unidad queda conectada a tierra a través del cable de alimentación siempre que se conecta a una toma de corriente estándar con toma de tierra. Asegúrese de que la toma de corriente tiene conexión a tierra.
Si el aparato no está conectado a tierra se pueden producir descargas eléctricas.
- No utilice un cable de extensión ni comparta la misma toma de corriente con otros aparatos.
Compruebe la fuente de alimentación disponible y resuelva cualquier problema de cableado antes de realizar la instalación y puesta en marcha.
- Si el cable de alimentación está dañado, debe ser reemplazado por el fabricante, el agente de mantenimiento o por personal cualificado con el fin de evitar situaciones de peligro.
- Con el fin de evitar situaciones de peligro debido al reseteo accidental de la protección térmica, la alimentación eléctrica de este aparato no debe realizarse a través de un dispositivo de conmutación externo, como por ejemplo un temporizador, ni debe ir conectado a un circuito que la compañía eléctrica enciende y apaga regularmente.
- Si la unidad se vuelca accidentalmente durante el uso, apáguela y desenchufe inmediatamente.
Deje la unidad en reposo unas pocas horas antes de volverla a usar.
De lo contrario, la unidad puede iniciar la función de auto apagado.
- No utilice gases inflamables o combustibles como gasolina, benceno, disolvente, etc. en el espacio acondicionado.
Puede provocar un incendio.
- Mantenga este aparato lejos de fuentes de calor.
Se podría dañar la unidad o provocar un incendio.
- Operar con las manos mojadas puede provocar una descarga eléctrica.
- No haga funcionar la unidad en lugares húmedos como un baño o un lavadero.
Pueden producirse descargas eléctricas.
- No introduzca las manos, los dedos u otros objetos en la entrada o la salida de aire en ningún momento.
Puede causarle daños, ya que el ventilador interno gira a velocidad alta.



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1. PRECAUCIONES DE SEGURIDAD

PRECAUCIÓN

Este símbolo indica la posibilidad de daños a la propiedad o consecuencias graves.

- Este producto está diseñado SOLO para el confort humano.
- No bloquee las entradas o salidas de aire. Al hacerlo, bajará el rendimiento, aumentarán los costes de funcionamiento y reducirá la vida del producto.
- No coloque la unidad delante de cortinas o de objetos colgantes.
En caso de que caigan en la entrada de aire.
- La unidad se debe utilizar de manera que esté protegida de la humedad. No coloque objetos encima de la unidad, especialmente si contienen agua.
- No encienda y apague el sistema con el interruptor principal.
Puede provocar un incendio o fugas de agua.
- Mantenga el mando a distancia fuera del alcance de los niños.
De no hacerlo, podrían tragarse las pilas o producirse otros accidentes.
- Transporte siempre la unidad en posición vertical.
- Asegúrese de que la unidad se coloca de manera segura sobre una superficie estable y nivelada.
- Desenchufe la unidad cuando no se utilice durante periodos de tiempo largos. Colocar y almacenar lejos de la luz solar directa.
- Desconecte ANTES de la limpieza o el mantenimiento.
Pueden producirse descargas eléctricas.
- No moje la carcasa ni el panel de control, ni utilice detergentes fuertes, disolventes o materiales abrasivos para limpiar el producto.
- Las cubiertas fijas no se deben quitar nunca.
- Es esencial realizar un buen mantenimiento a intervalos regulares de las unidades.
El MANTENIMIENTO para hacer una limpieza profunda, engrasar y verificar las funciones de todos los componentes críticos debe realizarlo un especialista. Póngase en contacto con un proveedor de servicio técnico cualificado.

Este producto contiene gases fluorados regulados por el Protocolo de Kyoto

Nombre químico del gas	R410A / R290
Potencial de calentamiento global (GWP) del gas	2088 / 3

PRECAUCIÓN

1. Escriba claramente la cantidad de refrigerante cargado en la etiqueta del refrigerante con tinta indeleble.
2. Evite la emisión al medio ambiente del gas fluorado contenido. Asegúrese de que el gas fluorado nunca se ventila a la atmósfera durante la instalación, mantenimiento o eliminación de la unidad. Cuando se detecte alguna fuga del gas fluorado contenido, hay que detener la fuga y repararla lo antes posible.
3. El mantenimiento y reparación de este producto solo puede realizarlo personal de mantenimiento cualificado.
4. Cualquier manipulación de los gases fluorados de este producto, por ejemplo, al trasladar el producto o al recargar el gas, deberá cumplir el Reglamento CE N° 517/2014 sobre determinados gases fluorados de efecto invernadero y las leyes locales.
5. Si tiene alguna pregunta póngase en contacto con los distribuidores, instaladores, etc.



Ef

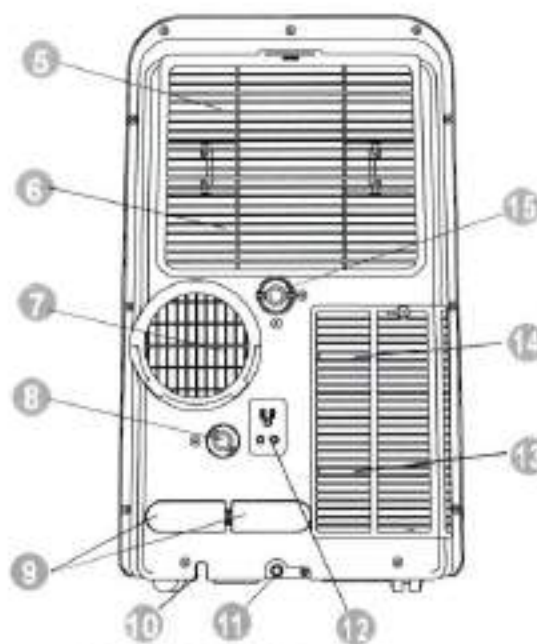
2. VISIÓN GENERAL

2.1 NOMBRES DE LOS COMPONENTES



VISTA FRONTAL

- (1) Panel de control
- (2) Lumbre
- (3) Ruedas
- (4) Asa plegable



VISTA POSTERIOR

- (5) Filtro de aire superior
- (6) Toma de aire superior
- (7) Salida del aire de escape
- (8) Salida de desagüe 1
- (9) Soportes del cable de alimentación (solo para almacenamiento)
- (10) Salida del cable de alimentación
- (11) Salida de desagüe de la bandeja inferior
- (12) Toma eléctrica (solo para almacenamiento)
- (13) Filtro de aire inferior
- (14) Toma de aire inferior
- (15) Salida de desagüe 2

2.2 ACCESORIOS

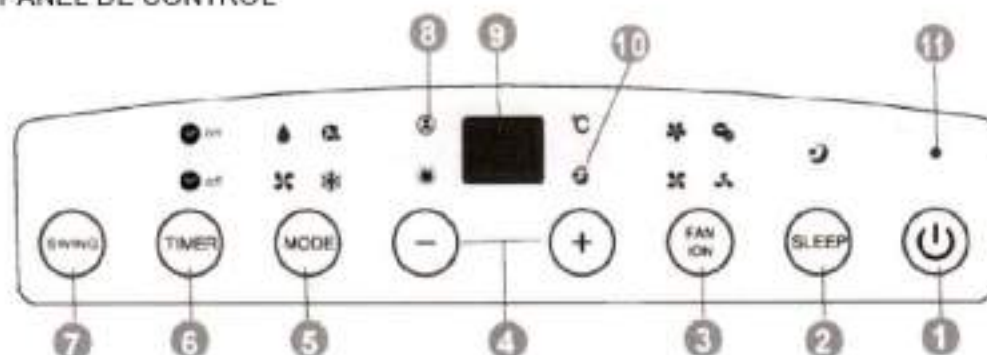
Nombre de los accesorios	Forma	Ctd (piezas)	Nombre de los accesorios	Forma	Ctd (piezas)
Tubo y adaptador de desagüe		1	Manguera de escape		1
Pila		2	Adaptador de manguera de escape A		1
Mando a distancia		1	Adaptador de manguera de escape B		1
Kit para ventanas correderas y tornillo		1	Adaptador de manguera de escape C		1
Espónja de sellado		3	Adaptador de escape en pared		1
Manual		2	Tornillo y taca		4



EL

2. VISION GENERAL


2.3 PANEL DE CONTROL



(1) Botón ON/OFF

El funcionamiento se inicia cuando se pulsa este botón y se detiene cuando se pulsa el botón de nuevo.

(2) Botón SLEEP


Activa/Desactiva la función de dormir. El indicador  estará iluminado cuando la función de dormir esté activada.

(3) Botón FAN

Pulse este botón para seleccionar la velocidad del ventilador:



Botón ION*

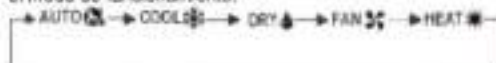
Pulse este botón durante más de 3 segundos para activar la función ionizador (se encenderá el indicador ) y vuelva a pulsarlo durante más de 3 segundos para desactivarla.

(4) Botón + / -

Pulse este botón para subir o bajar la temperatura ambiente

(5) Botón MODE

Pulse el botón de modo repetidamente para cambiar el modo de funcionamiento.



[*] Dependiendo del modelo

(6) Botón TIMER

Pulse este botón para iniciar el temporizador de encendido/apagado automático.

(7) Botón SWING

Ajusta o detiene la oscilación automática de la louver.

(8) Indicador SÍGUEME*

Este indicador estará iluminado cuando la función Sígueme (FOLLOW ME) esté activada.

(9) Pantalla LED

Indica el ajuste de la temperatura programada o el ajuste del temporizador automático. Cuando está en los modos DRY o FAN, indica la temperatura ambiente.

(10) Indicador GESTIÓN DE ENERGÍA

En el modo Frio/Calor, cuando la temperatura ambiente es inferior/superior a la temperatura establecida durante un periodo de tiempo, el motor del compresor y el ventilador se detendrán automáticamente. Este indicador estará iluminado cuando la función de gestión de energía esté activada.

(11) Indicador de ALIMENTACIÓN

NOTA

- Todas las imágenes de este manual solo tienen fines explicativos. Pueden ser ligeramente diferentes del aire acondicionado que compre (en función del modelo). Prevalecerá la forma real.
- En este paquete de manuales se incluye una guía sobre el uso del mando a distancia



EL

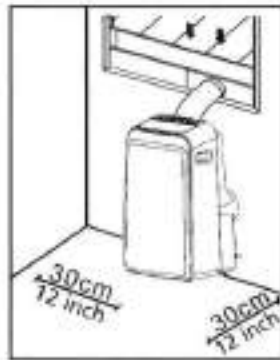
3. PREPARACIÓN PARA EL FUNCIONAMIENTO

⚠ PRECAUCIÓN

- La unidad se debe colocar sobre una base firme para minimizar el ruido y la vibración. Asegúrese de que el suelo es suficientemente para aguantar la unidad.
- No coloque nunca obstáculos alrededor de la entrada o la salida de aire de la unidad.

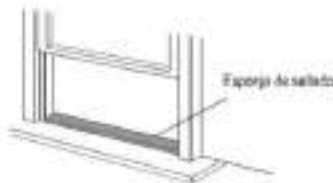
3.1 INSTALACIÓN DE LA MANGUERA DE ESCAPE

3.1.1 Instalación del kit para ventanas corredizas

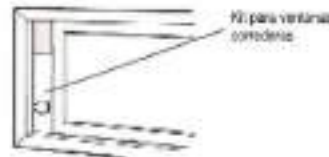
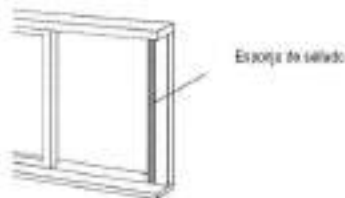


Kit para ventanas corredizas

- Cómo instalar el kit para ventanas corredizas



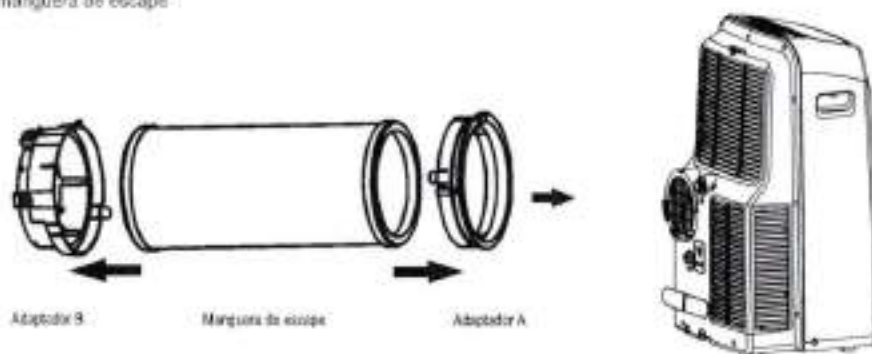
O BIEN



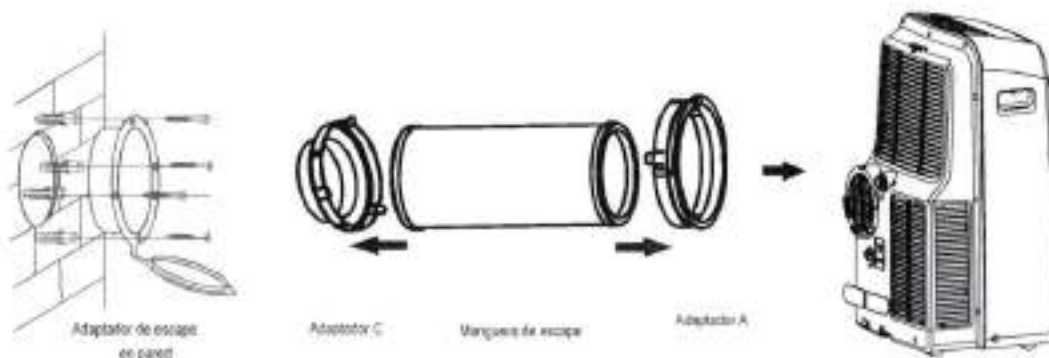
EL

3. PREPARACIÓN PARA EL FUNCIONAMIENTO

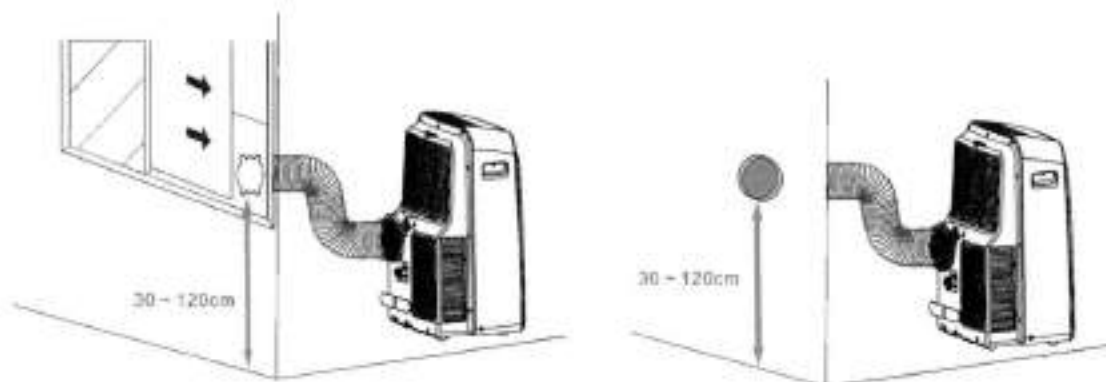
- Cómo instalar la manguera de escape



3.3.2 Montaje en la pared



3.3.3 Altura de la salida de la manguera de escape



NOTA

- No doble demasiado la manguera de escape
- Cubre el orificio con la tapa del adaptador (montaje en pared) cuando no se usa



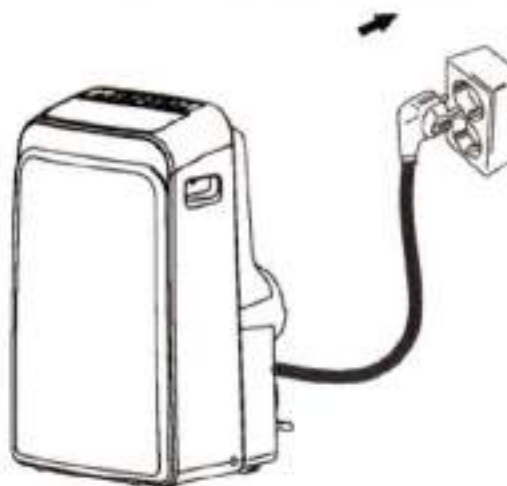
EL

3. PREPARACIÓN PARA EL FUNCIONAMIENTO

3.2 CONEXIÓN A LA RED ELÉCTRICA

! PRECAUCIÓN

- La unidad se debe colocar al alcance de una toma de corriente con toma de tierra.
- El enchufe de alimentación debe insertarse firmemente en la toma de corriente.
- No utilice un cable de extensión ni comparta la misma toma de corriente con otros aparatos.
- Tenga cuidado de que el cable de alimentación no quede atrapado.



4. FUNCIONAMIENTO

4.1 CONDICIONES DE FUNCIONAMIENTO

Modo	Condiciones de funcionamiento
Modo Refrigeración	17 ~ 35°C BS
Modo DRY	13 ~ 35°C BS
Modo Calefacción	5 ~ 30°C BS

Nota: BS: tubo seco

- El rendimiento óptimo se logrará dentro de estas temperaturas de funcionamiento.
- Cuando la unidad opere por encima o por debajo de estas condiciones durante mucho tiempo, el programa de diagnóstico del sistema puede detectar una avería y la unidad dejará de funcionar correctamente.
- Humedad relativa de la sala: menos de 50%. Si el acondicionador de aire funciona fuera de este rango, la superficie del acondicionador de aire puede generar condensación.




EL

4. FUNCIONAMIENTO


4.2 FUNCIONAMIENTO

Modos básicos de funcionamiento: COOL (FRÍO) / DRY (SECO) / HEAT (CALOR) / FAN (VENTILADOR) / AUTO

Modo COLD (FRÍO)

- 1) Pulse **MODE** y seleccione .
- 2) Pulse +/- en la unidad o pulse **TEMP** en el mando a distancia para seleccionar la temperatura.
- 3) Pulse **FAN** en la unidad o en el mando a distancia para seleccionar la velocidad del ventilador.


Modo DRY (SECO)

- 1) Conecte la manguera de desagüe como se muestra en la figura.
- 2) Pulse **MODE** y seleccione .


NOTA:

- Retire la manguera de escape antes de activar el funcionamiento DRY (SECO).
- La velocidad del ventilador y la temperatura no se pueden ajustar en el modo DRY.
- Al detener el funcionamiento DRY, asegúrese de que se ha sacado todo el agua antes de retirar el tubo de desagüe y de colocar el tapón de la salida de desagüe en la parte posterior de la unidad.

Modo HEAT (CALOR)

- 1) Conecte la manguera de desagüe como se muestra en la figura muestra (orificio de desagüe distinto que para el modo DRY (SECO)).
- 2) Pulse **MODE** y seleccione .
- 3) Pulse +/- en la unidad o pulse **TEMP** en el mando a distancia para seleccionar la temperatura.
- 4) Pulse **FAN** en la unidad o en el mando a distancia para seleccionar la velocidad del ventilador.

Modo FAN (VENTILADOR)

- 1) Pulse **MODE** y seleccione .
- 2) Pulse **FAN** en la unidad o en el mando a distancia para seleccionar la velocidad del ventilador.

NOTA:

- La temperatura no se pueden ajustar en el modo FAN.

Modo AUTO

Pulse **MODE** y seleccione .

NOTA:

- En este ajuste el sistema cambiará automáticamente los modos y la velocidad del ventilador para conseguir la temperatura establecida. En primavera y otoño, el control de la temperatura puede requerir cambios al modo COOL/HEAT (FRÍO/CALOR).
- La velocidad del ventilador y la temperatura no se pueden ajustar en el modo AUTO.

Funciones especiales

FUNCIÓN DE OSCILACIÓN

- La lumbria sólo se puede ajustar cuando la unidad está encendida.
- Pulse **SWING** para iniciar la oscilación automática. Presione **SWING** de nuevo para que la lumbria deje de oscilar.

NOTA:




- No ajuste la lumbria manualmente.

FUNCIÓN DEL TEMPORIZADOR

La hora de encendido/apagado se puede ajustar en el panel de control o en el mando a distancia.




En el panel de control:

Cuando la unidad está encendida:

- 1) Pulse **TIMER**. Se iluminará el indicador  OFF.
- 2) Ajuste la hora de apagado automático pulsando +/- . Pulse **TIMER** para confirmar. Se iluminará el indicador  ON.
- 3) Ajuste la hora de encendido automático pulsando +/- . Pulse **TIMER** para confirmar. Se iluminarán los dos indicadores  ON/OFF.

La unidad está ahora programada para encendido/apagado automático.

Cuando la unidad está apagada:

- 1) Pulse **TIMER**. Se iluminará el indicador  ON.
- 2) Ajuste la hora de encendido automático pulsando +/- . Pulse **TIMER** para confirmar. Se iluminará el indicador  OFF.
- 3) Ajuste la hora de apagado automático pulsando +/- . Pulse **TIMER** para confirmar. Se iluminarán los dos indicadores  ON/OFF.

La unidad está ahora programada para encendido/apagado automático.

NOTA:

- Para configurar la función **TIMER** con mando a distancia, consulte el manual de instrucciones del mando a distancia.
- Para cancelar el ajuste del temporizador de encendido/apagado automático, pulse el botón **ON/OFF** o ajustar el temporizador en 0.0.



En funcionamiento DRY (SECO)



En funcionamiento HEAT (CALOR)



4. FUNCIONAMIENTO

Función SÍGUEME*

Al activar la función Sigueme (Follow Me), el mando a distancia mide la temperatura en el lugar donde se encuentra este. El mando a distancia enviará esta señal al acondicionador de aire cada 3 minutos hasta que pulse el botón FOLLOW ME (SÍGUEME) de nuevo.

NOTA:

- La función SÍGUEME no está disponible en el modo DRY (SECC) y FAN (VENTILADOR).

Función IONIZER (IONIZADOR) *

Se añaden iones negativos al aire para simular los efectos de los bosques y las cascadas de agua en los seres humanos.

FUNCIÓN SLEEP (DORMIR)

Cuando se selecciona el modo SLEEP (DORMIR), la temperatura establecida aumentará (refrigeración) o disminuirá (calefacción) 1 °C por 30 minutos durante la primera hora. A partir de entonces mantiene esta nueva temperatura durante 7 horas antes de desconectar el modo SLEEP.

Esta operación ahorra energía y mejora el confort nocturno mediante la sincronización con el metabolismo del cuerpo.

Retraso del compresor (Compressor Delay)

En el arranque hay un retardo de 3 a 4 minutos para proteger el compresor.

Prevención de corrientes frías (Cold Draft Prevention)

Para evitar corrientes de aire desagradables en el modo de calefacción, la unidad interior se precalienta antes de arrancar el ventilador. Este retardo solo dura unos minutos.

Deshielo automático (Auto Defrost)

En el modo de calefacción se genera hielo en la unidad exterior. Para descongelar el hielo, el ventilador interior se detiene durante unos minutos antes de continuar calentando.

Reinicio automático* (Auto Restart*)

La unidad se pondrá en marcha automáticamente después de un corte de energía. Se recuperan todos los ajustes anteriores del usuario.

Función de protección de bandeja llena

Cuando la pantalla LED muestra "P1", significa que la bandeja inferior está llena de agua y hay que vaciarla. La unidad se detendrá automáticamente y no se podrá reiniciar hasta que se retire el agua.

- 1) Mueva la unidad a un lugar de desagüe.
- 2) Retire la cubierta y el tapón de salida de desagüe de la bandeja inferior.
- 3) Cuando el agua haya salido por completo, vuelva a poner el tapón y la cubierta.
- 4) Encienda la unidad hasta que desaparezca "P1".

NOTA:

- Si se sigue mostrando "P1", desactive la unidad y llame al servicio técnico.

[*] Dependiente del modelo



EL

5. CUIDADO Y MANTENIMIENTO

⚠ PRECAUCIÓN

- **DESCONECTE** la fuente de alimentación de la unidad **ANTES** de intentar limpiarla o repararla.
- Use un paño suave y húmedo para limpiar la rejilla, la carcasa y el mando a distancia.
- Siempre póngase en contacto con personal de mantenimiento cualificado para una reparación o cualquier mantenimiento que no pueda realizar el usuario, caso de una limpieza profunda, engrasar y verificar las funciones de los componentes críticos.



■ Limpieza general

Use un paño suave y húmedo para limpiar la rejilla, la carcasa y el mando a distancia.

- No utilice productos químicos, por ejemplo, detergentes, disolventes, pulidores abrasivos, etc.
- No utilice calor (más de 40 °C).

■ Limpieza del filtro de aire

Para que funcione bien, inspeccione con regularidad los filtros de aire y límpielos cuando sea necesario.

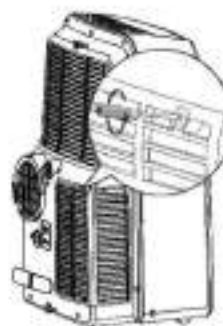
Retire el filtro superior

- Abra la rejilla.
- Saque el filtro.



Retire el filtro inferior

- Desenrosque la rejilla.
- Saque el filtro.



Limpie el filtro de aire

Puede utilizar una aspiradora o agua pura para limpiar el filtro de aire. Si el polvo acumulado es demasiado espeso, utilice un cepillo y un detergente suave para limpiarlo y seque la unidad en un lugar fresco. Vuelva a montar el filtro de aire después de asegurarse que el filtro esté completamente seco.



NOTA

El lado de la entrada de aire debe mirar hacia arriba si se utiliza una aspiradora.
El lado de la entrada de aire debe mirar hacia abajo si se utiliza agua.



■ Preparación para el almacenamiento [largos períodos de inactividad]

1. Limpie los filtros de aire.
2. Asegúrese de que la unidad no contiene nada de agua y que está seca. En climas húmedos y lluviosos, opere en modo solo ventilador hasta que la unidad se haya secado.
3. Apague el acondicionador de aire con el mando a distancia y retire las pilas.
4. Desconecte de la fuente de alimentación. Envuelva el cable de alimentación alrededor de los soportes provistos a tal efecto y conecte el enchufe en la toma de la parte posterior de la unidad.
5. Guarde los accesorios, por ejemplo mangueras de escape, kit para ventanas corredizas, etc.

■ Reutilización después del almacenamiento

1. Compruebe que no haya nada que bloquee la entrada y la salida de aire.
2. Limpie los filtros de aire.
3. Compruebe que los cables no estén dañados y que estén conectados a tierra correctamente.
4. Vuelva a instalar los accesorios.
5. Reconecte a la red eléctrica.
6. Vuelva a instalar las pilas en el mando a distancia y encienda la unidad.

ef



6. SOLUCIÓN DE PROBLEMAS

6.1 GUÍAS, CONSEJOS Y PRECAUCIONES

Durante el funcionamiento normal puede suceder lo siguiente y no ser una avería.

Caso	Explicación / Solución
La refrigeración o calefacción está retardada.	Hay un retardo de 3 minutos para proteger el compresor.
La unidad no se enciende o no hay alimentación eléctrica al pulsar ON / OFF.	Compruebe que la unidad está bien conectada a la toma de corriente y que llega electricidad a la misma.
	La temperatura ambiente es más baja que la temperatura establecida (modo de refrigeración). Requiere la temperatura.
El aparato de aire acondicionado emite sonidos de bajo volumen.	Elimina el agua de la salida de desagüe de la bandeja inferior.
	"Gorgoteo": el refrigerante fluye con normalidad dentro de la unidad.
	"Crujidos": expansión y contracción normales de las piezas de plástico y metal. Corrientes de aire: es normal cuando la lunitra restablece su posición.
Bajo rendimiento de la refrigeración.	Compruebe que todas las ventanas y puertas están cerradas.
	Retire o apague todas las fuentes de calor si es posible.
	Compruebe que el conducto de aire de escape está conectado correctamente y no está obstruido. Si está obstruido, límpielo y vuelva a conectarlo.
	Limpie el filtro de aire y vuélvalo a colocar de forma segura antes de continuar.
Vibración ruidosa o excesiva.	El ajuste de la temperatura es demasiado alto. Baje la temperatura.
	Mueva la unidad a una superficie estable, plana y nivelada.

6.2 CÓDIGOS DE ERROR

Pantalla LED	Descripción	Acción
E1E2E3E4	Avería interna	1) Apague la unidad. 2) Desconecte la unidad y vuelva a conectarla. 3) Si el error persiste, llame a un agente de mantenimiento cualificado para recibir asistencia.
P1	La bandeja inferior está llena.	Quite el agua. Consulte la sección "FUNCIONAMIENTO".



EL

FE4A, FE5A Infinity® Series
Communicating Variable-Speed Fan Coil
Puron® Refrigerant
Sizes 002 thru 006

Carrier

turn to the experts

Product Data

PREMIUM ENVIRONMENTALLY RESPONSIBLE FAN COIL



Puron

The latest in technology makes the FE4A and FE5A fan coil models the most advanced air handlers available. With attention to quiet, efficient, and comfortable operation, Carrier has developed a new benchmark for homeowner comfort and ease of installation.

The FE4A and FE5A utilize the Infinity® Control as a required accessory to enable state of the art smart-diagnostics capability. This enables faster troubleshooting, providing ease of service and repair. The FE4A and FE5A also provide a 4-wire hook up with matching outdoor unit and the Infinity® Control. This makes installation simpler and a lot quicker than with conventional fan coils. The FE4A and FE5A have advanced technology that allows the fan coil to self-configure with a matching outdoor unit and the Infinity™ Control, cutting down on installation time.

The FE4A and FE5A feature Puron® refrigerant, the chlorine-free alternate that is the future for the residential heating and cooling industry. The FE4A and FE5A using Puron® refrigerant maximize performance for environmentally responsible systems. In addition to environmental safety, these systems are 30 to 40% more efficient than standard heating and cooling systems, thereby combining excellence in efficiency and environmental sustainability.

The FE4A and FE5A provide these benefits due to Carrier's command of Electronically Commutating Motor (ECM) technology. These motors are extremely efficient at all speeds, and enable the FE4A and FE5A to operate at the correct speed to deliver airflow precisely, ensuring proper performance across a wide range of duct static pressures. This adaptive efficiency also makes installation quality easier to achieve for today's demanding homeowner.

Carrier's command of ECM technology may be most evident in the comfort advantages that an ECM can deliver. For true comfort, the homeowner can achieve command of both temperature and humidity in cooling and heating modes.

Another feature which sets the FE4A and FE5A apart is the factory-installed TXV, which enhances efficiency and provides compressor-protecting operation at all recommended conditions. Grooved tubing, louvered aluminum fins, and the large face areas of the FE4A and FE5A refrigerant coils also provide superior efficiency, for high SEER and HSPF performance.

Carrier leads the way in condensate control, a hallmark of these multipoise fan coils. All of these featured components are protected within a rugged, pre-painted metal cabinet lined with super-thick, high-density insulation. For neat, high quality installations, the unit exterior features sweat refrigerant connections for simple leak free performance, and multiple electrical entry for both high and low voltage service.

Assembled at the factory compliant with low leak requirements of less than 2% cabinet leakage rate at 0.5 inches W.C. and 1.4% cabinet leakage rate at 0.5 inches W.C. when tested in accordance with ASHRAE 193 standard.



EL

FEATURES

Smart Diagnostics

- Self configuring (ease of installation)
- Easier troubleshooting, providing faster service and repair
- Energy Tracking capability with the Infinity[®] Series Wall Control.
(Energy Tracking has the ability to monitor and estimate the energy consumption of your Infinity[®] system.)

Environmentally Responsible Refrigerant Technology

- Puron[®] refrigerant the chlorine-free, non-ozone depleting refrigerant
- Thermostatic Expansion Valve (TXV) designed to maximize performance with Puron[®] refrigerant

Energy Efficient Operation

- Electronically Commutated Motor (ECM) operates efficiently at all speeds
- Maximizes efficiency of heating and cooling systems
- Ultra-low power consumption during fan only operation

Comfort Control

- Warm, comfortable heating air temperatures
- Unmatched humidity control

Airflow and Sound Technology

- Logarithmic spiral blower housings for high blower efficiency and quiet operation
- Diffuser air discharge section for high airflow efficiency and quiet, smooth operation
- High duct static capability
- Design meets stringent regulations for cabinet air leakage of less than 2% when tested at 0.5 inches W.C., and cabinet air leakage less than 1.4% at 0.5 inches W.C. when tested in accordance with ASHRAE 193 standard.

Condensate Control and Disposal Technology

- Minimal standing water – less microbial growth for improved IAQ and reduced condensate line clogging and related condensate leakage
- Condensate fittings relocated away from turbulent airflow patterns at the blower entrance for improved condensate control performance
- Overflow feature for slope coil units allows condensate to exit the unit without damage to product under clogged primary and secondary line conditions
- Tested for condensate disposal at conditions much more severe than those required by ARI
- Primary and secondary drain connections to comply with HUD
- All pans constructed of an injection molded glass-filled polycarbonate engineered resin material, with brass drain connections
- High density, super thick cabinetry insulation with vapor barrier
- Pre-painted galvanized sheet metal cabinet

Heat Transfer Technology

- Grooved tubing
- Lanced sine wave aluminum fins
- Discrete refined counterflow refrigerant circuitry
- Bi-flow hard-shutoff TXV metering device

Quality Assisting, Ease of Installation and Service Features

- Easy 4 wire hook up: convenient and reduces installation time.
- FB4A unit is multipoise
- FB5A unit is upflow/downflow only (single drain pan).
- Provision made for suspending from roof or ceiling joints
- Modular cabinet on sizes 003 through 006
- Sweat connections for leak free service
- Multiple electrical entry for application flexibility (high and low voltage)
- Low voltage terminal strip, to safely hold connections within the cabinet
- Cabinet construction features innovations designed to prevent cabinet sweating

Controls and Electrical Features

- Easy plug connection provided for quick installation of accessory heater packages
- 40VA 208/230v transformer
- Replaceable 3-amp blade-type auto fuse protects against transformer secondary short

Filter Features

- Factory supplied filter
- Cleanable polyester filter media
- Filter "springs" out for easy access – no tools required
- Newly improved filter rack area – filter door insulation added for an improved air seal



EL

MODEL NUMBER NOMENCLATURE

1 2 3 4 5 6 7 8 9 10 11 12
F E 4 A N B 0 0 2 0 0 0

Product
F = Fan Coil

Type
E = Infinity®, VS, Puron® Refrigerant

Position
4 = Multi-poise
5 = Upflow / Downflow

Series
A

Electrical
N = 208/230v, 1ph-60 Hz

Coil Type
T00 = Tin-plated
000 = Copper
L00 = Aluminum

Capacity
002 = 18-36,000
003 = 24-42,000
004 = 24-42,000
005 = 30-48,000
006 = 36-60,000

Cabinet / Insulation
B = Modular
F = Single piece



Use of the AHRI Certified logo indicates a manufacturer's participation in the program for verification of refrigerant technical products. go to www.ahri.com

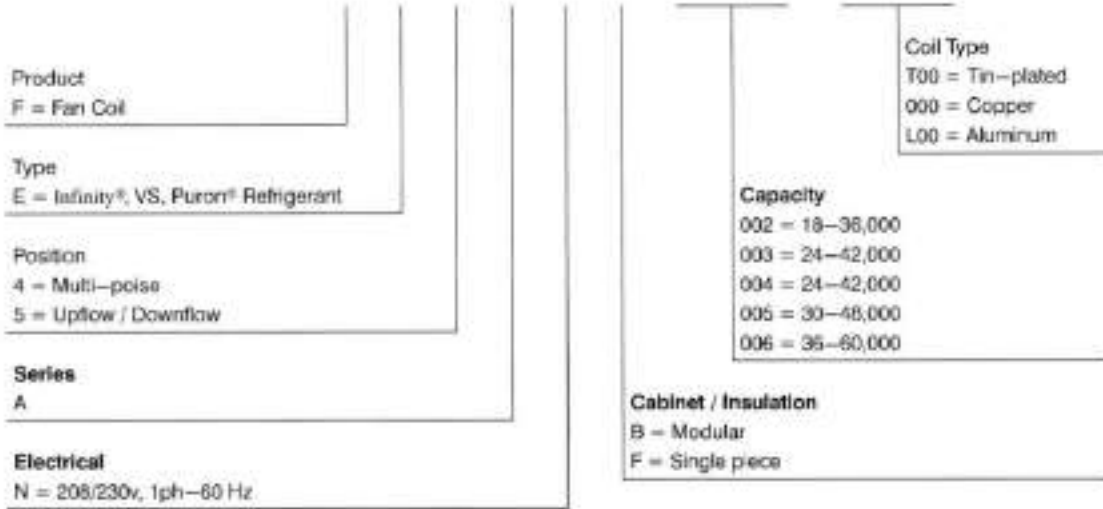


ISO 9001
See the back



MODEL NUMBER NOMENCLATURE

1 2 3 4 5 6 7 8 9 10 11 12
F E 4 A N B 0 0 2 0 0 0



One of the AHRI Certified Top 1000 products, a manufacturer's participation in the program for verification of performance on technical products. go to www.ahri.org

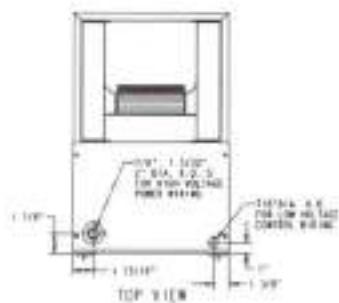


ISO 9001

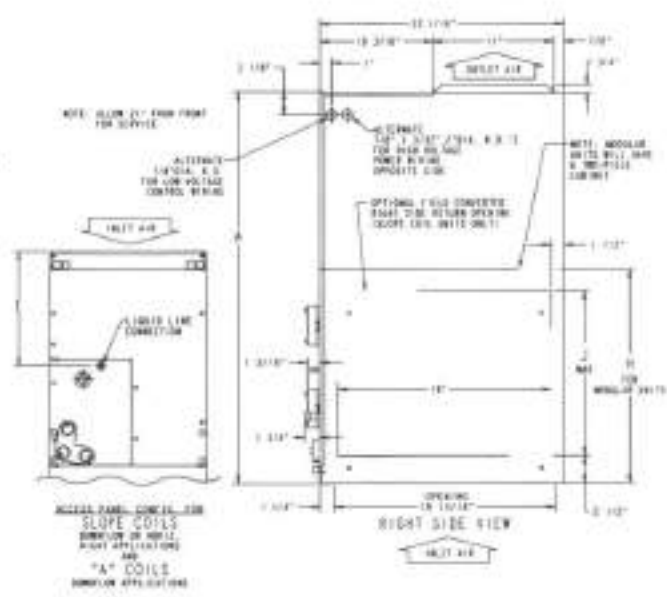
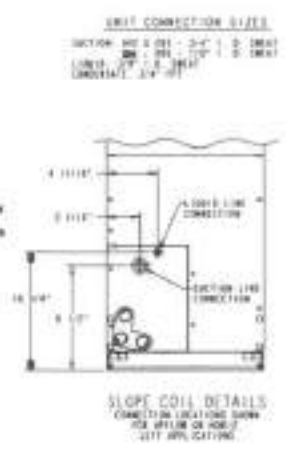
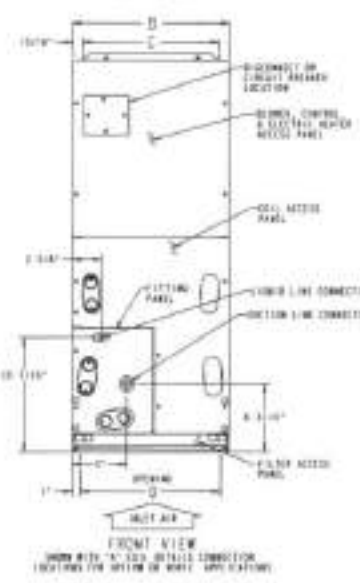


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NOTE:
1. SERIES IDENTIFICATION IS THE 1ST4 POSITION
OF THE PRODUCT NUMBER.



DIMENSIONS

UNIT	SIZE	A		B		C		D		E		H*	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
FE4A	002	42-11/16	1084	17-5/8	448	15-3/4	400	15-5/8	397	10-3/4	273	—	—
FE4A	003	53-7/16	1357	21-1/8	537	19-1/4	489	19-1/8	486	19-3/16	487	—	—
FE4A	003*	53-7/16	1357	21-1/8	537	19-1/4	489	19-1/8	486	19-3/16	487	28-5/16	719
FE4A	005	53-7/16	1357	21-1/8	537	19-1/4	489	19-1/8	486	19-1/2	495	—	—
FE4A	005*	53-7/16	1357	21-1/8	537	19-1/4	489	19-1/8	486	19-1/2	495	28-5/16	719
FE4A	006*	59-3/16	1503	24-11/16	627	22-3/4	578	22-11/16	576	25-1/4	641	34-1/16	865
FE5A	004*	59-3/16	1503	24-11/16	627	22-3/4	578	22-11/16	576	25-1/4	641	34-1/16	865

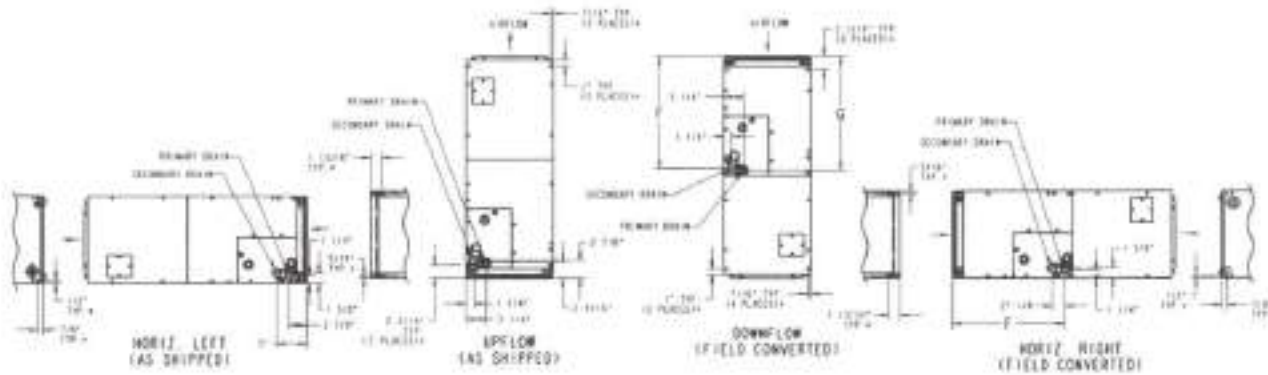
* Modular Cabinet



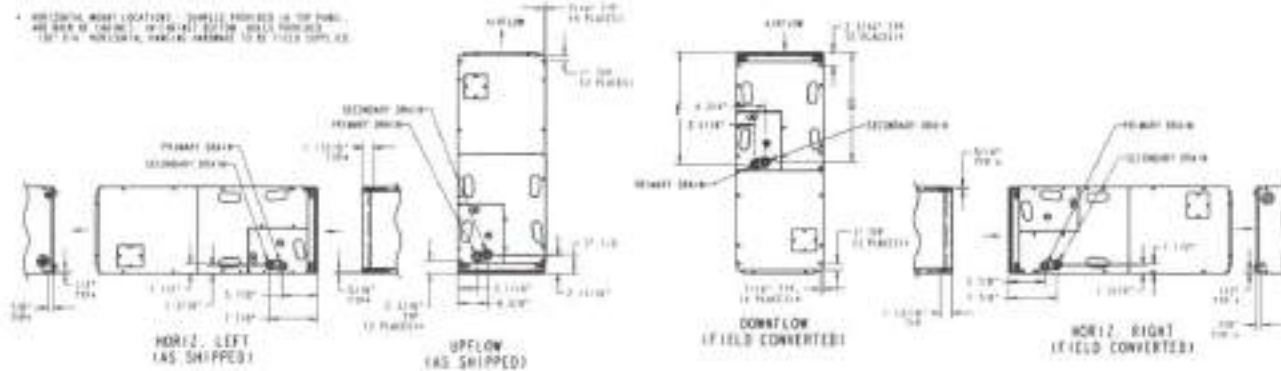
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NOTE:
 * DIMENSIONS ARE GIVEN UNLESS SHOWN OTHERWISE

SLOPE COIL



* HORIZONTAL COIL LOCATION: COILS ARE LOCATED IN THE PANEL. ALL OTHER COILS ARE LOCATED IN THE PANEL. ALL DIMENSIONS ARE IN INCHES. DIMENSIONS ARE IN MILLIMETERS. DIMENSIONS ARE IN INCHES.



A-COIL

DIMENSIONS

UNIT	SIZE	F		G		COIL CONFIGURATION		SHIPPING WEIGHT
		in	mm	in	mm	Slope	"A"	lb / kg
FE4A	002	18-9/16	472	18-1/4	464	—	Yes	135 / 61
FE4A	003	26-15/16	684	27-1/2	699	Yes	—	150 / 68
FE4A	003*	28-15/16	684	27-1/2	699	Yes	—	150 / 68
FE4A	005	27-1/4	682	26-15/16	684	—	Yes	172 / 78
FE4A	005*	27-1/4	682	26-15/16	684	—	Yes	172 / 78
FE4A	006*	32-15/16	837	32-5/8	829	—	Yes	207 / 94
FE5A	004*	32-15/16	837	32-5/8	829	—	Yes	200 / 91

* Modular Cabinet



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PHYSICAL DATA

ORDERING NO.	FIELD-INSTALLED HEAT (kW)	NOMINAL COOLING CAPACITY (BTUH)	DIMENSIONS			SHIPPING WEIGHT lb / kg
			Height	Width	Depth	
FE4ANF002000 FE4ANF002T00 FE4ANF002L00	5, 8, 9, 10, 15, 20	18,000 to 36,000	42-11/16-in 1084 mm	17-5/8-in 448 mm	22-1/16-in 560 mm	135 lb 61 kg
FE4ANF003000 FE4AN(B,F)003T00 FE4AN(B,F)003L00	5, 8, 9, 10, 15, 18, 20	24,000 to 42,000	53-7/16-in 1357 mm	21-1/8-in 537 mm	22-1/16-in 560 mm	150 lb 68 kg
FE4ANF005000 FE4AN(B,F)005T00 FE4AN(B,F)005L00	5, 8, 9, 10, 15, 18, 20, 24, 30	30,000 to 48,000	53-7/16-in 1357 mm	21-1/8-in 537 mm	22-1/16-in 560 mm	172 lb 78 kg
FE4ANB006000 FE4ANB006T00 FE4ANB006L00	8, 9, 10, 15, 18, 20, 24, 30	36,000 to 60,000	59-3/16-in 1503 mm	24-11/16-in 627 mm	22-1/16-in 560 mm	207 lb 94 kg
FE5ANB004T00 FE5ANB004L00	5, 8, 9, 10, 15, 18, 20	24,000 to 42,000	59-3/16-in 1503 mm	24-11/16-in 627 mm	22-1/16-in 560 mm	200 lb 91 kg

SPECIFICATIONS

MODEL	FE4A				FE5A
SIZE	002	003	005	006	004
COIL					
Refrigerant Metering Device	Puron® Refrigerant (R-410A) TXV				
TXV Size	2 Ton	3 Ton	4 Ton	5 Ton	3 Ton
Configuration	A	Slope	A	A	A
Rows—Fins/in.	3 / 14.5				
Face Area (Sq Ft)	3.46	3.46	5.93	7.42	7.42
MATCHES OUTDOOR UNIT SIZES					
Nominal Cooling Tons	1.5, 2, 2.5, 3	2, 2.5, 3, 3.5	2.5, 3, 3.5, 4	3, 3.5, 4, 5	2, 2.5, 3, 3.5
FAN					
Air Discharge	Upflow, Downflow, Horizontal				Upflow, Downflow
CFM/Ton (Nominal Clg/Htg)	350+				
Motor HP (ECM)	1/2	1/2	1/2	3/4	3/4
Filter 21-1/2-in (546 mm) x	16-3/8-in (417 mm)	19-7/8-in (505 mm)	19-7/8-in (505 mm)	23-5/16-in (592 mm)	23-5/16-in (592 mm)
CABINET CONFIGURATION OPTIONS					
	1-piece	1-piece / Modular	1-piece / Modular	Modular	Modular



PERFORMANCE DATA

AIRFLOW DELIVERY — COOLING, HEATING, ELECTRIC HEATING MODES

The FE4 and FE5A fan coils will provide airflow at a rate that is requested by the Integrated System User Interface during air conditioning or heat pump heating (without electric heat) modes. The nominal airflow for both heating and cooling modes is 350 cfm/ton nominal size of the outdoor unit installed. The airflow actually requested by the User Interface is modified by its internal algorithms for zoning, comfort or efficiency concerns. Refer to the

documentation for the User Interface for more information on how the User Interface controls the fan coil. Safe operation of electric heaters requires airflow delivery at or above the minimum CFM for electric heater application listed in the chart below. The fan coil will adjust its airflow delivery to maintain safe airflow as operating mode and staging conditions require.

FE4A/FE5A FAN COIL AIRFLOW DELIVERY CHART (CFM) — ELECTRIC HEATING MODELS

MODEL FE4A	OUTDOOR UNIT CAPACITY BTUH	ELECTRIC HEATER KW RANGE						
		5	9	10	15	20	24	30
002	EMERGENCY	625	625	675	775	950	—	—
	18,000	625	625	675	—	—	—	—
	24,000	650	725	775	900	—	—	—
	30,000	800	875	875	925	1125	—	—
	36,000	975	975	975	1025	1125	—	—
003	EMERGENCY	675	700	775	850	1050	—	—
	24,000	675	875	875	1100	1150	—	—
	30,000	800	875	875	1100	1150	—	—
	36,000	975	975	1025	1150	1250	—	—
	42,000	1125	1125	1125	1150	1350	—	—
005	EMERGENCY	675	700	775	850	1050	1400	1425
	30,000	800	875	875	1100	1150	—	—
	36,000	975	975	1025	1150	1250	—	—
	42,000	1125	1125	1125	1150	1250	—	—
	48,000	1305	1305	1305	1305	1350	1500	1600
006	EMERGENCY	1050	1050	1050	1050	1125	1750	1750
	36,000	1050	1050	1100	1350	1350	—	—
	42,000	1125	1125	1150	1350	1350	—	—
	48,000	1300	1300	1300	1350	1500	1750	1750
	60,000	1625	1625	1625	1625	1750	1750	1750
MODEL FE5A	OUTDOOR UNIT CAPACITY BTUH	ELECTRIC HEATER KW RANGE						
		5	9	10	15	20	24	30
004	EMERGENCY	675	775	775	900	1125	—	—
	24,000	975	975	975	—	—	—	—
	30,000	1050	1050	1100	1125	—	—	—
	36,000	1050	1050	1100	1350	1350	—	—
	42,000	1125	1125	1150	1350	1350	—	—

Note 1: Emergency — Air conditioner with electric heater application, or emergency heat.

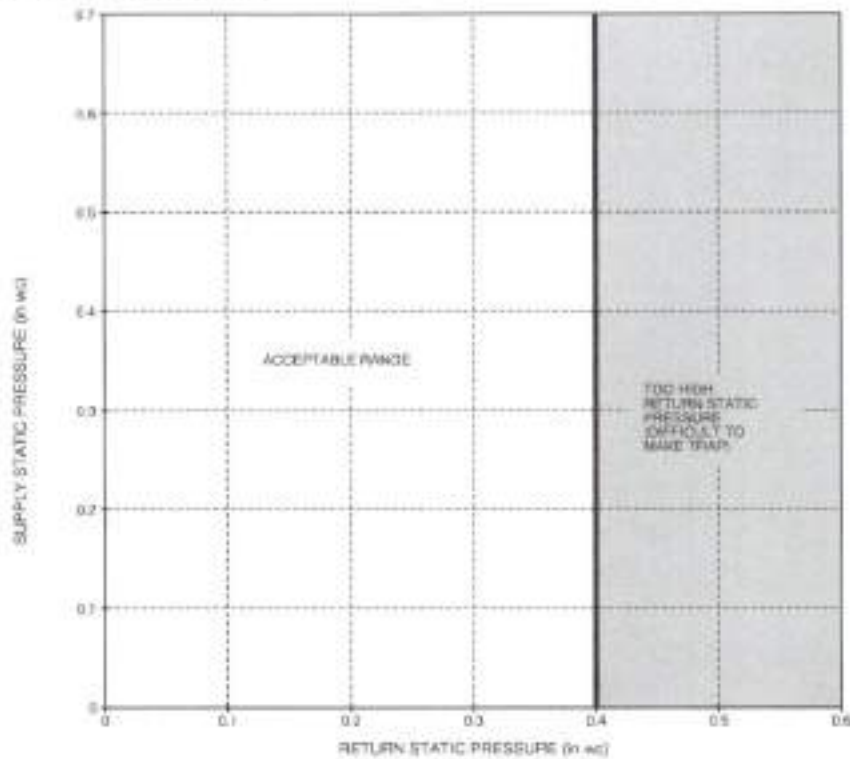
Note 2: These airflows are minimum airflows as UL listed.

Note 3: Dashed entry indicates that the heater/fan coil/outdoor unit combination is not approved. Do not apply.



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ACCEPTABLE DUCT CONDITIONS



For satisfactory operation (specifically making dry secondary trap), subject fan coils must be installed with duct systems which fall within the "Acceptable Range" illustrated above.

AC0273

MINIMUM RPM TABLE

MODEL	SYSTEM SIZES	CFM RANGE	MIN RPM
FE4ANF002	018, 024, 030, 036	150 - 1200	300
FE4AN(B,F)003	024, 030, 036, 042	200 - 1400	285
FE4AN(B,F)005	030, 036, 042, 048	250 - 1600	275
FE4ANB006	036, 042, 048, 060	500 - 2000	275
FE5ANB004	024, 030, 036, 042	500 - 1400	275

MAXIMUM STATIC TABLE

MODEL	AIRFLOW DELIVERY	AVAILABLE STATIC PRESSURE
FE4ANF002	525 CFM	1.00 in wc
	700 CFM	1.00 in wc
	875 CFM	1.00 in wc
	1050 CFM	0.80 in wc
	1200 CFM	0.60 in wc
FE4AN(B,F)003	700 CFM	1.00 in wc
	875 CFM	1.00 in wc
	1050 CFM	1.00 in wc
	1225 CFM	1.00 in wc
	1400 CFM	0.80 in wc
FE4AN(B,F)005	875 CFM	1.00 in wc
	1050 CFM	1.00 in wc
	1225 CFM	1.00 in wc
	1400 CFM	1.00 in wc
	1600 CFM	0.50 in wc
FE4ANB006	1050 CFM	1.00 in wc
	1225 CFM	1.00 in wc
	1400 CFM	1.00 in wc
	1750 CFM	1.00 in wc
	2000 CFM	0.60 in wc
FE5ANB004	700 CFM	1.00 in wc
	875 CFM	1.00 in wc
	1050 CFM	1.00 in wc
	1225 CFM	1.00 in wc
	1400 CFM	1.00 in wc



CFM – Cubic Ft per Minute

EWB – Entering Wet Bulb (°F / °C)

LWB – Leaving Wet Bulb (°F / °C)

TC – Gross Cooling Capacity 1000 Btu/h

SHC – Gross Sensible Capacity 1000 Btu/h

BF – Bypass Factor

MBH – 1000 Btu/h

NOTES:

- Contact manufacturer for cooling capacities at conditions other than shown in table.
- Formulas:

$$\text{Leaving db} = \text{entering db} - \frac{\text{sensible heat cap.}}{1.09 \times \text{CFM}}$$

$$\text{Leaving wb} = \text{wb corresponding to enthalpy of air leaving coil (} h_{\text{wb}} \text{)}$$

$$h_{\text{wb}} = \frac{h_{\text{wet}} - \text{total capacity (Btu/h)}}{4.5 \times \text{CFM}}$$
 where h_{wet} = enthalpy of air entering coil. Direct interpolation is permissible. Do not extrapolate.
- SHC is based on 80°F db temperature of air entering coil. Below 80°F db, subtract (Correction Factor x CFM) from SHC. Above 80°F db, add (Correction Factor x CFM) to SHC.
- Bypass Factor = 0 indicates no psychometric solution. Use bypass factor of next lower EWB for approximation.

SHC CORRECTION FACTOR

BYPASS FACTOR	ENTERING AIR DRY-BULB TEMPERATURE (°F)						Use formula shown below
	79	78	77	76	75	Under 75	
	81	82	83	84	85	Over 85	
	Correction Factor						
0.10	.096	1.96	2.94	3.92	4.91		
0.20	0.87	1.74	2.62	3.49	4.36		
0.30	0.76	1.53	2.29	3.05	3.82		

Interpolation is permissible.
 Correction Factor = 1.09 x (1 - BF) x (db - 80)

ESTIMATED SOUND POWER LEVEL (dBA)

MODEL SIZE	CONDITIONS		OCTAVE BAND CENTER FREQUENCY						
	CFM	ESP	63	125	250	500	1000	2000	4000
FE4ANF002	400	0.25	61.0	57.0	55.0	50.0	48.0	46.0	42.0
	600	0.25	62.7	58.7	56.7	51.7	49.7	47.7	43.7
	800	0.25	64.0	60.0	58.0	53.0	51.0	49.0	45.0
	1000	0.25	65.0	61.0	57.0	56.0	52.0	50.0	46.0
	1200	0.25	65.8	61.8	57.8	56.8	52.8	50.8	46.8
	1400	0.25	66.4	62.4	58.4	57.4	53.4	51.4	47.4
FE4ANF003	400	0.25	61.0	57.0	55.0	50.0	48.0	46.0	42.0
	600	0.25	62.7	58.7	56.7	51.7	49.7	47.7	43.7
	800	0.25	64.0	60.0	58.0	53.0	51.0	49.0	45.0
	1000	0.25	65.0	61.0	59.0	54.0	52.0	50.0	46.0
	1200	0.25	65.8	61.8	59.8	54.8	52.8	50.8	46.8
	1400	0.25	66.4	62.4	58.4	57.4	53.4	51.4	47.4
FE5ANB004	600	0.25	62.7	58.7	56.7	51.7	49.7	47.7	43.7
	800	0.25	64.0	60.0	58.0	53.0	51.0	49.0	45.0
	1000	0.25	65.0	61.0	59.0	54.0	52.0	50.0	46.0
	1200	0.25	65.8	61.8	59.8	54.8	52.8	50.8	46.8
	1400	0.25	66.4	62.4	60.4	55.4	53.4	51.4	47.4
	1600	0.25	67.0	63.0	61.0	56.0	54.0	52.0	48.0
FE4ANF005	400	0.25	61.0	57.0	55.0	50.0	48.0	46.0	42.0
	600	0.25	62.7	58.7	56.7	51.7	49.7	47.7	43.7
	800	0.25	64.0	60.0	58.0	53.0	51.0	49.0	45.0
	1000	0.25	65.0	61.0	59.0	54.0	52.0	50.0	46.0
	1200	0.25	65.8	61.8	59.8	54.8	52.8	50.8	46.8
	1400	0.25	66.4	62.4	58.4	57.4	53.4	51.4	47.4
FE4ANB006	600	0.25	62.7	58.7	56.7	51.7	49.7	47.7	43.7
	800	0.25	64.0	60.0	58.0	53.0	51.0	49.0	45.0
	1000	0.25	65.0	61.0	59.0	54.0	52.0	50.0	46.0
	1200	0.25	65.8	61.8	59.8	54.8	52.8	50.8	46.8
	1400	0.25	66.4	62.4	60.4	55.4	53.4	51.4	47.4
	1600	0.25	67.0	63.0	61.0	56.0	54.0	52.0	48.0
	1800	0.25	67.5	63.5	59.5	58.5	54.5	52.5	48.5
	2000	0.25	68.0	64.0	60.0	59.0	55.0	53.0	49.0
2150	0.25	68.3	64.3	60.3	59.3	55.3	53.3	49.3	

*Est. sound power levels have been derived using the method described in the 1987 ASHRAE HVAC Systems & Applications Handbook, chapter 52, p. 52.7.

AIRFLOW PERFORMANCE CORRECTION FACTORS

HEATER KW	ELEMENTS	STATIC PRESSURE CORRECTION (in wc)	
		Sizes 002-005	Size 006
0	0	+ .02	+ .03
5	1	+ .01	+ .02
8, 10	2	0	0
9, 15	3	-.02	-.03
20	4	-.04	-.06
18, 24, 30	6	-.06	-.10

The FE4A airflow performance table was developed using fan coils with 10kW electric heaters (2 elements) in the units. For fan coils with heaters made up of a different number of elements, the external available static air at a given CFM from the table may be corrected by adding or subtracting pressure. Use table for this correction.



24VNA9 Infinity® 19VS
Variable Speed Air Conditioner
with Puron® Refrigerant
1 – 5 Tons



Product Data



INFINITY® 19VS

The Infinity 19VS air conditioner offers high-efficiency variable speed performance in a remarkably small cabinet and provides up to 19 SEER cooling efficiency. The variable speed inverter capacity control delivers up to 5 stages of operation for exceptional load matching, dehumidification and zoning performance.

This product has been designed and manufactured to provide flexible system matching and work with a wide variety of indoor units and controls.

NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory (www.ahridirectory.org) for the most up-to-date ratings information.



INDUSTRY LEADING FEATURES / BENEFITS

Energy Efficiency

- Up to 19 SEER / 13 EER
- Microtube Technology™ refrigeration system

Sound

- Sound level as low as 56 dBA in low speed (Silencer System II).
- Soft start and smooth ramp to operating speeds

Comfort

- Variable speed compressor operates at 5 stages with capacity range from as wide as 25-100%
- Air cooled Inverter variable speed drive
 - System requires Infinity Touch Control with version 11 software or newer for 5 stage operation
 - Ratings provided with 2-stage thermostats and suitable non-communicating indoor products for 2-stage operation.

Reliability

- Puron® refrigerant - environmentally sound, won't deplete the ozone layer and low lifetime service cost.
- Front-seating service valves
- Inverter control drives compressor and fan motor
- No control module attached to fan motor
- Infinity intelligence monitors critical system parameters
- Pressure equalizer valve for easy compressor starting
- High pressure switch
- Suction pressure transducer
- Compressor discharge temperature sensor
- Suction temperature sensor
- Filter drier (field installed)
- Internal crankcase heater standard

Flexibility and installation:

- 2 control wires to outdoor unit in complete Infinity system and Touch Control
- Smaller and lighter than 2-stage units
- Minimum and Maximum adjustments with Infinity Touch Control
- Compatible with non-communicating thermostats

Durability

- WeatherArmor Ultra™ protection package:
- Solid, Durable sheet metal construction
 - Steel lower coil guard
 - Baked-on, complete outer coverage, powder paint

Applications

- Line sets up to 100 ft (30.5 m) equivalent length
- No long-line accessories required.



MODEL NUMBER NOMENCLATURE

1	2	3	4	5	6	7	8	9	10	11	12	13
N	N	A	A	A/N	N	N	N	A/N	A/N	A/N	N	N
2	4	V	N	A	9	3	8	A	0	0	3	0
Product Series	Product Family	Tier	Major Series	SEER	Cooling Capacity	Varactors	Open	Open	Voltage	Minor Series		
24 = AC	V = VS HP	N = Infinity Series	A = Puron	9 = 19 SEER	1,000 Btu (nominal)	A = Standard B = Design Variant	0 = Not Defined	0 = Not Defined	3 = 208/230-1	0, 1, 2, ...		



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahricertification.org



STANDARD FEATURES

FEATURES	Unit Size - Voltage, Series							
	13	24A 24B	25	35	37	40	49	60
Puron Refrigerant	X	X	X	X	X	X	X	X
Variable Speed Rotary Compressor	X	X	X	X	X	X	X	X
Air-Cooled Integrated Inverter Drive	X	X	X	X	X	X	X	X
Louvered Coil Guard	X	X	X	X	X	X	X	X
Field Installed Filter Drier	X	X	X	X	X	X	X	X
Front Sealing Service Valves	X	X	X	X	X	X	X	X
Internal Pressure and Temperature Protection	X	X	X	X	X	X	X	X
Suction Pressure Transducer	X	X	X	X	X	X	X	X
High Pressure Switch	X	X	X	X	X	X	X	X
Internal Crankcase Heater	X	X	X	X	X	X	X	X
Enhanced Diagnostics with Infinity Touch™ Control (version 11 software or newer)	X	X	X	X	X	X	X	X
Deluxe Sound Blanket	X	X	X	X	X	X	X	X
Outdoor Air Temperature Sensor	X	X	X	X	X	X	X	X

X = Standard

PHYSICAL DATA

UNIT SIZE SERIES	13-30	24A-30	24B-30	25-30	35-30	37-30	40-30	49-30	60-30
Compressor Type	Variable Speed Rotary								
REFRIGERANT	Puron® (R-410A)								
Control	TXV (Puron® Hard Shut-off)								
Charge lb (kg)	4.6 (2.09)	5.5 (2.50)	4.80 (2.18)	5.5 (2.50)	8.0 (2.72)	7.5 (3.40)	7.5 (3.40)	9.6 (4.35)	8.30 (3.78)
COND FAN	Forward Sweep Propeller Type, Direct Drive								
Air Discharge	Vertical								
Air Qty (CFM)	1600	2500	2500	2500	2500	4500	4500	4800	4500
Motor HP	1/5	1/3	1/5	1/3	1/3	1/3	1/3	1/3	1/3
Motor RPM	690	1050	825	1050	1050	850	850	850	900
COND COIL									
Face Area (Sq ft)	11.12	13.90	11.12	13.90	13.90	21.50	21.50	27.53	23.65
Fins per In.	20	20	20	20	20	20	20	25	20
Rows	1	1	1	1	1	1	1	1	1
Circuits	6	6	5	6	6	6	6	6	6
VALVE CONNECT. (In. ID)									
Vapor	5/8	3/4	5/8	3/4	3/4	7/8	7/8	7/8	7/8
Liquid	3/8								
REFRIGERANT TUBES (In. OD)									
Rated Vapor*	3/4	7/8	3/4	7/8	7/8	1-1/8	1-1/8	1-1/8	1-1/8
Mix Liquid Line	3/8								

* Units are rated with 25 ft (7.6 m) of line set length. See Vapor Line Sizing and Cooling Capacity Loss table when using other sizes and lengths of line set.

Note: See unit installation instruction for proper installation.



EF

REFRIGERANT PIPING LENGTH LIMITATIONS

Maximum Line Lengths:

The maximum allowable total equivalent length for air conditioners can vary depending on the vertical separation. See the tables below for allowable lengths depending on whether the outdoor unit is on the same level, above or below the indoor unit.

Maximum Line Lengths for Air Conditioner Applications

	MAXIMUM ACTUAL LENGTH ft (m)	MAXIMUM EQUIVALENT LENGTH† ft (m)	MAXIMUM VERTICAL SEPARATION ft (m)
Units on equal level	100 (30.5)	100 (30.5)	N/A
Outdoor unit ABOVE indoor unit	100 (30.5)	100 (30.5)	100 (30.5)
Outdoor unit BELOW indoor unit	See Table 'Maximum Total Equivalent Length: Outdoor Unit BELOW Indoor Unit'		

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

Maximum Total Equivalent Length† - Outdoor Unit BELOW Indoor Unit

Size	Liquid Line Diameter w/ TXV	AC with Puron® Refrigerant - Maximum Total Equivalent Length† Vertical Separation ft (m) Outdoor unit BELOW indoor unit:						
		0-20 (0 - 6.1)	21-30 (6.4 - 9.1)	31-40 (9.4 - 12.2)	41-50 (12.5 - 15.2)	51-60 (15.5 - 18.3)	61-70 (18.6 - 21.3)	71-80 (21.6 - 24.4)
1-Ton	3/8	100*	100*	100*	100*	100*	100*	100*
2-Ton	3/8	100*	100*	100*	100*	100*	100*	100*
3-Ton	3/8	100*	100*	100*	100*	100*	100*	100*
4-Ton	3/8	100*	100*	100*	100*	100	100	--
5-Ton	3/8	100*	100*	100*	100*	100	100	--

* Maximum actual length not to exceed 100 ft (30.5 m)

† Total equivalent length accounts for losses due to elbows or fitting.

-- = outside acceptable range

LONG LINE APPLICATIONS

Unit is approved for up to 100 ft (30.5 m) equivalent length and vertical separations shown above with no additional accessories. Longer line set applications are not permitted.

COOLING CAPACITY LOSS TABLE

Nominal Size (Btu/h)	Line OD (in.)	24VNA9 Cooling Capacity Loss (%)				
		Total Equivalent Line Length (ft)				
		25	50	75	80	100
13	5/8	0.5	1.2	1.8	1.9	2.4
	3/4	0.1	0.4	0.6	0.7	0.8
24B	5/8	0.5	1.2	1.8	1.9	2.4
	3/4	0.1	0.4	0.6	0.7	0.8
24A	5/8	0.5	1.2	1.8	1.9	2.4
	3/4	0.1	0.4	0.6	0.7	0.8
25	7/8	0.0	0.1	0.3	0.3	0.4
	5/8	1.1	2.4	3.7	4.0	5.0
36	3/4	0.3	0.8	1.3	1.4	1.8
	7/8	0.0	0.3	0.5	0.6	0.8
48	3/4	0.7	1.6	2.4	2.6	3.2
	7/8	0.3	0.7	1.1	1.2	1.6
49	1 1/8	0.0	0.1	0.2	0.3	0.4
	3/4	1.0	2.3	3.5	3.8	4.8
60	7/8	0.4	1.0	1.7	1.8	2.3
	1 1/8	0.0	0.1	0.3	0.4	0.5

Rating Line Size in **BOLD**



EL

MIN/MAX AIRFLOW TABLES

The indoor airflow delivered by this system varies significantly based on outdoor temperature, indoor unit combination, and system demand. The airflows on these tables are for duct design considerations. Duct systems capable of these ranges will ensure

the system will deliver full capacity at all outdoor temperatures. Minimum and maximum airflows can be adjusted from these numbers in the Infinity Control Setup screen.

Cooling - Comfort Mode			Minimum Cooling (Dehum or Zoning)
Size	Max Stage 5 Airflow	Max Stage 1 Airflow	
1-Ton	420	300	300
2-Ton	739	263	222
3-Ton	990	289	236
4-Ton	1389	542	457
5-Ton	1800	700	600

Cooling - Efficiency Mode		
Size	Max Stage 5 Airflow	Max Stage 1 Airflow
1-Ton	420	300
2-Ton	825	585
3-Ton	1050	600
4-Ton	1400	875
5-Ton	1800	975

Cooling Max Mode		
Size	Max Stage 5 Airflow	Max Stage 1 Airflow
1-Ton (550 cfm/ delivered ton)	780	434
2-Ton (24)	850	585
2-Ton (25) (550 cfm/ delivered ton)*	1350	510
3-Ton	1200	600
4-Ton	1600	875
4-Ton-49	1450	875
5-Ton	2000	975

* Serial number beginning with 0115E and newer

LEGEND:

Max Capacity Airflow - Stage 5 airflow varies depending on conditions. This is the highest airflow the system will attempt to deliver in this particular mode. Ductwork for non-zoned systems should be sized for this airflow to ensure the system can deliver full capacity when needed. Improper duct design may result in excessive airflow noise and/or outback occurrences at max airflow conditions.

Highest Min. Capacity Airflow - Stage 1 airflow also varies depending on conditions. In zoned systems, each zone must be capable of delivering this airflow for the system to deliver full capacity into the zone. Otherwise, airflow may be diverted to other zones or outback may occur.

Min Cooling (Dehum or Zoning) - Lowest airflow the system will deliver. May operate down to this airflow in dehumidification mode or in zoning applications where ductwork restrictions have caused the blower to cut-back.

ELECTRICAL DATA

UNIT SIZE - VOLTAGE, SERIES	V/PH	OPER VOLTS*		COMPR		FAN	MCA	MAX FUSE ** or CKT BRK AMPS
		MAX	MIN	LRA	RLA	FLA		
13-30	208-230-1	253	197	N/A	10.32	0.58	13.5	20
24A-30				N/A	17.70	1.20	23.6	40
24B-30				N/A	10.32	0.58	13.5	20
25-30				N/A	17.70	1.20	23.6	40
36-30				N/A	18.30	1.20	24.4	40
37-30				N/A	23.9	1.20	31.4	50
48-30				N/A	23.9	1.20	31.4	50
49-30				N/A	23.9	1.40	31.4	50
60-30				N/A	31.3	1.40	48.2	60

* Permissible limits of the voltage range at which the unit will operate satisfactorily

** Time-Delay fuse

FLA - Full Load Amps

LRA - Locked Rotor Amps

MCA - Minimum Circuit Amps

RLA - Rated Load Amps

NOTE: Control circuit is 24-V on all units and requires external power source. Copper wire must be used from service disconnect to unit.

All motors/compressors contain internal overload protection.

Complies with 2010 requirements of ASHRAE Standards 90.1

CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE)

UNIT SIZE - VOLTAGE, SERIES	
13-30	If a Touch Control is installed, subcooling recommendation displayed in Charging Mode must be followed. If not, subcooling chart shown on the charging label must be followed.
24A-30, 24B-30	
25-30	
36-30	
37-30	
48-30	
49-30	
60-30	

RPM-CAPACITY-SOUND (dBA)*

STAGE #	COMP RPM	CAPACITY %	SOUND (dBA)
24VNA913			
1	1500	58%	58
2	1887	72%	59
3	2100	81%	59
4	2350	90%	59
5	2500	100%	60
24VNA924A			
1	1200	36%	56
2	1900	58%	61
3	2400	73%	64
4	2600	79%	68
5	3300	100%	71
24VNA924B			
1	1500	35%	55
2	2566	58%	60
3	3150	69%	65
4	3950	87%	66
5	4700	100%	68
24VNA925			
1	1200	36%	56
2	1900	58%	61
3	2400	73%	63
4	2600	79%	67
5	3300	100%	69
24VNA936			
1	1200	25%	56
2	2400	50%	61
3	3300	69%	65
4	4200	88%	69
5	4800	100%	71
24VNA937			
1	1200	40%	56
2	1800	60%	63
3	2200	73%	67
4	2600	87%	67
5	3000	100%	68
24VNA948			
1	1500	35%	62
2	2460	57%	65
3	2900	65%	67
4	3650	84%	70
5	4320	100%	72
24VNA949			
1	1200	38%	57
2	1840	59%	62
3	2300	74%	66
4	2700	87%	68
5	3120	100%	69
24VNA960			
1	1200	32%	57
2	2180	55%	61
3	2850	70%	64
4	3700	90%	70
5	4140	100%	72

*Estimated sound for stages 2, 3, and 4
 For 2-stage operation: Low = Stage 2, High = Stage 5



EL

SOUND POWER LEVEL (dBA)

Unit Size—Voltage, Series	Typical Octave Band Spectrum (without tone adjustment)	Min Speed Cooling	Max Speed Cooling
13-30	Freq (Hz)	1500	2800
	125	46.5	46.5
	250	50.5	54.0
	500	52.0	53.5
	1000	50.0	51.0
	2000	47.0	47.5
	4000	40.5	47.0
	8000	45.5	45.0
	Sound Rating (dBA)	58	60
24A-30	Freq (Hz)	1200 RPM	3300 RPM
	125	40.4	43.9
	250	44.4	53.9
	500	46.3	61.8
	1000	45.0	58.0
	2000	37.2	56.7
	4000	31.0	60.0
	8000	28.4	45.4
	Sound Rating (dBA)	56	71
24B-30	Freq (Hz)	1500 RPM	4700 RPM
	125	40.5	44.0
	250	45.5	49.5
	500	41.5	53.0
	1000	44.0	52.5
	2000	39.0	50.5
	4000	34.5	53.0
	8000	31.0	45.0
	Sound Rating (dBA)	55	67
25-30	Freq (Hz)	1200 RPM	3300 RPM
	125	40.4	45.4
	250	44.4	57.9
	500	46.3	61.3
	1000	45.0	58.0
	2000	37.2	54.7
	4000	31.0	52.0
	8000	28.4	41.9
	Sound Rating (dBA)	56	69
36-30	Freq (Hz)	1200 RPM	4800 RPM
	125	40.4	43.9
	250	44.4	53.9
	500	46.3	61.8
	1000	45.0	59.0
	2000	37.2	56.7
	4000	31.0	60.0
	8000	28.4	45.4
	Sound Rating (dBA)	56	71
37-30	Freq (Hz)	1200	3000
	125	45.0	54.5
	250	48.5	59.0
	500	50.5	63.0
	1000	50.0	60.5
	2000	44.0	58.5
	4000	37.5	57.5
	8000	44.5	52.0
	Sound Rating (dBA)	56	68
48-30	Freq (Hz)	1500 RPM	4320 RPM
	125	40.9	42.4
	250	46.4	54.4
	500	47.3	60.3
	1000	56.5	63.5
	2000	59.2	56.7
	4000	35.0	56.0
	8000	31.9	44.9
	Sound Rating (dBA)	62	72
49-30	Freq (Hz)	1200	3120
	125	44.5	52.0
	250	48.5	63.0
	500	50.5	63.5
	1000	51.5	67.5
	2000	47.5	61.5
	4000	43.5	58.5
	8000	47.5	54.5
	Sound Rating (dBA)	57	73
50-30	Freq (Hz)	1200 RPM	4140 RPM
	125	39.0	49.5
	250	48.0	59.5
	500	46.5	62.0
	1000	45.5	60.0
	2000	39.5	58.5
	4000	36.5	55.0
	8000	35.5	48.0
	Sound Rating (dBA)	57	72

NOTE: Tested in compliance with AHRI 270-2008 but not listed with AHRI.



EL

ACCESSORIES

KIT NUMBER	KIT NAME	13-30	24A-30 24B-30	25-30	36-30	37-30	48-30	49-30	60
KSASF0101AAA	SPRT FEET KIT					X	X	X	X
KSASF0201AAA	SPRT FEET KIT	X	X	X	X	X			
KSATX0201PUR	TXV KIT	X	X	X					
KSATX0301PUR	TXV KIT				X	X			
KSATX0401PUR	TXV KIT						X	X	
KSATX0501PUR	TXV KIT								X
KSBTX0201PUR	TXV KIT	X	X	X					
KSBTX0301PUR	TXV KIT				X	X			
KSBTX0401PUR	TXV KIT						X	X	

x = Accessory S = Standard

Accessory Description and Usage

Support Feet

Raises unit above base pad. 2 and 3 ton kit contains 5 feet for stable installation with small base. 4 and 5 ton kit contains 4 feet.

Usage Guideline:

Recommended for rooftop applications.

Thermostatic Expansion Valve (TXV)

A modulating flow-control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator.

Usage Guideline:

Required if indoor unit does not already contain Puron® refrigerant TXV

CONTROLS

SYSTXCCITN01-A	Infinity Touch Control (non-Wi-Fi) version 11 or newer
SYSTXCCITC01-A	Infinity Touch Control (Wi-Fi)
SYSTXCCITW01-A	Infinity Touch Control with Wi-Fi & Wireless Access Point
SYSTXCC4ZC01	Infinity 4-Zone Damper Control Module
SYSTXCCSMS01	Infinity Smart Sensor (Optional wall control used to monitor temperature and/or fan control in an individual zone.)
SYSTXCCNIM01	Infinity Network Interface Module (Connects Heat Recovery and Energy Recovery Ventilators on non-zoning applications.)
SYSTXCCSMS01	Infinity Smart Sensor

THERMOSTATS

PART NUMBER	PROGRAM	GAS	ELECTRIC	HEAT	COOL
TP-PAC01	7-Day	✓	✓	1	1
TP-NRH01-A	NP	✓	✓	3	2
TP-NAC01	NP	✓	✓	1	1



EL

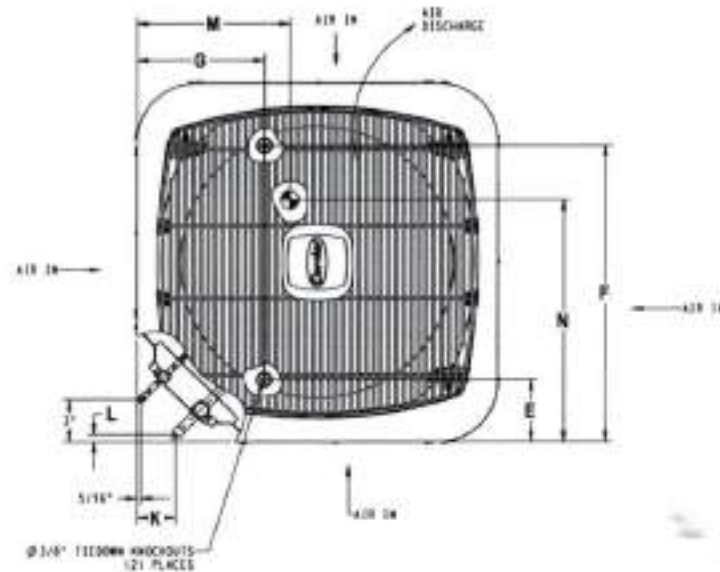
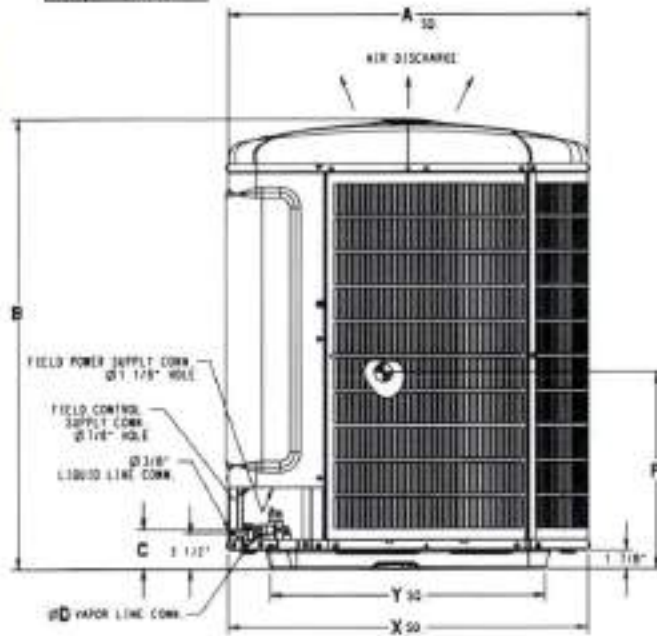


DIMENSIONS - ENGLISH

UNIT	SERIES	ELECTRICAL CHARACTERISTICS	A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT (lbs)	SHIPPING WEIGHT (lbs)	SHIPPING DIMENSIONS (L x W x H)
Z4YNA0130	0	1 0 0 0	23 1/8"	31 5/8"	3 3/4"	3/8"	4 7/16"	18 1/16"	2 13/16"	2 13/16"	1/2"	11 1/4"	11 1/4"	14 1/2"	135	150	25 1/4" x 25 1/4" x 35 5/8"
Z4YNA0240	0	1 0 0 0	23 1/8"	30 7/16"	3 3/4"	3/4"	4 7/16"	18 1/16"	2 13/16"	2 13/16"	1/2"	10 3/4"	10 3/4"	18 1/4"	160	186	25 1/4" x 25 1/4" x 43 3/8"
Z4YNA0240	0	1 0 0 0	23 1/8"	31 5/8"	3 3/4"	3/8"	4 7/16"	18 1/16"	2 13/16"	2 13/16"	1/2"	11 1/4"	11 1/4"	14 1/2"	135	150	25 1/4" x 25 1/4" x 35 5/8"
Z4YNA0250	0	1 0 0 0	23 1/8"	30 7/16"	3 3/4"	3/4"	4 7/16"	18 1/16"	2 13/16"	2 13/16"	1/2"	10 3/4"	10 3/4"	18 1/4"	160	186	25 1/4" x 25 1/4" x 43 3/8"
Z4YNA0360	0	1 0 0 0	23 1/8"	30 7/16"	3 3/4"	3/4"	4 7/16"	18 1/16"	2 13/16"	2 13/16"	1/2"	10 3/4"	10 3/4"	18 1/4"	160	186	25 1/4" x 25 1/4" x 43 3/8"
Z4YNA0370	0	1 0 0 0	31 3/16"	38 3/4"	3 7/8"	7/8"	6 9/16"	24 11/16"	9 1/8"	2 15/16"	5/8"	14 1/2"	14 3/8"	18 3/4"	219	255	33 3/8" x 33 3/8" x 46 1/8"
Z4YNA0400	0	1 0 0 0	31 3/16"	38 3/4"	3 7/8"	7/8"	6 9/16"	24 11/16"	9 1/8"	2 15/16"	5/8"	14 1/2"	14 3/8"	18 3/4"	219	255	33 3/8" x 33 3/8" x 46 1/8"
Z4YNA0430	0	1 0 0 0	35"	44"	3 7/8"	7/8"	6 9/16"	28 7/16"	9 1/8"	2 15/16"	5/8"	16 1/4"	16 1/4"	20 1/2"	262	300	35 1/8" x 35 1/4" x 50 3/16"
Z4YNA0600	0	1 0 0 0	31 3/16"	43 3/16"	3 7/8"	7/8"	6 9/16"	24 11/16"	9 1/8"	2 15/16"	5/8"	16 1/2"	15"	20"	241	282	33 3/8" x 33 3/8" x 49 9/16"

208-230-160
230-160
208/230-360
460-360

1 = YES
0 = NO



UNIT SIZE	1" MIN OVERHEAD CLEARANCE AND APPLICATION DIMENSIONS	1" MIN ROOF-TOP CLEARANCE AND APPLICATION DIMENSIONS
13, 24, 25, 36	23 1/8"	17 3/4"
	25 1/4"	20 7/16"
37, 48, 60	31 3/16"	23"
49	35"	28 3/4"

When installing, allow sufficient space for airflow clearance, wiring, refrigerant piping, and service. Allow 24 in. (609.6 mm) clearance to service end of unit and 40 in. (1015.2 mm) (above unit). For proper airflow, a 6-in. (152.4 mm) clearance on 1 side of unit and 12 in. (304.8 mm) on all remaining sides must be maintained. Maintain a distance of 24 in. (609.6 mm) between units or 18 in. (457.2 mm) if no overhang within 12 ft. (3.66 m). Position to weather, snow, or ice from roof or eaves cannot fall directly on unit.
NOTE: 18" (457.2 mm) clearance option described above is approved for outdoor units with wire grille coil guard only. Units with lower panels require 24" (609.6 mm) between units.
On rooftop applications, locate unit at least 6 in. (152.4 mm) above roof surface.



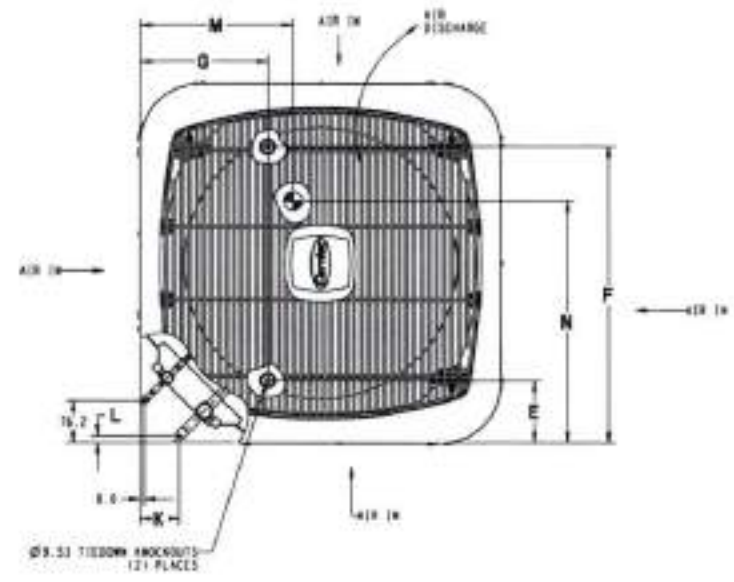
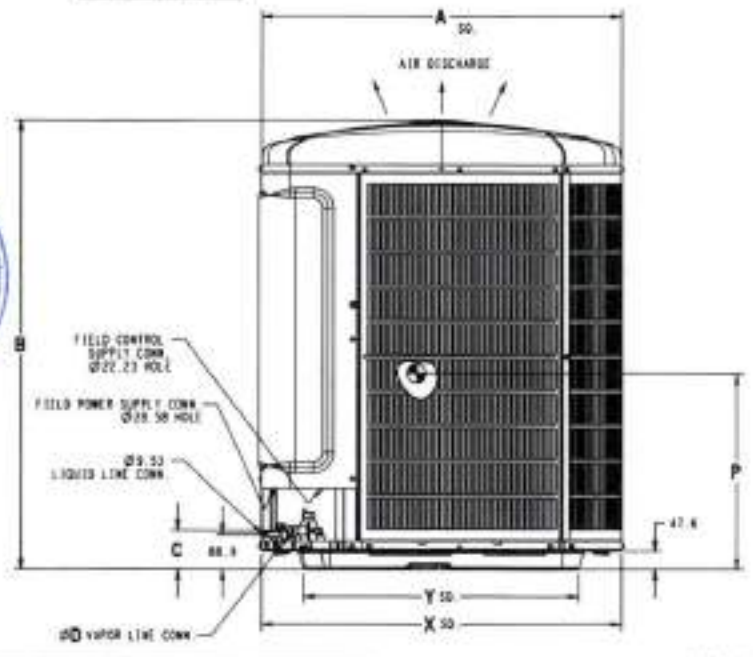
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DIMENSIONS - SI

UNIT	SERIES	ELECTRICAL CHARACTERISTICS		A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT (Kgs)	SHIPPING WEIGHT (Kgs)	SHIPPING DIMENSIONS L x W x H		
Z4VR9124	E	3	0	0	0	587.3	863.1	86.1	19.1	112.7	456.8	198.4	71.4	12.7	265.8	265.8	358.3	61.2	71.7	641.5 x 641.5 x 1102.2
Z4VR9248	E	3	0	0	0	587.3	875.9	86.1	19.1	112.7	456.8	198.4	71.4	12.7	273.1	273.1	463.8	72.6	84.4	641.5 x 641.5 x 1102.2
Z4VR9376	E	3	0	0	0	587.3	883.1	86.1	19.1	112.7	456.8	198.4	71.4	12.7	285.8	285.8	368.3	61.2	71.7	641.5 x 641.5 x 1102.2
Z4VR9756	E	3	0	0	0	587.3	875.9	86.1	19.1	112.7	456.8	198.4	71.4	12.7	273.1	273.1	463.8	72.6	84.4	641.5 x 641.5 x 1102.2
Z4VR9384	E	3	0	0	0	587.3	875.9	86.1	19.1	112.7	456.8	198.4	71.4	12.7	273.1	273.1	463.8	72.6	84.4	641.5 x 641.5 x 1102.2
Z4VR9378	E	3	0	0	0	192.2	1018.3	88.4	22.2	166.7	627.1	231.8	74.6	15.9	368.3	371.5	476.3	68.8	115.7	846.6 x 846.6 x 1122.2
Z4VR9408	E	3	0	0	0	192.2	1018.3	88.4	22.2	166.7	627.1	231.8	74.6	15.9	368.3	371.5	476.3	68.8	115.7	846.6 x 846.6 x 1122.2
Z4VR9498	E	3	0	4	0	889.4	1117.8	88.4	22.2	166.7	722.3	231.8	74.6	15.9	412.8	412.8	525.7	118.8	126.1	917.8 x 917.8 x 1234.8
Z4VR9108	E	3	0	0	0	192.2	1094.7	88.4	22.2	166.7	627.1	231.8	74.6	15.9	418.7	367.8	508.8	120.3	127.8	846.6 x 846.6 x 1258.6

208-230-1-60
230-1-60
208/230-3-60
480-3-60

B = YES
D = NO



UNIT SIZE	T MIN GRADE MOUNTING PING APPLICATION DIMENSION	T MIN ROOF-TOP MOUNTING PING APPLICATION DIMENSION
11, 24, 35, 36	581.4	451.1
48	654.3	528.3
57, 66, 82	767.7	583.7
95	881.2	678.1

When installing, allow sufficient space for airflow clearance, wiring, refrigerant piping, and service. Allow 24 in. (609.6 mm) clearance to service end of unit and 48 in. (1219.2 mm) (above unit). For proper airflow, a 6-in. (152.4 mm) clearance on 1 side of unit and 12-in. (304.8 mm) on all remaining sides must be maintained. Maintain a distance of 24 in. (609.6 mm) between units or 18 in. (457.2 mm) if no overhang within 12 ft. (3.66 m). Position so water, snow, or ice from roof or eaves cannot fall directly on unit.

NOTE: 18" (457.2 mm) clearance option described above is approved for outdoor units with wire grille coil guard only. Units with lower panels require 24" (609.6 mm) between units.

On rooftop applications, locate unit at least 6 in. (152.4 mm) above roof surface.



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TESTED AHRI COMBINATION RATINGS*

NOTE: Ratings contained in this document are subject to change at any time.

For AHRI ratings certificates, please refer to the AHRI directory www.ahridirectory.org

Additional ratings and system combinations can be accessed via the Carrier database at: www.MyCarrierRatings.com

For performance data at specific application &/or design conditions with various indoor unit combinations, the equipment performance calculator can be accessed at: <http://rpmob.wrightsoft.com/>

Model Number	Coil Model Number	Furnace Model Number	Cooling Capacity High	SEER	EER	ID CFM
24VNA913A**30	FE4ANF002L+UI		12800	17.0	13.0	420
24VNA924A**30	FE4AN(B,F)005L+UI		23000	18.0	11.0	825
24VNA924A**30	FV4CN(B,F)003L		22600	18.0	11.0	700
24VNA924B**30	FE4ANF002L+UI		24000	18.0	11.0	825
24VNA924B**30	FV4CNF002L		23800	18.0	11.0	700
24VNA925A**30	FE4AN(B,F)005L+UI		24000	19.0	12.5	825
24VNA925A**30	FV4CN(B,F)003L		22600	19.0	12.2	700
24VNA936A**30	FE4AN(B,F)005L+UI		35000	18.0	10.5	1050
24VNA936A**30	FV4CN(B,F)005L		35000	16.0	10.5	1050
24VNA937A**30	FE4ANB006L+UI		33600	19.0	13.0	1050
24VNA948A**30	FE4ANB006L+UI		46500	19.0	11.0	1400
24VNA948A**30	FV4CNB006L		46000	15.5	11.0	1400
24VNA949A**30	CNPV*6024AL	58CV(A,X)155-22+UL	44500	19.0	12.5	1200
24VNA960A**30	FE4ANB006L+UI		57000	17.0	10.0	1600
24VNA960A**30	FV4CNB006L		57500	15.0	10.0	1750

* Ratings are net values reflecting the effects of circulating fan heat. Supplemental electric heat is not included. Ratings are based on Cooling Standard: 80°F (27°C) db 67°F (19°C) wb indoor entering air temperature and 96°F (36°C) db air entering outdoor unit.

EER — Energy Efficiency Ratio

SEER — Seasonal Energy Efficiency Ratio

UI — User Interface

NOTE: Ratings contained in this document are subject to change at any time.



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DETAILED COOLING CAPACITIES[®] - EFFICIENCY MODE

COOLING CAPACITY (kW)	EVAR. AIR (°C)	24VNA15 / PE4ANPRO3, Efficiency Mode Condenser Entering Air Temperature (°C)																													
		118 (48.2)						105 (42.2)						95 (39.4)						75 (29.4)						65 (18.3)					
		ID SCFM	Capacity MBtuh		Total Sys. kW**	ID SCFM	Capacity MBtuh		Total Sys. kW**	ID SCFM	Capacity MBtuh		Total Sys. kW**	ID SCFM	Capacity MBtuh		Total Sys. kW**	ID SCFM	Capacity MBtuh		Total Sys. kW**	ID SCFM	Capacity MBtuh		Total Sys. kW**						
STAGE 4																															
75 (24.9)	72 (22.2)	425	12.59	1.28	1.28	425	13.48	0.90	1.17	425	14.21	0.88	0.98	425	10.07	0.18	0.81	425	10.02	0.51	0.65	425	16.70	0.83	0.50						
	67 (19.4)		11.37	1.12	1.20		12.17	0.90	1.17		12.88	1.10	0.98		13.81	0.18	0.82		14.37	0.48	0.97		15.11	0.79	0.55						
	63 (17.2)		10.47	0.94	1.04		11.21	0.88	1.17		11.80	0.30	0.98		12.53	0.64	0.81		13.22	0.28	0.89		13.90	1.03	0.66						
	57 (15.6)		9.80	0.83	1.04		10.42	1.04	1.17		10.88	10.88	0.98		11.42	11.42	0.84		11.93	11.93	0.71		12.40	12.40	0.59						
80 (24.7)	72 (22.2)	425	12.55	1.15	1.28	425	13.44	0.92	1.17	425	14.18	0.81	0.98	425	10.02	0.18	0.81	425	10.97	0.44	0.65	425	16.71	0.82	0.50						
	67 (19.4)		11.34	0.94	1.05		12.15	0.40	1.17		12.88	0.11	0.98		13.57	10.07	0.80		14.33	10.42	0.97		15.07	10.76	0.60						
	63 (17.2)		10.50	10.47	1.05		11.23	10.87	1.17		11.84	11.20	0.98		12.54	11.97	0.83		13.22	11.07	0.89		13.88	12.28	0.64						
	57 (15.6)		10.48	10.48	1.04		11.08	11.08	1.17		11.38	11.38	0.98		12.16	12.16	0.93		12.70	12.70	0.70		13.22	13.22	0.57						
STAGE 3																															
75 (23.6)	72 (22.2)	380	10.14	4.15	1.01	380	10.65	4.40	0.90	420	12.32	5.12	0.77	420	12.91	3.41	0.60	420	13.88	5.70	0.54	420	14.43	0.98	0.42						
	67 (19.4)		9.12	4.84	1.01		9.75	5.82	0.91		10.28	7.00	0.79		11.01	7.38	0.60		12.29	7.88	0.67		12.95	7.87	0.47						
	63 (17.2)		8.38	4.82	1.01		8.98	6.00	0.91		10.04	8.00	0.79		10.67	6.80	0.69		11.28	9.23	0.60		11.88	9.53	0.50						
	57 (15.6)		7.78	7.73	1.00		8.17	5.17	0.80		8.57	8.57	0.80		10.07	10.07	0.70		10.54	10.54	0.61		11.01	11.01	0.52						
80 (24.7)	72 (22.2)	380	10.10	4.87	1.01	380	10.60	5.86	0.90	420	12.37	7.11	0.77	420	12.96	7.40	0.60	420	13.83	7.73	0.54	420	14.38	0.93	0.42						
	67 (19.4)		9.09	4.40	1.01		9.73	7.22	0.91		10.29	8.03	0.79		11.08	8.38	0.60		12.25	8.88	0.67		12.91	8.88	0.47						
	63 (17.2)		8.36	7.89	1.01		8.97	6.28	0.91		10.24	10.24	0.79		10.78	10.78	0.69		11.34	11.19	0.59		11.90	11.30	0.50						
	57 (15.6)		8.23	8.23	1.01		8.70	6.70	0.91		10.23	10.23	0.79		10.78	10.78	0.69		11.25	11.25	0.60		11.70	11.70	0.50						
STAGE 1																															
75 (23.6)	72 (22.2)	300	8.50	3.43	0.81	300	9.06	3.88	0.77	360	9.44	3.00	0.51	360	9.08	0.84	0.44	360	9.67	4.28	0.34	360	10.29	4.24	0.28						
	67 (19.4)		7.85	4.30	0.83		8.17	4.90	0.77		7.91	3.00	0.51		8.18	5.29	0.40		8.70	5.53	0.39		9.23	5.77	0.31						
	63 (17.2)		7.04	5.58	0.80		7.31	6.30	0.77		7.02	6.16	0.51		7.21	6.44	0.40		7.54	6.28	0.40		7.80	6.83	0.34						
	57 (15.6)		6.33	6.15	0.81		6.83	6.30	0.77		6.75	6.75	0.52		7.18	7.18	0.47		7.54	7.54	0.41		7.80	7.80	0.38						
80 (24.7)	72 (22.2)	300	8.48	4.30	0.81	300	9.06	4.83	0.77	360	9.40	3.00	0.51	360	9.02	0.80	0.44	360	9.64	5.55	0.30	360	10.24	5.80	0.28						
	67 (19.4)		7.80	5.20	0.83		8.15	5.54	0.77		7.88	4.46	0.51		8.14	6.76	0.40		8.68	7.02	0.39		9.21	7.28	0.31						
	63 (17.2)		7.00	6.21	0.80		7.48	6.20	0.77		7.23	7.23	0.51		7.48	7.88	0.48		7.68	8.08	0.40		8.08	8.42	0.33						
	57 (15.6)		6.58	6.58	0.80		6.94	6.94	0.77		7.22	7.22	0.51		7.01	7.01	0.40		7.08	8.08	0.40		7.40	8.48	0.38						

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage
Stage 1 - Compressor speed limited to stage two at 105 and 115 outdoor

See additional notes on page 48



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DETAILED COOLING CAPACITIES[#] - EFFICIENCY MODE CONTINUED

24VNA813

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FELANF006L	1.00	1.00	
CAP**1814AL*	0.99	0.99	99CVA X070-12
CAP**2414AL*	0.99	0.99	99CVA X070-12
CAP**2417AL*	0.99	0.99	50**N*A06DV17**14
CAP**2417AL*	0.99	0.99	50**N*A06DV17**14
CNPH*2417AL*	0.99	0.99	50**N*A06DV17**14
CNPH*2417AL*	0.99	0.99	50**N*A06DV17**14
CNPV*2414AL*	1.00	1.00	99CVA X070-12
CNPV*2417AL*	0.99	0.99	50**N*A06DV17**14
CNPV*2417AL*	0.99	0.99	50**N*A06DV17**14
CSPH*2412AL*	1.00	1.00	50**N*A06DV17**14
CSPH*2412AL*	1.00	1.00	50**N*A06DV17**14

See additional notes on page 48



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DETAILED COOLING CAPACITIES[#] - EFFICIENCY MODE CONTINUED

COOLING CAPACITY T (°C)	EVAPORATOR AIR T (°C)	CONDENSER / REFRIGERANT Efficiency Mode Condenser Entering Air Temperature °F (°C)																													
		75 (24.1)						100 (40.0)						80 (28)						75 (23.9)						65 (18.9)					
		ID SCFM	Capacity MBH ^h		Total Sys. kW ^h **	ID SCFM	Capacity MBH ^h		Total Sys. kW ^h **	ID SCFM	Capacity MBH ^h		Total Sys. kW ^h **	ID SCFM	Capacity MBH ^h		Total Sys. kW ^h **	ID SCFM	Capacity MBH ^h		Total Sys. kW ^h **	ID SCFM	Capacity MBH ^h		Total Sys. kW ^h **						
STAGE 5																															
75 (24.9)	72 (22.2)	825	22.00	9.53	3.21	825	24.02	19.09	2.91	825	25.33	10.54	2.07	825	26.67	11.04	1.80	825	27.96	11.54	1.20	825	29.20	12.02	0.94						
	67 (19.4)		20.50	13.10	3.20		21.88	13.78	3.63		23.10	14.31	2.09		24.34	14.86	1.84		25.55	15.41	1.24		26.73	15.96	0.89						
	63 (17.2)		19.06	16.04	3.10		20.29	16.68	3.62		21.44	17.26	2.10		22.61	17.83	1.88		23.74	18.44	1.26		24.85	19.01	0.93						
	57 (13.8)		18.10	18.10	3.18		19.29	18.09	2.63		20.04	20.04	2.11		20.97	20.97	1.87		21.89	21.89	1.29		22.78	22.78	0.96						
80 (26.7)	72 (22.2)	825	22.44	10.14	3.20	825	23.85	13.70	2.81	825	25.13	14.23	2.06	825	26.49	14.77	1.80	825	27.80	15.31	1.18	825	29.07	15.84	0.84						
	67 (19.4)		20.98	16.76	3.20		21.79	17.38	2.62		23.00	17.90	2.09		24.24	18.58	1.83		25.43	19.18	1.23		26.62	19.73	0.89						
	63 (17.2)		19.26	19.26	3.18		20.27	20.18	2.60		21.49	20.85	2.10		22.63	21.51	1.85		23.75	22.13	1.28		24.85	22.77	0.92						
	57 (13.8)		19.23	19.23	3.18		20.28	20.28	2.60		21.29	21.29	2.10		22.23	22.23	1.86		23.18	23.18	1.27		24.10	24.10	0.94						
STAGE 3																															
75 (23.9)	72 (22.2)	650	15.28	6.47	1.34	650	15.08	8.82	1.23	650	15.82	7.10	1.10	650	17.75	7.44	0.91	650	18.87	7.78	0.72	650	19.88	8.12	0.54						
	67 (19.4)		13.88	9.15	1.34		14.59	9.54	1.20		15.23	9.87	1.12		16.19	10.25	0.94		17.20	10.62	0.76		17.86	10.98	0.58						
	63 (17.2)		12.72	11.20	1.34		13.54	11.87	1.26		14.27	12.04	1.13		15.07	12.45	0.96		15.86	12.85	0.79		16.62	13.24	0.62						
	57 (13.8)		12.27	12.27	1.34		12.87	12.87	1.27		13.50	13.50	1.14		14.24	14.24	0.97		14.89	14.89	0.81		15.52	15.52	0.66						
80 (26.7)	72 (22.2)	650	14.36	9.12	1.33	650	15.90	9.61	1.33	650	16.60	9.81	1.10	650	17.61	10.18	0.91	650	18.53	10.55	0.73	650	19.47	10.88	0.54						
	67 (19.4)		13.54	11.78	1.34		14.54	12.20	1.35		15.27	12.56	1.12		16.13	12.96	0.94		17.06	13.36	0.76		17.78	13.78	0.50						
	63 (17.2)		13.08	13.08	1.34		13.82	13.82	1.36		14.43	14.43	1.12		15.14	15.09	0.96		15.89	15.56	0.79		16.65	15.96	0.62						
	57 (13.8)		13.06	13.06	1.34		13.79	13.79	1.26		14.41	14.41	1.10		15.10	15.10	0.96		15.77	15.77	0.79		16.42	16.42	0.63						
STAGE 1																															
75 (24.9)	72 (22.2)	585	11.90	5.31	0.85	585	12.72	6.69	0.82	585	13.55	4.80	0.40	585	11.18	4.83	0.44	585	11.84	5.13	0.39	585	12.52	5.37	0.28						
	67 (19.4)		10.80	7.83	0.80		11.55	8.14	0.83		12.38	6.85	0.47		13.16	7.10	0.47		13.74	7.36	0.43		14.26	7.61	0.34						
	63 (17.2)		10.05	6.78	0.80		10.74	10.12	0.84		11.43	8.90	0.58		12.12	8.83	0.43		12.80	9.10	0.46		13.48	9.37	0.38						
	57 (13.8)		9.87	9.87	0.80		10.57	10.57	0.85		11.27	10.57	0.48		12.00	9.29	0.50		12.70	9.75	0.47		13.40	10.20	0.40						
80 (26.7)	72 (22.2)	585	11.80	7.81	0.89	585	12.88	8.12	0.82	585	13.41	6.01	0.46	585	11.00	7.06	0.44	585	11.72	7.22	0.38	585	12.41	7.50	0.28						
	67 (19.4)		10.80	10.26	0.89		11.52	10.84	0.85		12.25	8.90	0.47		13.03	8.25	0.47		13.71	8.53	0.43		14.32	8.81	0.34						
	63 (17.2)		10.66	10.66	0.89		11.38	11.28	0.84		12.10	9.40	0.46		12.83	9.03	0.48		13.57	10.37	0.44		14.07	10.87	0.38						
	57 (13.8)		10.54	10.54	0.89		11.36	11.26	0.84		12.09	9.30	0.48		12.82	9.07	0.48		13.56	10.35	0.44		14.06	10.86	0.38						

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage.
Stage 1 - Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 48



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DETAILED COOLING CAPACITIES[#] - EFFICIENCY MODE CONTINUED

24VNA924A

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
FE4ANB F303L	1.00	1.05	
FE4ANB F303L	0.96	1.00	
FE4ANB 006L	0.96	1.08	
FE4ANF020L	0.96	1.00	
CAP**3614AL*	0.96	1.03	86CVA.X0070-12
CAP**3617AL*	0.98	1.03	86CVA.X0070-12
CNPH**3617AL*	0.98	1.08	86CVA.X0070-12
CNPH**3617AL*	0.97	1.01	86CVA.X0070-12
CNPH**3617AL*	0.97	1.02	86CVA.X0070-12
CNPH**3617AL*	0.96	1.00	86CVA.X0070-12
CSPH**3612AL*	1.00	1.09	86CVA.X0070-12
CSPH**4212AL*	1.00	1.05	86CVA.X0070-12
CAP**3617AL*	0.96	1.03	86CVA.X0090-16
CAP**3621AL*	0.98	1.03	86CVA.X0090-16
CAP**4221AL*	0.98	1.04	86CVA.X0090-16
CNPH**3617AL*	0.98	1.03	86CVA.X0090-16
CNPH**4221AL*	0.98	1.04	86CVA.X0090-16
CNPH**3617AL*	0.97	1.01	86CVA.X0090-16
CNPH**3617AL*	0.97	1.01	86CVA.X0090-16
CNPH**3617AL*	0.97	0.97	86CVA.X0090-16
CNPH**4217AL*	0.96	1.00	86CVA.X0090-16
CNPH**4221AL*	0.96	1.00	86CVA.X0090-16
CSPH**3612AL*	1.00	1.00	86CVA.X0090-16
CSPH**4212AL*	1.01	1.01	86CVA.X0090-16
CAP**3617AL*	0.96	1.03	90"NA.A060V17**14
CAP**3621AL*	0.98	1.03	90"NA.A060V17**14
CAP**4221AL*	0.98	1.03	90"NA.A060V17**14
CNPH**3617AL*	0.97	1.07	90"NA.A060V17**14
CNPH**4221AL*	0.98	1.08	90"NA.A060V17**14
CNPH**3617AL*	0.94	1.03	90"NA.A060V17**14
CNPH**3621AL*	0.94	1.03	90"NA.A060V17**14
CNPH**3617AL*	0.97	1.02	90"NA.A060V17**14
CNPH**4221AL*	0.95	1.04	90"NA.A060V17**14
CSPH**3612AL*	0.95	1.04	90"NA.A060V17**14
CSPH**3613AL*	0.99	1.04	90"NA.A060V17**14
CSPH**4212AL*	1.00	1.05	90"NA.A060V17**14
CAP**3617AL*	0.98	1.03	90"NA.A060V17**14
CAP**3621AL*	0.98	1.03	90"NA.A060V17**14
CAP**4221AL*	0.98	1.04	90"NA.A060V17**14
CNPH**3617AL*	0.98	1.08	90"NA.A060V17**14
CNPH**4221AL*	0.98	1.08	90"NA.A060V17**14
CNPH**3617AL*	0.95	1.04	90"NA.A060V17**14
CNPH**3621AL*	0.95	0.99	90"NA.A060V17**14
CNPH**3617AL*	0.97	1.02	90"NA.A060V17**14
CNPH**4221AL*	0.97	1.02	90"NA.A060V17**14
CSPH**3612AL*	1.00	1.05	90"NA.A060V17**14
CSPH**4212AL*	1.00	1.05	90"NA.A060V17**14
CAP**3621AL*	0.98	1.03	90"NA.A060V21**20
CAP**4221AL*	0.99	1.04	90"NA.A060V21**20
CAP**4226AL*	0.99	1.04	90"NA.A060V21**20

Cooling Indoor Model	2-STAGE (H-Stage 1, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
FVACN.BJF003L	0.94	0.94	0.92	0.94	
FVACN.F052L	0.94	0.94	1.00	0.97	
CAP**2414AL*	0.94	0.99	1.05	1.12	88PH*045-08
CAP**2417AL*	0.94	0.98	1.09	1.12	88PH*045-08
CAP**3014AL*	0.95	0.95	1.09	1.11	88PH*045-08
CAP**3017AL*	0.95	0.95	1.09	1.11	88PH*045-08
CNPH**2414AL*	0.93	0.98	1.05	1.12	88PH*045-08
CNPH**2417AL*	0.93	0.98	1.09	1.12	88PH*045-08
CNPH**3014AL*	0.95	1.00	1.09	1.11	88PH*045-08
CNPH**3017AL*	0.95	1.00	1.09	1.11	88PH*045-08
CNPH**3117AL*	0.95	0.95	1.12	1.11	88PH*045-08
CAP**2414AL*	0.93	0.93	1.09	1.09	88CWX45-12
CAP**2417AL*	0.94	0.94	1.09	1.07	88CWX45-12
CAP**3014AL*	0.95	0.95	1.10	1.09	88CWX45-12
CAP**3017AL*	0.95	0.93	1.11	1.09	88CWX45-12
CAP**2414AL*	0.93	0.95	1.09	1.07	88CWX45-12
CNPH**2417AL*	0.93	0.98	1.09	1.07	88CWX45-12
CNPH**3014AL*	0.95	0.97	1.10	1.09	88CWX45-13
CNPH**3017AL*	0.95	0.93	1.11	1.09	88CWX45-13
CNPH**3117AL*	0.94	0.94	1.12	1.08	88CWX45-12
CSPH**3012AL*	0.93	0.93	1.11	1.08	88CWX45-13
CAP**2417AL*	0.95	0.93	1.11	1.08	88CWX45-13
CNPH**2417AL*	0.96	1.05	1.09	1.07	88CWX45-16
CNPH**3017AL*	0.93	0.98	1.11	1.09	88CWX45-16
CNPH**3117AL*	0.95	0.95	1.12	1.08	88CWX45-13
CSPH**2412AL*	0.97	1.01	1.09	1.08	88CWX45-16
CSPH**3012AL*	0.95	0.95	1.11	1.07	88CWX45-16
CSPH**2412AL*	0.94	0.94	1.13	1.15	88CWX45-16
CSPH**3012AL*	0.95	0.95	1.14	1.12	88CWX45-16
CAP**2414AL*	0.95	1.00	1.00	1.13	89"PS.A040E14**10
CAP**2417AL*	0.93	0.98	1.09	1.13	89"PS.A040E14**10
CAP**3014AL*	0.94	0.99	1.07	1.12	89"PS.A040E14**10
CAP**3017AL*	0.96	1.00	1.08	1.12	89"PS.A040E14**10
CNPH**2414AL*	0.93	0.97	1.07	1.13	89"PS.A040E14**10
CNPH**2417AL*	0.93	0.97	1.07	1.13	89"PS.A040E14**10
CNPH**3014AL*	0.94	0.99	1.07	1.12	89"PS.A040E14**10
CNPH**3017AL*	0.95	1.00	1.09	1.12	89"PS.A040E14**10
CNPH**3117AL*	0.94	0.94	1.11	1.11	89"PS.A040E14**10
CSPH**2412AL*	0.96	1.00	1.10	1.23	89"PS.A040E14**10
CSPH**3012AL*	0.97	1.01	1.09	1.11	89"PS.A040E14**10
CAP**2417AL*	0.93	0.96	1.07	1.12	89"PS.A040E17**12
CAP**3017AL*	0.95	1.00	1.06	1.13	89"PS.A040E17**12
CNPH**2417AL*	0.95	1.05	1.08	1.13	89"PS.A040E17**12
CNPH**3017AL*	0.93	1.00	1.09	1.12	89"PS.A040E17**12
CNPH**3117AL*	0.97	1.01	1.09	1.10	89"PS.A040E17**12
CSPH**2412AL*	0.96	1.00	1.10	1.25	89"PS.A040E17**12
CAP**2414AL*	0.94	0.94	1.09	1.10	89"PS.A060E14**10
CAP**2417AL*	0.95	0.95	1.10	1.10	89"PS.A060E14**10
CAP**3014AL*	0.93	0.93	1.11	1.11	89"PS.A060E14**10

Cooling Indoor Model	2-STAGE (H-Stage 1, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
CAP**3017AL*	0.94	0.94	1.12	1.11	89"PS.A060E14**10
CNPH**2414AL*	0.94	0.99	1.09	1.09	89"PS.A060E14**10
CNPH**2417AL*	0.94	0.99	1.09	1.09	89"PS.A060E14**10
CNPH**3014AL*	0.93	0.98	1.11	1.11	89"PS.A060E14**10
CNPH**3017AL*	0.94	0.94	1.12	1.11	89"PS.A060E14**10
CNPH**3117AL*	0.90	0.96	1.13	1.09	89"PS.A060E14**10
CSPH**2412AL*	0.95	0.95	1.09	1.10	89"PS.A060E14**10
CSPH**3012AL*	0.94	0.94	1.12	1.10	89"PS.A060E14**10
CNPH**2417AL*	0.98	1.00	1.11	1.13	89"PS.A060E17**14
CSPH**2412AL*	0.95	0.95	1.13	1.15	89"PS.A060E17**14
CNPH**2417AL*	0.96	1.00	1.10	1.10	89"PS.A060E17**16
CSPH**2412AL*	0.94	0.94	1.12	1.12	89"PS.A060E17**16
CAP**2414AL*	0.93	1.03	1.07	1.17	89"PS.A060E14**10
CAP**2417AL*	0.94	1.04	1.07	1.17	89"PS.A060E14**10
CAP**3014AL*	0.95	1.05	1.07	1.16	89"PS.A060E14**10
CAP**3017AL*	0.95	1.05	1.07	1.15	89"PS.A060E14**10
CNPH**2414AL*	0.93	1.03	1.07	1.17	89"PS.A060E14**10
CNPH**2417AL*	0.93	1.03	1.07	1.17	89"PS.A060E14**10
CNPH**3014AL*	0.95	1.05	1.07	1.16	89"PS.A060E14**10
CNPH**3017AL*	0.95	1.05	1.07	1.15	89"PS.A060E14**10
CNPH**3117AL*	0.96	1.06	1.09	1.13	89"PS.A060E14**10
CSPH**2412AL*	0.95	1.05	1.08	1.15	89"PS.A060E14**10
CSPH**3012AL*	0.95	1.05	1.08	1.15	89"PS.A060E14**10
CAP**2417AL*	0.93	0.97	1.07	1.14	89"PS.A060E17**12
CAP**3017AL*	0.93	0.98	1.07	1.13	89"PS.A060E17**12
CNPH**2417AL*	0.94	1.04	1.08	1.15	89"PS.A060E17**12
CNPH**3017AL*	0.93	1.03	1.07	1.13	89"PS.A060E17**12
CNPH**3117AL*	0.96	1.06	1.09	1.12	89"PS.A060E17**12
CNPH**2417AL*	0.93	1.01	1.07	1.14	89"PS.A060E17**12
CNPH**3017AL*	0.93	0.98	1.07	1.13	89"PS.A060E17**12
CNPH**3117AL*	0.94	0.99	1.09	1.10	89"PS.A060E17**12
CSPH**2412AL*	0.96	1.05	1.10	1.23	89"PS.A060E17**12
CSPH**3012AL*	0.93	0.99	1.08	1.13	89"PS.A060E17**12
CNPH**2417AL*	0.96	1.05	1.10	1.17	89"PS.A060E17**14
CSPH**2412AL*	0.97	1.01	1.10	1.16	89"PS.A060E17**14

See notes on page 48



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DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

DBR F (C)	EWS F (C)	OUTDOOR / FRANKFORD Efficiency Mode Condenser Entering Air Temperature °F (°C)																													
		115 (46.1)						105 (40.5)						95 (35)						75 (23.9)						65 (18.3)					
		ID SCFM	Capacity MBtuh		Total Sys. kW**	ID SCFM	Capacity MBtuh		Total Sys. kW**	ID SCFM	Capacity MBtuh		Total Sys. kW**	ID SCFM	Capacity MBtuh		Total Sys. kW**	ID SCFM	Capacity MBtuh		Total Sys. kW**	ID SCFM	Capacity MBtuh		Total Sys. kW**						
STAGE 2																															
79 (23.9)	72 (22.2)	825	23.43	9.90	2.85	825	25.03	10.49	2.50	825	26.46	11.02	2.20	825	28.00	11.50	1.91	825	29.51	12.10	1.63	825	31.01	12.75	1.37						
	67 (19.6)		21.30	12.70	2.81		22.78	14.32	2.49		24.07	14.89	2.18		25.46	15.90	1.90		26.82	16.10	1.63		28.19	16.70	1.38						
	63 (17.2)		19.74	15.00	2.75		21.07	17.34	2.47		22.29	17.94	2.17		23.58	18.97	1.89		24.85	19.20	1.63		26.11	19.82	1.39						
	57 (13.9)		18.74	18.74	2.70		19.81	18.81	2.45		20.78	20.78	2.15		21.79	21.79	1.88		22.78	20.78	1.63		23.74	23.74	1.38						
80 (26.7)	72 (22.2)	825	23.38	13.70	2.85	825	24.88	14.32	2.52	825	26.39	14.88	2.20	825	27.93	15.49	1.91	825	29.44	16.09	1.63	825	30.94	16.68	1.37						
	67 (19.6)		21.24	17.46	2.81		22.69	18.11	2.48		24.00	18.72	2.18		25.39	19.38	1.90		26.78	19.99	1.63		28.12	20.52	1.38						
	63 (17.2)		19.96	19.96	2.78		21.18	20.93	2.47		22.35	21.63	2.17		23.61	22.34	1.89		24.88	23.02	1.63		26.10	23.70	1.38						
	57 (13.9)		19.93	19.93	2.78		21.05	21.05	2.47		22.07	22.07	2.16		23.12	23.12	1.88		24.16	24.16	1.63		25.17	25.17	1.38						
STAGE 3																															
75 (23.9)	72 (22.2)	850	18.80	7.18	1.72	850	17.75	7.59	1.53	850	16.75	7.96	1.31	850	15.68	8.37	1.12	850	14.59	8.76	0.94	850	13.50	9.18	0.77						
	67 (19.6)		15.81	10.22	1.72		16.08	10.66	1.53		16.99	11.06	1.32		18.05	11.49	1.14		18.99	11.92	0.97		19.97	12.34	0.81						
	63 (17.2)		13.48	12.56	1.71		14.82	13.06	1.54		15.70	13.48	1.32		16.62	13.94	1.15		17.52	14.33	0.99		18.40	14.82	0.84						
	57 (13.9)		13.48	13.48	1.71		14.25	14.25	1.54		14.87	14.87	1.32		15.70	15.70	1.18		16.48	16.48	1.01		17.19	17.19	0.88						
80 (26.7)	72 (22.2)	850	18.24	10.24	1.72	850	17.69	10.66	1.53	850	16.68	11.07	1.31	850	15.61	11.51	1.12	850	14.52	11.94	0.94	850	13.43	12.37	0.77						
	67 (19.6)		14.38	13.23	1.72		16.01	13.70	1.53		16.94	14.13	1.32		17.95	14.59	1.14		18.93	15.05	0.97		19.91	15.56	0.81						
	63 (17.2)		14.42	14.42	1.72		15.24	15.24	1.53		15.99	15.99	1.32		16.77	16.77	1.15		17.61	17.33	0.93		18.40	17.88	0.83						
	57 (13.9)		14.40	14.40	1.72		15.22	15.22	1.53		15.96	15.96	1.32		16.74	16.74	1.15		17.50	17.50	0.88		18.23	18.23	0.84						
STAGE 1																															
75 (23.9)	72 (22.2)	880	14.31	6.30	1.38	880	13.80	6.85	1.24	880	13.25	7.43	1.04	880	12.65	8.01	0.84	880	12.05	8.61	0.67	880	11.45	9.21	0.52						
	67 (19.6)		12.64	9.35	1.38		13.52	9.73	1.25		14.32	10.35	1.05		15.05	10.95	0.84		15.77	11.55	0.67		16.49	12.15	0.53						
	63 (17.2)		11.71	11.02	1.39		12.40	12.00	1.26		13.11	12.61	1.05		13.82	13.22	0.84		14.53	13.83	0.67		15.24	14.44	0.54						
	57 (13.9)		11.67	11.67	1.39		12.20	12.20	1.26		13.11	13.11	1.05		13.82	13.82	0.84		14.53	14.53	0.67		15.24	15.24	0.54						
80 (26.7)	72 (22.2)	880	13.95	8.39	1.38	880	14.04	9.79	1.24	880	13.25	10.43	1.04	880	12.45	11.07	0.84	880	11.65	11.71	0.67	880	10.85	12.35	0.52						
	67 (19.6)		12.88	12.32	1.39		13.62	12.75	1.25		14.37	13.50	1.04		15.08	14.21	0.84		15.79	14.92	0.67		16.50	15.63	0.53						
	63 (17.2)		12.38	12.38	1.39		13.28	13.28	1.26		13.77	13.77	1.04		14.25	14.25	0.84		14.73	14.73	0.67		15.21	15.21	0.53						
	57 (13.9)		12.33	12.33	1.39		13.26	13.26	1.26		13.76	13.76	1.04		14.24	14.24	0.84		14.72	14.72	0.67		15.20	15.20	0.53						

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage
Stage 1 - Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 48



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DETAILED COOLING CAPACITIES[#] - EFFICIENCY MODE CONTINUED

IDR °F (°C)	EVAP AIR °F (°C)	DYNAMIC PERFORMANCE Efficiency Mode Condenser Entering Air Temperature °F (°C)																								
		115 (46.1)					105 (40.6)					95 (35)					75 (23.9)					65 (18.3)				
		ID SCFM	Capacity MBtuh		Total Sys. KW**	ID SCFM	Capacity MBtuh		Total Sys. KW**	ID SCFM	Capacity MBtuh		Total Sys. KW**	ID SCFM	Capacity MBtuh		Total Sys. KW**	ID SCFM	Capacity MBtuh		Total Sys. KW**					
STAGE 2																										
75 (23.9)	72 (22.2)	825	23.06	9.99	2.51	825	25.12	10.51	2.21	825	26.43	11.00	1.90	825	27.77	11.50	1.62	825	29.06	11.99	1.34	825	30.34	12.47	1.07	
	67 (19.4)		21.58	10.62	2.50		22.86	14.39	2.21		24.10	14.93	1.92		25.35	15.46	1.60		26.55	16.01	1.39		27.72	16.54	1.13	
	63 (17.2)		19.97	16.81	2.49		21.22	17.43	2.22		22.38	18.00	1.93		23.54	18.59	1.67		24.67	19.16	1.42		25.77	19.72	1.17	
	57 (13.9)		18.96	18.96	2.48		19.97	19.97	2.21		20.91	20.91	1.94		21.84	21.84	1.69		22.75	22.75	1.45		23.62	23.62	1.21	
80 (26.7)	72 (22.2)	825	23.52	13.77	2.50	825	24.94	14.33	2.20	825	26.29	14.85	1.90	825	27.59	15.38	1.61	825	28.89	15.91	1.34	825	30.15	16.42	1.07	
	67 (19.4)		21.46	17.56	2.50		22.78	18.16	2.21		24.00	18.75	1.92		25.24	19.33	1.65		26.45	19.90	1.39		27.61	20.46	1.13	
	63 (17.2)		20.19	20.19	2.49		21.30	21.10	2.22		22.43	21.76	1.93		23.57	22.40	1.67		24.68	23.02	1.42		25.77	23.62	1.17	
	57 (13.9)		20.15	20.15	2.49		21.20	21.20	2.22		22.18	22.18	1.93		23.15	23.15	1.67		24.09	24.09	1.43		25.00	25.00	1.19	
STAGE 3																										
75 (23.9)	72 (22.2)	860	15.55	6.67	1.25	860	16.54	7.02	1.17	860	17.29	7.30	1.03	860	18.23	7.64	0.91	860	19.14	7.96	0.77	860	20.05	8.32	0.61	
	67 (19.4)		14.11	9.43	1.25		15.02	8.62	1.15		15.78	10.15	1.05		16.63	10.52	0.95		17.47	10.89	0.82		18.29	11.25	0.67	
	63 (17.2)		13.09	11.60	1.25		13.94	12.02	1.19		14.67	12.38	1.06		15.47	12.78	0.97		16.26	13.17	0.85		17.02	13.56	0.71	
	57 (13.9)		12.85	12.85	1.25		13.36	13.36	1.20		13.97	13.97	1.07		14.62	14.62	0.98		15.26	15.26	0.87		15.89	15.89	0.75	
80 (26.7)	72 (22.2)	860	15.43	8.41	1.24	860	16.40	8.79	1.17	860	17.14	10.08	1.03	860	18.09	10.46	0.91	860	18.99	10.81	0.77	860	19.94	11.19	0.61	
	67 (19.4)		14.07	12.14	1.25		14.97	12.56	1.15		15.70	12.91	1.05		16.56	13.31	0.94		17.39	13.70	0.82		18.21	14.09	0.67	
	63 (17.2)		13.49	13.49	1.25		14.23	14.23	1.19		14.84	14.84	1.06		15.64	15.49	0.96		16.30	15.95	0.84		17.05	16.38	0.71	
	57 (13.9)		13.47	13.47	1.25		14.20	14.20	1.19		14.81	14.81	1.05		15.50	15.50	0.96		16.17	16.17	0.85		16.91	16.91	0.72	
STAGE 1																										
75 (23.9)	72 (22.2)	885	12.12	5.36	0.73	885	12.82	5.66	0.75	885	13.55	4.99	0.48	885	11.18	4.89	0.44	885	11.84	5.13	0.39	885	12.52	5.37	0.28	
	67 (19.4)		10.96	7.95	0.74		11.73	8.27	0.77		12.50	6.85	0.47		13.26	7.10	0.47		13.94	7.35	0.43		14.61	7.61	0.34	
	63 (17.2)		10.22	9.94	0.74		10.91	10.29	0.77		11.60	8.58	0.49		12.29	8.83	0.49		12.97	9.10	0.46		13.64	9.37	0.38	
	57 (13.9)		10.14	10.14	0.74		10.74	10.74	0.76		11.34	8.82	0.48		12.03	9.29	0.50		12.71	9.75	0.47		13.39	10.21	0.40	
80 (26.7)	72 (22.2)	885	11.99	7.94	0.73	885	12.79	8.25	0.75	885	13.41	6.61	0.46	885	11.06	7.06	0.44	885	11.73	7.32	0.38	885	12.41	7.59	0.28	
	67 (19.4)		10.97	10.45	0.74		11.70	10.80	0.76		12.43	8.98	0.47		13.16	9.25	0.47		13.83	9.53	0.43		14.50	9.81	0.34	
	63 (17.2)		10.63	10.63	0.74		11.46	11.46	0.77		12.16	9.40	0.48		12.86	9.69	0.48		13.54	10.37	0.44		14.20	10.67	0.36	
	57 (13.9)		10.62	10.62	0.74		11.44	11.44	0.77		12.14	9.39	0.48		12.84	9.67	0.48		13.52	10.35	0.44		14.18	10.65	0.36	

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage.
Stage 1 - Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 48



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DETAILED COOLING CAPACITIES - EFFICIENCY MODE CONTINUED

24VNA925

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
FE4ANB F003L	1.00	1.00	
FE4ANB F003L	0.96	0.99	
FE4ANB006L	0.96	1.07	
FE4ANF002L	0.96	0.99	
CAP**3614AL*	0.98	1.01	SRVVA30070-12
CAP**3617AL*	0.98	1.01	SRVVA30070-12
CNRH*3617AL*	0.98	1.02	SRVVA30070-12
CNPV*3617AL*	0.97	0.99	SRVVA30070-12
CNPV*3717AL*	0.98	1.00	SRVVA30070-12
CNPV*4217AL*	0.96	0.99	SRVVA30070-12
CSPH*3612AL*	1.00	1.02	SRVVA30070-12
CSPH*4212AL*	1.00	1.02	SRVVA30070-12
CAP**3617AL*	0.98	1.01	SRVVA30060-16
CAP**3621AL*	0.98	1.01	SRVVA30060-16
CAP**4221AL*	0.99	0.99	SRVVA30060-16
CNRH*3617AL*	0.98	1.01	SRVVA30060-16
CNRH*4221AL*	0.99	1.02	SRVVA30060-16
CNPV*3617AL*	0.97	0.99	SRVVA30060-16
CNPV*3621AL*	0.97	0.99	SRVVA30060-16
CNPV*3717AL*	0.98	0.99	SRVVA30060-16
CNPV*4217AL*	0.98	0.99	SRVVA30060-16
CNPV*4221AL*	0.96	0.99	SRVVA30060-16
CSPH*3612AL*	1.00	1.00	SRVVA30060-16
CSPH*4212AL*	1.01	1.01	SRVVA30060-16
CAP**3617AL*	0.98	1.02	58*N*A060V17**14
CAP**3621AL*	0.98	1.01	58*N*A060V17**14
CAP**4221AL*	0.98	1.01	58*N*A060V17**14
CNRH*3617AL*	0.98	1.11	58*N*A060V17**14
CNRH*4221AL*	0.98	1.12	58*N*A060V17**14
CNPV*3617AL*	0.94	1.02	58*N*A060V17**14
CNPV*3621AL*	0.94	1.02	58*N*A060V17**14
CNPV*3717AL*	0.96	1.00	58*N*A060V17**14
CNPV*4217AL*	0.95	1.03	58*N*A060V17**14
CSPH*3612AL*	0.98	1.02	58*N*A060V17**14
CSPH*4212AL*	1.00	1.02	58*N*A060V17**14
CAP**3617AL*	0.98	1.01	58*N*A080V17**14
CAP**3621AL*	0.98	1.01	58*N*A080V17**14
CAP**4221AL*	0.99	1.02	58*N*A080V17**14
CNRH*3617AL*	0.98	1.07	58*N*A080V17**14
CNRH*4221AL*	0.99	1.08	58*N*A080V17**14
CNPV*3617AL*	0.95	1.03	58*N*A080V17**14
CNPV*3621AL*	0.95	1.03	58*N*A080V17**14
CNPV*3717AL*	0.98	1.00	58*N*A080V17**14
CNPV*4217AL*	0.98	1.02	58*N*A080V17**14
CSPH*3612AL*	1.00	1.02	58*N*A080V17**14
CAP**3621AL*	0.98	1.01	58MN*A080V21**20
CAP**4221AL*	0.99	1.02	58MN*A080V21**20
CAP**4224AL*	0.99	1.02	58MN*A080V21**20

Cooling Indoor Model	2-STAGE (Hi-Stage 5, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
FV4CXB F003L	0.94	0.98	0.97	0.94	
FV4CNF002L	0.94	0.98	1.00	0.97	
CAP**2414AL*	0.94	1.02	1.08	1.12	SBRH*045-08
CAP**2417AL*	0.94	1.02	1.09	1.12	SBRH*045-08
CSPH*3014AL*	0.95	0.99	1.09	1.11	SBRH*045-08
CSPH*3017AL*	0.95	0.99	1.09	1.11	SBRH*045-08
CNPV**2414AL*	0.93	1.01	1.06	1.12	SBRH*045-08
CNPV**2417AL*	0.93	1.01	1.06	1.12	SBRH*045-08
CNPV**3014AL*	0.95	1.03	1.08	1.11	SBRH*045-08
CNPV**3017AL*	0.95	1.03	1.09	1.11	SBRH*045-08
CNPV**3117AL*	0.95	0.99	1.12	1.11	SBRH*045-08
CAP**2414AL*	0.93	0.97	1.08	1.08	SBRH*045-08
CAP**2417AL*	0.94	0.98	1.08	1.07	SBRH*045-08
CAP**3014AL*	0.93	0.96	1.12	1.09	SBRH*045-08
CAP**3017AL*	0.93	0.97	1.11	1.09	SBRH*045-08
CNPV**2414AL*	0.93	1.01	1.08	1.07	SBRH*045-08
CNPV**2417AL*	0.93	1.01	1.08	1.07	SBRH*045-08
CNPV**3014AL*	0.93	1.01	1.10	1.09	SBRH*045-08
CNPV**3017AL*	0.93	0.97	1.11	1.09	SBRH*045-08
CNPV**3117AL*	0.94	0.98	1.12	1.08	SBRH*045-08
CSPH**2412AL*	0.93	0.96	1.11	1.08	SBRH*045-08
CAP**2417AL*	0.93	0.96	1.11	1.09	SBRH*045-08
CAP**3017AL*	0.93	0.97	1.11	1.08	SBRH*045-08
CNRH**2417AL*	0.96	1.04	1.09	1.07	SBRH*045-08
CNRH**3017AL*	0.93	1.01	1.11	1.08	SBRH*045-08
CNRH**3117AL*	0.95	0.99	1.12	1.09	SBRH*045-08
CNRH**3117AL*	0.95	0.99	1.12	1.09	SBRH*045-08
CNRH**3117AL*	0.93	1.01	1.09	1.07	SBRH*045-08
CNPV**3017AL*	0.93	0.97	1.11	1.08	SBRH*045-08
CNPV**3117AL*	0.95	0.99	1.12	1.09	SBRH*045-08
CSPH**2412AL*	0.97	1.05	1.09	1.08	SBRH*045-08
CSPH**3012AL*	0.93	0.97	1.11	1.07	SBRH*045-08
CSPH**2412AL*	0.94	0.98	1.13	1.13	SBRH*045-08
CSPH**3012AL*	0.93	0.99	1.14	1.12	SBRH*045-08
CAP**2414AL*	0.95	1.03	1.08	1.13	58P*0430E14**12
CAP**2417AL*	0.93	1.01	1.06	1.13	58P*0430E14**12
CAP**3014AL*	0.94	1.02	1.07	1.12	58P*0430E14**12
CAP**3017AL*	0.95	1.03	1.08	1.12	58P*0430E14**12
CNPV**2414AL*	0.93	1.01	1.07	1.13	58P*0430E14**12
CNPV**2417AL*	0.93	1.01	1.07	1.13	58P*0430E14**12
CNPV**3014AL*	0.94	1.02	1.07	1.12	58P*0430E14**12
CNPV**3017AL*	0.95	1.03	1.08	1.12	58P*0430E14**12
CNPV**3117AL*	0.94	0.99	1.11	1.11	58P*0430E14**12
CSPH**2412AL*	0.95	1.04	1.10	1.23	58P*0430E14**12
CSPH**3012AL*	0.97	1.09	1.09	1.11	58P*0430E14**12
CAP**2417AL*	0.93	1.01	1.07	1.12	58P*0430E17**12
CAP**3017AL*	0.95	1.03	1.08	1.13	58P*0430E17**12
CNRH**2417AL*	0.95	1.06	1.06	1.10	58P*0430E17**12
CNRH**3017AL*	0.95	1.03	1.06	1.12	58P*0430E17**12
CNRH**3117AL*	0.97	1.05	1.09	1.10	58P*0430E17**12
CNPV**2417AL*	0.93	1.01	1.07	1.13	58P*0430E17**12
CNPV**3017AL*	0.95	1.03	1.08	1.12	58P*0430E17**12
CNPV**3117AL*	0.97	1.05	1.09	1.10	58P*0430E17**12
CSPH**2412AL*	0.95	1.04	1.10	1.26	58P*0430E17**12
CAP**2414AL*	0.94	0.98	1.09	1.10	58P*0430E14**12
CAP**2417AL*	0.95	0.99	1.10	1.10	58P*0430E14**12
CAP**3016AL*	0.93	0.97	1.11	1.11	58P*0430E14**12

Cooling Indoor Model	2-STAGE (Hi-Stage 5, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
CAP**3017AL*	0.94	0.99	1.12	1.11	58P*0430E14**12
CNPV**2414AL*	0.94	1.02	1.09	1.09	58P*0430E14**12
CNPV**2417AL*	0.94	1.02	1.09	1.09	58P*0430E14**12
CNPV**3014AL*	0.93	1.01	1.11	1.11	58P*0430E14**12
CNPV**3017AL*	0.94	0.99	1.12	1.11	58P*0430E14**12
CNPV**3117AL*	0.96	1.00	1.13	1.09	58P*0430E14**12
CSPH**2412AL*	0.95	0.99	1.09	1.10	58P*0430E14**12
CSPH**3012AL*	0.94	0.99	1.12	1.10	58P*0430E14**12
CNRH**2417AL*	0.96	1.04	1.11	1.12	58P*0430E17**14
CSPH**2412AL*	0.95	0.99	1.13	1.15	58P*0430E17**14
CNRH**2417AL*	0.96	1.04	1.10	1.10	58P*0430E17**16
CSPH**2412AL*	0.94	0.99	1.12	1.12	58P*0430E17**18
CAP**2414AL*	0.93	1.00	1.07	1.17	58P*0430E14**10
CAP**2417AL*	0.94	1.01	1.07	1.17	58P*0430E14**10
CAP**3014AL*	0.95	1.06	1.07	1.16	58P*0430E14**10
CAP**3017AL*	0.95	1.06	1.07	1.16	58P*0430E14**10
CNPV**2414AL*	0.93	1.11	1.07	1.17	58P*0430E14**10
CNPV**2417AL*	0.93	1.11	1.07	1.17	58P*0430E14**10
CNPV**3014AL*	0.95	1.08	1.07	1.16	58P*0430E14**10
CNPV**3017AL*	0.95	1.08	1.07	1.16	58P*0430E14**10
CNPV**3117AL*	0.96	1.11	1.08	1.16	58P*0430E14**10
CSPH**2412AL*	0.95	1.06	1.07	1.17	58P*0430E14**10
CSPH**3012AL*	0.95	1.08	1.06	1.16	58P*0430E14**10
CAP**2417AL*	0.93	1.01	1.07	1.14	58P*0430E17**12
CAP**3017AL*	0.93	1.01	1.07	1.13	58P*0430E17**12
CNRH**2417AL*	0.94	1.12	1.08	1.15	58P*0430E17**12
CNRH**3017AL*	0.93	1.05	1.07	1.13	58P*0430E17**12
CNRH**3117AL*	0.96	1.04	1.06	1.12	58P*0430E17**12
CNPV**2417AL*	0.92	1.04	1.07	1.14	58P*0430E17**12
CNPV**3017AL*	0.93	1.01	1.07	1.13	58P*0430E17**12
CNPV**3117AL*	0.96	1.04	1.09	1.12	58P*0430E17**12
CSPH**2412AL*	0.95	1.09	1.10	1.23	58P*0430E17**12
CSPH**3012AL*	0.93	1.01	1.06	1.13	58P*0430E17**12
CNRH**2417AL*	0.95	1.09	1.10	1.17	58P*0430E17**14
CSPH**2412AL*	0.97	1.05	1.10	1.16	58P*0430E17**14

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DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

COOLING CAPACITY (Tons)	EVAR AIR (Tons)	DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED																									
		CONDENSER ENTERING AIR TEMPERATURE (°C)																									
		115 (46.1)			105 (40.5)			95 (35)			85 (29.4)			75 (23.9)			65 (18.3)										
ID SCFM	Capacity MBtuh	Total Sys. kW**	ID SCFM	Capacity MBtuh	Total Sys. kW**	ID SCFM	Capacity MBtuh	Total Sys. kW**	ID SCFM	Capacity MBtuh	Total Sys. kW**	ID SCFM	Capacity MBtuh	Total Sys. kW**	ID SCFM	Capacity MBtuh	Total Sys. kW**										
																		Total	Sensit	Total	Sensit	Total	Sensit	Total	Sensit	Total	Sensit
STAGE 5																											
75 (23.9)	72 (22.2)	14.24	14.12	4.44	1050	35.41	14.89	3.89	1050	38.29	15.70	3.06	1050	40.30	16.47	2.87	1050	42.28	17.24	2.61	1050	44.18	17.99	1.99			
	67 (19.4)	31.38	19.07	4.38		33.25	19.95	3.85		35.13	20.75	3.34		36.99	21.60	3.87		38.79	22.42	3.43		40.52	23.22	3.02	42.22	23.99	2.62
	63 (17.2)	29.21	22.90	4.33		31.07	23.84	3.81		32.74	24.70	3.31		34.48	25.59	2.88		36.17	26.47	2.44		37.79	27.33	2.04	39.48	28.18	1.64
	57 (13.9)	27.86	27.84	4.27		28.50	28.50	3.77		29.85	29.85	3.26		31.20	31.20	2.84		32.65	32.65	2.41		34.08	33.21	2.04	35.48	33.71	1.64
80 (26.7)	72 (22.2)	34.24	18.82	4.44	1050	36.21	19.79	3.88	1050	38.09	20.56	3.39	1050	40.10	21.38	2.88	1050	42.08	22.22	2.41	1050	43.98	23.01	1.96			
	67 (19.4)	31.25	23.78	4.38		33.25	24.72	3.84		35.00	25.57	3.33		36.88	26.47	2.88		38.69	27.35	2.42		40.39	28.21	2.02			
	63 (17.2)	29.21	27.55	4.33		31.05	28.56	3.81		32.70	28.48	3.31		34.43	30.44	2.88		36.11	31.08	2.43		37.72	32.28	2.04			
	57 (13.9)	28.81	28.81	4.32		30.14	30.14	3.80		31.53	31.53	3.30		32.85	32.85	2.89		34.31	34.31	2.44		35.64	35.64	2.00			
STAGE 3																											
75 (23.9)	72 (22.2)	21.81	9.22	1.98	900	23.28	9.85	1.83	900	24.29	10.24	1.87	900	25.65	10.75	1.58	900	27.01	11.26	1.31	900	28.33	11.73	1.10			
	67 (19.4)	19.85	13.12	1.98		21.18	13.71	1.84		22.21	14.19	1.88		23.48	14.77	1.52		24.72	15.30	1.26		25.94	15.89	1.15			
	63 (17.2)	18.41	16.28	1.95		19.88	16.73	1.85		20.88	17.29	1.88		21.87	17.91	1.54		23.02	18.55	1.37		24.18	19.14	1.10			
	57 (13.9)	17.71	17.71	1.93		18.75	18.75	1.88		19.83	19.83	1.88		20.81	20.81	1.54		21.57	21.57	1.39		22.50	22.50	1.22			
80 (26.7)	72 (22.2)	21.84	13.26	1.95	900	23.27	13.85	1.83	900	24.08	14.08	1.88	900	25.45	14.69	1.49	900	26.81	15.21	1.31	900	28.13	15.78	1.10			
	67 (19.4)	19.77	16.83	1.95		21.28	17.48	1.84		22.11	18.01	1.87		23.37	18.64	1.52		24.60	19.28	1.30		25.82	19.87	1.10			
	63 (17.2)	18.86	18.86	1.95		19.95	19.95	1.84		20.83	20.83	1.88		21.84	21.87	1.53		23.07	22.36	1.37		24.19	23.06	1.10			
	57 (13.9)	18.83	18.83	1.95		19.91	19.91	1.84		20.79	20.79	1.88		21.83	21.83	1.53		23.02	23.02	1.37		23.80	23.80	1.20			
STAGE 1																											
75 (23.9)	72 (22.2)	14.74	6.50	0.98	800	15.82	6.99	1.00	800	16.82	7.41	0.49	800	11.37	5.09	0.46	800	12.38	5.38	0.39	800	13.21	5.89	0.27			
	67 (19.4)	13.36	3.71	0.98		14.34	10.15	1.02		15.83	7.10	0.49		10.32	7.46	0.49		11.29	7.79	0.44		11.99	8.21	0.34			
	63 (17.2)	12.47	12.13	0.98		13.37	12.65	1.03		14.17	8.89	0.51		9.81	9.25	0.51		10.45	9.60	0.47		11.13	10.00	0.38			
	57 (13.9)	12.37	12.37	0.98		13.18	13.18	1.03		14.00	9.09	0.51		9.26	9.98	0.53		10.22	10.22	0.48		10.81	10.81	0.40			
80 (26.7)	72 (22.2)	14.68	9.69	0.97	800	15.83	10.12	1.00	800	16.87	7.06	0.47	800	11.45	7.35	0.48	800	12.27	7.73	0.39	800	13.09	8.27	0.27			
	67 (19.4)	13.38	12.75	0.98		14.32	13.27	1.02		15.80	9.32	0.49		10.49	9.70	0.49		11.21	10.06	0.44		11.95	10.47	0.34			
	63 (17.2)	13.20	13.20	0.98		14.24	14.04	1.02		15.88	9.69	0.49		10.28	10.28	0.49		10.89	10.89	0.45		11.33	11.33	0.36			
	57 (13.9)	13.18	13.18	0.98		14.02	14.02	1.02		15.87	9.67	0.49		10.28	10.28	0.48		10.87	10.87	0.45		11.30	11.30	0.36			

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage.
Stage 1 - Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 48



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DETAILED COOLING CAPACITIES* - EFFICIENCY MODE CONTINUED

24VNA935

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
FE4ANB F300L	1.00	1.00	
FE4ANB F300L	0.97	0.97	
FE4ANB00L	0.99	0.99	
FE4ANF00L	0.96	1.01	
CAP**3614AL*	0.95	1.00	56CWA X070-12
CSRH*3613AL*	0.96	1.00	56CWA X070-12
CSRH*4212AL*	0.96	1.00	56CWA X070-12
CAP**3617AL*	0.95	0.99	56CWA X090-16
CAP**4817AL*	0.96	0.99	56CWA X090-16
CNPH*3617AL*	0.95	1.00	56CWA X090-16
CNPH*3617AL*	0.95	1.00	56CWA X090-16
CNPH*3717AL*	0.97	0.97	56CWA X090-16
CNPH*4217AL*	0.97	0.97	56CWA X090-16
CNPH*4221AL*	0.97	1.01	56CWA X090-16
CNPH*4821AL*	0.96	0.99	56CWA X090-16
CSRH*3612AL*	0.96	0.96	56CWA X090-16
CSRH*4212AL*	0.96	0.96	56CWA X090-16
CAP**3617AL*	0.97	1.00	56**A080V17**14
CAP**4817AL*	0.98	1.00	56**A080V17**14
CNPH*3617AL*	0.95	1.00	56**A080V17**14
CNPH*3617AL*	0.95	1.00	56**A080V17**14
CNPH*3717AL*	0.97	1.00	56**A080V17**14
CNPH*4217AL*	0.95	1.00	56**A080V17**14
CNPH*4221AL*	0.96	1.00	56**A080V17**14
CNPH*4821AL*	0.97	1.00	56**A080V17**14
CSRH*3612AL*	0.97	1.00	56**A080V17**14
CSRH*4212AL*	0.96	1.00	56**A080V17**14
CSRH*4812AL*	0.96	1.00	56**A080V17**14
CAP**3617AL*	0.96	1.00	56**A080V17**14
CAP**4817AL*	0.96	1.00	56**A080V17**14
CNPH*3617AL*	0.95	1.00	56**A080V17**14
CNPH*3717AL*	0.97	1.00	56**A080V17**14
CNPH*4217AL*	0.96	1.00	56**A080V17**14
CNPH*4221AL*	0.95	1.00	56**A080V17**14
CNPH*4821AL*	0.97	1.00	56**A080V17**14
CSRH*3612AL*	0.96	1.00	56**A080V17**14
CSRH*4212AL*	0.96	1.00	56**A080V17**14
CSRH*4812AL*	0.96	1.00	56**A080V17**14
CAP**3621AL*	0.96	1.00	56**A080V21**20
CAP**4221AL*	0.97	1.01	56**A080V21**20
CAP**4821AL*	0.96	0.99	56**A080V21**20
CNPH*4221AL*	0.96	1.01	56**A080V21**20
CNPH*4321AL*	0.96	1.00	56**A080V21**20
CNPH*4821AL*	0.98	1.00	56**A080V21**20
CNPH*3621AL*	0.95	1.00	56**A080V21**20
CNPH*4221AL*	0.95	1.00	56**A080V21**20
CNPH*4321AL*	0.96	1.00	56**A080V21**20
CNPH*4821AL*	0.98	1.00	56**A080V21**20
CSRH*3612AL*	0.96	0.99	56**A080V21**20
CSRH*4212AL*	0.96	0.99	56**A080V21**20
CSRH*4812AL*	0.96	0.99	56**A080V21**20
CAP**3621AL*	0.96	0.99	56**A150V21**22
CAP**3621AL*	0.96	1.00	56**A150V21**22
CAP**4221AL*	0.97	1.01	56**A150V21**22

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CAP**4821AL*	0.96	1.00	56**A150V21**22
CNPH*4221AL*	0.95	1.00	56**A150V21**22
CNPH*4221AL*	0.96	1.00	56**A150V21**22
CNPH*4321AL*	0.96	1.00	56**A150V21**22
CNPH*4821AL*	0.97	1.00	56**A150V21**22
CNPH*3621AL*	0.95	1.00	56**A150V21**22
CNPH*4221AL*	0.95	1.00	56**A150V21**22
CNPH*4221AL*	0.95	1.00	56**A150V21**22
CNPH*4321AL*	0.96	1.01	56**A150V21**22
CNPH*4821AL*	0.97	1.01	56**A150V21**22
CNPH*4821AL*	0.97	1.02	56**A150V21**22
CNPH*4821AL*	0.97	1.02	56**A150V21**22
CSRH*3612AL*	0.96	1.00	56**A150V21**22
CSRH*4212AL*	0.96	1.00	56**A150V21**22
CSRH*4812AL*	0.96	1.00	56**A150V21**22

2-STAGE (H-Stage 5, Lo-Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
FV4CN(B,F)300L	0.97	0.97	1.01	1.06	
FV4CNF00L	0.97	1.01	0.99	1.09	
CAP**3614AL*	0.96	1.00	0.97	1.09	58**P245-08
CAP**3617AL*	0.97	1.01	0.97	1.09	58**P245-08
CAP**3614AL*	0.96	1.01	0.97	1.07	58CTW245-12
CAP**3617AL*	0.97	1.01	0.97	1.06	58CTW245-12
CAP**3617AL*	0.97	1.00	0.96	1.05	58CTW270-16
CAP**3621AL*	0.97	1.00	0.96	1.04	58CTW270-16
CAP**4221AL*	0.98	1.00	0.99	1.05	58CTW270-16
CNPH*3617AL*	0.97	1.01	0.97	1.05	58CTW270-16
CNPH*3617AL*	0.97	1.01	0.97	1.05	58CTW270-16
CNPH*3717AL*	1.01	1.01	1.00	1.03	58CTW270-16
CNPH*4217AL*	0.99	1.04	0.99	1.05	58CTW270-16
CAP**3621AL*	0.97	0.97	0.96	1.02	58CTW290-16
CAP**4221AL*	0.98	0.96	0.99	1.03	58CTW290-16
CNPH*4221AL*	0.98	0.99	0.98	1.03	58CTW290-16
CNPH*4321AL*	1.01	1.01	1.01	1.01	58CTW290-16
CNPH*3621AL*	0.97	1.01	0.97	1.03	58CTW290-16
CNPH*4221AL*	0.98	0.99	0.98	1.03	58CTW290-16
CNPH*4221AL*	0.98	0.99	0.98	1.02	58CTW110-20
CNPH*4321AL*	1.01	1.01	1.01	0.99	58CTW110-20
CNPH*3621AL*	0.97	0.97	0.97	1.02	58CTW110-20
CNPH*4221AL*	0.98	0.99	0.98	1.02	58CTW110-20
CNPH*4321AL*	1.02	0.97	1.01	0.99	58CTW135-20
CAP**3617AL*	0.96	1.06	0.97	1.12	59**P2A042E17**12
CAP**3621AL*	0.96	1.05	0.97	1.11	59**P2A042E17**12
CAP**4221AL*	0.97	1.07	0.97	1.10	59**P2A042E17**12
CNPH*3617AL*	0.95	1.05	0.96	1.11	59**P2A042E17**12
CNPH*3717AL*	1.00	1.00	0.99	1.09	59**P2A042E17**12
CNPH*4217AL*	0.98	1.06	0.98	1.11	59**P2A042E17**12
CSRH*3612AL*	0.98	1.09	0.98	1.10	59**P2A042E17**12
CAP**3614AL*	0.97	1.01	0.98	1.09	59**P2A060E14**12
CAP**3617AL*	0.97	1.01	0.98	1.07	59**P2A060E14**12
CSRH*3612AL*	0.99	1.04	0.99	1.09	59**P2A060E14**12
CAP**3617AL*	0.97	1.00	0.98	1.05	59**P2A060E17**14
CAP**3621AL*	0.97	1.02	0.98	1.04	59**P2A060E17**14
CAP**4221AL*	0.98	0.96	0.99	1.04	59**P2A060E17**14
CNPH*3617AL*	0.97	1.01	0.97	1.05	59**P2A060E17**14

2-STAGE (H-Stage 5, Lo-Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CNPH*3617AL*	0.97	1.01	0.97	1.06	59**P2A060E17**14
CNPH*3717AL*	1.01	1.01	1.00	1.02	59**P2A060E17**14
CNPH*4217AL*	0.99	0.99	0.99	1.04	59**P2A060E17**14
CSRH*3612AL*	0.99	0.99	0.99	1.04	59**P2A060E17**14
CAP**3617AL*	0.97	1.02	0.99	1.05	59**P2A060E17**16
CAP**3621AL*	0.98	0.98	0.99	1.04	59**P2A060E17**16
CAP**4221AL*	0.98	0.98	0.99	1.04	59**P2A060E17**16
CNPH*3617AL*	0.97	1.01	0.97	1.04	59**P2A060E17**16
CNPH*3617AL*	0.97	1.01	0.97	1.04	59**P2A060E17**16
CNPH*3717AL*	1.01	1.01	1.00	1.02	59**P2A060E17**16
CNPH*4217AL*	0.99	0.99	0.99	1.04	59**P2A060E17**16
CAP**3617AL*	0.96	1.12	0.96	1.10	59**P2A060E17**12
CAP**3621AL*	0.96	1.12	0.96	1.09	59**P2A060E17**12
CAP**4221AL*	0.97	1.12	0.96	1.09	59**P2A060E17**12
CNPH*3617AL*	0.95	1.11	0.95	1.09	59**P2A060E17**12
CNPH*3617AL*	0.95	1.11	0.95	1.09	59**P2A060E17**12
CNPH*3717AL*	0.99	1.11	0.99	1.09	59**P2A060E17**12
CNPH*3717AL*	1.00	1.11	0.99	1.07	59**P2A060E17**12
CNPH*4217AL*	0.98	1.08	0.97	1.09	59**P2A060E17**12
CAP**3614AL*	0.95	1.11	0.95	1.12	59**P2A060E14**12
CAP**3617AL*	0.98	1.12	0.97	1.13	59**P2A060E14**12
CAP**3617AL*	0.97	1.01	0.97	1.06	59**P2A060E17**14
CAP**3621AL*	0.97	1.01	0.97	1.06	59**P2A060E17**14
CAP**4221AL*	0.97	1.03	0.98	1.06	59**P2A060E17**14
CAP**4221AL*	0.97	1.03	0.98	1.06	59**P2A060E17**14
CNPH*3617AL*	0.96	1.01	0.97	1.07	59**P2A060E17**14
CNPH*3717AL*	1.00	1.00	0.99	1.04	59**P2A060E17**14
CNPH*4217AL*	0.98	1.03	0.98	1.06	59**P2A060E17**14

See notes on page 48



DETAILED COOLING CAPACITIES[®] - EFFICIENCY MODE CONTINUED

EER (°F)	EVAR AIR (°F)	2010/2017 / 2010/2017 Efficiency Mode Condenser Entering Air Temperature °F (°C)																							
		115 (46.1)						125 (51.7)						135 (57.2)						145 (62.8)					
		ID SCFM	Capacity MBtuh		Total Sys. g/ps ¹	ID SCFM	Capacity MBtuh		Total Sys. g/ps ¹	ID SCFM	Capacity MBtuh		Total Sys. g/ps ¹	ID SCFM	Capacity MBtuh		Total Sys. g/ps ¹								
50000																									
75 (23.9)	72 (22.2)	1050	32.70	13.00	3.40	1050	34.08	14.48	3.05	1050	37.03	15.20	2.50	1050	39.29	16.11	2.21	1050	41.44	16.95	1.99				
	67 (19.4)		31.53	12.22	3.08		31.81	13.44	3.03		33.70	14.30	2.58		35.71	15.22	2.21		37.63	16.14	1.97				
	65 (17.2)		27.56	22.20	3.44		29.48	23.32	3.02		31.25	24.23	2.58		33.12	25.24	2.21		34.94	26.21	1.99				
	67 (19.4)		25.75	25.75	2.41		27.21	27.21	3.03		28.75	28.75	2.58		30.19	30.19	2.21		31.62	31.62	1.99				
	72 (22.2)		32.50	18.47	3.40		34.00	19.41	3.05		36.81	20.29	2.58		39.14	21.18	2.21		41.32	22.11	1.99				
80 (24.7)	67 (19.4)	1050	31.43	24.01	3.08	1050	31.71	24.30	3.03	1050	33.60	25.24	2.58	1050	35.81	26.24	2.21	1050	37.59	27.23	1.97				
	65 (17.2)		27.81	27.32	3.44		29.46	28.13	3.02		31.23	29.15	2.58		33.10	30.22	2.21		34.91	31.27	1.99				
	67 (19.4)		27.36	27.36	3.44		28.98	28.98	3.01		30.45	30.45	2.57		32.00	32.00	2.21		33.43	33.43	1.99				
	72 (22.2)		32.90	8.70	2.41		24.70	12.37	2.11		28.30	10.89	1.76		29.28	11.89	1.90		29.77	12.89	1.25				
	67 (19.4)		20.81	19.40	2.42		22.39	14.22	2.13		23.81	14.93	1.76		25.43	15.85	1.94		26.85	16.87	1.30				
75 (23.9)	65 (17.2)	900	19.24	18.44	2.42	900	20.08	17.23	2.14	900	22.00	18.51	1.90	900	23.82	19.78	1.98	900	24.98	19.87	1.34				
	67 (19.4)		18.34	18.34	2.42		19.54	19.54	2.15		20.70	20.70	1.90		21.85	21.85	1.98		22.98	22.98	1.37				
	72 (22.2)		22.80	13.40	2.41		24.80	14.23	2.11		26.28	14.93	1.76		27.98	15.87	1.90		29.67	16.39	1.25				
	67 (19.4)		20.74	17.22	2.42		22.31	18.00	2.13		23.63	19.82	1.76		25.26	19.82	1.94		26.57	20.42	1.33				
	65 (17.2)		19.57	19.57	2.42		20.63	20.60	2.14		22.18	21.93	1.90		23.54	22.73	1.98		24.92	23.59	1.33				
80 (24.7)	67 (19.4)	900	19.93	19.93	2.42	900	20.70	20.70	2.14	900	22.21	22.21	1.90	900	23.22	23.22	1.98	900	24.42	24.42	1.34				
	72 (22.2)		22.80	13.40	2.41		24.80	14.23	2.11		26.28	14.93	1.76		27.98	15.87	1.90		29.67	16.39	1.25				
	67 (19.4)		20.74	17.22	2.42		22.31	18.00	2.13		23.63	19.82	1.76		25.26	19.82	1.94		26.57	20.42	1.33				
	65 (17.2)		19.57	19.57	2.42		20.63	20.60	2.14		22.18	21.93	1.90		23.54	22.73	1.98		24.92	23.59	1.33				
	67 (19.4)		19.93	19.93	2.42		20.70	20.70	2.14		22.21	22.21	1.90		23.22	23.22	1.98		24.42	24.42	1.34				
60000																									
75 (23.9)	72 (22.2)	800	18.18	7.73	1.98	800	18.82	8.28	1.73	800	19.94	8.28	0.97	800	18.18	8.71	0.70	800	17.28	7.14	0.87				
	67 (19.4)		16.42	10.92	1.98		17.74	11.48	1.78		19.04	8.90	0.91		14.65	9.09	0.70		16.88	8.94	0.82				
	65 (17.2)		15.19	13.25	1.90		16.30	13.04	1.77		17.83	13.35	0.93		19.55	10.80	0.90		18.47	11.84	0.88				
	67 (19.4)		14.39	14.39	1.98		15.21	15.21	1.79		16.37	14.97	0.96		17.64	15.84	0.90		18.40	15.83	0.75				
	72 (22.2)		18.09	10.84	1.98		18.54	11.47	1.73		19.88	8.95	0.97		18.10	9.05	0.70		17.22	8.55	0.87				
80 (24.7)	67 (19.4)	800	16.39	13.86	1.98	800	17.80	14.00	1.75	800	19.00	15.81	0.91	800	14.60	11.37	0.70	800	16.80	11.04	0.82				
	65 (17.2)		15.57	15.57	1.90		16.68	16.68	1.77		17.87	12.58	0.93		19.57	13.20	0.70		18.45	12.82	0.88				
	67 (19.4)		15.54	15.54	1.98		16.83	16.83	1.77		18.02	12.82	0.93		19.43	13.43	0.90		18.73	14.23	0.87				
	72 (22.2)		18.09	10.84	1.98		18.54	11.47	1.73		19.88	8.95	0.97		18.10	9.05	0.70		17.22	8.55	0.87				
	67 (19.4)		16.39	13.86	1.98		17.80	14.00	1.75		19.00	15.81	0.91		18.60	11.37	0.70		16.80	11.04	0.82				

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage
Stage 1 - Compressor speed limited to stage two at 105 and 115 outdoor.

See additional rates on page 48



for



DETAILED COOLING CAPACITIES* - EFFICIENCY MODE CONTINUED

24VNA937

Table with 4 columns: COOLING INDOOR MODEL, CAPACITY, POWER, FURNACE MODEL. Contains multiple rows of data for various indoor models like FE4ANB, CAP, and CNRH.

Table with 4 columns: COOLING INDOOR MODEL, CAPACITY, POWER, FURNACE MODEL. Continuation of data for indoor models.

Table with 5 columns: Cooling Indoor Model, High Speed Cap., Power, Low Speed Cap., Power, Furnace Model. Titled '2-STAGE (Hi-Speed 1, Lo-Speed 2)'.



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DETAILED COOLING CAPACITIES* - EFFICIENCY MODE CONTINUED

24WNA937

2-STAGE (H=Stage 1, L=Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CSPH*4812AL*	0.98	1.03	0.98	1.07	58CTW048-12
CAP*3617AL*	0.95	1.01	0.97	1.08	58CTW070-18
CAP*4817AL*	0.98	1.04	0.98	1.08	58CTW070-18
CNPH*3617AL*	0.95	1.03	0.95	1.08	58CTW070-18
CNPH*3617AL*	0.95	1.02	0.95	1.08	58CTW070-18
CNPH*3717AL*	0.98	1.04	0.98	1.08	58CTW070-18
CNPH*4217AL*	0.97	1.03	0.98	1.07	58CTW070-18
CSPH*3612AL*	0.98	1.03	0.98	1.07	58CTW070-18
CSPH*4212AL*	0.98	1.04	0.98	1.08	58CTW070-18
CSPH*4812AL*	0.98	1.04	0.98	1.05	58CTW070-18
CAP*3621AL*	0.98	1.01	0.97	1.04	58CTW090-18
CAP*4221AL*	0.95	0.99	0.98	1.04	58CTW090-18
CAP*4821AL*	0.98	1.01	0.98	1.03	58CTW090-18
CNPH*4221AL*	0.98	1.01	0.97	1.05	58CTW090-18
CNPH*4821AL*	0.99	1.02	0.99	1.03	58CTW090-18
CNPH*4821AL*	0.98	1.01	0.98	1.03	58CTW090-18
CNPH*3621AL*	0.95	1.00	0.95	1.08	58CTW090-18
CNPH*4221AL*	0.98	1.01	0.97	1.05	58CTW090-18
CNPH*4821AL*	0.98	1.01	0.98	1.03	58CTW090-18
CNPH*4821AL*	0.98	1.01	0.98	1.03	58CTW090-18
CSPH*3612AL*	0.97	1.00	0.98	1.04	58CTW090-18
CSPH*4212AL*	0.98	1.01	0.98	1.04	58CTW090-18
CSPH*4812AL*	0.98	1.01	0.98	1.03	58CTW090-18
CAP*3621AL*	0.98	0.99	0.97	1.03	58CTW110-22
CAP*4221AL*	0.95	0.99	0.98	1.03	58CTW110-22
CAP*4821AL*	0.98	1.01	0.98	1.03	58CTW110-22
CNPH*4221AL*	0.98	1.01	0.98	1.03	58CTW110-22
CNPH*4821AL*	0.98	1.01	0.98	1.03	58CTW110-22
CNPH*4821AL*	0.98	1.01	0.98	1.03	58CTW110-22
CNPH*3621AL*	0.95	1.01	0.98	1.04	58CTW110-22
CNPH*4221AL*	0.98	0.99	0.97	1.04	58CTW110-22
CNPH*4821AL*	0.98	1.01	0.98	1.03	58CTW110-22
CNPH*4821AL*	0.98	1.01	0.98	1.03	58CTW110-22
CSPH*3612AL*	0.98	1.01	0.98	1.03	58CTW110-22
CSPH*4212AL*	0.98	1.01	0.98	1.03	58CTW110-22
CSPH*4812AL*	0.98	1.01	0.98	1.03	58CTW110-22
CAP*4824AL*	0.98	0.99	0.98	1.03	58CTW135-22
CAP*4824AL*	0.98	1.01	0.98	1.03	58CTW135-22
CNPH*4324AL*	0.99	0.99	1.00	1.01	58CTW135-22
CNPH*4824AL*	0.98	1.01	0.98	1.03	58CTW135-22
CSPH*3612AL*	0.97	1.00	0.98	1.04	58CTW135-22
CSPH*4212AL*	0.98	1.01	0.98	1.03	58CTW135-22
CSPH*4812AL*	0.98	1.01	0.98	1.03	58CTW135-22
CAP*4824AL*	0.98	1.04	0.99	1.09	58P2A080E17***12
CAP*3617AL*	0.95	1.01	0.98	1.08	58P2A080E17***14
CAP*4817AL*	0.98	1.01	0.98	1.05	58P2A080E17***14
CNPH*3617AL*	0.95	1.01	0.98	1.07	58P2A080E17***14
CNPH*3617AL*	0.95	1.01	0.98	1.07	58P2A080E17***14
CNPH*3717AL*	0.98	1.02	0.98	1.08	58P2A080E17***14
CNPH*4217AL*	0.97	1.03	0.98	1.08	58P2A080E17***14
CNPH*4217AL*	0.98	1.01	0.98	1.08	58P2A080E17***14
CAP*3617AL*	0.95	1.01	0.98	1.08	58P2A080E17***16
CAP*4817AL*	0.98	1.01	0.98	1.08	58P2A080E17***16
CNPH*3617AL*	0.95	1.02	0.98	1.07	58P2A080E17***16
CNPH*3717AL*	0.98	1.02	0.98	1.08	58P2A080E17***16
CNPH*4217AL*	0.97	1.03	0.98	1.08	58P2A080E17***16

2-STAGE (H=Stage 1, L=Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CSPH*3612AL*	0.98	1.01	0.98	1.08	58P2A080E17***18
CSPH*4812AL*	0.98	1.01	0.98	1.08	58P2A080E17***18
CAP*4817AL*	0.98	1.03	0.98	1.08	58P2A080E17***14
CNPH*3717AL*	0.98	1.04	0.98	1.07	58P2A080E17***14
CSPH*3612AL*	0.97	1.03	0.97	1.08	58P2A080E17***14
CSPH*4212AL*	0.98	1.03	0.98	1.08	58P2A080E17***14
CSPH*4812AL*	0.98	1.03	0.98	1.07	58P2A080E17***14
CAP*4817AL*	0.98	1.03	0.98	1.13	58P2A080E17***14
CNPH*3717AL*	0.98	1.03	0.99	1.13	58P2A080E17***14
CSPH*4212AL*	0.97	1.03	0.98	1.14	58P2A080E17***14
CSPH*4212AL*	0.97	1.03	0.98	1.14	58P2A080E17***14
CSPH*4812AL*	0.98	1.03	0.98	1.13	58P2A080E17***14
CAP*4817AL*	0.98	1.03	0.98	1.13	58P2A080E17***14
CNPH*3717AL*	0.98	1.04	0.99	1.11	58P2A080E17***16
CNPH*4217AL*	0.98	1.02	0.98	1.12	58P2A080E17***16
CSPH*4212AL*	0.98	1.03	0.99	1.12	58P2A080E17***16
CSPH*4212AL*	0.98	1.03	0.98	1.12	58P2A080E17***16
CSPH*4812AL*	0.98	1.04	0.98	1.11	58P2A080E17***16
CAP*3621AL*	0.95	1.01	0.98	1.09	58P2A080E21***20
CAP*4221AL*	0.98	1.01	0.98	1.09	58P2A080E21***20
CAP*4821AL*	0.97	1.00	0.98	1.09	58P2A080E21***20
CAP*4821AL*	0.97	1.00	0.98	1.09	58P2A080E21***20
CNPH*4221AL*	0.98	1.02	0.98	1.10	58P2A080E21***20
CNPH*4821AL*	0.99	1.02	1.00	1.07	58P2A080E21***20
CNPH*4821AL*	0.98	1.01	0.99	1.08	58P2A080E21***20
CNPH*3621AL*	0.95	1.01	0.97	1.10	58P2A080E21***20
CNPH*4221AL*	0.98	1.02	0.98	1.10	58P2A080E21***20
CNPH*4821AL*	0.98	1.01	0.98	1.08	58P2A080E21***20
CNPH*4821AL*	0.98	1.01	0.98	1.08	58P2A080E21***20
CSPH*3612AL*	0.98	1.01	0.98	1.09	58P2A080E21***20
CSPH*4212AL*	0.98	1.01	0.98	1.09	58P2A080E21***20
CSPH*4812AL*	0.98	1.01	0.98	1.08	58P2A080E21***20
CAP*4821AL*	0.95	1.01	0.98	1.10	58P2A080E21***20
CAP*4821AL*	0.98	0.99	0.98	1.10	58P2A080E21***20
CAP*4821AL*	0.97	1.00	0.98	1.09	58P2A080E21***20
CNPH*4221AL*	0.98	1.02	0.98	1.09	58P2A080E21***20
CNPH*4821AL*	0.98	1.02	1.00	1.08	58P2A080E21***20
CNPH*4821AL*	0.98	1.01	0.98	1.08	58P2A080E21***20
CNPH*3621AL*	0.95	1.01	0.97	1.10	58P2A080E21***20
CNPH*4221AL*	0.98	1.02	0.98	1.09	58P2A080E21***20
CNPH*4821AL*	0.98	1.01	0.98	1.08	58P2A080E21***20
CAP*4824AL*	0.98	1.01	0.98	1.09	58P2A080E21***20
CNPH*4324AL*	0.99	1.01	0.98	1.08	58P2A080E21***20
CNPH*4824AL*	0.98	1.01	0.98	1.09	58P2A080E21***20
CAP*4824AL*	0.98	1.01	0.98	1.07	58P2A080E21***20
CNPH*4324AL*	0.98	1.02	1.01	1.07	58P2A080E21***20
CNPH*4824AL*	0.98	1.01	0.98	1.08	58P2A080E21***20
CSPH*4812AL*	0.98	1.01	1.00	1.08	58P2A080E21***20

See notes on page 48



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DETAILED COOLING CAPACITIES[#] - EFFICIENCY MODE CONTINUED

EDB °F (°C)		EVAR AIR °F (°C)		24VNA98 / F548N900 Efficiency Mode Condenser Entering Air Temperature °F (°C)																													
				115 (46.1)						105 (40.6)						85 (29.4)						75 (23.9)						65 (18.3)					
				ID SCFM		Capacity MBtuh		Total Sys. KW**	ID SCFM		Capacity MBtuh		Total Sys. KW**	ID SCFM		Capacity MBtuh		Total Sys. KW**	ID SCFM		Capacity MBtuh		Total Sys. KW**	ID SCFM		Capacity MBtuh		Total Sys. KW**					
		Total	Sensd		Total	Sensd		Total	Sensd		Total	Sensd		Total	Sensd		Total	Sensd		Total	Sensd		Total	Sensd									
STAGE 2																																	
75 (23.9)	72 (22.2)	1400	44.82	18.57	5.52	1400	47.95	19.78	4.88	1400	50.99	20.91	4.29	1400	53.99	22.06	3.74	1400	56.99	23.19	3.23	1400	59.70	24.28	2.75	1400	62.40	25.32	2.28				
	67 (19.4)		40.99	17.45	5.42		43.88	18.28	4.82		46.55	19.24	4.23		49.38	20.85	3.70		52.01	22.04	3.21		54.60	23.27	2.75		57.18	24.45	2.28				
	63 (17.3)		38.13	16.87	5.34		40.79	17.30	4.74		43.27	18.22	4.18		45.91	19.27	3.67		48.37	20.40	3.19		50.78	21.72	2.74		53.24	22.99	2.31	55.70	24.21	1.88	
	57 (13.9)		35.25	16.25	5.25		37.41	16.41	4.66		39.48	17.48	4.12		41.45	18.45	3.60		43.58	19.69	3.16		45.70	21.05	2.73		47.92	22.38	2.30	50.13	23.67	1.89	
80 (26.7)	72 (22.2)	1400	44.80	18.75	5.51	1400	47.74	19.88	4.88	1400	50.77	20.96	4.29	1400	53.78	22.01	3.73	1400	56.66	23.06	3.22	1400	59.48	24.07	2.75	1400	62.24	25.04	2.28				
	67 (19.4)		40.94	17.14	5.49		43.71	18.53	4.82		46.50	19.64	4.23		49.21	20.71	3.70		51.86	21.85	3.20		54.45	23.04	2.75		57.18	24.27	2.28				
	63 (17.3)		38.13	16.54	5.34		40.76	17.38	4.74		43.23	18.27	4.18		45.84	19.34	3.67		48.30	20.58	3.18		50.75	21.91	2.74		53.21	23.24	2.28				
	57 (13.9)		37.38	16.34	5.32		39.52	16.92	4.72		41.72	18.12	4.16		43.81	19.31	3.64		46.84	20.64	3.17		49.82	22.02	2.73		52.73	23.43	2.28				
STAGE 3																																	
75 (23.9)	72 (22.2)	1200	29.42	12.82	2.82	1200	31.80	13.43	2.88	1200	33.83	14.20	2.28	1200	35.78	15.00	2.02	1200	37.62	15.78	1.74	1200	39.38	16.55	1.49	1200	41.07	17.32	1.22				
	67 (19.4)		26.82	11.88	2.80		28.82	12.78	2.56		30.73	13.88	2.27		32.66	14.80	2.02		34.57	15.60	1.77		36.44	16.42	1.52		38.28	17.18	1.25				
	63 (17.3)		24.91	11.89	2.79		26.79	12.90	2.55		28.58	13.95	2.26		30.38	14.90	2.02		32.16	15.80	1.78		33.91	16.69	1.55		35.61	17.59	1.25				
	57 (13.9)		24.03	12.03	2.78		25.61	13.61	2.55		27.12	14.72	2.26		28.62	15.82	2.03		30.11	16.91	1.80		31.58	17.98	1.57		33.03	19.05	1.27				
80 (26.7)	72 (22.2)	1300	29.22	12.78	2.81	1300	31.30	13.70	2.55	1300	33.41	14.57	2.25	1300	35.52	15.47	2.00	1300	37.60	16.37	1.74	1300	39.62	17.28	1.48	1300	41.61	18.11	1.22				
	67 (19.4)		26.71	12.96	2.80		28.71	14.01	2.50		30.80	15.01	2.28		32.92	16.03	2.01		34.92	17.05	1.77		36.91	18.05	1.52		38.88	19.05	1.22				
	63 (17.3)		25.56	13.56	2.85		27.23	14.23	2.55		29.00	15.80	2.28		30.86	16.84	2.02		32.81	17.82	1.78		34.73	18.82	1.55		36.61	19.82	1.25				
	57 (13.9)		25.52	13.52	2.80		27.19	14.19	2.59		28.78	15.78	2.28		30.38	16.88	2.02		32.38	17.88	1.78		34.43	18.88	1.55								
STAGE 1																																	
75 (23.9)	72 (22.2)	1100	25.52	10.99	2.21	1100	27.46	11.73	2.07	875	19.62	8.88	0.98	875	20.98	9.08	0.84	875	22.29	9.87	0.72	875	23.61	10.67	0.67	875	24.93	11.47	0.62				
	67 (19.4)		23.22	10.65	2.21		25.04	11.51	2.08		17.88	12.38	0.98		19.11	12.98	0.88		20.32	13.92	0.78		21.55	14.21	0.62		22.78	14.91	0.57				
	63 (17.3)		21.97	10.30	2.21		23.24	11.25	2.08		16.89	13.37	1.00		17.82	14.07	0.90		18.95	14.77	0.78		20.07	14.96	0.60		21.20	15.65	0.50				
	57 (13.9)		20.89	10.89	2.20		22.52	12.32	2.08		16.33	14.33	1.00		17.54	15.24	0.91		18.34	16.34	0.81		19.35	17.35	0.68		20.36	18.36	0.60				
80 (26.7)	72 (22.2)	1100	25.81	10.99	2.21	1100	27.26	11.44	2.06	875	19.42	10.31	0.95	875	20.78	12.52	0.84	875	22.09	13.52	0.71	875	23.40	14.14	0.67	875	24.71	14.76	0.62				
	67 (19.4)		23.13	10.38	2.21		24.90	11.18	2.07		17.82	13.09	0.98		19.04	13.80	0.88		20.25	14.51	0.78		21.44	15.21	0.62		22.63	15.91	0.57				
	63 (17.3)		22.28	10.25	2.21		23.77	11.77	2.06		17.35	14.35	0.98		18.41	14.41	0.89		19.46	15.46	0.78		20.56	16.56	0.65		21.71	17.11	0.57				
	57 (13.9)		22.21	10.21	2.21		23.73	11.73	2.06		17.32	14.32	0.98		18.38	15.38	0.89		19.43	16.43	0.78		20.47	17.47	0.65								

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage.
Stage 1 – Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 48



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DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EWS °F (°C)	EWR AIR °F (°C)	24V00449 - "CHRY" 6024AL* Efficiency Mode Condenser Entering Air Temperature °F (°C)																													
		115 (48.5)						105 (48.5)						95 (35)						75 (23.3)						65 (18.3)					
		ID SCFM	Capacity MBtuh		Total Sys. KW**	ID SCFM	Capacity MBtuh		Total Sys. KW**	ID SCFM	Capacity MBtuh		Total Sys. KW**	ID SCFM	Capacity MBtuh		Total Sys. KW**	ID SCFM	Capacity MBtuh		Total Sys. KW**	ID SCFM	Capacity MBtuh		Total Sys. KW**						
STAGE 2																															
75 (23.3)	75 (23.3)	1300	45.15	15.59	4.64	1300	47.22	19.34	4.13	1300	49.12	22.04	3.62	1300	50.69	25.49	3.20	1300	52.44	27.29	2.83	1300	53.92	27.99	2.53						
	67 (19.4)		40.89	21.58	4.57		40.86	21.28	4.00		44.52	23.92	3.56		44.16	26.60	3.14		47.59	27.35	2.77		48.82	27.54	2.44						
	60 (17.2)		37.94	29.29	4.53		39.67	29.03	3.99		41.28	31.52	3.52		42.70	31.05	3.10		44.02	31.54	2.74		45.02	31.99	2.42						
	57 (13.9)		34.34	34.49	4.44		36.17	36.17	3.94		37.25	37.25	3.47		38.30	37.70	3.03		39.47	38.20	2.59		40.40	38.55	2.29						
80 (26.7)	75 (23.3)	1300	40.56	24.59	4.63	1300	47.12	25.29	4.10	1300	49.53	23.43	3.60	1300	50.76	26.92	3.20	1300	52.36	27.67	2.82	1300	53.92	27.50	2.50						
	67 (19.4)		40.30	30.52	4.57		40.79	31.19	4.00		44.50	31.73	3.56		44.00	32.20	3.14		47.51	32.74	2.77		48.81	33.19	2.44						
	60 (17.2)		36.05	35.23	4.51		39.74	36.91	3.90		41.31	38.59	3.52		42.72	38.60	3.10		44.03	37.34	2.74		45.02	37.62	2.42						
	57 (13.9)		37.10	37.10	4.51		36.57	36.57	3.97		38.11	38.11	3.50		40.51	40.51	3.03		41.42	41.42	2.71		42.21	42.21	2.39						
STAGE 3																															
75 (23.3)	75 (23.3)	1100	31.12	13.04	2.68	1100	33.04	15.72	2.40	1100	34.58	14.34	2.13	1100	36.52	14.88	1.89	1100	38.14	15.62	1.67	1100	39.42	16.21	1.47						
	67 (19.4)		27.89	17.71	2.68		28.74	18.27	2.42		31.23	16.92	2.12		30.80	18.60	1.94		34.47	20.20	1.67		35.96	20.76	1.49						
	60 (17.2)		26.70	21.37	2.67		27.30	22.01	2.41		28.81	22.81	2.11		30.27	23.23	1.94		31.88	23.76	1.67		33.02	24.31	1.47						
	57 (13.9)		24.22	24.22	2.68		23.43	23.43	2.41		26.34	26.34	2.11		27.60	27.60	1.94		28.59	28.59	1.67		29.31	29.31	1.47						
80 (26.7)	75 (23.3)	1100	31.23	17.80	2.69	1100	32.68	19.46	2.40	1100	34.67	19.57	2.13	1100	36.43	18.89	1.90	1100	38.11	20.29	1.67	1100	39.73	20.89	1.47						
	67 (19.4)		27.94	22.44	2.68		29.04	23.09	2.42		31.29	23.67	2.12		32.89	24.25	1.94		34.39	24.83	1.67		35.94	25.39	1.46						
	60 (17.2)		25.99	25.39	2.67		27.49	25.65	2.41		28.94	27.28	2.11		30.27	27.80	1.94		31.74	28.40	1.67		33.00	28.92	1.47						
	57 (13.9)		23.42	23.42	2.67		27.23	27.23	2.41		28.59	28.59	2.11		29.45	29.45	1.94		30.47	30.47	1.67		31.42	31.42	1.47						
STAGE 1																															
75 (23.3)	75 (23.3)	1100	24.22	10.39	1.81	1100	24.09	11.20	1.70	875	22.44	9.20	0.96	875	22.15	9.12	0.90	875	22.77	8.73	0.94	875	24.36	10.26	0.94						
	67 (19.4)		21.60	14.43	1.81		22.28	13.08	1.71		19.32	11.34	1.08		19.80	12.00	0.99		21.39	12.52	0.94		22.74	13.26	0.96						
	60 (17.2)		18.76	17.81	1.82		21.27	18.28	1.71		19.73	13.92	1.05		18.00	14.24	0.99		19.44	14.89	0.96		20.79	15.21	0.97						
	57 (13.9)		18.39	19.28	1.82		20.28	20.28	1.71		15.93	15.93	1.08		14.83	14.83	0.99		17.84	17.84	0.96		18.92	18.62	0.70						
80 (26.7)	75 (23.3)	1100	24.14	14.58	1.81	1100	25.09	12.23	1.70	875	20.47	11.81	1.08	875	22.58	12.72	0.99	875	23.71	12.79	0.94	875	25.39	13.38	0.94						
	67 (19.4)		21.31	16.81	1.81		23.27	18.29	1.71		19.32	14.33	1.08		19.70	14.98	0.99		21.32	15.60	0.94		22.70	16.25	0.96						
	60 (17.2)		20.30	20.80	1.81		21.69	21.99	1.71		19.80	18.59	1.08		18.19	17.21	0.99		19.52	17.89	0.90		20.85	18.52	0.97						
	57 (13.9)		20.59	20.59	1.82		21.62	21.62	1.71		18.70	18.70	1.08		17.83	17.83	0.99		18.89	18.89	0.96		19.92	19.92	0.89						

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage
Stage 1 - Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 48.



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DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

24VNA949

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CNPV9024AL*	1.00	1.00	8RCVA.X115-22
FE4AN(B,F)025L	0.99	0.99	
FE4AN(B)005L	1.00	1.00	
CAP**4821AL*	0.97	1.03	8MN7A000V1**20
CAP**4824AL*	0.98	1.00	8P**N**A080V21**20
CAP**4824AL*	0.98	1.00	8P**N**A100V21**22
CAP**4824AL*	0.98	1.00	8P**N**A120V24**22
CAP**4824AL*	0.98	0.98	8RCVA.X110-20
CAP**4824AL*	0.98	0.98	8RCVA.X135-22
CAP**4824AL*	0.98	0.98	8RCVA.X155-22
CAP**6021AL*	1.00	1.00	8RCVA.X090-18
CAP**6021AL*	0.99	1.05	8MN7A000V21**20
CAP**6024AL*	1.00	1.00	8P**N**A080V21**20
CAP**6024AL*	1.00	1.00	8P**N**A100V21**22
CAP**6024AL*	1.00	1.00	8P**N**A120V24**22
CAP**6024AL*	1.00	1.00	8RCVA.X110-20
CAP**6024AL*	1.00	1.00	8RCVA.X135-22
CAP**6024AL*	1.00	1.00	8RCVA.X155-22
CNPV4821AL*	0.98	1.00	8RCVA.X090-18
CNPV4821AL*	0.98	1.04	8MN7A000V21**20
CNPV6024AL*	0.99	0.99	8P**N**A080V21**20
CNPV6024AL*	1.00	1.00	8P**N**A100V21**22
CNPV6024AL*	1.00	1.00	8P**N**A120V24**22
CNPV6024AL*	1.00	1.00	8RCVA.X110-20
CNPV6024AL*	1.00	1.00	8RCVA.X135-22
CNPV6124AL*	1.00	1.00	8P**N**A080V21**20
CNPV6124AL*	1.01	1.01	8P**N**A100V21**22
CNPV6124AL*	1.00	1.00	8P**N**A120V24**22
CNPV6124AL*	1.01	1.01	8RCVA.X110-20
CNPV6124AL*	1.01	0.97	8RCVA.X135-22
CNPV6124AL*	1.01	0.97	8RCVA.X155-22

Cooling Indoor Model	2-STAGE (H-Stage 3, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
CNPV6024AL*	1.00	1.00	1.00	1.00	8RCVA.X155-22
FE4AN(B,F)025L	0.99	0.99	1.00	1.00	
FE4AN(B)005L	1.01	0.99	1.01	0.99	
FE4AN(B)025L	1.01	0.99	1.01	0.99	
FE4AN(B)005L	1.01	0.99	1.01	0.99	
CAP**4821AL*	0.97	1.03	0.98	1.05	8P**N**A080V21**20
CAP**4821AL*	0.97	1.03	0.98	1.05	8P**N**A100V21**22
CAP**4821AL*	0.97	1.03	0.98	1.05	8P**N**A120V24**22
CAP**6021AL*	1.00	1.00	1.00	1.00	8RCVA.X090-18
CAP**6021AL*	0.99	1.02	0.99	1.04	8MN7A000V21**20
CAP**6021AL*	0.99	1.01	0.99	1.03	8MN7A000V21**20
CAP**6021AL*	0.99	1.00	0.99	1.03	8MN7A000V21**20
CAP**6021AL*	1.00	1.00	1.00	1.00	8RCVA.X110-20
CAP**6021AL*	1.00	1.00	1.00	1.00	8RCVA.X135-22
CAP**6021AL*	1.00	1.00	1.00	1.00	8RCVA.X155-22
CNPV4821AL*	0.98	1.00	0.98	1.03	8RCVA.X090-18
CNPV4821AL*	0.98	1.04	0.98	1.03	8MN7A000V21**20
CNPV6024AL*	0.99	0.99	1.00	1.04	8P**N**A080V21**20
CNPV6024AL*	1.00	1.00	1.00	1.00	8P**N**A100V21**22
CNPV6024AL*	1.00	1.00	1.00	1.00	8P**N**A120V24**22
CNPV6024AL*	1.00	1.00	1.00	1.00	8RCVA.X110-20
CNPV6024AL*	1.00	1.00	1.00	1.00	8RCVA.X135-22
CNPV6024AL*	1.00	1.00	1.00	1.00	8RCVA.X155-22
CNPV6124AL*	0.98	1.00	0.98	1.03	8RCVA.X090-18
CNPV6124AL*	0.98	1.04	0.98	1.03	8MN7A000V21**20
CNPV6124AL*	0.99	0.99	1.00	1.04	8P**N**A080V21**20
CNPV6124AL*	1.00	1.00	1.00	1.00	8P**N**A100V21**22
CNPV6124AL*	1.00	1.00	1.00	1.00	8P**N**A120V24**22
CNPV6124AL*	1.00	1.00	1.00	1.00	8RCVA.X110-20
CNPV6124AL*	1.00	1.00	1.00	1.00	8RCVA.X135-22
CNPV6124AL*	1.00	1.00	1.00	1.00	8RCVA.X155-22
CNPV6124AL*	1.01	1.01	1.01	1.01	8P**N**A080V21**20
CNPV6124AL*	1.01	1.01	1.01	1.01	8P**N**A100V21**22
CNPV6124AL*	1.01	1.01	1.01	1.01	8P**N**A120V24**22
CNPV6124AL*	1.01	1.01	1.01	1.01	8RCVA.X110-20
CNPV6124AL*	1.01	1.01	1.01	1.01	8RCVA.X135-22
CNPV6124AL*	1.01	1.01	1.01	1.01	8RCVA.X155-22
CNPV6124AL*	1.01	0.97	1.01	0.97	8RCVA.X110-20
CNPV6124AL*	1.01	0.97	1.01	0.97	8RCVA.X135-22
CNPV6124AL*	1.01	0.97	1.01	0.97	8RCVA.X155-22
CNPV6124AL*	1.01	0.97	1.01	0.97	8RCVA.X110-20
CNPV6124AL*	1.01	0.97	1.01	0.97	8RCVA.X135-22
CNPV6124AL*	1.01	0.97	1.01	0.97	8RCVA.X155-22

Cooling Indoor Model	2-STAGE (H-Stage 3, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
CNPV6024AL*	1.00	1.00	1.00	1.00	8RCVA.X155-22
CNPV6024AL*	0.99	1.05	0.98	1.03	8MN7A000V21**20
CNPV6024AL*	0.99	1.04	0.98	1.03	8MN7A000V21**20
CNPV6024AL*	0.97	0.99	0.96	1.01	8P**N**A080V21**20
CNPV6024AL*	0.97	0.99	0.96	1.01	8P**N**A100V21**22
CNPV6024AL*	0.97	0.99	0.96	1.01	8P**N**A120V24**22
CNPV6024AL*	0.98	1.00	1.00	1.00	8RCVA.X110-20
CNPV6024AL*	0.97	0.98	0.98	1.01	8RCVA.X135-22
CNPV6024AL*	0.97	0.98	0.98	1.01	8RCVA.X155-22
CNPV6024AL*	0.99	1.01	1.00	1.01	8P**N**A080V21**20
CNPV6024AL*	0.99	1.01	1.00	1.01	8P**N**A100V21**22
CNPV6024AL*	0.99	1.01	1.00	1.01	8P**N**A120V24**22
CNPV6024AL*	0.99	1.00	0.98	1.01	8RCVA.X110-20
CNPV6024AL*	0.99	1.00	0.98	1.01	8RCVA.X135-22
CNPV6024AL*	0.99	1.00	0.98	1.01	8RCVA.X155-22
CNPV6024AL*	0.99	1.01	1.01	1.00	8P**N**A080V21**20
CNPV6024AL*	0.99	1.01	1.01	1.00	8P**N**A100V21**22
CNPV6024AL*	0.99	1.01	1.01	1.00	8P**N**A120V24**22
CNPV6024AL*	0.99	1.00	0.98	1.01	8RCVA.X110-20
CNPV6024AL*	0.99	1.00	0.98	1.01	8RCVA.X135-22
CNPV6024AL*	0.99	1.00	0.98	1.01	8RCVA.X155-22
CNPV6024AL*	1.01	1.04	1.00	1.05	8P**N**A080V21**20
CNPV6024AL*	1.01	1.04	1.00	1.05	8P**N**A100V21**22
CNPV6024AL*	0.98	1.00	1.00	1.01	8P**N**A120V24**22
CNPV6024AL*	1.00	1.00	1.01	1.00	8RCVA.X110-20

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DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EOR °F (°C)	EWR °F (°C)	24VNA96 / FEA96B96L Efficiency Mode Condenser Entering Air Temperature °F (°C)																							
		115 (46.1)						105 (40.5)						95 (35)						85 (29.4)					
		ID SCFM	Capacity MBtuh		Total Sys. KW**	ID SCFM	Capacity MBtuh		Total Sys. KW**	ID SCFM	Capacity MBtuh		Total Sys. KW**	ID SCFM	Capacity MBtuh		Total Sys. KW**								
STAGE 3																									
79 (26.1)	72 (22.2)	1600	55.58	22.79	7.71	1600	59.00	24.17	8.73	1600	62.54	25.53	9.08	1600	65.98	26.96	9.73	1600	69.30	28.18	4.47	1600	72.59	29.46	3.89
	67 (19.4)		50.83	20.18	7.50		53.95	21.88	8.34		57.12	23.14	8.70		60.22	24.57	9.36		63.25	25.99	4.20		66.21	27.38	3.75
	63 (17.2)		47.11	18.00	7.26		50.18	19.58	8.46		53.13	20.12	8.87		56.09	21.62	9.84		58.79	23.11	4.21		61.52	24.58	3.85
	57 (13.9)		43.18	16.16	7.19		45.55	16.55	8.23		47.07	17.63	8.40		50.44	18.97	8.89		52.66	20.21	4.06		55.26	21.62	3.82
80 (26.7)	72 (22.2)	1600	55.24	23.24	7.70	1600	58.96	21.53	8.73	1600	62.40	23.00	8.88	1600	65.82	24.44	9.73	1600	69.15	25.85	4.47	1600	72.44	27.26	3.89
	67 (19.4)		50.50	20.17	7.50		53.83	18.98	8.54		57.00	20.53	8.70		60.10	22.07	9.36		63.13	23.59	4.32		66.10	25.09	3.75
	63 (17.2)		47.09	18.10	7.26		50.13	18.81	8.46		53.07	19.46	8.87		55.91	21.08	9.84		58.70	22.57	4.21		61.44	24.21	3.85
	57 (13.9)		43.62	16.62	7.19		48.13	16.13	8.23		50.51	17.51	8.40		52.83	18.93	8.76		55.26	20.06	4.12		57.29	21.24	3.88
STAGE 2																									
75 (23.9)	72 (22.2)	1350	35.84	13.07	3.39	1350	38.40	15.28	3.08	1350	42.44	16.73	2.76	1350	42.79	17.91	2.51	1350	45.10	18.48	2.29	1350	47.38	19.24	2.02
	67 (19.4)		33.49	12.54	3.35		34.72	14.48	3.05		36.87	15.32	2.72		38.80	16.24	2.47		40.88	17.15	2.28		42.94	18.05	2.04
	63 (17.2)		29.95	11.83	3.33		32.01	13.61	3.03		33.87	14.70	2.69		35.85	15.65	2.44		37.79	16.59	2.22		39.68	17.52	2.01
	57 (13.9)		28.14	11.14	3.32		29.79	12.79	3.02		31.24	13.24	2.67		32.75	14.25	2.42		34.21	15.21	2.19		35.89	16.19	1.99
80 (26.7)	72 (22.2)	1350	35.82	13.09	3.39	1350	38.29	15.14	3.08	1350	40.30	16.34	2.76	1350	42.67	17.26	2.51	1350	44.98	18.17	2.29	1350	47.24	19.07	2.08
	67 (19.4)		32.39	12.51	3.35		34.52	14.09	3.05		36.56	15.07	2.72		38.70	16.03	2.47		40.78	17.07	2.24		42.84	18.02	2.04
	63 (17.2)		30.07	12.04	3.29		32.09	13.18	3.03		33.90	14.16	2.69		35.85	15.17	2.44		37.76	16.16	2.22		39.69	17.14	2.01
	57 (13.9)		30.02	11.09	3.33		31.70	12.70	3.03		33.22	13.22	2.68		34.80	14.80	2.43		36.33	15.33	2.21		37.82	16.32	2.00
STAGE 1																									
75 (23.9)	72 (22.2)	1200	26.84	11.34	1.89	1200	28.98	12.03	1.84	975	30.89	12.76	1.80	975	32.26	13.26	1.80	975	33.59	13.75	0.81	975	34.89	14.21	0.75
	67 (19.4)		23.46	10.71	1.89		25.63	11.40	1.84		27.83	11.99	1.82		29.80	12.40	1.80		31.11	12.89	0.82		32.30	13.31	0.77
	63 (17.2)		21.85	10.14	1.89		23.45	10.83	1.84		25.25	11.38	1.81		27.11	11.83	1.80		28.94	12.26	0.82		30.34	12.69	0.79
	57 (13.9)		20.91	10.01	1.88		22.14	10.14	1.84		23.97	10.97	1.81		25.81	11.81	1.80		27.62	12.62	0.84		29.38	13.08	0.81
80 (26.7)	72 (22.2)	1200	26.55	11.24	1.89	1200	28.46	11.92	1.84	975	30.81	12.66	1.80	975	32.18	13.32	1.80	975	33.51	13.87	0.81	975	34.81	14.32	0.75
	67 (19.4)		23.79	10.18	1.89		25.52	10.89	1.84		27.58	11.17	1.82		29.60	11.62	1.80		31.05	12.05	0.82		32.24	12.40	0.77
	63 (17.2)		22.46	10.46	1.89		23.77	10.77	1.84		25.45	11.25	1.81		27.20	11.90	1.80		28.92	12.42	0.82		30.35	12.85	0.79
	57 (13.9)		22.44	10.44	1.89		23.72	10.72	1.84		25.40	11.20	1.81		27.15	11.85	1.80		28.87	12.37	0.82		29.70	12.70	0.80

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage
Stage 1 - Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 48



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DETAILED COOLING CAPACITIES* - EFFICIENCY MODE CONTINUED

24VNA900

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4AN005L	1.00	1.00	
CAP**6021AL*	0.99	0.99	5BCVAX1110-20
CAP**6024AL*	0.99	0.99	5BCVAX1110-20
CNR**6024AL*	0.99	1.04	5BCVAX1110-20
CNR**6124AL*	0.99	1.04	5BCVAX1110-20
CNR**624AL*	0.99	0.99	5BCVAX1110-20
CNR**6124AL*	1.00	1.00	5BCVAX1110-20
CSPH**6012AL*	1.00	1.00	5BCVAX1110-20
CAP**6024AL*	0.99	0.99	5BCVAX1135-22
CNR**6024AL*	0.99	0.99	5BCVAX1135-22
CNR**6124AL*	1.00	1.00	5BCVAX1135-22
CNR**624AL*	0.99	0.99	5BCVAX1135-22
CNR**6124AL*	1.00	1.00	5BCVAX1135-22
CSPH**6012AL*	1.00	1.00	5BCVAX1135-22
CAP**6024AL*	1.00	1.00	5BCVAX1155-22
CNR**6024AL*	1.00	1.00	5BCVAX1155-22
CNR**6124AL*	1.00	1.00	5BCVAX1155-22
CNR**624AL*	0.99	0.99	5BCVAX1155-22
CNR**6124AL*	1.00	1.00	5BCVAX1155-22
CSPH**6012AL*	1.00	1.00	5BCVAX1155-22
CAP**6021AL*	0.99	1.04	5P**PA090121**20
CAP**6024AL*	0.99	1.04	5P**PA090121**20
CNR**6024AL*	0.99	1.04	5P**PA090121**20
CNR**6124AL*	0.99	1.04	5P**PA090121**20
CNR**624AL*	0.99	1.03	5P**PA090121**20
CNR**6124AL*	0.99	1.04	5P**PA090121**20
CSPH**6012AL*	0.99	1.04	5P**PA090121**20
CAP**6021AL*	0.99	1.04	5P**PA090121**20
CAP**6024AL*	0.99	1.04	5P**PA090121**20
CNR**6024AL*	0.99	1.04	5P**PA090121**20
CNR**6124AL*	0.99	1.04	5P**PA090121**20
CNR**624AL*	0.99	0.99	5P**PA090121**20
CNR**6124AL*	1.00	1.00	5P**PA090121**20
CSPH**6012AL*	1.00	1.00	5P**PA090121**20
CAP**6024AL*	0.99	1.04	5P**PA100121**22
CNR**6024AL*	0.99	1.04	5P**PA100121**22
CNR**6124AL*	0.99	1.04	5P**PA100121**22
CNR**624AL*	0.99	0.99	5P**PA100121**22
CNR**6124AL*	1.00	1.00	5P**PA100121**22
CSPH**6012AL*	1.00	1.00	5P**PA100121**22
CAP**6024AL*	0.99	1.04	5P**PA100124**22
CNR**6024AL*	0.99	1.04	5P**PA100124**22
CNR**6124AL*	0.99	1.04	5P**PA100124**22
CNR**624AL*	0.99	1.03	5P**PA100124**22
CNR**6124AL*	0.99	0.99	5P**PA100124**22
CSPH**6012AL*	1.00	1.00	5P**PA100124**22
CAP**6024AL*	0.99	1.09	5P**PA100124**22
CNR**6024AL*	0.99	1.03	5P**PA100124**22
CAP**6024AL*	0.99	1.03	5P**PA100124**22
CNR**6024AL*	0.99	1.09	5P**PA100124**22
CNR**6124AL*	0.99	1.09	5P**PA100124**22
CNR**624AL*	0.97	1.03	5P**PA100124**22
CNR**6124AL*	0.99	1.04	5P**PA100124**22
CSPH**6012AL*	0.99	1.04	5P**PA100124**22

Z-STAGE (Hi-Stage 5, Lo-Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
*FV2CR0008L	1.00	1.00	1.00	1.00	
CAP**6021AL*	1.01	1.06	1.01	1.07	5BRH110-20
CSPH**6012AL*	1.00	1.07	1.00	1.04	5BRH110-20
CAP**6024AL*	1.01	1.06	1.00	1.11	5BRH135-20
CNR**6024AL*	1.01	1.06	1.01	1.08	5BRH135-20
CNR**6124AL*	1.01	1.06	1.01	1.12	5BRH135-20
CNR**624AL*	1.00	1.05	1.01	1.06	5BRH135-20
CNR**6124AL*	1.00	1.07	1.00	1.03	5BRH135-20
CSPH**6012AL*	1.00	1.07	1.01	1.05	5BRH135-20
CAP**6021AL*	1.01	1.06	1.01	1.07	5BCTW110-22
CSPH**6012AL*	1.00	1.07	1.00	1.04	5BCTW110-22
CAP**6024AL*	1.01	1.06	1.01	1.09	5BCTW135-22
CNR**6024AL*	1.01	1.06	1.01	1.08	5BCTW135-22
CNR**6124AL*	1.00	1.05	1.01	1.08	5BCTW135-22
CNR**624AL*	1.00	1.07	1.01	1.04	5BCTW135-22
CSPH**6012AL*	1.00	1.07	1.00	1.04	5BCTW135-22
CAP**6021AL*	1.01	1.06	1.01	1.07	5P**PSA080211**20
CSPH**6012AL*	1.00	1.07	1.00	1.05	5P**PSA080211**20
CAP**6024AL*	1.01	1.06	1.01	1.07	5P**PSA100211**20
CSPH**6012AL*	1.01	1.06	1.01	1.05	5P**PSA100211**20
CAP**6024AL*	1.01	1.06	1.01	1.07	5P**PSA100241**20
CNR**6024AL*	1.01	1.06	1.01	1.07	5P**PSA100241**20
CNR**6124AL*	1.01	1.06	1.01	1.07	5P**PSA100241**20
CNR**624AL*	1.00	1.05	1.01	1.07	5P**PSA100241**20
CNR**6124AL*	1.00	1.07	1.00	1.04	5P**PSA100241**20
CSPH**6012AL*	1.00	1.07	1.00	1.05	5P**PSA100241**20
CAP**6021AL*	0.99	1.04	1.01	1.11	5P**PSA080211**20
CSPH**6012AL*	1.00	1.05	1.01	1.10	5P**PSA080211**20
CAP**6024AL*	1.00	1.05	1.01	1.11	5P**PSA100241**22
CNR**6024AL*	1.00	1.05	1.01	1.11	5P**PSA100241**22
CNR**6124AL*	1.00	1.05	1.01	1.10	5P**PSA100241**22
CSPH**6012AL*	1.00	1.05	1.00	1.09	5P**PSA100241**22
CSPH**6012AL*	1.00	1.05	1.01	1.10	5P**PSA080211**20
CSPH**6012AL*	1.01	1.06	1.00	1.11	5P**PSA100211**20
CAP**6024AL*	0.99	1.04	1.01	1.11	5P**PSA100241**22
CNR**6124AL*	1.00	1.05	1.01	1.10	5P**PSA100241**22
CNR**624AL*	0.99	1.03	1.01	1.10	5P**PSA100241**22
CNR**6124AL*	1.00	1.05	1.01	1.09	5P**PSA100241**22
CSPH**6012AL*	1.00	1.05	1.00	1.09	5P**PSA100241**22
CAP**6021AL*	1.00	1.06	1.01	1.09	DVLAAR600154
CNR**6024AL*	0.99	1.04	1.01	1.09	DVLAAR600154
CNR**6124AL*	1.01	1.06	1.01	1.07	DVLAAR600154
CNR**6124AL*	1.01	1.06	1.01	1.11	DVMAA8000154
CSPH**6012AL*	1.01	1.06	1.00	1.11	DVMAA8000154

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DETAILED COOLING CAPACITIES[#] - COMFORT + DEHUMIDIFY MODE

DB _s °F (°C)	WDB °F (°C)	349MA13 / F24ARF02, Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)																													
		105 (40.3)						95 (35)						85 (29.4)						75 (23.9)						65 (18.2)					
		ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW										
	Total	Sensit			Total	Sensit			Total	Sensit			Total	Sensit			Total	Sensit													
STAGE 3																															
75 (23.9)	72 (22.2)	300	13.14	5.38	1.10	420	14.21	5.00	0.90	420	10.07	8.18	0.81	420	10.88	8.51	0.65	420	18.76	8.83	0.50										
	67 (19.4)		11.00	7.21	1.10		12.94	7.73	0.95		10.81	8.13	0.82		18.37	8.48	0.67		15.11	8.70	0.50										
	62 (17.2)		10.81	8.23	1.16		11.83	8.20	0.90		12.83	8.84	0.83		13.22	8.86	0.68		13.99	10.30	0.56										
	57 (13.9)		8.98	8.88	1.76		10.88	10.88	0.90		11.42	11.42	0.84		11.93	11.93	0.71		12.42	12.42	0.58										
80 (26.7)	72 (22.2)	300	13.10	7.04	1.76	420	14.18	6.81	0.98	420	15.20	8.13	0.81	420	15.97	8.49	0.85	420	18.71	8.83	0.60										
	67 (19.4)		11.82	8.85	1.18		12.83	8.71	0.90		10.87	10.07	0.82		14.33	10.42	0.87		15.07	10.70	0.58										
	62 (17.2)		10.00	9.30	1.16		11.84	11.20	0.90		12.54	11.57	0.85		13.22	11.83	0.84		13.88	12.28	0.56										
	57 (13.9)		10.31	10.21	1.18		11.30	11.30	0.90		12.16	12.16	0.83		12.70	12.70	0.70		13.22	12.23	0.57										
STAGE 2																															
75 (23.9)	72 (22.2)	300	10.85	4.45	0.90	300	11.85	4.88	0.77	300	12.81	5.25	0.65	300	13.33	5.47	0.54	300	14.04	5.78	0.43										
	67 (19.4)		8.75	5.80	0.91		10.87	8.58	0.78		11.33	8.88	0.80		11.97	7.17	0.57		12.80	7.48	0.47										
	62 (17.2)		8.95	8.90	0.91		9.01	7.88	0.78		10.40	8.23	0.80		10.88	8.48	0.81		11.55	8.78	0.50										
	57 (13.9)		8.17	8.17	0.90		8.13	8.13	0.78		8.58	8.58	0.71		10.80	10.80	0.80		10.45	10.45	0.53										
80 (26.7)	72 (22.2)	300	10.82	5.88	0.90	300	11.82	6.82	0.77	300	12.88	8.20	0.65	300	13.28	7.21	0.54	300	14.00	7.90	0.43										
	67 (19.4)		8.73	7.22	0.91		10.84	8.28	0.78		11.30	8.58	0.88		11.84	8.88	0.57		12.57	8.18	0.47										
	62 (17.2)		8.97	8.28	0.91		8.84	8.57	0.78		10.42	8.88	0.88		10.90	10.21	0.80		11.58	10.52	0.50										
	57 (13.9)		8.12	8.70	0.91		8.73	8.73	0.78		10.22	10.22	0.88		10.80	10.88	0.80		11.14	11.14	0.51										
STAGE 1																															
75 (23.9)	72 (22.2)	300	8.87	4.33	0.77	300	8.83	3.88	0.51	300	8.84	4.82	0.45	300	8.88	4.25	0.37	300	10.27	4.28	0.25										
	67 (19.4)		8.87	5.84	0.78		7.00	5.04	0.52		8.13	5.28	0.40		8.30	5.52	0.38		8.22	5.76	0.30										
	62 (17.2)		8.15	6.58	0.78		7.22	6.18	0.52		7.53	6.43	0.47		7.80	6.88	0.41		8.45	6.81	0.34										
	57 (13.9)		7.58	7.52	0.78		8.74	8.74	0.52		7.13	7.13	0.47		7.53	7.53	0.42		7.88	7.88	0.38										
80 (26.7)	72 (22.2)	300	8.88	5.52	0.77	300	8.88	5.03	0.51	300	8.88	5.30	0.45	300	8.82	5.55	0.37	300	10.01	5.40	0.28										
	67 (19.4)		8.84	6.43	0.78		7.58	6.43	0.52		8.13	6.75	0.48		8.87	7.81	0.38		8.18	7.27	0.30										
	62 (17.2)		8.17	7.83	0.78		7.22	7.22	0.52		7.83	7.83	0.47		8.27	8.27	0.41		8.48	8.43	0.34										
	57 (13.9)		8.00	8.00	0.78		7.21	7.21	0.52		7.84	7.84	0.47		8.25	8.25	0.41		8.45	8.45	0.34										

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage
Stage 1 - Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 48



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DETAILED COOLING CAPACITIES[#] - COMFORT + DEHUMIDIFY MODE CONTINUED

24VNA013

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANF002L	1.00	1.00	
CAP**2414AL*	0.99	0.99	58CVA.X070-12
CAP**2414AL*	0.99	0.99	58CVA.X070-12
CAP**2417AL*	0.99	0.99	59**N*AO80V17**14
CAP**2417AL*	0.99	0.99	59**N*AO80V17**14
CNPH*2417AL*	0.99	0.99	59**N*AO80V17**14
CNPH*2417AL*	0.99	0.99	59**N*AO80V17**14
CNPH*2414AL*	1.00	1.00	58CVA.X070-12
CNPV*2417AL*	0.99	0.99	59**N*AO80V17**14
CNPV*2417AL*	0.99	0.99	59**N*AO80V17**14
CNPH*2412AL*	1.00	1.00	59**N*AO80V17**14
CSRH*2412AL*	1.00	1.00	59**N*AO80V17**14

See additional notes on page 48



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DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

EDB °F (°C)	EWAR AIR °F (°C)	341W432A / FE4ANF00S Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)																			
		105 (38.3)			85 (30)			75 (23.9)			65 (19.4)			55 (13.9)							
		ID SCFM	Capacity MBtuh Total	Total Tons kW	ID SCFM	Capacity MBtuh Total	Total Tons kW	ID SCFM	Capacity MBtuh Total	Total Tons kW	ID SCFM	Capacity MBtuh Total	Total Tons kW	ID SCFM	Capacity MBtuh Total	Total Tons kW					
STAGE 1																					
75 (23.9)	75 (23.9)	808	18.41	7.88	1.92	808	24.19	9.93	2.55	824	25.82	10.41	1.59	663	27.05	11.00	1.19	700	28.58	11.60	0.84
	80 (26.7)		16.71	13.00	1.94		22.02	12.83	2.26		23.35	13.97	1.60		24.68	14.13	1.23		26.09	15.02	0.88
	85 (29.4)		15.50	12.08	1.95		20.40	14.90	2.27		21.64	15.67	1.63		22.89	16.56	1.25		24.23	17.65	0.92
	90 (32.2)		14.52	14.52	1.95		18.30	18.00	2.27		19.43	19.04	1.65		20.36	20.13	1.28		21.81	21.49	0.95
80 (26.7)	75 (23.9)	808	18.29	13.97	1.81	808	24.08	12.57	2.24	824	25.90	13.30	1.59	663	26.92	14.28	1.19	700	28.43	14.92	0.84
	80 (26.7)		16.60	13.09	1.84		21.95	15.35	2.26		23.28	16.24	1.62		24.60	17.18	1.23		26.00	18.28	0.89
	85 (29.4)		15.55	15.22	1.95		20.38	17.52	2.27		21.62	18.53	1.65		22.87	19.89	1.25		24.20	20.91	0.92
	90 (32.2)		15.42	15.42	1.95		19.24	19.24	2.27		20.39	20.29	1.64		21.37	21.87	1.27		22.82	22.92	0.94
STAGE 2																					
75 (23.9)	75 (23.9)	437	15.17	8.19	1.32	437	15.84	8.46	1.29	452	16.82	8.84	0.81	475	17.81	7.24	0.73	510	18.87	7.88	0.54
	80 (26.7)		13.78	9.02	1.34		14.47	8.33	1.11		15.33	8.80	0.83		16.34	8.32	0.70		17.22	9.94	0.59
	85 (29.4)		12.75	9.48	1.34		13.41	9.80	1.12		14.32	10.33	0.95		15.07	10.95	0.79		16.00	11.72	0.62
	90 (32.2)		11.46	11.46	1.35		12.02	11.94	1.12		12.74	12.57	0.87		13.52	13.34	0.82		14.38	14.31	0.66
80 (26.7)	75 (23.9)	437	15.10	9.00	1.32	437	15.81	8.29	1.29	452	16.74	8.75	0.81	475	17.72	9.27	0.72	510	18.78	9.88	0.54
	80 (26.7)		13.74	9.82	1.34		14.42	10.15	1.11		15.38	10.70	0.83		16.18	11.34	0.70		17.18	12.14	0.59
	85 (29.4)		12.73	11.20	1.34		13.39	11.81	1.12		14.20	12.23	0.95		15.05	12.97	0.79		16.00	13.90	0.62
	90 (32.2)		12.15	12.15	1.34		12.89	12.89	1.12		13.43	13.42	0.96		14.24	14.24	0.80		15.18	15.18	0.64
STAGE 1 - PEAKFLOW ONLY																					
75 (23.9)	75 (23.9)	342	11.88	4.74	0.81	342	9.28	3.75	0.47	250	9.75	3.95	0.47	260	10.23	4.15	0.43	250	10.72	4.35	0.38
	80 (26.7)		10.56	6.08	0.82		8.20	4.83	0.48		8.84	4.99	0.49		9.27	5.09	0.47		9.70	5.30	0.40
	85 (29.4)		9.75	7.13	0.82		7.74	5.42	0.49		8.15	5.61	0.51		8.56	5.82	0.49		8.98	6.04	0.44
	90 (32.2)		8.88	8.88	0.84		6.85	6.48	0.49		7.22	6.88	0.52		7.58	6.90	0.52		7.85	7.12	0.48
80 (26.7)	75 (23.9)	342	11.81	6.08	0.81	342	9.23	4.88	0.47	250	9.72	4.98	0.47	260	10.20	5.09	0.43	250	10.68	5.30	0.38
	80 (26.7)		10.53	7.41	0.82		8.27	5.63	0.48		8.81	5.82	0.49		9.25	6.00	0.47		9.68	6.24	0.40
	85 (29.4)		9.73	8.48	0.82		7.72	6.30	0.49		8.14	6.54	0.51		8.54	6.76	0.49		8.95	6.98	0.44
	90 (32.2)		9.21	9.21	0.82		7.08	7.09	0.49		7.40	7.40	0.52		7.75	7.70	0.51		8.00	8.00	0.48
STAGE 1 - ALL OTHER INDOOR COMBINATIONS																					
75 (23.9)	75 (23.9)	342	11.88	4.74	0.81	322	8.28	3.84	0.47	234	8.55	3.99	0.48	229	8.88	4.06	0.44	245	10.66	4.30	0.38
	80 (26.7)		10.56	6.08	0.82		8.12	4.40	0.48		8.68	4.70	0.50		9.04	4.82	0.48		9.45	5.25	0.41
	85 (29.4)		9.75	7.13	0.82		7.48	5.09	0.49		8.00	5.44	0.51		8.34	5.58	0.50		8.61	5.88	0.44
	90 (32.2)		8.88	8.88	0.84		6.82	6.02	0.49		7.09	6.43	0.52		7.34	6.56	0.52		7.50	7.04	0.48
80 (26.7)	75 (23.9)	342	11.81	6.08	0.81	322	8.26	4.47	0.47	234	8.55	4.78	0.47	229	8.96	4.82	0.44	245	10.62	5.29	0.38
	80 (26.7)		10.50	7.41	0.82		8.11	5.28	0.48		8.68	5.63	0.50		9.02	5.78	0.48		9.43	6.18	0.41
	85 (29.4)		9.73	8.48	0.82		7.48	5.91	0.49		7.99	6.31	0.51		8.33	6.44	0.50		8.60	6.91	0.44
	90 (32.2)		9.21	9.21	0.82		6.73	6.73	0.49		7.19	7.19	0.52		7.40	7.40	0.52		7.63	7.93	0.48

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage
Stage 1 - Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 48



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DETAILED COOLING CAPACITIES¹ - COMFORT + DEHUMIDIFY MODE CONTINUED

24VNA22A

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANB F100SL	1.00	1.00	
FE4ANB F03SL	0.98	1.00	
FE4ANB F05SL	0.99	1.05	
FE4ANB F03SL	0.96	1.00	
CAP**3614AL*	0.98	1.03	58CVAX0070-12
CAP**3617AL*	0.98	1.03	58CVAX0070-12
CNPH**3617AL*	0.96	1.06	58CVAX0070-12
CNPH**3617AL*	0.97	1.01	58CVAX0070-12
CNPH**3717AL*	0.97	1.02	58CVAX0070-12
CNPH**4217AL*	0.96	1.00	58CVAX0070-12
CSRH**3613AL*	1.00	1.05	58CVAX0070-12
CSRH**4212AL*	1.00	1.05	58CVAX0070-12
CAP**3817AL*	0.98	1.03	58CVAX0090-18
CAP**3821AL*	0.96	1.03	58CVAX0090-18
CAP**4221AL*	0.99	1.04	58CVAX0090-18
CNPH**3617AL*	0.98	1.03	58CVAX0090-18
CNPH**4221AL*	0.99	1.04	58CVAX0090-18
CNPH**3617AL*	0.97	1.01	58CVAX0090-18
CNPH**3621AL*	0.97	1.01	58CVAX0090-18
CNPH**3717AL*	0.97	0.97	58CVAX0090-18
CNPH**4217AL*	0.96	1.00	58CVAX0090-18
CNPH**4221AL*	0.96	1.00	58CVAX0090-18
CSRH**3613AL*	1.00	1.00	58CVAX0090-18
CSRH**4212AL*	1.01	1.01	58CVAX0090-18
CAP**3817AL*	0.98	1.03	59NPA080V17**14
CAP**3821AL*	0.96	1.03	59NPA080V17**14
CAP**4221AL*	0.96	1.03	59NPA080V17**14
CNPH**3617AL*	0.97	1.07	59NPA080V17**14
CNPH**4221AL*	0.96	1.08	59NPA080V17**14
CNPH**3617AL*	0.94	1.05	59NPA080V17**14
CNPH**3621AL*	0.94	1.05	59NPA080V17**14
CNPH**3717AL*	0.97	1.02	59NPA080V17**14
CNPH**4221AL*	0.95	1.04	59NPA080V17**14
CSRH**3613AL*	0.98	1.04	59NPA080V17**14
CSRH**4212AL*	1.00	1.05	59NPA080V17**14
CAP**3817AL*	0.98	1.03	59NPA080V17**14
CAP**3821AL*	0.96	1.03	59NPA080V17**14
CAP**4221AL*	0.99	1.04	59NPA080V17**14
CNPH**3617AL*	0.98	1.08	59NPA080V17**14
CNPH**4221AL*	0.98	1.09	59NPA080V17**14
CNPH**3617AL*	0.98	1.08	59NPA080V17**14
CNPH**4221AL*	0.98	1.09	59NPA080V17**14
CSRH**3613AL*	1.00	1.05	59NPA080V17**14
CSRH**4212AL*	1.00	1.05	59NPA080V17**14
CAP**3821AL*	0.98	1.03	59MNA080V21**20
CAP**4221AL*	0.99	1.04	59MNA080V21**20
CAP**4224AL*	0.99	1.04	59MNA080V21**20

Cooling Indoor Model	2-STAGE (Hi-Stage 5, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
FV4CWB F700SL	0.94	0.94	0.99	0.94	
FV4CWF00SL	0.94	0.94	1.00	0.97	
CAP**2414AL*	0.94	0.99	1.08	1.12	58PHD45-08
CAP**2417AL*	0.94	0.99	1.08	1.12	58PHD45-08
CAP**3014AL*	0.95	0.95	1.06	1.11	58PHD45-08
CAP**3017AL*	0.95	0.95	1.09	1.11	58PHD45-08
CNPH**2414AL*	0.93	0.98	1.08	1.12	58PHD45-08
CNPH**2417AL*	0.93	0.98	1.08	1.12	58PHD45-08
CNPH**3014AL*	0.95	1.00	1.08	1.11	58PHD45-08
CNPH**3017AL*	0.95	1.00	1.09	1.11	58PHD45-08
CNPH**3117AL*	0.95	0.95	1.12	1.11	58PHD45-08
CAP**2414AL*	0.93	0.93	1.08	1.08	58CTW045-12
CAP**2417AL*	0.94	0.94	1.08	1.07	58CTW045-12
CAP**3014AL*	0.93	0.93	1.10	1.09	58CTW045-12
CAP**3017AL*	0.93	0.93	1.11	1.09	58CTW045-12
CNPH**2414AL*	0.93	0.98	1.08	1.07	58CTW045-12
CNPH**2417AL*	0.93	0.98	1.08	1.07	58CTW045-12
CNPH**3014AL*	0.93	0.97	1.10	1.09	58CTW045-12
CNPH**3017AL*	0.93	0.93	1.11	1.09	58CTW045-12
CNPH**3117AL*	0.94	0.94	1.12	1.06	58CTW045-12
CSRH**3012AL*	0.93	0.93	1.11	1.08	58CTW045-12
CAP**2417AL*	0.93	0.93	1.11	1.09	58CTW075-16
CAP**3017AL*	0.93	0.93	1.11	1.08	58CTW075-16
CNPH**2417AL*	0.96	1.05	1.09	1.07	58CTW075-16
CNPH**3017AL*	0.93	0.99	1.11	1.08	58CTW075-16
CNPH**3117AL*	0.95	0.95	1.12	1.05	58CTW075-16
CSRH**2417AL*	0.93	0.98	1.08	1.07	58CTW075-16
CSRH**3012AL*	0.93	0.93	1.11	1.07	58CTW075-16
CSRH**2412AL*	0.94	0.94	1.13	1.15	58CTW090-18
CSRH**3012AL*	0.95	0.95	1.18	1.12	58CTW090-18
CAP**2414AL*	0.93	1.00	1.08	1.13	59P2A040E14**10
CAP**2415AL*	0.93	0.98	1.08	1.13	59P2A040E14**10
CAP**3014AL*	0.94	0.99	1.07	1.12	59P2A040E14**10
CAP**3017AL*	0.95	1.00	1.08	1.12	59P2A040E14**10
CNPH**2414AL*	0.93	0.97	1.07	1.13	59P2A040E14**10
CNPH**2417AL*	0.93	0.97	1.07	1.13	59P2A040E14**10
CNPH**3014AL*	0.94	0.99	1.07	1.12	59P2A040E14**10
CNPH**3017AL*	0.95	1.00	1.08	1.12	59P2A040E14**10
CNPH**3117AL*	0.94	0.94	1.11	1.11	59P2A040E14**10
CSRH**2412AL*	0.96	1.00	1.10	1.23	59P2A040E14**10
CSRH**3012AL*	0.97	1.01	1.08	1.13	59P2A040E14**10
CAP**2417AL*	0.93	0.98	1.07	1.12	59P2A040E17**12
CAP**3017AL*	0.95	1.00	1.08	1.13	59P2A040E17**12
CNPH**2417AL*	0.95	1.05	1.08	1.13	59P2A040E17**12
CNPH**3017AL*	0.95	1.05	1.08	1.12	59P2A040E17**12
CNPH**3117AL*	0.97	1.01	1.08	1.10	59P2A040E17**12
CSRH**2412AL*	0.98	1.00	1.10	1.25	59P2A040E17**12
CAP**2414AL*	0.94	0.94	1.08	1.10	59P2A060E14**12
CAP**2417AL*	0.95	0.95	1.10	1.10	59P2A060E14**12
CAP**3014AL*	0.93	0.93	1.11	1.11	59P2A060E14**12

Cooling Indoor Model	2-STAGE (Hi-Stage 5, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
CAP**2017AL*	0.94	0.94	1.12	1.11	58P2A060E14**12
CNPH**2414AL*	0.94	0.99	1.09	1.09	58P2A060E14**12
CNPH**2417AL*	0.94	0.99	1.09	1.09	58P2A060E14**12
CNPH**3014AL*	0.95	0.98	1.11	1.11	58P2A060E14**12
CNPH**3017AL*	0.94	0.94	1.12	1.11	58P2A060E14**12
CNPH**3117AL*	0.96	0.96	1.13	1.09	58P2A060E14**12
CSRH**2412AL*	0.95	0.95	1.08	1.10	58P2A060E14**12
CSRH**3012AL*	0.94	0.94	1.12	1.10	58P2A060E14**12
CNPH**2417AL*	0.98	1.00	1.11	1.13	58P2A060E17**14
CSRH**2412AL*	0.95	0.95	1.13	1.15	58P2A060E17**14
CNPH**2417AL*	0.98	1.00	1.10	1.10	58P2A060E17**18
CSRH**2413AL*	0.94	0.94	1.12	1.12	58P2A060E17**18
CAP**2414AL*	0.93	1.03	1.07	1.17	58P2A060E14**10
CAP**2417AL*	0.94	1.04	1.07	1.17	58P2A060E14**10
CAP**3014AL*	0.95	1.05	1.07	1.16	58P2A060E14**10
CAP**3017AL*	0.95	1.05	1.07	1.15	58P2A060E14**10
CNPH**2414AL*	0.95	1.03	1.07	1.17	58P2A060E14**10
CNPH**2417AL*	0.93	1.03	1.07	1.17	58P2A060E14**10
CNPH**3014AL*	0.95	1.05	1.07	1.16	58P2A060E14**10
CNPH**3017AL*	0.95	1.05	1.07	1.15	58P2A060E14**10
CNPH**3117AL*	0.96	1.06	1.08	1.13	58P2A060E14**10
CSRH**2412AL*	0.95	1.05	1.07	1.17	58P2A060E14**10
CSRH**3012AL*	0.94	1.04	1.08	1.18	58P2A060E14**10
CAP**2417AL*	0.93	0.97	1.07	1.14	58P2A060E17**12
CAP**3017AL*	0.93	0.98	1.07	1.13	58P2A060E17**12
CNPH**3117AL*	0.96	1.00	1.09	1.12	58P2A060E17**12
CNPH**2417AL*	0.93	1.01	1.07	1.14	58P2A060E17**12
CNPH**3017AL*	0.93	0.98	1.07	1.13	58P2A060E17**12
CNPH**3117AL*	0.94	0.99	1.09	1.12	58P2A060E17**12
CSRH**2412AL*	0.96	1.05	1.10	1.23	58P2A060E17**12
CSRH**3012AL*	0.93	0.98	1.08	1.13	58P2A060E17**12
CNPH**2417AL*	0.98	1.00	1.10	1.17	58P2A060E17**14
CSRH**2412AL*	0.97	1.01	1.10	1.16	58P2A060E17**14

See notes on page 48



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DETAILED COOLING CAPACITIES[#] - COMFORT + DEHUMIDIFY MODE CONTINUED

DB F (C)	EWH - F (C)	24VNA028 / F8AH/02L Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)																							
		75 (23.9)						80 (26.7)						85 (29.4)						90 (32.2)					
		ID SCFM	Capacity MBtuh Total Sensd		Total Sys. KW	ID SCFM	Capacity MBtuh Total Sensd		Total Sys. KW	ID SCFM	Capacity MBtuh Total Sensd		Total Sys. KW	ID SCFM	Capacity MBtuh Total Sensd		Total Sys. KW								
STAGE 2																									
75 (23.9)	75 (23.9)	842	24.23	9.92	2.44	806	25.33	10.31	2.12	834	26.03	10.55	1.84	883	26.54	11.60	1.56	786	30.28	12.32	1.33				
	67 (19.4)		22.01	12.06	2.42		23.01	13.22	2.10		24.40	14.00	1.83		25.91	14.82	1.59		27.31	15.77	1.34				
	63 (17.2)		20.38	15.34	2.38		21.31	15.50	2.08		22.54	16.40	1.82		24.03	17.33	1.57		25.48	18.47	1.35				
	57 (13.9)		18.45	18.40	2.38		18.98	18.80	2.05		20.29	19.87	1.80		21.49	20.99	1.57		22.82	22.37	1.36				
80 (26.7)	75 (23.9)	842	24.17	12.95	2.44	806	25.27	13.22	2.12	834	26.87	14.00	1.84	883	26.49	14.82	1.59	786	30.22	15.77	1.33				
	67 (19.4)		21.86	15.36	2.42		22.95	16.20	2.10		24.40	17.12	1.83		25.90	17.99	1.59		27.45	19.17	1.34				
	63 (17.2)		20.30	18.31	2.39		21.29	18.35	2.08		22.61	19.39	1.82		23.97	20.40	1.57		25.45	21.89	1.35				
	57 (13.9)		19.50	19.56	2.38		20.08	20.08	2.07		21.39	21.29	1.81		22.54	22.54	1.57		23.97	23.97	1.36				
STAGE 3																									
75 (23.9)	75 (23.9)	437	18.80	8.88	1.48	415	17.53	7.13	1.28	457	18.69	7.60	1.10	455	19.82	8.08	0.92	484	21.04	8.53	0.78				
	67 (19.4)		15.18	9.96	1.30		15.92	8.13	1.28		16.89	8.72	1.11		17.91	10.28	0.95		18.99	10.83	0.78				
	63 (17.2)		13.88	12.58	1.30		14.82	10.69	1.28		15.86	11.37	1.12		16.49	12.01	0.87		17.45	12.77	0.82				
	57 (13.9)		12.63	12.63	1.48		12.99	12.94	1.29		13.83	13.78	1.14		14.64	14.51	1.00		15.53	15.43	0.88				
80 (26.7)	75 (23.9)	437	18.75	8.99	1.48	415	17.48	8.18	1.28	437	18.64	8.75	1.10	488	19.77	10.22	0.92	484	20.98	10.97	0.78				
	67 (19.4)		15.14	11.05	1.30		15.81	11.13	1.28		16.85	11.84	1.11		17.87	12.81	0.95		18.95	13.31	0.78				
	63 (17.2)		13.97	12.65	1.30		14.99	12.68	1.28		15.34	13.40	1.12		16.47	14.23	0.97		17.46	15.14	0.82				
	57 (13.9)		13.43	13.43	1.30		13.76	13.76	1.29		14.89	14.65	1.13		15.51	15.51	0.99		16.47	16.47	0.84				
STAGE 1																									
75 (23.9)	75 (23.9)	362	13.91	5.70	1.21	222	8.34	3.43	0.52	234	8.88	3.65	0.44	239	8.31	3.90	0.37	245	8.90	4.05	0.29				
	67 (19.4)		12.50	7.42	1.22		7.48	4.49	0.53		7.97	4.78	0.46		8.34	4.91	0.40		8.86	5.24	0.33				
	63 (17.2)		11.49	8.77	1.22		8.65	5.34	0.53		7.30	5.67	0.47		7.83	5.73	0.41		8.11	6.18	0.35				
	57 (13.9)		10.81	10.81	1.22		8.25	6.25	0.54		6.65	6.65	0.45		6.87	6.87	0.45		7.32	7.32	0.37				
80 (26.7)	75 (23.9)	362	13.87	7.46	1.21	222	8.21	4.53	0.52	234	8.88	4.82	0.44	229	8.28	4.99	0.37	245	8.87	5.29	0.29				
	67 (19.4)		12.47	8.17	1.22		7.45	5.59	0.52		7.94	5.94	0.46		8.31	6.06	0.40		8.83	6.48	0.33				
	63 (17.2)		11.48	10.01	1.22		8.89	6.43	0.53		7.39	6.82	0.47		7.83	6.93	0.41		8.10	7.41	0.35				
	57 (13.9)		11.09	11.09	1.22		8.68	6.68	0.54		7.19	7.19	0.48		7.33	7.33	0.42		7.81	7.81	0.38				

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage
Stage 1 - Compressor speed limited to stage two at 105 outdoor

See additional notes on page 48



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DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

EDB °F (°C)	DWAR AIR °F (°C)	SEVILARK® PE44MFO05 Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)																			
		105 (40.3)					95 (35)					75 (23.3)					65 (18.3)				
		ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens	Total Sys. kW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens	Total Sys. kW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens	Total Sys. kW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens	Total Sys. kW				
STAGE 3																					
75 (23.0)	72 (22.2)	608	19.29	8.01	1.82	608	25.34	10.30	1.88	634	20.68	10.04	1.81	653	25.11	11.45	1.34	758	29.84	12.08	1.07
	67 (19.4)		17.40	10.88	1.83		22.98	13.18	1.89		24.21	13.02	1.80		25.84	14.88	1.38		27.06	15.57	1.13
	63 (17.2)		16.21	13.13	1.84		21.20	15.45	1.90		22.54	18.31	1.85		23.79	17.21	1.41		25.13	18.30	1.17
	57 (13.9)		15.18	15.18	1.85		19.10	18.78	1.90		20.23	19.83	1.80		21.27	20.92	1.44		22.82	22.29	1.21
80 (26.7)	72 (22.2)	608	19.12	10.84	1.81	608	25.12	13.12	1.88	634	20.55	13.85	1.80	653	27.99	14.80	1.33	758	29.49	15.47	1.07
	67 (19.4)		17.40	13.68	1.83		22.91	16.02	1.89		24.24	16.91	1.83		25.56	17.80	1.38		26.97	18.96	1.13
	63 (17.2)		16.20	15.91	1.84		21.25	18.20	1.90		22.51	19.29	1.85		23.76	20.26	1.41		25.10	21.88	1.17
	57 (13.9)		15.12	18.12	1.84		20.08	20.08	1.90		21.23	21.33	1.80		22.41	22.41	1.42		23.77	23.77	1.19
STAGE 3																					
75 (23.0)	72 (22.2)	437	15.62	8.37	1.18	437	18.33	8.64	1.23	462	17.27	7.62	0.91	475	18.26	7.42	0.78	570	18.30	7.87	0.60
	67 (19.4)		14.19	8.26	1.17		14.98	8.57	1.24		15.74	9.55	0.94		16.88	8.58	0.82		17.84	10.18	0.68
	63 (17.2)		13.12	9.74	1.18		13.79	10.07	1.25		14.80	10.81	0.96		15.46	11.23	0.83		16.38	12.00	0.71
	57 (13.9)		11.80	11.80	1.18		12.35	12.27	1.26		13.08	12.91	0.97		13.87	13.88	0.88		14.74	14.65	0.75
80 (26.7)	72 (22.2)	437	15.55	8.25	1.18	437	18.25	8.52	1.22	462	17.18	8.88	0.91	475	18.17	8.60	0.78	570	18.23	10.12	0.60
	67 (19.4)		14.14	10.11	1.17		14.93	10.44	1.24		15.88	10.99	0.94		16.80	11.63	0.82		17.57	12.83	0.67
	63 (17.2)		13.11	11.58	1.18		13.77	11.94	1.26		14.88	12.96	0.96		15.44	13.26	0.83		16.30	14.24	0.71
	57 (13.9)		12.51	12.51	1.18		13.05	13.05	1.26		13.78	13.78	0.97		14.60	14.60	0.88		15.55	15.55	0.74
STAGE 1 - PE44MFO05 ONLY																					
75 (23.0)	72 (22.2)	342	8.38	2.99	0.47	290	9.26	2.73	0.47	360	9.75	3.25	0.47	250	10.23	4.18	0.43	250	10.72	4.35	0.38
	67 (19.4)		10.72	6.18	0.78		8.39	4.88	0.48		8.84	4.88	0.49		9.27	5.09	0.47		9.70	5.30	0.40
	63 (17.2)		8.95	7.24	0.78		7.74	5.40	0.49		8.15	5.81	0.51		8.56	6.03	0.48		8.98	6.04	0.44
	57 (13.9)		8.83	8.81	0.77		8.35	8.48	0.49		7.22	8.88	0.52		7.59	8.98	0.52		7.95	7.12	0.48
80 (26.7)	72 (22.2)	342	11.79	8.17	0.78	290	9.23	4.68	0.47	360	9.72	4.88	0.47	250	10.20	5.09	0.43	250	10.68	5.30	0.38
	67 (19.4)		10.69	7.53	0.78		8.27	5.60	0.48		8.81	5.62	0.49		9.28	6.03	0.47		9.69	6.24	0.40
	63 (17.2)		8.88	8.90	0.78		7.72	8.32	0.49		8.14	8.54	0.51		8.54	8.76	0.49		8.95	8.98	0.44
	57 (13.9)		8.35	9.35	0.77		7.09	7.09	0.49		7.40	7.40	0.52		7.70	7.70	0.51		8.00	8.00	0.48
STAGE 1 - ALL OTHER INDOOR COMBINATIONS																					
75 (23.0)	72 (22.2)	342	8.18	1.23	0.24	222	8.99	5.64	0.47	224	9.29	3.89	0.40	229	9.59	4.08	0.44	245	10.66	4.33	0.38
	67 (19.4)		10.72	6.18	0.78		8.13	4.86	0.48		8.88	4.75	0.50		9.24	4.92	0.45		9.65	5.25	0.41
	63 (17.2)		8.92	7.24	0.78		7.40	5.03	0.49		8.00	5.44	0.51		8.54	5.58	0.50		8.91	5.88	0.44
	57 (13.9)		8.82	8.81	0.77		6.83	6.22	0.49		7.29	6.43	0.52		7.59	6.58	0.52		7.90	7.04	0.48
80 (26.7)	72 (22.2)	342	11.79	8.17	0.78	222	8.26	4.47	0.47	224	8.55	4.70	0.47	229	8.90	4.92	0.44	245	10.62	5.26	0.38
	67 (19.4)		10.69	7.53	0.78		8.11	5.28	0.48		8.88	5.63	0.50		9.02	5.78	0.48		9.63	5.18	0.41
	63 (17.2)		8.88	8.90	0.78		7.48	5.31	0.49		7.98	6.31	0.51		8.33	6.44	0.50		8.89	5.91	0.44
	57 (13.9)		8.35	9.35	0.77		6.73	6.73	0.49		7.19	7.19	0.52		7.40	7.40	0.52		7.93	7.93	0.48

Operation in the area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage / Stage 1 - Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 48



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DETAILED COOLING CAPACITIES[#]- COMFORT + DEHUMIDIFY MODE CONTINUED

24VNA925

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANB FJ003L	1.00	1.00	
FE4ANB FJ003L	0.96	0.96	
FE4ANB006L	0.98	1.07	
FE4ANF002L	0.96	0.96	
CAP**3614AL*	0.98	1.01	58CVJA.X0070 - 12
CAP**3617AL*	0.98	1.01	58CVJA.X0070 - 12
CNPH**3617AL*	0.98	1.00	58CVJA.X0070 - 12
CNPV**3617AL*	0.97	0.90	58CVJA.X0070 - 12
CNPV**3717AL*	0.98	1.00	58CVJA.X0070 - 12
CNPV**4217AL*	0.98	0.98	58CVJA.X0070 - 12
CSRH**3612AL*	1.00	1.02	58CVJA.X0070 - 12
CSRH**4212AL*	1.00	1.02	58CVJA.X0070 - 12
CAP**3617AL*	0.98	1.01	58CVJA.X0090 - 16
CAP**3621AL*	0.98	1.01	58CVJA.X0090 - 16
CAP**4221AL*	0.98	0.99	58CVJA.X0090 - 16
CNPH**3617AL*	0.98	1.01	58CVJA.X0090 - 16
CNPH**4221AL*	0.99	1.00	58CVJA.X0090 - 16
CNPV**3617AL*	0.97	0.99	58CVJA.X0090 - 16
CNPV**3621AL*	0.97	0.99	58CVJA.X0090 - 16
CNPV**3717AL*	0.98	0.98	58CVJA.X0090 - 16
CNPV**4217AL*	0.98	0.98	58CVJA.X0090 - 16
CNPH**4221AL*	0.98	0.98	58CVJA.X0090 - 16
CSRH**3612AL*	1.00	1.00	58CVJA.X0090 - 16
CSRH**4212AL*	1.01	1.01	58CVJA.X0090 - 16
CAP**3617AL*	0.98	1.02	58**N**A082V17**14
CAP**3621AL*	0.98	1.01	58**N**A082V17**14
CAP**4221AL*	0.98	1.01	58**N**A082V17**14
CNPH**3617AL*	0.98	1.11	58**N**A082V17**14
CNPH**4221AL*	0.98	1.12	58**N**A082V17**14
CNPV**3617AL*	0.94	1.02	58**N**A082V17**14
CNPV**3621AL*	0.94	1.02	58**N**A082V17**14
CNPV**3717AL*	0.98	1.00	58**N**A082V17**14
CNPV**4221AL*	0.95	1.03	58**N**A082V17**14
CSRH**3612AL*	0.99	1.02	58**N**A082V17**14
CSRH**4212AL*	1.00	1.02	58**N**A082V17**14
CAP**3617AL*	0.98	1.01	58**N**A082V17**14
CAP**3621AL*	0.98	1.01	58**N**A082V17**14
CAP**4221AL*	0.98	1.02	58**N**A082V17**14
CNPH**3617AL*	0.98	1.07	58**N**A082V17**14
CNPH**4221AL*	0.99	1.08	58**N**A082V17**14
CNPV**3617AL*	0.95	1.03	58**N**A082V17**14
CNPV**3621AL*	0.95	0.99	58**N**A082V17**14
CNPV**3717AL*	0.98	1.00	58**N**A082V17**14
CNPV**4221AL*	0.98	1.00	58**N**A082V17**14
CSRH**3612AL*	1.00	1.02	58**N**A082V17**14
CSRH**4212AL*	1.00	1.02	58**N**A082V17**14
CAP**3621AL*	0.98	1.01	58**N**A082V17**20
CAP**4221AL*	0.98	1.02	58**N**A082V17**20
CAP**4224AL*	0.99	1.02	58**N**A082V17**20

Cooling Indoor Model	2-STAGE (Hi-Stage 5, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
FACN(B FJ003L	0.94	0.96	0.99	0.94	
FACN(F002L	0.94	0.98	1.00	0.97	
CAP**2414AL*	0.94	1.02	1.00	1.12	58PHD45-08
CAP**2417AL*	0.94	1.02	1.00	1.12	58PHD45-08
CAP**3014AL*	0.95	0.99	1.00	1.11	58PHD45-08
CAP**3017AL*	0.95	0.99	1.00	1.11	58PHD45-08
CNPV**2414AL*	0.93	1.01	1.00	1.12	58PHD45-08
CNPV**2417AL*	0.93	1.01	1.00	1.12	58PHD45-08
CNPV**3014AL*	0.95	1.03	1.00	1.11	58PHD45-08
CNPV**3017AL*	0.95	1.03	1.00	1.11	58PHD45-08
CNPH**2117AL*	0.95	0.99	1.12	1.11	58PHD45-08
CAP**2414AL*	0.93	0.97	1.00	1.08	58CTW045-12
CAP**2417AL*	0.94	0.98	1.00	1.07	58CTW045-12
CAP**3014AL*	0.93	0.90	1.10	1.09	58CTW045-12
CAP**3017AL*	0.93	0.97	1.11	1.09	58CTW045-12
CNPV**2414AL*	0.93	1.01	1.00	1.07	58CTW045-12
CNPV**2417AL*	0.93	1.01	1.00	1.07	58CTW045-12
CNPV**3014AL*	0.93	1.01	1.10	1.09	58CTW045-12
CNPV**3017AL*	0.93	0.97	1.11	1.09	58CTW045-12
CNPH**2117AL*	0.94	0.98	1.12	1.06	58CTW045-12
CSRH**2412AL*	0.93	0.96	1.11	1.08	58CTW045-12
CAP**2417AL*	0.93	0.90	1.11	1.09	58CTW075-10
CAP**3017AL*	0.93	0.97	1.11	1.08	58CTW075-10
CNPH**2417AL*	0.98	1.04	1.09	1.07	58CTW075-16
CNPH**3017AL*	0.93	1.01	1.11	1.08	58CTW075-16
CNPH**3117AL*	0.95	0.99	1.12	1.08	58CTW075-16
CNPV**2417AL*	0.93	1.01	1.00	1.07	58CTW075-16
CSRH**2412AL*	0.93	0.97	1.11	1.07	58CTW075-16
CSRH**3012AL*	0.94	0.96	1.13	1.10	58CTW095-18
CSRH**3012AL*	0.95	0.99	1.14	1.12	58CTW095-18
CAP**2414AL*	0.95	1.03	1.00	1.13	58**P**A082E14**10
CAP**2417AL*	0.95	1.01	1.00	1.13	58**P**A082E14**10
CAP**3014AL*	0.94	1.02	1.07	1.12	58**P**A082E14**10
CAP**3017AL*	0.95	1.03	1.00	1.12	58**P**A082E14**10
CNPV**2414AL*	0.93	1.01	1.07	1.13	58**P**A082E14**10
CNPV**2417AL*	0.93	1.01	1.07	1.13	58**P**A082E14**10
CNPV**3014AL*	0.94	1.02	1.07	1.12	58**P**A082E14**10
CNPV**3017AL*	0.95	1.03	1.00	1.12	58**P**A082E14**10
CNPH**2117AL*	0.94	0.98	1.11	1.11	58**P**A082E14**10
CSRH**2412AL*	0.95	1.04	1.10	1.23	58**P**A082E14**10
CSRH**3012AL*	0.97	1.06	1.09	1.11	58**P**A082E14**10
CAP**2417AL*	0.93	1.01	1.07	1.12	58**P**A082E17**12
CAP**3017AL*	0.95	1.03	1.00	1.13	58**P**A082E17**12
CNPH**2417AL*	0.96	1.06	1.08	1.13	58**P**A082E17**12
CNPH**3017AL*	0.96	1.03	1.08	1.12	58**P**A082E17**12
CNPV**2117AL*	0.97	1.05	1.09	1.10	58**P**A082E17**12
CNPV**2417AL*	0.93	1.01	1.07	1.13	58**P**A082E17**12
CNPV**3017AL*	0.95	1.03	1.08	1.12	58**P**A082E17**12
CNPV**3117AL*	0.97	1.05	1.09	1.10	58**P**A082E17**12
CSRH**2412AL*	0.96	1.04	1.10	1.25	58**P**A082E17**12
CAP**2414AL*	0.94	0.98	1.09	1.10	58**P**A082E14**10
CAP**2417AL*	0.95	0.99	1.10	1.10	58**P**A082E14**10
CAP**3014AL*	0.93	0.97	1.11	1.11	58**P**A082E14**10

Cooling Indoor Model	3-STAGE (Hi-Stage 5, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
CAP**3017AL*	0.94	0.98	1.12	1.11	58**P**A082E14**12
CNPV**2414AL*	0.94	1.02	1.09	1.09	58**P**A082E14**12
CNPV**2417AL*	0.94	1.02	1.09	1.09	58**P**A082E14**12
CNPV**3014AL*	0.93	1.01	1.11	1.11	58**P**A082E14**12
CNPV**3017AL*	0.94	0.98	1.12	1.11	58**P**A082E14**12
CNPH**2117AL*	0.96	1.00	1.13	1.09	58**P**A082E14**12
CSRH**2412AL*	0.95	0.99	1.09	1.10	58**P**A082E14**12
CSRH**3012AL*	0.94	0.98	1.12	1.10	58**P**A082E14**12
CNPH**2417AL*	0.98	1.04	1.11	1.13	58**P**A082E17**14
CSRH**2412AL*	0.95	0.99	1.13	1.15	58**P**A082E17**14
CNPH**2417AL*	0.98	1.04	1.10	1.10	58**P**A082E17**16
CSRH**2412AL*	0.94	0.98	1.12	1.12	58**P**A082E17**16
CAP**2414AL*	0.93	1.00	1.07	1.17	58**P**A082E14**10
CAP**2417AL*	0.94	1.07	1.07	1.17	58**P**A082E14**10
CSRH**2412AL*	0.95	1.00	1.07	1.16	58**P**A082E14**10
CAP**3017AL*	0.95	1.00	1.07	1.15	58**P**A082E14**10
CNPV**2414AL*	0.89	1.11	1.07	1.17	58**P**A082E14**10
CNPV**2417AL*	0.93	1.11	1.07	1.17	58**P**A082E14**10
CNPV**3014AL*	0.93	1.00	1.07	1.18	58**P**A082E14**10
CNPV**3017AL*	0.95	1.00	1.07	1.15	58**P**A082E14**10
CNPH**2117AL*	0.98	1.11	1.08	1.13	58**P**A082E14**10
CSRH**2412AL*	0.95	0.98	1.07	1.17	58**P**A082E14**10
CSRH**3012AL*	0.95	0.98	1.08	1.15	58**P**A082E14**10
CAP**2417AL*	0.95	1.01	1.07	1.14	58**P**A082E17**12
CAP**3017AL*	0.93	1.01	1.07	1.13	58**P**A082E17**12
CNPH**2417AL*	0.94	1.12	1.08	1.18	58**P**A082E17**12
CNPH**3017AL*	0.93	1.06	1.07	1.13	58**P**A082E17**12
CNPV**3117AL*	0.96	1.04	1.09	1.12	58**P**A082E17**12
CNPV**2417AL*	0.92	1.04	1.07	1.14	58**P**A082E17**12
CNPV**3017AL*	0.93	1.01	1.07	1.13	58**P**A082E17**12
CNPV**3117AL*	0.96	1.04	1.09	1.12	58**P**A082E17**12
CSRH**2412AL*	0.96	1.00	1.10	1.23	58**P**A082E17**12
CSRH**3012AL*	0.98	1.01	1.08	1.13	58**P**A082E17**12
CNPH**2417AL*	0.98	1.09	1.10	1.17	58**P**A082E17**14
CSRH**2412AL*	0.97	1.05	1.10	1.18	58**P**A082E17**14

See notes on page 49



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DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

cond °F (°C)	EVAP AIR °F (°C)	SYSTEMS - PEAK/POOR Control + Dehumidify Mode Condenser Entering Air Temperature °F (°C)																			
		95 (35.0)			96 (35.6)			97 (35.9)			98 (36.7)			99 (37.2)							
		ID SCFM	Capacity MBtuh Total / Sens	Total Tons kW	ID SCFM	Capacity MBtuh Total / Sens	Total Tons kW	ID SCFM	Capacity MBtuh Total / Sens	Total Tons kW	ID SCFM	Capacity MBtuh Total / Sens	Total Tons kW	ID SCFM	Capacity MBtuh Total / Sens	Total Tons kW					
STAGE 1																					
75 (23.9)	72 (22.2)	812	35.03	14.21	3.80	812	30.72	14.31	3.28	848	33.87	15.73	3.81	887	41.14	16.67	2.38	948	43.43	17.21	1.97
	67 (19.4)		32.03	18.10	3.78		33.60	18.07	3.26		35.70	19.98	3.81		37.69	21.10	2.26		39.83	22.35	2.00
	63 (17.2)		29.70	21.12	3.72		31.34	21.94	3.29		33.25	23.22	3.80		35.10	24.53	2.40		37.11	26.09	2.02
	57 (13.9)		25.08	25.51	3.66		25.08	28.39	3.19		29.78	27.82	3.78		31.48	29.00	2.40		33.35	31.47	2.04
80 (26.7)	72 (22.2)	812	34.00	17.00	3.79	812	36.85	18.72	3.29	848	38.82	19.91	3.81	887	40.98	20.02	2.37	948	43.26	22.13	1.97
	67 (19.4)		31.95	21.03	3.75		33.60	22.84	3.26		35.41	23.93	3.81		37.60	25.30	2.29		39.72	26.91	2.00
	63 (17.2)		29.73	24.84	3.72		31.29	25.70	3.29		33.16	27.18	3.80		35.04	28.72	2.39		37.04	30.81	2.02
	57 (13.9)		27.71	27.71	3.68		28.99	28.98	3.20		30.66	30.88	3.78		32.41	32.41	2.40		34.42	34.42	2.04
STAGE 1																					
75 (23.9)	72 (22.2)	560	21.74	8.83	1.80	560	22.72	9.22	1.82	600	24.20	9.82	1.87	620	25.81	10.39	1.30	664	27.10	11.00	1.29
	67 (19.4)		18.76	11.28	1.80		20.72	11.74	1.84		22.09	12.54	1.89		23.98	13.27	1.33		24.77	14.10	1.14
	63 (17.2)		16.09	13.00	1.80		19.22	13.70	1.82		20.61	14.88	1.90		21.73	15.81	1.35		23.02	16.51	1.18
	57 (13.9)		14.27	16.00	1.78		17.20	16.00	1.80		18.42	17.76	1.81		19.53	18.80	1.37		20.70	20.04	1.21
80 (26.7)	72 (22.2)	560	21.85	11.25	1.88	560	22.82	11.87	1.82	600	24.08	12.45	1.87	620	25.48	13.17	1.29	664	26.96	13.99	1.09
	67 (19.4)		19.70	13.09	1.80		20.80	14.18	1.83		22.03	15.13	1.89		23.30	16.03	1.33		24.59	17.07	1.14
	63 (17.2)		18.20	16.00	1.80		19.20	16.13	1.82		20.48	17.28	1.90		21.70	18.27	1.35		22.99	19.47	1.17
	57 (13.9)		17.18	17.18	1.80		17.98	17.98	1.82		19.20	19.20	1.90		20.24	20.24	1.38		21.61	21.61	1.20
STAGE 1 - PEAK/POOR ONLY																					
75 (23.9)	72 (22.2)	417	14.50	5.90	0.89	250	3.48	3.04	0.49	250	10.07	4.08	0.69	250	10.88	4.32	0.45	287	11.47	4.65	0.38
	67 (19.4)		12.17	7.38	1.00		8.59	4.79	0.50		9.13	5.04	0.52		9.69	5.30	0.49		10.39	5.71	0.41
	63 (17.2)		12.18	8.91	1.00		7.92	5.93	0.81		8.42	6.80	0.53		8.92	8.07	0.51		9.60	6.55	0.45
	57 (13.9)		10.00	10.84	1.21		7.00	6.81	0.52		7.98	6.90	0.55		7.91	7.19	0.54		8.52	7.77	0.49
80 (26.7)	72 (22.2)	417	14.44	7.87	0.89	250	3.44	4.79	0.49	250	10.00	5.04	0.49	250	10.80	5.30	0.45	287	11.43	5.71	0.35
	67 (19.4)		12.13	9.25	1.00		8.66	5.73	0.80		9.14	6.01	0.52		9.64	6.29	0.49		10.36	6.79	0.41
	63 (17.2)		12.16	10.56	1.00		7.91	6.47	0.81		8.81	6.70	0.52		8.91	7.05	0.51		9.58	7.61	0.45
	57 (13.9)		11.52	11.52	1.21		7.26	7.26	0.52		7.64	7.64	0.54		8.03	8.03	0.54		8.60	8.60	0.48
STAGE 1 - ALL OTHER INDOOR COMBINATIONS																					
75 (23.9)	72 (22.2)	417	14.50	6.90	0.89	226	3.25	3.79	0.49	222	9.88	4.01	0.50	246	10.62	4.30	0.45	267	11.47	4.65	0.38
	67 (19.4)		12.17	7.38	1.00		3.46	4.65	0.50		9.94	4.90	0.52		9.62	5.27	0.49		10.39	5.71	0.41
	63 (17.2)		12.18	8.91	1.00		7.80	5.97	0.81		8.26	6.89	0.53		8.88	8.00	0.51		9.60	6.55	0.45
	57 (13.9)		10.99	10.84	1.21		6.91	6.89	0.52		7.80	6.80	0.55		7.87	7.12	0.54		8.52	7.77	0.49
80 (26.7)	72 (22.2)	417	14.44	7.87	0.89	226	3.21	4.65	0.49	222	9.94	4.90	0.50	246	10.66	5.27	0.45	267	11.43	5.71	0.35
	67 (19.4)		12.13	9.25	1.00		3.44	5.57	0.50		9.92	5.79	0.52		9.60	6.23	0.49		10.36	6.79	0.41
	63 (17.2)		12.16	10.56	1.00		7.79	6.28	0.81		8.23	6.88	0.53		8.87	6.98	0.51		9.58	7.61	0.45
	57 (13.9)		11.52	11.52	1.21		7.08	7.08	0.52		7.89	7.89	0.55		7.97	7.97	0.54		8.60	8.60	0.48

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage.
Stage 1 - Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 48



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DETAILED COOLING CAPACITIES* - COMFORT + DEHUMIDIFY MODE CONTINUED

24VNA935

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANB F003L	1.09	1.00	
FE4ANB F003L	0.97	0.97	
FE4ANB006L	0.99	0.99	
FE4ANF002L	0.95	1.01	
CAP**3614AL*	0.99	1.03	58CWA X070-12
CSPH**3612AL*	0.99	1.03	58CWA X070-12
CSPH**4212AL*	0.99	1.03	58CWA X070-12
CAP**3617AL*	0.99	0.98	58CWA X090-16
CAP**4617AL*	0.99	0.98	58CWA X090-16
CNPV**3617AL*	0.95	1.00	58CWA X090-16
CNPV**3617AL*	0.95	1.00	58CWA X090-16
CNPV**3717AL*	0.97	0.97	58CWA X090-16
CNPV**4217AL*	0.97	0.97	58CWA X090-16
CNPV**4221AL*	0.97	1.01	58CWA X090-16
CNPV**4821AL*	0.99	0.98	58CWA X090-16
CSPH**3612AL*	0.99	0.98	58CWA X090-16
CSPH**4212AL*	0.99	0.98	58CWA X090-16
CAP**3617AL*	0.97	1.02	59**N**A060V17**14
CAP**4617AL*	0.99	1.03	59**N**A060V17**14
CNPV**3617AL*	0.95	1.03	59**N**A060V17**14
CNPV**3717AL*	0.95	1.03	59**N**A060V17**14
CNPV**4217AL*	0.95	1.00	59**N**A060V17**14
CNPV**4221AL*	0.95	1.05	59**N**A060V17**14
CNPV**4821AL*	0.97	1.02	59**N**A060V17**14
CSPH**3612AL*	0.97	1.02	59**N**A060V17**14
CSPH**4212AL*	0.96	1.03	59**N**A060V17**14
CSPH**4612AL*	0.99	1.03	59**N**A060V17**14
CAP**3617AL*	0.96	1.03	59**N**A060V17**14
CAP**4617AL*	0.96	1.03	59**N**A060V17**14
CNPV**3617AL*	0.95	1.03	59**N**A060V17**14
CNPV**3617AL*	0.95	1.03	59**N**A060V17**14
CNPV**3717AL*	0.97	1.02	59**N**A060V17**14
CNPV**4217AL*	0.96	1.01	59**N**A060V17**14
CNPV**4221AL*	0.95	1.00	59**N**A060V17**14
CNPV**4821AL*	0.97	1.02	59**N**A060V17**14
CSPH**3612AL*	0.96	1.03	59**N**A060V17**14
CSPH**4212AL*	0.96	1.03	59**N**A060V17**14
CSPH**4612AL*	0.99	1.03	59**N**A060V17**14
CAP**3621AL*	0.99	1.03	59**N**A060V21**20
CAP**4221AL*	0.97	1.01	59**N**A060V21**20
CAP**4821AL*	0.98	0.98	59**N**A060V21**20
CNPV**4221AL*	0.96	1.01	59**N**A060V21**20
CNPV**4324AL*	0.96	1.01	59**N**A060V21**20
CNPV**4621AL*	0.97	0.97	59**N**A060V21**20
CNPV**4821AL*	0.95	1.00	59**N**A060V21**20
CNPV**4821AL*	0.95	1.00	59**N**A060V21**20
CNPV**4824AL*	0.98	1.01	59**N**A060V21**20
CNPV**4824AL*	0.98	1.01	59**N**A060V21**20
CSPH**3612AL*	0.95	0.99	59**N**A060V21**20
CSPH**4212AL*	0.96	0.98	59**N**A060V21**20
CSPH**4612AL*	0.99	0.99	59**N**A060V21**20
CAP**3621AL*	0.99	0.99	59**N**A060V21**20
CAP**4221AL*	0.99	1.03	59**N**A060V21**20
CAP**4821AL*	0.99	1.03	59**N**A060V21**20
CNPV**3617AL*	0.97	1.01	59**N**A060V21**20

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CAP**4821AL*	0.98	1.03	59**N**A060V21**20
CNPV**4221AL*	0.96	1.08	59**N**A060V21**20
CNPV**4324AL*	0.96	1.08	59**N**A060V21**20
CNPV**4621AL*	0.96	1.03	59**N**A060V21**20
CNPV**4821AL*	0.97	1.02	59**N**A060V21**20
CNPV**4821AL*	0.95	1.00	59**N**A060V21**20
CNPV**4821AL*	0.95	1.00	59**N**A060V21**20
CNPV**4821AL*	0.96	1.01	59**N**A060V21**20
CNPV**4324AL*	0.96	1.03	59**N**A060V21**20
CNPV**4821AL*	0.97	1.01	59**N**A060V21**20
CNPV**4821AL*	0.97	1.02	59**N**A060V21**20
CNPV**4824AL*	0.97	1.02	59**N**A060V21**20
CSPH**3612AL*	0.98	1.03	59**N**A060V21**20
CSPH**4212AL*	0.98	1.03	59**N**A060V21**20
CSPH**4612AL*	0.98	1.03	59**N**A060V21**20
CNPV**4821AL*	0.98	1.03	59**N**A060V21**20

2-STAGE (Hi-Stage 5, Lo-Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
FV4CMB F003L	0.97	0.97	1.01	1.08	
FV4CNF002L	0.97	1.01	0.99	1.08	
CAP**3614AL*	0.96	1.05	0.97	1.00	58PH**045-08
CAP**3617AL*	0.97	1.07	0.97	1.06	58PH**045-08
CAP**3617AL*	0.95	1.01	0.97	1.07	58CTW045-12
CAP**3617AL*	0.97	1.01	0.97	1.06	58CTW045-12
CAP**3617AL*	0.97	1.02	0.96	1.05	58CTW070-16
CAP**3621AL*	0.97	1.02	0.96	1.04	58CTW070-16
CAP**4221AL*	0.98	1.03	0.99	1.05	58CTW070-16
CNPV**3617AL*	0.97	1.01	0.97	1.00	58CTW070-16
CNPV**3617AL*	0.97	1.01	0.97	1.00	58CTW070-16
CNPV**3717AL*	1.01	1.01	1.00	1.03	58CTW070-16
CNPV**4217AL*	0.99	1.04	0.99	1.05	58CTW070-16
CAP**3621AL*	0.97	0.97	0.96	1.02	58CTW080-16
CAP**4221AL*	0.98	0.98	0.99	1.03	58CTW080-16
CNPV**4221AL*	0.98	0.99	0.99	1.03	58CTW080-16
CNPV**4321AL*	1.01	1.01	1.01	1.01	58CTW080-16
CNPV**3621AL*	0.97	1.01	0.97	1.03	58CTW080-16
CNPV**4221AL*	0.99	0.99	0.98	1.03	58CTW080-16
CNPV**4221AL*	0.98	0.98	0.98	1.00	58CTW110-20
CNPV**4321AL*	1.01	1.01	1.01	0.99	58CTW110-20
CNPV**3621AL*	0.97	0.97	0.97	1.02	58CTW110-20
CNPV**4221AL*	0.98	0.98	0.98	1.00	58CTW110-20
CNPV**4324AL*	1.02	0.97	1.01	0.95	58CTW135-22
CAP**3617AL*	0.96	1.06	0.97	1.12	59**P**A060E17**12
CAP**3621AL*	0.96	1.06	0.97	1.11	59**P**A060E17**12
CAP**4221AL*	0.97	1.07	0.97	1.10	59**P**A060E17**12
CNPV**3617AL*	0.95	1.05	0.95	1.11	59**P**A060E17**12
CNPV**3717AL*	1.00	1.06	0.99	1.09	59**P**A060E17**12
CNPV**4217AL*	0.98	1.06	0.98	1.11	59**P**A060E17**12
CSPH**3612AL*	0.98	1.06	0.98	1.10	59**P**A060E17**12
CAP**3614AL*	0.97	1.01	0.98	1.09	59**P**A060E14**12
CAP**3617AL*	0.97	1.01	0.98	1.07	59**P**A060E14**12
CSPH**3612AL*	0.99	1.04	0.99	1.08	59**P**A060E14**12
CAP**3617AL*	0.97	1.03	0.98	1.05	59**P**A060E17**14
CAP**3621AL*	0.97	1.02	0.98	1.04	59**P**A060E17**14
CAP**4221AL*	0.96	0.98	0.95	1.04	59**P**A060E17**14
CNPV**3617AL*	0.97	1.01	0.97	1.05	59**P**A060E17**14

Cooling Indoor Model	2-STAGE (Hi-Stage 5, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
CNPV**3617AL*	0.97	1.01	0.97	1.05	59**P**A060E17**14
CNPV**3717AL*	1.01	1.01	1.00	1.02	59**P**A060E17**14
CNPV**4217AL*	0.99	0.99	0.99	1.04	59**P**A060E17**14
CSPH**3612AL*	0.99	0.99	0.99	1.04	59**P**A060E17**14
CAP**3617AL*	0.97	1.02	0.98	1.05	59**P**A060E17**14
CAP**3621AL*	0.98	0.98	0.98	1.04	59**P**A060E17**14
CAP**4221AL*	0.98	0.98	0.98	1.04	59**P**A060E17**14
CNPV**3617AL*	0.97	1.01	0.97	1.04	59**P**A060E17**14
CNPV**3617AL*	0.97	1.01	0.97	1.04	59**P**A060E17**14
CNPV**3717AL*	1.01	1.01	1.00	1.02	59**P**A060E17**14
CNPV**4217AL*	0.99	0.99	0.99	1.04	59**P**A060E17**14
CAP**3617AL*	0.98	1.12	0.98	1.10	59**P**A060E17**12
CAP**3621AL*	0.98	1.12	0.98	1.09	59**P**A060E17**12
CAP**4221AL*	0.97	1.13	0.96	1.09	59**P**A060E17**12
CNPV**3617AL*	0.95	1.11	0.95	1.09	59**P**A060E17**12
CNPV**3617AL*	0.95	1.11	0.95	1.09	59**P**A060E17**12
CNPV**3717AL*	1.00	1.11	0.99	1.07	59**P**A060E17**12
CNPV**4217AL*	0.98	1.08	0.97	1.09	59**P**A060E17**12
CAP**3614AL*	0.95	1.11	0.98	1.12	59**P**A060E14**12
CAP**3617AL*	0.96	1.12	0.97	1.13	59**P**A060E14**12
CAP**3617AL*	0.97	1.01	0.97	1.06	59**P**A060E17**14
CAP**3621AL*	0.97	1.01	0.97	1.06	59**P**A060E17**14
CAP**4221AL*	0.97	1.02	0.98	1.08	59**P**A060E17**14
CNPV**3617AL*	0.96	1.01	0.97	1.07	59**P**A060E17**14
CNPV**3717AL*	1.00	1.05	0.99	1.04	59**P**A060E17**14
CNPV**4217AL*	0.98	1.03	0.98	1.08	59**P**A060E17**14

See notes on page 48



DETAILED COOLING CAPACITIES[®] - COMFORT + DEHUMIDIFY MODE CONTINUED

DB _{in} °F (°C)	ENR AIR	DAVITA [®] / FEARNBOLD Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)																			
		104 (40.2)					96 (35)			88 (31.1)			79 (26.1)			65 (18.3)					
		ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens	Total Dts KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens	Total Dts KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens	Total Dts KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens	Total Dts KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens	Total Dts KW
STAGE 3																					
75 (23.9)	72 (21.7)	812	30.81	13.88	2.98	812	30.81	14.41	2.91	848	37.87	15.08	2.15	888	40.27	16.34	1.91	948	42.88	17.40	1.91
	67 (19.9)		30.54	17.50	2.94		32.25	18.30	2.50		34.42	19.52	2.15		35.82	21.75	1.93		38.24	22.10	1.59
	63 (17.2)		29.28	20.04	2.93		29.88	21.40	2.49		31.80	22.77	2.13		33.91	24.19	1.94		36.07	24.84	1.55
	57 (13.9)		25.28	24.04	2.90		26.74	25.80	2.47		28.50	27.52	2.15		30.29	29.23	1.95		32.24	31.20	1.58
80 (26.7)	72 (21.7)	812	29.61	17.48	2.98	812	30.42	18.30	2.91	848	37.77	18.48	2.15	888	40.17	20.72	1.91	948	42.74	22.14	1.91
	67 (19.9)		30.47	21.31	2.94		32.21	22.18	2.50		34.35	23.58	2.15		36.52	25.07	1.93		38.88	26.84	1.59
	63 (17.2)		28.24	24.31	2.93		29.07	25.23	2.49		31.86	26.85	2.15		33.83	28.51	1.94		36.02	30.22	1.55
	57 (13.9)		25.63	28.83	2.91		27.04	27.84	2.48		29.75	29.75	2.15		31.81	31.81	1.94		33.74	33.74	1.57
STAGE 3																					
75 (23.9)	72 (21.7)	585	22.54	9.20	2.95	585	24.28	8.89	1.72	600	25.88	12.57	1.47	625	27.88	11.27	1.23	660	30.72	12.04	1.01
	67 (19.9)		20.87	11.88	2.87		21.68	13.30	1.74		23.80	13.23	1.50		25.18	14.12	1.28		26.87	15.10	1.07
	63 (17.2)		19.38	13.58	2.98		20.08	14.24	1.75		21.70	15.33	1.53		23.23	16.20	1.31		24.81	17.51	1.11
	57 (13.9)		17.32	16.42	2.85		18.12	17.12	1.77		19.44	18.42	1.55		20.71	19.81	1.34		22.12	21.08	1.19
80 (26.7)	72 (21.7)	585	22.78	11.70	2.95	585	24.23	12.32	1.72	600	26.03	13.26	1.47	625	27.76	14.13	1.23	660	30.84	15.14	1.01
	67 (19.9)		20.82	14.71	2.87		21.88	14.77	1.74		23.55	15.80	1.52		25.10	16.83	1.28		26.81	18.18	1.07
	63 (17.2)		19.28	16.89	2.98		20.27	18.70	1.73		21.75	17.90	1.52		23.20	18.14	1.31		24.77	20.57	1.11
	57 (13.9)		17.74	19.76	2.88		18.78	19.72	1.78		20.14	20.14	1.54		21.44	21.44	1.33		22.97	22.97	1.14
STAGE 1 - FEARNBOLD ONLY																					
75 (23.9)	72 (21.7)	800	18.14	7.28	1.70	500	14.83	6.00	0.87	500	15.60	6.61	0.70	600	16.75	6.83	0.87	660	17.81	7.24	0.84
	67 (19.9)		16.41	8.34	1.72		12.27	7.00	0.91		14.22	8.08	0.78		15.17	8.89	0.85		16.11	9.29	0.90
	63 (17.2)		15.18	10.91	1.74		12.27	8.38	0.93		13.14	8.88	0.80		14.21	10.41	0.88		14.95	10.91	0.94
	57 (13.9)		13.54	13.23	1.75		11.20	11.20	0.88		11.20	11.20	0.83		12.81	12.81	0.71		13.31	13.28	0.93
80 (26.7)	72 (21.7)	500	18.02	8.36	1.70	500	14.98	7.89	0.87	500	15.68	8.38	0.70	600	16.70	8.80	0.87	660	17.75	9.31	0.84
	67 (19.9)		16.37	11.36	1.72		12.23	8.18	0.91		14.19	10.33	0.78		15.12	11.82	0.85		16.07	11.94	0.90
	63 (17.2)		15.14	13.88	1.74		12.28	11.27	0.93		13.13	11.89	0.83		14.20	13.28	0.88		14.97	13.28	0.94
	57 (13.9)		13.21	16.21	1.74		11.20	11.88	0.94		12.02	12.92	0.81		13.26	13.26	0.69		14.00	14.00	0.97
STAGE 1 - ALL OTHER INDOOR COMBINATIONS																					
75 (23.9)	72 (21.7)	417	17.35	7.14	1.70	238	12.57	4.88	0.82	232	12.74	5.27	0.70	245	13.77	5.88	0.85	267	14.86	6.17	0.82
	67 (19.9)		15.72	8.88	1.72		10.91	5.85	0.83		11.91	6.14	0.82		12.43	6.88	0.70		13.53	7.24	0.87
	63 (17.2)		14.55	9.38	1.73		10.07	6.52	0.87		10.83	6.89	0.85		11.49	7.40	0.73		12.48	8.08	0.81
	57 (13.9)		12.84	11.81	1.74		8.98	7.52	0.89		9.45	7.84	0.87		10.21	8.30	0.78		11.10	9.31	0.83
80 (26.7)	72 (21.7)	417	17.34	8.70	1.70	238	12.84	5.88	0.82	232	12.71	6.17	0.70	244	13.75	6.88	0.88	267	14.85	7.27	0.82
	67 (19.9)		15.88	10.34	1.72		10.89	6.73	0.85		11.49	7.05	0.83		12.43	7.60	0.70		13.51	8.33	0.87
	63 (17.2)		14.63	11.80	1.72		10.05	7.42	0.87		10.81	7.79	0.85		11.47	8.88	0.73		12.47	9.17	0.81
	57 (13.9)		13.22	13.32	1.74		8.95	8.42	0.88		9.44	8.73	0.87		10.21	9.47	0.78		11.08	10.45	0.83

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage
Stage 1 - Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 48



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DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

24VNA937

2-STAGE (H-Stage 5, Lo-Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CSRH*4612AL*	0.99	1.03	0.96	1.07	58CTW045-12
CAP**4617AL*	0.95	1.01	0.97	1.09	58CTW075-15
CAP**4817AL*	0.98	1.04	0.98	1.04	58CTW075-16
CNPH**3617AL*	0.95	1.03	0.96	1.08	58CTW075-16
CNPH**3617AL*	0.95	1.02	0.96	1.08	58CTW075-19
CNPH**3717AL*	0.99	1.04	0.99	1.08	58CTW075-15
CNPH**4217AL*	0.97	1.03	0.98	1.07	58CTW075-16
CSRH**3612AL*	0.98	1.03	0.96	1.07	58CTW075-16
CSRH**4212AL*	0.96	1.04	0.96	1.06	58CTW075-16
CSRH**4812AL*	0.95	1.04	0.98	1.05	58CTW075-16
CAP**3621AL*	0.96	1.01	0.97	1.04	58CTW090-16
CAP**4221AL*	0.98	0.99	0.98	1.04	58CTW090-16
CAP**4621AL*	0.98	1.01	0.98	1.03	58CTW090-16
CNPH**4221AL*	0.96	1.01	0.97	1.09	58CTW090-16
CNPH**4821AL*	0.99	1.02	0.99	1.03	58CTW090-16
CNPH**4821AL*	0.96	1.01	0.99	1.03	58CTW090-16
CNPH**3621AL*	0.95	1.00	0.95	1.06	58CTW090-16
CNPH**4221AL*	0.96	1.01	0.97	1.05	58CTW090-16
CNPH**4821AL*	0.98	1.01	0.98	1.03	58CTW090-16
CAP**4821AL*	0.98	1.01	0.98	1.03	58CTW090-16
CSRH**3612AL*	0.97	1.00	0.98	1.04	58CTW090-16
CSRH**4212AL*	0.96	1.01	0.98	1.04	58CTW090-16
CSRH**4812AL*	0.95	1.01	0.98	1.03	58CTW090-16
CAP**3621AL*	0.96	0.99	0.97	1.03	58CTW110-22
CAP**4221AL*	0.95	0.99	0.99	1.03	58CTW110-22
CAP**4621AL*	0.98	1.01	0.98	1.03	58CTW110-22
CNPH**4221AL*	0.98	0.99	0.97	1.04	58CTW110-22
CNPH**4821AL*	0.99	1.00	0.99	1.01	58CTW110-22
CNPH**4821AL*	0.96	1.01	0.99	1.07	58CTW110-22
CNPH**3621AL*	0.95	1.01	0.95	1.04	58CTW110-22
CNPH**4221AL*	0.96	0.98	0.97	1.04	58CTW110-22
CNPH**4821AL*	0.98	1.01	0.98	1.01	58CTW110-22
CAP**4621AL*	0.95	1.01	0.99	1.07	58CTW110-22
CSRH**3612AL*	0.96	1.01	0.95	1.05	58CTW110-22
CSRH**4212AL*	0.98	1.01	0.98	1.03	58CTW110-22
CSRH**4812AL*	0.95	1.01	0.98	1.02	58CTW110-22
CAP**4224AL*	0.96	0.99	0.99	1.00	58CTW135-22
CAP**4624AL*	0.95	1.01	0.98	1.05	58CTW135-22
CNPH**4324AL*	0.99	0.99	1.00	1.01	58CTW135-22
CNPH**4624AL*	0.98	1.01	0.98	1.00	58CTW135-22
CSRH**3612AL*	0.97	1.00	0.98	1.04	58CTW135-22
CSRH**4212AL*	0.96	1.01	0.95	1.05	58CTW135-22
CSRH**4812AL*	0.96	1.01	0.98	1.00	58CTW135-22
CSRH**4812AL*	0.95	1.04	0.99	1.09	58CTW135-22
CAP**3617AL*	0.95	1.01	0.95	1.06	58PTA090E17**14
CAP**4817AL*	0.96	1.01	0.99	1.05	58PTA090E17**14
CNPH**3617AL*	0.95	1.01	0.96	1.07	58PTA090E17**14
CAP**3617AL*	0.95	1.00	0.96	1.07	58PTA090E17**14
CNPH**3717AL*	0.99	1.02	0.99	1.05	58PTA090E17**14
CNPH**4217AL*	0.97	1.03	0.99	1.06	58PTA090E17**14
CSRH**4812AL*	0.96	1.01	0.95	1.05	58PTA090E17**14
CAP**3617AL*	0.95	1.01	0.96	1.06	58PTA090E17**18
CNPH**3617AL*	0.95	1.00	0.96	1.07	58PTA090E17**18
CAP**3717AL*	0.99	1.02	0.99	1.05	58PTA090E17**18
CAP**4217AL*	0.97	1.03	0.98	1.06	58PTA090E17**18

2-STAGE (H-Stage 5, Lo-Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CSRH**3612AL*	0.98	1.01	0.98	1.09	58PTA090E17**18
CSRH**4812AL*	0.98	1.01	0.99	1.05	58PTA090E17**18
CAP**4817AL*	0.98	1.03	0.98	1.09	58PTA090E17**14
CNPH**3717AL*	0.98	1.04	0.99	1.07	58PTA090E17**14
CSRH**3612AL*	0.97	1.03	0.97	1.09	58PTA090E17**14
CSRH**4212AL*	0.98	1.03	0.99	1.09	58PTA090E17**14
CSRH**4812AL*	0.98	1.03	0.99	1.07	58PTA090E17**14
CAP**4817AL*	0.98	1.03	0.98	1.13	58PTA090E17**14
CNPH**3717AL*	0.99	1.05	0.99	1.13	58PTA090E17**14
CSRH**4212AL*	0.97	1.03	0.99	1.14	58PTA090E17**14
CSRH**4212AL*	0.97	1.03	0.99	1.14	58PTA090E17**14
CSRH**4812AL*	0.98	1.03	0.98	1.13	58PTA090E17**14
CAP**4817AL*	0.98	1.03	0.98	1.11	58PTA090E17**18
CNPH**3717AL*	0.98	1.04	0.99	1.11	58PTA090E17**18
CNPH**4217AL*	0.98	1.02	0.98	1.12	58PTA090E17**18
CSRH**4212AL*	0.99	1.00	0.99	1.12	58PTA090E17**18
CSRH**4212AL*	0.98	1.03	0.98	1.12	58PTA090E17**18
CSRH**4812AL*	0.98	1.04	0.99	1.11	58PTA090E17**18
CAP**3621AL*	0.95	1.01	0.98	1.09	58PTA090E21**20
CAP**4221AL*	0.95	1.01	0.98	1.09	58PTA090E21**20
CAP**4821AL*	0.97	1.00	0.99	1.09	58PTA090E21**20
CNPH**4221AL*	0.96	1.02	0.98	1.10	58PTA090E21**20
CNPH**4821AL*	0.99	1.00	1.00	1.07	58PTA090E21**20
CNPH**4821AL*	0.98	1.01	0.99	1.08	58PTA090E21**20
CNPH**3621AL*	0.95	1.01	0.97	1.10	58PTA090E21**20
CNPH**4221AL*	0.96	1.00	0.98	1.10	58PTA090E21**20
CNPH**4821AL*	0.98	1.01	0.99	1.08	58PTA090E21**20
CAP**3621AL*	0.95	1.01	0.98	1.09	58PTA090E21**20
CAP**4221AL*	0.96	1.01	0.98	1.09	58PTA090E21**20
CAP**4821AL*	0.97	1.00	0.99	1.09	58PTA090E21**20
CNPH**4821AL*	0.98	1.01	0.99	1.09	58PTA090E21**20
CAP**4621AL*	0.95	1.01	0.98	1.10	58PTA100E21**20
CAP**4221AL*	0.96	0.99	0.98	1.10	58PTA100E21**20
CAP**4821AL*	0.97	1.00	0.99	1.09	58PTA100E21**20
CNPH**4221AL*	0.96	1.00	0.98	1.09	58PTA100E21**20
CNPH**4821AL*	0.98	1.01	0.99	1.08	58PTA100E21**20
CNPH**4821AL*	0.96	1.01	0.99	1.08	58PTA100E21**20
CNPH**3621AL*	0.95	1.01	0.97	1.10	58PTA100E21**20
CNPH**4221AL*	0.96	1.00	0.98	1.09	58PTA100E21**20
CNPH**4821AL*	0.98	1.01	0.99	1.08	58PTA100E21**20
CSRH**4812AL*	0.96	1.01	0.99	1.08	58PTA100E21**20
CAP**4824AL*	0.96	1.02	0.98	1.08	58PTA100E21**20
CAP**4824AL*	0.98	1.01	0.98	1.07	58PTA100E21**20
CNPH**4324AL*	0.99	1.00	1.01	1.07	58PTA100E21**20
CNPH**4624AL*	0.98	1.01	0.99	1.08	58PTA100E21**20
CSRH**4812AL*	0.98	1.01	1.00	1.08	58PTA100E21**20

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DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

DBW T (°C)	EVAR AIR T (°C)	24VNA448 / FE48NB006 Comfort + Dehumidify Mode Condenser Entering Air Temperature - T (°C)																			
		105 (40.5)			85 (30)			65 (25.4)			75 (23.9)			85 (30.2)							
		ID SCFM	Capacity MBRuh Total Demand	Total Sys. KW	ID SCFM	Capacity MBRuh Total Demand	Total Sys. KW	ID SCFM	Capacity MBRuh Total Demand	Total Sys. KW	ID SCFM	Capacity MBRuh Total Demand	Total Sys. KW	ID SCFM	Capacity MBRuh Total Demand	Total Sys. KW					
STAGE 5																					
75 (23.9)	72 (22.2)	1130	48.42	18.85	4.71	1184	49.50	20.22	4.17	1247	50.00	21.57	3.65	1330	56.46	22.36	3.19	1326	56.44	23.68	2.67
	67 (19.4)		42.40	24.08	4.63		45.50	25.89	4.11		48.51	27.62	3.61		51.61	29.50	3.17		52.38	28.85	2.67
	65 (17.2)		39.08	28.15	4.57		42.27	30.30	4.35		45.08	32.33	3.58		47.99	34.60	3.10		49.62	34.64	2.86
	62 (13.9)		35.01	34.00	4.47		37.54	36.72	3.38		40.46	39.19	3.53		43.14	41.99	3.12		44.52	41.65	2.64
80 (26.7)	72 (22.2)	1130	46.28	23.95	4.71	1184	49.62	25.75	4.16	1247	52.80	27.49	3.65	1330	56.25	28.32	3.19	1326	56.25	29.66	2.67
	67 (19.4)		42.28	29.13	4.63		45.38	31.35	4.10		48.38	33.46	3.61		51.47	35.79	3.17		52.36	35.77	2.67
	65 (17.2)		39.01	33.18	4.57		42.20	36.74	4.36		45.01	38.14	3.58		47.91	40.67	3.15		49.54	40.54	2.66
	62 (13.9)		36.60	38.80	4.51		39.58	43.58	4.21		42.24	42.24	3.55		45.10	45.10	3.13		46.78	43.78	2.85
STAGE 3																					
75 (23.9)	72 (22.2)	744	29.62	12.02	2.44	801	31.87	12.96	2.15	842	34.08	13.86	1.81	887	36.31	14.77	1.68	1001	36.98	15.92	1.42
	67 (19.4)		26.97	16.81	2.44		29.06	16.58	2.15		31.09	17.89	1.82		33.14	19.09	1.68		35.39	20.85	1.46
	65 (17.2)		24.98	18.04	2.43		26.95	19.58	2.15		28.84	20.06	1.82		30.75	22.40	1.70		32.06	24.69	1.49
	62 (13.9)		22.03	21.88	2.41		24.13	23.80	2.14		25.84	25.46	1.82		27.58	27.24	1.71		29.32	29.52	1.51
80 (26.7)	72 (22.2)	744	28.81	16.29	2.44	801	31.74	16.85	2.15	842	33.90	17.78	1.81	887	36.13	18.69	1.68	1001	36.77	20.72	1.42
	67 (19.4)		26.80	18.70	2.44		28.88	20.28	2.15		31.00	21.72	1.82		33.04	23.21	1.68		35.47	25.60	1.46
	65 (17.2)		24.40	20.97	4.20		26.80	23.17	2.15		28.79	24.81	1.82		30.70	26.03	1.70		32.02	28.42	1.49
	62 (13.9)		20.79	25.76	4.10		23.27	32.41	3.78		25.77	34.73	3.48		28.24	37.17	3.15		31.88	41.28	2.88
STAGE 1 - FE48NB006 ONLY																					
75 (23.9)	72 (22.2)	662	25.60	10.40	1.99	800	18.27	7.44	0.93	860	19.44	7.91	0.83	906	20.67	8.39	0.71	934	22.04	8.96	0.56
	67 (19.4)		23.27	13.21	1.99		16.64	9.65	0.95		17.72	10.17	0.86		18.84	10.76	0.75		20.11	11.51	0.61
	65 (17.2)		21.53	15.58	1.99		15.45	11.39	0.97		16.46	11.95	0.88		17.49	12.62	0.77		18.66	13.53	0.65
	62 (13.9)		19.28	18.92	1.98		13.90	13.30	0.96		14.76	14.58	0.90		15.69	15.35	0.81		16.77	16.48	0.70
80 (26.7)	72 (22.2)	662	25.60	10.40	1.99	800	18.26	7.44	0.93	860	19.44	7.91	0.83	906	20.67	8.39	0.71	934	22.04	8.96	0.56
	67 (19.4)		23.27	13.21	1.99		16.64	9.65	0.95		17.72	10.17	0.86		18.84	10.76	0.75		20.11	11.51	0.61
	65 (17.2)		21.53	15.58	1.99		15.45	11.39	0.97		16.46	11.95	0.88		17.49	12.62	0.77		18.66	13.53	0.65
	62 (13.9)		19.28	18.92	1.98		13.90	13.30	0.96		14.76	14.58	0.90		15.69	15.35	0.81		16.77	16.48	0.70
STAGE 1 - ALL OTHER COILS																					
75 (23.9)	72 (22.2)	662	25.60	10.40	1.99	867	17.95	7.29	0.93	882	19.30	7.84	0.83	906	20.67	8.39	0.71	934	22.04	8.96	0.56
	67 (19.4)		23.27	13.21	1.99		16.36	9.21	0.95		17.59	10.02	0.86		18.84	10.76	0.75		20.11	11.51	0.61
	65 (17.2)		21.53	15.58	1.99		15.18	10.89	0.97		16.33	11.74	0.88		17.49	12.62	0.77		18.66	13.53	0.65
	62 (13.9)		19.28	18.92	1.98		13.59	13.23	0.96		14.63	14.27	0.90		15.69	15.35	0.81		16.77	16.48	0.70
80 (26.7)	72 (22.2)	662	25.60	10.40	1.99	867	17.95	7.29	0.93	882	19.30	7.84	0.83	906	20.67	8.39	0.71	934	22.04	8.96	0.56
	67 (19.4)		23.27	13.21	1.99		16.36	9.21	0.95		17.59	10.02	0.86		18.84	10.76	0.75		20.11	11.51	0.61
	65 (17.2)		21.53	15.58	1.99		15.18	10.89	0.97		16.33	11.74	0.88		17.49	12.62	0.77		18.66	13.53	0.65
	62 (13.9)		19.28	18.92	1.98		13.59	13.23	0.96		14.63	14.27	0.90		15.69	15.35	0.81		16.77	16.48	0.70

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage.
Stage 5 - Compressor speed limited to stage four at 65 outdoor. **Stage 1** - Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 48



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DETAILED COOLING CAPACITIES¹⁾ - COMFORT + DEHUMIDIFY MODE CONTINUED

24VNA918

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FEAAN5006L	1.00	1.00	
FEAAN51000L	0.98	0.98	
CAP**4817AL*	0.97	1.01	96CVAJX090-18
CSRH*6012AL*	0.98	1.03	96CVAJX090-18
CSRH*6012AL*	0.99	0.99	96CVAJX090-18
CAP**4821AL*	0.97	1.01	96CVAJX110-20
CAP**6021AL*	0.99	0.99	96CVAJX110-20
CNPH*4821AL*	0.97	1.06	96CVAJX110-20
CNPH*6021AL*	0.97	1.01	96CVAJX110-20
CSRH*4812AL*	0.98	1.03	96CVAJX110-20
CSRH*6012AL*	1.00	1.00	96CVAJX110-20
CAP**4824AL*	0.97	0.97	96CVAJX136-22
CAP**6024AL*	0.99	0.99	96CVAJX136-22
CNPH*6024AL*	0.99	1.04	96CVAJX136-22
CNPH*6124AL*	1.00	1.05	96CVAJX136-22
CNPH*6024AL*	0.98	1.03	96CVAJX136-22
CNPH*6024AL*	0.99	0.99	96CVAJX136-22
CNPH*6124AL*	1.00	1.00	96CVAJX136-22
CSRH*4812AL*	0.98	0.98	96CVAJX136-22
CSRH*6012AL*	1.00	1.00	96CVAJX136-22
CAP**4824AL*	0.97	0.97	96CVAJX155-22
CAP**6024AL*	0.99	0.99	96CVAJX155-22
CNPH*6024AL*	0.99	0.99	96CVAJX155-22
CNPH*6124AL*	1.00	1.00	96CVAJX155-22
CSRH*4812AL*	0.98	0.98	96CVAJX155-22
CSRH*6012AL*	1.00	1.00	96CVAJX155-22
CAP**4821AL*	0.97	1.01	96N*AJ060V21**20
CAP**6021AL*	0.99	1.04	96N*AJ060V21**20
CNPH*4821AL*	0.97	1.06	96N*AJ060V21**20
CNPH*6021AL*	0.97	1.01	96N*AJ060V21**20
CSRH*4812AL*	0.98	1.03	96N*AJ060V21**20
CSRH*6012AL*	0.99	0.99	96N*AJ060V21**20
CAP**4821AL*	0.97	1.01	96N*AJ060V21**22
CAP**6021AL*	0.99	0.99	96N*AJ060V21**22
CNPH*4821AL*	0.97	1.01	96N*AJ060V21**22
CNPH*6021AL*	0.97	1.01	96N*AJ060V21**22
CSRH*4812AL*	0.98	1.03	96N*AJ060V21**22
CSRH*6012AL*	0.99	0.99	96N*AJ060V21**22
CAP**4824AL*	0.97	1.01	96N*AJ060V21**22
CAP**6024AL*	0.99	1.04	96N*AJ060V21**22
CNPH*6024AL*	0.99	1.04	96N*AJ060V21**22
CNPH*6124AL*	1.00	1.05	96N*AJ060V21**22
CSRH*4812AL*	0.98	1.03	96N*AJ060V21**22
CSRH*6012AL*	0.99	0.99	96N*AJ060V21**22
CAP**4821AL*	0.96	1.05	96MN7A060V21**20
CAP**6021AL*	0.98	1.08	96MN7A060V21**20
CNPH*4821AL*	0.97	1.06	96MN7A060V21**20
CNPH*6021AL*	0.97	1.06	96MN7A060V21**20
CSRH*4812AL*	0.97	1.06	96MN7A060V21**20
CSRH*6012AL*	0.99	1.04	96MN7A060V21**20

Cooling Indoor Model	2-STAGE (H-Stage 5, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
*FVACN5006L	1.00	1.00	1.00	1.00	
FVACN51000L	0.99	0.99	0.99	1.03	
CAP**4817AL*	0.90	1.11	0.97	1.12	96PH*070-18
CSRH*6012AL*	0.97	1.00	0.98	1.13	96PH*070-18
CAP**4821AL*	0.90	1.00	0.98	1.08	96PH*090-18
CAP**6021AL*	0.99	1.04	0.98	1.05	96PH*090-18
CNPH*4821AL*	0.97	1.01	0.98	1.08	96PH*090-18
CNPH*6021AL*	0.97	1.01	0.98	1.08	96PH*090-18
CSRH*4812AL*	0.97	1.01	0.99	1.08	96PH*090-18
CAP**4821AL*	0.90	1.00	0.98	1.05	96PH*110-20
CAP**6021AL*	0.99	0.99	0.99	1.09	96PH*110-20
CNPH*4821AL*	0.97	1.01	0.98	1.05	96PH*110-20
CNPH*6021AL*	0.97	1.01	0.98	1.05	96PH*110-20
CSRH*4812AL*	0.97	0.97	0.98	1.10	96PH*110-20
CSRH*6012AL*	0.99	0.99	0.99	1.04	96PH*110-20
CAP**6024AL*	0.99	0.99	0.99	1.10	96PH*135-20
CSRH*4812AL*	0.97	1.01	0.99	1.11	96PH*135-20
CAP**4821AL*	0.90	1.00	0.97	1.05	96CTW090-18
CAP**6021AL*	0.99	1.04	0.98	1.04	96CTW090-18
CNPH*4821AL*	0.97	1.01	0.98	1.04	96CTW090-18
CNPH*6021AL*	0.97	1.01	0.98	1.05	96CTW090-18
CSRH*4812AL*	0.97	1.01	0.98	1.03	96CTW110-22
CAP**4821AL*	0.90	0.99	0.98	1.02	96CTW110-22
CNPH*4821AL*	0.97	1.01	0.98	1.03	96CTW110-22
CNPH*6021AL*	0.97	1.01	0.98	1.03	96CTW110-22
CSRH*4812AL*	0.98	1.02	0.98	1.03	96CTW110-22
CSRH*6012AL*	1.00	1.00	0.99	1.03	96CTW110-22
CAP**4824AL*	0.97	1.01	0.98	1.03	96CTW135-22
CAP**6024AL*	0.99	0.99	0.98	1.03	96CTW135-22
CNPH*6024AL*	0.99	0.99	0.99	1.02	96CTW135-22
CNPH*6124AL*	1.00	1.05	0.98	1.03	96CTW135-22
CNPH*4824AL*	0.97	1.01	0.98	1.03	96CTW135-22
CNPH*6024AL*	0.99	0.99	0.99	1.02	96CTW135-22
CNPH*6124AL*	1.00	1.00	1.00	1.02	96CTW135-22
CSRH*6012AL*	1.00	1.00	0.99	1.03	96CTW135-22
CAP**4817AL*	0.97	1.01	0.98	1.08	96PDA080E17**16
CSRH*6012AL*	0.97	1.01	0.98	1.07	96PDA080E17**16
CAP**4821AL*	0.97	1.01	0.97	1.01	96PDA080E21**20
CAP**6021AL*	0.99	0.99	0.98	1.03	96PDA080E21**20
CNPH*4821AL*	0.97	1.01	0.98	1.03	96PDA080E21**20
CNPH*6021AL*	0.97	1.01	0.98	1.03	96PDA080E21**20
CSRH*4812AL*	0.98	1.02	0.98	1.04	96PDA080E21**20
CAP**4821AL*	0.97	1.01	0.97	1.04	96PDA100E21**20
CAP**6021AL*	0.99	0.99	0.98	1.03	96PDA100E21**20
CNPH*4821AL*	0.97	1.01	0.98	1.03	96PDA100E21**20
CNPH*6021AL*	0.97	1.01	0.98	1.03	96PDA100E21**20
CSRH*4812AL*	0.98	1.02	0.98	1.04	96PDA100E21**20
CSRH*6012AL*	1.00	1.00	0.99	1.03	96PDA100E21**20
CAP**4824AL*	0.97	1.01	0.98	1.04	96PDA120E24**20
CAP**6024AL*	0.99	0.99	0.98	1.03	96PDA120E24**20
CNPH*6024AL*	0.99	1.04	0.99	1.03	96PDA120E24**20
CNPH*6124AL*	1.00	1.05	0.98	1.03	96PDA120E24**20
CNPH*4824AL*	0.97	1.01	0.98	1.04	96PDA120E24**20
CNPH*6024AL*	0.99	0.99	0.99	1.03	96PDA120E24**20
CNPH*6124AL*	1.00	1.00	0.99	1.02	96PDA120E24**20
CSRH*6012AL*	0.98	1.02	0.98	1.04	96PDA120E24**20

Cooling Indoor Model	2-STAGE (H-Stage 5, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
CSRH*6012AL*	1.00	1.00	0.99	1.03	96PDA120E24**20
CAP**4817AL*	0.98	1.05	0.97	1.08	96PDA080E17**16
CSRH*4812AL*	0.97	1.06	0.97	1.08	96PDA080E17**16
CNPH*4821AL*	0.97	1.01	0.98	1.03	96PDA080E21**20
CNPH*6021AL*	0.97	1.01	0.98	1.03	96PDA080E21**20
CSRH*4812AL*	0.97	1.01	0.98	1.03	96PDA080E21**20
CAP**4821AL*	0.98	1.00	0.98	1.11	96PDA100E21**20
CAP**6021AL*	0.99	1.04	0.99	1.10	96PDA100E21**20
CNPH*4821AL*	0.99	1.04	0.99	1.10	96PDA100E21**20
CNPH*6021AL*	0.97	1.01	0.99	1.11	96PDA100E21**20
CSRH*4812AL*	0.97	1.01	0.99	1.11	96PDA100E21**20
CSRH*6012AL*	0.99	0.99	1.00	1.10	96PDA100E21**20
CAP**6024AL*	0.99	1.04	0.99	1.14	96PDA120E24**20

See notes on page 48



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DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

3/10/2008 / *CHP/1000AL *+18CFM, X)100-20 Comfort + Dehumidify Mode
Condenser Entering Air Temperature °F (°C)

EOB °F (°C)	EVAP AIR °F (°C)	STAGE 1																			
		105 (40.5)			90 (30)			85 (29.4)			75 (23.9)			65 (18.3)							
		ID SCFM	Capacity MBtuh Total Sens	Total Sys. KW	ID SCFM	Capacity MBtuh Total Sens	Total Sys. KW	ID SCFM	Capacity MBtuh Total Sens	Total Sys. KW	ID SCFM	Capacity MBtuh Total Sens	Total Sys. KW	ID SCFM	Capacity MBtuh Total Sens	Total Sys. KW					
75 (23.9)	73 (23.2)	1110	48.69	19.05	4.05	1184	46.02	19.88	5.81	1188	50.83	20.87	5.20	1200	50.44	21.20	5.85	1230	54.19	21.00	5.52
	67 (19.4)		42.27	24.54	3.88		44.50	25.79	3.02		46.12	28.87	3.14		47.06	27.06	3.27		48.19	27.84	3.47
	63 (17.2)		39.20	28.85	3.04		41.17	30.33	3.51		42.57	31.00	3.10		44.02	31.54	3.74		45.47	32.41	2.94
	57 (13.9)		35.30	35.19	3.80		37.12	36.88	3.40		39.37	37.70	3.02		39.47	38.20	3.09		40.73	38.17	3.38
80 (26.7)	72 (22.2)	1110	48.69	24.58	4.05	1184	46.02	25.81	5.81	1188	50.72	28.48	5.20	1200	52.24	27.07	5.00	1230	54.08	27.87	5.52
	67 (19.4)		42.28	30.00	3.48		44.41	31.53	3.55		46.04	32.21	3.14		47.51	32.74	3.77		48.07	33.83	3.47
	63 (17.2)		39.24	34.33	3.04		41.22	36.08	3.51		42.71	36.75	3.10		44.05	37.24	3.74		45.48	38.20	3.44
	57 (13.9)		37.41	37.41	3.00		39.00	34.33	3.40		40.47	40.47	3.07		41.42	41.40	3.71		42.00	42.88	3.41
75 (23.9)	72 (22.2)	744	36.84	12.93	2.05	801	32.85	13.32	2.05	842	34.70	14.08	1.82	887	35.88	14.90	1.81	9001	38.12	13.87	1.43
	67 (19.4)		27.87	18.42	2.33		29.59	14.80	2.04		31.20	17.50	1.81		32.84	18.50	1.80		35.28	20.03	1.43
	63 (17.2)		25.33	19.03	2.30		27.00	18.25	2.03		28.71	20.34	1.81		30.31	21.41	1.81		32.59	23.23	1.44
	57 (13.9)		26.37	21.44	2.30		29.07	21.17	2.03		29.40	24.38	1.81		30.83	25.90	1.81		32.78	28.01	1.44
80 (26.7)	70 (20.2)	744	30.77	15.75	2.33	801	30.78	18.70	2.09	842	33.80	17.70	1.82	887	35.80	18.07	1.81	9001	39.04	20.14	1.43
	67 (19.4)		27.61	16.93	2.03		28.50	20.12	2.04		31.23	21.20	1.81		32.84	22.30	1.80		35.21	24.23	1.43
	63 (17.2)		25.33	21.25	2.30		27.10	22.73	2.03		28.71	23.90	1.81		30.32	25.17	1.81		32.41	27.44	1.43
	57 (13.9)		29.94	23.94	2.30		29.21	25.01	2.03		29.53	28.80	1.81		29.28	28.88	1.81		30.36	30.35	1.44
75 (23.9)	72 (22.2)	882	25.83	9.06	1.83	457	17.67	7.17	1.02	482	18.18	7.43	0.93	508	20.78	8.45	0.80	535	22.37	9.11	0.81
	67 (19.4)		21.84	12.07	1.84		18.75	8.58	1.01		17.11	9.31	0.93		19.52	10.05	0.87		21.97	10.81	0.83
	63 (17.2)		19.36	13.89	1.84		14.04	9.71	1.00		15.01	10.48	0.93		16.92	11.30	0.80		18.83	12.13	0.80
	57 (13.9)		17.03	16.75	1.89		13.48	11.34	0.88		13.87	12.20	0.94		14.78	13.14	0.84		15.04	14.09	0.89
80 (26.7)	70 (20.2)	882	35.27	12.23	1.83	497	17.63	8.75	1.08	482	18.18	9.45	0.93	508	20.75	10.20	0.80	535	22.38	10.97	0.81
	67 (19.4)		21.18	14.81	1.04		15.71	10.14	1.01		17.08	12.04	0.93		18.40	11.70	0.81		20.04	12.85	0.83
	63 (17.2)		19.28	16.03	1.04		14.03	11.25	1.00		15.59	12.13	0.93		16.80	13.04	0.82		18.22	13.87	0.86
	57 (13.9)		18.08	18.08	1.03		12.74	12.74	0.96		13.70	13.70	0.94		14.66	14.68	0.80		16.28	15.95	0.89

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage
Stage 1 - Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 48



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DETAILED COOLING CAPACITIES[#] - COMFORT + DEHUMIDIFY MODE CONTINUED

DB _{in} °F (°C)	EVAR AIR DB °F (°C)	DESIGNING / PERFORMANCE: Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)																													
		105 (40.8)						95 (35)						85 (29.4)						75 (23.3)						65 (18.3)					
		ID SCFM	Capacity MBH/h Total		Total Sys. kW		ID SCFM	Capacity MBH/h Total		Total Sys. kW		ID SCFM	Capacity MBH/h Total		Total Sys. kW		ID SCFM	Capacity MBH/h Total		Total Sys. kW		ID SCFM	Capacity MBH/h Total		Total Sys. kW						
STAGE 5																															
75 (23.9)	72 (22.2)	1367	57.74	22.45	6.51	1440	61.00	25.02	5.73	1514	65.43	26.57	5.06	1596	69.11	28.06	4.43	1688	71.73	29.06	3.80	1780	74.35	30.06	3.17	1872	76.97	31.06	2.54		
	67 (19.4)		52.75	20.00	6.33		56.20	31.94	5.50		59.74	33.02	4.89		63.08	35.74	4.29		66.39	36.48	3.66		69.70	37.23	3.03		73.01	38.72	2.27		
	63 (17.2)		49.08	20.05	6.19		52.31	37.25	5.43		55.53	39.67	4.77		58.62	41.74	4.17		61.71	42.20	2.91		64.80	43.69	1.65		67.89	45.14	0.99		
	57 (13.9)		44.14	42.48	6.03		47.05	45.25	5.27		49.95	49.04	4.62		52.86	50.49	4.02		55.77	52.94	2.66		58.68	56.74	1.31		61.59	60.74	0.55		
80 (26.7)	72 (22.2)	1367	57.61	20.52	6.52	1440	61.47	31.80	5.74	1514	65.25	33.78	5.06	1596	69.27	35.61	4.43	1688	71.59	36.37	3.80	1780	74.21	37.13	3.17	1872	76.83	37.89	2.54		
	67 (19.4)		52.65	30.25	6.32		56.15	38.64	5.58		59.62	41.04	4.89		62.90	43.19	4.29		66.29	43.67	3.66		69.58	45.07	2.91		72.87	46.42	2.13		
	63 (17.2)		48.99	41.31	6.19		52.23	44.02	5.43		55.45	46.75	4.77		58.54	49.15	4.17		61.63	49.42	2.91		64.71	51.69	1.65		67.79	53.94	0.99		
	57 (13.9)		45.90	45.90	6.03		45.92	48.92	5.33		48.92	48.92	4.67		51.93	51.93	4.07		54.72	54.72	2.66		57.51	57.51	1.31		60.10	60.10	0.55		
STAGE 3																															
75 (23.9)	72 (22.2)	959	36.88	15.01	3.25	1013	39.25	15.94	2.79	1066	41.77	16.95	2.44	1120	44.28	17.97	2.13	1174	46.75	18.11	1.87	1228	49.20	19.11	1.67	1282	51.65	20.11	1.51		
	67 (19.4)		33.40	19.03	3.22		35.55	20.23	2.75		37.53	21.90	2.39		39.41	23.76	2.09		41.20	24.30	1.84		42.99	25.00	1.61		44.78	26.30	1.37		
	63 (17.2)		30.77	22.16	3.21		32.82	23.69	2.72		34.64	25.04	2.37		36.36	26.50	2.06		38.08	27.53	1.81		39.79	28.52	1.56		41.50	29.51	1.21		
	57 (13.9)		27.21	26.76	3.18		29.19	26.49	2.69		31.00	30.32	2.24		32.79	31.96	2.04		34.58	33.63	1.74		36.37	35.28	1.49		38.16	36.98	1.24		
80 (26.7)	72 (22.2)	959	36.89	19.10	3.25	1013	39.15	20.27	2.79	1066	41.66	21.53	2.44	1120	44.17	22.80	2.13	1174	46.63	24.34	1.87	1228	49.04	25.00	1.67	1282	51.41	25.66	1.51		
	67 (19.4)		33.30	23.06	3.22		35.47	24.51	2.75		37.34	26.01	2.39		39.16	27.53	2.09		40.97	28.52	1.84		42.78	29.51	1.59						
	63 (17.2)		30.72	26.18	3.21		32.77	27.85	2.72		34.59	29.54	2.37		36.38	31.25	2.06		38.17	32.53	1.79		39.96	33.52	1.54		41.75	34.51	1.29		
	57 (13.9)		28.74	28.74	3.19		30.65	30.65	2.70		32.56	32.56	2.26		34.35	34.35	2.05		36.14	36.14	1.79		37.93	37.93	1.54						
STAGE 1																															
75 (23.9)	72 (22.2)	746	27.11	11.00	2.21	800	19.91	8.07	1.22	800	20.99	8.50	1.01	847	22.49	9.11	0.80	894	24.02	9.73	0.59	941	25.55	10.35	0.38	988	27.04	11.59	0.07		
	67 (19.4)		24.29	13.80	2.21		17.69	10.04	1.21		18.67	10.45	1.01		19.64	11.19	0.61		20.61	11.93	0.61		21.58	12.67	0.61		22.55	13.41	0.61		
	63 (17.2)		22.21	15.99	2.20		16.05	11.57	1.21		16.97	11.96	1.01		17.91	12.81	0.62		18.84	13.56	0.62		19.71	14.30	0.62		20.58	15.04	0.62		
	57 (13.9)		19.51	19.20	2.20		13.98	13.89	1.20		14.78	14.19	1.02		15.68	15.20	0.64		16.57	15.80	0.64		17.46	16.41	0.64		18.35	17.01	0.64		
80 (26.7)	72 (22.2)	746	27.04	13.80	2.21	800	19.88	10.20	1.22	800	20.94	10.61	1.01	847	22.43	11.36	0.80	894	23.96	12.10	0.59	941	25.50	12.84	0.28	988	27.04	13.58	0.00		
	67 (19.4)		24.22	16.71	2.21		17.65	12.16	1.21		18.63	12.54	1.01		19.61	13.42	0.61		20.58	14.16	0.61		21.55	14.90	0.61		22.52	15.64	0.61		
	63 (17.2)		22.18	19.89	2.20		16.04	13.48	1.21		16.95	14.04	1.01		17.90	14.88	0.62		18.81	15.62	0.62		19.72	16.46	0.62		20.64	17.20	0.62		
	57 (13.9)		20.85	20.85	2.20		14.90	14.90	1.20		15.80	15.80	1.02		16.70	16.70	0.63		17.60	17.60	0.63		18.50	18.50	0.63		19.40	19.40	0.63		

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage.
Stage 5 - Compressor speed limited to stage four at 65 outdoor. **Stage 1** - Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 48



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DETAILED COOLING CAPACITIES* - COMFORT + DEHUMIDIFY MODE CONTINUED

24VNA560

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FCAAN000L	1.00	1.00	
CAP**8021AL*	0.99	0.99	56CVA(X)110-20
CAP**8024AL*	0.99	0.99	56CVA(X)110-20
CNPH**8024AL*	0.99	1.04	56CVA(X)110-20
CNPH*6124AL*	0.99	1.04	56CVA(X)110-20
CNPH*6024AL*	0.98	0.98	56CVA(X)110-20
CNPH*6124AL*	1.00	1.00	56CVA(X)110-20
CSRH*6012AL*	1.00	1.00	56CVA(X)110-20
CAP**8024AL*	0.99	0.99	56CVA(X)135-22
CNPH**8024AL*	0.99	0.99	56CVA(X)135-22
CNPH*6124AL*	1.00	1.00	56CVA(X)135-22
CNPH*6024AL*	0.98	0.98	56CVA(X)135-22
CNPH*6124AL*	1.00	1.00	56CVA(X)155-22
CSRH*6012AL*	1.00	1.00	56CVA(X)155-22
CAP**8021AL*	0.99	1.04	56CVA(X)155-22
CAP**8024AL*	0.99	1.04	56CVA(X)155-22
CNPH**8024AL*	0.99	1.04	56CVA(X)155-22
CNPH*6124AL*	1.00	1.00	56CVA(X)155-22
CSRH*6012AL*	1.00	1.00	56CVA(X)155-22
CAP**8021AL*	0.99	1.04	56CVA(X)155-22
CAP**8024AL*	0.99	1.04	56CVA(X)155-22
CNPH**8024AL*	0.99	1.04	56CVA(X)155-22
CNPH*6124AL*	1.00	1.00	56CVA(X)155-22
CSRH*6012AL*	1.00	1.00	56CVA(X)155-22
CAP**8021AL*	0.99	1.04	56CVA(X)155-22
CAP**8024AL*	0.99	1.04	56CVA(X)155-22
CNPH**8024AL*	0.99	1.04	56CVA(X)155-22
CNPH*6124AL*	1.00	1.00	56CVA(X)155-22
CSRH*6012AL*	1.00	1.00	56CVA(X)155-22
CAP**8021AL*	0.99	1.04	56CVA(X)155-22
CAP**8024AL*	0.99	1.04	56CVA(X)155-22
CNPH**8024AL*	0.99	1.04	56CVA(X)155-22
CNPH*6124AL*	1.00	1.00	56CVA(X)155-22
CSRH*6012AL*	1.00	1.00	56CVA(X)155-22
CAP**8021AL*	0.98	1.03	56MN7A000V01**20
CAP**8024AL*	0.98	1.03	56MN7A000V01**20
CNPH**8024AL*	0.98	1.03	56MN7A000V01**20
CNPH*6124AL*	0.98	1.03	56MN7A000V01**20
CSRH*6012AL*	0.98	1.03	56MN7A000V01**20
CAP**8021AL*	0.97	1.02	56MN7A000V01**20
CAP**8024AL*	0.99	1.04	56MN7A000V01**20
CNPH**8024AL*	0.99	1.04	56MN7A000V01**20
CNPH*6124AL*	0.99	1.04	56MN7A000V01**20
CSRH*6012AL*	0.99	1.04	56MN7A000V01**20

Cooling Indoor Model	2-STAGE (Hi-Stage 1, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
*FVAC0000L	1.00	1.00	1.00	1.00	
CAP**8021AL*	1.01	1.06	1.01	1.07	58PH*110-20
CSRH*8012AL*	1.02	1.07	1.00	1.04	58PH*110-20
CAP**8024AL*	1.01	1.06	1.03	1.11	58PH*135-20
CNPH**8024AL*	1.01	1.06	1.01	1.06	58PH*135-20
CNPH*6124AL*	1.01	1.06	1.01	1.12	58PH*135-20
CNPH*6024AL*	1.00	1.05	1.01	1.09	58PH*135-20
CNPH*6124AL*	1.02	1.07	1.03	1.09	58PH*135-20
CSRH*8012AL*	1.02	1.07	1.01	1.05	58PH*135-20
CAP**8021AL*	1.01	1.06	1.01	1.07	58CTW110-20
CSRH*8012AL*	1.02	1.07	1.00	1.04	58CTW110-20
CAP**8024AL*	1.01	1.06	1.01	1.06	58CTW135-20
CNPH**8024AL*	1.01	1.06	1.01	1.06	58CTW135-20
CNPH*6124AL*	1.01	1.06	1.01	1.06	58CTW135-20
CSRH*8012AL*	1.02	1.07	1.00	1.04	58CTW135-20
CAP**8021AL*	1.01	1.06	1.01	1.07	59**P2A00E21**20
CSRH*8012AL*	1.02	1.07	1.00	1.06	59**P2A00E21**20
CAP**8021AL*	1.01	1.06	1.01	1.07	59**P2A100E21**20
CSRH*8012AL*	1.02	1.06	1.00	1.06	59**P2A100E21**20
CAP**8024AL*	1.01	1.06	1.01	1.07	59**P2A120E24**20
CNPH**8024AL*	1.01	1.06	1.01	1.07	59**P2A120E24**20
CNPH*6124AL*	1.01	1.06	1.01	1.07	59**P2A120E24**20
CSRH*6012AL*	1.02	1.07	1.00	1.04	59**P2A120E24**20
CSRH*8012AL*	1.02	1.07	1.00	1.06	59**P2A120E24**20
CAP**8021AL*	0.99	1.04	1.01	1.11	59**P2A00E21**20
CSRH*8012AL*	1.00	1.06	1.01	1.10	59**P2A00E21**20
CAP**8024AL*	0.99	1.04	1.01	1.11	59**P2A120E24**20
CNPH**8024AL*	1.00	1.06	1.01	1.09	59**P2A120E24**20
CNPH*6124AL*	1.00	1.06	1.01	1.09	59**P2A120E24**20
CSRH*8012AL*	1.02	1.06	1.00	1.06	59**P2A120E24**20
CSRH*8012AL*	1.00	1.06	1.01	1.10	59**P2A00E21**20
CSRH*8013AL*	1.01	1.06	1.00	1.11	59**P2A120E24**20
CAP**8024AL*	0.99	1.04	1.01	1.11	59**P2A120E24**20
CNPH**8024AL*	1.00	1.05	1.01	1.10	59**P2A120E24**20
CNPH*6124AL*	1.00	1.05	1.01	1.09	59**P2A120E24**20
CSRH*8012AL*	1.00	1.05	1.00	1.08	59**P2A120E24**20
CAP**8024AL*	1.00	1.05	1.01	1.09	CVLAA0000154
CNPH**8024AL*	0.99	1.04	1.01	1.09	CVLAA0000154
CNPH*6124AL*	1.01	1.06	1.01	1.07	CVLAA0000154
CSRH*6124AL*	1.01	1.06	1.01	1.11	CVMAA0000154
CSRH*8012AL*	1.01	1.06	1.00	1.11	CVMAA0000154

NOTES:

- * Tested combination.
- † Total and sensible capacities are net capacities. Blower motor heat has been subtracted.
- ‡ Sensible capacities are shown for both 80°F (27°C) and 75°F (23.4°C) entering air at the indoor coil.
- For sensible capacities at other than these, deduct 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree below reference temperature, or add 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree above reference temperature.
- # Detailed cooling capacities are based on indoor and outdoor unit at the same elevation per AHRI standard 210/240-2008. If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.
- ** System kw is total of indoor and outdoor unit kilowatts.
- NOTE: When the required data falls between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.
- EWB -- Entering Wet Bulb



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GUIDE SPECIFICATIONS

GENERAL

System Description

Outdoor-mounted, air-cooled, split-system air conditioning unit suitable for ground or rooftop installation. Unit consists of a hermetic compressor, an air-cooled coil, forward-swept blade propeller-type condenser fan, and a control box. Unit will discharge supply air upward as shown on contract drawings. Unit will be used in a refrigeration circuit to match up to a packaged fan coil or coil unit.

Quality Assurance

- Unit will be rated in accordance with the latest edition of AHRI Standard 240.
- Unit will be certified for capacity and efficiency, and listed in the latest AHRI directory.
- Unit construction will comply with latest edition of ASHRAE and with NEC.
- Unit will be constructed in accordance with UL standards and will carry the UL label of approval. Unit will have C-UL approval.
- Unit cabinet will be capable of withstanding Federal Test Method Standard No. 141 (Method 6061) 500-hr salt spray test.
- Air-cooled condenser coils are pressure tested and the outdoor units are leak tested.
- Unit constructed in ISO9001 approved facility.

Delivery, Storage, and Handling

- Unit will be shipped as single package only and is stored and handled per unit manufacturer's recommendations.

Warranty (for inclusion by specifying engineer)

- U.S. and Canada only.

PRODUCTS

Equipment

- Factory-assembled, single-piece, air-cooled air conditioning unit. Contained within the unit enclosure is all factory wiring, piping, controls, compressor, refrigerant charge Puron® (R-410A) refrigerant, and special features required prior to field start-up.

Unit Cabinet

- Unit cabinet will be constructed of galvanized steel, bonderized, and coated with a powder coat paint.

Fans

- Condenser fan will be direct-drive propeller type, forward swept blade, discharging air upward.

AIR-COOLED, SPLIT-SYSTEM AIR CONDITIONER

24VNA9

- Condenser fan motors will be totally enclosed, 1-phase type with class B insulation and permanently lubricated.
- Shafts will be corrosion resistant.
- Fan blades will be statically and dynamically balanced.
- Condenser fan openings will be equipped with coated steel wire safety guards.

Compressor

- Compressor will be hermetically sealed.
- Compressor will be mounted on rubber vibration isolators.
- Compressor will be covered with a sound absorbing blanket.

Condenser Coil

- Condenser coil will be air cooled.
- Coil will be constructed of aluminum fins mechanically bonded to copper tubes which are then cleaned, dehydrated, and sealed.

Refrigeration Components

- Refrigeration circuit components will include liquid-line front-seating shutoff valve with sweat connections, vapor-line front-seating shutoff valve with sweat connections, system charge of Puron® (R-410A) refrigerant, POE compressor oil, accumulator, charge compensator, electronic expansion valve, and reversing valve.
- Unit will be equipped with high-pressure switch, suction pressure transducer, and filter drier for Puron® refrigerant.

Operating Characteristics

- The capacity of the unit will meet or exceed _____ Btuh at a suction temperature of _____ °F (°C). The power consumption at full load will not exceed _____ kW.
- Combination of the unit and the evaporator or fan coil unit will have a total net cooling capacity of _____ Btuh or greater at conditions of _____ CFM entering air temperature at the evaporator at _____ °F (°C) wet bulb and _____ °F (°C) dry bulb, and air entering the unit at _____ °F (°C).
- The system will have a SEER of _____ Btuh/watt or greater at DOE conditions.

Electrical Requirements

- Nominal unit electrical characteristics will be _____ v, single phase, 60 hz. The unit will be capable of satisfactory operation within voltage limits of _____ v to _____ v.
- Unit electrical power will be single point connection.
- Control circuit will be 24v.
- Compliant with IEC 61000-4-5 Transient Surge Requirement.

Special Features

- Refer to section of this literature identifying accessories and descriptions for specific features and available enhancements.
- Infinity control with appropriate software version is required for full featured operation.



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SYSTEM DESIGN SUMMARY

1. Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01-in. wc.
2. This product is not qualified for low ambient cooling operation.
Minimum cooling outdoor operating temperatures:
 - Communicating systems: 40°F (4.44°C)
 - Non-communicating systems: 55°F (12.8°C)
3. For reliable operation, unit should be level in all horizontal planes.
4. This unit is qualified for up to 100 ft (30.5 m) equivalent length of line set without additional accessories.
5. If any refrigerant tubing is buried, provide a 6 in. (152.4 mm) vertical rise to the valve connections at the unit. Refrigerant tubing lengths up to 36 in. (914.4 mm) may be buried without further consideration. Do not bury refrigerant lines longer than 36 in. (914.4 mm).
6. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
7. Do not apply capillary tube indoor coils to these units.
8. Puron refrigerant TXV required on indoor coil.





Product Data

Commercial Split Systems Air Conditioning Condensing Units

6 to 25 Tons



38AUZ07,08,12,14 Shown



38AUZ, AUD 07-28 Single and Dual Circuit Condensing Units
with Puron® R-410A Refrigerant

Features/Benefits



These dependable outdoor air cooled condensing units match Carrier's indoor-air handlers to meet a wide selection of cooling solutions.

Carrier's air-cooled air conditioning split systems:

- Provide a logical solution for commercial needs
- Have rugged, dependable construction
- Available with single or dual refrigerant circuits
- Have cooling capability up to 125°F (52°C) ambient and down to 35°F (2°C) ambient standard

Constructed for long life

The 38AUZ single circuit and 38AUD dual circuit, air cooled condensing units are designed and built to last. The high efficient designed outdoor coil construction allows for a more efficient design in a smaller cabinet size that utilizes an overall reduction in refrigerant charge. Where conditions require, special coil coating coil protection option is available. Cabinets are constructed of pre-painted galvanized steel, delivering unparalleled protection from the environment. Inside and outside surfaces are protected to ensure long life, good looks, and reliable operation. Safety controls are used for enhanced system protection and reliability. Each unit utilizes the Comfort Alert™ diagnostic and troubleshooting control system. This protects the units operation and provides valuable diagnostic information when required.

Factory-installed options (FIOPs)

Certified and pre-engineered factory-installed options (FIOPs) allow units to be installed in less time, thereby reducing installed cost.

FIOPs include:

- low ambient controls which provide cooling operation down to -20°F (-29°C) ambient temperatures
- non-fused disconnect
- special coil coating coil protection
- louvered hail guard

Efficient operation

These air cooled condensing units will provide EERs up to 12.0 (tested in accordance with AHRI standard 340/360).

This high efficiency operation will help reduce overall operating cost and energy consumption.

Controls for performance dependability

The 38AUZ condensing units offer operating controls and components designed for performance dependability. The high efficiency hermetic scroll compressor is engineered for long life and durability. The compressors include vibration isolation for quiet operation. The high-pressure switch protects the entire refrigeration system from abnormally high operating pressures. A low-pressure switch protects the system from loss of charge. These units also include anti-short-cycling protection, which helps to protect the units against compressor failure.

All units include a crankcase heater to eliminate liquid slugging at start-up. Each unit comes standard with the Comfort Alert control system. This provides:

- System Go LED indicator
- Fault LED indicator
- Compressor fault LED indicator
- Phase loss protection
- Phase reversal protection
- Safety pressure indicator
- Anti-short cycle protection

Innovative Carrier 40RFA/RUA packaged air handlers are custom matched to 38AUZ/D condensing units.

Information on matching 40RFA/RUA DX packaged air handler follows for convenience. See separate product data for more details. The 40RFA/RUA Series has excellent fan performance, efficient direct-expansion (DX) coils, a unique combination of indoor-air quality features, and is easy to install. Its versatility and state-of-the-art features help to ensure economical performance of the split system both now and in the future.

Indoor-air quality (IAQ) features

The unique combination of features in the 40RFA/RUA air handlers ensures that clean, fresh, conditioned air is delivered to the occupied space.

Cooling coils prevent the build-up of humidity in the room, even during part-load conditions. Unit sizes 10 tons and above feature dual-circuit face-split coils.

Two-inch (51 mm) disposable filters remove dust and airborne particles from the occupied space.

Pitched drain pan can be adjusted for a right-hand or left-hand connection to provide positive drainage and prevent standing condensate.

Economizer accessory precisely controls the blend of outdoor air and room air to achieve comfort levels. When the outside air is suitable, outside air dampers can fully open to provide "free" cooling. Economizer is an Ultra Low Leak design that includes return and outside air damper leakage that meets California Title 24 section 140.4 requirements. Controller meets California Title 24 Section 120.2 Fault Detection and Diagnostic (FDD) requirements.

Economy

The 40RFA/RUA Series packaged air handlers have low initial costs, and they continue to save money by providing reduced installation expense and energy-efficient performance.

Quick installation is ensured by the multi-position design. Units can be installed in either the horizontal or vertical (upflow) configuration without modifications. All units have drain-pan connections on both sides, and pans can be pitched for right-hand or left hand operation with a simple adjustment.

Fan motors and contactors are pre-wired and TXVs are factory-installed on 40RFA/40RUA models.

High-efficiency, precision balanced fans minimize air turbulence, surging, and unbalanced operation, thereby cutting operating expenses.

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Features/Benefits (cont)



Rugged dependability

The 40RFA/RUA series units are made to last. Die-formed galvanized steel panels ensure structural integrity under all operating conditions. Mechanically bonded coil fins provide improved heat transfer.

For 40RUA units, galvanized steel fan housings are securely mounted to a die-formed galvanized steel deck.

Rugged pillow-block bearings (40RUA sizes 14-30) are securely fastened to the solid steel fan shaft with split collets and clamp locking devices. 40RFA units (sizes 07-12) have spider-type bearings.

The accompanying air handling unit has thermal insulation containing an

immobilized anti-microbial agent to inhibit the growth of bacteria and fungi on the insulation.

Coil flexibility

Model 40RFA/RUA air handling units have galvanized steel casings; inlet and outlet connections are on the same end.

Chilled water coils have 1/2 in. (12.7 mm) diameter copper tubes mechanically bonded to aluminum sine-wave fins. All chilled water coils have non-ferrous headers.

Direct-expansion (DX) coils are designed for use with Puron® R-410A refrigerant and have copper tubes mechanically bonded to aluminum sine-wave fins.

Direct-expansion coils include matched, factory-installed thermostatic expansion valves (TXVs) with matching distributor nozzles.

Easier installation and service

The multipurpose design and component layout ensures quick unit installation and operation. Units can be converted from horizontal to vertical operation by simply repositioning the unit. Drain pan connections are duplicated on both sides of the unit. The filters, motor, drive, TXVs, and coil connections are all easily accessed by removing a single side panel.

Model number nomenclature

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
3 8 A U D T 1 2 A 0 A 6 - 0 A 0 A 0

Model Type

38AU = Carrier Condensing Unit
 Puron® R-410A Refrigerant

Type of Coil

Z = Single Circuit, A/C Scroll Compressor
 D = Dual Circuit, A/C Scroll Compressor

Refrigerant Options

A = None¹
 B = Low Ambient²
 D = Single Circuit / 2-Stage²
 E = Single Circuit / 2-Stage with Low Ambient³
 M = Single Circuit / 2-Stage³
 N = Single Circuit / 2-Stage with Low Ambient³
 T = Dual Circuit / Three Cooling Stages⁴
 U = Dual Circuit / Three Cooling Stages with Low Ambient⁴

Nominal Tonnage

07 = 6 Tons
 08 = 7.5 Tons
 12 = 10 Tons
 14 = 12.5 Tons
 16 = 15 Tons
 25 = 20 Tons
 28 = 25 Tons⁴

Not Used

A = Not Used

Not Used

0 = Not Used

NOTE(S):

- ¹ 38AUZ 16 and 25 units only.
- ² 38AUZ 07/08 models only.
- ³ 38AUZ 12/14 models only.
- ⁴ 38AUZ models only.

Packaging

0 = Standard
 1 = LTL

Electrical Options

A = None
 C = Non-Fused Disconnect

Service Options

0 = None
 1 = Un-powered Convenience Outlet
 2 = Powered Convenience Outlet

Not Used

A = Place Holder

Base Unit Controls

0 = Electro-Mechanical Controls

Design Rev

- = Factory Specified

Voltage

1 = 575/3/60
 5 = 208/230/3/60
 6 = 460/3/60

Coil Options (RTPF)

A = Cu/Al
 B = Precoat (Cu/Al)
 C = E-Coat (Cu/Al)
 E = Cu/Cu
 M = Cu/Al with Louvered Hail Guard
 N = Precoat (Cu/Al) with Louvered Hail Guard
 P = E-Coat (Cu/Al) with Louvered Hail Guard
 R = Cu/Cu with Louvered Hail Guard



AHRI capacity ratings



AHRI Capacity Ratings^{a,b}

UNIT	COOLING STAGES	NOMINAL CAPACITY (tons)	NET COOLING CAPACITY (MBH)	TOTAL POWER (kW)	EER	IEER WITH 2-SPEED VFD
38AUZ(D,E)07/40RF07	2	6	70.0	5.8	12.0	15.5
38AUZ(D,E)08/40RF08	2	7.5	92.0	8.2	11.2	15.5
38AUZ(M,N)12/40RF12	2	10	117.0	10.4	11.2	15.5
38AUZ(M,N)14/40RU14	2	12.5	135.0	12.3	11.0	15.5
38AUZ(A,B)16/40RU16	2	15	184.0	16.4	11.2	14.3
38AUZ(A,B)25/40RU25	2	20	240.0	21.8	11.0	13.8
38AUD(T,U)12/40RF12	3	10	117.0	10.4	11.2	14.9
38AUD(T,U)14/40RU14	3	12.5	135.0	12.3	11.0	14.2
38AUD(T,U)16/40RU16	3	15	184.0	16.7	11.0	14.2
38AUD(T,U)25/40RU25	3	20	240.0	22.6	10.6	13.5
38AUD(T,U)28/40RU28	3	25	278.0	26.2	10.6	13.2

NOTE(S):

- a. Rated in accordance with AHRI Standard 340/360, as appropriate.
- b. Ratings are based on:
Cooling Standard: 80°F (27°C) db, 67°F (19°C) wb indoor air temp and 95°F (35°C) db outdoor air temp.

LEGEND

- AHRI — Air Conditioning, Heating, and Refrigeration
- ASHRAE — American Society of Heating, Refrigeration, and Air-Conditioning, Inc.
- EER — Energy Efficiency Ratio
- IEER — Integrated Energy Efficiency Ratio



Sound Power Levels, dB

UNIT	COOLING STAGES	A-WEIGHT OCTAVE OUTDOOR SOUND (dB) ^a								
		TOTAL	63	125	250	500	1000	2000	4000	8000
38AUZ07	2	84.6	63.1	68.9	73.4	79.5	80.2	76.4	72.0	64.9
38AUZ08	2	84.6	63.1	68.9	73.4	79.5	80.2	76.4	72.0	64.9
38AUZ12	2	83.2	60.4	65.8	77.1	76.8	77.1	75.8	70.2	64.7
38AUD12	3	83.8	62.9	69.6	74.4	77.9	79.3	76.1	70.7	61.1
38AUZ14	2	82.6	60.5	65.1	70.3	77.2	78.0	75.4	71.2	63.9
38AUD14	3	85.2	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.9
38AUZ16	2	84.2	60.1	69.7	72.8	78.7	79.5	76.3	72.9	67.8
38AUD16	3	82.8	55.5	64.8	73.6	77.2	78.2	74.8	70.7	64.3
38AUZ25	2	82.6	60.5	65.1	70.3	77.2	78.0	75.4	71.2	63.9
38AUD25	3	85.2	64.8	68.9	71.4	82.8	79.0	74.2	69.0	61.8
38AUD28	3	88.2	67.8	71.9	74.4	85.8	82.0	77.2	72.0	64.8

NOTE(S):

- a. Outdoor sound data is measured in accordance with AHRI standard 270-2008.

LEGEND

- dB — Decibel



EL

38AUZ*07-12 Single Circuit Models - Physical Data

UNIT	38AUZ(D,E)07	38AUZ(D,E)08	38AUZ(M,N)12	38AUZ(M,N)14
NOMINAL CAPACITY (tons)	6	7.5	10	12.5
OPERATING WEIGHT (lb)	389	430	490	508
Refrigeration System				
No. Circuits / No. Comp. / Type	1 / 1 / Scroll	1 / 1 / Scroll	1 / 1 / Scroll	1 / 2 / Scroll
Refrigerant Type	Puron® R-410A	Puron R-410A	Puron R-410A	Puron R-410A
R-410A Shipping Charge A/B (lb)	9.0	9.0	9.0	9.0
System Charge w/ Fan Coil*	14.0	19.0	22.0	34.2
Metering Device	TXV	TXV	TXV	TXV
High-Press. Trip / Reset (psig)	630 / 505	630 / 505	630 / 505	630 / 605
Low-Press. Trip / Reset (psig)	54 / 117	54 / 117	54 / 117	54 / 117
Compressor				
Oil Charge A/B (oz)	56	58	85	84
Speed (rpm, 60 Hz)	3500	3500	3500	3500
Condenser Coil				
Material	AlCu	AlCu	AlCu	AlCu
Coil type	RTPF	RTPF	RTPF	RTPF
Rows / FPI	2 / 17	2 / 17	2 / 17	3 / 17
Total Face Area (ft ²)	17.5	23.0	25.1	31.8
Condenser Fan / Motor				
Qty / Motor Drive Type	2 / direct	2 / direct	2 / direct	2 / direct
Motor HP / RPM	1/4 / 1100	1/4 / 1100	1/4 / 1100	1/4 / 1100
Fan Diameter (in.)	22	22	22	22
Nominal Airflow (cfm)	6,000	6,000	6,000	6,000
Watts (total)	610	610	610	610
Piping Connections				
Qty / Suction (in. ODS)	1 / 1-3/8	1 / 1-1/8	1 / 1-3/8	1 / 1-3/8
Qty / Liquid (in. ODS)	1 / 3/8	1 / 1/2	1 / 1/2	1 / 5/8

NOTE(S):

- a. Approximate system charge with about 25 ft piping of sizes indicated with matched 40RFA or 40RUA.

38AUD*12-14 Two Circuit Models - Physical Data

UNIT	38AUD(T,U)12	38AUD(T,U)14
NOMINAL CAPACITY (tons)	10	12.5
OPERATING WEIGHT (lb)	516	664
Refrigeration System		
No. Circuits / No. Comp. / Type	2 / 2 / Scroll	2 / 2 / Scroll
Refrigerant Type	Puron R-410A	Puron R-410A
R-410A Shipping Charge A/B (lb)	9.0 / 9.0	9.0 / 9.0
System Charge w/ Fan Coil*	11.9 / 13.1	16.2 / 16.1
Metering Device	TXV	TXV
High-Press. Trip / Reset (psig)	630 / 505	630 / 505
Low-Press. Trip / Reset (psig)	54 / 117	54 / 117
Compressor		
Oil Charge A/B (oz)	42 / 42	56 / 56
Speed (rpm, 60 Hz)	3500	3500
Condenser Coil		
Material	AlCu	AlCu
Coil type	RTPF	RTPF
Rows / FPI	2 / 17	3 / 17
Total Face Area (ft ²)	31.8	31.8
Condenser Fan / Motor		
Qty / Motor Drive Type	2 / direct	2 / direct
Motor HP / RPM	1/4 / 1100	1/4 / 1100
Fan Diameter (in.)	22	22
Nominal Airflow (cfm)	6,000	6,000
Watts (total)	610	610
Piping Connections		
Qty / Suction (in. ODS)	2 / 1-1/8	2 / 1-3/8
Qty / Liquid (in. ODS)	2 / 3/8	2 / 1/2

NOTE(S):

- a. Approximate system charge with about 25 ft piping of sizes indicated with matched 40RFA or 40RUA.



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Physical data (cont)



38AUZ*16-25 Physical Data

UNIT	38AUZ(A,B)16	38AUZ(A,B)25
NOMINAL CAPACITY (tons)	15	20
OPERATING WEIGHT (lb)	731	978
Refrigeration System		
No. Circuits / No. Comp. / Type	1 / 2 / Scroll	1 / 2 / Scroll
Refrigerant Type	Puron R-410A	Puron R-410A
R-410A Shipping Charge A/B (lbs)	9.0	9.0
System Charge w/ Fan Coil ^a	43.0	38.0
Metering Device	TXV	TXV
High-Press. Trip / Reset (psig)	630 / 505	630 / 505
Low-Press. Trip / Reset (psig)	54 / 117	54 / 117
Compressor		
Oil Charge A/B (oz)	60 / 60	110 / 110
Speed (rpm, 60 Hz)	3500	3500
Condenser Coil		
Material	AlCu	AlCu
Coil type	RTPF	RTPF
Rows / FPI	2 / 17	2 / 17
Total Face Area (ft ²)	23.5 x 2	25.0 x 2
Condenser Fan / Motor		
Qty / Motor Drive Type	3 / direct	4 / direct
Motor HP / RPM	1/4 / 1100	1/4 / 1100
Fan Diameter (in.)	22	22
Nominal Airflow (cfm)	9,000	12,000
Watts (total)	970	1150
Piping Connections		
Qty / Suction (in. ODS)	1 / 1-3/8	1 / 1-5/8
Qty / Liquid (in. ODS)	1 / 5/8	1 / 5/8

NOTE(S):

- a. Approximate system charge with about 25 ft piping of sizes indicated with matched 40RUA.



38AUD*16-28 Physical Data

UNIT	38AUD(T,U)16	38AUD(T,U)25	38AUD(T,U)28
NOMINAL CAPACITY (tons)	15	20	25
OPERATING WEIGHT (lb)	731	978	978
Refrigeration System			
No. Circuits / No. Comp. / Type	2 / 2 / Scroll	2 / 2 / Scroll	2 / 2 / Scroll
Refrigerant Type	Puron R-410A	Puron R-410A	Puron R-410A
R-410A Shipping Charge A/B (lbs)	9.0 / 9.0	9.0 / 9.0	9.0 / 9.0
System Charge w/ Fan Coil ^a	20.4 / 22.4	20.90 / 20.55	24.17 / 25.80
Metering Device	TXV	TXV	TXV
High-Press. Trip / Reset (psig)	630 / 505	630 / 505	630 / 505
Low-Press. Trip / Reset (psig)	54 / 117	54 / 117	54 / 117
Compressor			
Oil Charge A/B (oz)	60 / 60	110 / 110	110 / 110
Speed (rpm, 60 Hz)	3500 / 2900	3500 / 2900	3500 / 2900
Condenser Coil			
Material	AlCu	AlCu	AlCu
Coil type	RTPF	RTPF	RTPF
Rows / FPI	2 / 17	2 / 17	2 / 17
Total Face Area (ft ²)	23.5 x 2	25.0 x 2	25.0 x 2
Condenser fan / motor			
Qty / Motor Drive Type	3 / direct	4 / direct	4 / direct
Motor HP / RPM	1/4 / 1100	1/4 / 1100	1/4 / 1100
Fan Diameter (in.)	22	22	22
Nominal Airflow (cfm)	9,000	12,000	12,000
Watts (total)	870	1150	1150
Piping Connections			
Qty / Suction (in. ODS)	2 / 1-3/8	2 / 1-3/8	2 / 1-3/8
Qty / Liquid (in. ODS)	2 / 1/2	2 / 1/2	2 / 1/2

NOTE(S):

- a. Approximate system charge with about 25 ft piping of sizes indicated with matched 40RUA.



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Physical data (cont)



38AUZ Piping Recommendations (Single-Circuit)

MODEL & NOMINAL CAPACITY	LINEAR LINE (FT)	0 - 24	25 - 49	50 - 74	75 - 99	100 - 124	125 - 149	150 - 174	175 - 200								
	EQUIV. LINE (FT)	0 - 37	38 - 74	75 - 112	113 - 149	150 - 187	188 - 224	225 - 262	263 - 300								
38AUZ_07 TC 88.5, SC 5.57°F	Liquid Line Size (in.)	3/8	3/8	1/2	1/2	5/8	1/2	5/8	1/2	5/8	1/2	5/8	1/2	5/8			
	Liquid PD (F)	2.0	4.0	0.7	1.1	0.3	1.4	0.4	1.8	0.0	2.1	0.6	2.5	0.7	2.8	0.8	
	Max Lift (ft)	15	7	34	31	39	44	57	41	57	35	54	31	53	27	52	
	Max Lift PD (F)	3.5	4.6	3.5	3.5	3.5	5.0	5.0	5.0	5.0	4.9	5.0	5.0	5.0	5.0	5.0	
	Suction Line Size (in.)	7/8	7/8	1-1/8	7/8	1-1/8	7/8	1-1/8	7/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8		
	Suction Ln PD (F)	0.9	1.8	0.5	2.7	0.8	3.6	1.0	4.5	1.3	1.6	1.8	1.8	2.1	2.1		
	Charge (lb)	10.8	11.8	13.7	15.2	18.5	16.9	21.3	18.7	24.2	21.4	27.1	23.4	30.0	25.3	32.8	
	#/TR	1.90	2.07	2.41	2.67	3.25	2.97	3.74	3.28	4.25	3.8	4.75	4.1	5.26	4.4	5.75	
	38AUZ(D,E) 08 TC 92.0, SC 11.3°F	Liquid Line Size (in.)	1/2	1/2	5/8	1/2	5/8	1/2	5/8	1/2	5/8	1/2	5/8	1/2	5/8	1/2	5/8
		Liquid PD (F)	0.6	1.3	0.3	1.9	0.5	2.5	0.7	3.2	0.9	3.8	1.0	4.4	1.2	5.1	1.4
Max Lift (ft)		25	50	50	75	75	100	100	97	97	90	90	82	121	74	119	
Max Lift PD (F)		2.7	5.4	4.5	8.1	6.7	10.8	9.0	11.2	8.9	11.2	8.5	11.2	11.2	11.2	11.2	
Suction Line Size (in.)		7/8	7/8	1-1/8	7/8	1-1/8	1-1/8	1-1/8	1-3/8	1-1/8	1-3/8	1-1/8	1-3/8	1-1/8	1-3/8	1-1/8	1-3/8
Suction Ln PD (F)		1.5	3.1	0.8	4.8	1.2	1.6	2.1	0.7	2.5	0.8	2.9	1.0	3.3	1.1	3.3	
Charge (lb)		15.6	19.0	19.7	20.8	24.1	23.1	26.9	25.1	30.7	26.0	32.8	27.0	34.8	27.9	37.1	
#/TR		2.66	2.53	2.63	2.77	3.21	3.08	3.59	3.35	4.09	3.47	4.37	3.60	4.64	3.73	4.95	
38AUZ_12 TC 113.1, SC 7.1°F		Liquid Line Size (in.)	1/2	1/2	5/8	1/2	5/8	1/2	5/8	1/2	5/8	1/2	5/8	1/2	5/8	1/2	5/8
		Liquid PD (F)	0.9	1.9	0.5	2.8	0.8	3.8	1.0	4.7	1.3	5.7	1.6	1.8	2.1	2.1	
	Max Lift (ft)	25	40	50	28	54	34	68	22	65	11	63	59	55	55		
	Max Lift PD (F)	2.9	5.0	4.5	5.0	5.0	6.5	6.4	6.5	6.4	6.5	6.5	6.4	6.4			
	Suction Line Size (in.)	7/8	1-3/8	1-3/8	1-1/8	1-3/8	1-1/8	1-3/8	1-1/8	1-3/8	1-1/8	1-3/8	1-1/8	1-3/8	1-1/8	1-3/8	
	Suction Ln PD (F)	2.4	1.2	1.2	1.8	0.8	2.4	0.9	3.1	1.1	3.7	1.3	4.3	1.5	4.9	1.7	
	Charge (lb)	15.7	18.0	20.0	19.8	23.1	21.6	26.1	23.6	29.2	25.5	32.3	34.1	35.3	36.9	38.4	
	#/TR	1.67	1.89	2.09	2.10	2.45	2.29	2.77	2.50	3.10	2.71	3.43	3.62	3.75	3.92	4.08	
	38AUZ_14 TC 146.1, SC 3.9°F	Liquid Line Size (in.)	5/8	5/8	3/4	5/8	3/4	5/8	3/4	5/8	3/4	5/8	3/4	5/8	3/4	3/4	7/8
		Liquid PD (F)	0.4	0.8	0.4	1.2	0.6	1.6	0.8	2.0	1.1	2.4	1.1	2.8	1.5	1.7	0.8
Max Lift (ft)		23	16	23	10	18	28	38	21	36	14	35	9	30	25	43	
Max Lift PD (F)		1.8	1.84	1.84	1.8	1.8	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	
Suction Line Size (in.)		1-5/8	1-5/8	1-5/8	1-1/8	1-3/8	1-3/8	1-3/8	1-3/8	1-5/8	1-3/8	1-5/8	1-3/8	1-5/8	1-3/8	1-5/8	
Suction Ln PD (F) (Cap Red)		0.1	0.2	0.2	3.3 (-2.3%)	1.2	1.6	2.0	0.8	2.4 (-0.7%)	1.0	2.8 (-1.4%)	1.2	3.2 (-2.1%)	1.3		
Charge (lb)		35.1	38.4	40.9	37.5	41.8	41.1	46.1	44.2	51.6	47.3	56.1	50.3	60.6	53.4	76.9	
#/TR		3.10	3.99	3.62	3.09	3.44	3.38	3.79	3.64	4.24	3.89	4.61	4.14	4.98	5.21	6.32	
38AUZ_16 TC 185.7, SC 18.4°F		Liquid Line Size (in.)	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	5/8	3/4	5/8	3/4	
		Liquid PD (F)	0.7	1.3	2.0	2.7	3.4	4.0	4.0	4.0	4.0	4.0	4.0	4.7	2.5	5.4	2.8
	Max Lift (ft)	25	50	75	100	100	125	150	150	150	150	150	150	175	145	175	
	Max Lift PD (F)	2.8	5.65	8.5	11.3	14.1	16.9	16.9	16.9	16.9	16.9	16.9	17.0	17.5	17.0	17.9	
	Suction Line Size (in.)	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8	1-5/8	1-3/8	1-5/8	1-3/8	1-5/8	1-3/8	1-5/8	1-3/8	1-5/8	
	Suction Ln PD (F) (Cap Red)	1.4	1.0	1.5	2.0	2.5 (-0.9%)	1.1	3 (-1.8%)	1.3	3.5 (-2.7%)	1.5	4 (-3.6%)	1.7				
	Charge (lb)	35.1	38.1	41.2	44.2	47.3	48.4	50.4	51.7	53.4	53.7	56.5	56.5	68.3			
	#/TR	2.9	3.11	3.36	3.61	3.86	3.95	4.11	4.22	4.36	4.36	5.20	4.61	5.57			
	38AUZ_25 TC 233.3, SC 13.0°F	Liquid Line Size (in.)	5/8	5/8	5/8	5/8	5/8	5/8	3/4	5/8	3/4	5/8	3/4	5/8	3/4	5/8	3/4
		Liquid PD (F)	1.1	2.1	3.2	4.3	5.4	2.8	6.4	3.3	7.5	3.8	8.6	4.4	4.4		
Max Lift (ft)		25	50	93	98	85	118	71	108	59	102	46	95				
Max Lift PD (F)		3.2	6.4	9.6	12.5	12.5	12.5	12.4	12.5	12.5	12.5	12.5	12.5				
Suction Line Size (in.)		1-3/8	1-3/8	1-3/8	1-5/8	1-3/8	1-5/8	1-3/8	1-5/8	1-5/8	2-1/8	1-5/8	2-1/8	1-5/8	2-1/8		
Suction Ln PD (F) (Cap Red)		0.8	1.6	2.4 (-0.8%)	1.0	3.3 (-2.2%)	1.4	4 (-3.6%)	1.7	2.0	0.4	2.4 (-0.7%)	0.5	2.7 (-1.2%)	0.8		
Charge (lb)		31.1	34.1	37.2	37.9	40.2	41.1	43.3	50.7	47.7	58.5	51.0	63.0	54.3	68.7		
#/TR		2.62	2.77	3.02	3.07	3.26	3.34	3.61	4.11	3.87	4.75	4.13	5.16	4.40	5.57		

LEGEND:

- #/TR — Charge to unit capacity ratio, lbs per ton (at 45°F SST, 95°F ODA)
- Cap Red — Capacity reduction caused by suction line pressure drop GT 2°F
- Liquid PD (F) — Liquid line pressure drop, saturated temperature, °F
- Max Lift — Maximum liquid lift (Indoor unit ABOVE outdoor unit only), at maximum permitted pressure drop.
- Max Lift PD (F) — Pressure drop including Maximum liquid lift value
- SC — Sub-cooling, °F (at liquid line valve)
- TC — Total Capacity, MBH (at 45°F saturated suction, 95°F outdoor air temp)



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Physical data (cont)



38AUD Piping Recommendations (Dual-Circuit)^a

MODEL & NOMINAL CAPACITY	LINEAR LINE (FT)	0 - 24	25 - 49	50 - 74	75 - 99	100 - 124	125 - 149	150 - 174	175 - 200							
	EQUIV. LINE (FT)	0 - 37	38 - 74	75 - 112	113 - 149	150 - 187	188 - 224	225 - 262	263 - 300							
38AUD_12 TC 55.9 Each, SC 12.7°F	Liquid Line Size (in.)	3/8	3/8	3/8	3/8	1/2	3/8	1/2	3/8	1/2	5/8	1/2	5/8			
	Liquid PD (F)	1.4	2.7	5.0	5.5	0.9	6.9	1.1	8.2	1.4	1.6	0.5	1.8	0.8		
	Max Lift (ft)	25	50	75	82	100	66	125	48	133	130	144	125	144		
	Max Lift PD (F)	3.4	6.8	10.2	12.1	9.0	12.1	11.2	12.1	12.1	12.1	12.1	12.1	12.1		
	Suction Line Size (in.)	3/4	7/8	7/8	7/8	1-1/8	7/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8		
	Suction Ln PD (F) (Cap Red)	1.4	1.2	1.8	2.5 (-0.8%)	0.8	3.1 (-1.9%)	0.9	1.1	1.1	1.3	1.3	1.5	1.5		
	Charge (lb)	9.0	10.0	11.0	12.1	15.7	13.1	17.7	14.9	19.6	21.5	28.2	23.5	31.0		
	#/TR	0.73	0.81	0.89	0.97	1.27	1.05	1.42	1.20	1.58	1.74	2.27	1.89	2.50		
	38AUD_14 TC 69.8 Each, SC 14.7°F	Liquid Line Size (in.)	3/8	3/8	3/8	3/8	1/2	3/8	1/2	1/2	5/8	1/2	5/8	1/2	5/8	
		Liquid PD (F)	2.1	4.1	6.2	8.2	1.0	10.3	1.8	2.2	2.6	0.7	2.9	0.8	0.8	
Max Lift (ft)		25	50	75	69	155	42	125	145	140	163	135	162	162		
Max Lift PD (F)		4.0	8.1	12.1	13.6	9.4	13.6	11.7	13.6	13.6	13.6	13.6	13.6	13.6		
Suction Line Size (in.)		1-3/8	1-3/8	7/8	1-1/8	1-1/8	1-1/8	1-1/8	1-3/8	1-1/8	1-1/8	1-1/8	1-1/8	1-1/8		
Suction Ln PD (F) (Cap Red)		0.3	0.6	2.9 (-1.5%)	0.8	1.1	1.4	1.6	1.6	1.9	1.9	2.2 (-0.3%)	0.7	0.7		
Charge (lb)		16.5	17.9	19.0	19.5	20.6	23.7	21.6	25.7	27.6	29.5	36.2	31.5	39.0		
#/TR		1.44	1.56	1.52	1.56	1.65	1.90	1.74	2.05	2.21	2.38	2.89	2.52	3.12		
38AUD_16 TC 92.9 Each, SC 15.1°F		Liquid Line size	3/8	3/8	3/8	1/2	1/2	1/2	1/2	5/8	1/2	5/8	1/2	5/8		
		Liquid PD (F)	3.4	6.9	10.3	1.9	2.6	3.2	3.9	1.0	4.5	1.2	6.1	1.4	1.4	
	Max Lift (ft)	25	50	32	75	144	125	127	150	121	159	112	157	157		
	Max Lift PD (F)	5.5	11.1	13.0	8.2	10.9	13.7	14.5	13.6	14.5	14.5	14.5	14.5	14.5		
	Suction Line size	1-3/8	1-3/8	1-1/8	1-1/8	1-1/8	1-3/8	1-1/8	1-3/8	1-1/8	1-3/8	1-3/8	1-3/8	1-3/8		
	Suction Ln PD (F) (Cap Red)	0.5	1.0	1.2	1.6	2 (-0.1%)	0.7	2.5 (-0.8%)	0.8	2.9 (-1.0%)	1.0	3.3 (-2.2%)	1.1	1.1		
	Charge (lb)	22.6	23.9	19.5	21.8	23.7	25.7	26.6	27.6	34.4	29.5	37.4	31.5	40.5		
	#/TR	1.42	1.50	1.55	1.73	1.89	2.04	2.11	2.19	2.73	2.35	2.97	2.50	3.22		
	38AUD_25 TC 121.2 Each, SC 10.6°F	Liquid Line size	3/8	1/2	1/2	5/8	1/2	5/8	1/2	5/8	5/8	5/8	5/8	3/4	3/4	
		Liquid PD (F)	5.6	2.2	3.3	0.9	4.3	1.2	5.4	1.5	6.5	1.8	2.1	2.4	1.3	
Max Lift (ft)		25	50	64	75	70	108	55	104	42	100	97	92	107		
Max Lift PD (F)		7.7	6.3	6.5	7.1	10.0	9.4	9.9	10.0	10.0	10.0	10.0	9.9	10.0		
Suction Line size		1-1/8	1-1/8	1-1/8	1-3/8	1-1/8	1-3/8	1-1/8	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8	1-3/8		
Suction Line PD (F) (Cap Red)		0.7	1.3	2.0	0.7	2.7 (-1.2%)	1.0	3.4 (-2.4%)	1.2	1.4	1.7	1.7	1.9	1.9		
Charge (lb)		15.2	17.9	19.8	23.2	21.7	26.2	23.7	29.3	26.7	32.4	35.4	36.5	46.5		
#/TR		1.20	1.41	1.56	1.83	1.72	2.07	1.67	2.31	2.11	2.56	2.80	3.04	3.83		
38AUD_28 TC 261.9 Each, SC 13.0°F		Liquid Line size	1/2	1/2	5/8	5/8	3/4	5/8	3/4	5/8	3/4	7/8	3/4	7/8	3/4	7/8
		Liquid PD (F)	4.2	8.5	3.0	4.6	2.4	6.1	3.2	7.7	4.0	4.8	1.5	5.8	1.8	6.4
	Max Lift (ft)	25	14	50	48	75	42	79	23	89	59	99	49	96	39	93
	Max Lift PD (F)	6.3	9.5	7.1	8.4	8.4	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
	Suction Line size	1-1/8	1-3/8	1-5/8	1-3/8	1-5/8	1-5/8	1-5/8	1-5/8	1-5/8	1-5/8	1-5/8	1-5/8	1-5/8	2-1/8	
	Suction Line PD (F) (Cap Red)	4.2 (-4.0%)	2.8 (-1.8%)	1.2	4.3 (-4.2%)	1.8	2.4	3.0 (-1.9%)	3.6 (-2.9%)	4.2 (-4.0%)	4.2	1.9	1.9	1.9	1.9	
	Charge (lb)	25.8	26.1	30.4	33.7	38.1	39.2	44.2	43.1	49.3	54.4	63.3	59.5	66.8	64.6	76.4
	#/TR	1.10	1.20	1.30	1.44	1.67	1.67	1.88	1.83	2.10	2.32	2.89	2.53	2.97	2.75	3.25

NOTE(S):

a. 38AUD units require TWO sets of refrigeration piping



LEGEND

- #/TR --- Charge to unit capacity ratio, lbs per ton (at 45°F SST, 95°F ODA)
- Cap Red --- Capacity reduction caused by suction line pressure drop GT 2°F
- Liquid PD (F) --- Liquid line pressure drop, saturated temperature, °F
- Max Lift --- Maximum liquid lift (Indoor unit ABOVE outdoor unit only), at maximum permitted pressure drop.
- Max Lift PD (F) --- Pressure drop including Maximum liquid lift value
- SC --- Sub-cooling, °F (at liquid line valve)
- TC --- Total Capacity, MBH (at 45°F saturated suction, 95°F outdoor air temp)



EL

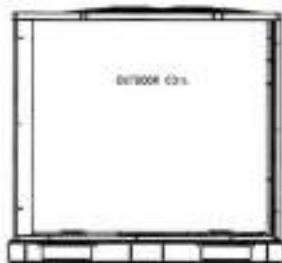
38AUD/Z 07-14 Base Unit Dimensions

 CENTER OF GRAVITY
 DIRECTION OF AIR FLOW
 DIMENSIONS IN () ARE IN MM

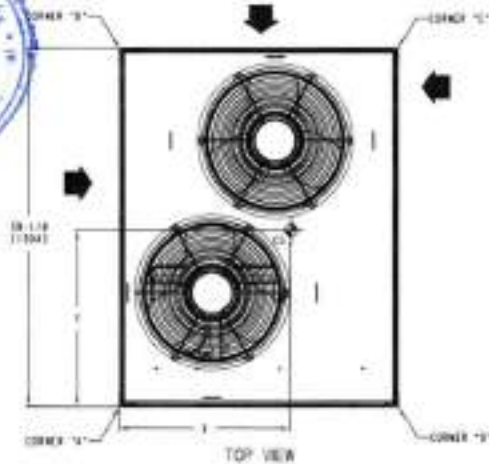


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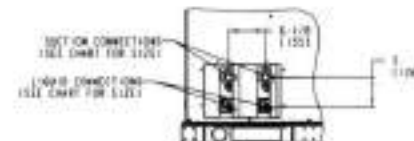
SERVICE VALVE CONNECTIONS				GTY
UNIT	3/8" L1/8"	1/2" L1/8"	1/2" L1/8"	
38A007	1-118 (30.43)	318 (8.03)	-	1
38A008	1-118 (30.43)	318 (8.03)	-	1
38A011	1-118 (30.43)	318 (8.03)	-	1
38A013	1-118 (30.43)	318 (8.03)	-	1
38A014	1-118 (30.43)	318 (8.03)	-	2
38A017	1-118 (30.43)	318 (8.03)	-	2
38A020	1-118 (30.43)	318 (8.03)	-	1
38A021	1-118 (30.43)	318 (8.03)	-	1



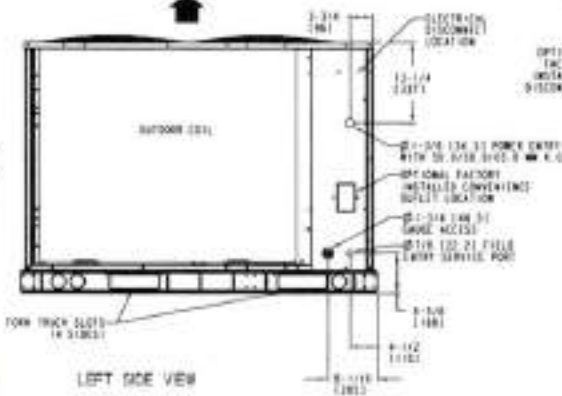
REAR VIEW



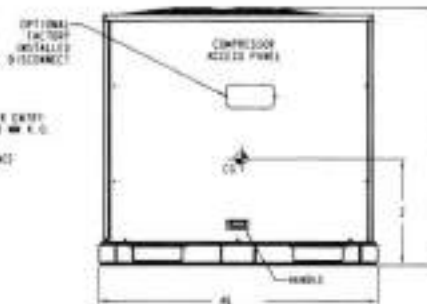
TOP VIEW



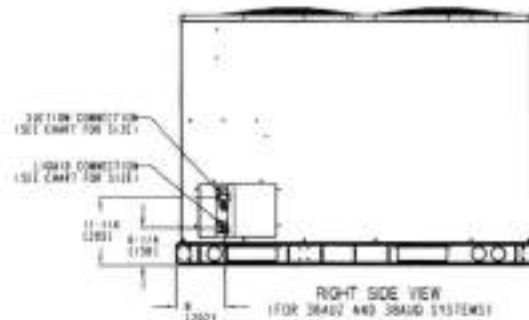
RIGHT SIDE VIEW
(FOR 38A02 SYSTEMS)



LEFT SIDE VIEW



FRONT VIEW



RIGHT SIDE VIEW
(FOR 38A02 AND 38AUD SYSTEMS)

FIG. CLASSIFICATION	SIZE	DATE	APPROVED	CONDENSING UNIT	38A000149	REV
U. S. COIL WEB	2 OF 2	12/01/02	06/25/02	38A07 38A08 38A09 38AUD-0110012114		N



Base unit dimensions



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Base unit dimensions (cont)



38AU 07-14 Corner Weights

UNIT	STD. UNIT WT.		CORNER A		CORNER B		CORNER C		CORNER D		CENTER OF GRAVITY*			UNIT HEIGHT*
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	X	Y	Z	H
38AUZ*07	389	176	141	64	96	44	62	28	91	41	18 [457.2]	24 [609.6]	21 [533.4]	42 3/8 [1076.0]
38AUZ*08	430	195	142	64	96	44	76	34	111	50	18 [457.2]	24 [609.6]	21 [533.4]	42 3/8 [1076.0]
38AUZ*12	490	222	177	80	120	54	78	35	114	52	18 [457.2]	24 [609.6]	24 [609.6]	50 3/8 [1279.2]
38AUZ*14	598	271	195	88	142	64	110	50	151	68	20 [508.0]	25 [635.0]	24 [609.6]	50 3/8 [1279.2]
38AUD*12	516	234	185	84	117	53	83	38	131	59	19 [482.6]	23 [584.2]	24 [609.6]	50 3/8 [1279.2]
38AUD*14	654	297	214	97	155	70	120	54	165	76	20 [508.0]	25 [635.0]	24 [609.6]	50 3/8 [1279.2]

NOTE(S):

a. Dimensions are in inches [mm]

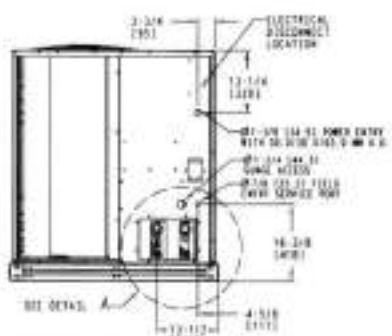


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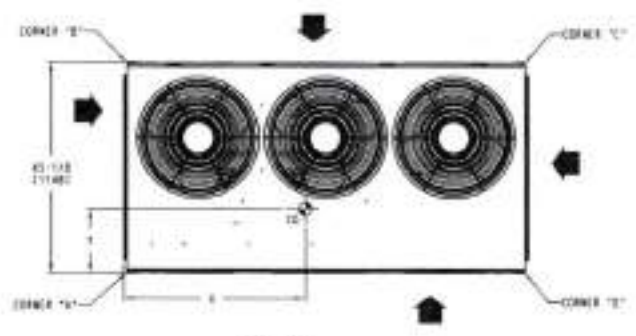
38AUD/Z 16 Base Unit Dimensions

UNIT	ELECTRICAL CHARACTERISTICS	175" UNIT WT. CORNER A				CORNER B				CORNER C				CORNER D				CENTER OF GRAVITY			UNIT HEIGHT
		LBS	KG	LBS	KG	LBS	KG	LBS	KG	LBS	KG	LBS	KG	X	Y	Z	IN				
38AUDZ (RHP)	246/170-3-45-440-3-16-370-3-30	110	50.0	2.27	1.03	112	51	2.31	1.04	109	49	2.26	1.03	108	48	2.22	21	1400.81	17	3407.83	20-3/8 (519.21)
38AUDZ (RHP)	246/170-3-45-440-3-16-370-3-30	110	50.0	2.27	1.03	112	51	2.31	1.04	109	49	2.26	1.03	108	48	2.22	21	1400.81	17	3407.83	20-3/8 (519.21)

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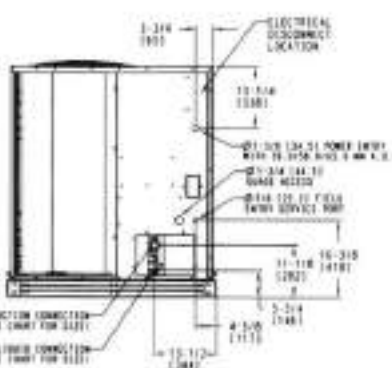
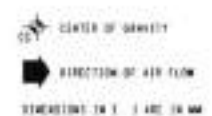
LEFT SIDE VIEW FOR 38AUD SYSTEMS



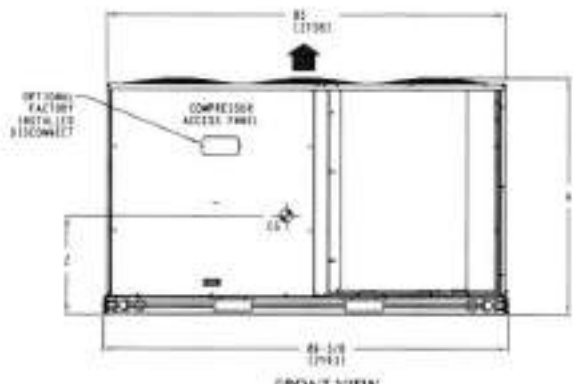
TOP VIEW

- NOTES:
1. MINIMUM CLEARANCE LOCAL CODES OR JURISDICTION MAY PREVAIL.
 2. BOTTOM TO COMBUSTIBLE SURFACES: 8 INCHES.
 3. OUTSIDE COILS: FOR PROPER AIR FLOW: 18 INCHES ONE SIDE, 12 INCHES THE OTHER. THE SIDE GETTING THE GREATER CLEARANCE IS OPTIONAL.
 4. OVERHEAD: 40 INCHES, TO ASSURE PROPER OUTDOOR AIR CIRCULATION.
 5. BETWEEN UNITS: CONTROL BOX SIDE, 42 INCHES PER REC.
 6. BETWEEN UNIT AND UNDISBURSED SURFACES: CONTROL BOX SIDE, 36 INCHES PER REC.
 7. BETWEEN UNIT AND WALLS OR CONCRETE WALLS AND OTHER UNDISBURSED SURFACES: CONTROL BOX SIDE, 42 INCHES PER REC.
 8. WITH EXCEPTION OF THE CLEARANCE FOR THE OUTDOOR COILS AS STATED IN NOTE 10, A REMOVABLE COVER OR DISBURSED REQUIRES NO CLEARANCE.
 9. UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORS MADE FROM WOOD OR CLASS A, B OR C ROOF COVERING MATERIAL.

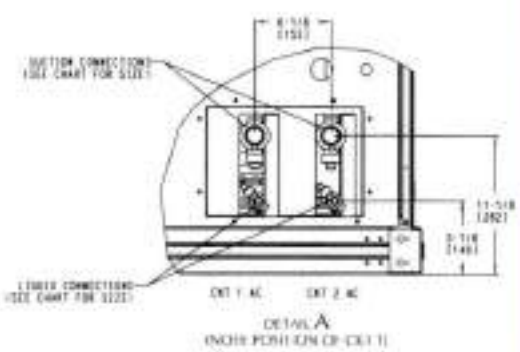
SERVICE VALVE CONNECTIONS			QTY
UNIT	SUCTION	LIQUID	
38AUDZ	1'-3/8" (34.81)	3/8" (9.53)	1 EA
38AUDZ	1'-3/8" (34.81)	1/2" (12.7)	2 EA



LEFT SIDE VIEW



FRONT VIEW



DETAIL A (INDOOR POSITION OF COIL 1)

ICC CLASSIFICATION	UNIT	DATE	REVISIONS	38AUD-18AUD CONDENSING UNIT	3849300183	REV
U.S. ECRN-WSP	1 OF 1	02/07/22	05/08/16			H



Base unit dimensions (cont)



FD

38AUZ 25 / 38AUD 25-28 Base Unit Dimensions

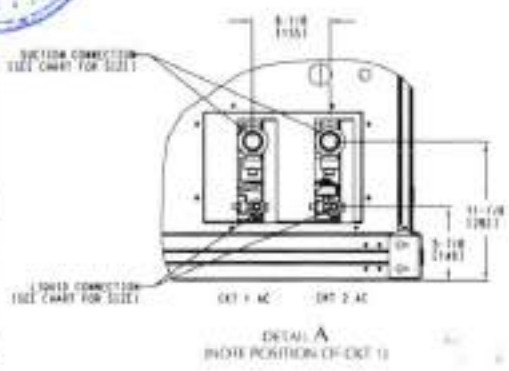
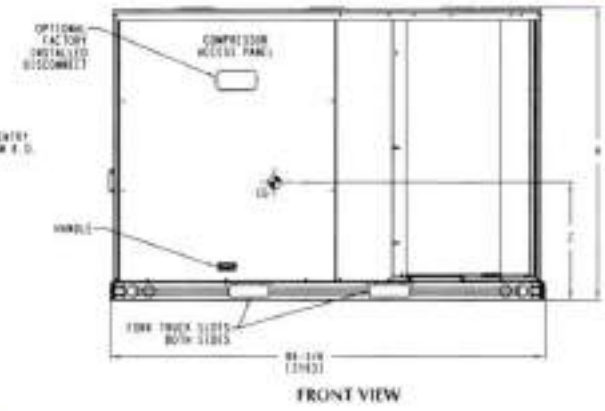
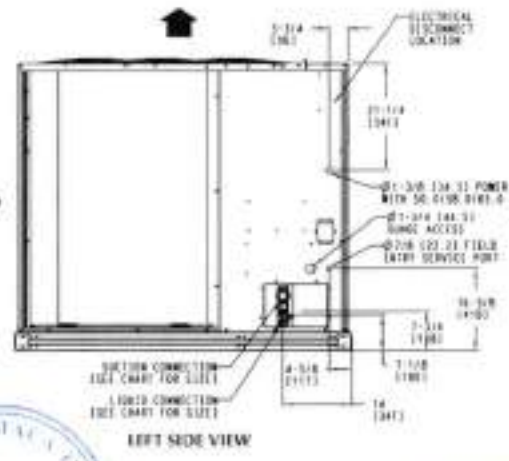
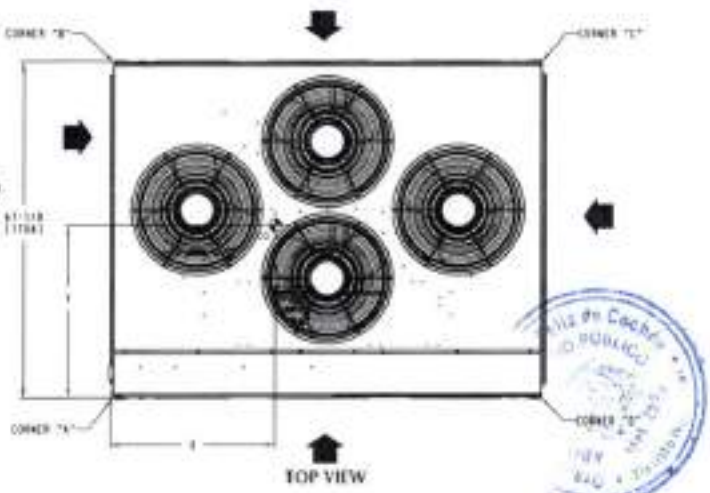
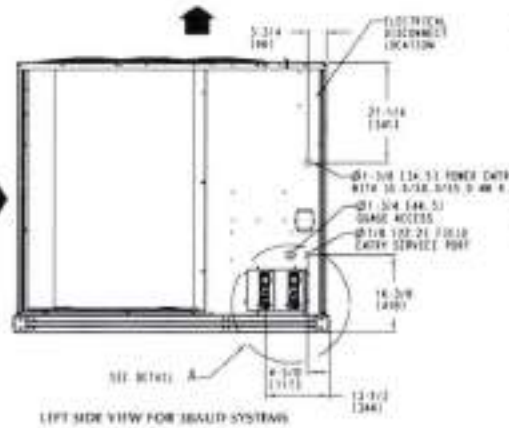
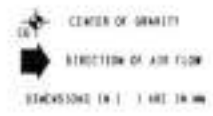
UNIT	ELECTRICAL CHARACTERISTICS	STD. UNIT WT.				CORNER A				CORNER B				CORNER C				CORNER D				CENTER OF GRAVITY				UNIT HEIGHT								
		LBS	KG	LBS	KG	LBS	KG	LBS	KG	LBS	KG	LBS	KG	LBS	KG	LBS	KG	LBS	KG	LBS	KG	LBS	KG	LBS	KG		LBS	KG	LBS	KG				
38AUZ25 (107H)	200/230 3-40 AMP 3-00 175-2-10	850	400	140	163	108	85	147	67	265	120	36	165	75	27	124	57	26	120	57	145	66	50	23	117	53	50	23	117	53	50	23	117	53
38AUD25 (107H)	200/230 3-40 AMP 3-00 175-2-10	850	400	140	163	108	85	147	67	265	120	36	165	75	27	124	57	26	120	57	145	66	50	23	117	53	50	23	117	53	50	23	117	53
38AUD28 (107H)	200/230 3-40 AMP 3-00 175-2-10	850	400	140	163	108	85	147	67	265	120	36	165	75	27	124	57	26	120	57	145	66	50	23	117	53	50	23	117	53	50	23	117	53



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- NOTES:
- MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTION MAY VARY):
 - BOTTOM TO COMBUSTIBLE SURFACES: 6 INCHES.
 - OUTDOOR COIL, TOP PROPER AIR FLOW: 24 INCHES (SEE SIDE VIEW FOR OTHER THE EDGE SETTING THE GREATER CLEARANCE IS OPTIONAL).
 - OVERHEAD: 60 INCHES, TO ASSURE PROPER OUTDOOR FAN OPERATION.
 - BETWEEN UNITS: CONTROL BOX SIDE, 40 INCHES PER AC; SIDE, 48 INCHES PER AC.
 - BETWEEN UNIT AND UNFINISHED SURFACES: CONTROL BOX SIDE, 48 INCHES PER AC.
 - BETWEEN UNIT AND BLOCK OF CONCRETE WALLS AND OTHER FINISHED SURFACES: CONTROL BOX SIDE, 40 INCHES PER AC.
 - WITH EXCEPTION OF THE CLEARANCE FOR THE OUTDOOR COIL AS SHOWN IN NOTE 1B, A REMOVABLE FENCE OR BARRICADE REQUIRES NO CLEARANCE.
 - UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORING MADE FROM WOOD OR CLASS A, B OR C ROOF CEILING MATERIALS.

UNIT	SECTION	LENGTH	WT
38AUZ25	1-3/4 (44.5)	124 (3150)	1.14
38AUD25	1-3/4 (44.5)	122 (3125)	1.14
38AUD28	1-3/4 (44.5)	122 (3125)	1.14



DATE	APPROVED	38AUZ - 38AUD CONDENSING UNIT	38AU500370	G
4/8/23	9/1/22			



38AU, 40RFA/40RUA options and accessories



ITEM	FACTORY-INSTALLED OPTION	FIELD-INSTALLED ACCESSORY
Condenser Coil Grille		X
E-Coated Aluminum-Fin Coils	X	
Louvered Hail Guard	X	X
Low-Ambient Temperature Kit	X	X
Non-Fused Disconnect Switch ^a	X	
Powered Convenience Outlet	X	
Pre-Coated Coils	X	
Staged Air Volume (SAV)	X ^b	
Thermostats		X
Unpowered Convenience Outlet	X	

NOTE(S):

- a. Non-fused disconnect switch cannot be used when unit MOCP electrical rating exceeds 80 amps.
- b. Requires pairing with 40RFA/40RUA series packaged air handler.

38AUZ/38AUD Factory-Installed Options

E-Coated Aluminum-Fin Coils

These coils have a flexible and durable epoxy coating uniformly applied to all coil surfaces. Unlike brittle phenolic dip and bake coatings, E-coating provides superior protection with unmatched flexibility, edge coverage, metal adhesion, thermal performance, and most importantly, corrosion resistance.

Pre-Coated Coils

These coils provide protection in mild coastal environments.

Staged Air Volume (SAV[™]) System

Our SAV units will automatically adjust the indoor fan motor speed in sequence with the unit's cooling operation. Per ASHRAE 90.1 2010 standard section 6.4.3.10.b, during the first stage of cooling operation the fan motor (either ECM or controlled by VFD) will adjust to provide two-thirds of the total cfm established for the unit. When a call for the second stage of cooling is required, the fan motor will allow the total cfm (100%) established for the unit. During the

heating mode the fan motor will allow total design cfm (100%) operation and during the ventilation mode the fan motor will allow operation to two-thirds of total cfm.

Low-Ambient Temperature Kit (-20°F [-29°C])

This kit controls outdoor-fan motor operation to maintain the correct head pressure at low outdoor ambient temperatures.

Louvered Hail Guard

This guard protects coils against damage from flying debris and hail.

Non-Fused Disconnect Switch

This switch is used to remove power locally at the condensing unit. This switch also includes a power lockout capability to protect the service person. This lockout switch saves the service person time and effort because there is no need to access a distant disconnect switch while servicing the unit.

NOTE: Non-fused disconnect switch cannot be used when unit MOCP electrical rating exceeds 80 amps.

38AUZ/D Field-Installed Accessories

Low-Ambient Temperature Kit (-20°F [-29°C])

This accessory controls outdoor-fan motor operation to maintain the correct head pressure at low outdoor ambient temperatures.

Louvered Hail Guard

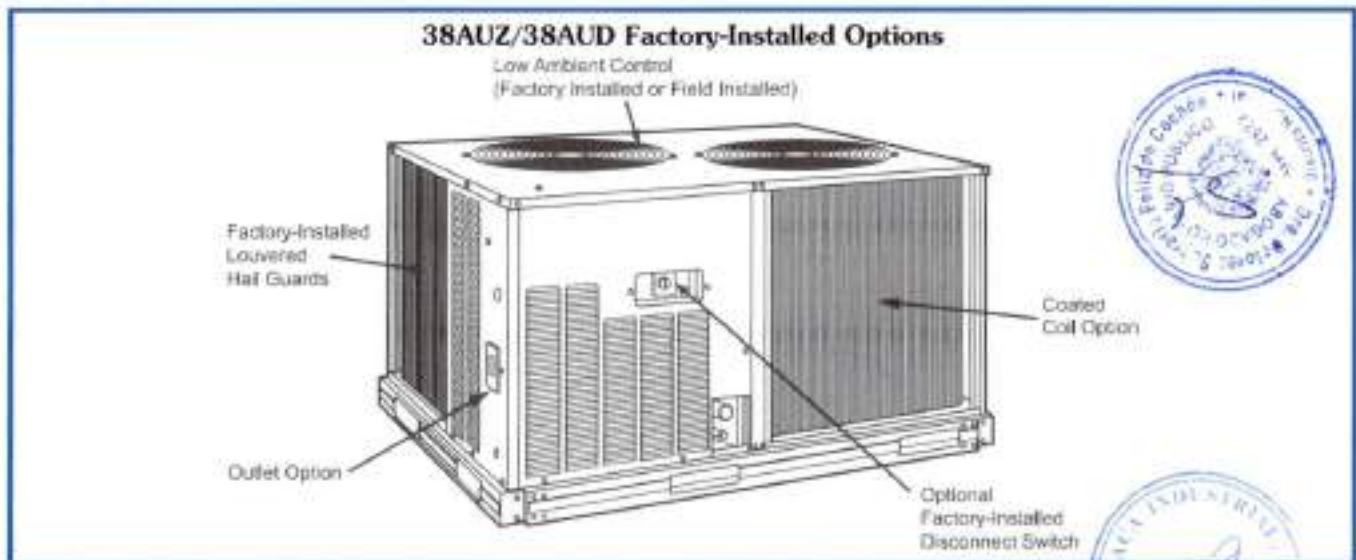
This guard protects coils against damage from flying debris and hail.

Condenser Coil Grille

This grille protects the condensing unit coil from impact by large objects and vandalism.

Thermostats

These accessories provide both programmable and non-programmable capability with the new Carrier line of commercial programmable thermostats. The Commercial Electronic thermostats provide 7-day programmable capability for economical applications.



ITEM	FACTORY-INSTALLED OPTION	FIELD-INSTALLED ACCESSORY
Alternate Fan Motors (40RUA only)	X	
Alternate Drives (40RUA only)	X	
CO ₂ Sensors		X
Condensate Drain Trap		X
Discharge Duct Adapter (40RFA only)		X
Discharge Plenum		X
Economizer		X
Electric Heater		X
Hot Water Heating Coils (2 row)		X
Optional VFD Display Kit (40RUA only)		X
Overhead Suspension Package		X
Pre-painted Units	X	
Programmable Thermostats		X
Return Air Grille		X
Steam Heating Coil (1 row)		X

40RFA/RUA Factory-Installed Options

Alternate Fan Motors and Drives (40RUA only)

Alternate fan motors and drives are available to provide the widest possible range of performance.

Pre-painted Steel Constructed Units

Pre-painted units are available from the factory for applications that require painted units. Units are painted with American Sterling Gray color.

40RFA/RUA Field-Installed Accessories

Optional VFD display Kit (40RUAonly)

There is an optional VFD display kit offered (as an accessory) for 40RUA units to allow the user to troubleshoot any VFD faults in the field after start-up.

NOTE: Do not use the VFD display kit to adjust the frequency and voltage in the VFD to required performance requirements. This could lead to decreased life of the motor and VFD.

Two-Row Hot Water Coils

Two-row hot water coils have copper tubes mechanically bonded to aluminum plate fins and non-ferrous headers.

One-Row Steam Coil

One-row steam coils have copper tubes and aluminum fins. The Inner Distributing Tube (IDT) design provides uniform temperatures across the coil face. The steam coil has a broad operating pressure range; up to 20 psi (138 kPag) at 260°F (126°C). The IDT steam coils are especially suited to applications where sub-freezing air enters the unit.



Electric heater

Electric heaters are available as factory-supplied, field-installed accessories for nominal 240v, 480v, and 575v, 3-phase, 60 Hz units. Electric heaters are ETL (U.S.A.) and ETL, Canada, agency-approved. They have single-point power wiring. The heater assembly includes contactors with 24-v coils, power wiring, 24-v control wiring terminal blocks, and a hinged access panel. Electric heaters should not be used with an air discharge plenum.

Economizer

Provides ventilation air and provides "free" cooling if the outside ambient temperature and humidity are suitable. The economizer can also be used in conjunction with Carrier Comfort System thermostats and CO₂ sensors to help meet indoor air quality requirements. The economizer can be used in both vertical and horizontal positions.

Discharge Plenum

Discharge plenum directs the air discharge directly into the occupied space; integral horizontal and vertical louvers enable redirection of airflow. This accessory is available unpainted or painted. Field assembly is required (only applicable for vertical application).

Return-Air Grille

The return-air grille provides a protective barrier over the return-air opening and gives a finished appearance to units installed in the occupied space. This accessory is available unpainted or painted.

Overhead suspension package

The overhead suspension package includes necessary brackets to support units in horizontal ceiling installations.

CO₂ sensors

CO₂ sensors can be used in conjunction with the economizer accessory to help meet indoor air quality requirements. The sensor signals the economizer to open when the CO₂ level in the space exceeds the set point. A Carrier Comfort System programmable thermostat can be used to override the sensor if the outside-air temperature is too high or too low.

Condensate drain trap

The condensate drain trap includes an overflow shutoff switch that can be wired to turn off the unit if the trap becomes plugged. Kit also includes a wire harness that can be connected to an alarm if desired. The transparent trap is designed for easy service and maintenance.

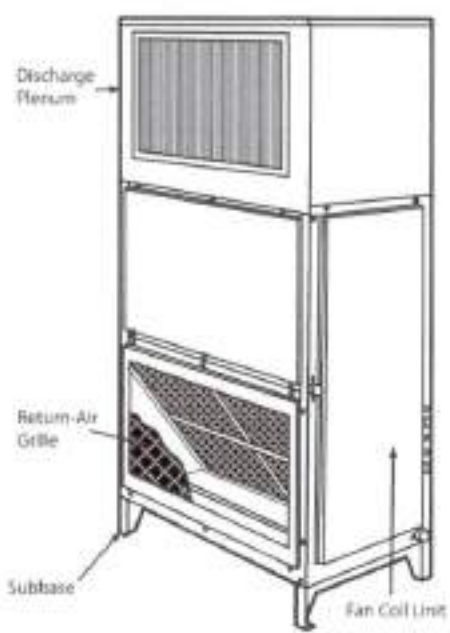
Discharge duct adapter

This accessory is required for replacements using 40RFA units with or without electric heat. It is not required for new installations or when using steam coil, hot water coil, or discharge plenum accessories.



EL

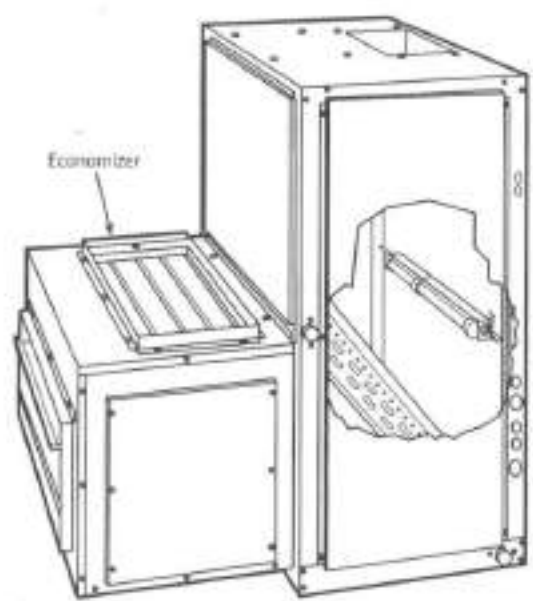
40RFA/RUA with Discharge Plenum Return-Air Grille and Subbase



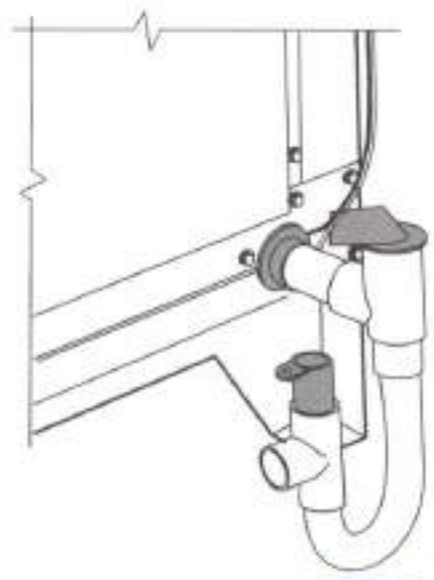
40RFA/RUA with Hot Water or Steam Coil



40RFA/RUA with Economizer

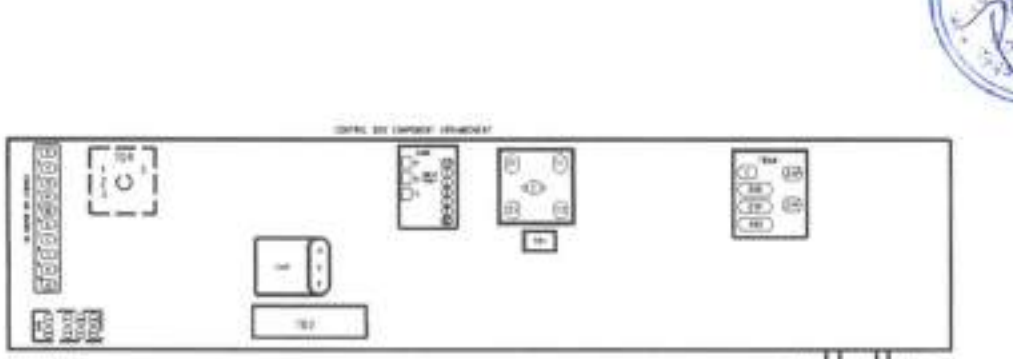
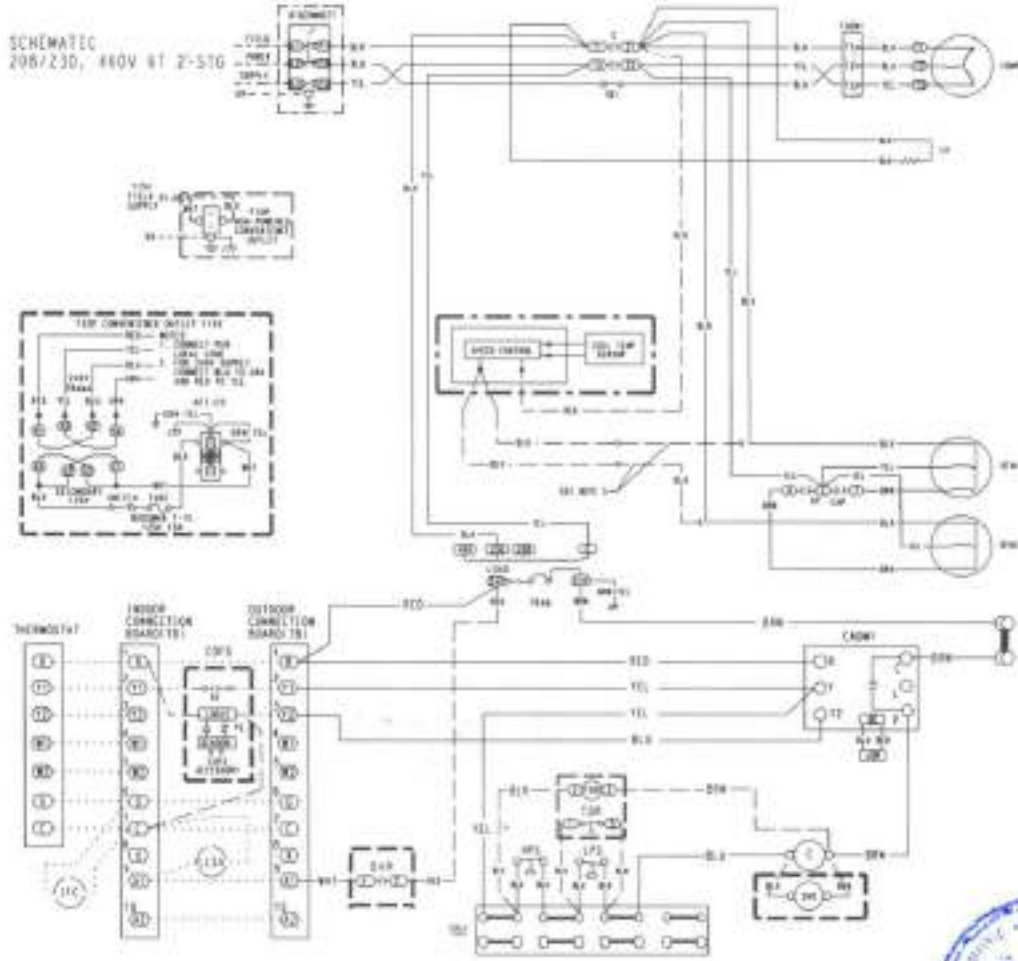


40RFA/RUA with Condensate Trap



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Typical Single Circuit/Two-Stage Wiring Diagram, 6 Ton — 460-3-60 Units



- FIELD WIRING**
- FIELD WIRE
 - WIRE SIZE
 - Ⓢ TERMINAL (NUMBER)
 - + TERMINAL (NUMBER)
 - Ⓢ TERMINAL BLOCK
 - + SPICE
 - FACTORY WIRING
 - - - FIELD CONTROL WIRING
 - - - FIELD POWER WIRING
 - - - ACCESSORY OR OPTIONAL WIRING
 - TO INDICATE COMMON
 - POTENTIAL ON/ OFF WIRE
 - TO REPRESENT WIRING
- LEGEND**
- C CONTACTOR, COMPRESSOR
 - CAP CAPACITOR
 - CDM COMPACT MOTOR - ELECTRONIC MODULE
 - CR CROWBAR RELAY
 - CSF CONDENSATE OVERFLOW SWITCH
 - COMP COMPRESSOR MOTOR
 - COILF COIL
 - FU FUSE
 - GR GROUND
 - HPS HIGH PRESSURE SWITCH
 - IFC INDOOR FAN CONTACTOR
 - IRV INDOOR FAN RELAY
 - LPS LOW PRESSURE SWITCH
 - LPC LOW PRESSURE CUT OFF
 - LCF COMPRESSOR LOADER FLUID
 - OFW OUTDOOR FAN MOTOR
 - OFR OUTDOOR FAN RELAY
 - OTR OUTDOOR THERMIST
 - ORV OUTDOOR FAN RELAY
 - TRM THERMAL RELAY
 - TS TERMINAL BLOCK
 - TRM TIME RELAY
 - TRM TRANSFORMER

- NOTES**
1. IF ANY OF THE ORIGINAL WIRE FUNCTIONS MUST BE REPLACED, IT MUST BE REPLACED WITH THE SAME GAUGE OR LARGER.
 2. USE COPPER CONDUCTORS ONLY.
 3. COMPRESSORS AND FAN MOTORS ARE THERMALLY PROTECTED. THREE PHASE MOTORS ARE PROTECTED AGAINST PRIMARY SINGLE PHASING CONDITIONS.
 4. TRANSFORMER IS WIRING FOR 230V SMT. IT MUST BE TO BE RUN WITH 230V POWER SUPPLY. DISCONNECT BLACK WIRE FROM 230V TAP AND CONNECT TO 230V TAP.
 5. ON UNITS WITH SPEED CONTROL, WIRING OF WIRE AND GROUND WIRE FROM COMPRESSOR CONTACTOR TERMINAL, 21, AND CONNECT TO BLUE WIRE FROM SPEED CONTROL.

38AU000441



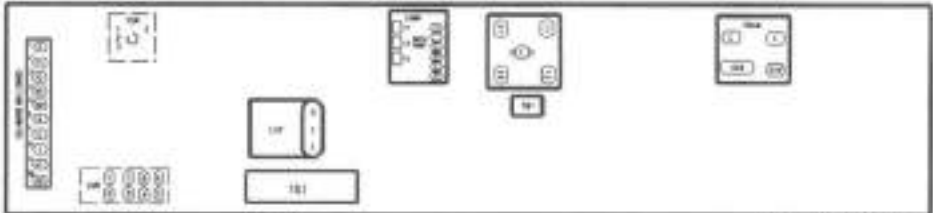
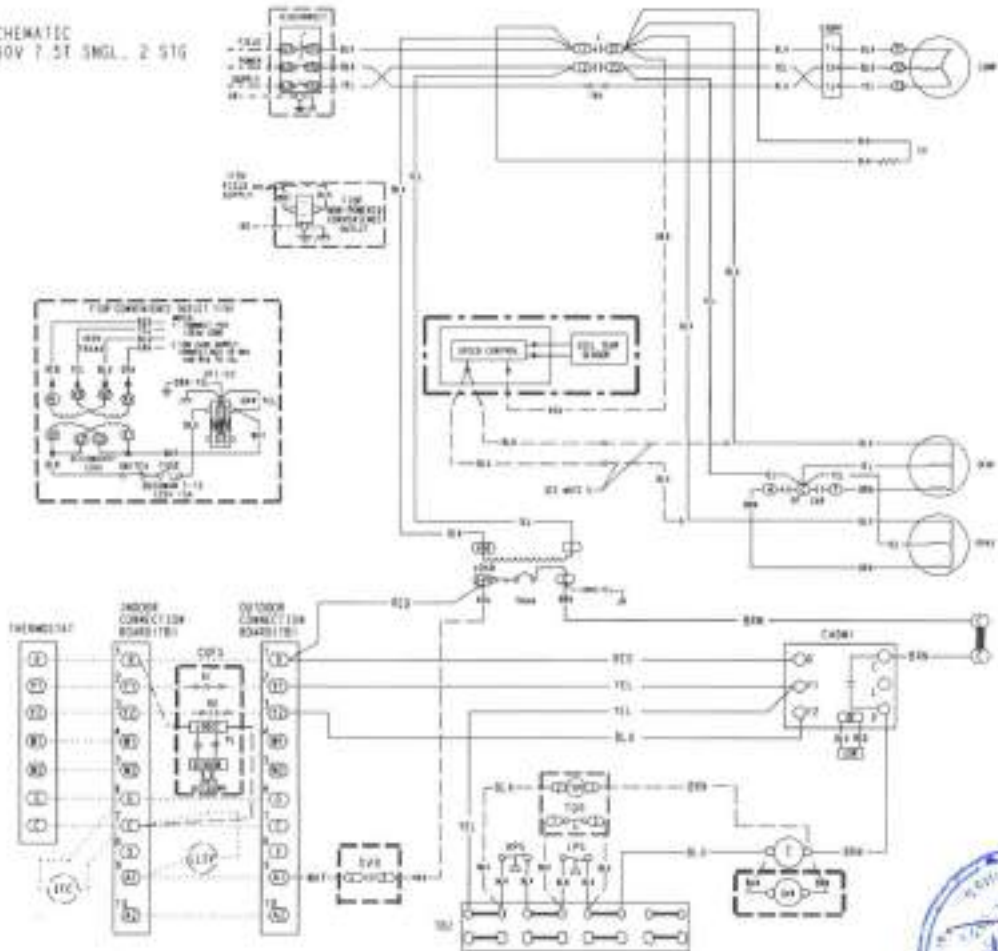
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Typical piping and wiring (cont)



Typical Single Circuit/Two-Stage Wiring Diagram, 7.5 Ton — 460-3-60 Units

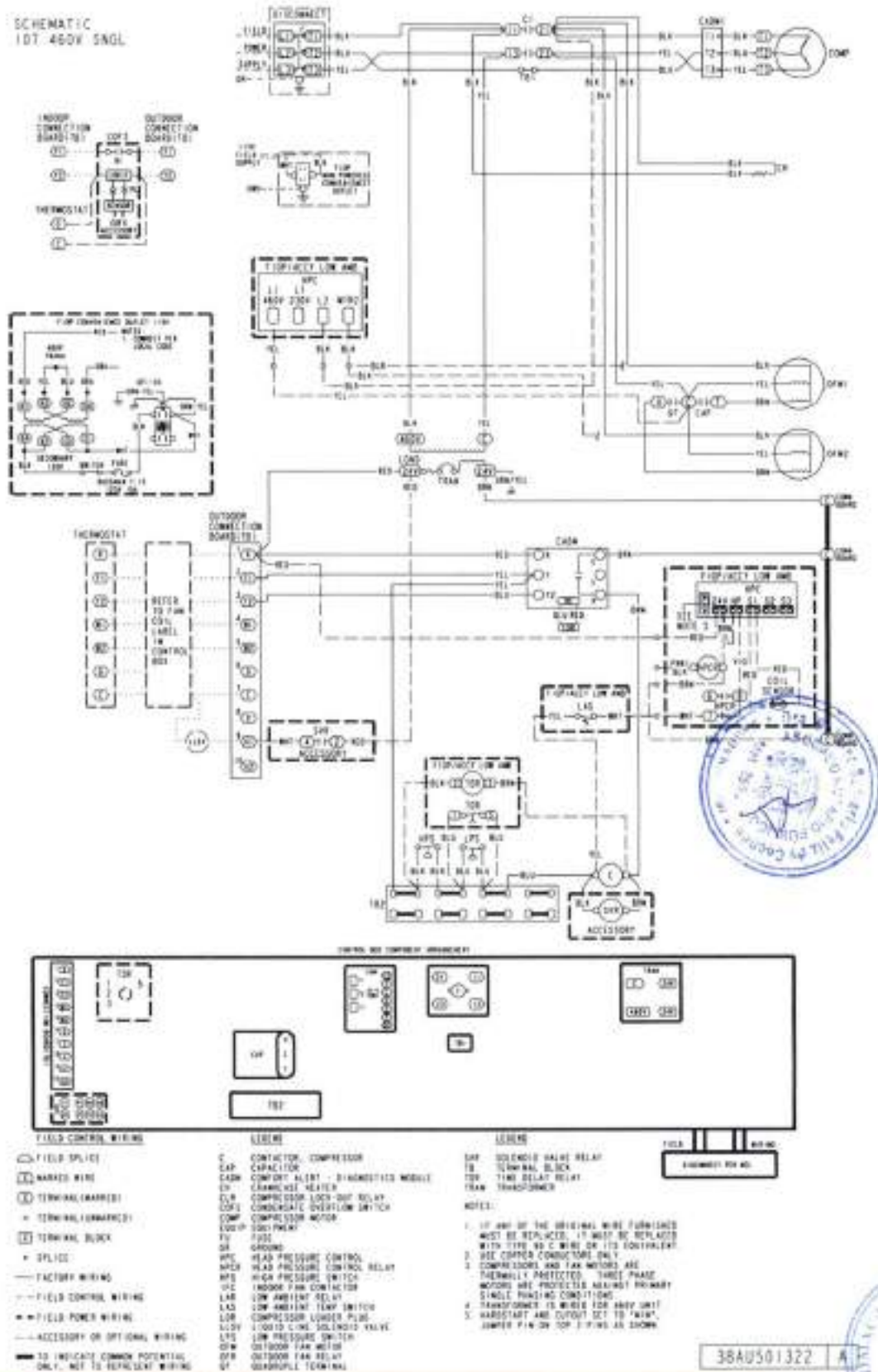
SCHMATIC
480V 7.5T SINGL. 2 STG



- LEGEND**
- C1 CONTACTOR, COMPRESSOR
 - CAP CAPACITOR
 - CAM COMPART ALERT - DIAGNOSTIC MODULE
 - C4 CONNECTOR BEAKER
 - COS CONDENSATE OVERFLOW SWITCH
 - COMP COMPRESSOR MOTOR
 - C7S CYCLE TIMER SWITCH
 - C7R COMPRESSOR OVERHEAT RELAY
 - C22 DIGITAL COMPRESSOR DISCONNECT
 - C23 DISCONNECT
 - C24 FUSE
 - C25 GROUND
 - C26 HIGH PRESSURE SWITCH
 - C31 INDOOR FAN CONTACTOR
 - C32 COMPRESSOR COOLER PLUG
 - C33 THERMISTOR
 - C34 LOW PRESSURE SWITCH
 - C35 OUTDOOR FAN MOTOR
 - C36 OUTDOOR FAN RELAY
 - C37 DIAGNOSTIC TERMINAL
 - C38 CYCLED RELAY RELAY
 - C39 TERMINAL BLOCK
 - C40 TIME RELAY RELAY
 - C41 TRANSFORMER
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 - (TO) FIELD WIRE
 - (TP) FIELD WIRE
 - (TQ) FIELD WIRE
 - (TR) FIELD WIRE
 - (TS) FIELD WIRE
 - (TT) FIELD WIRE
 - (TU) FIELD WIRE
 - (TV) FIELD WIRE
 - (TW) FIELD WIRE
 - (TX) FIELD WIRE
 - (TY) FIELD WIRE
 - (TZ) FIELD WIRE
 - (UA) FIELD WIRE
 - (UB) FIELD WIRE
 - (UC) FIELD WIRE
 - (UD) FIELD WIRE
 - (UE) FIELD WIRE
 - (UF) FIELD WIRE
 - (UG) FIELD WIRE
 - (UH) FIELD WIRE
 - (UI) FIELD WIRE
 - (UJ) FIELD WIRE
 - (UK) FIELD WIRE
 - (UL) FIELD WIRE
 - (UM) FIELD WIRE
 - (UN) FIELD WIRE
 - (UO) FIELD WIRE
 - (UP) FIELD W

Typical Single Circuit/Two-Stage Wiring Diagram, 10 Ton — 460-3-60 Units

SCHEMATIC
10T 460V SINGL



38AU501322 A

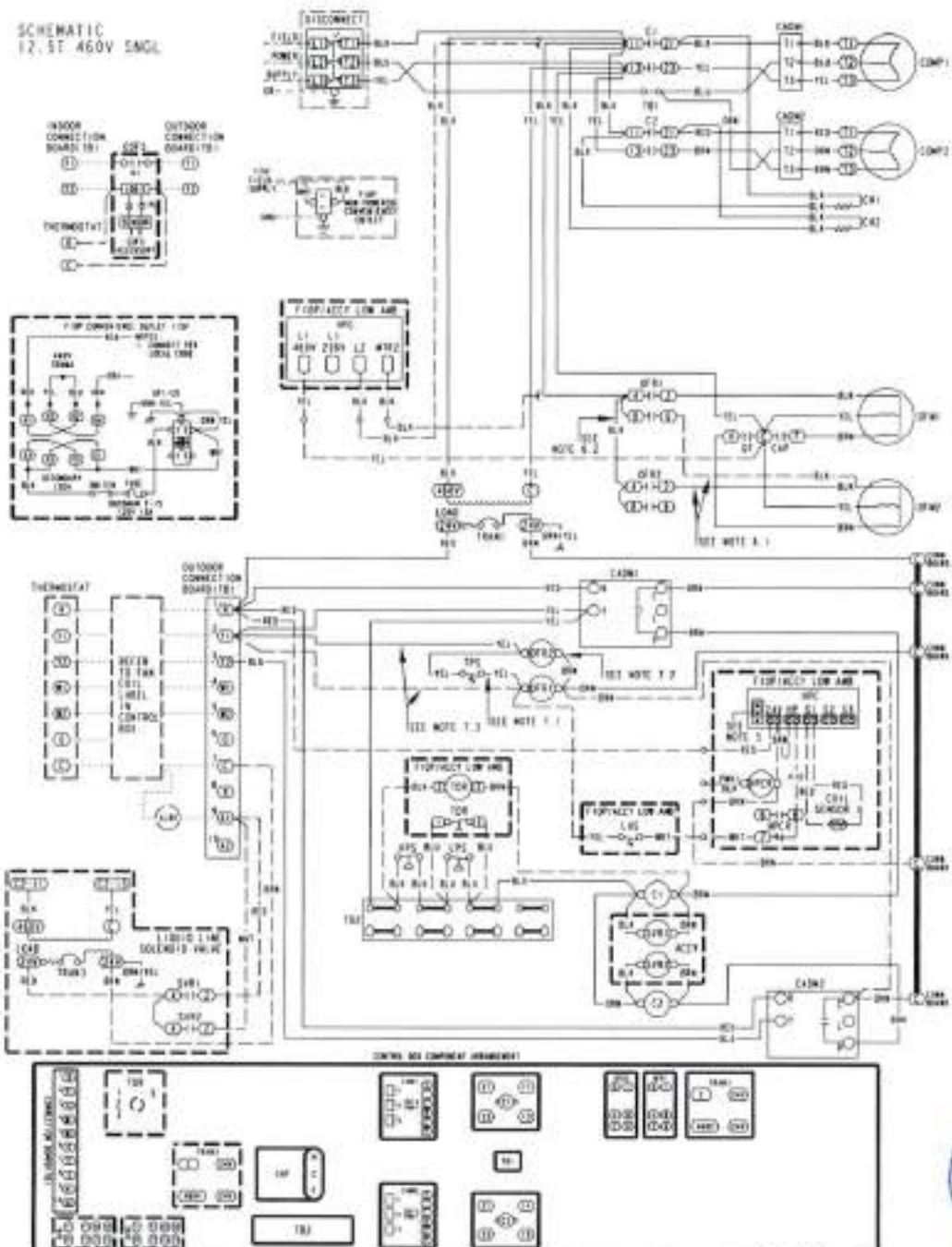


Typical piping and wiring (cont)



Typical Single Circuit/Two-Stage Wiring Diagram, 12.5 Ton — 460-3-60 Units

SCHEMATIC
12.5T 460V SINGL



- | | | |
|--|--|---|
| <p>FIELD WIRING</p> <ul style="list-style-type: none"> ○ FIELD SPICE □ MARKED WIRE ⊕ TERMINAL(MARKED) ⊕ TERMINAL(MARKED) ⊕ TERMINAL BLOCK • SPICE — FACTORY WIRING - - - FIELD CONTROL WIRING ••••• FIELD POWER WIRING - - - ACCESSORY OR OPTIONAL WIRING — TO INDICATE COMMON POTENTIAL ONLY, NOT TO REPRESENT WIRING | <p>LEGEND</p> <ul style="list-style-type: none"> C CONTACTOR, COMPRESSOR CAF CAPACITOR ALM LOW-AMBIENT ALERT - DIAGNOSTIC MODULE CR DRUMCASE RELAY CR COMPRESSOR RUN-OUT RELAY CRS CONDENSATE OVERFLOW SWITCH COMP COMPRESSOR MOTOR DISC DISCONNECT FS FUSE SPRING HPC HEAD PRESSURE CONTROL RELAY HPS HIGH PRESSURE SWITCH IPC INDOOR FAN CONTACTOR LAR LOW AMBIENT RELAY LAT LOW AMBIENT TEMP SWITCH LDR COMPRESSOR LOADER P.W. LTV LOW VOLTAGE LOCKING VALVE LVI LOW VOLTAGE ON LCA OFM OUTDOOR FAN MOTOR OFR OUTDOOR FAN RELAY OT OASIS/ICE TERMINAL | <p>LEGEND</p> <ul style="list-style-type: none"> SRV SOLENOID VALVE RELAY TS TERMINAL BLOCK TRM TIME DELAY RELAY TRN TRANSFORMER <p>NOTES</p> <ol style="list-style-type: none"> 1. IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED, IT MUST BE REPLACED WITH THE SAME TYPE OF WIRE OR ITS EQUIVALENT. 2. USE COPPER CONDUCTORS ONLY. 3. COMPRESSORS AND FAN MOTORS ARE TERMINALLY PROTECTED, THREE PHASE MOTORS ARE PROTECTED AGAINST PHASE SEQUENCE REVERSAL CONDITIONS. 4. TRANSFORMER IS WIRING FOR 480V UNIT. 5. HARDSTART AND CUTOFF SET TO "NOM". JUMPER P.W. ON TOP 2-PIN AS SHOWN. |
|--|--|---|

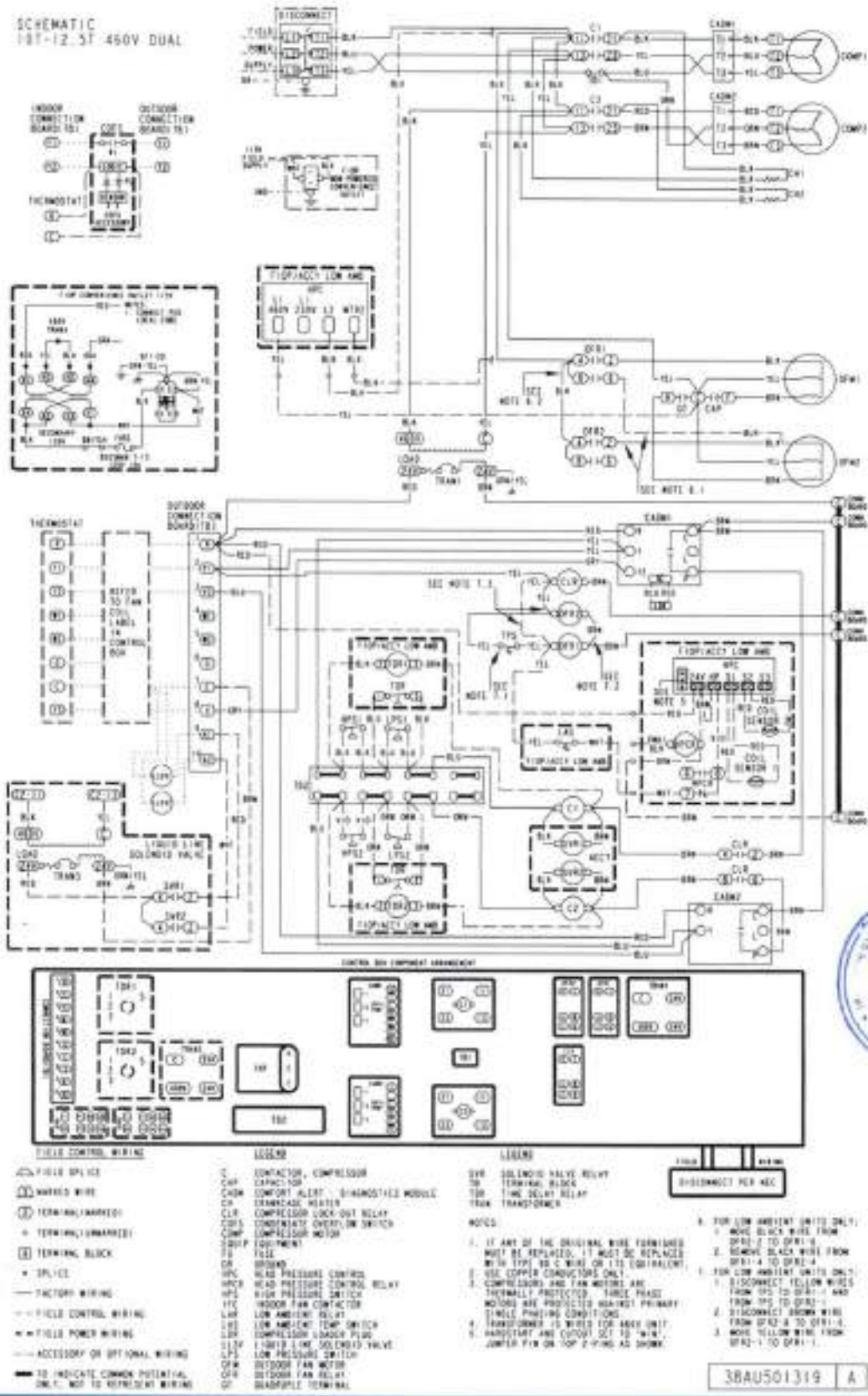
38A501325 A



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Typical Dual Circuit/Three-Stage Wiring Diagram, 10-12.5 Ton — 460-3-60 Units

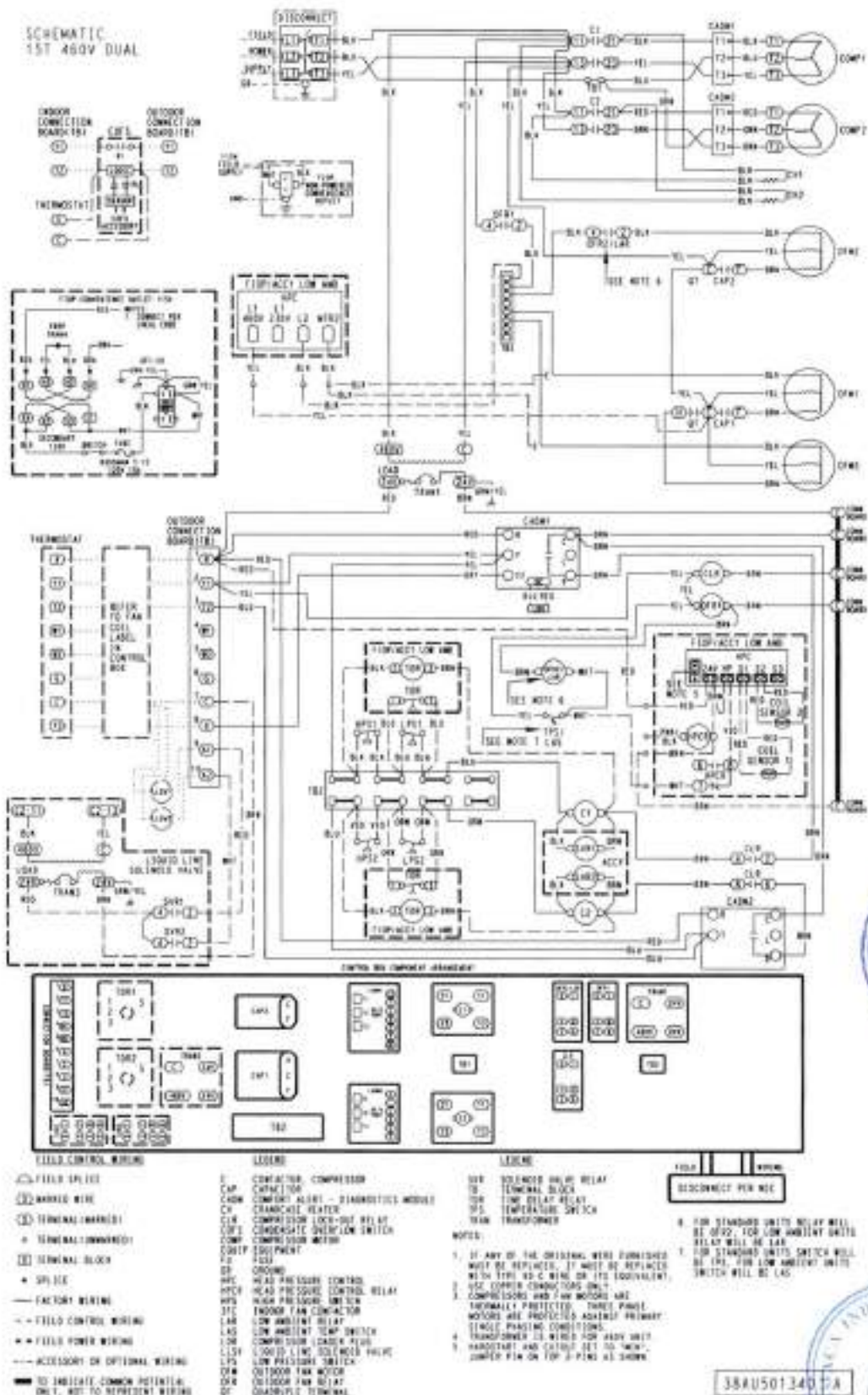
SCHEMATIC
10T-12.5T 450V DUAL



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Typical Dual Circuit/Three Stage Wiring Diagram, 15 Ton — 460-3-60 Unit

SCHEMATIC
15T 460V DUAL



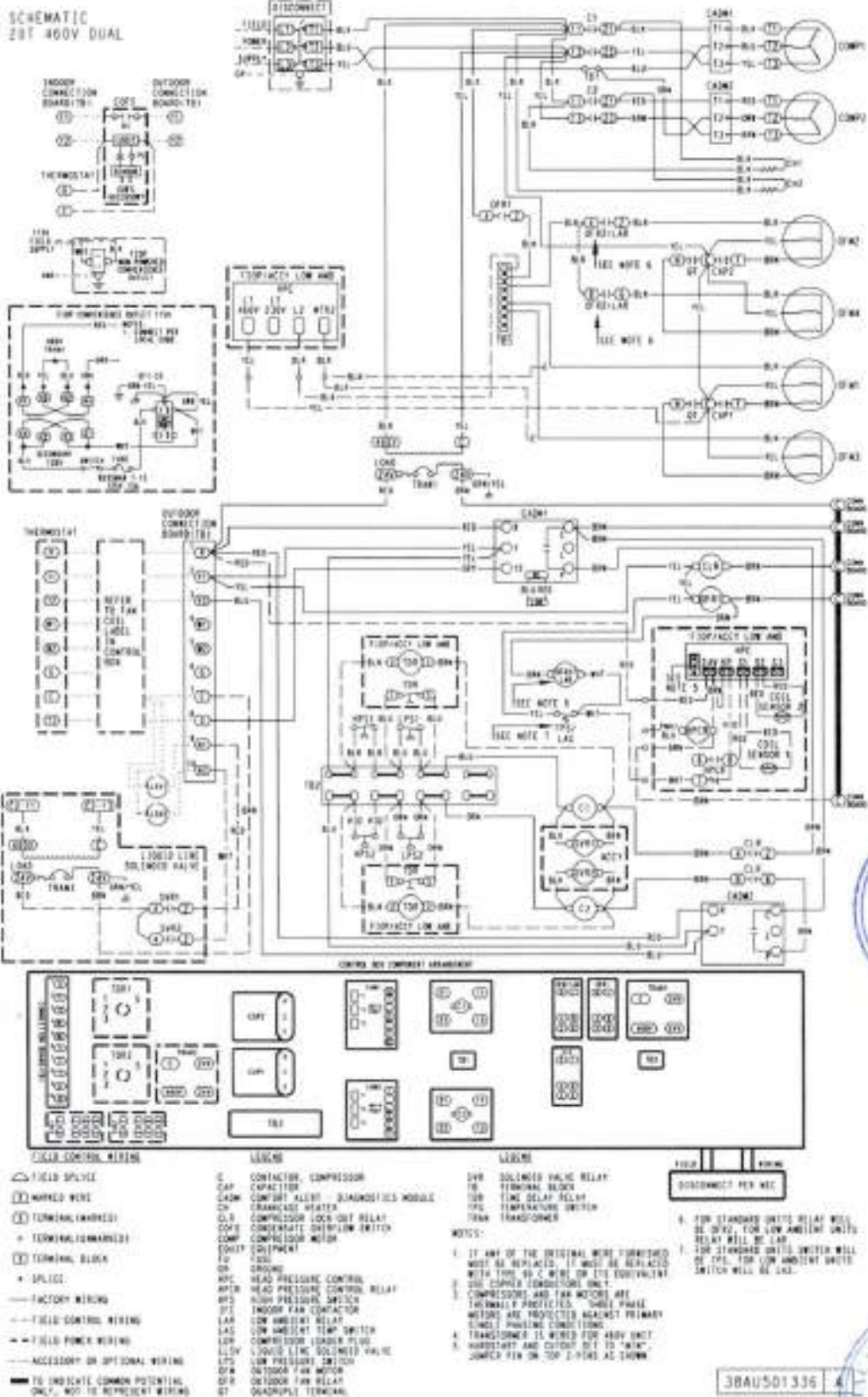
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38AU501340 2A

Typical piping and wiring (cont)



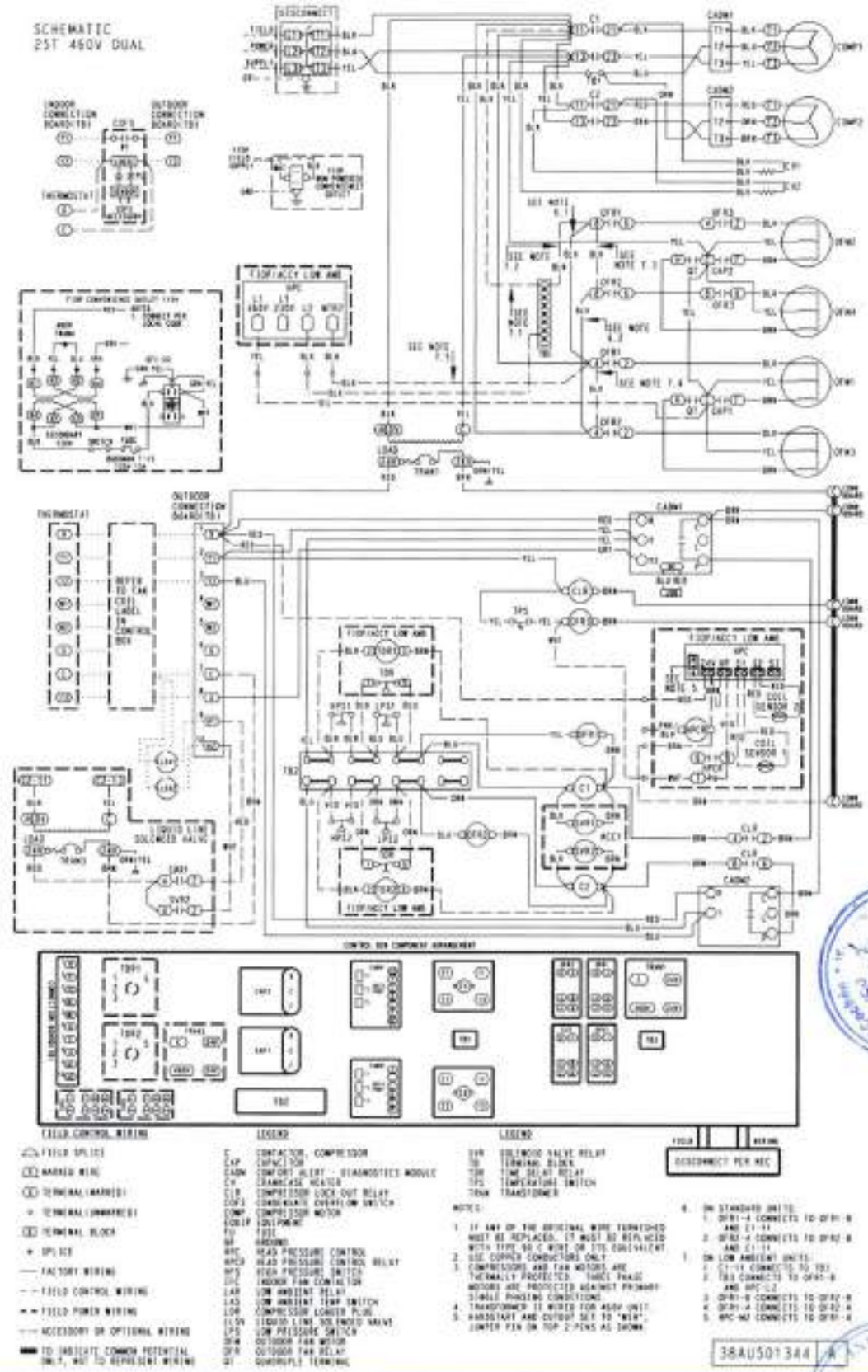
Typical Dual Circuit/Three Stage Wiring Diagram, 20 Ton (460-3-60 Unit Shown)



Typical piping and wiring (cont)



Typical Dual Circuit/Three Stage Wiring Diagram, 25 Ton (460-3-60 Unit Shown)

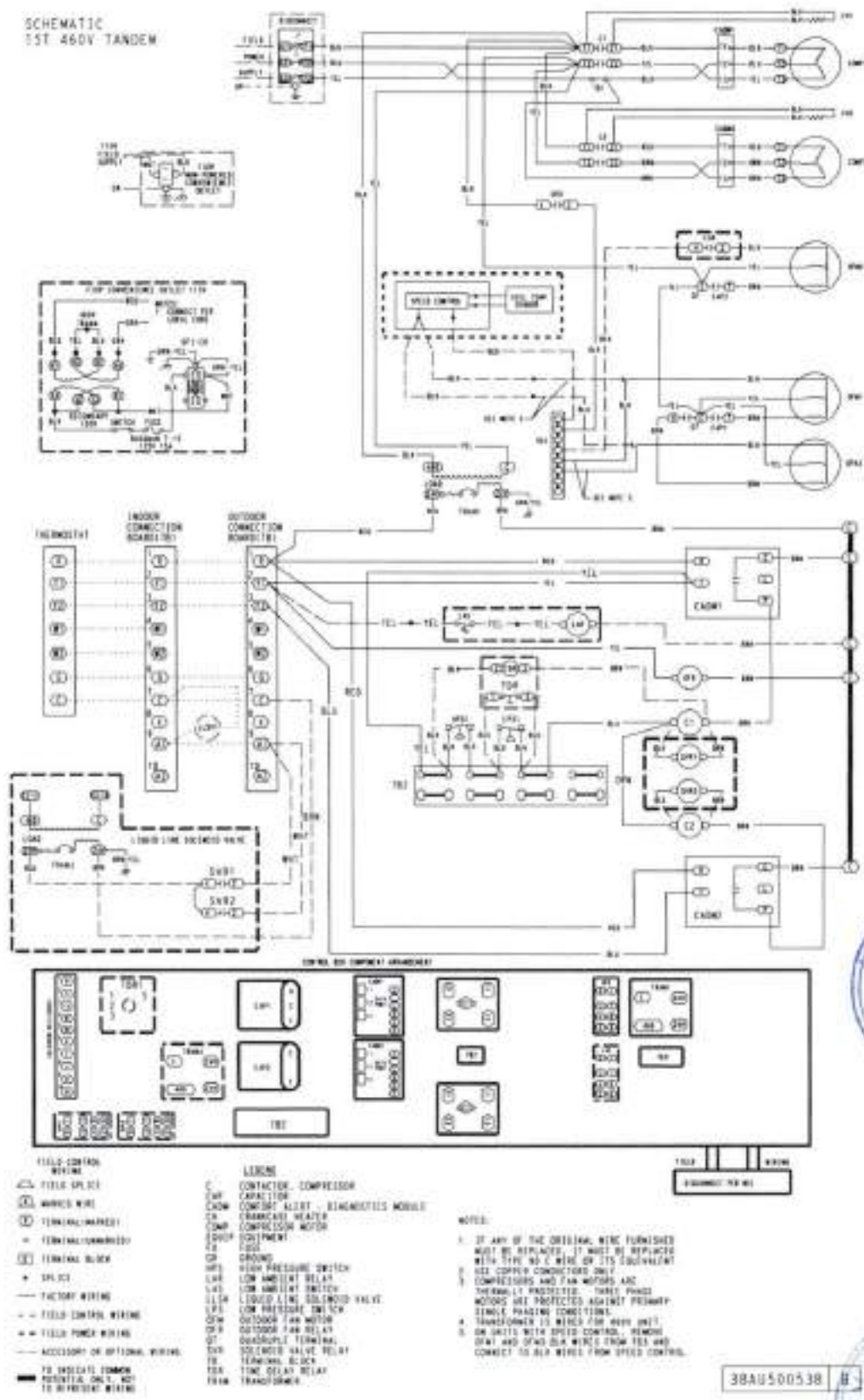


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Typical piping and wiring (cont)



Typical Single Circuit/Two Stage Wiring Diagram, 15 Ton (460-3-60 Unit Shown)



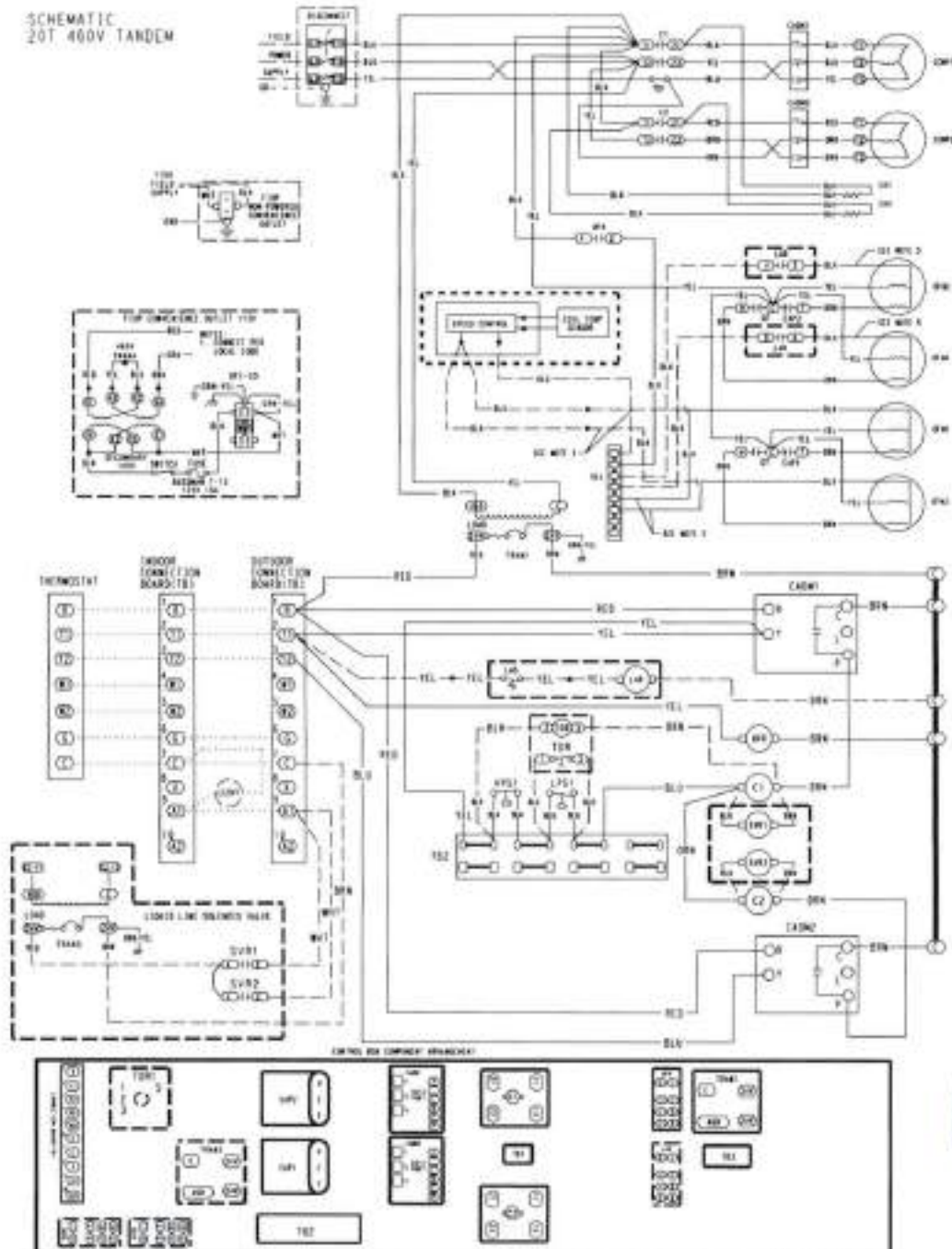
EL

Typical piping and wiring (cont)



Typical Single Circuit/Two Stage Wiring Diagram, 20 Ton (460-3-60 Unit Shown)

SCHEMATIC
20T 400V TANDEM



- | | | |
|--|--|---|
| <p>FIELD CONTROL WIRING</p> <ul style="list-style-type: none"> ○ FIELD SPLICE □ WIRELESS WIRE ⊕ TERMINAL (MARKED) ⊖ TERMINAL (UNMARKED) ▭ TERMINAL BLOCK • SPLICE — FACTORY WIRING - - - FIELD CONTROL WIRING — FIELD POWER WIRING - - - ACCESSORY OR OPTIONAL WIRING ⊕ TO INDICATE COMMON POINTS (IN ONLY, NOT TO REPRESENT WIRING) | <p>LEGEND</p> <ul style="list-style-type: none"> C CONTACTOR, COMPRESSOR LAP LAMP/LED CASH COMFORT ALERT - DIAGNOSTICS MODULE CH CHARGE/HEAT COMP COMPRESSOR MOTOR COUP COUPLER CU CURTAIN GR GROUND HP HIGH PRESSURE SWITCH LAL LOW AMBIENT RELAY LAS LOW AMBIENT SWITCH LAT LOW AMBIENT THERMISTOR LLV LOW VOLTAGE LOCKOUT VALVE LPS LOW PRESSURE SWITCH OFM OUTDOOR FAN MOTOR OFM OUTDOOR FAN RELAY OT OIL THERMISTOR OPR OIL PRESSURE RELAY TE TERMINAL BLOCK TRM TIME DELAY RELAY TRN TRANSFORMER | <p>NOTES</p> <ol style="list-style-type: none"> 1. IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED, IT MUST BE REPLACED WITH THE SAME WIRE OR ITS EQUIVALENT. 2. USE COPPER CONDUCTORS ONLY. 3. COMPRESSORS AND FAN MOTORS ARE THEMALLY PROTECTED, THREE PHASE MOTORS ARE PROTECTED AGAINST PRIMARY THERMAL PROTECTIVE CONDITIONS. 4. TRANSFORMER IS WIRING FOR 480V UNIT. 5. ON UNITS WITH SPEED CONTROL, CONNECT THE BLACK WIRE FROM OFM1 AND OFM2 TO BLA WIRES FROM SPEED CONTROL MODULE AND CONNECT THE BLACK WIRE FROM OFM2 AND OFM1 TO TERMINALS 1 AND 3 ON THE LOW AMBIENT RELAY (LAL). |
|--|--|---|



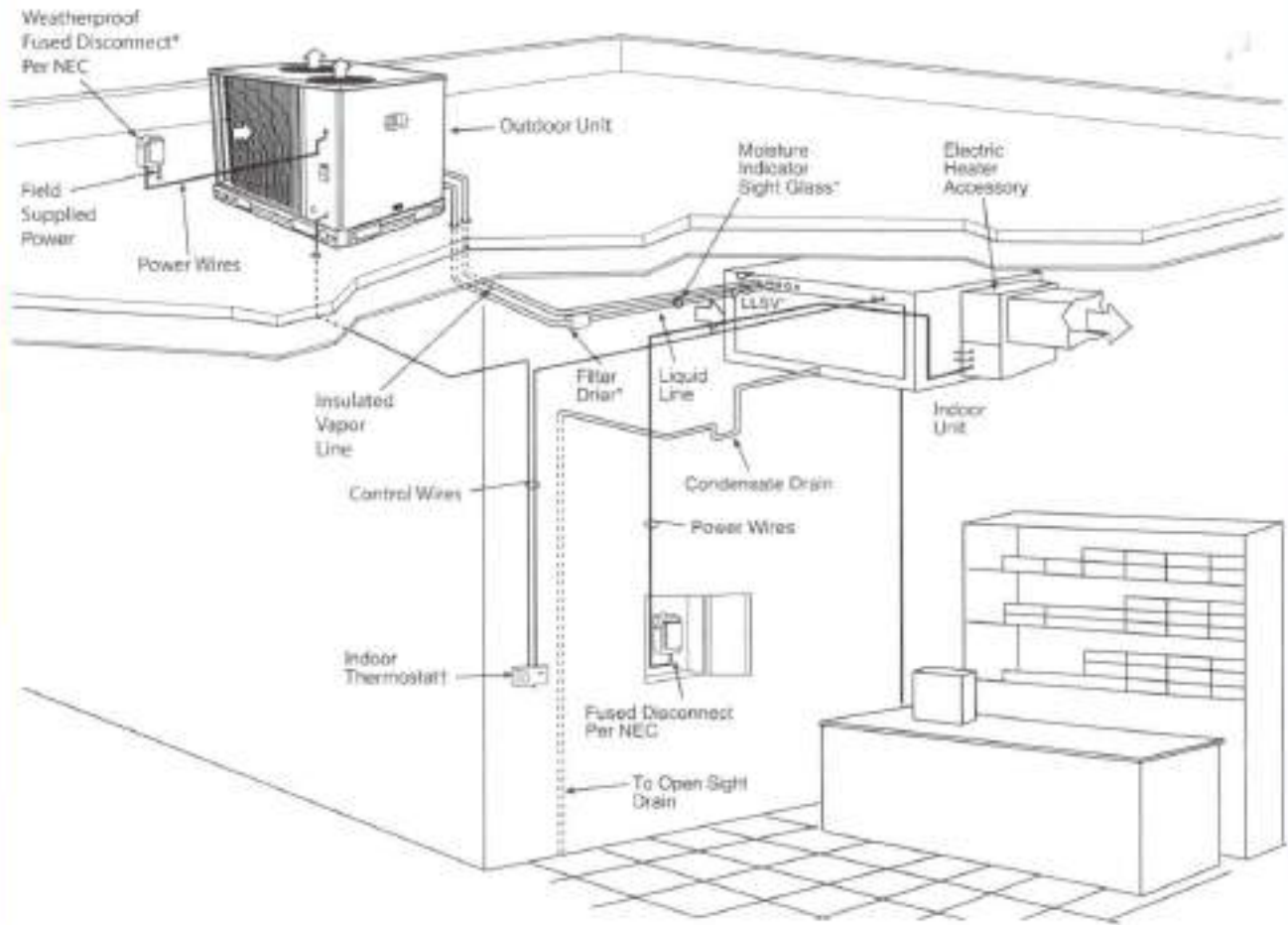
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38A2500549 B

Typical piping and wiring (cont)



Roof Installation and Ceiling-Mounted Fan Coil



LEGEND

- LLSV** — Liquid Line Solenoid Valve
- NEC** — National Electrical Code
- TXV** — Thermostatic Expansion Valve

* Field-supplied.

† Double riser may be required. Consult condensing unit product data catalog for details.

NOTE(S):

1. All piping must follow standard refrigerant piping techniques. Refer to Carrier System Design Manual for details.
2. All wiring must comply with the applicable local and national codes.
3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.
4. Liquid line solenoid valve (solenoid drop control) is recommended to prevent refrigerant migration to the compressor.
5. Internal factory-supplied TXVs not shown.

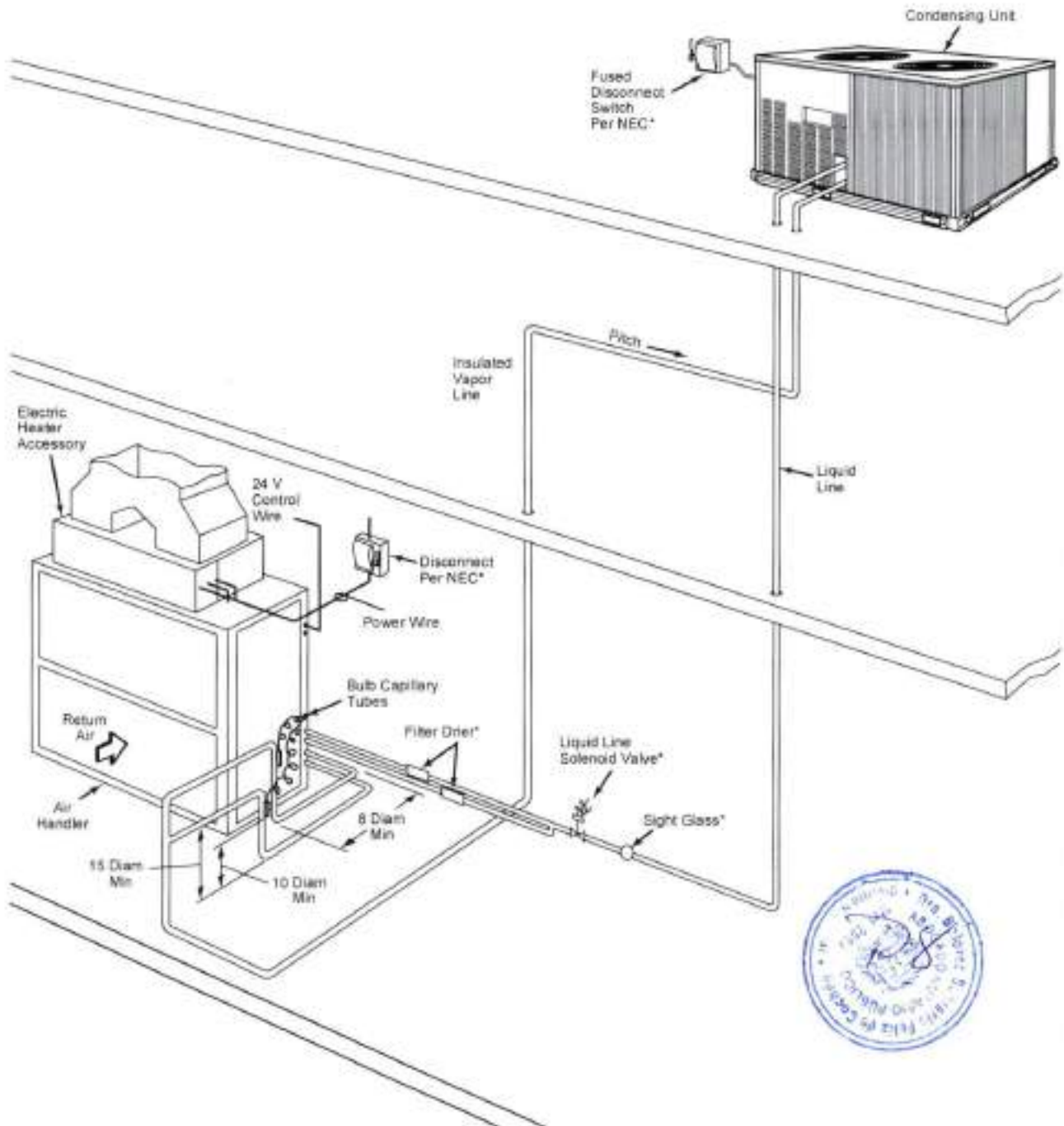


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Typical piping and wiring (cont)



Roof Installation and a Vertical Discharge Fan Coil



LEGEND
 DIAM — Diameter
 NEC — National Electrical Code
 TXV — Thermostatic Expansion Valve
 Piping

*Field supplied

NOTE(S):

1. All piping must follow standard refrigerant piping techniques. Refer to System Design Manual for details.
2. All wiring must comply with applicable local and national codes.
3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.
4. Liquid line solenoid valve (solenoid drop control) is recommended to prevent refrigerant migration to the compressor on line links above 75 feet (23 meters).
5. Internal factory-supplied TXVs and check valves not shown.

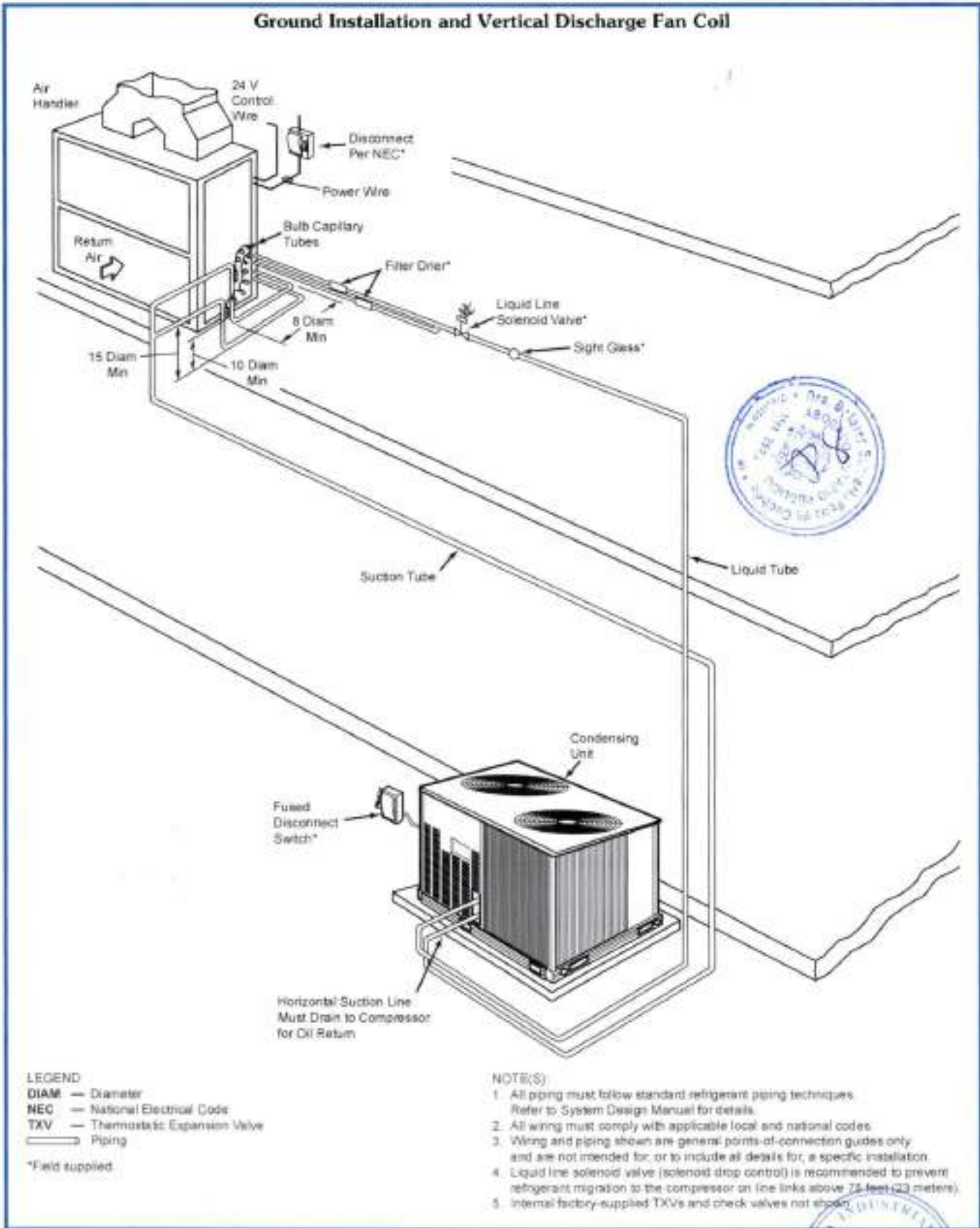
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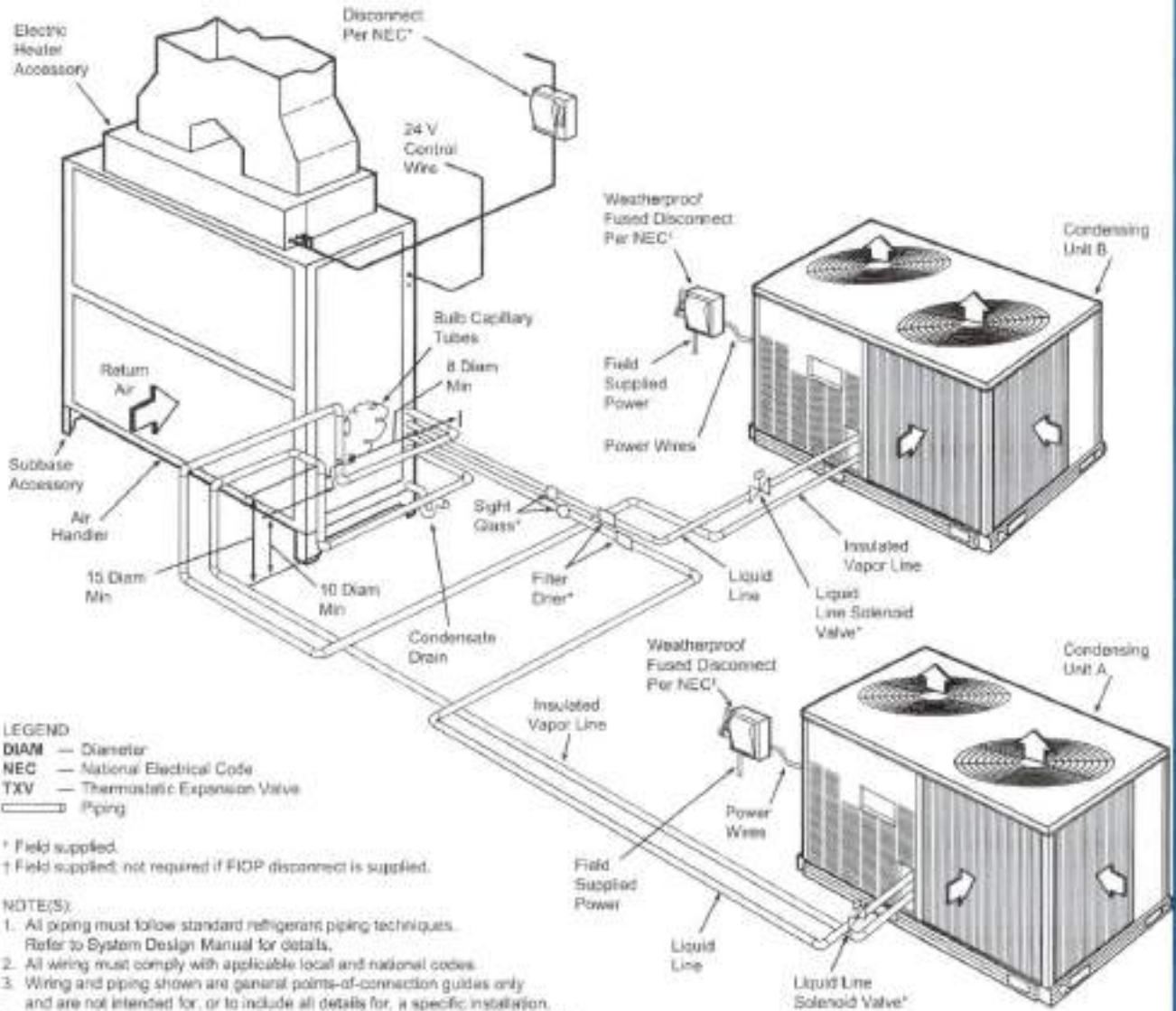
Typical piping and wiring (cont)



Ground Installation and Vertical Discharge Fan Coil



Dual Condensing Units and a Dual Circuit Fan Coil



LEGEND
 DIAM — Diameter
 NEC — National Electrical Code
 TXV — Thermostatic Expansion Valve
 Piping

* Field supplied.
 † Field supplied; not required if FIOP disconnect is supplied.

- NOTE(S):**
1. All piping must follow standard refrigerant piping techniques. Refer to System Design Manual for details.
 2. All wiring must comply with applicable local and national codes.
 3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.
 4. Liquid line solenoid valve (solenoid drop control) is recommended to prevent refrigerant migration to the compressor on line links above 75 feet (23 meters).
 5. Condensing Unit A should be the first on, last off and be connected to the lower half of the coil.
 6. Internal factory-supplied TXVs and check valves not shown.



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38AUZD07 Total Unit — Condenser Only Ratings — 60 Hz

SST (°F)		38AUZD07					
		Air Temperature Entering Condenser (°F)					
		85	95	100	105	115	125
20	TC	45.9	42.9	41.3	39.7	36.3	32.6
	kW	4.1	4.7	5.1	5.4	6.3	7.3
	SDT	103.5	113.2	118.1	123.0	132.9	142.7
25	TC	50.7	47.5	45.8	44.1	40.5	36.6
	kW	4.2	4.8	5.1	5.5	6.3	7.3
	SDT	104.9	114.6	119.5	124.3	134.2	143.9
30	TC	56.0	52.5	50.7	48.9	45.0	40.9
	kW	4.2	4.8	5.2	5.5	6.4	7.3
	SDT	106.4	116.0	120.9	125.7	135.4	145.0
35	TC	61.6	57.9	56.0	54.0	49.9	45.5
	kW	4.3	4.9	5.2	5.6	6.4	7.4
	SDT	108.1	117.6	122.4	127.1	136.7	146.2
40	TC	67.7	63.7	61.6	59.5	55.1	50.5
	kW	4.3	4.9	5.3	5.6	6.5	7.4
	SDT	109.7	119.1	123.9	128.6	138.0	147.3
45	TC	74.3	69.9	67.7	65.4	60.7	55.8
	kW	4.4	5.0	5.3	5.7	6.5	7.4
	SDT	111.5	120.8	125.5	130.2	139.4	148.5
50	TC	81.3	76.6	74.2	71.8	66.8	61.6
	kW	4.5	5.1	5.4	5.8	6.6	7.5
	SDT	113.4	122.6	127.2	131.8	140.8	149.7

38AUZD08 Total Unit — Condenser Only Ratings — 60 Hz

SST (°F)		38AUZD08					
		Air Temperature Entering Condenser (°F)					
		85	95	100	105	115	125
20	TC	60.3	56.3	54.2	52.1	47.7	43.2
	kW	5.4	6.0	6.4	6.8	7.6	8.5
	SDT	99.4	108.5	113.0	117.5	126.4	135.2
25	TC	67.0	62.6	60.3	57.9	53.1	48.1
	kW	5.5	6.1	6.5	6.9	7.7	8.6
	SDT	100.8	109.8	114.2	118.7	127.5	136.2
30	TC	74.2	69.3	66.8	64.2	58.9	53.4
	kW	5.6	6.2	6.6	7.0	7.8	8.7
	SDT	102.3	111.2	115.6	120.0	128.7	137.3
35	TC	81.8	76.5	73.7	70.9	65.1	59.0
	kW	5.7	6.3	6.7	7.1	7.9	8.8
	SDT	103.9	112.7	117.0	121.4	130.0	138.4
40	TC	90.0	84.1	81.1	78.0	71.7	65.0
	kW	5.8	6.5	6.8	7.2	8.0	9.0
	SDT	105.6	114.2	118.5	122.8	131.3	139.6
45	TC	98.8	92.2	88.9	85.0	78.6	71.3
	kW	5.9	6.6	7.0	7.3	8.2	9.1
	SDT	107.4	115.9	120.1	124.3	132.7	140.8
50	TC	107.8	100.8	97.2	93.5	86.0	78.1
	kW	6.1	6.7	7.1	7.5	8.3	9.2
	SDT	109.2	117.6	121.8	125.9	134.1	142.1

LEGEND

- kW — Compressor Motor Power Input
- SDT — Saturated Discharge Temperature (°F)
- SST — Saturated Suction Temperature
- TC — Total Capacity (1000 Btu/h) gross



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Performance data (cont)



38AUZM12 Total Unit — Condenser Only Ratings — 60 Hz

SST (°F)		38AUZM12					
		Air Temperature Entering Condenser (°F)					
		85	95	100	105	115	125
20	TC	75.6	69.3	66.1	63.0	57.1	52.0
	kW	7.2	8.0	8.4	8.9	10.0	11.1
	SDT	106.0	114.6	118.8	123.0	131.6	140.1
25	TC	84.0	77.3	73.9	70.5	64.1	58.3
	kW	7.3	8.1	8.6	9.0	10.1	11.2
	SDT	108.0	116.4	120.6	124.8	133.2	141.6
30	TC	92.8	85.8	82.1	78.5	71.4	65.0
	kW	7.5	8.3	8.7	9.2	10.2	11.3
	SDT	110.0	118.4	122.5	126.6	134.9	143.0
35	TC	102.2	94.7	90.8	86.9	79.2	72.0
	kW	7.7	8.5	8.9	9.4	10.4	11.5
	SDT	112.1	120.4	124.5	128.5	136.6	144.5
40	TC	112.1	104.0	99.8	95.6	87.3	79.3
	kW	7.9	8.7	9.1	9.5	10.5	11.6
	SDT	114.3	122.4	126.4	130.4	138.3	146.0
45	TC	122.5	113.8	109.3	104.8	95.8	87.0
	kW	8.1	8.9	9.3	9.8	10.7	11.8
	SDT	116.6	124.6	128.5	132.4	140.1	147.6
50	TC	133.4	124.0	119.2	114.3	104.5	94.9
	kW	8.3	9.1	9.5	10.0	10.9	11.9
	SDT	118.9	126.7	130.6	134.4	141.8	149.1

38AUDT12 Circuit A and B Unit — Condenser Only Ratings — 60 Hz

SST (°F)		38AUDT12 Total Unit					
		Air Temperature Entering Condenser (°F)					
		85	95	100	105	115	125
20	TC	76.8	71.7	69.1	66.4	60.9	55.2
	kW	6.9	7.7	8.2	8.7	9.8	11.0
	SDT	100.8	109.8	114.3	118.8	127.5	136.3
25	TC	84.9	79.5	76.7	73.8	67.6	61.6
	kW	7.0	7.9	8.4	8.9	9.9	11.1
	SDT	102.5	111.4	115.8	120.2	129.0	137.5
30	TC	93.7	87.8	84.7	81.6	75.2	68.5
	kW	7.2	8.0	8.5	9.0	10.1	11.3
	SDT	104.2	113.0	117.4	121.8	130.4	138.9
35	TC	103.0	96.6	93.2	89.8	82.8	75.5
	kW	7.3	8.2	8.7	9.2	10.3	11.4
	SDT	106.1	114.8	119.1	123.3	131.8	140.1
40	TC	113.0	105.9	102.3	98.6	90.9	83.0
	kW	7.5	8.4	8.9	9.4	10.4	11.6
	SDT	108.1	116.6	120.9	125.1	133.4	141.5
45	TC	123.5	115.7	111.8	107.8	99.6	90.9
	kW	7.7	8.6	9.0	9.6	10.6	11.8
	SDT	110.2	118.6	122.8	126.9	135.2	143.1
50	TC	134.5	126.0	121.7	117.4	108.1	98.7
	kW	7.9	8.8	9.2	9.8	10.8	12.0
	SDT	112.4	120.6	124.7	128.8	136.7	144.5

LEGEND

- kW — Compressor Motor Power Input
- SDT — Saturated Discharge Temperature (°F)
- SST — Saturated Suction Temperature
- TC — Total Capacity (1000 Btu/h) gross



6/2

Performance data (cont)



38AUZM14 Total Unit — Condenser Only Ratings — 60 Hz

SST (°F)		38AUZM14 Air Temperature Entering Condenser (°F)					
		85	95	100	105	115	125
20	TC	88.6	81.9	78.4	74.8	67.3	59.4
	kW	8.3	9.4	10.0	10.6	11.9	13.3
	SDT	103.8	112.6	116.9	121.2	129.6	137.7
25	TC	98.7	91.6	87.9	84.1	76.2	67.8
	kW	8.4	9.6	10.2	10.8	12.2	13.6
	SDT	105.8	114.5	118.8	123.0	131.3	139.4
30	TC	109.4	101.9	98.0	93.9	85.5	76.6
	kW	8.6	9.8	10.4	11.1	12.4	13.8
	SDT	107.9	116.5	120.8	124.9	133.1	141.0
35	TC	120.8	112.8	108.6	104.3	95.3	85.9
	kW	8.8	10.0	10.6	11.3	12.7	14.1
	SDT	110.2	118.7	122.8	126.9	135.0	142.7
40	TC	132.9	124.3	119.8	115.2	105.6	95.5
	kW	9.1	10.3	10.9	11.5	12.9	14.3
	SDT	112.5	120.9	125.0	129.1	136.9	144.5
45	TC	145.6	136.4	131.6	126.6	116.4	105.6
	kW	9.4	10.5	11.2	11.8	13.2	14.6
	SDT	115.0	123.2	127.3	131.2	138.9	146.3
50	TC	158.9	149.0	143.8	138.5	127.5	116.0
	kW	9.7	10.8	11.5	12.1	13.5	14.9
	SDT	117.6	125.8	129.6	133.5	141.0	148.1

38AUDT14 Circuit A and B Unit — Condenser Only Ratings — 60 Hz

SST (°F)		38AUDT14 Total Unit Air Temperature Entering Condenser (°F)					
		85	95	100	105	115	125
20	TC	88.2	82.0	78.7	75.1	68.0	60.4
	kW	8.4	9.6	10.2	10.9	12.3	13.9
	SDT	101.5	110.5	115.0	119.4	128.1	136.6
25	TC	98.0	91.2	87.7	84.0	76.5	68.4
	kW	8.5	9.7	10.3	11.0	12.5	14.1
	SDT	103.2	112.1	116.5	120.9	129.5	137.9
30	TC	108.3	101.1	97.3	93.5	85.4	76.8
	kW	8.7	9.8	10.5	11.2	12.6	14.2
	SDT	104.9	113.8	118.2	122.5	131.0	139.3
35	TC	119.4	111.6	107.5	103.4	94.9	85.9
	kW	8.8	10.0	10.6	11.3	12.8	14.4
	SDT	106.8	115.5	119.9	124.2	132.6	140.8
40	TC	131.1	122.8	118.4	114.0	105.0	95.1
	kW	9.0	10.2	10.8	11.5	13.0	14.5
	SDT	108.7	117.4	121.7	125.9	134.2	142.2
45	TC	143.6	134.6	129.8	125.1	115.4	104.7
	kW	9.2	10.4	11.0	11.7	13.1	14.7
	SDT	110.8	119.3	123.5	127.7	135.9	143.7
50	TC	156.5	146.8	141.8	136.6	126.1	114.8
	kW	9.4	10.6	11.2	11.9	13.3	14.9
	SDT	112.9	121.3	125.5	129.5	137.6	145.2

LEGEND

- kW — Compressor Motor Power Input
- SDT — Saturated Discharge Temperature (°F)
- SST — Saturated Suction Temperature
- TC — Total Capacity (1000 Btu/h) gross



EL

Performance data (cont)



38AUZA16 Total Unit — Condenser Only Ratings — 60 Hz

SST (°F)		38AUZA16 Air Temperature Entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	125.5	121.8	114.2	106.6	99.7	79.7
	kW	10.5	11.2	12.6	14.2	16.0	17.5
	SDT	98.6	103.4	113.0	122.7	134.9	136.0
25	TC	138.7	134.7	126.5	118.1	109.3	98.5
	kW	10.7	11.4	12.8	14.3	16.0	17.9
	SDT	100.0	104.7	114.2	123.8	132.9	140.5
30	TC	152.9	148.6	139.8	130.7	120.9	104.9
	kW	10.9	11.6	13.0	14.6	16.2	17.8
	SDT	101.4	106.2	115.5	125.0	133.5	139.4
35	TC	168.2	163.5	154.1	144.2	133.6	121.2
	kW	11.2	11.8	13.2	14.8	16.5	18.1
	SDT	102.9	107.5	117.0	126.2	134.8	142.1
40	TC	184.9	179.4	169.3	158.7	147.6	135.1
	kW	11.5	12.0	13.5	15.1	16.8	18.5
	SDT	105.2	108.9	118.5	127.7	136.7	144.5
45	TC	202.1	196.7	185.7	174.3	162.5	150.4
	kW	11.7	12.4	13.9	15.6	17.5	19.6
	SDT	106.4	111.2	120.9	130.7	140.4	150.2
50	TC	220.6	214.7	202.1	190.0	174.6	159.6
	kW	11.9	12.6	13.9	15.4	16.9	18.5
	SDT	107.2	111.7	120.4	129.4	136.9	144.9

38AUDT16 Circuit A and B Unit — Condenser Only Ratings — 60 Hz

SST (°F)		38AUDT16 Total Unit Air Temperature Entering Condenser (°F)					
		85	95	100	105	115	125
20	TC	126.1	118.2	114.1	110.0	101.6	93.1
	kW	11.2	12.5	13.3	14.1	15.8	17.7
	SDT	102.2	111.3	115.9	120.4	129.4	138.3
25	TC	138.7	130.1	125.7	121.3	112.1	102.8
	kW	11.4	12.8	13.5	14.3	16.0	18.0
	SDT	103.9	113.0	117.5	122.0	130.9	139.6
30	TC	152.3	143.0	138.2	133.3	123.4	113.2
	kW	11.7	13.1	13.8	14.6	16.3	18.3
	SDT	105.7	114.7	119.2	123.6	132.4	141.0
35	TC	166.9	156.7	151.5	146.2	135.3	124.3
	kW	12.0	13.4	14.1	14.9	16.7	18.6
	SDT	107.6	116.5	120.9	125.3	134.0	142.5
40	TC	182.4	171.3	165.6	159.9	148.1	136.0
	kW	12.3	13.7	14.5	15.3	17.0	18.9
	SDT	109.7	118.5	122.8	127.2	135.7	144.1
45	TC	199.0	186.9	180.7	174.4	161.6	148.4
	kW	12.7	14.1	14.8	15.6	17.4	19.3
	SDT	111.8	120.5	124.8	129.1	137.5	145.7
50	TC	216.6	203.3	196.6	189.7	175.7	161.3
	kW	13.1	14.5	15.2	16.1	17.8	19.7
	SDT	114.1	122.7	126.9	131.2	139.4	147.3

LEGEND

- kW — Compressor Motor Power Input
- SDT — Saturated Discharge Temperature (°F)
- SST — Saturated Suction Temperature
- TC — Total Capacity (1000 Btu/h) gross



ef

Performance data (cont)



38AUZA25 Total Unit — Condenser Only Ratings — 60 Hz

SST (°F)		38AUZA25					
		Air Temperature Entering Condenser (°F)					
		80	85	95	105	115	125
20	TC	159.2	154.5	144.5	133.9	122.5	110.2
	kW	13.0	13.7	15.3	17.1	19.2	21.5
	SDT	97.3	101.8	110.6	119.3	127.9	136.5
25	TC	176.1	171.0	160.2	148.8	138.5	123.2
	kW	13.2	14.0	15.6	17.4	19.5	21.8
	SDT	98.9	103.3	112.0	120.7	129.2	137.6
30	TC	194.2	188.6	176.9	164.5	151.3	136.9
	kW	13.5	14.3	15.9	17.7	19.7	22.0
	SDT	100.6	104.9	113.6	122.1	130.5	138.8
35	TC	213.5	207.4	194.7	181.2	166.8	151.2
	kW	13.8	14.6	16.2	18.0	20.0	22.3
	SDT	102.4	106.7	115.2	123.6	131.9	140.1
40	TC	234.1	227.4	213.5	198.8	183.1	166.1
	kW	14.2	14.9	16.5	18.3	20.3	22.6
	SDT	104.3	108.5	116.9	125.2	133.3	141.4
45	TC	255.9	248.6	233.3	217.3	200.1	181.7
	kW	14.6	15.3	16.9	18.7	20.7	22.9
	SDT	106.3	110.5	118.7	126.8	134.9	142.7
50	TC	279.0	270.9	254.2	236.7	218.1	197.8
	kW	15.1	15.8	17.3	19.1	21.1	23.2
	SDT	108.5	112.5	120.6	128.6	136.5	144.1

38AUDT25 Circuit A and B Unit — Condenser Only Ratings — 60 Hz

SST (°F)		38AUDT25 Total Unit					
		Air Temperature Entering Condenser (°F)					
		85	95	100	105	115	125
20	TC	161.4	150.4	144.6	138.7	127.0	115.4
	kW	13.6	15.2	16.0	16.9	18.9	21.1
	SDT	100.8	109.7	114.1	118.4	127.2	135.9
25	TC	178.1	169.4	160.2	153.9	141.1	128.4
	kW	13.9	15.5	16.3	17.2	19.1	21.3
	SDT	102.5	111.3	115.6	119.9	128.5	137.1
30	TC	195.8	183.2	176.5	169.7	155.8	141.9
	kW	14.2	15.8	16.6	17.5	19.4	21.6
	SDT	104.2	112.8	117.2	121.5	130.0	138.4
35	TC	214.5	200.6	193.6	186.3	171.2	155.8
	kW	14.6	16.1	16.9	17.8	19.7	21.9
	SDT	106.1	114.6	118.9	123.1	131.5	139.7
40	TC	233.9	219.3	211.5	203.5	187.1	170.3
	kW	14.9	16.5	17.3	18.2	20.1	22.2
	SDT	108.0	116.5	120.7	124.8	133.1	141.1
45	TC	254.5	238.5	230.0	221.3	203.4	184.9
	kW	15.4	16.9	17.7	18.6	20.5	22.5
	SDT	110.1	118.4	122.6	126.6	134.7	142.6
50	TC	275.8	258.3	249.0	239.5	219.8	199.4
	kW	15.8	17.3	18.2	19.0	20.9	22.9
	SDT	112.3	120.5	124.5	128.5	136.4	144.0

LEGEND

- kW — Compressor Motor Power Input
- SDT — Saturated Discharge Temperature (°F)
- SST — Saturated Suction Temperature
- TC — Total Capacity (1000 Btu/h) gross



EL

Performance data (cont)



38AUDT28 Circuit A and B Unit — Condenser Only Ratings — 60 Hz

SST (°F)		38AUDT28 Total Unit					
		Air Temperature Entering Condenser (°F)					
		85	95	100	105	115	125
20	TC	193.2	180.1	173.1	165.9	150.5	134.0
	kW	17.6	19.5	20.5	21.6	24.0	26.6
	SDT	104.0	112.6	116.9	121.2	129.6	137.7
25	TC	212.9	198.9	191.5	183.8	167.6	150.3
	kW	18.0	19.9	21.0	22.1	24.5	27.1
	SDT	106.0	114.5	118.8	123.0	131.3	139.3
30	TC	233.6	218.6	210.7	202.5	185.3	168.9
	kW	18.5	20.4	21.5	22.6	25.0	27.6
	SDT	108.1	116.5	120.7	124.9	133.0	140.9
35	TC	255.4	239.1	230.6	221.8	203.3	183.7
	kW	19.0	21.0	22.1	23.2	25.6	28.2
	SDT	110.3	118.6	122.7	126.8	134.8	142.6
40	TC	278.0	260.3	251.1	241.5	221.7	200.6
	kW	19.6	21.6	22.6	23.8	26.2	28.8
	SDT	112.7	120.8	124.9	128.8	136.7	144.2
45	TC	301.4	282.0	271.9	261.6	240.0	217.2
	kW	20.2	22.2	23.3	24.4	26.8	29.4
	SDT	115.1	123.1	127.0	130.9	138.6	145.9
50	TC	325.3	304.0	292.9	281.6	258.1	233.3
	kW	20.9	22.9	23.9	25.1	27.4	30.0
	SDT	117.7	125.4	129.3	133.1	140.5	147.6

LEGEND

- kW — Compressor Motor Power Input
- SDT — Saturated Discharge Temperature (°F)
- SST — Saturated Suction Temperature
- TC — Total Capacity (1000 Btu/h) gross



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38AUZ07/40RFA07 Stage 2 Combination Ratings — 60 Hz

38AUZ07/40RFA07			AMBIENT TEMPERATURE (°F)																	
			85			95			105			115			125					
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
1800 cfm	EA (wb)	58	75	80	85	75	80	85	75	80	85	75	80	85	75	80	85			
			TC	61.4	61.4	67.0	58.8	58.8	66.4	57.3	57.3	61.7	54.2	54.2	61.2	51.5	51.5	58.3		
SHC	52.1	59.5	67.0	51.1	58.8	66.4	48.1	54.9	61.7	47.1	54.2	61.2	44.8	51.5	58.3					
62	TC	64.9	64.9	64.9	62.3	62.3	62.3	59.4	59.4	60.4	56.3	56.3	58.9	52.9	52.9	57.1				
	SHC	46.8	54.9	62.9	45.5	53.6	61.7	44.2	52.3	60.4	42.8	50.8	58.9	41.1	49.1	57.1				
67	TC	70.7	70.7	70.7	67.8	67.8	67.8	64.7	64.7	64.7	61.4	61.4	61.4	57.8	57.8	57.8				
	SHC	38.4	46.4	54.3	37.2	45.2	53.2	35.9	43.9	51.9	34.6	42.6	50.7	33.1	41.1	49.2				
72	TC	77.3	77.3	77.3	74.3	74.3	74.3	70.9	70.9	70.9	67.1	67.1	67.1	63.2	63.2	63.2				
	SHC	30.5	38.0	45.5	29.2	36.9	44.6	27.9	35.6	43.4	26.4	34.3	42.2	25.0	32.9	40.9				
76	TC	—	83.3	83.3	—	79.6	79.6	—	76.1	76.1	—	72.2	72.2	—	67.9	67.9				
	SHC	—	31.0	40.9	—	29.9	39.8	—	28.5	38.4	—	27.5	37.4	—	26.2	33.7				
2100 cfm	EA (wb)	58	TC	65.3	65.3	68.4	61.8	61.8	69.8	59.3	59.3	67.0	56.7	56.7	64.1	53.8	53.8	60.9		
			SHC	53.8	61.1	68.4	53.7	61.8	69.8	51.6	59.3	67.0	49.3	56.7	64.1	46.8	53.8	60.9		
		62	TC	66.8	66.8	68.4	64.0	64.0	67.0	61.0	61.0	65.5	57.8	57.8	63.7	54.5	54.5	61.6		
			SHC	50.0	59.2	68.4	48.6	57.8	67.0	47.2	56.3	65.5	45.6	54.7	63.7	43.8	52.7	61.6		
		67	TC	72.5	72.5	72.5	69.6	69.6	69.6	66.4	66.4	66.4	63.0	63.0	63.0	59.2	59.2	59.2		
			SHC	40.4	49.5	58.6	39.2	48.3	57.5	37.9	47.1	56.3	36.5	45.7	54.9	35.0	44.3	53.5		
		72	TC	79.3	79.3	79.3	75.9	75.9	75.9	72.4	72.4	72.4	68.7	68.7	68.7	64.6	64.6	64.6		
			SHC	31.1	39.9	48.7	29.9	38.8	47.7	28.5	37.5	46.6	27.1	36.2	45.3	25.6	34.8	43.9		
		76	TC	—	85.3	85.3	—	81.7	81.7	—	77.7	77.7	—	73.7	73.7	—	69.1	69.1		
			SHC	—	31.8	43.4	—	30.9	42.5	—	29.7	37.7	—	28.5	37.1	—	27.1	36.1		
		2400 cfm	EA (wb)	58	TC	66.4	66.4	75.1	64.1	64.1	72.4	61.5	61.5	69.5	58.8	58.8	66.4	55.8	55.8	63.1
					SHC	57.8	66.4	75.1	55.7	64.1	72.4	53.5	61.5	69.5	51.1	58.8	66.4	48.6	55.8	63.1
62	TC			68.3	68.3	73.3	65.4	65.4	71.8	62.4	62.4	69.9	59.1	59.1	67.5	56.3	56.3	64.1		
	SHC			52.8	63.1	73.3	51.4	61.6	71.8	49.8	59.9	69.9	47.8	57.6	67.5	45.4	54.7	64.1		
67	TC			74.1	74.1	74.1	71.0	71.0	71.0	67.7	67.7	67.7	64.1	64.1	64.1	60.2	60.2	60.2		
	SHC			42.3	52.5	62.7	41.0	51.3	61.5	39.8	50.0	60.3	38.3	48.5	58.8	36.9	47.2	57.5		
72	TC			80.8	80.8	80.8	77.3	77.3	77.3	73.8	73.8	73.8	69.9	69.9	69.9	65.7	65.7	65.7		
	SHC			31.7	41.8	51.8	30.5	40.6	50.7	29.1	39.3	49.5	27.7	37.9	48.1	26.2	36.5	46.7		
76	TC			—	86.7	86.7	—	83.0	83.0	—	79.0	79.0	—	74.7	74.7	—	70.1	70.1		
	SHC			—	33.0	41.4	—	31.9	41.2	—	30.6	40.3	—	29.3	39.3	—	27.9	38.1		
2700 cfm	EA (wb)			58	TC	68.5	68.5	77.4	66.0	66.0	74.6	63.3	63.3	71.6	60.5	60.5	68.4	57.5	57.5	65.0
					SHC	59.6	68.5	77.4	57.4	66.0	74.6	55.1	63.3	71.6	52.7	60.5	68.4	50.0	57.5	65.0
		62	TC	69.6	69.6	77.6	66.8	66.8	75.6	63.6	63.6	73.6	60.6	60.6	71.0	57.8	57.8	66.3		
			SHC	55.4	65.5	77.6	53.7	64.6	75.6	52.0	62.8	73.6	50.0	60.5	71.0	47.0	56.6	66.3		
		67	TC	75.3	75.3	75.3	72.1	72.1	72.1	68.8	68.8	68.8	65.1	65.1	65.1	61.1	61.1	61.3		
			SHC	44.0	55.3	66.6	42.8	54.1	65.5	41.5	52.9	64.2	40.1	51.5	62.8	38.6	49.9	61.3		
		72	TC	82.2	82.2	82.2	78.6	78.6	78.6	74.8	74.8	74.8	70.8	70.8	70.8	66.5	66.5	66.5		
			SHC	32.3	43.6	54.6	31.0	42.2	53.5	29.7	41.0	52.2	28.3	39.6	50.9	26.8	38.1	49.4		
		76	TC	—	88.1	88.1	—	84.1	84.1	—	80.0	80.0	—	75.6	75.6	—	70.9	70.9		
			SHC	—	33.9	44.3	—	32.6	43.4	—	31.4	42.4	—	30.0	41.2	—	28.6	39.9		
		3000 cfm	EA (wb)	58	TC	70.3	70.3	79.4	67.8	67.8	76.6	65.0	65.0	73.4	62.1	62.1	70.2	58.9	58.9	66.6
					SHC	61.2	70.3	79.4	59.0	67.8	76.6	56.5	65.0	73.4	54.0	62.1	70.2	51.3	58.9	66.6
62	TC			70.9	70.9	80.6	67.8	67.8	79.6	65.0	65.0	76.3	62.2	62.2	72.4	59.6	59.6	66.0		
	SHC			57.3	69.0	80.6	56.1	67.8	79.6	53.7	65.0	76.3	51.1	61.7	72.4	47.2	56.6	66.0		
67	TC			76.4	76.4	76.4	73.1	73.1	73.1	69.6	69.6	69.6	65.9	65.9	65.9	61.8	61.8	64.8		
	SHC			45.7	58.1	70.4	44.5	56.9	69.2	43.2	55.6	68.0	41.8	54.1	66.5	40.2	52.5	64.8		
72	TC			83.1	83.1	83.1	79.5	79.5	79.5	75.7	75.7	75.7	71.6	71.6	71.6	67.2	67.2	67.2		
	SHC			32.8	45.0	57.3	31.5	43.8	56.1	30.2	42.5	54.8	28.8	41.1	53.4	27.3	39.6	51.9		
76	TC			—	88.9	88.9	—	85.0	85.0	—	80.8	80.8	—	76.4	76.4	—	71.5	71.5		
	SHC			—	34.5	46.2	—	33.3	45.0	—	32.0	44.2	—	30.7	43.0	—	29.2	41.6		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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Performance data (cont)



38AUZ07/40RFA07 Stage 1 Combination Ratings — 60 Hz

38AUZ07/40RFA07			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
1500 cfm	EA (wb)	58	TC	47.0	47.0	53.1	45.4	45.4	51.3	43.5	43.5	49.2	41.4	41.4	46.7	39.0	39.0	44.0	
			SHC	41.0	47.0	53.1	39.5	45.4	51.3	37.9	43.5	49.2	36.0	41.4	46.7	33.9	39.0	44.0	
		62	TC	49.4	49.4	50.7	47.3	47.3	49.6	44.9	44.9	48.4	42.2	42.2	47.0	39.4	39.4	45.0	
			SHC	37.1	43.9	50.7	36.1	42.8	49.6	34.9	41.7	48.4	33.6	40.3	47.0	31.9	38.5	45.0	
		67	TC	54.4	54.4	54.4	52.1	52.1	52.1	49.4	49.4	49.4	46.5	46.5	46.5	43.2	43.2	43.2	
			SHC	30.4	37.0	43.7	29.4	36.1	42.8	28.3	35.1	41.8	27.1	33.9	40.6	25.8	32.6	39.4	
	72	TC	60.0	60.0	60.0	57.4	57.4	57.4	54.4	54.4	54.4	51.2	51.2	51.2	47.7	47.7	47.7		
		SHC	23.9	30.3	36.7	22.8	29.3	35.8	21.7	28.3	34.9	20.5	27.1	33.8	19.2	25.9	32.5		
	76	TC	—	64.9	64.9	—	61.9	61.9	—	58.7	58.7	—	55.3	55.3	—	51.4	51.4		
		SHC	—	24.4	32.6	—	23.6	31.8	—	22.7	30.9	—	21.8	27.7	—	20.4	26.9		
	1800 cfm	EA (wb)	58	TC	49.9	49.9	56.4	48.2	48.2	54.4	46.1	46.1	52.1	43.8	43.8	49.5	41.2	41.2	46.5
				SHC	43.4	49.9	56.4	41.9	48.2	54.4	40.1	46.1	52.1	38.1	43.8	49.5	35.9	41.2	46.5
62			TC	51.2	51.2	56.0	49.0	49.0	54.7	46.6	46.6	53.0	44.2	44.2	50.5	41.4	41.4	47.4	
			SHC	40.2	48.1	56.0	39.1	48.9	54.7	37.7	45.3	53.0	35.8	43.2	50.5	33.6	40.5	47.4	
67			TC	56.2	56.2	56.2	53.7	53.7	53.7	50.9	50.9	50.9	47.8	47.8	47.8	44.4	44.4	44.4	
			SHC	32.4	40.3	48.1	31.4	39.3	47.1	30.3	38.2	46.1	29.1	37.0	44.9	27.8	35.7	43.6	
72		TC	61.7	61.7	61.7	59.0	59.0	59.0	56.0	56.0	56.0	52.5	52.5	52.5	48.8	48.8	48.8		
		SHC	24.6	32.2	39.9	23.5	31.3	39.0	22.4	30.2	38.0	21.2	29.0	36.8	19.9	27.7	35.5		
76		TC	—	66.5	66.5	—	63.5	63.5	—	60.2	60.2	—	56.5	56.5	—	52.5	52.5		
		SHC	—	25.6	31.9	—	24.7	31.7	—	23.7	31.1	—	22.6	30.2	—	21.3	29.1		
2100 cfm		EA (wb)	58	TC	52.2	52.2	59.0	50.3	50.3	56.9	48.2	48.2	54.5	45.7	45.7	51.6	42.9	42.9	48.5
				SHC	45.5	52.2	59.0	43.8	50.3	56.9	42.0	48.2	54.5	39.8	45.7	51.6	37.4	42.9	48.5
	62		TC	52.8	52.8	60.1	50.4	50.4	59.1	48.8	48.8	55.2	46.2	46.2	52.3	43.0	43.0	50.4	
			SHC	42.7	51.4	60.1	41.7	50.4	59.1	39.3	47.3	55.2	37.2	44.7	52.3	35.5	43.0	50.4	
	67		TC	57.5	57.5	57.5	54.9	54.9	54.9	52.0	52.0	52.0	48.8	48.8	48.8	45.3	45.3	47.5	
			SHC	34.2	43.2	52.1	33.2	42.2	51.2	32.1	41.1	50.1	30.9	39.8	48.8	29.5	38.5	47.5	
	72	TC	63.0	63.0	63.0	60.2	60.2	60.2	57.0	57.0	57.0	53.5	53.5	53.5	49.7	49.7	49.7		
		SHC	25.2	34.0	42.8	24.1	33.0	41.9	23.0	31.9	40.8	21.8	30.7	39.6	20.5	29.4	38.3		
	76	TC	—	67.8	67.8	—	64.7	64.7	—	61.3	61.3	—	57.5	57.5	—	53.3	53.3		
		SHC	—	26.5	34.8	—	25.6	34.1	—	24.5	33.2	—	23.4	32.2	—	22.1	31.0		
	2400 cfm	EA (wb)	58	TC	54.2	54.2	61.2	52.2	52.2	58.9	49.9	49.9	56.4	47.3	47.3	53.4	44.4	44.4	50.1
				SHC	47.2	54.2	61.2	45.4	52.2	58.9	43.4	49.9	56.4	41.1	47.3	53.4	38.6	44.4	50.1
62			TC	54.2	54.2	63.6	52.4	52.4	60.6	50.5	50.5	56.5	47.3	47.3	55.5	44.4	44.4	52.0	
			SHC	44.8	54.2	63.6	42.9	51.8	60.6	40.3	48.4	56.5	39.1	47.3	55.5	36.7	44.4	52.0	
67			TC	58.5	58.5	58.5	55.9	55.9	55.9	52.9	52.9	53.9	49.6	49.6	52.6	45.9	45.9	51.0	
			SHC	36.0	46.0	56.0	35.0	45.0	55.1	33.8	43.8	53.9	32.6	42.6	52.6	31.1	41.1	51.0	
72		TC	64.0	64.0	64.0	61.1	61.1	61.1	57.8	57.8	57.8	54.3	54.3	54.3	50.3	50.3	50.3		
		SHC	25.7	35.7	45.6	24.7	34.6	44.6	23.6	33.5	43.5	22.3	32.3	42.3	21.0	31.0	40.9		
76		TC	—	68.8	68.8	—	65.6	65.6	—	62.1	62.1	—	58.2	58.2	—	53.9	53.9		
		SHC	—	27.3	36.8	—	26.3	36.0	—	25.3	35.1	—	24.0	34.0	—	22.7	32.7		
2700 cfm		EA (wb)	58	TC	55.8	55.8	63.0	53.7	53.7	60.6	51.3	51.3	57.9	48.5	48.5	54.8	45.5	45.5	51.3
				SHC	48.5	55.8	63.0	46.7	53.7	60.6	44.6	51.3	57.9	42.2	48.5	54.8	39.6	45.5	51.3
	62		TC	55.8	55.8	65.5	54.3	54.3	61.1	51.3	51.3	60.2	48.6	48.6	57.0	45.5	45.5	53.4	
			SHC	46.2	55.8	65.5	43.5	52.3	61.1	42.4	51.3	60.2	40.2	48.6	57.0	37.6	45.5	53.4	
	67		TC	59.4	59.4	59.7	56.7	56.7	58.6	53.6	53.6	57.6	50.1	50.1	56.0	46.5	46.5	54.2	
			SHC	37.6	48.7	59.7	36.6	47.6	58.6	35.5	46.5	57.6	34.1	45.0	56.0	32.6	43.4	54.2	
	72	TC	64.9	64.9	64.9	61.8	61.8	61.8	58.6	58.6	58.6	54.9	54.9	54.9	50.9	50.9	50.9		
		SHC	26.2	37.2	48.1	25.2	36.1	47.1	24.1	35.0	46.0	22.8	33.8	44.8	21.5	32.4	43.4		
	76	TC	—	69.5	69.5	—	66.3	66.3	—	62.7	62.7	—	58.8	58.8	—	54.3	54.3		
		SHC	—	27.9	38.6	—	27.0	37.8	—	25.8	36.6	—	24.6	35.6	—	23.3	34.3		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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38AUZ08/40RFA08 Stage 2 Combination Ratings — 60 Hz

38AUZ08/40RFA08			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
Capacity	Type	Temp	75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
			2250 cfm	EA (wb)	58	TC	81.8	81.8	88.9	77.8	77.8	88.1	74.6	74.6	84.5	71.2	71.2	80.7	67.3
	SHC	68.8	78.9		88.9	67.5	77.8	88.1	64.7	74.6	84.5	61.8	71.2	80.7	58.4	67.3	76.3		
	62	TC	86.3		86.3	86.3	82.9	82.9	82.9	78.3	78.3	80.2	74.3	74.3	78.1	69.1	69.1	75.9	
	SHC	61.9	72.9		83.9	60.0	70.8	81.5	58.1	69.2	80.2	56.2	67.2	78.1	54.0	64.9	75.9		
	67	TC	94.9		94.9	94.9	90.6	90.6	90.6	86.0	86.0	86.0	81.1	81.1	81.1	75.9	75.9	75.9	
	SHC	50.7	61.6		72.5	48.9	59.8	70.7	47.0	58.0	69.0	45.0	56.0	67.0	42.9	53.9	64.9		
	72	TC	104.3		104.3	104.3	99.8	99.8	99.8	94.6	94.6	94.6	89.3	89.3	89.3	83.3	83.3	83.3	
	SHC	39.8	50.2		60.6	38.0	48.5	59.1	35.9	46.6	57.3	33.9	44.7	55.5	31.7	42.6	53.4		
	76	TC	—		112.3	112.3	—	107.3	107.3	—	101.8	101.8	—	95.8	95.8	—	89.1	89.1	
	SHC	—	41.2		53.6	—	39.2	51.5	—	37.3	49.6	—	35.4	45.3	—	33.3	43.8		
2625 cfm	EA (wb)	58	TC		85.6	85.6	96.9	82.4	82.4	93.3	78.9	78.9	89.3	75.1	75.1	85.0	71.0	71.0	80.4
		SHC	74.3		85.6	96.9	71.5	82.4	93.3	68.5	78.9	89.3	65.1	75.1	85.0	61.6	71.0	80.4	
		62	TC	89.4	89.4	92.4	87.6	87.6	87.6	80.9	80.9	88.3	76.3	76.3	85.8	71.4	71.4	82.4	
		SHC	66.9	79.7	92.4	63.3	74.7	86.1	63.0	75.6	88.3	60.7	73.2	85.8	58.0	70.2	82.4		
		67	TC	98.2	98.2	98.2	93.5	93.5	93.5	88.8	88.8	88.8	83.4	83.4	83.4	77.9	77.9	77.9	
		SHC	53.9	66.6	79.2	52.1	64.7	77.4	50.2	62.9	75.6	48.1	60.8	73.5	45.9	58.6	71.3		
		72	TC	107.5	107.5	107.5	102.7	102.7	102.7	97.2	97.2	97.2	91.5	91.5	91.5	85.3	85.3	85.3	
		SHC	40.9	53.2	65.5	39.1	51.5	63.9	37.0	49.5	62.0	35.0	47.5	60.0	32.7	45.3	57.8		
		76	TC	—	115.6	115.6	—	110.1	110.1	—	104.2	104.2	—	97.5	97.5	—	91.0	91.0	
		SHC	—	42.3	56.8	—	40.6	51.5	—	38.7	50.5	—	36.6	48.8	—	34.5	46.9		
3000 cfm		EA (wb)	58	TC	89.1	89.1	100.8	85.7	85.7	97.0	81.9	81.9	92.7	78.1	78.1	88.4	73.7	73.7	83.4
			SHC	77.3	89.1	100.8	74.4	85.7	97.0	71.1	81.9	92.7	67.8	78.1	88.4	64.0	73.7	83.4	
	62		TC	92.9	92.9	96.1	87.3	87.3	97.0	82.9	82.9	94.5	78.0	78.0	91.7	75.0	75.0	83.0	
	SHC		69.4	82.8	96.1	69.0	83.0	97.0	66.8	80.7	94.5	64.3	78.0	91.7	59.0	71.0	83.0		
	67		TC	100.2	100.2	100.2	95.7	95.7	95.7	90.5	90.5	90.5	85.2	85.2	85.2	79.3	79.3	79.3	
	SHC		56.5	70.7	84.8	54.7	68.9	83.1	52.7	66.8	81.0	50.6	64.8	79.0	48.4	62.5	76.7		
	72		TC	109.7	109.7	109.7	104.5	104.5	104.5	98.9	98.9	98.9	93.0	93.0	93.0	86.6	86.6	86.6	
	SHC		41.7	55.6	69.4	39.8	53.7	67.6	37.8	51.8	65.7	35.7	49.7	63.7	33.5	47.5	61.5		
	76		TC	—	117.4	117.4	—	111.8	111.8	—	105.7	105.7	—	99.1	99.1	—	91.8	91.8	
	SHC		—	43.4	58.1	—	41.6	54.8	—	39.7	53.2	—	37.6	51.3	—	35.3	49.1		
3375 cfm	EA (wb)		58	TC	92.5	92.5	104.6	88.9	88.9	100.6	85.1	85.1	96.3	80.7	80.7	91.3	76.2	76.2	86.2
			SHC	80.4	92.5	104.6	77.3	88.9	100.6	73.9	85.1	96.3	70.1	80.7	91.3	66.2	76.2	86.2	
		62	TC	93.8	93.8	106.2	89.5	89.5	103.1	85.3	85.3	99.4	81.8	81.8	92.2	76.3	76.3	89.6	
		SHC	75.2	90.7	106.2	72.7	87.9	103.1	69.9	84.6	99.4	65.3	78.8	92.2	62.9	76.3	89.6		
		67	TC	102.4	102.4	102.4	97.3	97.3	97.3	92.1	92.1	92.1	86.6	86.6	86.6	80.5	80.5	82.5	
		SHC	59.4	75.2	91.0	57.4	73.3	89.1	55.4	71.2	87.0	53.3	69.1	84.8	51.1	66.8	82.5		
		72	TC	111.7	111.7	111.7	106.6	106.6	106.6	100.4	100.4	100.4	94.2	94.2	94.2	87.8	87.8	87.8	
		SHC	42.6	58.1	73.6	40.8	56.3	71.9	38.6	54.2	69.6	36.4	52.0	67.6	34.2	49.8	65.3		
		76	TC	—	119.3	119.3	—	113.2	113.2	—	106.9	106.9	—	100.1	100.1	—	92.8	92.8	
		SHC	—	44.4	59.2	—	42.5	57.6	—	40.5	55.8	—	38.3	53.7	—	36.1	51.4		
3750 cfm		EA (wb)	58	TC	95.1	95.1	107.6	91.5	91.5	103.5	87.3	87.3	98.8	82.8	82.8	93.6	78.0	78.0	88.3
			SHC	82.7	95.1	107.6	79.5	91.5	103.5	75.9	87.3	98.8	71.9	82.8	93.6	67.8	78.0	88.3	
	62		TC	96.5	96.5	108.5	91.5	91.5	107.5	90.1	90.1	94.0	82.9	82.9	97.2	78.1	78.1	91.7	
	SHC		77.0	92.8	108.5	75.5	91.5	107.5	68.0	81.0	94.0	66.3	82.8	97.2	64.4	78.1	91.7		
	67		TC	103.7	103.7	103.7	98.7	98.7	98.7	93.2	93.2	93.2	87.5	87.5	89.8	82.0	82.0	85.8	
	SHC		61.7	78.9	96.1	59.8	76.9	94.1	57.7	74.9	92.1	55.6	72.7	89.8	52.6	69.2	85.8		
	72		TC	113.0	113.0	113.0	107.4	107.4	107.4	101.6	101.6	101.6	95.3	95.3	95.3	88.6	88.6	88.6	
	SHC		43.2	60.1	77.0	41.2	58.2	75.2	39.2	56.2	73.1	37.1	54.0	70.9	34.8	51.7	68.6		
	76		TC	—	120.6	120.6	—	114.3	114.3	—	108.1	108.1	—	100.9	100.9	—	93.6	93.6	
	SHC		—	45.1	61.4	—	43.1	59.7	—	41.2	57.8	—	38.9	55.6	—	36.6	53.2		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



Ex

Performance data (cont)



38AUZ08/40RFA08 Stage 1 Combination Ratings — 60 Hz

38AUZ08/40RFA08			AMBIENT TEMPERATURE (°F)																	
			85			95			105			115			125					
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85			
1900 cfm	EA (wb)	58	TC	58.3	58.3	65.9	55.2	55.2	62.4	51.8	51.8	58.0	48.1	48.1	54.4	44.2	44.2	50.0		
		58	SHC	50.6	58.3	65.9	48.0	55.2	62.4	45.0	51.8	58.6	41.8	48.1	54.4	38.4	44.2	50.0		
		62	TC	60.1	60.1	65.1	56.1	56.1	63.1	52.1	52.1	60.0	48.7	48.7	55.1	44.2	44.2	52.0		
		62	SHC	46.7	55.9	65.1	44.8	53.9	63.1	42.3	51.2	60.0	39.0	47.0	55.1	36.5	44.2	52.0		
		67	TC	66.6	66.6	66.6	62.4	62.4	62.4	57.7	57.7	57.7	52.6	52.6	52.6	47.3	47.3	48.7		
		67	SHC	37.7	46.9	56.1	36.0	45.3	54.5	34.2	43.4	52.7	32.2	41.5	50.7	30.2	39.5	48.7		
	72	TC	73.6	73.6	73.6	69.2	69.2	69.2	64.2	64.2	64.2	58.6	58.6	58.6	53.1	53.1	53.1			
		SHC	28.5	37.5	46.5	26.9	35.9	45.0	25.1	34.2	43.2	23.2	32.3	41.4	21.2	30.4	39.5			
		76	TC	—	79.6	79.6	—	75.1	75.1	—	69.8	69.8	—	64.0	64.0	—	58.1	58.1		
		76	SHC	—	29.8	40.2	—	28.4	38.4	—	26.7	35.2	—	24.9	33.7	—	23.0	31.9		
		2250 cfm	EA (wb)	58	TC	61.8	61.8	69.9	58.5	58.5	66.2	54.8	54.8	62.0	50.9	50.9	57.5	46.6	46.6	52.8
				58	SHC	53.8	61.8	69.9	50.9	58.5	66.2	47.7	54.8	62.0	44.2	50.9	57.5	40.5	46.6	52.8
62	TC			62.4	62.4	71.4	58.9	58.9	67.7	54.1	54.1	64.2	50.9	50.9	59.8	46.7	46.7	54.8		
62	SHC			50.5	61.0	71.4	47.8	57.8	67.7	43.9	54.1	64.2	42.0	50.9	59.8	38.5	46.7	54.8		
67	TC			68.6	68.6	68.6	64.2	64.2	64.2	59.3	59.3	59.3	54.0	54.0	56.4	48.5	48.5	54.2		
67	SHC			40.4	51.1	61.8	38.7	49.4	60.2	36.8	47.6	58.4	34.9	45.6	56.4	32.8	43.5	54.2		
72	TC		75.6	75.6	75.6	71.0	71.0	71.0	65.9	65.9	65.9	60.2	60.2	60.2	54.3	54.3	54.3			
	SHC		29.5	40.0	50.5	27.9	38.4	49.0	26.0	36.7	47.3	24.1	34.8	45.4	22.1	32.8	43.4			
	76		TC	—	81.6	81.6	—	76.9	76.9	—	71.4	71.4	—	65.5	65.5	—	59.2	59.2		
	76		SHC	—	31.1	40.8	—	29.6	39.6	—	27.9	38.1	—	26.0	36.4	—	24.1	34.5		
	2650 cfm		EA (wb)	58	TC	65.0	65.0	73.5	61.5	61.5	69.5	57.6	57.6	65.1	53.3	53.3	60.3	48.8	48.8	55.2
				58	SHC	56.6	65.0	73.5	53.5	61.5	69.5	50.1	57.6	65.1	46.4	53.3	60.3	42.4	48.8	55.2
62		TC		65.1	65.1	76.4	61.6	61.6	72.3	57.6	57.6	67.7	53.4	53.4	62.7	48.9	48.9	57.4		
62		SHC		53.8	65.1	76.4	50.9	61.6	72.3	47.6	57.6	67.7	44.1	53.4	62.7	40.3	48.9	57.4		
67		TC		70.3	70.3	70.3	65.7	65.7	66.4	60.7	60.7	64.4	55.2	55.2	62.3	49.6	49.6	59.6		
67		SHC		43.2	55.7	68.1	41.5	54.0	66.4	39.7	52.0	64.4	37.6	50.0	62.3	35.4	47.5	59.6		
72		TC	77.3	77.3	77.3	72.6	72.6	72.6	67.2	67.2	67.2	61.4	61.4	61.4	55.3	55.3	55.3			
		SHC	30.4	42.6	54.8	28.8	41.0	53.3	27.0	39.3	51.6	25.1	37.4	49.7	23.0	35.3	47.6			
		76	TC	—	83.3	83.3	—	78.4	78.4	—	72.8	72.8	—	66.7	66.7	—	60.1	60.1		
		76	SHC	—	32.2	43.9	—	30.7	42.6	—	29.0	41.0	—	27.1	39.2	—	25.1	37.2		
		3000 cfm	EA (wb)	58	TC	67.3	67.3	76.1	63.7	63.7	72.0	59.6	59.6	67.3	55.1	55.1	62.3	50.4	50.4	56.9
				58	SHC	58.6	67.3	76.1	55.4	63.7	72.0	51.8	59.6	67.3	47.9	55.1	62.3	43.8	50.4	56.9
62	TC			66.8	66.8	79.1	63.7	63.7	74.8	59.6	59.6	70.0	55.2	55.2	64.8	50.5	50.5	59.3		
62	SHC			54.5	66.8	79.1	52.7	63.7	74.8	49.3	59.6	70.0	45.6	55.2	64.8	41.7	50.5	59.3		
67	TC			71.4	71.4	73.3	66.7	66.7	71.5	61.6	61.6	69.4	56.0	56.0	66.7	51.1	51.1	63.0		
67	SHC			45.6	59.5	73.3	43.9	57.7	71.5	42.0	55.7	69.4	39.7	53.2	66.7	37.2	50.1	63.0		
72	TC		78.4	78.4	78.4	73.6	73.6	73.6	68.1	68.1	68.1	62.2	62.2	62.2	56.0	56.0	56.0			
	SHC		31.1	44.8	58.4	29.5	43.2	56.9	27.7	41.4	55.1	25.8	39.5	53.2	23.8	37.4	51.1			
	76		TC	—	84.4	84.4	—	79.5	79.5	—	73.7	73.7	—	67.4	67.4	—	60.8	60.8		
	76		SHC	—	33.0	46.3	—	31.5	44.9	—	29.8	43.2	—	27.9	41.3	—	25.9	39.3		
	3400 cfm		EA (wb)	58	TC	69.5	69.5	78.5	65.8	65.8	74.3	61.4	61.4	69.4	56.8	56.8	64.2	51.9	51.9	58.8
				58	SHC	60.5	69.5	78.5	57.3	65.8	74.3	53.5	61.4	69.4	49.4	56.8	64.2	45.1	51.9	58.8
62		TC		69.6	69.6	81.6	65.8	65.8	77.2	61.5	61.5	72.1	56.8	56.8	66.7	51.9	51.9	60.9		
62		SHC		57.5	69.6	81.6	54.4	65.8	77.2	50.8	61.5	72.1	47.0	56.8	66.7	42.9	51.9	60.9		
67		TC		72.4	72.4	78.7	67.7	67.7	76.9	62.5	62.5	74.5	57.2	57.2	70.9	52.1	52.1	64.7		
67		SHC		48.1	63.4	78.7	46.4	61.8	76.9	44.4	59.4	74.5	41.8	56.4	70.9	38.1	51.4	64.7		
72		TC	79.4	79.4	79.4	74.5	74.5	74.5	69.0	69.0	69.0	62.9	62.9	62.9	56.6	56.6	56.6			
		SHC	31.8	47.0	62.3	30.2	45.5	60.7	28.5	43.7	59.0	26.6	41.8	57.0	24.6	39.7	54.9			
		76	TC	—	85.5	85.5	—	80.4	80.4	—	74.6	74.6	—	68.2	68.2	—	61.3	61.3		
		76	SHC	—	33.8	48.7	—	32.2	47.2	—	30.5	45.5	—	28.6	43.6	—	26.5	41.5		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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Performance data (cont)



38AUZ12/40RFA12 Stage 2 Combination Ratings — 60 Hz

38AUZ12/40RFA12			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
3000 cfm	EA (wb)	58	TC	107.1	107.1	118.6	102.2	102.2	115.5	97.6	97.6	110.3	92.6	92.6	104.7	87.4	87.4	98.8	
		SHC	91.8	105.2	118.6	88.9	102.2	115.5	84.9	97.6	110.3	80.5	92.6	104.7	76.0	87.4	98.8		
		62	TC	112.1	112.1	112.9	106.7	106.7	110.3	100.7	100.7	107.4	94.6	94.6	104.3	88.3	88.3	100.9	
		SHC	82.9	97.9	112.9	80.4	95.4	110.3	77.6	92.5	107.4	74.6	89.5	104.3	71.5	86.2	100.9		
		67	TC	122.5	122.5	122.5	116.8	116.8	116.8	110.2	110.2	110.2	103.3	103.3	103.3	96.1	96.1	96.1	
		SHC	68.0	82.8	97.7	65.6	80.5	95.4	62.9	77.8	92.8	60.0	75.0	90.0	57.2	72.2	87.2		
	72	TC	134.5	134.5	134.5	127.7	127.7	127.7	120.7	120.7	120.7	113.0	113.0	113.0	105.1	105.1	105.1		
	SHC	53.2	67.5	81.9	50.6	65.1	79.6	47.9	62.5	77.2	45.0	59.8	74.5	42.1	56.9	71.7			
	76	TC	—	144.5	144.5	—	137.3	137.3	—	129.5	129.5	—	121.4	121.4	—	112.8	112.8		
	SHC	—	54.4	70.9	—	62.2	69.7	—	49.8	61.2	—	47.3	60.8	—	44.5	58.7			
	3600 cfm	EA (wb)	58	TC	111.9	111.9	126.5	107.4	107.4	121.3	102.4	102.4	115.7	97.0	97.0	109.7	91.4	91.4	103.3
			SHC	97.3	111.9	126.5	93.4	107.4	121.3	89.0	102.4	115.7	84.4	97.0	109.7	79.5	91.4	103.3	
62			TC	115.3	115.3	123.1	109.9	109.9	120.3	103.7	103.7	117.0	98.2	110.2	123.1	92.3	92.3	104.5	
SHC			85.9	106.0	123.1	86.3	103.3	120.3	83.2	100.1	117.0	78.5	94.4	110.2	74.2	89.4	104.5		
67			TC	125.9	125.9	125.9	119.9	119.9	119.9	112.8	112.8	112.8	105.5	105.5	105.5	98.1	98.1	98.1	
SHC			71.8	89.0	106.2	69.4	86.6	103.8	66.6	83.8	101.1	63.7	81.0	98.3	60.8	78.1	95.3		
72		TC	137.9	137.9	137.9	130.7	130.7	130.7	123.2	123.2	123.2	115.2	115.2	115.2	107.0	107.0	107.0		
SHC		54.6	71.3	88.1	51.9	68.8	85.7	49.1	66.1	83.1	46.2	63.3	80.4	43.3	60.5	77.8			
76		TC	—	147.8	147.8	—	140.3	140.3	—	132.2	132.2	—	123.8	123.8	—	—	—		
SHC		—	56.6	75.9	—	64.3	83.6	—	51.7	67.5	—	49.1	65.4	—	—	—			
4000 cfm		EA (wb)	58	TC	116.5	116.5	131.7	111.7	111.7	126.2	106.4	106.4	120.2	100.6	100.6	113.7	94.6	94.6	106.9
			SHC	101.4	116.5	131.7	97.1	111.7	126.2	92.5	106.4	120.2	87.5	100.6	113.7	82.3	94.6	106.9	
	62		TC	118.2	118.2	132.2	112.6	112.6	129.0	107.2	107.2	121.7	101.5	101.5	114.9	94.7	94.7	111.1	
	SHC		94.3	113.2	132.2	91.4	110.2	129.0	86.4	104.1	121.7	81.6	98.2	114.9	78.3	94.7	111.1		
	67		TC	128.6	128.6	128.6	122.0	122.0	122.0	114.9	114.9	114.9	107.4	107.4	107.4	99.6	99.6	103.2	
	SHC		75.6	95.0	114.4	73.0	92.4	111.9	70.2	89.6	109.1	67.3	86.7	106.2	64.3	83.7	103.2		
	72	TC	140.1	140.1	140.1	133.0	133.0	133.0	125.2	125.2	125.2	117.0	117.0	117.0	108.6	108.6	108.6		
	SHC	55.7	74.7	93.8	53.1	72.3	91.4	50.3	69.5	88.8	47.4	66.7	86.0	44.5	63.9	83.2			
	76	TC	—	150.5	150.5	—	142.9	142.9	—	134.6	134.6	—	—	—	—	—	—		
	SHC	—	58.5	75.9	—	66.1	74.1	—	53.5	71.9	—	—	—	—	—	—			
	4500 cfm	EA (wb)	58	TC	120.3	120.3	136	115.4	115.4	130.4	109.6	109.6	123.8	103.6	103.6	117.1	97.3	97.3	109.9
			SHC	104.7	120.3	136	100.4	115.4	130.4	95.3	109.6	123.8	90.2	103.6	117.1	84.6	97.3	109.9	
62			TC	121.6	121.6	138.7	116.5	116.5	131.3	110.4	110.4	125.9	103.6	103.6	121.6	97.3	97.3	114.2	
SHC			98.4	118.5	138.7	93.4	112.3	131.3	89.3	107.6	125.9	85.6	103.6	121.6	80.4	97.3	114.2		
67			TC	130.4	130.4	130.4	123.8	123.8	123.8	116.7	116.7	116.9	108.8	108.8	113.6	100.8	100.8	110.4	
SHC			78.9	100.5	122.1	76.4	98.0	119.6	73.7	95.3	116.9	70.8	92.1	113.6	67.5	89.0	110.4		
72		TC	142.0	142.0	142.0	134.8	134.8	134.8	126.8	126.8	126.8	118.4	118.4	118.4	109.8	109.8	109.8		
SHC		56.8	78.1	99.3	54.2	75.6	96.9	51.4	72.8	94.3	48.6	70.0	91.5	45.6	67.1	88.6			
76		TC	—	152.2	152.2	—	144.5	144.5	—	135.9	135.9	—	—	—	—	—	—		
SHC		—	59.9	80.0	—	67.5	78.0	—	54.9	75.7	—	—	—	—	—	—			
5000 cfm		EA (wb)	58	TC	123.8	123.8	139.7	118.5	118.5	133.9	112.4	112.4	127.0	106.2	106.2	120.0	99.6	99.6	112.5
			SHC	107.5	123.8	139.7	103.1	118.5	133.9	97.8	112.4	127.0	92.4	106.2	120.0	86.6	99.6	112.5	
	62		TC	123.7	123.7	145.2	119.9	119.9	133.8	112.6	112.6	132.2	106.3	106.3	124.7	99.6	99.6	116.9	
	SHC		102.3	123.7	145.2	95.4	114.6	133.8	93.1	112.6	132.2	87.8	106.3	124.7	82.3	99.6	116.9		
	67		TC	132.1	132.1	132.1	125.2	125.2	127.0	117.7	117.7	123.9	109.9	109.9	121.2	101.9	101.9	117.3	
	SHC		82.3	105.9	129.6	79.7	103.4	127.0	76.8	100.3	123.9	74.0	97.6	121.2	70.7	94.0	117.3		
	72	TC	143.7	143.7	143.7	136.3	136.3	136.3	128.1	128.1	128.1	119.6	119.6	119.6	110.7	110.7	110.7		
	SHC	57.8	81.3	104.7	55.3	78.8	102.2	52.5	76.0	99.6	49.6	73.2	96.8	46.7	70.3	93.9			
	76	TC	—	154.1	154.1	—	146.1	146.1	—	—	—	—	—	—	—	—	—		
	SHC	—	61.4	83.9	—	68.9	91.6	—	—	—	—	—	—	—	—	—			

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



Ex

Performance data (cont)



38AUZ12/40RFA12 Stage 1 Combination Ratings — 60 Hz

38AUZ12/40RFA12			AMBIENT TEMPERATURE (°F)																	
			85			96			105			115			125					
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
Capacity	Type	Temp	75	80	85	75	80	85	75	80	85	75	80	85	75	80	85			
			2500 cfm	EA (wb)	58	TC	74.8	74.8	84.8	70.2	70.2	79.5	65.4	65.4	74.0	60.2	60.2	68.2	55.0	55.0
SHC	64.9	74.8	84.8			60.9	70.2	79.5	56.7	65.4	74.0	52.2	60.2	68.2	47.7	55.0	62.3			
62	TC	76.2	76.2		85.8	71.0	71.0	81.5	64.5	64.5	76.7	60.3	60.3	71.0	55.1	55.1	64.8			
	SHC	60.7	73.3		85.8	57.3	69.4	81.5	52.3	64.5	76.7	49.6	60.3	71.0	45.3	55.1	64.8			
67	TC	84.7	84.7		84.7	78.4	78.4	78.4	71.6	71.6	71.6	64.6	64.6	68.8	57.5	57.5	64.0			
	SHC	49.1	61.8		74.5	46.6	59.3	72.1	44.0	56.7	69.4	41.3	54.0	66.8	38.6	51.3	64.0			
72	TC	94.1	94.1		94.1	87.6	87.6	87.6	80.5	80.5	80.5	72.9	72.9	72.9	—	—	—			
	SHC	37.1	49.6		62.0	34.8	47.3	59.8	32.2	44.8	57.4	29.6	42.2	54.8	—	—	—			
76	TC	—	102.3		102.3	—	—	—	—	—	—	—	—	—	—	—	—			
	SHC	—	39.6		50.4	—	—	—	—	—	—	—	—	—	—	—	—			
3000 cfm	EA (wb)	58	TC		79.8	79.8	90.4	74.9	74.9	84.8	69.6	69.6	78.8	64.0	64.0	72.5	58.3	58.3	66.0	
			SHC		69.2	79.8	90.4	65.0	74.9	84.8	60.4	69.6	78.8	55.5	64.0	72.5	50.6	58.3	66.0	
		62	TC	80.6	80.6	92.5	73.5	73.5	87.8	69.6	69.6	81.9	64.1	64.1	75.4	58.3	58.3	68.6		
			SHC	65.1	78.8	92.5	59.2	73.5	87.8	57.3	69.6	81.9	52.7	64.1	75.4	48.0	58.3	68.6		
		67	TC	87.3	87.3	87.3	80.8	80.8	80.8	73.7	73.7	78.0	66.4	66.4	75.0	59.1	59.1	71.7		
			SHC	53.1	68.2	83.2	50.6	65.7	80.7	47.9	63.0	78.0	45.1	60.1	75.0	42.2	57.0	71.7		
		72	TC	98.7	96.7	96.7	90.2	90.2	90.2	82.6	82.6	82.6	—	—	—	—	—	—		
			SHC	38.7	53.5	68.3	36.4	51.3	66.1	33.8	48.7	63.7	—	—	—	—	—	—		
		76	TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
			SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		3500 cfm	EA (wb)	58	TC	83.8	83.8	94.9	78.6	78.6	89.0	73.0	73.0	82.6	67.1	67.1	75.9	60.9	60.9	68.9
					SHC	72.7	83.8	94.9	68.2	78.6	89.0	63.4	73.0	82.6	56.2	67.1	75.9	52.8	60.9	68.9
62	TC			83.9	83.9	98.7	78.7	78.7	92.5	73.1	73.1	85.9	67.1	67.1	78.9	60.9	60.9	71.7		
	SHC			69.1	83.9	98.7	64.8	78.7	92.5	60.2	73.1	85.9	55.3	67.1	78.9	50.2	60.9	71.7		
67	TC			89.3	89.3	91.5	82.6	82.6	88.8	75.4	75.4	85.8	68.0	68.0	82.3	61.7	61.7	75.2		
	SHC			56.9	74.2	91.5	54.3	71.6	88.8	51.6	68.7	85.8	48.6	65.4	82.3	44.3	59.7	75.2		
72	TC			98.7	98.7	98.7	91.8	91.8	91.8	—	—	—	—	—	—	—	—	—		
	SHC			40.1	57.3	74.4	37.8	55.0	72.1	—	—	—	—	—	—	—	—	—		
76	TC			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	SHC			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
4000 cfm	EA (wb)			58	TC	87.1	87.1	98.5	81.6	81.6	92.4	75.7	75.7	85.7	69.5	69.5	78.6	63.0	63.0	71.3
					SHC	75.6	87.1	98.5	70.9	81.6	92.4	65.8	75.7	85.7	60.3	69.5	78.6	54.7	63.0	71.3
		62	TC	87.1	87.1	102.5	81.7	81.7	96.1	75.8	75.8	89.1	69.5	69.5	81.8	63.0	63.0	74.1		
			SHC	71.8	87.1	102.5	67.4	81.7	96.1	62.5	75.8	89.1	57.3	69.5	81.8	51.9	63.0	74.1		
		67	TC	90.9	90.9	99.1	84.1	84.1	96.3	76.9	76.9	92.8	69.9	69.9	86.9	—	—	—		
			SHC	60.4	79.7	99.1	57.8	77.1	96.3	54.8	73.8	92.8	50.9	68.9	86.9	—	—	—		
		72	TC	100.1	100.1	100.1	93.2	93.2	93.2	—	—	—	—	—	—	—	—	—		
			SHC	41.4	60.8	80.1	38.2	58.5	77.9	—	—	—	—	—	—	—	—	—		
		76	TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
			SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
		4500 cfm	EA (wb)	58	TC	89.7	89.7	101.5	84.2	84.2	95.2	78.1	78.1	88.3	71.6	71.6	81.0	—	—	—
					SHC	77.9	89.7	101.5	73.1	84.2	95.2	67.8	78.1	88.3	62.2	71.6	81.0	—	—	—
62	TC			89.8	89.8	105.6	84.2	84.2	99.0	78.1	78.1	91.8	71.6	71.6	84.2	—	—	—		
	SHC			74.0	89.8	105.6	69.4	84.2	99.0	64.4	78.1	91.8	59.0	71.6	84.2	—	—	—		
67	TC			92.1	92.1	106.1	85.3	85.3	102.9	79.1	79.1	95.4	72.3	72.3	87.4	—	—	—		
	SHC			63.6	84.9	106.1	60.9	81.9	102.9	58.4	75.9	95.4	51.7	69.5	87.4	—	—	—		
72	TC			101.3	101.3	101.3	—	—	—	—	—	—	—	—	—	—	—	—		
	SHC			42.7	64.2	85.7	—	—	—	—	—	—	—	—	—	—	—	—		
76	TC			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	SHC			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



ef

38AUD12/40RFA12 Stage 3 Combination Ratings — 60 Hz

38AUD12/40RFA12				AMBIENT TEMPERATURE (°F)															
				85			95			105			115			125			
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)			
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
3000 cfm	EA (wb)	58	TC	100.7	100.7	111.7	96.2	96.2	109.8	92.4	92.4	105.3	88.4	88.4	100.7	83.9	83.9	95.6	
			SHC	85.0	88.3	111.7	82.8	96.2	109.8	79.6	92.4	105.3	76.1	88.4	100.7	72.3	83.9	95.6	
		62	TC	109.8	109.8	109.8	101.9	101.9	103.8	96.9	96.9	101.4	91.5	91.5	99.0	85.8	85.8	96.2	
			SHC	75.3	89.3	103.3	74.4	89.1	103.8	72.1	86.7	101.4	69.7	84.3	99.0	67.1	81.6	96.2	
		67	TC	118.9	118.9	118.9	113.6	113.6	113.6	107.9	107.9	107.9	101.9	101.9	101.9	95.4	95.4	95.4	
			SHC	62.7	77.3	92.0	60.7	75.3	90.0	58.4	73.1	87.9	56.1	70.8	85.6	53.6	68.4	83.1	
	72	TC	132.3	132.3	132.3	126.3	126.3	126.3	120.1	120.1	120.1	113.4	113.4	113.4	106.2	106.2	106.2		
		SHC	49.1	63.2	77.2	46.8	61.1	75.3	44.6	59.0	73.3	42.2	56.7	71.2	39.7	54.3	68.8		
	76	TC	—	144.0	144.0	—	137.6	137.6	—	130.7	130.7	—	123.3	123.3	—	115.2	115.2		
		SHC	—	51.2	67.7	—	49.2	65.7	—	47.4	63.9	—	45.2	58.3	—	42.8	56.7		
	3500 cfm	EA (wb)	58	TC	106.1	106.1	120.7	102.3	102.3	116.4	98.2	98.2	111.7	93.7	93.7	106.6	88.9	88.9	101.1
				SHC	91.5	106.1	120.7	88.3	102.3	116.4	84.7	98.2	111.7	80.8	93.7	106.6	76.6	88.9	101.1
62			TC	110.6	110.6	116.6	105.7	105.7	114.3	100.4	100.4	111.8	94.9	94.9	106.6	89.6	89.6	103.8	
			SHC	83.0	99.8	116.6	80.8	97.6	114.3	78.4	95.1	111.8	75.6	92.1	106.6	72.1	87.9	103.8	
67			TC	122.8	122.8	122.8	117.1	117.1	117.1	111.2	111.2	111.2	104.8	104.8	104.8	98.0	98.0	98.0	
			SHC	67.2	84.0	100.9	65.0	81.9	98.8	62.7	79.7	96.6	60.3	77.2	94.2	57.8	74.7	91.7	
72		TC	136.2	136.2	136.2	129.7	129.7	129.7	123.4	123.4	123.4	116.4	116.4	116.4	108.8	108.8	108.8		
		SHC	51.0	67.4	83.9	48.6	65.2	81.8	46.4	63.1	79.7	44.0	60.8	77.5	41.4	58.2	75.0		
76		TC	—	148.0	148.0	—	141.1	141.1	—	133.8	133.8	—	126.1	126.1	—	117.8	117.8		
		SHC	—	53.8	73.1	—	51.9	66.5	—	49.7	65.2	—	47.4	63.4	—	44.9	61.3		
4000 cfm		EA (wb)	58	TC	111.5	111.5	126.7	107.3	107.3	122.0	102.9	102.9	116.9	98.1	98.1	111.5	92.9	92.9	105.5
				SHC	96.3	111.5	126.7	92.7	107.3	122.0	88.9	102.9	116.9	84.8	98.1	111.5	80.2	92.9	105.5
	62		TC	114.1	114.1	126.5	109.0	109.0	123.6	103.7	103.7	120.5	99.2	99.2	113.1	93.0	93.0	109.9	
			SHC	89.1	107.8	126.5	86.6	105.1	123.6	83.9	102.2	120.5	79.1	96.1	113.1	76.2	93.0	109.9	
	67		TC	126.0	126.0	126.0	119.9	119.9	119.9	113.8	113.8	113.8	107.1	107.1	107.1	100.0	100.0	100.0	
			SHC	71.3	90.3	109.4	69.0	88.1	107.1	66.7	85.8	104.8	64.3	83.3	102.4	61.6	80.7	99.7	
	72	TC	139.4	139.4	139.4	132.7	132.7	132.7	125.9	125.9	125.9	118.5	118.5	118.5	110.7	110.7	110.7		
		SHC	52.7	71.4	90.0	50.4	69.1	87.9	48.1	66.9	85.7	45.6	64.5	83.4	43.0	61.9	80.9		
	76	TC	—	151.1	151.1	—	143.7	143.7	—	136.3	136.3	—	128.3	128.3	—	119.7	119.7		
		SHC	—	58.0	73.1	—	53.9	71.8	—	51.7	69.8	—	49.3	67.7	—	46.7	65.4		
	4500 cfm	EA (wb)	58	TC	116.0	116.0	131.7	111.6	111.6	126.7	106.9	106.9	121.3	101.8	101.8	115.5	96.2	96.2	109.2
				SHC	100.4	116.0	131.7	96.5	111.6	126.7	92.4	106.9	121.3	88.0	101.8	115.5	83.2	96.2	109.2
62			TC	117.1	117.1	134.4	112.0	112.0	131.3	107.3	107.3	125.6	102.1	102.1	119.9	96.3	96.3	113.6	
			SHC	94.0	114.2	134.4	91.4	111.4	131.3	87.5	106.6	125.6	83.4	101.7	119.9	79.0	96.3	113.6	
67			TC	129.3	129.3	129.3	123.0	123.0	123.0	115.7	115.7	115.7	108.9	108.9	110.2	102.2	102.2	109.3	
			SHC	76.1	97.7	119.3	73.8	95.4	117.0	70.4	91.5	112.7	68.0	89.1	110.2	66.2	87.8	109.3	
72		TC	141.7	141.7	141.7	135.0	135.0	135.0	127.9	127.9	127.9	120.4	120.4	120.4	112.3	112.3	112.3		
		SHC	54.1	75.0	95.8	51.9	72.8	93.7	49.6	70.5	91.4	47.0	68.0	89.1	44.4	65.4	86.5		
76		TC	—	153.3	153.3	—	146.1	146.1	—	138.3	138.3	—	130.1	130.1	—	121.2	121.2		
		SHC	—	57.9	77.6	—	55.7	75.8	—	53.4	73.8	—	51.0	71.6	—	48.4	69.2		
5000 cfm		EA (wb)	58	TC	120.0	120.0	136.1	115.2	115.2	130.7	110.3	110.3	125.1	104.9	104.9	119.0	99.1	99.1	112.4
				SHC	103.9	120.0	136.1	99.8	115.2	130.7	95.5	110.3	125.1	90.9	104.9	119.0	85.8	99.1	112.4
	62		TC	120.9	120.9	138.7	115.5	115.5	136.1	111.0	111.0	128.8	105.0	105.0	123.8	99.2	99.2	116.9	
			SHC	97.3	118.0	138.7	94.8	115.5	136.1	90.1	109.4	128.8	86.2	105.0	123.8	81.5	99.2	116.9	
	67		TC	130.3	130.3	130.3	124.0	124.0	124.0	117.4	117.4	120.2	110.4	110.4	117.4	103.0	103.0	114.5	
			SHC	78.8	101.9	125.1	76.5	99.6	122.7	74.0	97.1	120.2	71.4	94.4	117.4	68.7	91.6	114.5	
	72	TC	143.7	143.7	143.7	136.7	136.7	136.7	129.4	129.4	129.4	121.9	121.9	121.9	113.6	113.6	113.6		
		SHC	55.5	78.4	101.3	53.2	76.2	99.1	50.8	73.8	96.8	48.4	71.4	94.5	45.7	68.8	91.6		
	76	TC	—	155.5	155.5	—	147.7	147.7	—	139.6	139.6	—	131.4	131.4	—	122.5	122.5		
		SHC	—	59.6	81.6	—	57.2	79.6	—	54.9	77.5	—	52.5	75.2	—	49.9	72.7		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



Ex

38AUD12/40RFA12 Stage 2 Combination Ratings — 60 Hz

38AUD12/40RFA12			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
			2500 cfm	EA (wb)	58	TC	88.4	88.4	87.2	84.8	84.8	84.5	81.1	81.1	80.3	76.4	76.4	86.4	71.7
SHC	75.2	86.2			87.2	72.9	83.7	84.5	89.7	80.0	80.3	66.4	76.4	86.4	62.4	71.7	81.1		
62	TC	93.1			93.1	93.1	88.6	88.6	90.3	83.9	83.9	87.0	79.1	79.1	83.2	73.5	73.5	79.7	
SHC	68.3	80.4			82.6	66.1	78.2	80.3	83.3	75.1	87.0	60.2	71.7	83.2	57.2	68.4	79.7		
67	TC	102.6			102.6	102.6	97.7	97.7	97.7	92.4	92.4	92.4	86.8	86.8	86.8	80.1	80.1	80.1	
SHC	56.4	68.5			80.5	54.4	66.5	78.6	52.2	64.4	76.5	49.9	62.0	74.2	47.3	59.5	71.7		
72	TC	113.1		113.1	113.1	107.9	107.9	107.9	101.9	101.9	101.9	95.5	95.5	95.5	88.5	88.5	88.5		
SHC	44.7	56.0		67.3	42.6	54.2	65.7	40.3	52.0	63.8	37.9	49.8	61.7	35.3	47.3	59.4			
76	TC	—		122.2	122.2	—	116.4	116.4	—	110.3	110.3	—	—	—	—	—	—		
SHC	—	46.2		57.8	—	44.2	56.5	—	41.8	54.3	—	—	—	—	—	—			
3000 cfm	EA (wb)	58		TC	83.6	93.6	105.3	89.8	89.8	101.3	85.7	85.7	96.8	81.2	81.2	91.7	76.1	76.1	86.0
		SHC		81.2	93.3	105.3	78.0	89.7	101.3	74.6	85.7	96.8	70.6	81.2	91.7	68.3	76.1	86.0	
		62	TC	96.9	96.9	101.0	95.4	95.4	95.4	87.7	87.7	95.0	82.5	82.5	91.1	76.8	76.8	86.7	
		SHC	73.4	87.2	101.0	69.0	82.0	94.9	68.3	81.6	95.0	65.1	78.1	91.1	61.6	74.2	86.7		
		67	TC	106.2	106.2	106.2	101.0	101.0	101.0	95.4	95.4	95.4	89.2	89.2	89.2	82.5	82.5	82.5	
		SHC	60.5	74.7	89.0	58.4	72.7	87.0	56.2	70.5	84.8	53.7	68.1	82.5	51.1	65.4	79.8		
	72	TC	116.7	116.7	116.7	111.0	111.0	111.0	104.9	104.9	104.9	98.1	98.1	98.1	90.8	90.8	90.8		
	SHC	46.2	60.0	73.8	44.1	58.0	72.0	41.8	55.9	70.0	39.4	53.6	67.7	36.8	51.1	65.3			
	76	TC	—	126.1	126.1	—	—	—	—	—	—	—	—	—	—	—	—		
	SHC	—	47.9	62.7	—	—	—	—	—	—	—	—	—	—	—	—			
	3500 cfm	EA (wb)	58	TC	98.2	98.2	110.9	94.5	94.5	106.8	89.9	89.9	101.5	84.9	84.9	95.9	79.5	79.5	89.8
			SHC	85.5	98.2	110.9	82.3	94.5	106.8	78.2	89.9	101.5	73.9	84.9	95.9	69.2	79.5	89.8	
62			TC	100.2	100.2	109.2	95.8	95.8	105.7	90.9	90.9	102.0	85.4	85.4	97.8	80.0	80.0	92.2	
SHC			78.4	93.8	109.2	75.6	90.7	105.7	72.6	87.3	102.0	69.3	83.6	97.8	65.3	78.8	92.2		
67			TC	108.9	108.9	108.9	103.7	103.7	103.7	97.6	97.6	97.6	91.0	91.0	91.0	84.0	84.0	87.0	
SHC			64.2	80.6	97.1	62.5	79.1	95.7	59.8	76.2	92.6	57.3	73.6	90.0	54.4	70.7	87.0		
72		TC	119.4	119.4	119.4	113.5	113.5	113.5	107.3	107.3	107.3	100.3	100.3	100.3	—	—	—		
SHC		47.6	63.7	79.7	45.5	61.6	77.8	43.3	59.5	75.7	40.9	57.2	73.5	—	—	—			
76		TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
SHC		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
4000 cfm		EA (wb)	58	TC	102.1	102.1	115.3	97.8	97.8	110.5	93.2	93.2	105.2	88	88	99.4	82.3	82.3	92.9
			SHC	88.9	102.1	115.3	85.2	97.8	110.5	81.1	93.2	105.2	76.6	88.0	99.4	71.6	82.3	92.9	
	62		TC	103.3	103.3	115.7	98.6	98.6	112.2	93.6	93.6	108.3	88.6	88.6	101.9	82.7	82.7	95.1	
	SHC		82.5	99.1	115.7	79.7	96.0	112.2	76.7	92.5	108.3	72.3	87.1	101.9	67.5	81.3	95.1		
	67		TC	111.0	111.0	111.0	105.3	105.3	105.3	99.3	99.3	99.9	92.7	92.7	97.0	85.6	85.6	92.6	
	SHC		67.7	86.1	104.5	65.5	83.9	102.3	63.2	81.5	99.9	60.5	78.8	97.0	57.1	74.9	92.6		
	72	TC	121.5	121.5	121.5	115.5	115.5	115.5	108.7	108.7	108.7	101.6	101.6	101.6	—	—	—		
	SHC	48.9	67.1	85.2	46.8	65.1	83.3	44.5	62.8	81.1	42.1	60.4	78.8	—	—	—			
	76	TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
	4500 cfm	EA (wb)	58	TC	105.3	105.3	118.9	100.9	100.9	114.0	96.0	96.0	108.4	90.6	90.6	102.3	84.6	84.6	95.5
			SHC	91.7	105.3	118.9	87.9	100.9	114.0	83.6	96.0	108.4	78.9	90.6	102.3	73.7	84.6	95.5	
62			TC	105.8	105.8	121.7	101.3	101.3	116.9	96.0	96.0	112.6	90.9	90.9	106.3	84.8	84.8	99.3	
SHC			86.3	104.0	121.7	82.9	99.9	116.9	79.5	96.0	112.6	75.2	90.7	106.3	70.2	84.8	99.3		
67			TC	112.5	112.5	112.5	106.8	106.8	109.2	100.6	100.6	106.4	94.7	94.7	102.0	87.3	87.3	96.8	
SHC			70.9	81.2	111.5	68.7	89.0	109.2	66.2	86.3	106.4	63.0	82.5	102.0	59.1	77.9	96.8		
72		TC	123.1	123.1	123.1	117.1	117.1	117.1	110.2	110.2	110.2	—	—	—	—	—	—		
SHC		50.1	70.3	90.5	48.0	68.3	88.5	45.7	66.0	86.3	—	—	—	—	—	—			
76		TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
SHC		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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Performance data (cont)



38AUD12/40RFA12 Stage 1 Combination Ratings — 60 Hz

38AUD12/40RFA12				AMBIENT TEMPERATURE (°F)															
				85			95			105			115			125			
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)			
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
				2500 cfm	EA (wb)	58	TC	34.0	34.0	38.9	32.6	32.6	37.2	30.9	30.9	35.2	29.0	29.0	33.2
SHC	29.2	34.0	38.9			27.9	32.6	37.2	26.5	30.9	35.2	24.9	29.0	33.2	23.1	26.9	30.8		
62	TC	34.5	34.5			38.6	33.8	33.8	36.3	31.6	31.6	34.2	29.0	29.0	34.6	26.9	26.9	32.0	
SHC	26.7	32.7	38.6			25.4	30.8	36.3	23.9	29.0	34.2	23.4	29.0	34.6	21.8	26.9	32.0		
67	TC	38.4	38.4			38.4	36.3	36.3	36.3	33.9	33.9	33.9	31.4	31.4	32.2	28.6	28.6	31.2	
SHC	21.7	28.1	34.5			21.0	27.4	33.8	19.9	26.0	32.2	19.3	25.7	32.2	18.3	24.7	31.2		
72	TC	43.1	43.1		43.1	40.9	40.9	40.9	38.4	38.4	38.4	35.6	35.6	35.6	32.6	32.6	32.6		
SHC	15.9	22.1	28.3		15.2	21.5	27.7	14.4	20.7	27.1	13.5	19.9	26.4	12.6	19.0	25.5			
76	TC	—	47.3		47.3	—	45.0	45.0	—	42.4	42.4	—	—	—	—	—	—		
SHC	—	17.1	21.9		—	16.5	22.0	—	15.9	21.8	—	—	—	—	—	—			
3000 cfm	EA (wb)	58	TC		36.1	36.1	41.2	34.5	34.5	39.3	32.8	32.8	37.3	30.7	30.7	35.0	28.6	28.6	32.4
		SHC	31.1		36.1	41.2	29.7	34.5	39.3	28.2	32.8	37.3	26.4	30.7	35.0	24.5	28.6	32.4	
		62	TC	36.4	36.4	41.8	34.7	34.7	40.8	32.8	32.8	38.8	30.7	30.7	36.5	28.6	28.6	33.8	
		SHC	28.9	35.4	41.8	28.1	34.4	40.8	26.7	32.8	38.8	25.0	30.7	36.5	23.2	28.6	33.8		
		67	TC	39.5	39.5	39.5	37.3	37.3	37.6	35.1	35.1	37.0	32.3	32.3	35.9	29.3	29.3	34.5	
		SHC	23.6	30.9	38.2	22.9	30.2	37.6	22.2	29.6	37.0	21.1	28.5	35.9	20.0	27.2	34.5		
	72	TC	44.2	44.2	44.2	41.9	41.9	41.9	39.3	39.3	39.3	36.5	36.5	36.5	33.3	33.3	33.3		
	SHC	16.7	24.0	31.2	16.0	23.3	30.6	15.2	22.5	29.9	14.3	21.7	29.2	13.3	20.8	28.3			
	76	TC	—	48.4	48.4	—	46.0	46.0	—	—	—	—	—	—	—	—	—		
	SHC	—	18.2	24.8	—	17.6	24.5	—	—	—	—	—	—	—	—	—			
	3500 cfm	EA (wb)	58	TC	37.7	37.7	42.9	36.1	36.1	41.0	34.0	34.0	38.7	32.1	32.1	36.5	29.7	29.7	33.8
			SHC	32.5	37.7	42.9	31.1	36.1	41.0	29.4	34.0	38.7	27.7	32.1	36.5	25.6	29.7	33.8	
62			TC	38.4	38.4	41.5	36.1	36.1	42.7	34.2	34.2	40.4	32.1	32.1	38.0	29.7	29.7	35.2	
SHC			29.3	35.4	41.5	28.6	36.1	42.7	27.9	34.2	40.4	26.2	32.1	38.0	24.3	29.7	35.2		
67			TC	40.4	40.4	41.8	38.1	38.1	41.0	35.7	35.7	40.3	32.9	32.9	38.9	30.0	30.0	37.0	
SHC			25.3	33.5	41.8	24.6	32.8	41.0	23.8	32.0	40.3	22.7	30.8	38.9	21.3	29.1	37.0		
72		TC	45.0	45.0	45.0	42.7	42.7	42.7	40.1	40.1	40.1	37.2	37.2	37.2	33.9	33.9	33.9		
SHC		17.4	25.5	33.7	16.7	24.9	33.2	15.9	24.2	32.6	15.0	23.3	31.7	14.0	22.4	30.8			
76		TC	—	49.2	49.2	—	—	—	—	—	—	—	—	—	—	—	—		
SHC		—	19.1	26.9	—	—	—	—	—	—	—	—	—	—	—	—			
4000 cfm		EA (wb)	58	TC	39.1	39.1	44.5	37.4	37.4	42.5	35.4	35.4	40.2	33.2	33.2	37.7	30.7	30.7	34.9
			SHC	33.8	39.1	44.5	32.3	37.4	42.5	30.6	35.4	40.2	28.7	33.2	37.7	26.5	30.7	34.9	
	62		TC	39.1	39.1	46.2	37.4	37.4	44.2	35.4	35.4	41.8	33.2	33.2	39.2	30.7	30.7	36.3	
	SHC		32.0	39.1	46.2	30.6	37.4	44.2	29.0	35.4	41.8	27.2	33.2	39.2	25.2	30.7	36.3		
	67		TC	41.0	41.0	45.1	38.8	38.8	44.2	36.3	36.3	43.0	33.6	33.6	41.3	30.8	30.8	38.2	
	SHC		26.9	36.0	45.1	26.1	35.2	44.2	25.1	34.0	43.0	23.9	32.8	41.3	22.1	30.2	38.2		
	72	TC	45.7	45.7	45.7	43.3	43.3	43.3	40.6	40.6	40.6	37.7	37.7	37.7	34.4	34.4	34.4		
	SHC	18.0	27.1	36.3	17.3	26.5	35.7	16.4	25.7	34.9	15.6	24.9	34.2	14.6	23.9	33.1			
	76	TC	—	49.9	49.9	—	—	—	—	—	—	—	—	—	—	—	—		
	SHC	—	19.8	28.9	—	—	—	—	—	—	—	—	—	—	—	—			
	4500 cfm	EA (wb)	58	TC	40.3	40.3	45.7	38.5	38.5	43.7	36.4	36.4	41.3	34.1	34.1	38.7	31.6	31.6	35.8
			SHC	34.8	40.3	45.7	33.3	38.5	43.7	31.5	36.4	41.3	29.5	34.1	38.7	27.3	31.6	35.8	
62			TC	40.3	40.3	47.5	38.4	38.4	45.4	36.4	36.4	43.0	34.2	34.2	40.3	31.6	31.6	37.3	
SHC			33.0	40.3	47.5	31.5	38.4	45.4	29.9	36.4	43.0	28.0	34.2	40.3	25.9	31.6	37.3		
67			TC	41.6	41.6	48.0	39.3	39.3	46.9	36.9	36.9	45.3	34.2	34.2	43.3	32.3	32.3	36.7	
SHC			28.4	38.2	48.0	27.5	37.2	46.9	26.4	35.9	45.3	25.0	34.2	43.3	21.8	29.2	36.7		
72		TC	46.2	46.2	46.2	43.8	43.8	43.8	41.1	41.1	41.1	38.1	38.1	38.1	—	—	—		
SHC		18.5	28.5	38.6	17.8	27.9	38.0	16.9	27	37.1	16.2	26.3	36.5	—	—	—			
76		TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
SHC		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



EL

Performance data (cont)



38AUZ14/40RUA14 Stage 2 Combination Ratings — 60 Hz

38AUZ14/40RUA14			AMBIENT TEMPERATURE (°F)															
			85			95			105			115			125			
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)			
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
3750 cfm	EA (wb)	58 TC	120.0	120.0	136.9	115.6	115.6	131.9	110.8	110.8	126.5	105.6	105.6	120.5	99.9	99.9	114.0	
		58 SHC	103.0	120.0	136.9	99.3	115.6	131.9	95.2	110.8	126.5	90.7	105.6	120.5	85.8	99.9	114.0	
		62 TC	126.4	126.4	132.3	120.3	120.3	129.6	114.0	114.0	126.6	107.1	107.1	123.4	100.8	100.8	117.8	
		62 SHC	93.5	112.9	132.3	90.8	110.2	129.6	88.0	107.3	126.6	84.9	104.1	123.4	80.8	99.3	117.8	
		67 TC	141.7	141.7	141.7	135.2	135.2	135.2	128.1	128.1	128.1	120.5	120.5	120.5	112.2	112.2	112.2	
		67 SHC	75.7	95.1	114.4	73.2	92.6	111.9	70.5	89.9	109.3	67.7	87.1	106.6	64.6	84.1	103.5	
	72 TC	158.4	158.4	158.4	151.2	151.2	151.2	143.4	143.4	143.4	135.1	135.1	135.1	126.1	126.1	126.1		
	72 SHC	58.0	77.0	95.9	55.5	74.5	93.5	52.7	71.8	91.0	49.8	69.0	88.2	46.8	66.0	85.3		
	76 TC	—	172.9	172.9	—	164.9	164.9	—	156.4	156.4	—	147.3	147.3	—	137.6	137.6		
	76 SHC	—	62.1	82.8	—	59.7	76.8	—	57.1	75.1	—	54.4	72.8	—	51.4	70.2		
	4400 cfm	EA (wb)	58 TC	128.4	128.4	146.3	123.6	123.6	140.8	118.3	118.3	134.8	112.7	112.7	128.3	106.4	106.4	121.2
			58 SHC	110.6	128.4	146.3	106.4	123.6	140.8	101.9	118.3	134.8	97.0	112.7	128.3	91.7	106.4	121.2
62 TC			131.4	131.4	147.3	125.1	125.1	144.1	119.2	119.2	139.3	113.8	113.8	131.5	106.6	106.6	126.3	
62 SHC			102.7	125.0	147.3	99.8	122.0	144.1	96.1	117.7	139.3	91.0	111.3	131.5	86.8	106.6	126.3	
67 TC			146.6	146.6	146.6	139.8	139.8	139.8	132.3	132.3	132.3	124.1	124.1	124.1	115.6	115.6	115.6	
67 SHC			81.9	104.4	128.9	79.4	101.9	124.4	76.6	99.1	121.7	73.8	96.2	118.7	70.5	93.0	115.6	
72 TC		163.4	163.4	163.4	155.7	155.7	155.7	147.6	147.6	147.6	138.8	138.8	138.8	129.3	129.3	129.3		
72 SHC		60.7	82.8	105.0	58.0	80.3	102.5	55.2	77.5	99.8	52.3	74.6	97.0	49.2	71.5	93.9		
76 TC		—	177.5	177.5	—	169.1	169.1	—	160.4	160.4	—	151.1	151.1	—	140.7	140.7		
76 SHC		—	65.3	86.0	—	62.8	84.1	—	60.1	81.7	—	57.3	79.1	—	54.2	76.2		
5000 cfm		EA (wb)	58 TC	134.9	134.9	153.4	129.7	129.7	147.5	124.2	124.2	141.2	118.0	118.0	134.3	111.4	111.4	126.7
			58 SHC	116.4	134.9	153.4	111.9	129.7	147.5	107.1	124.2	141.2	101.8	118.0	134.3	96.1	111.4	126.7
	62 TC		136.5	136.5	156.6	131.0	131.0	151.8	125.8	125.8	143.2	118.2	118.2	139.8	111.6	111.6	132.0	
	62 SHC		108.9	132.8	156.6	105.3	128.6	151.8	99.8	121.5	143.2	96.5	116.2	139.8	91.1	111.6	132.0	
	67 TC		150.2	150.2	150.2	143.0	143.0	143.0	135.2	135.2	135.2	126.9	126.9	129.6	117.9	117.9	126.4	
	67 SHC		87.3	112.6	137.9	84.7	110.0	135.3	81.9	107.2	132.6	78.9	104.2	129.6	75.7	101.1	126.4	
	72 TC	166.9	166.9	166.9	159.0	159.0	159.0	150.5	150.5	150.5	141.4	141.4	141.4	131.6	131.6	131.6		
	72 SHC	62.8	87.8	112.9	60.1	85.2	110.3	57.3	82.5	107.6	54.3	79.5	104.7	51.1	76.3	101.5		
	76 TC	—	180.8	180.8	—	172.4	172.4	—	163.3	163.3	—	153.5	153.5	—	142.9	142.9		
	76 SHC	—	67.7	91.8	—	65.2	89.5	—	62.4	87.0	—	59.5	84.2	—	56.3	81.2		
	5650 cfm	EA (wb)	58 TC	140.8	140.8	159.9	135.3	135.3	153.7	129.4	129.4	147.0	123.0	123.0	139.7	115.9	115.9	131.6
			58 SHC	121.7	140.8	159.9	116.9	135.3	153.7	111.8	129.4	147.0	106.2	123.0	139.7	100.1	115.9	131.6
62 TC			143.0	143.0	162.2	136.9	136.9	156.6	129.5	129.5	153.0	123.1	123.1	145.4	116.0	116.0	137.0	
62 SHC			113.5	137.9	162.2	109.4	133.0	156.6	106.1	129.5	153.0	100.8	123.1	145.4	95.0	116.0	137.0	
67 TC			153.2	153.2	153.2	145.8	145.8	146.8	137.8	137.8	144.0	129.3	129.3	140.9	119.9	119.9	137.2	
67 SHC			92.8	121.1	149.5	90.2	118.5	146.8	87.4	115.7	144.0	84.4	112.7	140.9	81.0	109.1	137.2	
72 TC		169.7	169.7	169.7	161.7	161.7	161.7	153.0	153.0	153.0	143.7	143.7	143.7	133.7	133.7	133.7		
72 SHC		64.7	92.9	121.0	62.1	90.2	118.4	59.3	87.4	115.6	56.3	84.4	112.6	53.1	81.3	109.4		
76 TC		—	183.8	183.8	—	175.1	175.1	—	165.6	165.6	—	155.6	155.6	—	144.7	144.7		
76 SHC		—	70.0	97.3	—	67.4	94.9	—	64.6	92.2	—	61.6	89.4	—	58.4	86.2		
6250 cfm		EA (wb)	58 TC	145.6	145.6	165.2	138.8	138.8	158.6	133.6	133.6	151.6	126.8	126.8	143.9	119.3	119.3	135.4
			58 SHC	125.9	145.6	165.2	120.9	138.8	158.6	115.6	133.6	151.6	109.7	126.8	143.9	103.2	119.3	135.4
	62 TC		148.5	148.5	165.8	139.9	139.9	165.1	133.7	133.7	157.8	126.9	126.9	149.7	119.5	119.5	141.0	
	62 SHC		116.8	141.3	165.8	114.8	139.9	165.1	109.7	133.7	157.8	104.1	126.9	149.7	98.0	119.5	141.0	
	67 TC		155.6	155.6	159.8	147.9	147.9	157.3	139.6	139.6	154.2	130.9	130.9	150.7	121.6	121.6	146.7	
	67 SHC		97.8	128.8	159.8	95.2	126.2	157.3	92.3	123.2	154.2	89.1	119.9	150.7	85.7	116.2	146.7	
	72 TC	172.1	172.1	172.1	163.8	163.8	163.8	154.9	154.9	154.9	145.4	145.4	145.4	135.2	135.2	135.2		
	72 SHC	66.4	97.3	128.2	63.8	94.7	125.5	60.9	91.8	122.7	58.0	88.8	119.7	54.8	85.7	116.5		
	76 TC	—	186.1	186.1	—	177.2	177.2	—	167.4	167.4	—	156.9	156.9	—	146.1	146.1		
	76 SHC	—	71.9	102.0	—	69.2	99.5	—	66.3	96.7	—	63.2	93.7	—	60.0	90.5		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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Performance data (cont)



38AUZ14/40RUA14 Stage 1 Combination Ratings — 60 Hz

38AUZ14/40RUA14			AMBIENT TEMPERATURE (°F)															
			85			95			105			115			125			
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)			
Capacity (cfm)	Type	Temp (°F)	75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
			3750	EA (wb)	58	TC	77.6	77.6	87.9	73.7	73.7	83.7	69.1	69.1	78.5	64.3	64.3	73.3
	SHC	67.4	77.6		87.9	63.8	73.7	83.7	59.6	69.1	78.5	55.4	64.3	73.3	50.8	59.3	67.8	
	62	TC	77.7		77.7	91.4	73.5	73.5	86.7	69.1	69.1	81.8	64.4	64.4	76.4	59.2	59.2	70.5
	SHC	64.0	77.7		91.4	60.3	73.5	86.7	56.5	69.1	81.8	52.4	64.4	76.4	47.9	59.2	70.5	
	67	TC	83.0		83.0	83.6	78.1	78.1	81.0	72.6	72.6	78.2	66.8	66.8	75.3	60.7	60.7	72.0
	SHC	52.2	67.9		83.6	49.6	65.3	81.0	46.8	62.5	78.2	43.9	59.6	75.3	40.8	56.4	72.0	
	72	TC	91.5		91.5	91.5	86.0	86.0	86.0	80.3	80.3	80.3	74.2	74.2	74.2	67.5	67.5	67.5
	SHC	36.6	52.2		67.8	34.0	49.6	65.2	31.2	46.9	62.5	28.4	44.0	59.6	25.4	41.0	56.6	
	76	TC	—	98.8	98.8	—	93.1	93.1	—	86.8	86.8	—	80.5	80.5	—	73.4	73.4	
	SHC	—	39.4	54.6	—	36.8	52.0	—	34.1	49.4	—	31.3	46.7	—	28.3	43.7		
4400	EA (wb)	58	TC	81.5	81.5	92.2	77.1	77.1	87.4	72.6	72.6	82.4	67.4	67.4	76.8	62.0	62.0	70.8
		SHC	70.8	81.5	92.2	66.8	77.1	87.4	62.7	72.6	82.4	58.1	67.4	76.8	53.2	62.0	70.8	
		62	TC	81.6	81.6	95.9	77.2	77.2	90.9	72.5	72.5	85.7	67.6	67.6	80.1	62.0	62.0	73.7
		SHC	67.2	81.6	95.9	63.4	77.2	90.9	59.4	72.5	85.7	55.1	67.6	80.1	50.3	62.0	73.7	
		67	TC	84.8	84.8	93.4	79.5	79.5	90.5	74.3	74.3	87.5	68.2	68.2	84.1	62.1	62.1	79.6
		SHC	56.7	75.1	93.4	54.0	72.2	90.5	51.2	69.4	87.5	48.1	66.1	84.1	44.5	62.0	79.6	
		72	TC	93.4	93.4	93.4	87.9	87.9	87.9	81.8	81.8	81.8	75.5	75.5	75.5	68.6	68.6	68.6
		SHC	38.3	56.6	74.9	35.7	54.0	72.3	32.9	51.2	69.4	30.0	48.3	66.6	27.0	45.2	63.5	
	76	TC	—	100.5	100.5	—	94.5	94.5	—	88.3	88.3	—	81.4	81.4	—	74.2	74.2	
	SHC	—	41.4	59.3	—	38.8	56.7	—	36.0	54.0	—	33.1	51.1	—	30.1	48.0		
5000	EA (wb)	58	TC	84.9	84.9	96.0	80.3	80.3	91.0	75.4	75.4	85.6	70.1	70.1	79.7	64.3	64.3	73.3
		SHC	73.8	84.9	96.0	69.7	80.3	91.0	65.2	75.4	85.6	60.4	70.1	79.7	55.2	64.3	73.3	
		62	TC	84.9	84.9	99.7	80.3	80.3	94.5	75.4	75.4	89.0	70.1	70.1	83.0	64.4	64.4	76.5
		SHC	70.1	84.9	99.7	66.1	80.3	94.5	61.8	75.4	89.0	57.2	70.1	83.0	52.3	64.4	76.5	
		67	TC	86.3	86.3	102.9	81.1	81.1	99.3	75.9	75.9	93.7	71.2	71.2	86.9	64.6	64.6	81.7
		SHC	61.2	82.0	102.9	58.2	78.7	99.3	54.3	74.0	93.7	50.0	68.5	86.9	46.0	63.9	81.7	
		72	TC	94.8	94.8	94.8	89.2	89.2	89.2	83.0	83.0	83.0	76.5	76.5	76.5	69.7	69.7	70.6
		SHC	40.0	61.1	82.2	37.3	58.4	79.5	34.5	55.6	76.7	31.7	52.7	73.6	28.7	49.7	70.6	
	76	TC	—	102.1	102.1	—	95.7	95.7	—	89.4	89.4	—	82.4	82.4	—	75.2	75.2	
	SHC	—	43.4	64.1	—	40.6	61.3	—	37.9	58.6	—	34.9	55.5	—	31.8	52.4		
6650	EA (wb)	58	TC	87.3	87.3	98.7	82.5	82.5	93.4	77.5	77.5	87.9	71.9	71.9	81.8	66.2	66.2	75.4
		SHC	75.9	87.3	98.7	71.6	82.5	93.4	67.1	77.5	87.9	62.1	71.9	81.8	56.9	66.2	75.4	
		62	TC	87.5	87.5	102.7	82.6	82.6	97.2	77.6	77.6	91.5	72.2	72.2	85.4	66.1	66.1	78.4
		SHC	72.2	87.5	102.7	68.0	82.6	97.2	63.8	77.6	91.5	59.0	72.2	85.4	53.7	66.1	78.4	
		67	TC	88.2	88.2	108.4	82.9	82.9	103.6	77.6	77.6	96.5	72.3	72.3	90.7	66.1	66.1	84.6
		SHC	64.1	86.2	108.4	60.5	82.0	103.6	56.8	77.6	96.5	51.9	71.3	90.7	47.7	66.1	84.6	
		72	TC	95.7	95.7	95.7	90.0	90.0	90.0	83.9	83.9	83.9	77.1	77.1	80.1	70.1	70.1	77.0
		SHC	41.4	65.0	86.6	38.8	62.3	85.9	36.0	59.6	83.2	33.1	56.6	80.1	30.1	53.6	77.0	
	76	TC	—	102.8	102.8	—	96.5	96.5	—	90.0	90.0	—	83.0	83.0	—	75.5	75.5	
	SHC	—	44.8	68.0	—	42.1	65.3	—	39.3	62.4	—	36.3	59.2	—	33.1	56.0		
6250	EA (wb)	58	TC	89.5	89.5	101.1	84.6	84.6	95.8	79.2	79.2	89.8	73.6	73.6	83.6	67.7	67.7	77.1
		SHC	77.9	89.5	101.1	73.5	84.6	95.8	68.6	79.2	89.8	63.6	73.6	83.6	58.2	67.7	77.1	
		62	TC	89.6	89.6	105.1	84.7	84.7	99.6	79.4	79.4	93.6	73.9	73.9	87.4	67.5	67.5	80.1
		SHC	74.1	89.6	105.1	69.8	84.7	99.6	65.2	79.4	93.6	60.5	73.9	87.4	55.0	67.5	80.1	
		67	TC	91.3	91.3	110.1	84.9	84.9	106.0	79.5	79.5	100.4	73.7	73.7	93.8	67.6	67.6	86.4
		SHC	65.5	87.8	110.1	62.0	84.0	106.0	58.1	79.2	100.4	53.7	73.7	93.8	48.8	67.6	86.4	
		72	TC	95.6	95.6	95.6	90.6	90.6	92.6	84.4	84.4	89.8	77.7	77.7	86.7	70.6	70.6	83.4
		SHC	42.9	69.1	95.3	40.2	66.4	92.6	37.5	63.8	89.8	34.7	60.7	86.7	31.7	57.6	83.4	
	76	TC	—	103.6	103.6	—	97.5	97.5	—	90.9	90.9	—	83.7	83.7	—	76.0	76.0	
	SHC	—	46.3	72.1	—	43.6	69.3	—	40.7	66.3	—	37.8	63.0	—	34.4	59.7		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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Performance data (cont)



38AUD14/40RUA14 Stage 3 Combination Ratings — 60 Hz

38AUD14/40RUA14		AMBIENT TEMPERATURE (°F)																	
		85			95			105			115			125					
		EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
Capacity	Type	Temp	75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
			3750 cfm	EA (wb)	58	TC	120.2	120.2	137.3	116.0	116.0	132.5	111.1	111.1	127.0	105.9	105.9	121.0	100.5
	SHC	103.1	120.2		137.3	99.4	116.0	132.5	95.3	111.1	127.0	90.8	105.9	121.0	96.2	100.5	114.8		
	62	TC	127.5		127.5	130.7	121.6	121.6	128.0	115.1	115.1	125.2	108.4	108.4	122.4	101.7	101.7	117.7	
	SHC	92.6	111.7		130.7	90.0	106.0	128.0	87.3	106.2	125.2	84.5	103.4	122.4	80.7	99.2	117.7		
	72	TC	142.6		142.6	142.6	135.7	135.7	135.7	128.8	128.8	128.8	121.6	121.6	121.6	113.4	113.4	113.4	
	SHC	75.1	94.1		113.1	72.3	91.2	110.1	69.8	88.9	107.9	67.1	86.1	105.0	64.0	83.1	102.1		
	76	TC	158.8		158.8	158.8	151.4	151.4	151.4	143.9	143.9	143.9	135.7	135.7	135.7	126.8	126.8	126.8	
	SHC	57.4	76.0		94.5	54.8	73.5	92.2	52.2	71.0	89.8	49.4	68.1	86.9	46.4	65.2	84.1		
	76	TC	—		172.7	172.7	—	164.8	164.8	—	156.3	156.3	—	148.0	148.0	—	138.2	138.2	
	SHC	—	60.9		81.5	—	58.7	77.2	—	56.2	73.3	—	53.6	71.3	—	50.7	68.9		
4375 cfm	EA (wb)	58	TC		128.4	128.4	146.4	123.7	123.7	141.0	118.4	118.4	135.0	113.0	113.0	128.8	106.6	106.6	121.5
		SHC	110.4		128.4	146.4	106.4	123.7	141.0	101.8	118.4	135.0	97.2	113.0	128.8	91.7	106.6	121.5	
		62	TC	132.3	132.3	145.4	126.1	126.1	142.4	119.8	119.8	138.3	113.9	113.9	131.4	107.7	107.7	125.3	
		SHC	101.6	123.5	145.4	98.8	120.6	142.4	95.5	116.9	138.3	90.7	111.1	131.4	86.3	105.8	125.3		
		67	TC	147.3	147.3	147.3	140.2	140.2	140.2	133.0	133.0	133.0	125.2	125.2	125.2	118.5	118.5	118.5	
		SHC	80.9	102.8	124.7	78.4	100.4	122.5	75.7	97.7	119.7	72.6	94.5	118.4	69.6	92.0	114.1		
		72	TC	163.6	163.6	163.6	156.3	156.3	156.3	148.0	148.0	148.0	139.4	139.4	139.4	130.2	130.2	130.2	
		SHC	60.0	81.7	103.3	57.5	79.1	100.7	54.7	76.5	98.3	51.8	73.6	95.4	48.7	70.6	92.2		
		76	TC	—	177.9	177.9	—	169.3	169.3	—	160.4	160.4	—	150.9	150.9	—	141.7	141.7	
		SHC	—	64.3	83.8	—	61.8	82.2	—	59.1	79.9	—	56.3	77.4	—	53.6	74.8		
5000 cfm		EA (wb)	58	TC	134.8	134.8	153.5	129.4	129.4	147.3	124.2	124.2	141.4	118.2	118.2	134.6	111.7	111.7	127.2
			SHC	116.1	134.8	153.5	111.5	129.4	147.3	107.0	124.2	141.4	101.8	118.2	134.6	96.2	111.7	127.2	
	62		TC	136.2	136.2	157.2	130.7	130.7	151.2	124.7	124.7	146.4	117.8	117.8	139.9	111.9	111.9	132.5	
	SHC		108.9	133.1	157.2	104.7	127.9	151.2	100.9	123.6	146.4	95.6	117.8	139.9	91.2	111.9	132.5		
	67		TC	150.7	150.7	150.7	143.6	143.6	143.6	135.9	135.9	135.9	127.6	127.6	127.6	119.0	119.0	124.9	
	SHC		86.2	111.1	135.9	83.4	106.1	132.8	80.7	105.3	130.0	77.6	102.3	126.9	75.0	100.0	124.9		
	72		TC	167.2	167.2	167.2	158.8	158.8	158.8	150.5	150.5	150.5	142.0	142.0	142.0	132.4	132.4	132.4	
	SHC		62.1	86.6	110.9	59.3	83.6	108.0	56.6	81.3	106.1	53.8	78.3	102.8	50.7	75.4	100.2		
	76		TC	—	180.9	180.9	—	172.1	172.1	—	163.4	163.4	—	153.8	153.8	—	143.9	143.9	
	SHC		—	66.7	89.7	—	64.1	87.5	—	61.6	85.4	—	58.7	82.8	—	55.8	79.9		
5625 cfm	EA (wb)		58	TC	140.5	140.5	159.8	135.2	135.2	153.8	129.3	129.3	147.1	123.1	123.1	140.0	116.0	116.0	132.0
			SHC	121.3	140.5	159.8	116.7	135.2	153.8	111.6	129.3	147.1	106.2	123.1	140.0	100.1	116.0	132.0	
		62	TC	141.0	141.0	164.8	135.7	135.7	157.1	129.3	129.3	153.1	123.2	123.2	145.7	116.3	116.3	137.5	
		SHC	114.2	139.5	164.8	109.1	133.1	157.1	105.5	129.3	153.1	100.7	123.2	145.7	95.0	116.3	137.5		
		67	TC	153.9	153.9	153.9	146.4	146.4	146.4	138.4	138.4	141.7	130.4	130.4	138.0	120.7	120.7	134.8	
		SHC	91.6	119.2	146.8	88.9	116.6	144.2	86.2	113.9	141.7	83.0	110.5	138.0	79.8	107.3	134.8		
		72	TC	170.3	170.3	170.3	162.2	162.2	162.2	153.3	153.3	153.3	144.3	144.3	144.3	134.5	134.5	134.5	
		SHC	64.1	91.4	118.7	61.5	88.8	116.2	58.6	86.2	113.7	55.7	83.1	110.4	52.6	80.0	107.4		
		76	TC	—	183.9	183.9	—	174.5	174.5	—	166.1	166.1	—	156.4	156.4	—	145.8	145.8	
		SHC	—	69.0	95.3	—	66.4	93.0	—	63.8	90.6	—	60.7	87.6	—	57.9	84.8		
6250 cfm		EA (wb)	58	TC	145.2	145.2	164.9	139.7	139.7	158.7	133.4	133.4	151.5	125.9	125.9	143.1	118.7	118.7	134.9
			SHC	125.4	145.2	164.9	120.6	139.7	158.7	115.2	133.4	151.5	108.8	125.9	143.1	102.6	118.7	134.9	
	62		TC	145.2	145.2	171.6	139.8	139.8	165.2	133.7	133.7	157.9	126.6	126.6	149.6	119.5	119.5	141.2	
	SHC		118.9	145.2	171.6	114.4	139.8	165.2	109.4	133.7	157.9	103.6	126.6	149.6	97.8	119.5	141.2		
	67		TC	156.2	156.2	156.2	148.6	148.6	153.4	140.3	140.3	150.7	131.6	131.6	147.3	122.8	122.8	143.7	
	SHC		96.0	126.0	156.0	93.3	123.3	153.4	90.5	120.6	150.7	87.4	117.4	147.3	84.2	114.0	143.7		
	72		TC	172.5	172.5	172.5	164.3	164.3	164.3	155.3	155.3	155.3	146.1	146.1	146.1	136.0	136.0	136.0	
	SHC		65.8	95.7	125.6	63.1	93.1	123.1	60.3	90.2	120.2	57.3	87.2	117.0	54.2	84.2	114.1		
	76		TC	—	186.0	186.0	—	177.5	177.5	—	167.2	167.2	—	157.3	157.3	—	147.0	147.0	
	SHC		—	71.0	100.2	—	68.5	97.7	—	65.4	94.7	—	62.6	92.2	—	59.6	89.2		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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Performance data (cont)



38AUD14/40RUA14 Stage 2 Combination Ratings — 60 Hz

38AUD14/40RUA14			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
3150 cfm	EA (wb)	58	TC	107.3	107.3	120.2	103.2	103.2	115.8	98.5	98.5	111.6	93.7	93.7	106.2	88.3	88.3	100.1	
		SHC	92.3	106.2	120.2	88.8	102.3	115.8	85.4	98.5	111.6	81.2	93.7	106.2	76.6	88.3	100.1		
		62	TC	112.6	112.6	114.7	107.4	107.4	112.0	101.7	101.7	108.6	96.1	96.1	104.6	89.9	89.9	99.9	
		SHC	83.4	99.0	114.7	80.8	96.4	112.0	77.7	93.1	108.6	74.5	89.5	104.6	70.7	85.3	99.9		
		67	TC	124.5	124.5	124.5	118.7	118.7	118.7	112.6	112.6	112.6	105.8	105.8	105.8	99.4	98.4	98.4	
		SHC	68.0	83.5	99.1	65.7	81.2	96.8	63.2	78.8	94.4	60.5	76.1	91.8	57.6	73.3	88.9		
	72	TC	137.5	137.5	137.5	131.4	131.4	131.4	124.6	124.6	124.6	117.2	117.2	117.2	109.1	109.1	109.1		
	SHC	52.7	67.7	82.6	50.4	65.5	80.6	47.8	63.1	78.4	45.1	60.5	75.9	42.2	57.7	73.2			
	76	TC	—	148.8	148.8	—	142.2	142.2	—	135.0	135.0	—	126.9	126.9	—	118.2	118.2		
	SHC	—	54.8	72.1	—	52.3	67.7	—	50.0	65.7	—	47.8	63.6	—	45.0	59.5			
	3750 cfm	EA (wb)	58	TC	113.7	113.7	128.8	109.4	109.4	123.9	104.7	104.7	118.5	99.4	99.4	112.5	93.5	93.5	105.9
			SHC	98.7	113.7	128.8	95.0	108.4	123.9	90.8	104.7	118.5	86.2	99.4	112.5	81.1	93.5	105.9	
62			TC	117.4	117.4	124.9	112.0	112.0	122.0	106.5	106.5	118.0	100.4	100.4	114.0	94.0	94.0	109.0	
SHC			89.6	107.2	124.9	87.0	104.5	122.0	83.7	100.9	118.0	80.3	97.1	114.0	76.6	92.8	109.0		
67			TC	128.7	128.7	128.7	122.6	122.6	122.6	116.1	116.1	116.1	108.9	108.9	108.9	101.2	101.2	101.2	
SHC			73.0	91.2	109.5	70.6	88.8	107.1	68.0	86.4	104.7	65.3	83.6	102.0	62.4	80.7	99.1		
72		TC	141.8	141.8	141.8	135.2	135.2	135.2	128.1	128.1	128.1	120.4	120.4	120.4	111.9	111.9	111.9		
SHC		54.6	72.5	90.3	52.3	70.2	88.2	49.7	67.8	85.9	47.0	65.1	83.3	44.0	62.2	80.5			
76		TC	—	153.3	153.3	—	146.2	146.2	—	138.4	138.4	—	130.1	130.1	—	121.0	121.0		
SHC		—	57.1	75.7	—	55.0	73.7	—	52.8	69.3	—	50.0	67.3	—	47.3	64.9			
4400 cfm		EA (wb)	58	TC	119.8	119.8	135.6	115.1	115.1	130.3	110.0	110.0	124.5	104.3	104.3	118.1	98.1	98.1	111.0
			SHC	104.0	119.8	135.6	100.0	115.1	130.3	95.4	110.0	124.5	90.8	104.3	118.1	85.1	98.1	111.0	
	62		TC	121.6	121.6	135.4	116.3	116.3	132.0	110.5	110.5	127.9	104.6	104.6	121.6	98.5	98.5	114.3	
	SHC		96.0	115.7	135.4	93.1	112.6	132.0	89.9	108.9	127.9	85.5	103.5	121.6	80.3	97.3	114.3		
	67		TC	132.0	132.0	132.0	125.7	125.7	125.7	118.8	118.8	118.8	111.5	111.5	112.4	103.3	103.3	109.1	
	SHC		77.9	99.0	120.1	75.5	96.6	117.8	72.9	94.1	115.2	70.1	91.3	112.4	67.0	88.0	109.1		
	72	TC	145.2	145.2	145.2	138.4	138.4	138.4	131.0	131.0	131.0	122.8	122.8	122.8	114.0	114.0	114.0		
	SHC	56.5	77.3	98.1	54.1	74.9	95.8	51.5	72.5	93.4	48.7	69.7	90.7	45.8	66.8	87.8			
	76	TC	—	156.7	156.7	—	149.3	149.3	—	141.2	141.2	—	132.6	132.6	—	123.3	123.3		
	SHC	—	59.5	78.7	—	57.3	77.0	—	54.8	75.0	—	52.2	72.6	—	49.4	70.0			
	5000 cfm	EA (wb)	58	TC	124.4	124.4	140.8	119.5	119.5	135.2	114.1	114.1	129.1	108.0	108.0	122.3	101.5	101.5	114.9
			SHC	108.1	124.4	140.8	103.7	119.5	135.2	99.0	114.1	129.1	93.8	108.0	122.3	88.1	101.5	114.9	
62			TC	125.1	125.1	144.4	119.6	119.6	140.2	114.3	114.3	133.5	108.1	108.1	127.1	101.6	101.6	119.4	
SHC			101.7	123.1	144.4	98.4	119.3	140.2	93.8	113.6	133.5	89.2	108.1	127.1	83.8	101.6	119.4		
67			TC	134.4	134.4	134.4	127.9	127.9	127.9	120.7	120.7	124.3	113.3	113.3	121.3	105.0	105.0	116.5	
SHC			82.3	105.9	129.6	79.8	103.5	127.1	77.1	100.7	124.3	74.3	97.8	121.3	70.4	93.5	116.5		
72		TC	147.7	147.7	147.7	140.6	140.6	140.6	133.0	133.0	133.0	124.6	124.6	124.6	115.6	115.6	115.6		
SHC		58.0	81.4	104.8	55.6	79.0	102.5	53.0	76.5	100.0	50.2	73.7	97.3	47.2	70.8	94.3			
76		TC	—	159.1	159.1	—	151.5	151.5	—	143.2	143.2	—	134.4	134.4	—	124.9	124.9		
SHC		—	61.5	83.8	—	59.1	81.8	—	56.7	79.5	—	54.0	77.1	—	51.2	74.4			
5650 cfm		EA (wb)	58	TC	128.6	128.6	145.4	123.4	123.4	139.6	117.7	117.7	133.2	111.5	111.5	126.1	104.6	104.6	118.3
			SHC	111.7	128.6	145.4	107.2	123.4	139.6	102.3	117.7	133.2	96.8	111.5	126.1	90.8	104.6	118.3	
	62		TC	129.3	129.3	149.4	124.0	124.0	143.3	117.8	117.8	138.4	111.6	111.6	131.1	104.7	104.7	123.0	
	SHC		105.4	127.4	149.4	101.0	122.1	143.3	97.2	117.8	138.4	92.0	111.6	131.1	86.3	104.7	123.0		
	67		TC	136.4	136.4	139.2	129.8	129.8	136.5	122.5	122.5	133.2	114.7	114.7	129.3	106.9	106.9	123.6	
	SHC		86.7	113.0	139.2	84.2	110.3	136.5	81.2	107.2	133.2	77.9	103.6	129.3	73.8	98.7	123.6		
	72	TC	149.8	149.8	149.8	142.5	142.5	142.5	134.7	134.7	134.7	126.1	126.1	126.1	116.9	116.9	116.9		
	SHC	59.5	85.6	111.7	57.1	83.2	109.4	54.5	80.7	106.9	51.7	77.9	104.1	48.7	74.9	101.1			
	76	TC	—	161.2	161.2	—	153.4	153.4	—	145.0	145.0	—	136.0	136.0	—	126.2	126.2		
	SHC	—	63.3	88.5	—	60.9	86.4	—	58.4	84.1	—	55.7	81.5	—	52.8	78.7			

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



Handwritten initials

Performance data (cont)



38AUD14/40RUA14 Stage 1 Combination Ratings — 60 Hz

38AUD14/40RUA14			AMBIENT TEMPERATURE (°F)																	
			85			95			105			115			125					
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
3150 cfm	EA (wb)	58	75	80	85	75	80	85	75	80	85	75	80	85	75	80	85			
			TC	46.3	46.3	58.6	44.6	44.6	56.5	42.6	42.6	53.9	40.3	40.3	51.1	37.7	37.7	47.7		
SHC	34.0	46.3	58.6	32.8	44.6	56.5	31.3	42.6	53.9	29.6	40.3	51.1	27.6	37.7	47.7					
62	TC	47.8	47.8	59.3	45.6	45.6	58.2	43.0	43.0	56.9	40.5	40.5	54.9	38.0	38.0	50.5				
	SHC	29.6	44.4	59.3	28.6	43.4	58.2	27.4	42.2	56.9	26.1	40.5	54.9	24.2	37.3	50.5				
67	TC	53.3	53.3	53.3	50.7	50.7	50.7	47.8	47.8	49.6	44.7	44.7	48.5	41.2	41.2	47.4				
	SHC	22.0	36.8	51.7	21.0	35.8	50.6	19.9	34.8	49.6	18.7	33.6	48.5	17.5	32.4	47.4				
72	TC	59.2	59.2	59.2	56.4	56.4	56.4	53.3	53.3	53.3	49.8	49.8	49.8	46.1	46.1	46.1				
	SHC	14.6	29.1	43.5	13.5	28.1	42.7	12.4	27.0	41.7	11.2	25.9	40.6	9.8	24.6	39.4				
76	TC	—	64.2	64.2	—	61.3	61.3	—	57.8	57.8	—	54.5	54.5	—	50.2	50.2				
	SHC	—	22.5	39.9	—	21.7	34.2	—	20.5	33.5	—	19.6	33.5	—	18.4	32.7				
3750 cfm	EA (wb)	58	TC	49.2	49.2	62.2	47.2	47.2	59.7	45.2	45.2	57.1	42.6	42.6	53.8	39.9	39.9	50.4		
			SHC	36.3	49.2	62.2	34.8	47.2	59.7	33.2	45.2	57.1	31.3	42.6	53.8	29.3	39.9	50.4		
		62	TC	49.7	49.7	65.6	48.0	48.0	62.5	45.2	45.2	61.1	42.7	42.7	57.8	40.1	40.1	54.2		
			SHC	31.9	48.7	65.6	30.5	46.5	62.5	29.3	45.2	61.1	27.7	42.7	57.8	25.9	40.1	54.2		
		67	TC	54.8	54.8	58.2	52.2	52.2	56.7	49.2	49.2	55.7	46.0	46.0	54.4	42.5	42.5	52.9		
			SHC	23.1	40.7	58.2	22.0	39.4	56.7	21.0	38.3	55.7	19.8	37.1	54.4	18.5	35.7	52.9		
		72	TC	60.7	60.7	60.7	57.9	57.9	57.9	54.5	54.5	54.5	51.0	51.0	51.0	47.2	47.2	47.2		
			SHC	14.1	31.0	47.8	13.1	29.9	46.7	11.9	28.9	45.9	10.6	28.0	45.4	9.4	26.7	44.0		
		76	TC	—	66.1	66.1	—	62.9	62.9	—	59.0	59.0	—	55.5	55.5	—	51.4	51.4		
			SHC	—	23.6	39.1	—	22.7	36.7	—	21.5	37.8	—	20.5	37.2	—	19.2	36.2		
		4400 cfm	EA (wb)	58	TC	51.9	51.9	65.5	49.8	49.8	62.9	47.5	47.5	60.0	44.8	44.8	56.7	42.0	42.0	53.1
					SHC	38.3	51.9	65.5	36.8	49.8	62.9	35.0	47.5	60.0	33.0	44.8	56.7	30.9	42.0	53.1
62	TC			51.9	51.9	70.0	49.8	49.8	67.2	47.7	47.7	64.4	44.9	44.9	60.6	41.8	41.8	56.5		
	SHC			33.8	51.9	70.0	32.4	49.8	67.2	31.0	47.7	64.4	29.1	44.9	60.6	27.1	41.8	56.5		
67	TC			56.2	56.2	63.8	53.3	53.3	62.6	50.4	50.4	62.1	47.0	47.0	60.2	43.2	43.2	59.3		
	SHC			24.1	43.9	63.8	23.0	42.8	62.6	22.1	42.1	62.1	20.8	40.5	60.2	19.6	39.5	59.3		
72	TC			62.0	62.0	62.0	59.0	59.0	59.0	55.7	55.7	55.7	52.1	52.1	52.1	48.1	48.1	48.5		
	SHC			13.5	33.1	52.7	12.4	32.3	52.1	11.3	31.1	51.0	10.1	30.0	49.9	8.8	28.7	48.5		
76	TC			—	67.5	67.5	—	64.0	64.0	—	60.4	60.4	—	56.6	56.6	—	52.0	52.0		
	SHC			—	24.4	43.0	—	23.4	42.5	—	22.4	41.6	—	21.3	40.8	—	20.0	39.7		
5000 cfm	EA (wb)			58	TC	53.7	53.7	67.8	51.6	51.6	65.1	49.2	49.2	62.1	46.5	46.5	58.7	43.3	43.3	54.6
					SHC	39.7	53.7	67.8	38.1	51.6	65.1	36.3	49.2	62.1	34.3	46.5	58.7	31.9	43.3	54.6
		62	TC	53.9	53.9	72.6	51.6	51.6	69.6	49.0	49.0	66.1	46.5	46.5	62.7	43.3	43.3	58.4		
			SHC	35.1	53.9	72.6	33.7	51.6	69.6	31.9	49.0	66.1	30.3	46.5	62.7	28.1	43.3	58.4		
		67	TC	57.2	57.2	69.4	54.3	54.3	68.9	51.1	51.1	67.0	47.6	47.6	65.7	43.9	43.9	64.2		
			SHC	25.0	47.2	69.4	24.1	46.5	68.9	22.9	45.0	67.0	21.8	43.8	65.7	20.6	42.4	64.2		
		72	TC	63.1	63.1	63.1	60.0	60.0	60.0	56.6	56.6	56.6	52.8	52.8	53.9	48.7	48.7	52.6		
			SHC	12.9	35.0	57.1	11.9	34.0	56.1	10.7	32.9	55.1	9.5	31.7	53.9	8.3	30.4	52.6		
		76	TC	—	68.1	68.1	—	64.7	64.7	—	61.2	61.2	—	57.1	57.1	—	53.1	53.1		
			SHC	—	25.0	46.3	—	24.0	45.8	—	22.9	44.6	—	21.8	43.7	—	20.6	42.6		
		5650 cfm	EA (wb)	58	TC	55.2	55.2	69.5	53.2	53.2	67.1	50.7	50.7	64.0	47.4	47.4	59.8	44.2	44.2	55.8
					SHC	40.8	55.2	69.5	39.4	53.2	67.1	37.5	50.7	64.0	36.0	47.4	59.8	32.7	44.2	55.8
62	TC			55.7	55.7	75.0	53.3	53.3	71.8	50.5	50.5	68.0	47.8	47.8	64.5	44.5	44.5	60.0		
	SHC			36.4	55.7	75.0	34.8	53.3	71.8	32.9	50.5	68.0	31.2	47.8	64.5	29.0	44.5	60.0		
67	TC			58.1	58.1	74.8	55.1	55.1	73.5	51.8	51.8	72.4	48.3	48.3	70.5	45.2	45.2	65.6		
	SHC			26.0	50.4	74.8	25.0	49.2	73.5	23.9	48.2	72.4	22.7	46.6	70.5	21.1	43.3	65.6		
72	TC			64.0	64.0	64.0	60.8	60.8	60.8	57.2	57.2	59.2	53.4	53.4	58.0	49.2	49.2	56.6		
	SHC			12.2	36.6	61.1	11.2	35.8	60.3	10.1	34.6	59.2	8.9	33.4	58.0	7.7	32.1	56.6		
76	TC			—	69.2	69.2	—	65.9	65.9	—	61.9	61.9	—	57.8	57.8	—	53.3	53.3		
	SHC			—	25.4	49.4	—	24.5	48.5	—	23.4	47.7	—	22.2	46.6	—	20.9	45.4		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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38AUZ16/40RUA16 Stage 2 Combination Ratings — 60 Hz

38AUZ16/40RUA16			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
4500 cfm	EA (wb)	58	TC	155.2	155.2	168.9	146.6	146.6	169.0	140.8	140.8	162.3	134.7	134.7	155.2	128.1	128.1	147.6	
			SHC	126.1	147.5	168.9	124.3	146.6	169.0	119.4	140.8	162.3	114.2	134.7	155.2	108.6	128.1	147.6	
		62	TC	165.9	165.9	165.9	158.2	158.2	158.4	150.1	150.1	155.0	141.5	141.5	151.3	132.4	132.4	147.4	
			SHC	113.6	137.7	161.7	110.4	134.4	158.4	107.0	131.0	155.0	103.4	127.3	151.3	96.6	123.5	147.4	
		67	TC	187.3	187.3	187.3	178.9	178.9	178.9	170.0	170.0	170.0	160.4	160.4	160.4	150.2	150.2	150.2	
			SHC	92.8	117.0	141.1	89.6	113.7	137.9	86.2	110.4	134.5	82.7	106.8	130.9	79.0	103.1	127.2	
	72	TC	210.6	210.6	210.6	201.4	201.4	201.4	191.6	191.6	191.6	181.2	181.2	181.2	170.0	170.0	170.0		
		SHC	71.6	95.9	120.3	68.4	92.8	117.1	65.1	89.4	113.7	61.6	85.9	110.1	57.9	82.2	106.4		
	76	TC	—	230.5	230.5	—	220.6	220.6	—	210.0	210.0	—	198.8	198.8	—	186.6	186.6		
		SHC	—	78.8	103.5	—	75.6	100.4	—	72.3	97.1	—	68.9	93.6	—	65.2	89.9		
	5260 cfm	EA (wb)	58	TC	164.0	164.0	188.4	158.0	158.0	181.5	151.6	151.6	174.2	144.8	144.8	166.4	137.4	137.4	157.9
				SHC	139.5	164.0	188.4	134.4	158.0	181.5	129.0	151.6	174.2	123.2	144.8	166.4	117.0	137.4	157.9
62			TC	173.0	173.0	181.0	164.9	164.9	177.5	156.4	156.4	173.7	147.4	147.4	169.5	138.1	138.1	164.3	
			SHC	125.5	153.2	181.0	122.1	149.8	177.5	118.5	146.1	173.7	114.6	142.0	169.5	110.2	137.3	164.3	
67			TC	194.7	194.7	194.7	185.7	185.7	185.7	176.1	176.1	176.1	166.0	166.0	166.0	155.1	155.1	155.1	
			SHC	100.7	128.7	166.6	97.4	125.3	153.3	93.9	121.8	149.8	90.2	118.1	146.1	86.4	114.3	142.2	
72		TC	218.2	218.2	218.2	208.5	208.5	208.5	198.1	198.1	198.1	186.9	186.9	186.9	175.1	175.1	175.1		
		SHC	75.4	103.6	131.8	72.2	100.3	128.4	68.7	96.8	124.9	65.0	93.1	121.2	61.2	89.3	117.4		
76		TC	—	238.3	238.3	—	227.8	227.8	—	216.6	216.6	—	204.7	204.7	—	191.8	191.8		
		SHC	—	83.3	112.2	—	80.0	108.7	—	78.5	105.1	—	72.9	101.4	—	69.0	97.5		
6000 cfm		EA (wb)	58	TC	174.0	174.0	199.5	167.5	167.5	192.0	160.6	160.6	184.1	153.2	153.2	175.6	145.3	145.3	166.5
				SHC	148.5	174.0	199.5	143.0	167.5	192.0	137.1	160.6	184.1	130.8	153.2	175.6	124.0	145.3	166.5
	62		TC	179.1	179.1	199.2	170.6	170.6	195.1	162.4	162.4	189.1	163.4	163.4	183.3	145.5	145.5	173.8	
			SHC	136.7	168.0	199.2	132.9	164.0	195.1	128.2	158.7	189.1	123.8	153.4	183.3	117.2	145.5	173.8	
	67		TC	200.3	200.3	200.3	190.9	190.9	190.9	180.8	180.8	180.8	170.2	170.2	170.2	158.9	158.9	158.9	
			SHC	108.1	139.8	171.5	104.6	136.3	168.0	101.0	132.7	164.4	97.3	129.0	160.8	93.4	125.0	156.6	
	72	TC	224.1	224.1	224.1	213.9	213.9	213.9	203.0	203.0	203.0	191.4	191.4	191.4	178.9	178.9	178.9		
		SHC	78.7	110.6	142.5	75.3	107.2	139.1	71.7	103.6	135.5	68.0	99.9	131.7	64.1	96.9	127.0		
	76	TC	—	244.3	244.3	—	233.3	233.3	—	221.7	221.7	—	209.2	209.2	—	195.8	195.8		
		SHC	—	87.0	119.5	—	83.6	116.1	—	80.1	112.5	—	76.3	108.6	—	72.4	104.6		
	6750 cfm	EA (wb)	58	TC	182.6	182.6	209.0	175.7	175.7	201.1	168.3	168.3	192.6	160.3	160.3	183.5	151.8	151.8	173.8
				SHC	158.2	182.6	209.0	150.3	175.7	201.1	143.9	168.3	192.6	137.2	160.3	183.5	129.9	151.8	173.8
62			TC	184.3	184.3	215.4	176.0	176.0	209.8	168.5	168.5	200.9	160.6	160.6	191.4	152.1	152.1	181.3	
			SHC	146.7	181.0	215.4	142.2	176.0	209.8	136.1	166.5	200.9	129.7	160.6	191.4	122.9	152.1	181.3	
67			TC	204.8	204.8	204.8	195.0	195.0	195.0	184.6	184.6	184.6	173.6	173.6	174.6	162.0	162.0	170.4	
			SHC	115.0	150.4	185.8	111.5	146.9	182.3	107.9	143.2	178.6	104.0	139.3	174.6	100.0	135.2	170.4	
72		TC	228.6	228.6	228.6	218.2	218.2	218.2	206.8	206.8	206.8	194.8	194.8	194.8	182.0	182.0	182.0		
		SHC	81.5	117.2	152.8	78.1	113.7	149.3	74.5	110.1	145.7	70.7	106.3	141.8	66.7	102.2	137.8		
76		TC	—	249.1	249.1	—	237.7	237.7	—	225.6	225.6	—	212.8	212.8	—	199.0	199.0		
		SHC	—	90.3	126.5	—	86.9	123.0	—	83.2	119.3	—	79.4	115.4	—	75.4	111.3		
7500 cfm		EA (wb)	58	TC	190.0	190.0	217.1	182.7	182.7	208.8	174.8	174.8	199.8	166.4	166.4	190.2	157.5	157.5	180.0
				SHC	162.6	190.0	217.1	156.6	182.7	208.8	149.8	174.8	199.8	142.7	166.4	190.2	135.0	157.5	180.0
	62		TC	192.7	192.7	218.5	182.9	182.9	217.7	175.0	175.0	208.3	166.7	166.7	198.3	157.6	157.6	187.6	
			SHC	150.4	184.5	218.5	148.1	182.9	217.7	141.8	175.0	208.3	135.0	166.7	198.3	127.7	157.6	187.6	
	67		TC	208.5	208.5	208.5	198.4	198.4	198.4	187.7	187.7	192.2	178.5	178.5	188.1	164.6	164.6	183.6	
			SHC	121.6	160.6	199.7	118.1	157.1	196.0	114.4	153.3	192.2	110.5	149.3	188.1	106.4	145.0	183.6	
	72	TC	232.6	232.6	232.6	221.6	221.6	221.6	210.0	210.0	210.0	197.7	197.7	197.7	184.5	184.5	184.5		
		SHC	84.1	123.4	162.7	80.6	119.9	159.1	76.9	116.2	155.4	73.1	112.3	151.6	69.1	108.3	147.5		
	76	TC	—	253.0	253.0	—	241.3	241.3	—	228.9	228.9	—	215.7	215.7	—	201.6	201.6		
		SHC	—	93.3	133.1	—	89.7	129.5	—	86.1	125.8	—	82.2	121.8	—	78.1	117.7		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



EK

Performance data (cont)



38AUZ16/40RUA16 Stage 1 Combination Ratings — 60 Hz

38AUZ16/40RUA16			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
3750 cfm	EA (wb)	58	TC	102.6	102.6	117.0	95.7	95.7	109.6	88.6	88.6	101.9	81.1	81.1	93.8	73.2	73.2	85.2	
			SHC	88.1	102.6	117.0	81.8	95.7	109.6	75.3	88.6	101.9	68.4	81.1	93.8	61.2	73.2	85.2	
		62	TC	102.7	102.7	121.9	95.9	95.9	114.4	88.8	88.8	106.5	81.2	81.2	98.1	73.3	73.3	89.2	
			SHC	83.5	102.7	121.9	77.4	95.9	114.4	71.0	88.8	106.5	64.4	81.2	98.1	57.4	73.3	89.2	
		67	TC	112.4	112.4	112.4	104.1	104.1	104.1	95.4	95.4	97.0	86.4	86.4	92.0	76.8	76.8	86.8	
			SHC	65.6	86.2	106.8	60.8	81.4	102.0	55.9	76.4	97.0	50.9	71.4	92.0	45.7	66.3	86.8	
	72	TC	125.2	125.2	125.2	116.5	116.5	116.5	107.3	107.3	107.3	97.6	97.6	97.6	87.4	87.4	87.4		
		SHC	45.3	66.0	86.6	40.5	61.1	81.7	35.5	56.0	76.6	30.4	51.0	71.6	25.1	45.7	66.3		
	76	TC	—	136.2	136.2	—	127.2	127.2	—	117.6	117.6	—	107.5	107.5	—	96.9	96.9		
		SHC	—	49.7	70.3	—	44.8	65.4	—	39.8	60.4	—	34.6	55.3	—	29.3	50.0		
	4500 cfm	EA (wb)	58	TC	109.4	109.4	124.6	102.3	102.3	116.9	94.7	94.7	108.6	86.7	86.7	100.0	78.3	78.3	90.8
				SHC	94.2	109.4	124.6	87.7	102.3	116.9	80.7	94.7	108.6	73.4	86.7	100.0	65.7	78.3	90.8
62			TC	109.6	109.6	129.8	102.5	102.5	121.9	94.8	94.8	113.4	86.8	86.8	104.5	78.4	78.4	95.0	
			SHC	89.3	109.6	129.8	83.0	102.5	121.9	76.2	94.8	113.4	69.1	86.8	104.5	61.7	78.4	95.0	
67			TC	115.5	115.5	122.1	107.0	107.0	117.3	98.1	98.1	112.4	88.7	88.7	107.3	78.9	78.9	102.0	
			SHC	72.9	97.5	122.1	68.1	92.7	117.3	63.2	87.8	112.4	58.2	82.7	107.3	53.0	77.5	102.0	
72		TC	126.4	126.4	128.4	119.4	119.4	119.4	110.0	110.0	110.0	100.0	100.0	100.0	89.4	89.4	89.4		
		SHC	47.8	72.5	97.3	42.9	67.6	92.3	37.9	62.6	87.3	32.7	57.4	82.2	27.4	52.1	76.9		
76		TC	—	139.7	139.7	—	130.3	130.3	—	120.4	120.4	—	110.0	110.0	—	99.1	99.1		
		SHC	—	52.4	77.2	—	47.5	72.2	—	42.4	67.2	—	37.2	61.9	—	31.8	56.5		
5250 cfm		EA (wb)	58	TC	115.1	115.1	130.9	107.5	107.5	122.7	99.6	99.6	114.1	91.1	91.1	104.9	82.2	82.2	95.2
				SHC	99.2	115.1	130.9	92.3	107.5	122.7	85.0	99.6	114.1	77.4	91.1	104.9	69.3	82.2	95.2
	62		TC	115.1	115.1	136.1	107.6	107.6	127.8	99.7	99.7	119.0	91.2	91.2	109.5	82.3	82.3	99.6	
			SHC	94.0	115.1	136.1	87.3	107.6	127.8	80.4	99.7	119.0	72.9	91.2	109.5	65.1	82.3	99.6	
	67		TC	117.8	117.8	137.3	109.2	109.2	132.5	100.1	100.1	127.2	91.4	91.4	118.8	82.5	82.5	108.2	
			SHC	80.1	108.7	137.3	75.3	103.9	132.5	70.4	98.8	127.2	64.0	91.4	118.8	58.7	82.5	108.2	
	72	TC	130.7	130.7	130.7	121.5	121.5	121.5	111.8	111.8	111.8	101.6	101.6	101.6	90.8	90.8	90.8		
		SHC	49.9	78.8	107.6	45.0	73.8	102.7	40.0	68.8	97.6	34.9	63.8	92.4	29.6	58.4	87.1		
	76	TC	—	142.2	142.2	—	132.6	132.6	—	122.5	122.5	—	111.9	111.9	—	100.7	100.7		
		SHC	—	54.7	83.6	—	49.7	78.6	—	44.5	73.4	—	39.3	68.2	—	33.8	62.6		
	6000 cfm	EA (wb)	58	TC	119.6	119.6	135.9	111.7	111.7	127.4	103.4	103.4	118.3	94.6	94.6	108.8	85.5	85.5	98.8
				SHC	103.3	119.6	135.9	96.1	111.7	127.4	88.4	103.4	118.3	80.5	94.6	108.8	72.1	85.5	98.8
62			TC	119.6	119.6	141.3	111.7	111.7	132.5	103.6	103.6	123.4	94.8	94.8	113.6	85.5	85.5	103.3	
			SHC	97.9	119.6	141.3	90.9	111.7	132.5	83.7	103.6	123.4	76.0	94.8	113.6	67.8	85.5	103.3	
67			TC	119.9	119.9	151.6	111.9	111.9	143.0	103.7	103.7	133.4	94.9	94.9	123.0	85.7	85.7	112.1	
			SHC	87.1	119.4	151.6	80.8	111.9	143.0	74.0	103.7	133.4	66.8	94.9	123.0	59.2	85.7	112.1	
72		TC	132.4	132.4	132.4	123.1	123.1	123.1	113.2	113.2	113.2	102.8	102.8	102.8	91.9	91.9	97.3		
		SHC	52.0	84.8	117.7	47.1	79.9	112.7	42.1	74.9	107.7	37.1	69.8	102.8	32.0	64.6	97.3		
76		TC	—	144.0	144.0	—	134.3	134.3	—	124.0	124.0	—	113.2	113.2	—	101.9	101.9		
		SHC	—	56.6	89.6	—	51.5	84.4	—	46.3	79.2	—	40.9	73.7	—	35.3	67.8		
6750 cfm		EA (wb)	58	TC	123.1	123.1	139.9	115.1	115.1	131.1	106.6	106.6	121.9	97.6	97.6	112.1	88.1	88.1	101.7
				SHC	106.4	123.1	139.9	98.0	115.1	131.1	91.3	106.6	121.9	83.1	97.6	112.1	74.5	88.1	101.7
	62		TC	123.3	123.3	145.5	115.4	115.4	136.7	106.8	106.8	127.2	97.7	97.7	116.9	88.2	88.2	106.3	
			SHC	101.0	123.3	145.5	94.0	115.4	136.7	86.5	106.8	127.2	78.4	97.7	116.9	70.1	88.2	106.3	
	67		TC	123.4	123.4	156.7	115.3	115.3	147.2	106.8	106.8	137.2	97.8	97.8	126.6	88.3	88.3	115.3	
			SHC	90.2	123.4	156.7	83.5	115.3	147.2	76.5	106.8	137.2	69.1	97.8	126.6	61.3	88.3	115.3	
	72	TC	133.7	133.7	133.7	124.3	124.3	124.3	114.2	114.2	117.8	103.7	103.7	112.9	92.7	92.7	108.1		
		SHC	54.1	90.9	127.7	49.2	86.0	122.8	44.4	81.1	117.8	39.5	78.2	112.9	34.7	71.4	108.1		
	76	TC	—	145.5	145.5	—	135.6	135.6	—	125.2	125.2	—	114.3	114.3	—	102.9	102.9		
		SHC	—	58.0	94.9	—	52.8	89.6	—	47.5	84.2	—	41.9	78.4	—	36.1	72.3		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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38AUD16/40RUA16 Stage 3 Combination Ratings — 60 Hz

38AUD16/40RUA16			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
			4500 cfm	EA (wb)	58	TC	167.6	167.6	185.4	161.3	161.3	180.5	154.6	154.6	174.8	147.9	147.9	167.2	140.7
SHC	143.3	164.4			185.4	139.1	159.8	180.5	134.4	154.6	174.8	128.6	147.9	167.2	122.3	140.7	159.1		
62	TC	177.9			177.9	177.9	170.1	170.1	170.4	166.5	166.5	166.5	153.3	153.3	162.7	144.1	144.1	158.2	
SHC	128.6	151.2			173.9	125.1	147.8	170.4	118.5	139.9	161.3	117.4	140.0	162.7	113.2	135.7	158.2		
67	TC	195.6			195.6	195.6	187.3	187.3	187.3	178.3	178.3	178.3	168.8	168.8	168.8	158.7	158.7	158.7	
SHC	105.8	128.2			150.7	102.4	124.9	147.5	98.7	121.4	144.0	94.9	117.7	140.4	91.0	113.8	136.8		
72	TC	215.9		215.9	215.9	206.7	206.7	206.7	198.9	198.9	198.9	186.4	186.4	186.4	175.3	175.3	175.3		
SHC	83.4	105.1		126.7	79.8	101.8	123.7	76.1	98.2	120.4	72.2	94.5	116.9	68.1	90.6	113.2			
76	TC	—		233.6	233.6	—	223.7	223.7	—	212.9	212.9	—	201.6	201.6	—	189.4	189.4		
SHC	—	85.1		109.9	—	81.9	106.6	—	78.9	103.7	—	75.5	95.0	—	71.7	92.8			
5350 cfm	EA (wb)	58		TC	176.0	176.0	198.9	169.7	169.7	191.8	163.0	163.0	184.2	155.8	155.8	176.1	148.0	148.0	167.3
		SHC		153.1	176.0	198.9	147.6	169.7	191.8	141.8	163.0	184.2	135.5	155.8	176.1	128.7	148.0	167.3	
		62	TC	183.7	183.7	190.5	175.6	175.6	186.8	166.9	166.9	182.7	158.1	158.1	177.9	148.9	148.9	171.5	
		SHC	138.5	164.5	190.5	134.9	160.8	186.8	130.9	156.8	182.7	126.8	152.3	177.9	121.3	146.4	171.5		
		67	TC	201.7	201.7	201.7	192.9	192.9	192.9	183.4	183.4	183.4	173.4	173.4	173.4	162.9	162.9	162.9	
		SHC	112.3	138.3	164.3	108.8	134.9	161.0	105.1	131.2	157.4	101.2	127.5	153.7	97.2	123.5	149.8		
	72	TC	222.2	222.2	222.2	212.5	212.5	212.5	202.1	202.1	202.1	191.1	191.1	191.1	179.4	179.4	179.4		
	SHC	85.8	111.3	136.8	82.2	107.9	133.6	78.4	104.3	130.1	74.5	100.5	126.5	70.4	96.5	122.6			
	76	TC	—	240.0	240.0	—	229.4	229.4	—	218.3	218.3	—	206.4	206.4	—	193.5	193.5		
	SHC	—	88.8	117.7	—	85.7	107.4	—	82.2	105.9	—	78.5	103.0	—	74.5	99.7			
	6000 cfm	EA (wb)	58	TC	183.9	183.9	207.9	177.3	177.3	200.4	170.0	170.0	192.2	162.4	162.4	183.5	154.2	154.2	174.3
			SHC	160.0	183.9	207.9	154.2	177.3	200.4	147.9	170.0	192.2	141.3	162.4	183.5	134.2	154.2	174.3	
62			TC	188.4	188.4	206.1	180.1	180.1	201.6	171.5	171.5	196.0	163.6	163.6	187.6	156.3	156.3	173.7	
SHC			147.8	176.9	206.1	143.7	172.7	201.6	139.0	167.5	196.0	132.9	160.3	187.6	124.0	148.9	173.7		
67			TC	206.5	206.5	206.5	197.3	197.3	197.3	187.4	187.4	187.4	177.0	177.0	177.0	166.0	166.0	166.0	
SHC			118.3	147.8	177.3	114.8	144.4	173.9	111.1	140.7	170.4	107.2	136.8	166.5	103.1	132.7	162.4		
72		TC	227.1	227.1	227.1	217.0	217.0	217.0	206.2	206.2	206.2	194.7	194.7	194.7	182.5	182.5	182.5		
SHC		88.0	117.1	146.2	84.4	113.7	142.9	80.6	110.0	139.4	76.6	106.1	135.6	72.4	102.0	131.6			
76		TC	—	244.9	244.9	—	234.0	234.0	—	222.3	222.3	—	210.0	210.0	—	197.0	197.0		
SHC		—	91.9	118.1	—	88.5	115.7	—	84.9	112.8	—	81.1	109.6	—	77.1	106.0			
6750 cfm		EA (wb)	58	TC	190.8	190.8	215.5	183.8	183.8	207.6	176.2	176.2	199.1	168.1	168.1	189.9	159.4	159.4	180.1
			SHC	166.0	190.8	215.5	159.9	183.8	207.6	153.3	176.2	199.1	146.2	168.1	189.9	136.7	159.4	180.1	
	62		TC	192.8	192.8	218.6	184.7	184.7	213.0	178.8	178.8	196.7	166.7	166.7	195.3	159.6	159.6	187.1	
	SHC		155.4	187.0	218.6	150.8	181.9	213.0	140.9	168.8	196.7	138.1	166.7	195.3	132.0	159.6	187.1		
	67		TC	210.4	210.4	210.4	200.8	200.8	200.8	190.7	190.7	190.7	183.1	183.1	183.1	168.5	168.5	174.5	
	SHC		124.2	157.0	189.9	120.6	153.5	186.5	116.8	149.8	182.8	111.4	142.1	172.8	108.6	141.6	174.5		
	72	TC	231.1	231.1	231.1	220.6	220.6	220.6	209.4	209.4	209.4	197.5	197.5	197.5	185.0	185.0	185.0		
	SHC	90.0	122.6	155.2	86.4	119.1	151.8	82.5	115.3	148.1	78.5	111.4	144.3	74.3	107.2	140.2			
	76	TC	—	249.0	249.0	—	237.6	237.6	—	225.6	225.6	—	213.0	213.0	—	199.2	199.2		
	SHC	—	94.4	125.1	—	90.9	122.2	—	87.3	119.0	—	83.5	115.6	—	79.3	111.7			
	7500 cfm	EA (wb)	58	TC	196.7	196.7	222.2	189.3	189.3	213.8	181.4	181.4	204.8	172.9	172.9	195.3	163.8	163.8	185.1
			SHC	171.2	196.7	222.2	164.7	189.3	213.8	157.9	181.4	204.9	150.5	172.9	195.3	142.6	163.8	185.1	
62			TC	197.9	197.9	226.5	191.3	191.3	214.8	181.6	181.6	212.9	173.1	173.1	202.9	164.0	164.0	192.3	
SHC			160.7	193.6	226.5	153.1	183.9	214.8	150.2	181.6	212.9	143.2	173.1	202.9	135.7	164.0	192.3		
67			TC	213.5	213.5	213.5	203.7	203.7	203.7	193.2	193.2	194.7	182.3	182.3	190.5	171.1	171.1	186.1	
SHC			129.8	166.0	202.1	126.1	162.3	198.5	122.3	158.5	194.7	118.3	154.4	190.5	114.2	160.1	186.1		
72		TC	234.3	234.3	234.3	223.5	223.5	223.5	211.9	211.9	211.9	199.8	199.8	199.8	187.0	187.0	187.0		
SHC		91.8	127.8	163.7	88.2	124.2	160.3	84.3	120.4	156.6	80.3	116.4	152.6	76.1	112.3	148.5			
76		TC	—	252.2	252.2	—	240.6	240.6	—	228.4	228.4	—	215.3	215.3	—	201.4	201.4		
SHC		—	96.7	131.2	—	93.1	128.0	—	89.5	124.8	—	85.5	121.2	—	81.4	117.2			

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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Performance data (cont)



38AUD16/40RUA16 Stage 2 Combination Ratings — 60 Hz

38AUD16/40RUA16			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
3750 cfm	EA (wb)	58	TC	137.5	137.5	150.1	131.2	131.2	145.3	124.6	124.6	139.8	118.3	118.3	132.3	110.9	110.9	125.5	
		58	SHC	116.0	133.0	150.1	111.9	128.6	145.3	107.3	123.5	139.8	101.7	117.0	132.3	96.3	110.9	125.5	
		62	TC	145.4	145.4	145.4	137.9	137.9	139.5	130.4	130.4	133.1	122.5	122.5	128.1	114.6	114.6	121.7	
		62	SHC	105.6	124.5	143.3	101.9	120.7	139.5	96.9	115.0	133.1	92.5	110.3	128.1	87.4	104.6	121.7	
		67	TC	161.3	161.3	161.3	153.1	153.1	153.1	144.3	144.3	144.3	135.0	135.0	135.0	125.1	125.1	125.1	
		67	SHC	87.4	106.2	124.9	84.1	102.9	121.8	80.5	99.5	118.4	76.9	95.9	114.9	73.1	92.1	111.1	
	72	TC	178.7	178.7	178.7	170.0	170.0	170.0	160.5	160.5	160.5	150.4	150.4	150.4	139.7	139.7	139.7		
	72	SHC	69.5	87.3	105.2	66.0	84.2	102.4	62.4	80.8	99.3	58.6	77.3	95.9	54.6	73.5	92.3		
	76	TC	—	193.5	193.5	—	184.5	184.5	—	174.4	174.4	—	163.8	163.8	—	152.3	152.3		
	76	SHC	—	72.3	90.0	—	68.9	87.6	—	65.5	84.6	—	61.8	81.1	—	58.3	77.7		
	4500 cfm	EA (wb)	58	TC	146.7	146.7	163.1	139.7	139.7	158.1	133.1	133.1	150.5	125.9	125.9	142.4	118.3	118.3	133.8
			58	SHC	125.7	144.4	163.1	121.4	139.7	158.1	115.6	133.1	150.5	109.3	125.9	142.4	102.8	118.3	133.8
62			TC	152.1	152.1	156.8	149.3	149.3	149.3	136.9	136.9	146.5	132.8	132.8	136.2	120.2	120.2	133.3	
62			SHC	113.9	135.4	156.8	107.4	127.9	148.3	105.1	125.8	146.5	97.2	116.7	136.2	94.6	114.0	133.3	
67			TC	167.6	167.6	167.6	159.0	159.0	159.0	149.6	149.6	149.6	139.6	139.6	139.6	129.2	129.2	129.2	
67			SHC	94.1	116.5	138.9	90.8	113.2	135.6	87.1	109.6	132.1	83.3	105.8	128.3	79.3	101.8	124.3	
72		TC	185.4	185.4	185.4	176.1	176.1	176.1	166.0	166.0	166.0	155.3	155.3	155.3	144.1	144.1	144.1		
72		SHC	72.2	94.0	115.8	68.7	90.8	112.8	65.1	87.2	109.4	61.3	83.6	105.9	57.4	79.8	102.1		
76		TC	—	200.8	200.8	—	191.0	191.0	—	180.2	180.2	—	168.6	168.6	—	156.6	156.6		
76		SHC	—	75.1	97.7	—	72.0	94.9	—	68.9	91.8	—	65.4	86.0	—	61.7	83.2		
5250 cfm		EA (wb)	58	TC	154.0	154.0	174.1	147.3	147.3	166.6	140.1	140.1	158.5	132.4	132.4	149.8	124.3	124.3	140.6
			58	SHC	133.8	154.0	174.1	128.0	147.3	166.6	121.8	140.1	158.5	115.1	132.4	149.8	108.0	124.3	140.6
	62		TC	157.9	157.9	170.3	150.4	150.4	164.5	142.3	142.3	157.8	133.6	133.6	151.5	124.8	124.8	144.5	
	62		SHC	122.1	146.2	170.3	117.4	140.9	164.5	112.1	134.9	157.8	107.1	129.3	151.5	101.8	123.2	144.5	
	67		TC	174.1	174.1	174.1	163.3	163.3	163.3	153.5	153.5	153.5	143.0	143.0	143.0	132.4	132.4	135.0	
	67		SHC	101.6	126.3	151.1	97.0	122.9	148.8	93.2	119.1	145.0	89.1	114.8	140.6	84.4	109.7	135.0	
	72	TC	190.2	190.2	190.2	180.6	180.6	180.6	170.1	170.1	170.1	158.9	158.9	158.9	147.2	147.2	147.2		
	72	SHC	74.6	100.0	125.5	71.2	98.7	122.3	67.5	93.2	118.9	63.7	89.5	115.2	59.7	85.5	111.3		
	76	TC	—	205.8	205.8	—	195.5	195.5	—	184.3	184.3	—	172.4	172.4	—	159.8	159.8		
	76	SHC	—	78.6	105.1	—	75.5	98.9	—	72.0	96.4	—	68.4	93.3	—	64.5	89.8		
	6000 cfm	EA (wb)	58	TC	160.7	160.7	181.7	153.7	153.7	173.8	146.1	146.1	165.2	137.9	137.9	156.0	129.3	129.3	146.2
			58	SHC	139.7	160.7	181.7	133.6	153.7	173.8	127.0	146.1	165.2	119.9	137.9	156.0	112.4	129.3	146.2
62			TC	163.1	163.1	181.3	155.2	155.2	175.9	146.8	146.8	166.6	138.2	138.2	161.6	130.1	130.1	149.5	
62			SHC	128.9	155.1	181.3	124.5	150.2	175.9	119.0	143.8	168.6	113.8	137.7	161.6	105.8	127.7	149.5	
67			TC	175.0	175.0	175.0	166.6	166.6	166.6	156.4	156.4	156.7	145.9	145.9	151.1	136.0	136.0	142.7	
67			SHC	106.3	135.5	164.7	102.7	131.9	161.1	98.6	127.6	156.7	94.0	122.5	151.1	88.1	115.4	142.7	
72		TC	194.0	194.0	194.0	184.1	184.1	184.1	173.2	173.2	173.2	161.7	161.7	161.7	149.6	149.6	149.6		
72		SHC	76.8	105.7	134.6	73.4	102.4	131.4	69.7	98.8	127.9	65.9	95.0	124.1	61.6	91.0	120.1		
76		TC	—	209.6	209.6	—	198.9	198.9	—	187.4	187.4	—	175.2	175.2	—	162.2	162.2		
76		SHC	—	81.5	108.7	—	78.3	106.0	—	74.8	103.0	—	71.1	99.6	—	67.1	95.8		
6750 cfm		EA (wb)	58	TC	166.4	166.4	188.1	159.1	159.1	179.8	151.1	151.1	170.8	142.5	142.5	161.1	133.6	133.6	151.0
			58	SHC	144.7	166.4	188.1	138.3	159.1	179.8	131.4	151.1	170.8	124.0	142.5	161.1	118.1	133.6	151.0
	62		TC	167.4	167.4	191.8	159.6	159.6	184.9	152.2	152.2	174.4	143.0	143.0	165.9	133.7	133.7	156.9	
	62		SHC	135.5	163.6	191.8	130.5	157.7	184.9	123.5	149.0	174.4	117.2	141.5	165.9	110.5	133.7	156.9	
	67		TC	179.0	179.0	179.0	169.3	169.3	172.4	159.1	159.1	166.8	149.4	149.4	157.7	138.5	138.5	151.6	
	67		SHC	111.8	144.2	176.6	108.0	140.2	172.4	103.4	135.1	166.8	97.2	127.5	157.7	92.3	121.9	151.6	
	72	TC	197.0	197.0	197.0	186.8	186.8	186.8	175.7	175.7	175.7	163.9	163.9	163.9	151.5	151.5	151.5		
	72	SHC	78.9	111.2	143.4	75.5	107.8	140.1	71.8	104.1	136.5	67.9	100.2	132.6	63.8	96.2	128.5		
	76	TC	—	212.7	212.7	—	201.8	201.8	—	190.0	190.0	—	177.5	177.5	—	164.1	164.1		
	76	SHC	—	84.1	115.2	—	80.9	112.3	—	77.3	109.0	—	73.5	105.4	—	69.5	101.5		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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38AUD16/40RUA16 Stage 1 Combination Ratings — 60 Hz

38AUD16/40RUA16			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
3750 cfm	EA (wb)	58	TC	51.8	51.8	64.3	49.3	49.3	59.3	45.9	45.9	57.6	42.7	42.7	53.6	39.4	39.4	49.4	
		SHC	38.4	51.3	64.3	36.0	47.6	59.3	34.2	45.9	57.6	31.8	42.7	53.6	29.3	39.4	49.4		
		62	TC	54.9	54.9	61.8	51.4	51.4	60.7	47.3	47.3	58.0	43.2	43.2	55.2	40.0	40.0	50.2	
		SHC	33.5	47.6	61.8	32.0	46.3	60.7	29.9	43.9	58.0	27.9	41.5	55.2	25.6	37.9	50.2		
		67	TC	60.8	60.8	60.8	56.9	56.9	56.9	52.5	52.5	52.5	48.0	48.0	49.9	43.2	43.2	48.0	
		SHC	26.6	40.5	54.4	24.9	39.1	53.2	23.1	37.4	51.7	21.3	35.6	49.9	19.4	33.7	48.0		
	72	TC	67.6	67.6	67.6	63.3	63.3	63.3	58.6	58.6	58.6	53.6	53.6	53.6	48.4	48.4	48.4		
	SHC	20.3	33.2	46.1	18.3	31.8	45.2	16.3	30.2	44.1	14.4	28.5	42.7	12.4	26.8	41.2			
	76	TC	—	73.3	73.3	—	68.8	68.8	—	63.8	63.8	—	58.6	58.6	—	53.1	53.1		
	SHC	—	26.6	47.2	—	25.3	45.9	—	24.1	44.7	—	22.6	35.0	—	21.0	34.6			
	4600 cfm	EA (wb)	58	TC	54.9	54.9	68.9	51.9	51.9	65.2	48.6	48.6	61.0	45.2	45.2	56.7	41.5	41.5	52.1
			SHC	40.9	54.9	68.9	38.7	51.9	65.2	36.2	48.6	61.0	33.6	45.2	56.7	30.9	41.5	52.1	
62			TC	56.9	56.9	67.7	53.1	53.1	66.1	49.1	49.1	63.1	45.3	45.3	59.6	41.5	41.5	55.6	
SHC			35.5	51.6	67.7	33.8	50.0	66.1	31.8	47.4	63.1	29.7	44.6	59.6	27.5	41.5	55.6		
67			TC	62.9	62.9	62.9	58.7	58.7	58.9	54.2	54.2	57.2	49.4	49.4	55.5	44.4	44.4	53.4	
SHC			27.6	44.0	60.5	25.9	42.4	58.9	24.1	40.7	57.2	22.2	38.9	55.5	20.3	36.9	53.4		
72		TC	69.6	69.6	69.6	65.1	65.1	65.1	60.2	60.2	60.2	55.0	55.0	55.0	49.6	49.6	49.6		
SHC		19.6	35.4	51.2	17.7	33.8	50.1	15.8	32.3	48.8	13.9	30.6	47.3	12.0	28.8	45.6			
76		TC	—	75.2	75.2	—	70.8	70.8	—	65.6	65.6	—	60.1	60.1	—	54.3	54.3		
SHC		—	28.0	52.7	—	26.7	51.5	—	25.3	40.1	—	23.7	39.6	—	22.0	38.6			
5250 cfm		EA (wb)	58	TC	57.6	57.6	72.2	54.4	54.4	68.2	50.9	50.9	63.8	47.2	47.2	59.2	43.3	43.3	54.4
			SHC	42.9	57.6	72.2	40.5	54.4	68.2	37.9	50.9	63.8	35.1	47.2	59.2	32.3	43.3	54.4	
	62		TC	58.6	58.6	73.7	54.9	54.9	70.1	51.0	51.0	68.1	47.3	47.3	63.1	43.4	43.4	58.1	
	SHC		37.5	55.6	73.7	35.4	52.8	70.1	33.6	50.9	68.1	31.2	47.1	63.1	28.7	43.4	58.1		
	67		TC	64.4	64.4	65.8	60.1	60.1	64.1	55.4	55.4	62.5	50.5	50.5	60.5	45.6	45.6	58.4	
	SHC		28.4	47.1	65.8	26.7	45.4	64.1	24.9	43.7	62.5	23.0	41.7	60.5	21.2	39.8	58.4		
	72	TC	70.9	70.9	70.9	66.4	66.4	66.4	61.4	61.4	61.4	56.1	56.1	56.1	50.6	50.6	50.6		
	SHC	18.9	37.2	55.6	17.2	35.8	54.3	15.4	34.1	52.8	13.5	32.4	51.3	11.6	30.6	49.5			
	76	TC	—	76.8	76.8	—	72.1	72.1	—	66.8	66.8	—	61.0	61.0	—	55.1	55.1		
	SHC	—	29.0	44.1	—	27.7	44.5	—	26.2	44.2	—	24.5	43.2	—	22.8	41.9			
	6000 cfm	EA (wb)	58	TC	59.8	59.8	75.0	56.5	56.5	70.8	52.7	52.7	65.2	48.9	48.9	61.3	44.8	44.8	56.2
			SHC	44.5	59.8	75.0	42.1	56.5	70.8	39.3	52.7	65.2	36.4	48.9	61.3	33.4	44.8	56.2	
62			TC	60.3	60.3	78.0	56.7	56.7	74.7	53.3	53.3	67.5	48.9	48.9	65.6	44.8	44.8	60.0	
SHC			39.1	58.6	78.0	37.2	56.0	74.7	34.2	50.9	67.5	32.3	48.9	65.6	29.6	44.8	60.0		
67			TC	65.7	65.7	70.8	61.3	61.3	69.0	57.9	57.9	62.9	51.4	51.4	65.1	46.1	46.1	62.7	
SHC			29.1	50.0	70.8	27.5	48.3	69.0	25.4	44.2	62.9	23.6	44.4	65.1	21.9	42.3	62.7		
72		TC	72.1	72.1	72.1	67.5	67.5	67.5	62.4	62.4	62.4	57.0	57.0	57.0	51.4	51.4	53.2		
SHC		18.3	38.9	59.5	16.7	37.4	58.2	14.9	35.8	56.7	13.0	34.0	55.0	11.2	32.2	53.2			
76		TC	—	78.1	78.1	—	73.2	73.2	—	67.8	67.8	—	61.8	61.8	—	55.8	55.8		
SHC		—	29.9	48.7	—	28.5	48.4	—	27.0	47.5	—	25.2	46.4	—	23.5	44.9			
6750 cfm		EA (wb)	58	TC	61.6	61.6	77.4	58.3	58.3	73.1	54.3	54.3	68.2	50.3	50.3	63.1	46.0	46.0	57.8
			SHC	45.9	61.6	77.4	43.4	58.3	73.1	40.5	54.3	68.2	37.5	50.3	63.1	34.3	46.0	57.8	
	62		TC	62.0	62.0	81.4	58.5	58.5	77.1	55.0	55.0	69.0	50.5	50.5	67.6	46.0	46.0	61.6	
	SHC		40.5	61.0	81.4	38.3	57.7	77.1	35.1	52.0	69.0	33.3	50.5	67.6	30.4	46.0	61.6		
	67		TC	66.7	66.7	75.5	62.2	62.2	73.8	57.2	57.2	71.9	52.1	52.1	69.6	48.8	48.8	66.4	
	SHC		29.8	52.7	75.5	28.2	51.0	73.8	26.4	49.1	71.9	24.5	47.1	69.6	22.6	44.5	66.4		
	72	TC	73.1	73.1	73.1	68.4	68.4	68.4	63.3	63.3	63.3	57.7	57.7	58.6	51.9	51.9	56.6		
	SHC	17.6	40.5	63.3	16.1	39.0	61.8	14.4	37.3	60.3	12.5	35.5	58.6	10.7	33.7	56.6			
	76	TC	—	79.0	79.0	—	74.1	74.1	—	68.4	68.4	—	62.5	62.5	—	56.4	56.4		
	SHC	—	30.6	52.3	—	29.2	51.6	—	27.6	50.6	—	25.8	49.3	—	24.1	47.7			

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



Ex

Performance data (cont)



38AUZ25/40RUA25 Stage 2 Combination Ratings — 60 Hz

38AUZ25/40RUA25			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
6000 cfm	EA (wb)	58	TC	215.6	215.6	238.3	208.4	208.4	231.1	199.5	199.5	225.3	190.8	190.8	215.4	181.4	181.4	204.8	
		SHC	184.8	211.5	238.3	179.0	205.0	231.1	173.7	199.5	225.3	166.1	190.8	215.4	158.0	181.4	204.8		
		62	TC	230.5	230.5	230.5	217.7	217.7	220.6	207.1	207.1	219.0	199.0	199.0	206.3	185.1	185.1	205.3	
		SHC	162.2	189.3	216.4	161.9	191.2	220.6	159.0	189.0	219.0	150.0	178.1	206.3	146.9	176.1	205.3		
		67	TC	249.0	249.0	249.0	238.9	238.9	238.9	227.9	227.9	227.9	215.9	215.9	215.9	202.8	202.8	202.8	
		SHC	136.2	165.3	194.4	131.9	161.1	190.3	127.4	156.6	185.9	122.5	151.8	181.2	117.3	146.6	176.0		
	72	TC	273.3	273.3	273.3	261.9	261.9	261.9	249.7	249.7	249.7	236.5	236.5	236.5	222.4	222.4	222.4		
	SHC	106.3	134.3	162.3	101.9	130.2	158.5	97.1	125.7	154.3	92.2	121.0	149.7	86.9	115.9	144.8			
	76	TC	—	294.6	294.6	—	282.6	282.6	—	268.8	268.8	—	254.5	254.5	—	238.4	238.4		
	SHC	—	108.7	141.7	—	104.1	137.1	—	100.8	133.6	—	96.1	122.3	—	91.0	118.8			
	7000 cfm	EA (wb)	58	TC	225.6	225.6	255.0	218.2	218.2	246.3	209.6	209.6	236.6	200.4	200.4	226.2	190.3	190.3	214.8
			SHC	196.7	225.8	255.0	190.1	218.2	246.3	182.6	209.6	236.6	174.6	200.4	226.2	165.8	190.3	214.8	
62			TC	234.3	234.3	248.6	224.3	224.3	241.4	214.0	214.0	236.2	202.7	202.7	230.0	192.7	192.7	216.7	
SHC			162.1	215.4	248.6	174.2	207.8	241.4	169.3	202.7	236.2	163.6	196.9	230.0	154.6	185.7	216.7		
67			TC	256.4	256.4	256.4	245.6	245.6	245.6	234.0	234.0	234.0	221.4	221.4	221.4	207.6	207.6	207.6	
SHC			144.0	177.5	211.1	139.6	173.2	206.9	135.0	168.7	202.3	130.0	163.7	197.4	124.7	158.4	192.1		
72		TC	280.6	280.6	280.6	268.6	268.6	268.6	255.8	255.8	255.8	242.1	242.1	242.1	227.3	227.3	227.3		
SHC		108.9	141.6	174.3	104.4	137.3	170.2	99.7	132.7	165.8	94.7	127.9	161.1	89.4	122.7	156.1			
76		TC	—	301.8	301.8	—	288.7	288.7	—	274.5	274.5	—	259.4	259.4	—	243.0	243.0		
SHC		—	112.4	150.9	—	108.4	137.5	—	103.9	134.9	—	99.2	131.1	—	94.0	126.6			
8000 cfm		EA (wb)	58	TC	235.6	235.6	265.9	227.1	227.1	256.4	218.1	218.1	246.2	208.3	208.3	235.1	197.5	197.5	222.9
			SHC	205.3	235.6	265.9	197.9	227.1	256.4	190.0	218.1	246.2	181.5	208.3	235.1	172.1	197.5	222.9	
	62		TC	240.0	240.0	265.1	229.9	229.9	259.4	220.1	220.1	251.3	210.6	210.6	239.4	202.6	202.6	217.3	
	SHC		190.1	227.6	265.1	185.0	222.2	259.4	178.8	215.0	251.3	170.4	204.9	239.4	167.0	187.1	217.3		
	67		TC	262.0	262.0	262.0	250.8	250.8	250.8	238.7	238.7	238.7	225.5	225.5	225.5	211.5	211.5	211.5	
	SHC		151.3	189.1	227.0	146.8	184.7	222.6	142.2	180.0	217.9	137.2	175.1	213.0	131.7	169.5	207.3		
	72	TC	286.2	286.2	286.2	273.8	273.8	273.8	260.6	260.6	260.6	246.5	246.5	246.5	230.8	230.8	230.8		
	SHC	111.1	148.2	185.3	106.7	143.9	181.1	101.9	139.3	176.6	96.9	134.4	171.8	91.5	129.0	166.5			
	76	TC	—	307.2	307.2	—	293.6	293.6	—	279.2	279.2	—	263.3	263.3	—	246.4	246.4		
	SHC	—	115.5	149.6	—	111.2	146.4	—	106.7	142.7	—	101.7	138.3	—	96.4	133.3			
	9000 cfm	EA (wb)	58	TC	243.4	243.4	274.7	234.7	234.7	264.8	225.2	225.2	254.1	215.1	215.1	242.7	203.5	203.5	229.6
			SHC	212.2	243.4	274.7	204.5	234.7	264.8	196.3	225.2	254.1	187.4	215.1	242.7	177.4	203.5	229.6	
62			TC	245.3	245.3	280.3	235.0	235.0	275.3	230.2	230.2	250.2	217.6	217.6	243.1	203.7	203.7	238.6	
SHC			199.4	239.9	280.3	194.7	235.0	275.3	180.2	215.2	250.2	173.9	208.5	243.1	168.8	203.7	238.6		
67			TC	266.6	266.6	266.6	254.9	254.9	254.9	242.5	242.5	242.5	229.1	229.1	229.1	214.3	214.3	222.0	
SHC			158.2	200.2	242.1	153.7	195.7	237.7	149.0	190.9	232.9	143.9	185.7	227.6	138.4	180.2	222.0		
72		TC	290.8	290.8	290.8	277.8	277.8	277.8	264.2	264.2	264.2	249.6	249.6	249.6	233.7	233.7	233.7		
SHC		113.1	154.4	195.7	108.5	150.0	191.4	103.8	145.3	186.8	98.8	140.3	181.9	93.4	135.0	176.5			
76		TC	—	311.5	311.5	—	297.4	297.4	—	282.4	282.4	—	266.4	266.4	—	249.0	249.0		
SHC		—	117.8	157.2	—	113.5	153.5	—	108.8	149.3	—	103.8	144.6	—	98.4	139.4			
10,000 cfm		EA (wb)	58	TC	250.4	250.4	282.5	241.3	241.3	272.2	231.3	231.3	260.9	220.5	220.5	248.8	208.8	208.8	235.6
			SHC	218.2	250.4	282.5	210.3	241.3	272.2	201.6	231.3	260.9	192.2	220.5	248.8	182.0	208.8	235.6	
	62		TC	250.6	250.6	293.5	245.3	245.3	275.2	234.0	234.0	262.7	220.9	220.9	258.8	208.8	208.8	244.6	
	SHC		207.7	250.6	293.5	196.6	235.9	275.2	187.7	225.2	262.7	183.1	220.9	258.8	173.0	208.8	244.6		
	67		TC	270.4	270.4	270.4	258.4	258.4	258.4	245.6	245.6	247.3	231.6	231.6	241.9	216.7	216.7	235.8	
	SHC		164.9	210.8	256.8	160.3	206.3	252.2	155.6	201.4	247.3	150.4	196.2	241.9	144.9	180.3	235.8		
	72	TC	294.4	294.4	294.4	281.3	281.3	281.3	267.4	267.4	267.4	252.3	252.3	252.3	235.9	235.9	235.9		
	SHC	114.8	160.2	205.6	110.3	155.7	201.2	105.6	151.0	195.5	102.9	148.3	193.7	95.1	140.5	186.0			
	76	TC	—	314.9	314.9	—	300.5	300.5	—	271.5	271.5	—	269.1	269.1	—	251.3	251.3		
	SHC	—	119.7	163.6	—	115.3	159.6	—	106.2	150.8	—	105.5	150.4	—	100.0	145.0			

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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Performance data (cont)



38AUZ25/40RUA25 Stage 1 Combination Ratings — 60 Hz

38AUZ25/40RUA25			AMBIENT TEMPERATURE (°F)															
			85			95			105			115			125			
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)			
5000 cfm	EA (wb)	58	75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
			TC	133.2	133.2	150.2	128.4	128.4	144.8	123.3	123.3	139.0	117.7	117.7	132.7	111.6	111.6	125.8
SHC	116.3	133.2	150.2	112.1	128.4	144.8	107.6	123.3	139.0	102.7	117.7	132.7	97.4	111.6	125.8			
62	TC	134.4	134.4	153.7	128.6	128.6	150.3	123.4	123.4	144.4	117.8	117.8	137.8	111.7	111.7	130.7		
	SHC	109.6	131.7	153.7	106.7	128.5	150.3	102.4	123.4	144.4	97.8	117.8	137.8	92.7	111.7	130.7		
67	TC	144.3	144.3	144.3	137.9	137.9	137.9	131.1	131.1	132.6	123.9	123.9	129.8	116.0	116.0	126.8		
	SHC	89.2	113.4	137.6	86.7	110.9	135.1	84.2	108.4	132.6	81.4	105.6	129.8	78.5	102.6	126.8		
72	TC	158.4	158.4	158.4	151.4	151.4	151.4	143.9	143.9	143.9	136.0	136.0	136.0	—	—	—		
	SHC	64.5	88.3	112.0	62.0	85.9	109.7	59.4	83.4	107.3	56.7	80.7	104.7	—	—	—		
76	TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
6000 cfm	58	TC	140.1	140.1	157.9	134.8	134.8	152.0	129.2	129.2	145.7	123.2	123.2	138.9	116.6	116.6	131.4	
		SHC	122.2	140.1	157.9	117.6	134.8	152.0	112.8	129.2	145.7	107.5	123.2	138.9	101.7	116.6	131.4	
	62	TC	140.1	140.1	164.0	134.9	134.9	157.8	129.3	129.3	151.3	123.3	123.3	144.3	116.7	116.7	136.5	
		SHC	116.3	140.1	164.0	112.0	134.9	157.8	107.3	129.3	151.3	102.4	123.3	144.3	96.8	116.7	136.5	
	67	TC	147.6	147.6	153.3	140.9	140.9	150.6	133.8	133.8	147.6	126.3	126.3	144.6	118.3	118.3	140.8	
		SHC	96.3	124.8	153.3	93.8	122.2	150.6	91.1	119.5	147.6	88.2	116.4	144.6	84.9	112.9	140.8	
	72	TC	161.8	161.8	161.8	154.4	154.4	154.4	146.7	146.7	146.7	—	—	—	—	—	—	
		SHC	67.0	95.1	123.1	64.5	92.6	120.8	61.9	90.1	118.4	—	—	—	—	—	—	
	76	TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	7000 cfm	58	TC	145.5	145.5	164.0	139.9	139.9	157.7	133.9	133.9	151.0	127.5	127.5	143.7	120.5	120.5	135.8
			SHC	127.0	145.5	164.0	122.1	139.9	157.7	116.9	133.9	151.0	111.3	127.5	143.7	105.1	120.5	135.8
62		TC	145.6	145.6	170.3	140.0	140.0	163.8	134.0	134.0	156.8	127.6	127.6	149.2	120.5	120.5	141.0	
		SHC	120.8	145.6	170.3	116.2	140.0	163.8	111.3	134.0	156.8	105.9	127.6	149.2	100.1	120.5	141.0	
67		TC	149.9	149.9	167.8	143.1	143.1	164.7	136.0	136.0	161.3	128.5	128.5	156.8	121.7	121.7	146.4	
		SHC	103.0	135.4	167.8	100.3	132.5	164.7	97.3	129.3	161.3	93.9	125.4	156.8	88.0	117.2	146.4	
72		TC	164.3	164.3	164.3	—	—	—	—	—	—	—	—	—	—	—	—	
		SHC	69.2	101.5	133.7	—	—	—	—	—	—	—	—	—	—	—	—	
76		TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
8000 cfm		58	TC	149.8	149.8	168.9	143.9	143.9	162.2	137.6	137.6	155.2	130.9	130.9	147.6	123.5	123.5	139.2
			SHC	130.7	149.8	168.9	125.6	143.9	162.2	120.1	137.6	155.2	114.3	130.9	147.6	107.8	123.5	139.2
	62	TC	149.9	149.9	175.4	144.0	144.0	168.4	137.7	137.7	161.1	131.1	131.1	153.3	123.5	123.5	144.5	
		SHC	124.4	149.9	175.4	119.5	144.0	168.4	114.3	137.7	161.1	108.8	131.1	153.3	102.5	123.5	144.5	
	67	TC	152.1	152.1	180.6	145.3	145.3	176.4	137.8	137.8	172.9	132.9	132.9	157.1	124.2	124.2	152.1	
		SHC	109.0	144.8	180.6	105.8	141.1	176.4	102.8	137.8	172.9	94.9	126.0	157.1	91.0	121.5	152.1	
	72	TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	76	TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	9000 cfm	58	TC	153.3	153.3	172.8	147.2	147.2	166.0	140.7	140.7	158.6	133.6	133.6	150.6	—	—	—
			SHC	133.8	153.3	172.8	128.5	147.2	166.0	122.8	140.7	158.6	116.6	133.6	150.6	—	—	—
62		TC	153.5	153.5	179.5	147.3	147.3	172.3	140.8	140.8	164.8	133.7	133.7	156.4	—	—	—	
		SHC	127.4	153.5	179.5	122.3	147.3	172.3	116.9	140.8	164.8	111.0	133.7	156.4	—	—	—	
67		TC	154.2	154.2	190.2	147.7	147.7	183.1	141.6	141.6	172.8	133.8	133.8	167.8	—	—	—	
		SHC	113.6	151.9	190.2	109.2	146.2	183.1	103.4	138.1	172.8	99.8	133.8	167.8	—	—	—	
72		TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
76		TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
		SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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Performance data (cont)



38AUD25/40RUA25 Stage 3 Combination Ratings — 60 Hz

38AUD25/40RUA25			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
6000 cfm	EA (wb)	58	TC	218.9	218.9	245.1	210.7	210.7	237.4	201.8	201.8	228.0	192.3	192.3	217.3	182.1	182.1	205.8	
		SHC	189.2	217.2	245.1	182.9	210.2	237.4	175.5	201.8	228.0	167.3	192.3	217.3	158.5	182.1	205.8		
		62	TC	234.0	234.0	234.0	220.9	220.9	225.0	209.5	209.5	219.9	197.6	197.6	214.4	184.9	184.9	206.9	
		SHC	176.0	195.0	214.0	164.6	194.8	225.0	159.5	189.7	219.9	154.1	184.2	214.4	147.5	177.2	206.9		
		67	TC	253.6	253.6	253.6	242.0	242.0	242.0	229.9	229.9	229.9	216.5	216.5	216.5	202.4	202.4	202.4	
		SHC	138.1	188.0	198.0	133.4	163.4	193.4	128.5	158.6	188.8	123.2	153.4	183.6	117.7	148.0	178.2		
	72	TC	278.0	278.0	278.0	265.4	265.4	265.4	252.2	252.2	252.2	237.5	237.5	237.5	222.0	222.0	222.0		
	SHC	107.1	136.0	164.9	102.2	131.4	160.6	97.2	126.7	156.2	91.8	121.5	151.2	86.2	116.1	146.0			
	76	TC	—	298.9	298.9	—	285.7	285.7	—	271.5	271.5	—	255.7	255.7	—	238.6	238.6		
	SHC	—	108.3	141.3	—	104.4	137.4	—	100.3	129.6	—	95.5	122.2	—	90.2	118.5			
	7000 cfm	EA (wb)	58	TC	230.0	230.0	259.8	221.5	221.5	250.3	212.1	212.1	239.6	201.7	201.7	227.9	190.8	190.8	215.6
			SHC	200.1	230.0	259.8	182.7	221.5	250.3	184.5	212.1	239.6	175.6	201.7	227.9	166.0	190.8	215.6	
62			TC	237.9	237.9	251.5	227.4	227.4	246.6	215.6	215.6	240.6	203.6	203.6	232.1	191.7	191.7	221.9	
SHC			182.0	216.7	251.5	177.3	211.9	246.6	171.7	206.2	240.6	164.8	198.4	232.1	157.0	189.4	221.9		
67			TC	260.6	260.6	260.6	248.8	248.8	248.8	235.4	235.4	235.4	221.5	221.5	221.5	206.8	206.8	206.8	
SHC			146.0	180.6	215.2	141.3	176.0	210.7	136.1	170.9	205.6	130.8	165.6	200.4	125.3	160.2	195.0		
72		TC	284.8	284.8	284.8	272.0	272.0	272.0	257.7	257.7	257.7	242.9	242.9	242.9	226.5	226.5	226.5		
SHC		109.4	143.2	177	104.7	138.8	172.8	99.6	133.8	168.1	94.3	128.8	163.2	88.7	123.2	157.8			
76		TC	—	306.9	306.9	—	292.4	292.4	—	277.0	277.0	—	260.3	260.3	—	243.0	243.0		
SHC		—	112.8	146.3	—	108.4	138.4	—	103.7	135.4	—	98.5	131.3	—	93.2	126.7			
8,000 cfm		EA (wb)	58	TC	239.3	239.3	270.4	230.3	230.3	260.2	220.5	220.5	249.1	209.6	209.6	236.8	197.9	197.9	223.5
			SHC	208.3	239.3	270.4	200.4	230.3	260.2	191.6	220.5	249.1	182.4	209.6	236.8	172.2	197.9	223.5	
	62		TC	243.6	243.6	271.1	232.9	232.9	265.0	221.6	221.6	256.4	211.3	211.3	241.0	199.0	199.0	229.2	
	SHC		193.6	232.4	271.1	188.3	226.6	265.0	181.4	218.9	256.4	171.2	206.1	241.0	162.3	195.7	229.2		
	67		TC	265.7	265.7	265.7	253.8	253.8	253.8	239.8	239.8	239.8	225.6	225.6	225.6	210.3	210.3	211.2	
	SHC		153.3	192.4	231.5	148.8	187.9	227.1	143.5	182.7	221.9	138.3	177.5	216.7	132.7	171.9	211.2		
	72	TC	290.5	290.5	290.5	277.1	277.1	277.1	262.7	262.7	262.7	247.2	247.2	247.2	229.9	229.9	229.9		
	SHC	111.7	150.1	188.6	106.9	145.6	184.3	101.9	140.7	179.5	96.7	135.6	174.6	90.9	129.9	169.0			
	76	TC	—	312.0	312.0	—	298.1	298.1	—	282.1	282.1	—	264.3	264.3	—	246.5	246.5		
	SHC	—	115.8	151.0	—	111.5	147.8	—	106.6	143.8	—	101.2	138.9	—	95.8	134.0			
	9,000 cfm	EA (wb)	58	TC	247.5	247.5	279.6	238.0	238.0	268.9	227.4	227.4	256.9	216.1	216.1	244.2	203.8	203.8	230.2
			SHC	215.4	247.5	279.6	207.1	238.0	268.9	197.9	227.4	256.9	188.1	216.1	244.2	177.3	203.8	230.2	
62			TC	249.1	249.1	287.8	239.2	239.2	277.6	229.0	229.0	262.0	216.6	216.6	252.3	204.0	204.0	239.1	
SHC			203.7	245.8	287.8	196.3	237.0	277.6	185.9	224.0	262.0	176.3	215.3	252.3	168.8	204.0	239.1		
67			TC	270.5	270.5	270.5	257.3	257.3	257.3	243.4	243.4	243.4	228.8	228.8	232.6	213.0	213.0	226.9	
SHC			160.6	204.1	247.6	155.7	199.3	242.8	150.7	194.2	237.8	145.5	189.0	232.6	139.9	183.4	226.9		
72		TC	294.8	294.8	294.8	280.9	280.9	280.9	265.9	265.9	265.9	250.0	250.0	250.0	232.6	232.6	232.6		
SHC		113.6	156.6	199.6	108.9	152.0	195.2	103.8	147.1	190.4	98.5	141.9	185.3	92.8	136.3	179.8			
76		TC	—	316.4	316.4	—	301.5	301.5	—	285.0	285.0	—	268	268.0	—	249.4	249.4		
SHC		—	118.3	159.0	—	113.7	155.1	—	108.8	150.8	—	103.6	146.0	—	98.1	140.9			
10,000 cfm		EA (wb)	58	TC	254.6	254.6	287.7	244.9	244.9	276.6	233.7	233.7	264.0	221.7	221.7	250.5	208.8	208.8	235.9
			SHC	221.6	254.6	287.7	213.1	244.9	276.6	203.4	233.7	264.0	193.0	221.7	250.5	181.7	208.8	235.9	
	62		TC	256.2	256.2	293.6	246.5	246.5	281.5	234.0	234.0	272.6	221.6	221.6	259.8	209.0	209.0	245.0	
	SHC		208.3	251.0	293.6	199.8	240.7	281.5	192.6	232.6	272.6	183.4	221.6	259.8	172.9	209.0	245.0		
	67		TC	273.5	273.5	273.5	260.6	260.6	260.6	246.3	246.3	253.2	230.9	230.9	247.7	215.1	215.1	241.6	
	SHC		167.3	215.1	262.8	162.7	210.5	258.2	157.7	205.4	253.2	152.3	200.0	247.7	146.7	194.1	241.6		
	72	TC	298.4	298.4	298.4	284.3	284.3	284.3	269.3	269.3	269.3	252.8	252.8	252.8	234.8	234.8	234.8		
	SHC	115.3	162.7	210.1	110.6	156.1	205.7	105.7	153.4	201.0	100.3	148.1	195.8	94.7	142.5	190.2			
	76	TC	—	320.7	320.7	—	305.4	305.4	—	288.6	288.6	—	270.6	270.6	—	251.7	251.7		
	SHC	—	120.5	166.1	—	115.9	162.0	—	110.9	157.4	—	105.5	152.4	—	100.0	147.1			

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



EL

Performance data (cont)



38AUD25/40RUA25 Stage 2 Combination Ratings — 60 Hz

38AUD25/40RUA25			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
5000 cfm	EA (wb)	58	TC	176.7	176.7	184.4	188.3	168.3	187.0	159.4	159.4	179.0	150.5	150.5	168.4	140.2	140.2	159.1	
		SHC	149.0	171.7	194.4	142.9	165.0	187.0	136.7	157.8	179.0	128.7	148.6	168.4	121.2	140.2	159.1		
		62	TC	185.4	185.4	187.2	176.2	176.2	180.0	166.0	166.0	172.2	155.6	155.6	163.9	144.7	144.7	154.9	
		SHC	135.9	161.6	187.2	130.2	155.1	180.0	123.8	148.0	172.2	117.1	140.9	163.9	110.1	132.5	154.9		
		67	TC	206.6	206.6	206.6	195.5	195.5	195.5	183.5	183.5	183.5	170.7	170.7	170.7	156.8	156.8	156.8	
		SHC	111.5	137.0	162.5	107.1	132.7	158.3	102.3	128.0	153.7	97.5	123.2	148.9	92.3	118.0	143.8		
	72	TC	228.5	228.5	228.5	217.5	217.5	217.5	204.4	204.4	204.4	190.7	190.7	190.7	176.4	176.4	176.4		
	SHC	87.0	111.2	135.4	82.7	107.5	132.3	77.9	103.0	128.0	73.0	98.2	123.4	67.6	93.0	118.3			
	76	TC	—	247.7	247.7	—	235.9	235.9	—	222.1	222.1	—	207.3	207.3	—	190.6	190.6		
	SHC	—	91.2	117.1	—	87.3	113.5	—	82.7	109.1	—	77.6	104.1	—	72.5	99.0			
	6000 cfm	EA (wb)	58	TC	188.8	188.8	211.1	179.5	179.5	203.5	170.2	170.2	193.0	160.3	160.3	181.8	149.9	149.9	170.1
			SHC	161.7	186.4	211.1	155.4	179.4	203.5	147.3	170.2	193.0	138.8	160.3	181.8	129.8	149.9	170.1	
62			TC	195.3	195.3	204.9	185.7	185.7	197.2	175.2	175.2	188.5	163.9	163.9	179.3	152.0	152.0	170.5	
SHC			147.1	176.0	204.9	141.0	166.1	197.2	134.1	161.3	188.5	126.8	153.0	179.3	119.8	145.1	170.5		
67			TC	214.8	214.8	214.8	204.1	204.1	204.1	190.1	190.1	190.1	176.3	176.3	176.3	162.0	162.0	162.0	
SHC			120.5	150.9	181.3	116.5	146.9	177.4	111.2	141.7	172.1	106.1	136.6	167.1	100.8	130.9	161.1		
72		TC	237.3	237.3	237.3	225.0	225.0	225.0	211.2	211.2	211.2	196.2	196.2	196.2	180.5	180.5	180.5		
SHC		90.5	120.2	149.9	86.1	116.0	145.8	81.3	111.3	141.3	76.1	106.2	136.3	70.9	101.0	131.1			
76		TC	—	256.7	256.7	—	243.8	243.8	—	229.0	229.0	—	212.7	212.7	—	195.1	195.1		
SHC		—	95.0	126.5	—	90.9	122.4	—	86.6	116.2	—	81.6	110.0	—	76.1	104.9			
7000 cfm		EA (wb)	58	TC	198.6	198.6	225.1	189.4	189.4	214.7	179.5	179.5	203.5	168.8	168.8	191.5	157.5	157.5	178.5
			SHC	172.1	198.6	225.1	164.1	189.4	214.7	155.5	179.5	203.5	146.4	168.9	191.5	136.4	157.5	178.5	
	62		TC	203.5	203.5	220.5	193.6	193.6	212.4	182.1	182.1	204.2	170.2	170.2	194.1	159.4	159.4	182.3	
	SHC		156.9	188.7	220.5	150.5	181.5	212.4	143.9	174.0	204.2	136.2	165.1	194.1	128.2	155.3	182.3		
	67		TC	220.5	220.5	220.5	208.4	208.4	208.4	194.8	194.8	194.8	180.6	180.6	183.4	167.0	167.0	172.4	
	SHC		128.8	163.9	199.0	124.3	159.4	194.6	119.4	154.4	189.5	113.9	146.6	183.4	106.2	139.3	172.4		
	72	TC	243.3	243.3	243.3	230.8	230.8	230.8	216.1	216.1	216.1	200.5	200.5	200.5	184.5	184.5	184.5		
	SHC	93.5	128.0	162.5	89.2	123.8	158.4	84.2	118.9	153.5	79.0	113.8	148.5	73.8	108.5	143.2			
	76	TC	—	262.7	262.7	—	248.7	248.7	—	233.2	233.2	—	216.5	216.5	—	198.2	198.2		
	SHC	—	98.9	135.5	—	94.7	127.1	—	89.9	123	—	84.8	118.1	—	79.0	112.1			
	8000 cfm	EA (wb)	58	TC	207.1	207.1	234.6	197.6	197.6	223.9	187.2	187.2	212.1	175.8	175.8	199.2	163.7	163.7	185.4
			SHC	179.5	207.1	234.6	171.3	197.6	223.9	162.3	187.2	212.1	152.4	175.8	199.2	141.9	163.7	185.4	
62			TC	208.9	208.9	235.7	199.5	199.5	227.0	188.2	188.2	218.0	176.6	176.6	205.1	164.5	164.5	190.7	
SHC			166.4	201.1	235.7	159.6	193.3	227.0	152.8	185.4	218.0	143.9	174.5	205.1	133.9	162.3	190.7		
67			TC	224.8	224.8	224.8	212.4	212.4	212.4	198.8	198.8	205.1	186.0	186.0	193.7	171.6	171.6	183.3	
SHC			136.8	176.4	216.0	132.1	171.7	211.2	126.8	165.9	205.1	119.1	156.4	193.7	111.6	147.5	183.3		
72		TC	247.9	247.9	247.9	234.6	234.6	234.6	219.9	219.9	219.9	203.9	203.9	203.9	187.0	187.0	187.0		
SHC		96.1	135.2	174.3	91.7	130.8	170.0	86.8	126.0	165.2	81.6	120.8	160.0	76.2	115.3	154.4			
76		TC	—	266.7	266.7	—	253.2	253.2	—	237.1	237.1	—	218.9	218.9	—	199.9	199.9		
SHC		—	102.0	139.1	—	97.9	135.4	—	92.9	130.7	—	87.3	124.9	—	81.1	118.1			
9000 cfm		EA (wb)	58	TC	214.4	214.4	242.8	204.5	204.5	231.6	193.5	193.5	219.1	181.6	181.6	205.8	169.0	169.0	191.4
			SHC	186.0	214.4	242.8	177.4	204.5	231.6	167.8	193.5	219.1	157.5	181.6	205.8	146.6	169.0	191.4	
	62		TC	215.6	215.6	249.0	205.1	205.1	238.9	193.7	193.7	227.7	182.0	182.0	214.0	168.9	168.9	196.7	
	SHC		174.9	211.9	249.0	167.7	203.3	238.9	159.5	193.6	227.7	149.9	182.0	214.0	139.2	168.9	196.7		
	67		TC	228.7	228.7	231.8	215.8	215.8	225.4	203.3	203.3	214.7	189.4	189.4	204.7	174.8	174.8	192.9	
	SHC		144.1	188.0	231.8	138.9	182.1	225.4	131.5	173.1	214.7	124.3	164.5	204.7	116.2	154.5	192.9		
	72	TC	251.6	251.6	251.6	237.9	237.9	237.9	223.0	223.0	223.0	206.5	206.5	206.5	189.2	189.2	189.2		
	SHC	98.5	142.1	185.6	94.0	137.6	181.2	89.2	132.8	176.4	84.0	127.5	171.0	78.5	121.7	165.0			
	76	TC	—	270.4	270.4	—	256.2	256.2	—	239.1	239.1	—	221.4	221.4	—	202.0	202.0		
	SHC	—	104.6	146.5	—	100.3	142.4	—	95.0	136.9	—	89.5	131.3	—	83.1	123.9			

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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Performance data (cont)



38AUD25/40RUA25 Stage 1 Combination Ratings — 60 Hz

38AUD25/40RUA25				AMBIENT TEMPERATURE (°F)															
				85			95			105			115			125			
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)			
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85	
5000 cfm	EA (wb)	58	TC	78.6	78.6	99.9	78.6	78.6	99.9	78.6	78.6	99.8	78.6	78.6	99.8	78.6	78.6	99.9	
			SHC	57.4	78.6	99.9	57.4	78.8	99.9	57.4	78.6	99.8	57.4	78.6	99.8	57.4	78.6	99.9	
		62	TC	80.5	80.5	102.8	80.6	80.6	103.1	80.5	80.5	102.8	80.5	80.5	102.8	80.5	80.5	102.8	
			SHC	50.0	76.4	102.8	50.1	76.6	103.1	50.0	76.4	102.8	50.0	76.4	102.8	50.0	76.4	102.8	
		67	TC	90.0	90.0	90.3	90.0	90.0	90.4	90.0	90.0	90.3	90.0	90.0	90.4	90.0	90.0	90.4	
			SHC	37.6	64.0	90.3	37.6	64.0	90.4	37.6	64.0	90.3	37.6	64.0	90.4	37.6	64.0	90.4	
	72	TC	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3	99.3		
		SHC	24.9	50.4	75.9	24.9	50.4	75.9	24.9	50.5	76.0	24.9	50.4	75.9	24.9	50.5	76.0		
	76	TC	—	108.4	108.4	—	108.5	108.5	—	108.2	108.2	—	108.4	108.4	—	108.3	108.3		
		SHC	—	40.5	64.9	—	40.5	64.9	—	41.5	68	—	40.5	64.9	—	40.5	64.9		
	6000 cfm	EA (wb)	58	TC	84.3	84.3	106.9	84.3	84.3	106.9	84.4	84.4	107.0	84.3	84.3	107.0	84.3	84.3	106.9
				SHC	61.7	84.3	106.9	61.7	84.3	106.9	61.7	84.4	107.0	61.7	84.3	107.0	61.7	84.3	106.9
62			TC	85.1	85.1	112.7	84.7	84.7	113.7	84.8	84.8	113.6	85.1	85.1	112.5	85.2	85.2	112.9	
			SHC	54.0	83.4	112.7	54.2	83.9	113.7	54.2	83.9	113.6	54.1	83.3	112.5	54.1	83.5	112.9	
67			TC	93.1	93.1	102.5	93.1	93.1	102.5	93.1	93.1	102.5	93.1	93.1	102.5	93.0	93.0	102.5	
			SHC	39.7	71.1	102.5	39.7	71.1	102.5	39.7	71.1	102.5	39.7	71.1	102.5	39.7	71.1	102.5	
72		TC	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.4	103.4	103.4	103.2	103.2	103.2		
		SHC	24.5	55.4	86.4	24.5	55.4	86.3	24.5	55.4	86.4	26.6	57.1	87.7	24.5	55.5	86.5		
76		TC	—	111.6	111.6	—	111.7	111.7	—	111.6	111.6	—	111.6	111.6	—	111.6	111.6		
		SHC	—	42.8	72.7	—	42.9	72.7	—	42.8	72.7	—	42.8	72.7	—	42.9	72.7		
7000 cfm		EA (wb)	58	TC	88.9	88.9	112.6	88.9	88.9	112.6	88.9	88.9	112.6	88.9	88.9	112.6	89.0	89.0	112.7
				SHC	65.2	88.9	112.6	65.2	88.9	112.6	65.2	88.9	112.6	65.2	88.9	112.6	65.2	89.0	112.7
	62		TC	89.0	89.0	120.6	89.0	89.0	120.6	89.0	89.0	120.6	89.0	89.0	120.6	89.0	89.0	120.6	
			SHC	57.4	89.0	120.6	57.4	89.0	120.6	57.4	89.0	120.6	57.4	89.0	120.6	57.4	89.0	120.6	
	67		TC	95.3	95.3	114.2	95.3	95.3	114.2	95.3	95.3	114.2	95.3	95.3	114.1	95.3	95.3	114.2	
			SHC	41.6	77.9	114.2	41.6	77.9	114.2	41.6	77.9	114.2	41.6	77.8	114.1	41.6	77.9	114.2	
	72	TC	105.3	105.3	105.3	105.4	105.4	105.4	105.3	105.3	105.3	105.3	105.3	105.3	105.4	105.4	105.4		
		SHC	23.6	59.6	95.5	23.8	59.6	95.5	23.8	59.6	95.5	23.8	59.6	95.5	23.8	59.6	95.5		
	76	TC	—	113.7	113.7	—	113.8	113.8	—	113.7	113.7	—	113.8	113.8	—	113.8	113.8		
		SHC	—	44.9	79.7	—	44.9	79.7	—	44.9	79.7	—	44.9	79.7	—	44.9	79.7		
	8000 cfm	EA (wb)	58	TC	92.6	92.6	117.2	92.7	92.7	117.3	92.7	92.7	117.3	92.6	92.6	117.3	92.6	92.6	117.2
				SHC	68.0	92.6	117.2	68.1	92.7	117.3	68.1	92.7	117.3	68.0	92.6	117.3	68.0	92.6	117.2
62			TC	92.7	92.7	125.4	92.7	92.7	125.4	92.7	92.7	125.4	92.7	92.7	125.4	92.7	92.7	125.5	
			SHC	59.9	92.7	125.4	59.9	92.7	125.4	59.9	92.7	125.4	59.9	92.7	125.4	60.0	92.7	125.5	
67			TC	96.7	96.7	124.5	96.8	96.8	124.5	96.7	96.7	124.5	96.8	96.8	124.5	96.8	96.8	124.6	
			SHC	43.2	83.9	124.5	43.2	83.9	124.5	43.2	83.9	124.5	43.2	83.9	124.5	43.3	83.9	124.6	
72		TC	107.1	107.1	107.1	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.1	107.1	107.1		
		SHC	23.0	63.7	104.3	23.0	63.7	104.3	23.0	63.7	104.3	23.0	63.7	104.3	25.4	65.4	105.4		
76		TC	—	115.3	115.3	—	115.3	115.3	—	115.3	115.3	—	115.2	115.2	—	115.2	115.2		
		SHC	—	46.8	86.3	—	46.8	86.2	—	46.8	86.3	—	46.8	86.2	—	46.8	86.2		
9000 cfm		EA (wb)	58	TC	95.8	95.8	121.1	95.8	95.8	121.1	95.7	95.7	121	95.7	95.7	121.1	95.6	95.6	120.9
				SHC	70.4	95.8	121.1	70.4	95.8	121.1	70.3	95.7	121	70.4	95.7	121.1	70.3	95.6	120.9
	62		TC	95.8	95.8	129.6	95.7	95.7	129.4	95.8	95.8	129.5	95.9	95.9	129.6	95.9	95.9	129.6	
			SHC	62.1	95.8	129.6	62.0	95.7	129.4	62.0	95.8	129.5	62.1	95.9	129.6	62.1	95.9	129.6	
	67		TC	98.3	98.3	135.9	98.3	98.3	135.9	98.3	98.3	135.9	98.3	98.3	135.9	98.3	98.3	135.8	
			SHC	45.1	90.5	135.9	45.1	90.5	135.9	45.1	90.5	135.9	45.1	90.5	135.9	45.1	90.5	135.8	
	72	TC	108.3	108.3	112.8	108.4	108.4	112.8	108.5	108.5	112.8	108.4	108.4	112.8	108.4	108.4	112.8		
		SHC	22.3	67.5	112.8	22.3	67.5	112.8	22.3	67.6	112.8	22.3	67.5	112.8	22.3	67.5	112.8		
	76	TC	—	116.5	116.5	—	116.4	116.4	—	116.5	116.5	—	116.4	116.4	—	116.4	116.4		
		SHC	—	48.6	92.5	—	48.6	92.5	—	48.6	92.5	—	48.6	92.4	—	48.6	92.4		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu) gross
- TC — Total Capacity (1000 Btu) gross
- wb — wet bulb



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Performance data (cont)



38AUD28/40RUA28 Stage 3 Combination Ratings — 60 Hz

38AUD28/40RUA28			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
7500 cfm	EA (wb)	58	TC	258.8	258.8	283.0	248.5	248.5	274.2	236.5	236.5	267.2	225.5	225.5	254.8	213.3	213.3	241.1	
		58	SHC	219.6	251.3	283.0	212.3	243.3	274.2	205.7	236.5	267.2	196.1	225.5	254.8	185.6	213.3	241.1	
		62	TC	270.9	270.9	270.9	258.7	258.7	282.6	245.6	245.6	256.7	231.4	231.4	249.9	216.4	216.4	242.0	
		62	SHC	197.8	232.9	268.1	182.2	227.4	282.6	186.4	221.6	256.7	179.8	214.8	249.9	172.4	207.2	242.0	
		67	TC	294.9	294.9	294.9	282.3	282.3	282.3	267.6	267.6	267.6	252.3	252.3	252.3	235.9	235.9	235.9	
		67	SHC	160.9	195.7	230.6	155.7	190.8	225.8	149.9	185.0	220.2	143.8	179.2	214.5	137.4	172.8	208.1	
	72	TC	321.7	321.7	321.7	307.8	307.8	307.8	292.2	292.2	292.2	275.4	275.4	275.4	257.1	257.1	257.1		
	72	SHC	124.3	157.8	191.4	118.9	153.0	187.0	113.0	147.4	181.9	106.9	141.6	176.3	100.3	135.2	170.2		
	76	TC	—	345.5	345.5	—	329.2	329.2	—	310.4	310.4	—	294.8	294.8	—	274.9	274.9		
	76	SHC	—	125.9	167.1	—	121.2	162.4	—	115.8	144.1	—	111.0	143.2	—	104.9	138.7		
	8750 cfm	EA (wb)	58	TC	268.2	268.2	303.6	258.4	258.4	292.0	247.5	247.5	279.7	235.8	235.8	266.5	222.6	222.6	251.6
			58	SHC	232.9	268.2	303.6	224.8	258.4	292.0	215.3	247.5	279.7	205.1	235.8	266.5	193.7	222.6	251.6
62			TC	280.3	280.3	288.6	268.6	268.6	280.4	252.3	252.3	279.6	237.9	237.9	271.2	223.6	223.6	256.5	
62			SHC	209.7	249.2	288.6	203.2	241.8	280.4	199.8	239.7	279.6	192.5	231.8	271.2	181.8	219.2	256.5	
67			TC	302.4	302.4	302.4	288.6	288.6	288.6	273.8	273.8	273.8	257.8	257.8	257.8	240.7	240.7	240.7	
67			SHC	169.5	209.7	249.9	164.1	204.4	244.7	158.5	198.8	239.4	152.3	192.7	233.2	145.7	186.2	226.7	
72		TC	329.2	329.2	329.2	314.0	314.0	314.0	297.8	297.8	297.8	280.3	280.3	280.3	261.7	261.7	261.7		
72		SHC	126.9	166.1	205.3	121.3	160.9	200.5	115.5	155.3	195.1	109.3	149.3	189.3	102.8	143.0	183.2		
76		TC	—	352.2	352.2	—	336.3	336.3	—	318.3	318.3	—	299.9	299.9	—	279.7	279.7		
76		SHC	—	130.3	171.6	—	125.7	161.3	—	120.2	157.7	—	114.5	153.2	—	108.4	147.9		
10000 cfm		EA (wb)	58	TC	278.6	278.6	314.8	268.1	268.1	303	256.8	256.8	290.2	244.1	244.1	275.9	230.2	230.2	260.1
			58	SHC	242.3	278.6	314.8	233.2	268.1	303	223.4	256.8	290.2	212.4	244.1	275.9	200.2	230.2	260.1
	62		TC	283.9	283.9	313.8	271.3	271.3	306.8	257.6	257.6	297.1	245.1	245.1	284.0	230.6	230.6	268.9	
	62		SHC	224.4	269.1	313.8	216.2	262.5	306.8	210.3	253.7	297.1	200.8	242.4	284.0	189.8	229.4	268.9	
	67		TC	308.2	308.2	308.2	294.4	294.4	294.4	278.6	278.6	278.6	262.0	262.0	262.0	244.4	244.4	244.4	
	67		SHC	177.7	223.0	268.2	172.4	217.8	263.1	166.4	211.7	257.1	160.3	205.7	251.0	153.8	199.1	244.4	
	72	TC	334.9	334.9	334.9	319.2	319.2	319.2	303.1	303.1	303.1	284.5	284.5	284.5	265.3	265.3	265.3		
	72	SHC	129.2	173.7	218.2	123.7	168.4	213.1	118.0	162.9	207.8	111.7	156.7	201.8	105.2	150.3	195.4		
	76	TC	—	357.7	357.7	—	341.6	341.6	—	323.8	323.8	—	304.3	304.3	—	283.3	283.3		
	76	SHC	—	133.8	174.9	—	128.9	171.4	—	123.5	167.0	—	117.6	161.9	—	111.2	156.1		
	11250 cfm	EA (wb)	58	TC	287.4	287.4	324.7	276.5	276.5	312.4	264.1	264.1	298.4	250.8	250.8	283.4	236.4	236.4	267.1
			58	SHC	250.0	287.4	324.7	240.5	276.5	312.4	229.7	264.1	298.4	218.2	250.8	283.4	205.6	236.4	267.1
62			TC	288.8	288.8	332.6	276.5	276.5	322.8	264.3	264.3	309.5	253.4	253.4	284.4	236.3	236.3	277.5	
62			SHC	235.3	284.0	332.6	227.9	275.3	322.8	218.3	263.9	309.5	202.6	243.5	284.4	195.2	236.3	277.5	
67			TC	313.3	313.3	313.3	298.1	298.1	298.1	282.4	282.4	282.4	265.3	265.3	268.2	247.2	247.2	261.3	
67			SHC	165.7	235.8	286.0	160.0	230.2	280.4	174.3	224.4	274.6	168.0	218.1	268.2	161.3	211.3	261.3	
72		TC	339.4	339.4	339.4	324.0	324.0	324.0	306.7	306.7	306.7	287.7	287.7	287.7	268.3	268.3	268.3		
72		SHC	131.3	180.8	230.3	126.0	175.6	225.3	120.1	169.9	219.8	113.7	163.6	213.5	107.3	157.3	207.3		
76		TC	—	363.0	363.0	—	346.0	346.0	—	326.9	326.9	—	307.5	307.5	—	—	—		
76		SHC	—	136.8	184.1	—	131.7	179.8	—	126.0	174.8	—	120.1	169.6	—	—	—		
12500 cfm		EA (wb)	58	TC	294.7	294.7	333.0	283.1	283.1	319.9	270.9	270.9	306.2	256.9	256.9	290.4	241.6	241.6	273.0
			58	SHC	256.4	294.7	333.0	246.3	283.1	319.9	235.7	270.9	306.2	223.5	256.9	290.4	210.2	241.6	273.0
	62		TC	295.3	295.3	346.4	283.9	283.9	329.6	270.9	270.9	316.5	257.3	257.3	301.3	241.8	241.8	283.6	
	62		SHC	244.2	295.3	346.4	232.9	281.3	329.6	223.3	269.9	316.5	212.5	258.9	301.3	200.0	241.8	283.6	
	67		TC	316.6	316.6	316.6	302.1	302.1	302.1	285.5	285.5	291.3	268.2	268.2	284.8	249.5	249.5	277.6	
	67		SHC	193.1	248.0	302.9	187.8	242.6	297.5	181.8	236.5	291.3	175.5	230.1	284.8	168.9	223.2	277.6	
	72	TC	343.1	343.1	343.1	326.7	326.7	326.7	309.3	309.3	309.3	291.1	291.1	291.1	270.6	270.6	270.6		
	72	SHC	133.1	187.5	241.9	127.6	182.1	236.8	121.8	176.4	230.9	115.9	170.4	225	109.3	163.9	218.5		
	76	TC	—	366.4	366.4	—	349.4	349.4	—	330.6	330.6	—	—	—	—	—	—		
	76	SHC	—	139	191.8	—	134.0	187.3	—	128.4	182.3	—	—	—	—	—	—		

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



Performance data (cont)



38AUD28/40RUA28 Stage 2 Combination Ratings — 60 Hz

38AUD28/40RUA28			AMBIENT TEMPERATURE (°F)																
			85			95			105			115			125				
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)				
			75	80	85	75	80	85	75	80	85	75	80	85	75	80	85		
			7500 cfm	EA (wb)	58	TC	212.8	212.8	233.6	202.5	202.5	226.1	193.5	193.5	213.4	161.0	161.0	204.5	169.2
SHC	180.7	207.2			233.6	174.4	200.2	226.1	165.3	189.3	213.4	157.5	161.0	204.5	147.3	169.2	191.2		
62	TC	224.6			224.6	224.6	211.7	211.7	212.5	199.3	199.3	205.9	187.0	187.0	194.9	173.0	173.0	185.7	
SHC	183.9	192.8			221.7	156.0	184.2	212.5	149.7	177.8	205.9	141.2	168.0	194.9	133.3	159.5	185.7		
67	TC	246.8			246.8	246.8	233.3	233.3	233.3	219.0	219.0	219.0	203.6	203.6	203.6	187.5	187.5	187.5	
SHC	135.4	164.2			192.9	129.8	156.7	187.5	124.0	153.0	182.0	117.8	146.8	175.9	111.4	140.5	169.6		
72	TC	270.1		270.1	270.1	255.9	255.9	255.9	240.8	240.8	240.8	224.0	224.0	224.0	206.4	206.4	206.4		
SHC	106.1	133.7		161.2	100.6	126.6	156.6	94.8	123.1	151.5	88.6	117.2	145.8	82.2	111.0	139.7			
76	TC	—		290.6	290.6	—	275.3	275.3	—	259.3	259.3	—	242.1	242.1	—	222.8	222.8		
SHC	—	109.1		143.4	—	104	132.7	—	98.3	127.7	—	93.1	122.9	—	87.2	114.7			
8750 cfm	EA (wb)	58		TC	226.1	226.1	251.9	214.8	214.8	242.7	203.7	203.7	230.1	191.8	191.8	216.7	178.6	178.6	201.8
		SHC		194.7	223.3	251.9	186.9	214.8	242.7	177.2	203.7	230.1	166.9	191.8	216.7	155.5	178.6	201.8	
		62	TC	232.8	232.8	239.5	220.4	220.4	233.3	208.2	208.2	223.3	194.5	194.5	213.4	179.7	179.7	203.2	
		SHC	174.1	205.8	239.5	168.2	200.8	233.3	160.3	191.8	223.3	152.0	182.7	213.4	143.8	173.5	203.2		
		67	TC	254.7	254.7	254.7	240.7	240.7	240.7	225.7	225.7	225.7	209.8	209.8	209.8	192.6	192.6	192.6	
		SHC	144.1	178.1	212	138.5	172.5	206.6	132.6	166.6	200.7	126.4	160.5	194.5	119.3	153.2	187.1		
	72	TC	278.9	278.9	278.9	263.4	263.4	263.4	247.3	247.3	247.3	230.1	230.1	230.1	211.9	211.9	211.9		
	SHC	109.3	142.5	175.6	103.6	137.0	170.4	97.7	131.4	165.0	91.6	125.4	159.2	85.3	119.1	152.0			
	76	TC	—	299.1	299.1	—	283.7	283.7	—	266.5	266.5	—	248	248	—	226.1	226.1		
	SHC	—	112.4	146.7	—	108.2	143.1	—	102.9	134.4	—	97.2	129.9	—	91.0	124.4			
	10000 cfm	EA (wb)	58	TC	235.6	235.6	266.2	224.8	224.8	254	213.1	213.1	240.7	200.3	200.3	226.4	186.5	186.5	210.7
			SHC	205.0	235.8	266.2	195.6	224.8	254	185.4	213.1	240.7	174.3	200.3	226.4	162.3	186.5	210.7	
62			TC	241.0	241.0	256.2	228.1	228.1	250.6	214.6	214.6	241.7	200.9	200.9	232.0	186.7	186.7	218.8	
SHC			184.2	220.2	256.2	178.6	214.6	250.6	171.3	206.5	241.7	163.8	197.9	232.0	154.4	186.6	218.8		
67			TC	260.8	260.8	260.8	246.6	246.6	246.6	230.9	230.9	230.9	213.7	213.7	213.7	196.3	196.3	202.2	
SHC			152.3	191.2	230.1	146.7	185.7	224.6	140.8	179.7	218.7	133.7	172.5	211.3	126.0	164.1	202.2		
72		TC	284.5	284.5	284.5	269.1	269.1	269.1	252.3	252.3	252.3	234.9	234.9	234.9	215.6	215.6	215.6		
SHC		111.8	150.1	188.5	106.3	144.8	183.3	100.4	139.1	177.7	94.4	133.1	171.8	87.8	126.6	165.4			
76		TC	—	305.1	305.1	—	289.3	289.3	—	271.6	271.6	—	252.4	252.4	—	232.0	232.0		
SHC		—	116.6	151.0	—	111.9	148.7	—	106.5	144.1	—	100.6	136.6	—	94.3	132.8			
11250 cfm		EA (wb)	58	TC	244.4	244.4	276.1	232.9	232.9	263.1	220.4	220.4	249.0	207.0	207.0	233.9	192.5	192.5	217.5
			SHC	212.6	244.4	276.1	202.6	232.9	263.1	191.8	220.4	249.0	180.1	207.0	233.9	167.5	192.5	217.5	
	62		TC	246.6	246.6	277.7	234.0	234.0	269.3	221.1	221.1	256.6	207.2	207.2	241.9	192.6	192.6	225.9	
	SHC		197.0	237.3	277.7	190.3	229.8	269.3	181.4	219.0	256.6	170.8	208.3	241.9	159.3	192.6	225.9		
	67		TC	265.5	265.5	265.5	250.5	250.5	250.5	234.2	234.2	234.9	217.5	217.5	226.4	200.1	200.1	213.8	
	SHC		160.0	203.7	247.4	154.4	196.1	241.8	147.8	191.4	234.9	140.4	183.4	226.4	131.0	172.4	213.8		
	72	TC	289.3	289.3	289.3	273.3	273.3	273.3	256.2	256.2	256.2	238.2	238.2	238.2	218.6	218.6	218.6		
	SHC	114.1	157.4	200.6	108.6	152.0	195.3	102.8	146.2	189.7	96.8	140.2	183.7	90.3	133.7	177.1			
	76	TC	—	310.5	310.5	—	293.3	293.3	—	274.9	274.9	—	255.3	255.3	—	234.9	234.9		
	SHC	—	120.2	161.7	—	114.9	157.2	—	109.3	152.1	—	103.4	146.5	—	97.1	140.4			
	12500 cfm	EA (wb)	58	TC	251.7	251.7	284.4	239.7	239.7	270.9	226.8	226.8	256.3	213.0	213.0	240.7	197.8	197.8	223.5
			SHC	219	251.7	284.4	208.6	239.7	270.9	197.4	226.8	256.3	185.4	213.0	240.7	172.1	197.8	223.5	
62			TC	253.3	253.3	289.5	240.9	240.9	276.7	228.3	228.3	260.4	213.1	213.1	249.9	197.7	197.7	231.8	
SHC			205.5	247.5	289.5	197.2	237.9	276.7	184.9	222.6	260.4	176.3	213.1	249.9	163.5	197.7	231.8		
67			TC	269.7	269.7	269.7	253.6	253.6	257.4	237.5	237.5	249.7	220.4	220.4	237.9	203.6	203.6	224.0	
SHC			167.6	216.0	264.3	161.2	209.3	257.4	154.3	202.0	249.7	145.3	191.6	237.9	135.7	179.9	224.0		
72		TC	293.0	293.0	293.0	276.8	276.8	276.8	259.2	259.2	259.2	241.3	241.3	241.3	220.8	220.8	220.8		
SHC		116.2	164.1	212.1	110.7	158.8	206.8	105.0	153.0	201.1	99.0	147.0	195.1	92.4	140.3	188.2			
76		TC	—	313.8	313.8	—	296.8	296.8	—	278.4	278.4	—	258.4	258.4	—	237.3	237.3		
SHC		—	122.7	169.5	—	117.6	164.9	—	112.0	159.7	—	106	153.9	—	99.5	147.4			

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



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Performance data (cont)



38AUD28/40RUA28 Stage 1 Combination Ratings — 60 Hz

38AUD28/40RUA28			AMBIENT TEMPERATURE (°F)																	
			85			95			105			115			125					
			EA (db)			EA (db)			EA (db)			EA (db)			EA (db)					
Capacity	Type	Condition	75	80	85	75	80	85	75	80	85	75	80	85	75	80	85			
			7500 cfm	EA (wb)	58	TC	91.8	91.8	106	92.3	92.3	107.0	90.8	90.8	109.9	92.4	92.4	105.4	90.7	90.7
	SHC	70.1	88.0		106	70.6	88.8	107.0	71.3	90.6	109.9	70.0	87.7	105.4	71.3	90.7	110.1			
	62	TC	91.0		91.0	101.0	91.0	91.0	100.9	91.0	91.0	101.1	91.0	91.0	100.9	91.0	91.0	101.0		
	SHC	54.7	77.9		101.0	54.7	77.8	100.9	54.7	77.9	101.1	54.7	77.8	100.9	54.7	77.9	101.0			
	67	TC	99.7		99.7	89.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.7	99.8	99.8		
	SHC	42.2	84.9		87.5	42.2	84.9	87.5	42.3	84.9	87.6	42.3	85.0	87.7	42.3	85.0	87.7			
	72	TC	109.2		109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2		
	SHC	31.2	52.0		72.7	31.2	52.0	72.7	31.2	51.9	72.6	31.2	52.0	72.7	31.2	52.0	72.7			
	76	TC	—		117.3	117.3	—	117.3	117.3	—	117.3	117.3	—	117.3	117.3	—	117.3	117.3		
	SHC	—	41.7		76.1	—	41.7	76.1	—	41.7	76.1	—	41.7	76.1	—	41.7	76.1			
8750 cfm	EA (wb)	58	TC		96.3	96.3	116.2	96.3	96.3	116.2	96.3	96.3	116.2	96.3	96.3	116.2	96.3	96.3	116.2	
		SHC	76.5		96.3	116.2	76.5	96.3	116.2	76.4	96.3	116.2	76.4	96.3	116.2	76.5	96.3	116.2		
		62	TC	95.8	95.6	115.2	95.5	95.5	115.2	95.5	95.5	115.3	95.6	95.6	115.2	95.6	95.6	115.2		
		SHC	63.0	89.1	115.2	63.0	89.1	115.2	63.0	89.1	115.3	62.9	89.1	115.2	63.0	89.1	115.2			
		67	TC	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1	103.1		
		SHC	44.5	71.0	97.5	44.6	71	97.5	44.6	71.1	97.6	44.5	71.1	97.7	44.6	71.1	97.6			
		72	TC	112.7	112.7	112.7	112.7	112.7	112.7	112.7	112.7	112.7	112.7	112.7	112.7	112.7	112.7	112.7		
		SHC	30.1	55.7	81.3	30.1	55.7	81.3	30.1	55.7	81.3	30.1	55.7	81.3	30.1	55.7	81.3			
		76	TC	—	120.7	120.7	—	120.7	120.7	—	120.7	120.7	—	120.7	120.7	—	120.7	120.7		
		SHC	—	42.5	83.8	—	42.5	83.8	—	42.5	83.8	—	42.5	83.8	—	42.5	83.8			
		10000 cfm	EA (wb)	58	TC	100.5	100.5	120.6	100.5	100.5	120.7	100.4	100.4	120.6	100.4	100.4	120.6	100.4	100.4	120.6
				SHC	80.3	100.5	120.6	80.3	100.5	120.7	80.3	100.4	120.6	80.3	100.4	120.6	80.3	100.4	120.6	
62	TC			100.7	100.7	126.7	101.9	101.9	120.2	101.2	101.2	122.8	102.8	102.8	122.3	101.1	101.1	123.9		
SHC	73.5			100.1	126.7	71.3	95.8	120.2	72.2	97.5	122.8	72.3	97.3	122.3	72.5	98.2	123.9			
67	TC			105.8	105.8	107.2	105.8	105.8	107.2	105.8	105.8	107.2	105.8	105.8	107.2	105.9	105.9	107.2		
SHC	47.3			77.3	107.2	47.2	77.2	107.2	47.3	77.2	107.2	47.2	77.2	107.2	47.3	77.2	107.2			
72	TC			115.2	115.2	115.2	115.4	115.4	115.4	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2		
SHC	29.7			59.2	88.6	29.7	59.2	88.6	29.7	59.2	88.6	29.7	59.2	88.6	29.7	59.1	88.6			
76	TC			—	122.9	122.9	—	123.0	123.0	—	122.9	122.9	—	122.9	122.9	—	123.0	123.0		
SHC	—			43.9	89.4	—	43.9	89.3	—	43.9	89.4	—	43.9	89.4	—	43.9	89.3			
11250 cfm	EA (wb)			58	TC	103.7	103.7	124.0	103.8	103.8	124.2	103.8	103.8	124.1	103.7	103.7	124.1	103.7	103.7	124.1
				SHC	83.4	103.7	124.0	83.5	103.8	124.2	83.4	103.8	124.1	83.4	103.7	124.1	83.4	103.7	124.1	
		62	TC	106.0	106.0	122.6	103.8	103.8	130.8	103.8	103.8	130.9	103.8	103.8	130.9	103.8	103.8	130.9		
		SHC	74.0	98.3	122.6	76.7	103.8	130.8	76.8	103.8	130.9	76.8	103.8	130.9	76.8	103.8	130.9			
		67	TC	107.8	107.8	114.6	107.8	107.8	115	107.9	107.9	116.6	107.8	107.8	116.3	107.9	107.9	116.5		
		SHC	50.1	82.4	114.6	50.2	82.6	115	50.6	83.6	116.6	50.6	83.4	116.3	50.6	83.5	116.5			
		72	TC	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3	117.3		
		SHC	29.3	62.2	95.0	29.3	62.2	95.0	29.3	62.2	95.0	29.3	62.2	95.0	29.3	62.2	95.0			
		76	TC	—	124.9	124.9	—	125.0	125.0	—	124.9	124.9	—	124.9	124.9	—	124.9	124.9		
		SHC	—	44.6	75.7	—	44.6	75.5	—	44.6	75.7	—	44.6	75.7	—	44.6	75.7			
		12500 cfm	EA (wb)	58	TC	106.5	106.5	126.9	106.5	106.5	126.9	106.6	106.6	127.1	106.6	106.6	127.1	106.5	106.5	127.0
				SHC	86.0	106.5	126.9	86.0	106.5	126.9	86.1	106.6	127.1	86.1	106.6	127.1	86.1	106.5	127.0	
62	TC			107.8	107.8	125.6	106.7	106.7	133.9	106.5	106.5	133.8	106.7	106.7	133.9	106.6	106.6	133.8		
SHC	76.2			100.9	125.6	79.4	106.7	133.9	79.3	106.5	133.8	79.4	106.7	133.9	79.3	106.6	133.8			
67	TC			109.7	109.7	125.6	109.7	109.7	125.7	109.7	109.7	125.7	109.7	109.7	125.8	109.7	109.7	125.6		
SHC	53.9			89.7	125.6	54.0	89.8	125.7	54.0	89.8	125.7	54.0	89.9	125.8	54.0	89.8	125.6			
72	TC			118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8	118.8		
SHC	28.8			64.8	100.8	28.8	64.8	100.8	28.8	64.8	100.8	28.8	64.8	100.8	28.8	64.8	100.8			
76	TC			—	126.5	126.5	—	126.6	126.6	—	127.4	127.4	—	126.6	126.6	—	126.5	126.5		
SHC	—			44.7	80.0	—	44.7	80.0	—	45	80.2	—	44.7	80.0	—	44.7	80.0			

LEGEND

- db — dry bulb
- EA — Entering Air Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h) gross
- TC — Total Capacity (1000 Btu/h) gross
- wb — wet bulb



EL

38AUZ 07-14 without Powered Convenience Outlet

UNIT SIZE	NUMBER OF STAGES	V-Ph-Hz	VOLTAGE RANGE		COMPRESSOR NO. 1		COMPRESSOR NO. 2		OFM		POWER SUPPLY		DISCONNECT SIZE	
			Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Breaker	FLA	LRA
07	2	208/230-3-60	187	253	17.5	136	—	—	2	1.5	25/25	30/30	24/24	142/142
		460-3-60	414	506	8.4	66	—	—	2	0.8	13	20	12	70
		575-3-60	518	633	6.3	55	—	—	2	0.7	10	15	9	59
08	2	208/230-3-60	187	253	26.8	164	—	—	2	1.5	37/37	60/60	34/34	170/170
		460-3-60	414	506	12.8	100	—	—	2	0.8	18	25	16	104
		575-3-60	518	633	9.9	78	—	—	2	0.7	14	20	13	82
12	2	208/230-3-60	187	253	33.2	240	—	—	2	1.5	45/45	60/60	42/42	246/246
		460-3-60	414	506	15.1	130	—	—	2	0.8	21	30	19	134
		575-3-60	518	633	11.4	94	—	—	2	0.7	16	25	15	98
14	2	208/230-3-60	187	253	19.6	136	19.6	136	2	1.5	48/48	60/60	49/49	278/278
		460-3-60	414	506	8.2	66	8.2	66	2	0.8	21	25	21	136
		575-3-60	518	633	6.6	55	6.6	55	2	0.7	17	20	17	114

38AUZ 07-14 with Powered Convenience Outlet

UNIT SIZE	NUMBER OF STAGES	V-Ph-Hz	VOLTAGE RANGE		COMPRESSOR NO. 1		COMPRESSOR NO. 2		OFM		POWER SUPPLY		DISCONNECT SIZE	
			Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Breaker	FLA	LRA
07	2	208/230-3-60	187	253	17.5	136	—	—	2	1.5	30/30	45/45	29/29	147/147
		460-3-60	414	506	8.4	66	—	—	2	0.8	15	20	14	72
		575-3-60	518	633	6.3	55	—	—	2	0.7	11	15	11	61
08	2	208/230-3-60	187	253	26.8	164	—	—	2	1.5	42/42	60/60	40/40	175/175
		460-3-60	414	506	12.6	100	—	—	2	0.8	20	30	19	106
		575-3-60	518	633	9.9	78	—	—	2	0.7	16	25	15	84
12	2	208/230-3-60	187	253	33.2	240	—	—	2	1.5	50/50	60/60	47/47	251/251
		460-3-60	414	506	15.1	130	—	—	2	0.8	23	30	22	136
		575-3-60	518	633	11.4	94	—	—	2	0.7	18	25	17	100
14	2	208/230-3-60	187	253	19.6	136	19.6	136	2	1.5	52/52	60/60	54/54	283/283
		460-3-60	414	506	8.2	66	8.2	66	2	0.8	23	30	23	138
		575-3-60	518	633	6.6	55	6.6	55	2	0.7	18	20	19	116

LEGEND

- FLA — Full Load Amps
- LRA — Locked Rotor Amps
- OFM — Outdoor Fan Motor



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Electrical data (cont)



38AUZ 16, 25 without Powered Convenience Outlet

UNIT SIZE	NUMBER OF STAGES	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR No. 1		COMPRESSOR No. 2		OFM		POWER SUPPLY		DISCONNECT SIZE	
			V-Ph-Hz	Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Brkr	FLA
16	2	208/230-3-60	187	253	25.0	164	25.0	164	3	1.5	60.8/60.8	80/80	63/63	337/337
	2	460-3-60	414	506	12.2	100	12.2	100	3	0.8	29.9	40	31	206
	2	575-3-60	518	633	9.0	78	9.0	78	3	0.7	22.4	30	23	162
25	2	208/230-3-60	187	253	30.1	225	30.1	225	4	1.5	73.7/73.7	100/100	76/76	462/462
	2	460-3-60	414	506	16.7	114	16.7	114	4	0.8	40.8	50	42	236
	2	575-3-60	518	633	12.2	80	12.2	80	4	0.7	30.3	40	31	168

38AUZ 16, 25 with Powered Convenience Outlet

UNIT SIZE	NUMBER OF STAGES	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR No. 1		COMPRESSOR No. 2		OFM		POWER SUPPLY		DISCONNECT SIZE	
			V-Ph-Hz	Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Brkr	FLA
16	2	208/230-3-60	187	253	25.0	164	25.0	164	3	1.5	65.6/65.6	90/90	68/68	342/342
	2	460-3-60	414	506	12.2	100	12.2	100	3	0.8	32.1	40	33	208
	2	575-3-60	518	633	9.0	78	9.0	78	3	0.7	24.1	30	25	164
25	2	208/230-3-60	187	253	30.1	225	30.1	225	4	1.5	78.5/78.5	100/100	82/82	467/467
	2	460-3-60	414	506	16.7	114	16.7	114	4	0.8	43	50	45	238
	2	575-3-60	518	633	12.2	80	12.2	80	4	0.7	32	40	33	170

38AUD 12-14 without Powered Convenience Outlet

UNIT SIZE	NUMBER OF STAGES	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR No. 1		COMPRESSOR No. 2		OFM		POWER SUPPLY		DISCONNECT SIZE	
			V-Ph-Hz	Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Brkr	FLA
12	3	208/230-3-60	187	253	16.4	110	15.6	110	2	1.5	40/40	50/50	40/40	226/226
	3	460-3-60	414	506	6.8	55	7.7	52	2	0.8	18	25	19	111
	3	575-3-60	518	633	6.4	48	5.8	39	2	0.7	16	20	16	91
14	3	208/230-3-60	187	253	17.5	136	19.6	136	2	1.5	45/45	60/60	46/46	278/278
	3	460-3-60	414	506	8.4	66	8.2	66	2	0.8	21	25	21	136
	3	575-3-60	518	633	6.6	55	6.6	55	2	0.7	17	20	17	114

38AUD 12-14 with Powered Convenience Outlet

UNIT SIZE	NUMBER OF STAGES	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR No. 1		COMPRESSOR No. 2		OFM		POWER SUPPLY		DISCONNECT SIZE	
			V-Ph-Hz	Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Brkr	FLA
12	3	208/230-3-60	187	253	16.4	110	15.6	110	2	1.5	44/44	60/60	46/46	231/231
	3	460-3-60	414	506	6.8	55	7.7	52	2	0.8	21	25	21	113
	3	575-3-60	518	633	6.4	48	5.8	39	2	0.7	17	20	18	93
14	3	208/230-3-60	187	253	17.5	136	19.6	136	2	1.5	50/50	60/60	52/52	283/283
	3	460-3-60	414	506	8.4	66	8.2	66	2	0.8	23	30	23	138
	3	575-3-60	518	633	6.6	55	6.6	55	2	0.7	18	20	19	116

LEGEND

- HACR — Heating, Air Conditioning and Refrigeration
- FLA — Full Load Amps
- LRA — Locked Rotor Amps
- MCA — Minimum Circuit Amps
- OFM — Outdoor Fan Motor
- RLA — Rated Load Amps



Electrical data (cont)



38AUD 16-28 without Powered Convenience Outlet

UNIT SIZE	NUMBER OF STAGES	NOMINAL POWER SUPPLY V-Ph-Hz	VOLTAGE RANGE		COMPRESSOR No. 1		COMPRESSOR No. 2		OFM		POWER SUPPLY		DISCONNECT SIZE	
			Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Brkr	FLA	LRA
16	3	208/230-3-60	187	253	26.8	164	25.0	164	3	1.5	63/63	80/80	65/65	337/337
	3	460-3-60	414	506	12.0	94	12.2	100	3	0.8	26.7	40	31	200
	3	575-3-60	518	633	9.0	65	9.9	78	3	0.7	23.5	30	24	149
25	3	208/230-3-60	187	253	32.5	240	28.2	240	4	1.5	74.8/74.8	100/100	77/77	492/492
	3	460-3-60	414	506	14.8	130	14.7	130	4	0.8	36.4	50	38	268
	3	575-3-60	518	633	11.1	94	11.3	94	4	0.7	28	35	29	196
28	3	208/230-3-60	187	253	35.3	240	48.4	245	4	1.5	101.8/101.8	150/150	103/103	497/497
	3	460-3-60	414	506	17.0	140	19.0	125	4	0.8	44	60	45	273
	3	575-3-60	518	633	13.0	108	16.0	100	4	0.7	35.8	50	37	218

38AUD 16-28 with Powered Convenience Outlet

UNIT SIZE	NUMBER OF STAGES	NOMINAL POWER SUPPLY V-Ph-Hz	VOLTAGE RANGE		COMPRESSOR No. 1		COMPRESSOR No. 2		OFM		POWER SUPPLY		DISCONNECT SIZE	
			Min	Max	RLA	LRA	RLA	LRA	Qty	FLA (ea)	MCA	Fuse or HACR Brkr	FLA	LRA
16	3	208/230-3-60	187	253	26.8	164	25.0	164	3	1.5	67.8/67.8	90/90	70/70	342/342
	3	460-3-60	414	506	12.0	94	12.2	100	3	0.8	31.9	40	33	202
	3	575-3-60	518	633	9.0	65	9.8	78	3	0.7	25.2	30	26	151
25	3	208/230-3-60	187	253	32.5	240	28.2	240	4	1.5	79.6/79.6	100/100	82/82	497/497
	3	460-3-60	414	506	14.8	130	14.7	130	4	0.8	38.6	50	40	270
	3	575-3-60	518	633	11.1	94	11.3	94	4	0.7	29.7	40	31	198
28	3	208/230-3-60	187	253	35.3	240	48.4	245	4	1.5	106.6/106.6	150/150	109/109	502/502
	3	460-3-60	414	506	17.0	140	19.0	125	4	0.8	46.2	60	48	275
	3	575-3-60	518	633	13.0	108	16.0	100	4	0.7	37.5	50	39	218

LEGEND

- HACR — Heating, Air Conditioning and Refrigeration
- FLA — Full Load Amps
- LRA — Locked Rotor Amps
- MCA — Minimum Circuit Amps
- OFM — Outdoor Fan Motor
- RLA — Rated Load Amps



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Application data



Operating Limits

- Maximum outdoor temperature..... 125°F
- Minimum return-air temperature (40RFA/RUA)..... 55°F
- Maximum return-air temperature (40RFA/RUA)..... 95°F
- Range of acceptable saturation suction temperature..... 20 to 50°F
- Maximum discharge temperature..... 275°F
- Minimum discharge superheat..... 60°F

1. Select air handler at no less than 300 cfm/ton (nominal condensing unit capacity).
2. Total combined draw of the field-supplied liquid line solenoid valve and air handler fan contactor must not exceed 22 va. If the specified va must be exceeded, use a remote relay to control the load.

Minimum Outdoor-Air Operating Temperature

UNIT 38AU	MAXIMUM OUTDOOR TEMP (°F)	
	Std	With Low Ambient Control ^a
Z07	35	-20
Z08	35	
D12	35	
D14	35	
D16	35	
D25	35	
D28	35	

NOTE(S):

- a. Wind baffles (field-supplied and field-installed) are recommended for all units with low ambient control. Refer to Low Ambient Temperature Control Installation Instructions for additional information.

Refrigerant Piping

IMPORTANT: Do not bury refrigerant piping underground.

It is recommended that the refrigerant piping for all commercial split systems include a liquid line solenoid valve, a liquid line filter drier and a sight glass.

For refrigerant lines longer than 75 lineal ft, a liquid line solenoid valve installed at the indoor unit and a suction accumulator are required. Refer to the Refrigerant Specialties Part Numbers table.

Refrigerant Specialties Part Numbers

LIQUID LINE SIZE (in.)	LIQUID LINE SOLENOID VALVE (LLSV)	LLSV COIL	SIGHT GLASS
3/8	EF680033	EF680037	KM680008
1/2	EF680035	EF680037	KM680004
5/8	EF680036	EF680037	KM680005



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Guide specifications



Commercial Air-Cooled Condensing Units HVAC Guide Specifications

Size Range: **6 to 25 Tons**

Carrier Model Numbers: **38AUZ, Single Circuit (07-25 Models) 38AUD, Dual Circuit (12-28 Models)**

Part 1 — GENERAL

1.01 SYSTEM DESCRIPTION

Outdoor-mounted, air-cooled condensing unit suitable for on-the-ground or rooftop installation. Unit shall consist of a hermetic scroll air-conditioning compressor(s) assembly, an air-cooled coil, propeller-type condenser fans, and a control box. Unit shall discharge supply air upward as shown on contract drawings. Unit shall be used in a refrigeration circuit matched with a packaged air-handling unit.

1.02 QUALITY ASSURANCE

- A. Unit shall be rated in accordance with AHRI Standard 340/360.
- B. Unit construction shall comply with ANSI/ASHRAE 15 safety code latest revision and comply with NEC.
- C. Unit shall be constructed in accordance with UL 1995 standard and shall carry the UL and UL, Canada label.
- D. Unit cabinet shall be capable of withstanding 500-hour salt spray exposure per ASTM B117 (scribed specimen).
- E. Air-cooled condenser coils for hermetic scroll compressor units 38AUZ and 38AUD shall be leak tested at 150 psig, and pressure tested at 650 psig.
- F. Unit shall be manufactured in a facility registered to ISO 9001:2015 manufacturing quality standard.

1.03 DELIVERY, STORAGE, AND HANDLING

Unit shall be shipped as single package only, and shall be stored and handled according to unit manufacturer's recommendations.

1.04 WARRANTY (FOR INCLUSION BY SPECIFYING ENGINEER.)

Part 2 — PRODUCTS

2.01 EQUIPMENT

- A. General:
Factory-assembled, single piece, air-cooled condensing unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, compressor, holding charge, and special features required prior to field start-up.
- B. Unit Cabinet:
 1. Unit cabinet shall be constructed of galvanized steel, bonderized and coated with a prepainted baked enamel finish.
 2. A heavy-gauge roll-formed perimeter base rail with forklift slots and lifting holes shall be provided to facilitate rigging.

- C. Condenser Fans:
 1. Condenser fans shall be direct driven, propeller type, discharging air vertically upward.
 2. Fan blades shall be balanced.
 3. Condenser fan discharge openings shall be equipped with PVC-coated steel wire safety guards.
 4. Condenser fan and motor shaft shall be corrosion resistant.
- D. Compressor:
 1. Compressor shall be of the hermetic scroll type.
 2. Compressor shall be mounted on rubber grommets.
 3. Compressors shall include overload protection.
 4. Compressors shall be equipped with a crankcase heater.
 5. Compressor shall be equipped with internal high pressure and high temperature protection.
- E. Condenser Coils:
 1. Standard Aluminum fin - Copper Tube Coils:
 - a. Standard evaporator and condenser coils shall have aluminum lanced plate fins mechanically bonded to seamless internally grooved copper tubes with all joints brazed.
 - b. Evaporator coils shall be leak tested to 150 psig, pressure tested to 450 psig, and qualified to UL 1995 burst test at 1775 psig.
 - c. Condenser coils shall be leak tested to 150 psig, pressure tested to 650 psig, and qualified to UL 1995 burst test at 1980 psig.
 2. Optional copper-fin evaporator and condenser coils:
 - a. Shall be constructed of copper fins mechanically bonded to copper tubes and copper tube sheets.
 - b. Galvanized steel tube sheets shall not be acceptable.
 - c. A polymer strip shall prevent coil assembly from contacting the sheet metal coil pan to minimize potential for galvanic corrosion between coil and pan.
 3. Optional e-coated aluminum-fin evaporator and condenser coils:
 - a. Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins.
 - b. Coating process shall ensure complete coil encapsulation of tubes, fins and headers.
 - c. Color shall be high gloss black with gloss per ASTM D523-89.
 - d. Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges.



EF

Guide specifications (cont)

Carrier

- e. Superior hardness characteristics of 2H per ASTM D3363-92A and cross-hatch adhesion of 4B-5B per ASTM D3359-93.
 - f. Impact resistance shall be up to 160 in.-lb (ASTM D2794-93).
 - g. Humidity and water immersion resistance shall be up to minimum 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870-92).
 - h. Corrosion durability shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117-90.
4. Optional e-coated aluminum-fin, aluminum tube condenser coils:
- a. Shall have a flexible epoxy polymer coating uniformly applied to all coil external surface areas without material bridging between fins or louvers.
 - b. Coating process shall ensure complete coil encapsulation, including all exposed fin edges.
 - c. E-coat thickness of 0.8 to 1.2 mil with top coat having a uniform dry film thickness from 1.0 to 2.0 mil on all external coil surface areas, including fin edges, shall be provided.
 - d. Shall have superior hardness characteristics of 2H per ASTM D3363-00 and crosshatch adhesion of 4B-5B per ASTM D3359-02.
 - e. Shall have superior impact resistance with no cracking, chipping or peeling per NSF/ANSI 51-2002 Method 10.2.

F. Refrigeration Components:

Refrigeration circuit components shall include liquid line service valve, suction line service valve, a full charge of compressor oil, and a partial holding charge of refrigerant.

G. Controls and Safeties:

1. Minimum control functions shall include:
 - a. Control wire terminal blocks.
 - b. Compressor lockout on auto-reset safety until reset from thermostat.
 - c. Each unit shall utilize the Comfort Alert™ Diagnostic Board that provides:
 - 1) System Pressure Trip fault code indication
 - 2) Short Cycling fault code indication
 - 3) Locked Rotor fault code indication
 - 4) Open Circuit fault code indication
 - 5) Reverse Phase 3 fault code indication
 - 6) Welded Contactor fault code indication
 - 7) Low Voltage fault code indication
 - 8) Anti-short cycle protection
 - 9) Phase reversal protection

- d. Minimum safety devices which are equipped with automatic reset (after resetting first at thermostat), shall include:

- 1) High discharge pressure cutout.
- 2) Low pressure cutout.

H. Operating Characteristics:

1. The capacity of the condensing unit shall meet or exceed _____ Btuh at a suction temperature of _____ °F/C. The power consumption at full load shall not exceed _____ kW.
2. The combination of the condensing unit and the evaporator or fan coil unit shall have a total net cooling capacity of _____ Btuh or greater at conditions of _____ cfm entering-air temperature at the evaporator at _____ °F/C wet bulb and _____ °F/C dry bulb, and air entering the condensing unit at _____ °F/C.
3. The system shall have an EER of _____ Btuh/Watt or greater at standard AHRI conditions.
4. Standard unit shall be capable to operate up to 125°F (52°C) and down to 40°F (4°C)

I. Electrical Requirements:

1. Nominal unit electrical characteristics shall be _____ v, 3-ph, _____ Hz. The unit shall be capable of satisfactory operation within voltage limits of _____ v to _____ v.
2. Unit electrical power shall be single-point connection.
3. Unit control circuit shall contain a 24-v transformer for unit control.

J. Special Features:

1. Low-Ambient Temperature Control:

A low-ambient temperature control shall be available as a factory-installed option or as a field-installed accessory. This low-ambient control shall regulate speed of the condenser-fan motors in response to the saturated condensing temperature of the unit. The control shall maintain correct condensing pressure at outdoor temperatures down to -20°F (-29°C).
2. Unit-Mounted, Non-Fused Disconnect Switch:

Switch shall be factory-installed and internally mounted. NEC and UL-approved non-fused switch shall provide unit power shutoff. Switch shall be accessible from outside the unit and shall provide power off lockout capability. Non-fused disconnect cannot be used when unit MOCP electrical rating exceeds 80 amps.
3. Thermostat Controls:
 - a. Programmable multi-stage thermostat shall have 7-day clock, holiday scheduling, large backlit display, re-mote sensor capability, and Title 24 compliance.



EL

Guide specifications (cont)



- b. Commercial Electronic Thermostat shall have 7-day time clock, auto-changeover, multi-stage capability, and large LCD (liquid crystal display) temperature display.
- 4. **Lowered Hail Guard Package:**
Lowered hail guard package shall protect coils against damage from hail and other flying debris.
- 5. **Condenser Coil Grille:**
Grille shall add decorative appearance to unit and protect condenser coil from large objects and vandalism.



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Product Data

Packaged Air-Handling Units

6-30 Nominal Tons, 60 Hz

ecoblue™  technology



40RFA 07-12 (Direct Expansion)
40RFS 08-12 (Chilled Water)
40RUA 14-30 (Direct Expansion)
40RUS 14-30 (Chilled Water)
Packaged Air Handling Units with Puron®
Refrigerant



EL

Features/Benefits

40RF/40RU Series air-handling units are the best choice for packaged air handlers. Model 40RFA/40RUA units have direct-expansion coils. 40RFS/40RUS units are chilled water packaged air handling units. Additionally, 40RF units come with EcoBlue™ Fan Technology. All models offer excellent fan performance, a unique combination of indoor air quality features, and easy installation. Their versatility and state-of-the-art features provides economical performance.

Carrier's easy-to install and economical 40RF/40RU units provide reliable service and versatile packaged air-handling units satisfy design requirements with:

- Multi-position design for horizontal or vertical installation without modification.
- Standard sloped drain pans and cleanable insulation treated with an immobilized anti-microbial agent to inhibit the growth of bacteria and fungi on the insulation.
- High-static design meets a wider range of applications than competitive packaged air handler lines.
- Ultra Low Leak Economizer accessory provides ventilation air and "free" cooling with built in Fault Detection and Diagnostic (FDD) capabilities.
- Cooling coils with mechanically bonded fins provide peak heat transfer.

- Hot water coil, steam coil, and electric heat accessories are available.
- Standard factory-installed thermostatic expansion valves (TXV) with removable power element on 40RFA/40RUA units.
- Die-formed galvanized steel casings provide durability and structural integrity. Optional paint is available.
- Upgraded unit control board with intuitive indoor fan adjustment.
- Standard Staged Air Volume (SAV™) system.

Indoor air quality features

The unique combination of features in the 40RF/40RU Series air handlers ensures that clean, fresh, conditioned air is delivered to the occupied space.

Cooling coils prevent the build-up of humidity in the room, even during part-load conditions. Unit sizes 10 tons and above feature dual-circuit face-split coils.

2 in. (51 mm) disposable filters remove dust and airborne particles from the occupied space.

Thermal insulation contains an immobilized anti-microbial agent to inhibit the growth of bacteria and fungi on the insulation.

Pitched drain pan can be adjusted for a right-hand or left-hand connection to provide positive drainage and prevent standing condensate.

Economizer accessory precisely controls the blend of outdoor air and room air to achieve comfort levels. When the outside air is suitable, outside air dampers can fully open to provide "free" cooling. Economizer is an Ultra Low Leak design that includes return and outside air damper leakage that meets California Title 24 section

140.4 requirements. Controller meets California Title 24 Section 120.2 Fault Detection and Diagnostic (FDD) requirements.

Economy

The 40RF/40RU Series packaged air handlers have low initial costs, and they continue to save money by providing reduced installation expense and energy-efficient performance.

Quick installation is ensured by the multi-position design. Units can be installed in either the horizontal or vertical (upflow) configuration without modifications. All units have drain-pan connections on both sides, and pans can be pitched for right-hand or left hand operation with a simple adjustment.

Fan motors and contactors are pre-wired and TXVs are factory-installed on 40RF/40RU models.

High-efficiency, precision balanced fans minimize air turbulence, surging, and unbalanced operation, thereby cutting operating expenses.

Rugged dependability

Die-formed galvanized steel panels ensure structural integrity under all operating conditions. Mechanically bonded coil fins provide improved heat transfer.

For 40RU units, galvanized steel fan housings are securely mounted to a die-formed galvanized steel deck.

Rugged pillow-block bearings (40RU sizes 14-30) are securely fastened to the solid steel fan shaft with split collets and clamp locking devices. 40RF units (sizes 07-12) have spider-type bearings.

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EL

Features/Benefits (cont)

Carrier

Coil flexibility

Model 40RF/40RU air handling units have galvanized steel casings; inlet and outlet connections are on the same end.

Chilled water coils have 1/2 in. (12.7 mm) diameter copper tubes mechanically bonded to aluminum sine-wave fins. All chilled water coils have non-ferrous headers.

Direct-expansion (DX) coils are designed for use with Puron® R-410A refrigerant and have copper tubes mechanically bonded to aluminum sine-wave fins.

Direct-expansion coils include matched, factory-installed thermostatic expansion valves (TXVs) with matching distributor nozzles.

Easier installation and service

With the new EcoBlue™ Vane Axial fan system, there is no longer a need to adjust belts or pulleys as in past designs. This frees up maintenance and installation time.

The multi-position design and component layout allow for quick unit installation and operation. The DX coils have factory-installed TXVs with matching distributor nozzles. Units can be converted from horizontal to vertical operation by simply repositioning the unit. There are simple, fast plug-in connections to the standard integrated unit control board (UCB). The UCB has clearly labeled connection points to reduce installation time. Also, a large control box provides room to work and mount Carrier accessory controls.

Drain pan connections are duplicated on both sides of the unit. The filters, motor, drive, TXVs, and coil connections are easily accessed by removing a single side panel.

EcoBlue™ Technology

The direct drive EcoBlue Technology indoor fan system on 40RF units uses a Vane Axial fan design and electronically commutated motors.

This new Vane Axial design over past belt drive systems has 75% fewer moving parts, uses up to 40% less energy and has no fan belts, blower bearings and shaft.

Easy to use

The newly re-designed Unit Control Board by Carrier puts all connections and troubleshooting points in one convenient place. Most low voltage connections are made to the same board and make it easy to access it. Setting up the fan is simple by an intuitive switch and rotary dial arrangement.

Staged Air Volume (SAV™) system

Our SAV units will automatically adjust the indoor fan motor speed in sequence with the unit's cooling operation. Per ASHRAE 90.1 2010 standard section 6.4.3.10.b, during the first stage of cooling operation the fan motor (either ECM or controlled by VFD) will adjust to provide two-thirds of the total cfm established for the unit. When a call for the second stage of cooling is required, the fan motor will allow the total cfm (100%) established for the unit. During the heating mode the fan motor will allow total design cfm (100%) operation and during the ventilation mode the fan motor will allow operation to two-thirds of total cfm.



ef

Model number nomenclature



40RF Model Number Nomenclature

Position:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Example:	4	0	R	F	A	A	1	2	A	2	A	0	-	U	A	0	A	0

Model Type

40RF = Vane Axial Fan Packaged Air-Handling Unit with Puron® (R-410A) Refrigerant

Type of Coil

A = Standard 4 Row DX
S = Chilled Water Coil

Refrigeration Options

A = None

Nominal Tonnage

07 = 6.0 Ton¹
08 = 7.5 Ton¹
10 = 8.5 Ton¹
12 = 10.0 Ton

Fan Motor Speed Controller

A = Two Speed Blower (VAF)

Indoor Fan Motor Options — ECM Motor

2 = Medium Static
3 = High Static

Coil Options

A = Standard Aluminum Fin/Copper Tube

Packaging Compliance

0 = Standard

Future Use

A = Standard

Cabinet Paint

0 = None
1 = Painted

Future Use

A = Standard

Control Box

U = Electro-Mechanical Unit Control Board

Design Revision

- = Factory Design Revision

Voltage

1 = 575-3-60
5 = 208/230-3-60
6 = 460-3-60

¹ 40RFA units only.
¹ 40RFS units only.

40RU Model Number Nomenclature

Position:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Example:	4	0	R	U	A	A	1	4	T	1	A	6	-	U	A	0	A	0

Model Type

40RU = Packaged Air-Handling Unit with Puron® (R-410A) Refrigerant

Type of Coil

A = Standard 4 Row DX
S = Chilled Water Coil

Refrigeration Options

A = None

Nominal Tonnage

14 = 12.5 Ton
16 = 15.0 Ton
25 = 20.0 Ton
26 = 25.0 Ton
30 = 30.0 Ton

Fan Motor Speed Controller

T = 2-Speed Fan Controller (VFD)¹

Indoor Fan Motor Options — Belt Drive

1 = Standard Motor / Standard Drive
2 = Standard/Alemale Motor / Medium Drive
3 = High Motor / High Drive

Coil Options

A = Standard Aluminum Fin/Copper Tube

Packaging Compliance

0 = Standard

Future Use

A = Standard

Cabinet Paint

0 = None
1 = Painted

Future Use

A = Standard

Control Box

U = Electro-Mechanical Unit Control Board

Design Revision

- = Factory Design Revision

Voltage

1 = 575-3-60
5 = 208/230-3-60
6 = 460-3-60

NOTE(S)

¹ 2-Speed indoor fan motor must use dedicated voltage mode listed. The VFD used is not multi voltage.



Model number nomenclature (cont)



40RFA/RFS — 2-Speed Motors

POSITION 10	MOTOR DESCRIPTION	VOLTAGE	UNIT SIZE			
			07 ^a	08	10 ^b	12
2	Standard/Medium Static (EcoBlue™)	All	X	X	X	X
3	High Static (EcoBlue)	All	X	X	X	X

NOTE(S):

- a. Applies to 40RFA model only.
- b. Applies to 40RFS model only.

40RUA/RUS — 2-Speed Motors

POSITION 10	MOTOR DESCRIPTION	VOLTAGE	UNIT SIZE				
			14	16	25	28	30 ^a
1	Std Static, Std Efficiency Motor / Std Drive	All	X	X	—	—	—
	Std Static, High Efficiency Motor / Std Drive	All	—	—	X	X	X
2	Std Static, Std Efficiency Motor / Med Drive	All	X	X	—	—	—
		208/230-3-60 460-3-60	—	—	X	—	X
		575-3-60	—	—	X	—	X
	High (Alternate) Static, High Efficiency Motor / Med Drive	208/230-3-60 460-3-60	—	—	—	X	—
		575-3-60	—	—	—	X	—
3	High (Alternate) Static, Std Efficiency Motor / High Drive	208/23-3-60 460-3-60	X	—	—	—	—
		575-3-60	—	—	—	—	X
		208/230-3-60 460-3-60	—	X	X	X	X
	High (Alternate) Static, High Efficiency Motor / High Drive	575-3-60	X	X	X	X	X

NOTE(S):

- a. Size 30 is designated standard motor and high static drive.



EL

40RF/40RU 6-30 Ton Direct Expansion with Puron Refrigerant Units

UNIT	40RFAA07	40RFAA08	40RFAA12	40RUAA14	40RUAA16	40RUAA25	40RUAA28	40RUAA30
NOMINAL CAPACITY (Tons)	6	7-1/2	10	12-1/2	15	20	25	30
OPERATING WEIGHT (lb)								
Base Unit with TXV (4 Row)	399	404	425	665	713	730	1050	1052
Plenum	175	175	175	225	225	225	325	325
Economizer	185	185	185	340	340	340	340	340
Hot Water Coil ^a	195	195	195	285	285	285	345	345
Steam Coil ^a	215	215	215	340	340	340	405	405
FANS								
Qty...Diam. (in.)	1...23	1...23	1...23	2...15	2...15	2...15	2...18	2...18
Nominal Airflow (cfm)	2,400	3,000	4,000	5,000	6,000	8,000	10,000	12,000
Airflow Range (cfm)	1,600-3,000	2,250-3,750	3,000-5,000	3,750-6,250	4,500-7,500	6,000-10,000	7,500-12,500	9,000-15,000
Nominal Motor hp (Standard Motor) ^{b,c}								
208/230-3-60 and 460-3-60	2.4	2.4	2.4	2.9	3.7	5.0	7.5	10.0
575-3-60	2.4	2.4	2.4	3.0	3.0	5.0	7.5	10.0
Motor Speed (rpm)								
208/230-3-60 and 460-3-60	2000	2000	2000	1725	1725	1760	1760	1755
575-3-60	2000	2000	2000	1725	1725	1745	1755	1755
REFRIGERANT^d								
	Puron (R-410A)	Puron (R-410A)	Puron (R-410A)	Puron (R-410A)	Puron (R-410A)	Puron (R-410A)	Puron (R-410A)	Puron (R-410A)
Shipping Charge (lb)	Nitrogen Purge	Nitrogen Purge	Nitrogen Purge	Nitrogen Purge	Nitrogen Purge	Nitrogen Purge	Nitrogen Purge	Nitrogen Purge
Metering Device	TXV	TXV	TXV	TXV	TXV	TXV	TXV	TXV
Operating Charge (lb) (approx per circuit)	3.0	3.0	1.5/1.6	2.0/2.0	2.5/2.5	3.5/3.5	4.5/4.5	5.0/5.0
DIRECT-EXPANSION COIL	Enhanced Copper Tubes, Aluminum Sine-Wave Fins							
Max Working Pressure (psig)	650	650	650	650	650	650	650	650
Material	Al / Cu	Al / Cu	Al / Cu	Al / Cu	Al / Cu	Al / Cu	Al / Cu	Al / Cu
Coil Type	RTPF	RTPF	RTPF	RTPF	RTPF	RTPF	RTPF	RTPF
Face Area (sq ft)	6.67	8.33	10.01	13.25	17.67	19.89	24.86	29.83
No. of Splits	1	1	2	2	2	2	2	2
Split Type...Percentage	---	---	Face...50/50	Face...50/50	Face...50/50	Face...50/50	Face...50/50	Face...50/50
No. of Circuits per Split	12	15	9	12	16	18	20	24
Rows...Fins/in.	4...15	4...15	4...15	4...15	4...15	4...15	4...15	4...15
STEAM COIL^a								
Max Working Press. (psig at 260°F)	20	20	20	20	20	20	20	20
Total Face Area (sq ft)	6.67	6.67	6.67	13.33	13.33	13.33	15.0	15.0
Rows...Fins/in.	1...9	1...9	1...9	1...10	1...10	1...10	1...10	1...10
HOT WATER COIL^a								
Max Working Pressure (psig)	150	150	150	150	150	150	150	150
Total Face Area (sq ft)	6.67	6.67	6.67	13.33	13.33	13.33	15.0	15.0
Rows...Fins/in.	2...8.5	2...8.5	2...8.5	2...8.5	2...8.5	2...8.5	2...12.5	2...12.5
Water Volume (gal) (ft ³)	8.3 (1.1)	8.3 (1.1)	8.3 (1.1)	13.9 (1.85)	13.9 (1.85)	13.9 (1.85)	14.3 (1.90)	14.3 (1.90)
PIPING CONNECTIONS								
Quantity...Size (in.)								
DX Coil — Suction (ODF)	1...1-1/8	1...1-1/8	2...1-1/8	2...1-1/8	2...1-1/8	2...1-1/8	2...1-3/8	2...1-3/8
DX Coil — Liquid Refrig (ODF)	1...5/8	1...5/8	2...5/8	2...5/8	2...5/8	2...5/8	2...5/8	2...5/8
Steam Coil, In (MPT)	1...2-1/2	1...2-1/2	1...2-1/2	1...2-1/2	1...2-1/2	1...2-1/2	1...2-1/2	1...2-1/2
Steam Coil, Out (MPT)	1...1-1/2	1...1-1/2	1...1-1/2	1...1-1/2	1...1-1/2	1...1-1/2	1...1-1/2	1...1-1/2
Hot Water Coil, In (MPT)	1...1-1/2	1...1-1/2	1...1-1/2	1...2	1...2	1...2	1...2	1...2
Hot Water Coil, Out (MPT)	1...1-1/2	1...1-1/2	1...1-1/2	1...2	1...2	1...2	1...2	1...2
Condensate (PVC)	1...5/8 ODM / 1-1/4 IDF	1...5/8 ODM / 1-1/4 IDF	1...5/8 ODM / 1-1/4 IDF	1...5/8 ODM / 1-1/4 IDF	1...5/8 ODM / 1-1/4 IDF	1...5/8 ODM / 1-1/4 IDF	1...5/8 ODM / 1-1/4 IDF	1...5/8 ODM / 1-1/4 IDF
FILTERS								
Quantity...Size (in.)	4...16 x 24 x 2	4...16 x 24 x 2	4...16 x 24 x 2	4...16 x 20 x 2 / 4...16 x 24 x 2	4...16 x 20 x 2 / 4...16 x 24 x 2	4...16 x 20 x 2 / 4...16 x 24 x 2	4...20 x 24 x 2 / 4...20 x 25 x 2	4...20 x 24 x 2 / 4...20 x 25 x 2
Access Location	Right or Left Side	Right or Left Side	Right or Left Side	Right or Left Side	Right or Left Side	Right or Left Side	Right or Left Side	Right or Left Side

NOTE(S):

- a. Field-installed accessory only.
- b. 40RF units are medium static option.
- c. Refer to Alternate Fan Motor Data table for alternate motor data (page 9).
- d. Units are shipped without refrigerant charge.



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40R'S 7.5-30 Ton Chilled Water Units

UNIT	40RFSA08	40RFSA10	40RFSA12	40RUSA14	40RUSA16	40RUSA25	40RUSA28	40RUSA30
NOMINAL CAPACITY (Tons)	7-1/2	8-1/2	10	12-1/2	15	20	25	30
OPERATING WEIGHT (lb)								
Base Unit with TXV (4 Row)	390	391	391	661	677	683	1035	1042
Plenum	175	175	175	225	225	225	325	325
Economizer	185	185	185	340	340	340	450	450
Hot Water Coil ^a	195	195	195	265	285	285	345	345
Steam Coil ^a	215	215	215	340	340	340	405	405
FANS								
Qty...Diam. (in.)	1...23	1...23	1...23	2...15	2...15	2...15	2...16	2...16
Nominal Airflow (cfm)	3,000	3,400	4,000	5,000	6,000	8,000	10,000	12,000
Airflow Range (cfm)	2,250-3,750	2,250-4,250	3,000-5,000	3,750-6,250	4,500-7,500	6,000-10,000	7,500-12,500	9,000-15,000
Nominal Motor hp (Standard Motor) ^{b, c}								
208/230-3-60 and 460-3-60	2.4	2.4	2.4	2.9	3.7	5.0	7.5	10.0
575-3-60	2.4	2.4	2.4	3.0	3.0	5.0	7.5	10.0
Motor Speed (rpm)								
208/230-3-60 and 460-3-60	2000	2000	2000	1725	1725	1745	1745	1745
575-3-60	2000	2000	2000	1725	1725	1745	1755	1755
CHILLED WATER COIL	Enhanced Copper Tubes, Aluminum Sine-Wave Fins							
Max Working Pressure (psig)	435	435	435	435	435	435	435	435
Face Area (sq ft) — Upper	8.3	9.0	9.8	8.3	8.3	11.0	12.4	15.5
Face Area (sq ft) — Lower	—	—	—	5.5	8.3	8.3	12.4	12.4
Rows...Fins/in.	3...15	3...15	3...15	3...15	3...15	3...15	3...15	3...15
Water Volume								
(gal)	3.0	3.3	3.5	4.7	5.6	6.4	8.9	9.9
(ft ³)	0.40	0.47	0.48	0.63	0.75	0.85	1.19	1.32
STEAM COIL^a								
Max Working Pressure (psig at 260°F)	20	20	20	20	20	20	20	20
Total Face Area (sq ft)	6.67	6.67	6.67	13.33	13.33	13.33	15.0	15.0
Rows...Fins/in.	1...9	1...9	1...9	1...10	1...10	1...10	1...10	1...10
HOT WATER COIL^a								
Max Working Press. (in. wg)	150	150	150	150	150	150	150	150
Total Face Area (sq ft)	6.67	6.67	6.67	13.33	13.33	13.33	15.0	15.0
Rows...Fins/in.	2...8.5	2...8.5	2...8.5	2...8.5	2...8.5	2...8.5	2...12.5	2...12.5
Water Volume								
(gal)	8.3	8.3	8.3	13.9	13.9	13.9	14.3	14.3
(ft ³)	1.1	1.1	1.1	1.85	1.85	1.85	1.90	1.90
PIPING CONNECTIONS								
Quantity...Size (in.)								
Chilled Water — In	1...1-3/8 ODF	1...1-3/8 ODF	1...1-3/8 ODF	2...1-3/8 ODM	2...1-3/8 ODM	2...1-3/8 ODM	2...2-1/8 ODM	2...2-1/8 ODM
Chilled Water — Out	1...1-3/8 ODF	1...1-3/8 ODF	1...1-3/8 ODF	2...1-3/8 ODM	2...1-3/8 ODM	2...1-3/8 ODM	2...2-1/8 ODM	2...2-1/8 ODM
Steam Coil, In (MPT)	1...2-1/2	1...2-1/2	1...2-1/2	1...2-1/2	1...2-1/2	1...2-1/2	1...2-1/2	1...2-1/2
Steam Coil, Out (MPT)	1...1-1/2	1...1-1/2	1...1-1/2	1...1-1/2	1...1-1/2	1...1-1/2	1...1-1/2	1...1-1/2
Hot Water Coil, In (MPT)	1...1-1/2	1...1-1/2	1...1-1/2	1...2	1...2	1...2	1...2	1...2
Hot Water Coil, Out (MPT)	1...1-1/2	1...1-1/2	1...1-1/2	1...2	1...2	1...2	1...2	1...2
Condensate (PVC)	1...5/8 ODM / 1 1/4 IDF	1...5/8 ODM / 1 1/4 IDF	1...5/8 ODM / 1 1/4 IDF	1...5/8 ODM / 1 1/4 IDF	1...5/8 ODM / 1 1/4 IDF	1...5/8 ODM / 1 1/4 IDF	1...5/8 ODM / 1 1/4 IDF	1...5/8 ODM / 1 1/4 IDF
FILTERS								
Throwaway — Factory-Supplied	Throwaway — Factory-Supplied	Throwaway — Factory-Supplied	Throwaway — Factory-Supplied	Throwaway — Factory-Supplied	Throwaway — Factory-Supplied	Throwaway — Factory-Supplied	Throwaway — Factory-Supplied	Throwaway — Factory-Supplied
Quantity...Size (in.)	4...16 x 24 x 2	4...16 x 24 x 2	4...16 x 24 x 2	4...16 x 20 x 2 4...16 x 24 x 2	4...16 x 20 x 2 4...16 x 24 x 2	4...16 x 20 x 2 4...16 x 24 x 2	4...20 x 24 x 2 4...20 x 25 x 2	4...20 x 24 x 2 4...20 x 25 x 2
Access Location	Right or Left Side	Right or Left Side	Right or Left Side	Right or Left Side	Right or Left Side	Right or Left Side	Right or Left Side	Right or Left Side

NOTE(S):

- a. Field-installed accessory only.
- b. 40RF units are medium static option.
- c. Refer to Alternate Fan Motor Data table for alternate motor data (page 8).



ef

Physical data (cont)



40RFA/S Fan Motor Data Standard Motor — Direct Drive Two Speed Motor

UNIT	40RFA 07	40RFA/S 08	40RFS 10	40RFA/S 12
230-3-60, 460-3-60, and 575-3-60				
Speed (rpm)	2000	2000	2000	2000
Hp	2.4	2.4	2.4	2.4

Motor Efficiency 40RFA/S — Direct Drive Two Speed Motor

MOTOR hp	MOTOR EFFICIENCY	
2.4	85.0%	
3.0	85.0%	

WEIGHTS	MEDIUM	HIGH
Motor hp	2.4	3.0
Motor Weight (lb)	23.8	53.7
Assembly Weight (lb)	56.4	85.6



Physical data (cont)



40RUA/S Fan Motor Data — Two Speed Standard Motor

UNIT	40RUA/S 14	40RUA/S 16	40RUA/S 25	40RUA/S 28	40RUA/S 30
208/230-3-60 and 460-3-60					
Speed (rpm)	1735	1750	1755	1760	1755
Hp	2.9	3.7	5.0	7.5	10.0
Frame (NEMA)	56HY	56HY	184T	S213T	S215T
Shaft Dia (in.)	7/8	7/8	1-1/8	1-3/8	1-3/8
575-3-60					
Speed (rpm)	1710	1710	1755	1750	1755
Hp	3.7	3.7	5.0	7.5	10.0
Frame (NEMA)	56HY	56HY	184T	S213T	S215T
Shaft Dia (in.)	7/8	7/8	1-1/8	1-3/8	1-3/8

LEGEND

NEMA — National Electrical Manufacturers Association (U.S.A.)

40RUA/S Fan Motor Data — Two Speed Alternate Motor

UNIT	40RUA/S 14	40RUA/S 16	40RUA/S 25	40RUA/S 28	40RUA/S 30
208/230-3-60 and 460-3-60					
Speed (rpm)	1750	1755	1760	1755	1755
Hp	3.7	5.0	7.5	10.0	10.0
Frame (NEMA)	56HY	184T	S213T	S215T	S215T
Shaft Dia (in.)	7/8	1-1/8	1-3/8	1-3/8	1-3/8
575-3-60					
Speed (rpm)	1755	1755	1750	1755	1755
Hp	5.0	5.0	7.5	10.0	10.0
Frame (NEMA)	184T	184T	S213T	S213T	S215T
Shaft Dia (in.)	1-1/8	1-1/8	1-3/8	1-3/8	1-3/8

LEGEND

NEMA — National Electrical Manufacturers Association (U.S.A.)

Motor Efficiency 40RUA/S — Two Speed Motor

MOTOR hp	EPACT MINIMUM	MOTOR EFFICIENCY
2.9	—	86.5%
3.7	—	83.6%
5.0	89.5%	89.5%
7.5	91.7%	91.7%
10.0	91.7%	91.7%

LEGEND

EPACT — Energy Policy and Conservation Act of 1992 (U.S.A.)



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Physical data (cont)



Standard Static Drive Data, 60 Hz

UNIT	40RUA/S 14	40RUA/S 16	40RU/S 25	40RUA/S 28	40RUA/S 30
MOTOR DRIVE					
Motor Pulley Pitch Diameter (in.)	2.8-3.8	2.8-3.8	3.7-4.7	4.3-5.3	4.3-5.3
Pulley Factory Setting Full Turns Open	2.5	2.5	3.0	3.0	3.0
FAN DRIVE					
Pulley Pitch Dia (in.)	9.0	9.0	9.4	11.0	11.0
Pulley Bore (in.)	1-7/16	1-7/16	1-7/16	1-15/16	1-15/16
Belt No. — Section	1—A	1—A	1—B	2—B ^a	2—B ^a
Belt Pitch (in.)	42.3	42.3	41.8	(2) 42.8 (2) 43.8	(2) 42.8 (2) 43.8
FAN SPEEDS (rpm)					
Factory Settings	632	632	771	752	752
Range	537-728	537-728	679-883	682-841	674-831
Max Allowable Speed (rpm)	1200	1200	1200	1100	1100
Change per 1/2 turn of Movable Motor Pulley Flange	19.1	19.1	15.3	13.1	13.1
MAX FULL TURNS FROM CLOSED POSITION	5	5	6	6	6
SHAFTS CENTER DISTANCE (in.)	10.44-12.32	10.44-12.32	9.12-10.99	6.67-9.43	6.67-9.43

NOTE(S):

- a. Four belts shipped with unit. Use correct set of 2 belts sized according to the pulley setting.

Medium Static Drive Data, 60 Hz

UNIT	40RUA/S 14	40RUA/S 16	40RUA/S 25	40RUA/S 28	40RUA/S 30
MOTOR DRIVE					
Motor Pulley Pitch Diameter (in.)	3.4-4.4	3.7-4.7	4.3-5.3	4.3-5.3	4.3-5.3
Pulley Factory Setting Full Turns Open	2.5	3.0	3.0	3.0	3.0
FAN DRIVE					
Pulley Pitch Dia (in.)	8.2	8.6	9.4	9.4	9.4
Pulley Bore (in.)	1-7/16	1-7/16	1-7/16	1-15/16	1-15/16
Belt No. — Section	1—A	1—B	1—B	2—B ^a	2—B ^a
Belt Pitch (in.)	41.3	41.8	41.8	(2) 38.8 (2) 39.8	(2) 38.8 (2) 39.8
FAN SPEEDS (rpm)					
Factory Setting	820	842	881	881	881
Range	715-928	742-943	798-984	798-984	798-984
Max Allowable Speed (rpm)	1200	1200	1200	1100	1100
Change per 1/2 Turn of Movable Motor Pulley Flange	21.1	16.7	15.3	15.3	15.3
MAX FULL TURNS FROM CLOSED POSITION	5	6	6	6	6
SHAFTS CENTER DISTANCE (in.)	10.44-12.32	10.44-12.32	9.16-10.99	6.67-9.43	6.67-9.43

NOTE(S):

- a. Four belts shipped with unit. Use correct set of 2 belts sized according to the pulley setting.



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Physical data (cont)



High Static Drive Data, 60 Hz

UNIT	40RUA/S 14	40RUA/S 16	40RUA/S 25	40RUA/S 28	40RUA/S 30
MOTOR DRIVE					
Motor Pulley Pitch Diameter (in.)	3.7-4.7	4.3-5.3	4.3-5.3	4.3-5.3	4.3-5.3
Pulley Factory Setting Full Turns Open	3.0	3.0	3.0	3.0	3.0
FAN DRIVE					
Pulley Pitch Dia (in.)	7.4	7.9	7.4	8.6	8.6
Pulley Bore (in.)	1-7/16	1-7/16	1-7/16	1-15/16	1-15/16
Belt No. — Section	1—B	1—B	2—B	2—B	2—B
Belt Pitch (in.)	39.8	39.8	36.8	37.8	37.8
FAN SPEEDS (rpm)					
Factory Setting	979	1060	1118	1024	1024
Range	873-1096	950-1171	1014-1200 ^a	873-1075	873-1075
Max Allowable Speed (rpm)	1200	1200	1200	1100	1100
Change per 1/2 Turn of Movable Motor Pulley Flange	19.4	18.4	19.4	16.7	16.7
MAX FULL TURNS FROM CLOSED POSITION					
	6	6	6	6	6
SHAFTS CENTER DISTANCE (in.)					
	10.44-12.32 ^b	9.16-10.98	8.16-10.02	6.67-9.43	6.67-9.43

NOTE(S):

- a. It is possible to adjust drive so that fan speed exceeds maximum allowable. DO NOT exceed 1200 rpm.
- b. 575-y unit has a center distance of 9.16-10.99.



EF

Options and accessories

ITEM	FACTORY-INSTALLED OPTION	FIELD-INSTALLED ACCESSORY
Alternate Drive (40RU only)	X	
Alternate Fan Motor (40RU only)	X	
CO ₂ Sensors		X
Condensate Drain Trap		X
Discharge Duct Adapter (40RF only)		X
Discharge Plenum		X
EconoMi\$er IV Standard Leak		X
EconoMi\$er X Ultra Low Leak — FDD		X
Electric Heater		X
Hot Water Heating Coils (2 row)		X
Optional VFD Display Kit (40RU only)		X
Overhead Suspension Package		X
Pre-Painted Units	X	
Programmable Thermostats		X
Return Air Grille		X
Steam Heating Coil (1 row)		X

Factory-installed options

Alternate fan motors and drives (40RU only)

Alternate fan motors and drives are available to provide the widest possible range of performance.

Pre-painted steel units

Pre-painted units are available from the factory for applications that require painted units. Units are painted with American Sterling Gray color.

Field-installed accessories

Optional VFD display Kit (40RU only)

There is an optional VFD display kit offered (as an accessory) for 40RU units to allow the user to troubleshoot any VFD faults in the field after start-up.

NOTE: Do not use the VFD display kit to adjust the frequency and voltage in the VFD to required performance requirements. This could lead to decreased life of the motor and VFD.

Two-row hot water coils

Two-row hot water coils have copper tubes mechanically bonded to aluminum plate fins and non-ferrous headers.

One-row steam coil

One-row steam coils have copper tubes and aluminum fins. The Inner Distributing Tube (IDT) design provides uniform temperatures across the coil face. The steam coil has a broad operating pressure range: up to 20 psi (138 kPag) at 260°F (126°C). The IDT steam coils are especially suited to applications where sub-freezing air enters the unit.

Electric heater

Electric heaters are available as factory-supplied, field-installed accessories for nominal 240v, 480v, and 575v, 3-phase, 60 Hz units. Electric heaters are ETL (U.S.A.)

and ETL, Canada, agency-approved. They have single-point power wiring. The heater assembly includes contactors with 24-v coils, power wiring, 24-v control wiring terminal blocks, and a hinged access panel. Electric heaters should not be used with an air discharge plenum.

Economizers — temperature dry bulb controlled

Ultra Low Leak — EconoMi\$er X

This economizer accessory comes with solid-state W7220 controller, gear-driven, modulating damper, and spring return actuator. It is supply/outdoor air sensors, and CO₂ sensor compatible, for use in electro-mechanical controls only. It also includes return and outside air damper leakage that meets California Title 24 section 140.4 requirements. Controller meets California Title 24 Section 120.2 Fault Detection and Diagnostic (FDD) requirements. Also meets AMCA Class 1A economizer damper test standards and labeling.

Standard — EconoMi\$er IV

The standard economizer accessory comes with gear driven damper blades and a W7212 controller (use p/n HH57AC078 sensor for enthalpy control).

Discharge plenum

Discharge plenum directs the air discharge directly into the occupied space; integral horizontal and vertical louvers enable redirection of airflow. This accessory is available unpainted or painted. Field assembly is required (only applicable for vertical application).

Return-air grille

The return-air grille provides a protective barrier over the return-air opening and gives a finished appearance to units installed in the occupied space. This accessory is available unpainted or painted.

Overhead suspension package

The overhead suspension package includes necessary brackets to support units in horizontal ceiling installations.

CO₂ sensors

CO₂ sensors can be used in conjunction with the economizer accessory to help meet indoor air quality requirements. The sensor signals the economizer to open when the CO₂ level in the space exceeds the set point. A Carrier Comfort System programmable thermostat can be used to override the sensor if the outside-air temperature is too high or too low.

Condensate drain trap

The condensate drain trap includes an overflow shutoff switch that can be wired to turn off the unit if the trap becomes plugged. Kit also includes a wire harness that can be connected to an alarm if desired. The transparent trap is designed for easy service and maintenance.

Discharge duct adapter

This accessory is required for replacements using 40RF units with or without electric heat. It is not required for new installations or when using steam coil, hot water coil, or discharge plenum accessories.

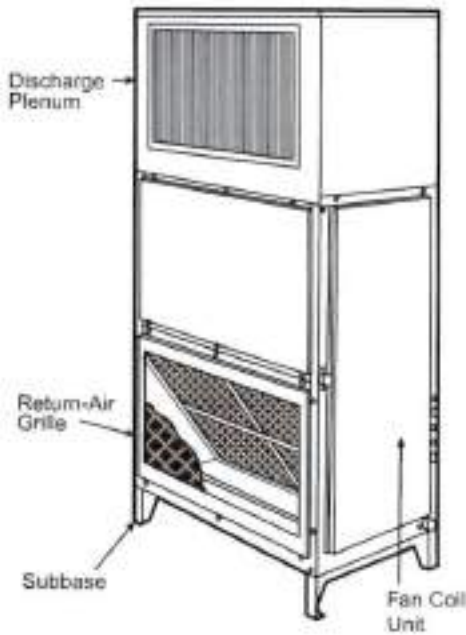


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Options and accessories (cont)



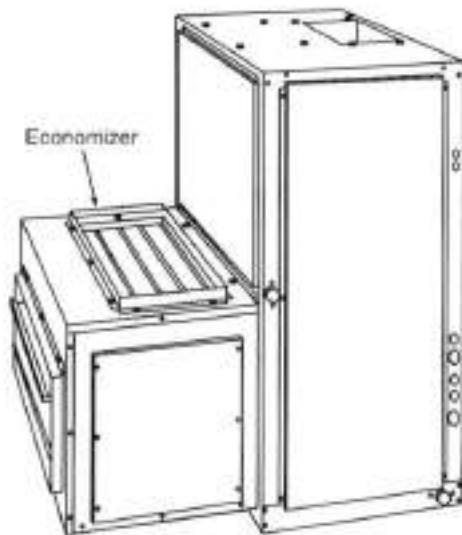
**40RF/40RU with Discharge Plenum
Return-Air Grille and Subbase**



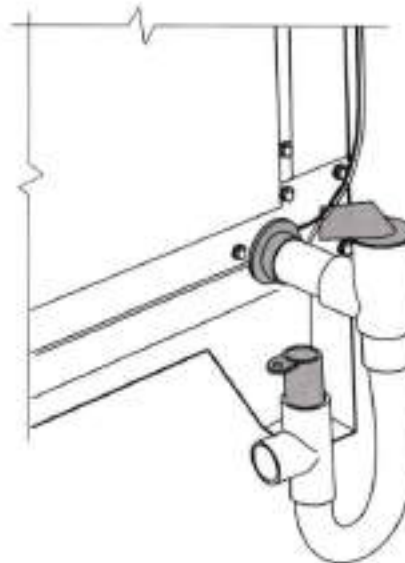
40RF/40RU with Hot Water or Steam Coil



40RF/40RU with Economizer



40RF/40RU with Condensate Trap

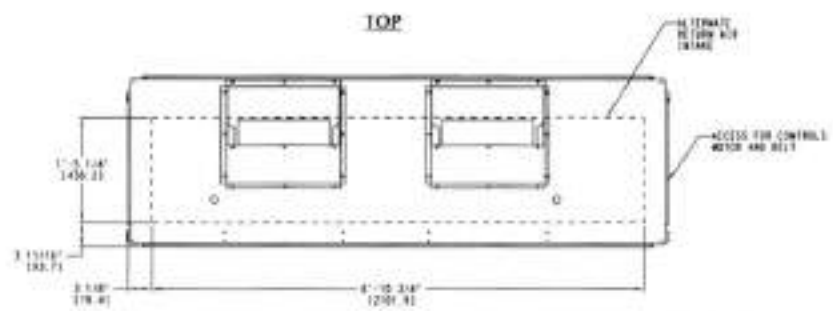


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40RU**14-25

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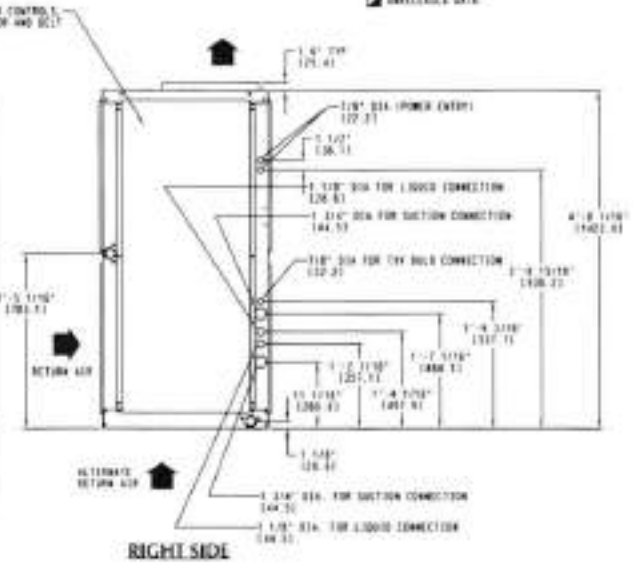
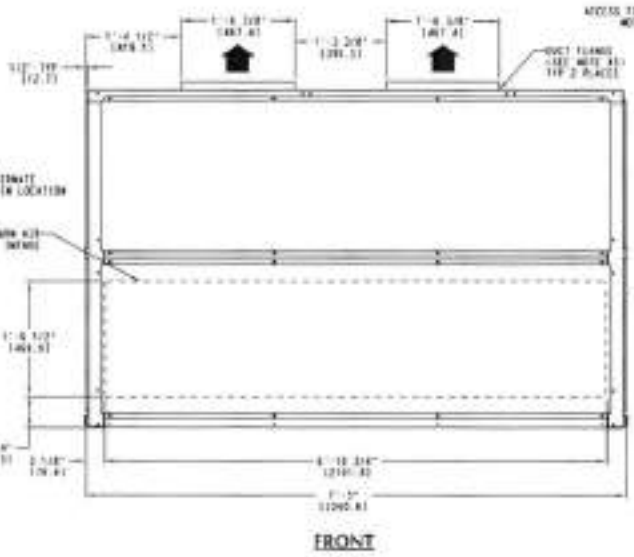
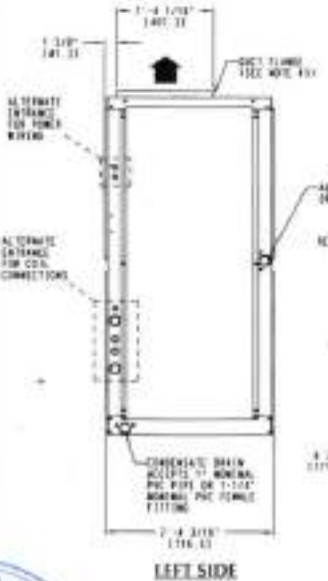
UNIT	WEIGHT (LBS)	WEIGHT (KGS)
40RU-14	480	218
40RU-16	570	258
40RU-18	660	299
40RU-20	750	340
40RU-22	840	381
40RU-24	930	422
40RU-26	1020	463
40RU-28	1110	504
40RU-30	1200	545
40RU-32	1290	586
40RU-34	1380	627
40RU-36	1470	668
40RU-38	1560	709
40RU-40	1650	750



- NOTES:
1. DIMENSIONS IN 1" ARE IN MILLIMETERS.
 2. DIRECTIONS OF AIRFLOW
 3. RECOMMENDED CLEARANCES:
 REAR: 2" (51 mm)
 TOP: 2" (51 mm)
 FRONT: 2" (51 mm)
 LEFT SIDE: 2" (51 mm)
 RIGHT SIDE: 2" (51 mm)
 (LOCAL CODES OF JURISDICTION MAY PREVAIL.)
 4. LIGHTED PIPING AND SUPPLIES BY CARBIDE.
 5. DUCT FLANGE IS FACTORY SUPPLIED AND FIELD INSTALLED.

ACCESSORY	SEE DRAWING
STANDARD PIPING	ADMINISTRATIVE
ECONOMIZER	ADMINISTRATIVE
STEAM COIL	ADMINISTRATIVE
HOT WATER COIL	ADMINISTRATIVE
RETURN AIR FILTER	ADMINISTRATIVE
OVERHEAD JOIST/CEILING	ADMINISTRATIVE
UPGRADE	ADMINISTRATIVE
ELECTRICAL WIRING	ADMINISTRATIVE

UNRELEASED DATA



TR. CLASSIFICATION	UNIT	DATE	ISSUES	REV.	FAN COIL UNITS	REV.
U.S. ROOM AIR	1 OF 2	05/27/01	01/23/12	40RU A / D / S / 14 / 16 / 25	40RU00028	01



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40RU**28-30

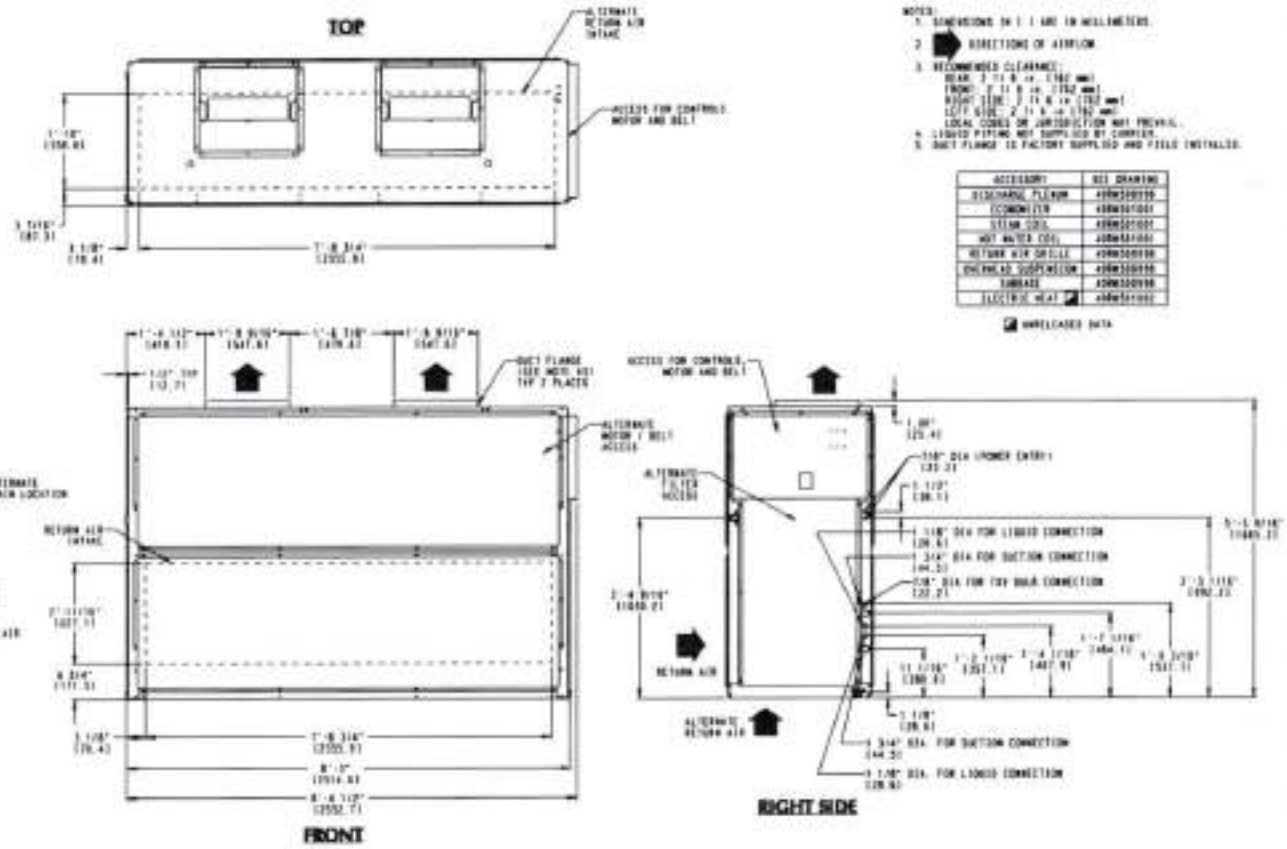
UNIT	UNIT WEIGHT (M/TONS)
40RU-28	1326 (29.1477)
40RU-29	1362 (29.9982)
40RU-30	1398 (30.8487)
40RU-31	1434 (31.6992)

Carrier THE QUALITY OF THE PRODUCTS OF CARRIER CORPORATION ARE GUARANTEED TO BE CONFORMANT WITH THE REQUIREMENTS OF THE ASHRAE 90.1-2010 ENERGY EFFICIENCY DESIGN STANDARD. THE QUALITY OF THE PRODUCTS OF CARRIER CORPORATION ARE GUARANTEED TO BE CONFORMANT WITH THE REQUIREMENTS OF THE ASHRAE 90.1-2010 ENERGY EFFICIENCY DESIGN STANDARD.

- NOTES:**
1. DIMENSIONS IN 1/4 AND 1/8 IN MILLIMETERS.
 2. DIRECTIONS OF AIRFLOW
 3. RECOMMENDED CLEARANCE:
 REAR: 3" (76.2 mm)
 TOP: 6" (152.4 mm)
 RIGHT: 2" (50.8 mm)
 LEFT: 2" (50.8 mm)
 LOCAL CODES OR JURISDICTION MAY PREVAIL.
 LIQUID PIPING NOT SUPPLIED BY CARRIER.
 4. DUCT FLANGE IS FACTORY SUPPLIED AND FITS INSTALLED.

ACCESSORY	SEE DRAWING
DISCHARGE FLANGE	40RU0010
ECONOMIZER	40RU0041
STEAM COIL	40RU0051
HOT WATER COIL	40RU0061
RETURN AIR GRILLE	40RU0010
ENERGY RECOVERY	40RU0010
UMBRELLA	40RU0010
ELECTRIC HEAT	40RU0010

UNRELEASED DATA



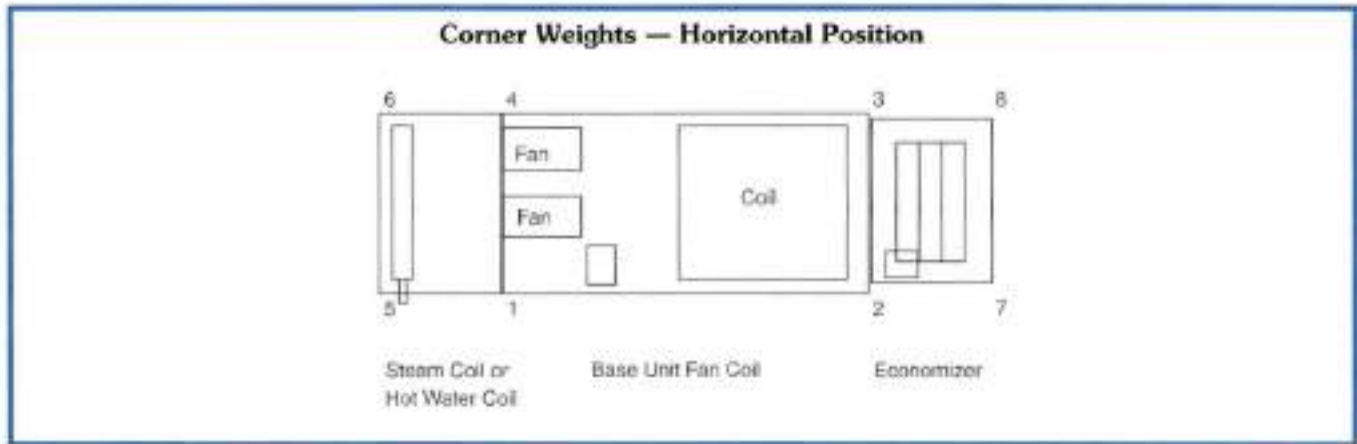
THE CLASSIFICATION	SHEET	DATE	SUPERSEDES	FAN COIL UNITS	REVISED	BY
U.S. ECON-458	1 OF 2	05/22/21	01/23/12	40RU 4 / 3 - 28 / 30	40RU0000	F

Base unit dimensions (cont)



FD

Base unit dimensions (cont)



40RF/40RU Horizontal Position

40RF/40RU UNIT SIZE	UNIT OR ACCESSORY NAME		UNIT OR ACCESSORY WEIGHT (lb)	CORNER NUMBER (Weight in lb)							
				1	2	3	4	5	6	7	8
40RFA07	Fan Coil Base Unit		399	109.3	106.1	90.6	93.4	—	—	—	—
40RFA08	Fan Coil Base Unit		404	110.7	107.5	91.7	94.5	—	—	—	—
40RFS08	Fan Coil Base Unit		390	106.9	103.8	88.5	90.8	—	—	—	—
40RFS10	Fan Coil Base Unit		391	107.2	104.1	88.7	91.0	—	—	—	—
40RFA12	Fan Coil Base Unit		425	116.4	113.0	96.5	99.4	—	—	—	—
40RFS12	Fan Coil Base Unit		391	107.2	104.1	88.7	91.0	—	—	—	—
40RFA 07, 08, 12 40RFS 08-12	Steam Coil	Add	215	40.2	—	—	40.6	68.5	67.5	—	—
	Hot Water Coil	Add	195	35.9	—	—	36.7	60.4	62.0	—	—
	Economizer	Add	185	—	36.8	35.7	—	—	—	56.8	55.1
	Eco + Steam Coil	Add	400	38.8	38.6	37.4	39.2	64.2	65.2	59.5	57.7
	Eco + Hw Coil	Add	380	36.9	35.6	34.6	37.7	62.1	63.6	55.1	53.4
40RUA14	Fan Coil Base Unit		695	224.0	177.7	129.8	163.7	—	—	—	—
40RUS14	Fan Coil Base Unit		661	213.1	169.0	123.5	155.4	—	—	—	—
40RUA16	Fan Coil Base Unit		713	229.8	182.3	133.2	167.9	—	—	—	—
40RUS16	Fan Coil Base Unit		677	216.2	173.1	126.5	159.2	—	—	—	—
40RUA25	Fan Coil Base Unit		730	235.6	186.4	136.5	171.5	—	—	—	—
40RUS25	Fan Coil Base Unit		683	220.0	174.8	127.7	160.5	—	—	—	—
40RUA/S 14-26	Steam Coil	Add	340	61.4	—	—	62.0	107.8	108.8	—	—
	Hot Water Coil	Add	285	51.7	—	—	51.3	91.5	90.6	—	102.0
	Economizer	Add	340	—	66.9	62.0	—	—	—	109.8	97.1
	Eco + Steam Coil	Add	680	64.4	63.7	59.0	65.0	113.0	114.1	104.5	87.8
	Eco + Hw Coil	Add	625	60.0	57.6	53.4	59.5	106.2	105.1	94.6	—
40RUA28	Fan Coil Base Unit		1050	338.4	268.5	196.1	247.2	—	—	—	—
40RUS28	Fan Coil Base Unit		1035	333.6	264.7	193.3	243.7	—	—	—	—
40RUA30	Fan Coil Base Unit		1062	342.4	271.6	198.3	249.7	—	—	—	—
40RUS30	Fan Coil Base Unit		1042	335.7	266.4	194.5	245.4	—	—	—	—
40RUA/S 28, 30	Steam Coil	Add	405	73.2	—	—	73.8	128.4	129.6	—	—
	Hot Water Coil	Add	345	62.6	—	—	62.1	110.7	109.6	—	—
	Economizer	Add	450	—	88.5	82.0	—	—	—	145.3	134.2
	Eco + Steam Coil	Add	855	80.6	80.1	74.1	81.6	142.0	143.4	131.3	122
	Eco + Hw Coil	Add	795	76.8	73.7	68.2	75.7	135.0	133.6	120.3	111.7

LEGEND

ECO — Economizer
 HW — Hot Water

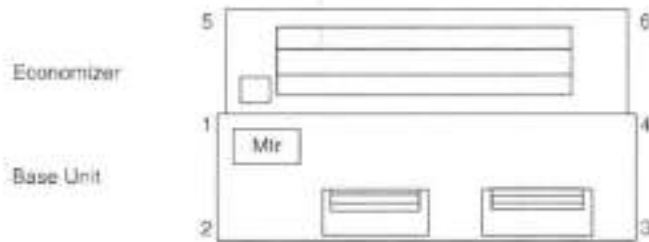


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Base unit dimensions (cont)



Corner Weights — Vertical Position



NOTE: Steam, Hot Water and Plenum on top of positions 1, 2, 3, 4

40RF/40RU Vertical Position

40RF/40RU UNIT SIZE	UNIT OR ACCESSORY NAME		UNIT OR ACCESSORY WEIGHT (lb)	CORNER NUMBER (Weight in lb)					
				1	2	3	4	5	6
40RFA07	Fan Coil Base Unit		399	100.5	114.9	98.0	85.8	—	—
40RFA08	Fan Coil Base Unit		404	101.7	116.3	99.1	86.9	—	—
40RFS08	Fan Coil Base Unit		390	98.2	116.2	99.1	76.5	—	—
40RFS10	Fan Coil Base Unit		391	98.9	116.5	99.4	76.2	—	—
40RFA12	Fan Coil Base Unit		425	107.6	122.3	108.0	87.1	—	—
40RFS12	Fan Coil Base Unit		391	98.9	116.5	99.4	76.2	—	—
40RFA 07, 08, 12 40RFS 08-12	Steam Coil	Add	215	54.1	54.1	53.4	53.4	—	—
	Hot Water Coil	Add	195	49.4	49.4	48.1	48.1	—	—
	Plenum	Add	175	50.8	36.7	36.7	50.8	—	—
	Economizer	Add	195	38.9	—	—	37.1	59.9	58.3
	Eco + Steam Coil	Add	410	93.0	53.4	52.6	91.1	61.0	59.1
	Eco + Hw Coil	Add	390	88.9	52.3	50.9	86.5	56.7	54.9
40RUA14	Fan Coil Base Unit		695	191.2	210.5	153.8	139.5	—	—
40RUS14	Fan Coil Base Unit		661	181.8	200.3	146.3	132.6	—	—
40RUA16	Fan Coil Base Unit		713	196.2	216.0	157.8	143.1	—	—
40RUS16	Fan Coil Base Unit		677	186.3	205.1	149.8	135.8	—	—
40RUA/S 14, 16	Steam Coil	Add	340	85.4	85.4	84.6	84.6	—	—
	Hot Water Coil	Add	285	70.9	70.9	71.6	71.6	—	—
	Plenum	Add	225	72.5	40.0	40.0	72.5	—	—
	Economizer	Add	340	88.5	—	—	82.0	109.5	102.0
	Eco + Steam Coil	Add	680	153.0	89.1	88.7	147.7	104.5	97.0
	Eco + Hw Coil	Add	625	139.9	82.5	83.3	136.7	94.7	87.9

LEGEND

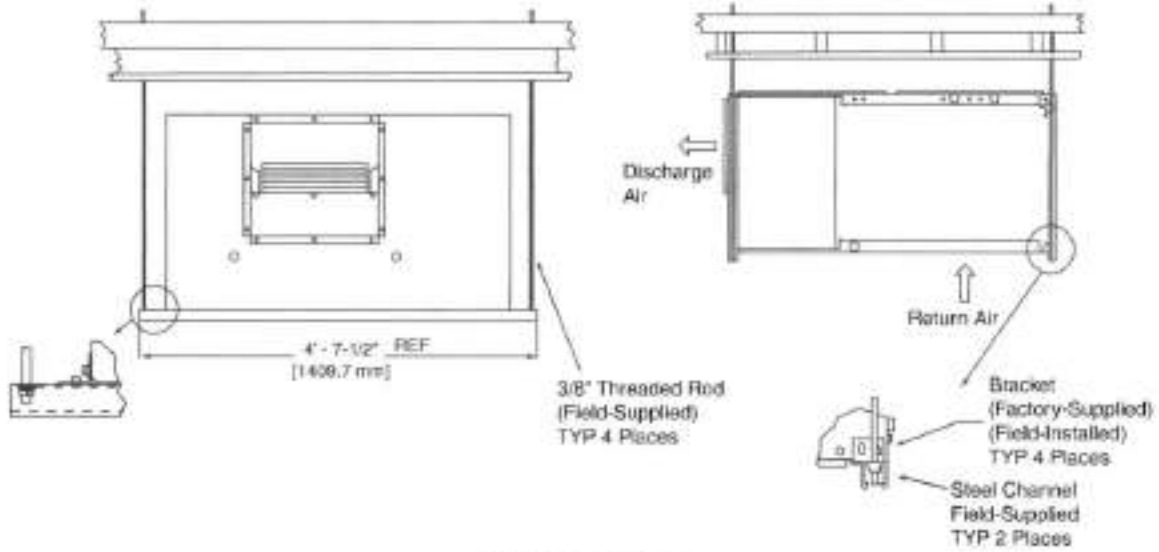
ECO — Economizer
HW — Hot Water



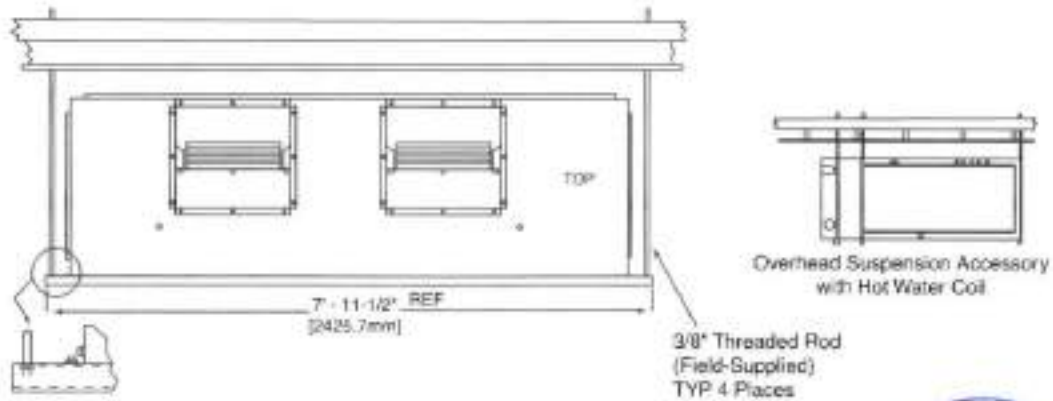
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Overhead Suspension Accessory

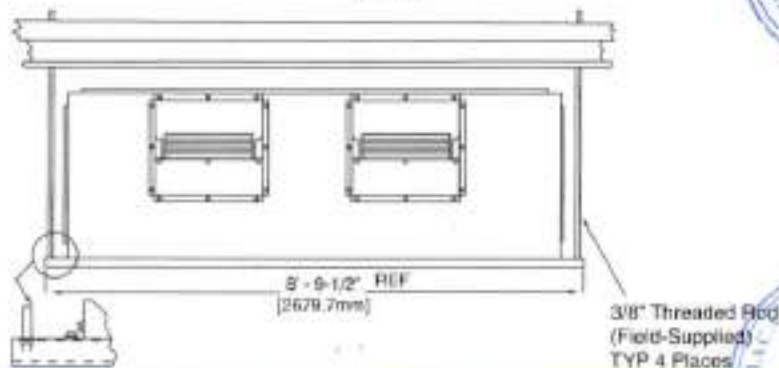
6-10 Ton Units
(Front)



12.5-20 Ton Units
(Front)



25-30 Ton Units
(Front)



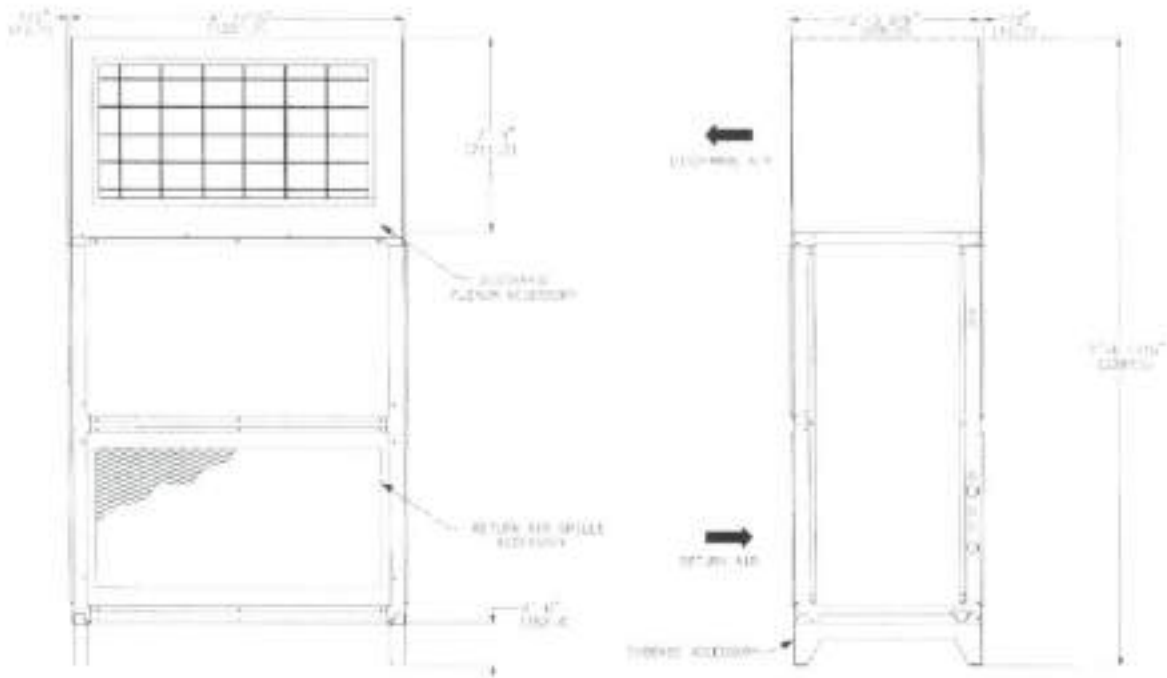
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Accessory dimensions (cont)

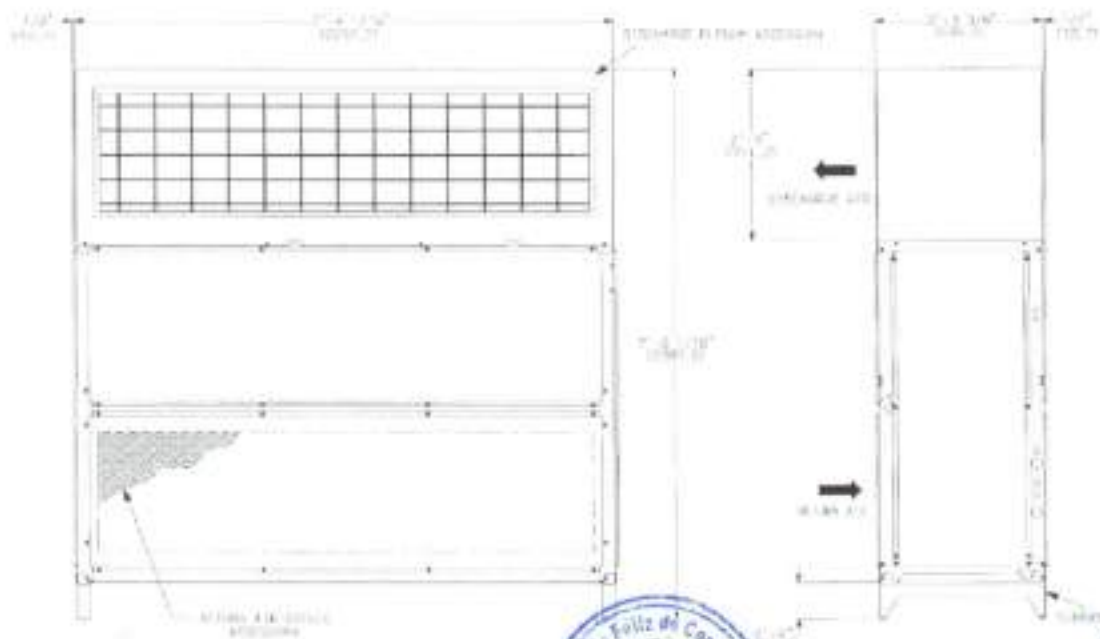


Plenum, Return-Air Grille, and Subbase Accessories — 40RF**07-12, 40RU**14-25

6-10 Ton Units



12.5-20 Ton Units



NOTE: Dimensions in [] are millimeters.



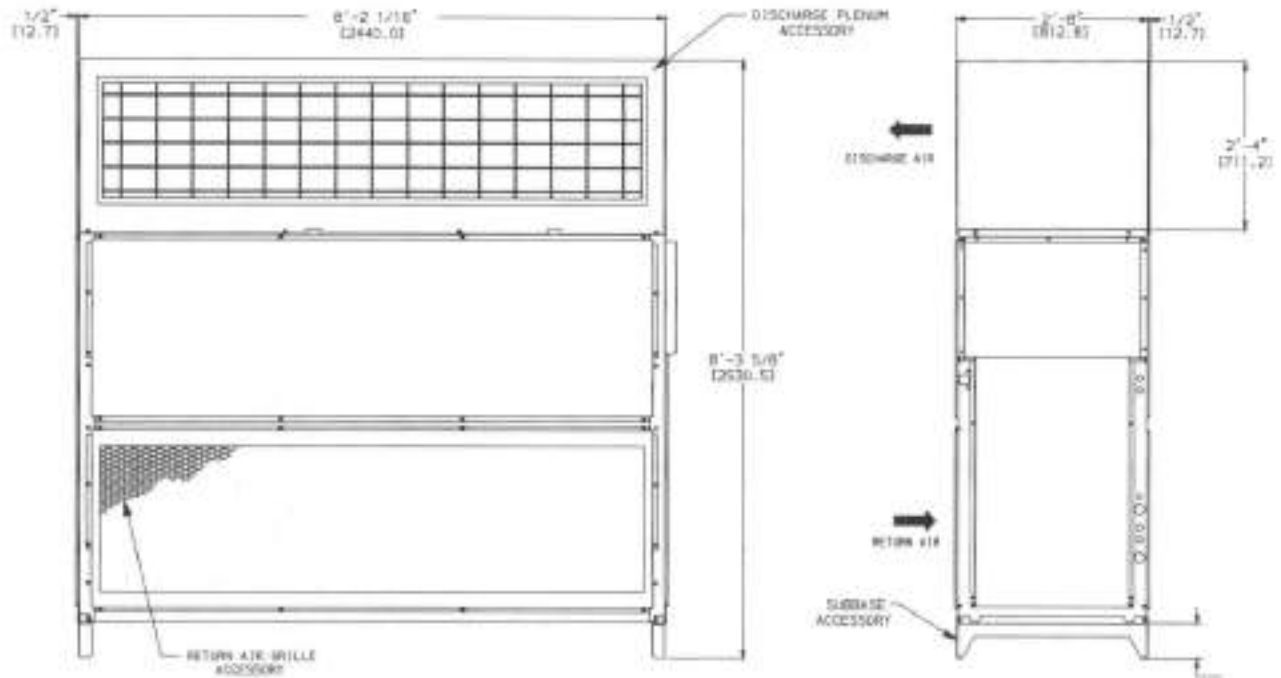
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Accessory dimensions (cont)



Plenum, Return-Air Grille, and Subbase Accessories — 40RU**28-30

25-30 Ton Units



NOTE: Dimensions in [] are millimeters.



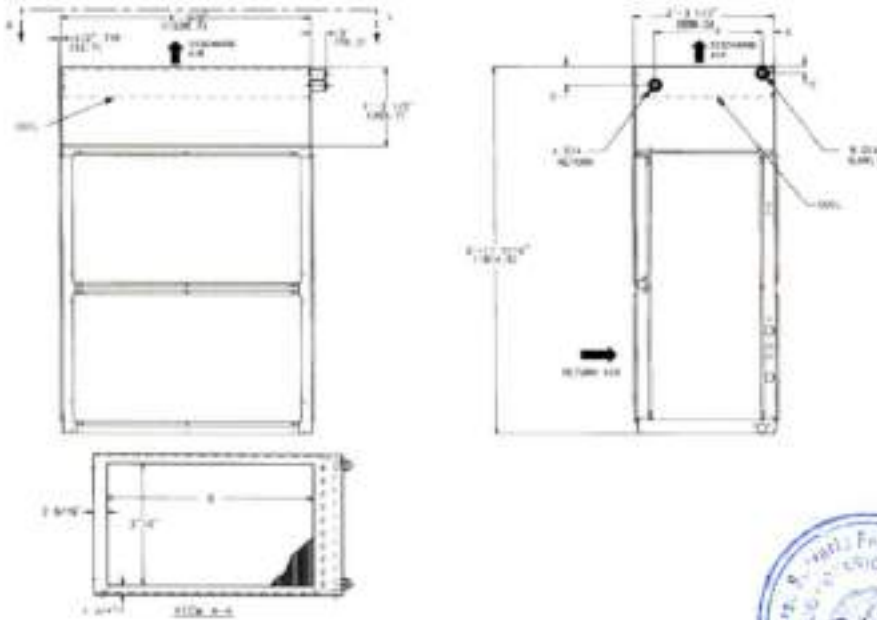
EL

Accessory dimensions (cont)

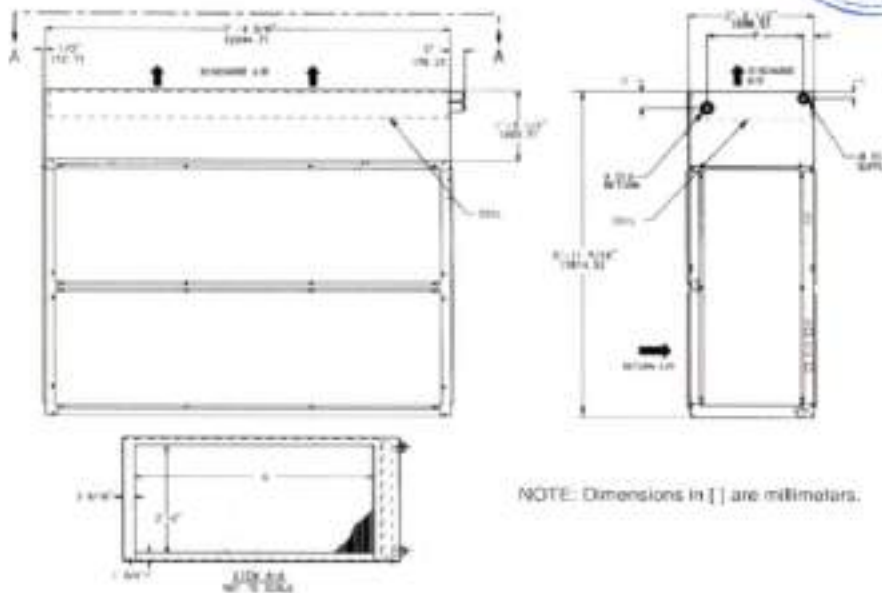


Hot Water and Steam Coil Accessories — 40RF**07-12, 40RU**14-25

6-10 Ton Units



12.5-20 Ton Units



NOTE: Dimensions in [] are millimeters.

40RF**07-12

DIMENSIONS	HOT WATER COIL	STEAM COIL
A	1-1/2" MPT [38.1]	1-1/2" MPT [38.1]
B	1-1/2" MPT [38.1]	2-1/2" MPT [63.5]
C	2-3/8" [60.3]	3-1/8" [79.4]
D	4-7/8" [123.8]	3-1/8" [79.4]
E	2-1/8" [54.0]	4-9/16" [115.8]
F	1'-11-1/4" [590.6]	1'-8" [584.2]
G	3'-4" [1016.0]	3'-4" [1016.0]

40RU**14-25

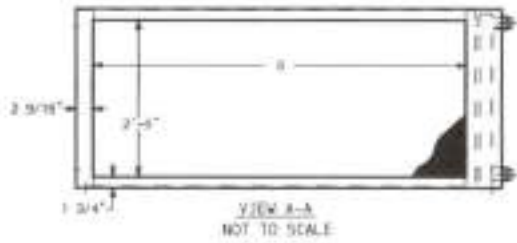
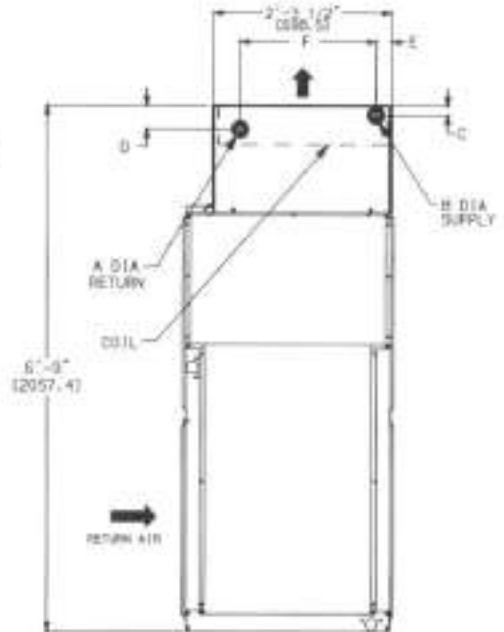
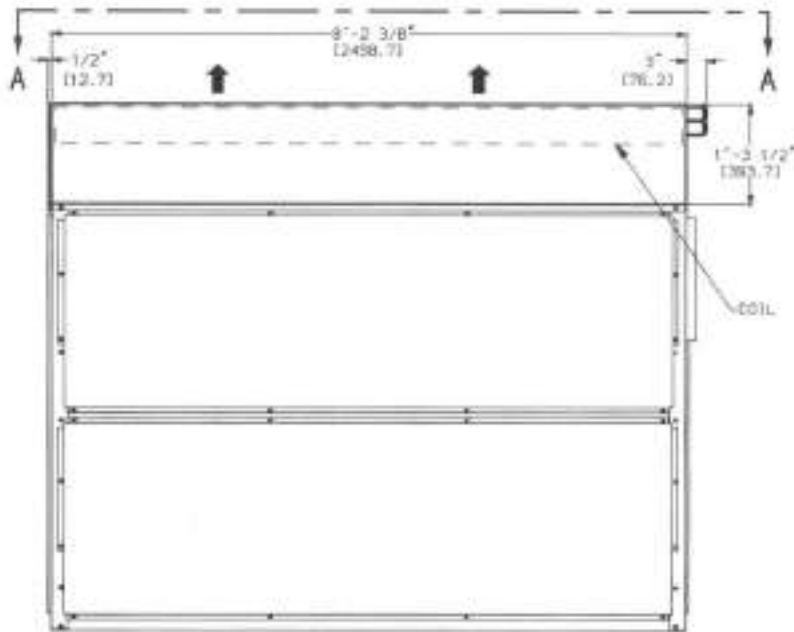
DIMENSIONS	HOT WATER COIL	STEAM COIL
A	2" MPT [50.8]	1-1/2" MPT [38.1]
B	2" MPT [50.8]	2-1/2" MPT [63.5]
C	2-3/8" [60.3]	3-1/8" [79.4]
D	4-7/8" [123.8]	3-1/8" [79.4]
E	2-1/8" [54.0]	4-9/16" [115.8]
F	1'-11-1/4" [590.6]	1'-9" [584.2]
G	6'-8" [2032.0]	3'-4" [2032.0]

Accessory dimensions (cont)



Hot Water and Steam Coil Accessories — 40RU**28-30

25-30 Ton Units



40RU**28-30

DIMENSIONS	HOT WATER COIL	STEAM COIL
A	2" MPT [50.8]	1-1/2" MPT [38.1]
B	2" MPT [50.8]	2-1/2" MPT [63.5]
C	2-3/8" [60.3]	3-1/8" [79.4]
D	4-7/8" [123.8]	3-1/8" [79.4]
E	2-1/8" [54.0]	4-9/16" [115.8]
F	1'-11-1/4" [590.6]	1'-9" [584.2]
G	7'-6" [2286.0]	7'-6" [2286.0]

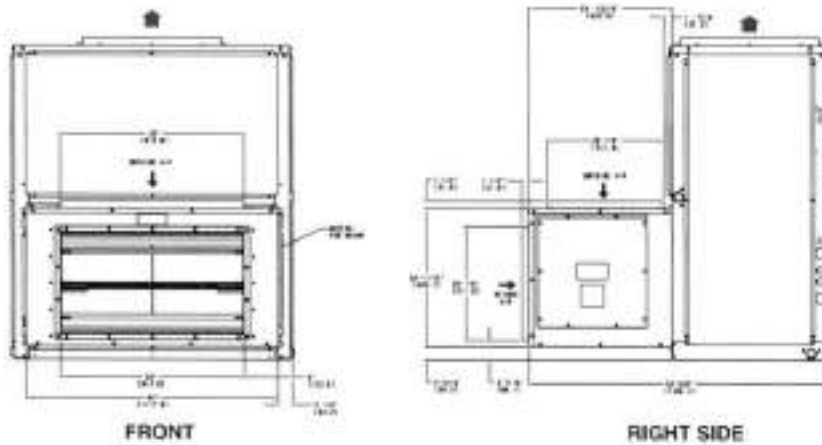
NOTE: Dimensions in [] are millimeters.



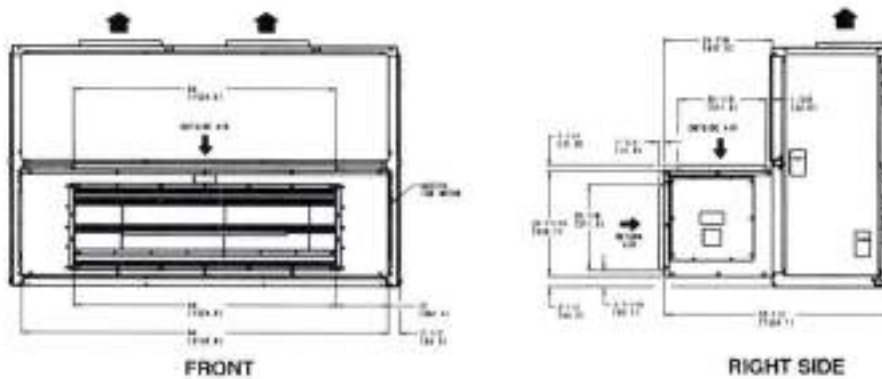
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Economizer Accessory — 40RF**07-12, 40RU**14-30

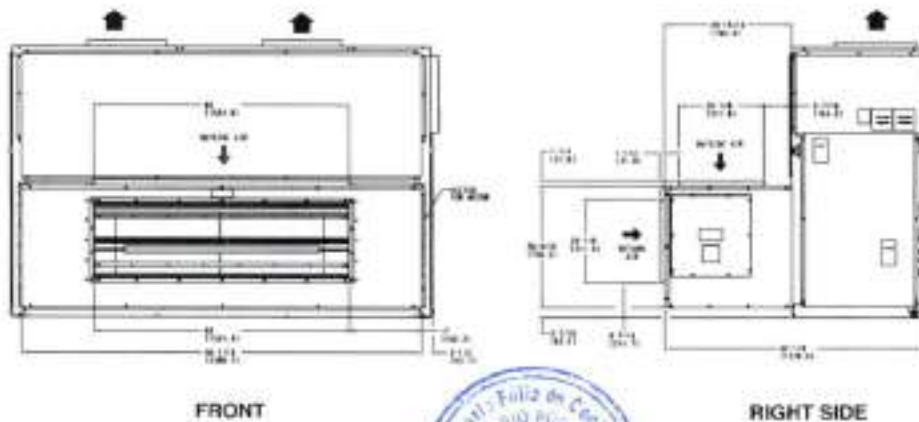
6-10 Ton Units



12.5-20 Ton Units



25-30 Ton Units



NOTES

1. For horizontal unit applications, economizer can be attached to end of unit opposite duct connections.
2. Dimensions in [] are in millimeters.



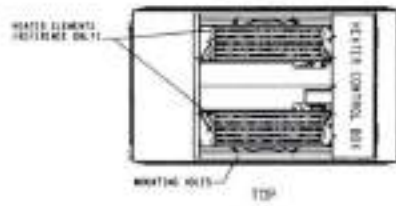
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Accessory dimensions (cont)

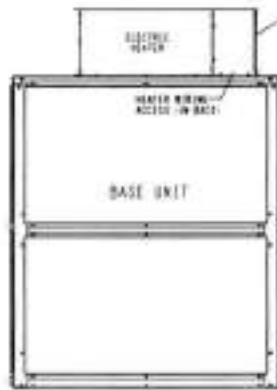


Electric Heater Accessory — Sizes 07-30

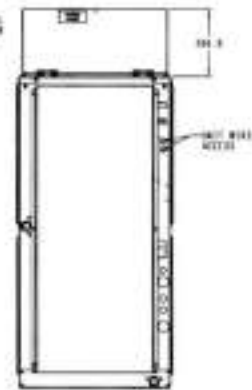
6-10 Ton Units



LEFT SIDE

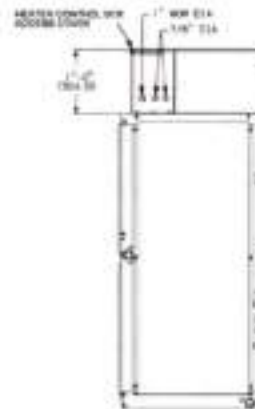
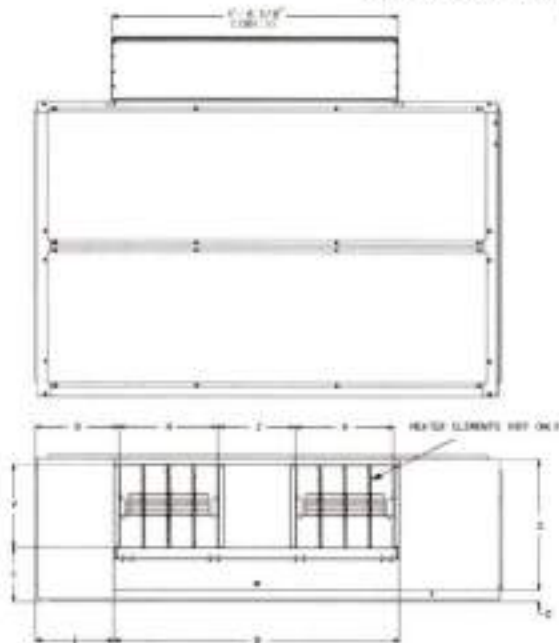


FRONT



RIGHT SIDE

12.5-30 Ton Units



40RU UNIT SIZE	A	B	C	D	E	F	G	H	J
14-25	1'-3-1/4" [387.4]	4'-6" [1381.1]	2'-5/16" [58.7]	2'-1-1/4" [641.4]	10'-5/8" [269.9]	1'-4" [406.4]	1'-4-5/16" [414.3]	1'-6-3/4" [476.3]	1'-7/8" [327.0]
28,30	1'-3-3/8" [360.5]	5'-4-7/8" [1636.8]	2-1/16" [52.4]	2'-6-3/16" [766.8]	1'-1/4" [311.2]	1'-7" [462.6]	1'-4-5/16" [414.3]	1'-10" [558.8]	1'-4-7/16" [417.1]

NOTE: Dimensions in [] are in millimeters.



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40RF**07-12 Cooling Capacities^{a,b,c,d,e}

UNIT 40RF	EVAPORATOR AIR		COIL REFRIGERANT TEMP (°F)									
	Airflow (cfm)	Ewb (°F)	30		35		40		45		50	
			TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
07	1,800	72	124	80	113	55	101	49	87	43	71	37
		67	104	64	93	59	81	53	67	47	52	40
		62	86	68	75	62	63	56	49	49	42	42
	2,400	72	143	69	131	64	117	58	101	52	83	44
		67	121	76	108	70	94	64	78	57	60	50
		62	101	83	88	76	73	69	60	60	51	51
	3,000	72	158	77	144	71	129	65	111	58	92	51
		67	134	86	121	80	105	73	87	68	67	58
		62	113	95	98	88	82	80	70	70	59	59
08	2,250	72	155	75	141	68	126	61	108	54	89	46
		67	130	80	118	73	101	66	83	59	64	51
		62	108	85	94	78	78	70	62	62	52	52
	3,000	72	179	86	164	80	146	72	126	64	103	56
		67	151	95	136	88	118	80	98	71	75	62
		62	126	103	110	95	92	86	76	76	64	64
	3,750	72	197	96	180	89	161	82	139	73	115	63
		67	168	108	151	100	131	92	109	82	84	72
		62	141	119	122	110	103	100	87	87	74	74
12	3,000	72	200	96	182	88	161	79	138	70	113	60
		67	168	104	150	96	130	86	107	76	83	66
		62	140	112	121	102	101	92	82	82	69	69
	4,000	72	228	111	208	102	185	93	159	83	130	71
		67	194	124	174	114	150	104	124	93	96	81
		62	162	135	141	124	119	113	99	99	84	84
	5,000	72	250	123	228	114	204	105	175	94	143	81
		67	214	140	192	130	168	119	138	107	108	94
		62	179	155	156	143	133	130	113	113	96	96

NOTE(S):

- a. Ratings based on approximately 15°F superheat leaving coil.
- b. Direct interpolation is permissible. Do not extrapolate.
- c. Dashes indicate coil loading limits are exceeded.
- d. Evaporator fan heat not deducted from ratings.
- e. See dry and wet bulb formulas below.
- f. SHC is based on 80°F db temperature of air entering evaporator coil.

Dry and Wet Bulb Formulas:

$$\text{Leaving db} = \text{entering db} - \frac{\text{sensible heat capacity (Btuh)}}{1.1 \times \text{cfm}}$$

$$\text{Leaving wb} = \text{wet-bulb temperature corresponding to enthalpy of air leaving coil } (h_{wb})$$

$$h_{wb} = h_{ewb} = \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

where h_{wb} = enthalpy of air entering coil

LEGEND

- db — Dry Bulb Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btuh)
- TC — Total Capacity (1000 Btuh)
- wb — Wet Bulb Temperature (°F)



ef

Performance data (cont)



40RU**14-30 Cooling Capacities^{a,b,c,d,e}

UNIT 40RU	EVAPORATOR AIR		COIL REFRIGERANT TEMP (°F)									
	AIRFLOW (cfm)	Ewb (°F)	30		35		40		45		50	
			TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
14	3,750	72	251	121	228	110	202	99	173	87	140	74
		67	210	129	187	118	161	106	133	94	102	81
		62	174	138	150	126	125	113	100	100	84	84
	5,000	72	289	139	263	128	233	116	200	103	162	88
		67	244	154	218	141	188	128	155	114	119	99
		62	203	167	176	153	146	138	121	121	102	102
	6,250	72	319	155	290	143	258	131	221	116	180	101
		67	271	174	242	161	209	147	172	132	133	115
		62	226	192	196	177	164	160	139	139	118	118
16	4,500	72	310	150	281	136	249	122	214	108	174	92
		67	260	160	231	145	199	131	165	116	127	100
		62	215	169	186	154	154	138	121	121	102	102
	6,000	72	361	175	329	161	292	145	250	128	205	110
		67	304	191	271	175	235	159	194	141	149	122
		62	254	206	220	189	183	170	149	149	125	125
	7,500	72	401	196	366	181	325	164	280	146	229	127
		67	340	218	304	201	263	183	218	164	167	143
		62	285	239	247	220	206	197	172	172	145	145
25	6,000	72	408	197	372	180	331	162	272	141	232	123
		67	344	213	307	195	266	176	220	156	169	135
		62	286	227	248	208	207	188	164	164	139	139
	8,000	72	470	228	429	210	382	191	329	170	269	147
		67	399	253	357	233	309	212	256	189	197	166
		62	333	275	290	254	242	230	202	202	170	170
	10,000	72	516	253	471	235	421	215	363	192	297	168
		67	440	287	395	266	343	244	284	219	220	193
		62	369	317	322	294	271	266	232	232	196	196
28	7,500	72	470	226	428	208	379	187	328	167	270	144
		67	395	246	354	227	307	205	255	183	197	159
		62	329	265	287	244	240	221	193	193	163	163
	10,000	72	535	260	487	240	434	219	376	196	310	171
		67	454	291	407	269	354	246	295	221	228	194
		62	380	320	332	296	279	268	235	235	199	199
	12,500	72	583	287	531	267	475	245	412	221	341	194
		67	499	329	448	306	390	282	325	255	252	225
		62	420	367	367	341	310	310	269	269	228	228
30	9,000	72	564	271	513	249	456	225	394	200	324	173
		67	476	296	425	272	368	246	306	220	236	191
		62	395	319	344	293	288	285	231	231	195	195
	12,500	72	642	312	584	288	521	263	451	235	372	205
		67	545	349	489	323	425	295	353	265	273	233
		62	456	383	398	355	334	322	281	281	238	238
	15,000	72	699	345	637	320	570	294	495	265	410	233
		67	598	394	537	367	468	338	390	306	303	270
		62	503	440	440	409	371	371	322	322	273	273

NOTE(S):

- a. Ratings based on approximately 15°F superheat leaving coil.
- b. Direct interpolation is permissible. Do not extrapolate.
- c. Dashes indicate coil loading limits are exceeded.
- d. Evaporator fan heat not deducted from ratings.
- e. See dry and wet bulb formulas below.
- f. SHC is based on 80°F db temperature of air entering evaporator coil.

Dry and Wet Bulb Formulas:

$$\text{Leaving db} = \text{entering db} - \frac{\text{sensible heat capacity (Btu/h)}}{1.1 \times \text{cfm}}$$

$$\text{Leaving wb} = \text{wet-bulb temperature corresponding to enthalpy of air leaving coil (h}_{wb}\text{)}$$

$$h_{wb} = h_{ewb} - \frac{\text{total capacity (Btu/h)}}{4.5 \times \text{cfm}}$$

where h_{wb} = enthalpy of air entering coil

LEGEND

- db — Dry Bulb Temperature (°F)
- SHC — Sensible Heat Capacity (1000 Btu/h)
- TC — Total Capacity (1000 Btu/h)
- wb — Wet Bulb Temperature (°F)



EL

Performance data (cont)



Hydronic Heating Capacities^{a,b,c}

UNIT	AIRFLOW	1-ROW STEAM ^d		2-ROW HOT WATER COIL ^e			
		Cap.	Ldb	Cap.	Ldb	Water Flow (Gpm)	PD
40RFA*07	1,800	146	134	156.0	140	15.6	3.4
	2,400	173	126	183.0	131	18.3	4.3
	3,000	209	123	206.0	124	20.6	5.2
40RFA*08 40RFS*08	2,250	168	129	174.0	133	17.4	4.0
	3,000	209	123	206.0	124	20.6	5.2
	3,750	240	117	238.0	118	23.8	6.5
40RFS*10	2,650	183	125	199.0	132	19.9	4.5
	3,400	229	121	233.0	123	23.3	5.7
	4,250	254	114	271.0	119	27.1	7.2
40RFA*12 40RFS*12	3,000	209	123	299.0	152	29.9	5.0
	4,000	243	115	275.0	124	27.5	6.6
	5,000	279	111	316.0	119	31.6	8.2
40RUA*14 40RUS*14	3,750	370	150	362.0	149	36.2	4.2
	5,000	425	137	409.0	136	40.9	5.1
	6,250	465	128	456.0	128	45.6	6.0
40RUA*16 40RUS*16	4,500	402	141	412.0	145	41.2	4.5
	6,000	458	129	471.0	133	47.1	5.5
	7,500	479	118	529.0	125	52.9	6.6
40RUA*25 40RUS*25	6,000	458	129	506.0	138	50.6	5.1
	8,000	487	115	584.0	128	58.4	6.3
	10,000	499	105	652.0	120	65.2	7.5
40RUA*28 40RUS*28	7,500	511	122	649.0	140	64.9	5.7
	10,000	575	112	752.0	130	75.2	7.1
	12,500	626	106	842.0	122	84.2	8.5
40RUA*30 40RUS*30	9,000	560	117	735.0	136	73.5	6.2
	12,000	621	107	850.0	126	85.0	7.8
	15,000	670	101	950.0	119	95.0	9.3

NOTE(S):

- Maximum operating limits for heating coils: 20 psig at 260°F.
- See leaving dry bulb formula below.
- See Heating Correction Factors table.
- Based on 5 psig steam, 60°F entering-air temperature. All steam coils are non-freeze type.
- Based on 200°F entering water, 20°F water temperature drop, 60°F entering air temperature.

Leaving dry bulb formula:

$$\text{Leaving db} = \text{ent db (°F)} + \frac{\text{Capacity (Btu/h)}}{1.1 \times \text{cfm}}$$

LEGEND

- Cap. — Capacity (Btu/h in 1000)
Ldb — Leaving Air Dry Bulb Temp (°F)
PD — Pressure Drop (ft water)



Heating Correction Factors

HOT WATER COIL						
Water Temp Drop (°F)	Entering Water Temp (°F)	Entering Water Temp (°F)				
		40	50	60	70	80
10	140	0.72	0.64	0.57	0.49	0.41
	160	0.89	0.81	0.74	0.66	0.58
	180	1.06	0.98	0.90	0.83	0.75
	200	1.22	1.15	1.07	1.00	0.92
	220	1.39	1.32	1.24	1.17	1.09
20	140	0.64	0.57	0.49	0.41	0.33
	160	0.81	0.74	0.66	0.58	0.51
	180	0.98	0.91	0.83	0.75	0.68
	200	1.15	1.08	1.00	0.93	0.85
	220	1.32	1.25	1.17	1.10	1.02
30	140	0.56	0.49	0.41	0.33	0.24
	160	0.74	0.66	0.58	0.51	0.43
	180	0.91	0.83	0.76	0.68	0.60
	200	1.08	1.00	0.93	0.85	0.78
	220	1.25	1.18	1.10	1.03	0.95

STEAM COIL					
STEAM PRESSURE (psig)	Entering-Air Temperature (°F)				
	40	50	60	70	80
0	1.06	0.96	0.91	0.85	0.78
2	1.09	1.02	0.95	0.89	0.82
6	1.13	1.06	1.00	0.93	0.87

NOTE: Multiply capacity is given in the Hydronic Heating Capacities table by the correction factor for conditions at which unit is actually operating. Correct leaving-air temperature using formula in Note b of Hydronic Heating Capacities table.



EF

Performance data (cont)



Duct Sound Power Levels (Lw)^{a,b,c}

MODEL	SIZE	CFM	db(A)	OCTAVE BAND CENTER FREQUENCY (Hz)						
				63	125	250	500	1000	2000	4000
40RFA	07	2,400	86.3	93.2	89.2	85.2	84.2	80.2	78.2	74.2
	08	3,000	88.3	95.3	91.3	87.3	86.3	82.3	80.3	76.3
	12	4,000	91.6	98.6	94.6	90.6	89.6	85.6	83.6	79.6
40RUA	14	5,000	91.1	97.3	93.3	89.3	90.3	84.3	82.3	78.3
	16	6,000	92.7	98.9	94.9	90.9	91.9	85.9	83.9	79.9
	25	8,000	96.4	102.6	98.6	94.6	95.6	89.6	87.6	83.6
	28	10,000	96.2	102.5	98.5	94.5	95.5	89.5	87.5	83.5
	30	12,000	98.5	104.7	100.7	96.7	97.7	91.7	89.7	85.7
40RUS	08	3,000	88.3	95.3	91.3	87.3	86.3	82.3	80.3	76.3
	10	3,400	89.8	96.7	92.7	88.7	87.7	83.7	81.7	77.7
	12	4,000	91.6	98.6	94.6	90.6	89.6	85.6	83.6	79.6
	14	5,000	91.1	97.3	93.3	89.3	90.3	84.3	82.3	78.3
	16	6,000	92.7	98.9	94.9	90.9	91.9	85.9	83.9	79.9
	25	8,000	96.4	102.6	98.6	94.6	95.6	89.6	87.6	83.6
	28	10,000	96.2	102.5	98.5	94.5	95.5	89.5	87.5	83.5
30	12,000	98.5	104.7	100.7	96.7	97.7	91.7	89.7	85.7	

NOTE(S):

- a. The estimated sound power levels are based upon the ASHRAE calculation approach from the ASHRAE 1987 HVAC Systems and Applications handbook, Chapter 52.
- b. Since this data is calculated, these sound power levels may be different than the actual sound power levels.
- c. The acoustic center of the unit is located at the geometric center of the unit.

LEGEND

- ASHRAE — American Society of Heating, Refrigerating and Air Conditioning
- HVAC — Heating, Ventilation and Air Conditioning

Factory-Supplied Filter Pressure Drops

UNIT	AIRFLOW (cfm)	PRESSURE DROP (in. wg)
40RFA*07	1,400	0.05
	2,400	0.08
	3,000	0.11
40RFA*08 40RFS*08	2,250	0.07
	3,000	0.11
	3,750	0.15
40RFS*10	2,550	0.09
	3,400	0.13
	4,250	0.18
40RFA*12 40RFS*12	3,000	0.11
	4,000	0.17
	5,000	0.23
40RUA*14 40RUS*14	3,750	0.06
	5,000	0.10
	6,250	0.13
40RUA*16 40RUS*16	4,500	0.08
	6,000	0.12
	7,500	0.17
40RUA*25 40RUS*25	6,000	0.12
	8,000	0.19
	10,000	0.26
40RUA*28 40RUS*28	7,500	0.15
	10,000	0.22
	12,500	0.30
40RUA*30 40RUS*30	9,000	0.19
	12,000	0.29
	15,000	0.40

Accessory Plenum Air Throw Data (ft)^a

UNIT	AIRFLOW (cfm)	VANE DEFLECTION		
		Straight	21-1/2°	45°
40RFA*07	2,400	39	33	24
40RFA*08 40RFS*08	3,000	45	38	28
40RFS*10	3,400	49	41	30
40RFA*12 40RFS*12	4,000	55	46	33
40RUA*14 40RUS*14	5,000	45	38	28
40RUA*16 40RUS*16	6,000	50	43	31
40RUA*25 40RUS*25	8,000	60	51	37
40RUA*28 40RUS*28	10,000	76	65	47
40RUA*30 40RUS*30	12,000	85	72	52

NOTE(S):

- a. Throw distances shown are for 75 fpm terminal velocity. Use the multipliers below to determine throw values for other terminal velocities.

TERMINAL VELOCITY (fpm)	THROW FACTOR
50	x 1.50
100	x 0.75
150	x 0.50



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Performance data (cont)



Accessory Pressure Drop — in. wg

UNIT	AIRFLOW (Cfm)	DISCHARGE PLENUM	RETURN AIR GRILLE	HOT WATER	STEAM	ELECTRIC	ECONOMIZER
40RFA 07	1,800	0.06	0.01	0.10	0.10	0.04	0.05
	2,400	0.10	0.01	0.16	0.16	0.06	0.07
	3,000	0.14	0.02	0.23	0.23	0.10	0.09
40RFA/S 08	2,250	0.09	0.01	0.15	0.15	0.06	0.06
	3,000	0.14	0.02	0.23	0.23	0.10	0.09
	3,750	0.21	0.03	0.35	0.35	0.15	0.15
40RFS 10	2,550	0.11	0.02	0.18	0.18	0.07	0.07
	3,400	0.17	0.03	0.28	0.28	0.12	0.13
	4,250	0.24	0.04	0.41	0.41	0.19	0.19
40RFA/S 12	3,000	0.14	0.02	0.23	0.23	0.10	0.09
	4,000	0.22	0.04	0.37	0.37	0.17	0.17
	5,000	0.32	0.06	0.53	0.53	0.26	0.28
40RUA/S 14	3,750	0.07	0.01	0.11	0.11	0.04	0.05
	5,000	0.12	0.02	0.17	0.17	0.07	0.07
	6,250	0.17	0.02	0.25	0.25	0.11	0.11
40RUA/S 16	4,500	0.10	0.01	0.15	0.15	0.06	0.06
	6,000	0.16	0.02	0.23	0.23	0.10	0.09
	7,500	0.23	0.03	0.33	0.33	0.15	0.15
40RUA/S 25	6,000	0.16	0.02	0.23	0.23	0.10	0.09
	8,000	0.26	0.04	0.37	0.37	0.17	0.17
	10,000	0.37	0.06	0.53	0.53	0.26	0.28
40RUA/S 28	7,500	0.15	0.02	0.28	0.28	0.09	0.06
	10,000	0.24	0.03	0.44	0.44	0.16	0.09
	12,500	0.34	0.05	0.63	0.63	0.24	0.14
40RUA/S 30	9,000	0.20	0.03	0.37	0.37	0.13	0.08
	12,000	0.32	0.05	0.59	0.59	0.22	0.14
	15,000	0.46	0.07	0.85	0.85	0.34	0.21



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GENERAL FAN PERFORMANCE NOTES

1. Interpolation is permissible. Do not extrapolate.
2. External static pressure is the static pressure difference between the return duct and the supply duct plus the static pressure caused by any FIOPs or accessories.
3. Tabular data accounts for pressure loss due to clean filters, unit casing, wet coils, and highest gas heat exchanger (when gas heat unit).
4. Factory options and accessories may effect static pressure losses. Selection software is available, through your salesperson, to help you select the best motor/drive combination for your application.
5. The fan performance tables offer motor/drive recommendations. In cases when two motor/drive combinations would work, Carrier recommends the lower horsepower option.
6. For information on the electrical properties of Carrier motors, please see the Electrical Data section of this book.
7. For more information on the performance limits of Carrier motors, see the Application Data section of this book.
8. The EPACT (Energy Policy Act of 1992, U.S.A.) regulates energy requirements for specific types of indoor fan motors. Motors regulated by EPACT include any general purpose, T-frame (three-digit, 143 and larger), single-speed, foot mounted, polyphase, squirrel cage induction motors of NEMA (National Electrical Manufacturers Association) design A and B, manufactured for use in the United States. Ranging from 1 to 200 Hp, these continuous-duty motors operate on 230 and 460 volt, 60 Hz power. If a motor does not fit into these specifications, the motor does not have to be replaced by an EPACT compliant energy-efficient motor. Variable-speed motors are exempt from EPACT compliance requirements.



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40RFAA07 Fan Data (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1800	788	0.18	942	0.31	1081	0.48	1202	0.67	1305	0.88
1950	828	0.20	975	0.34	1107	0.50	1227	0.71	1333	0.92
2100	870	0.23	1005	0.37	1134	0.55	1252	0.75	1358	0.97
2250	914	0.25	1040	0.41	1163	0.59	1279	0.80	1383	1.02
2400	958	0.30	1077	0.45	1194	0.63	1305	0.84	1409	1.07
2550	1004	0.34	1115	0.50	1228	0.68	1334	0.89	1435	1.13
2700	1050	0.39	1155	0.55	1261	0.74	1364	0.95	1462	1.18
2850	1097	0.44	1197	0.60	1297	0.79	1395	1.01	1491	1.25
3000	1144	0.50	1239	0.66	1334	0.86	1429	1.08	1521	1.32

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1800	1403	1.09	1491	1.32	1571	1.55	1647	1.79	1718	2.04
1950	1429	1.14	1517	1.36	1598	1.62	1674	1.87	1745	2.13
2100	1454	1.20	1542	1.44	1624	1.69	1700	1.95	1772	2.21
2250	1479	1.25	1568	1.50	1650	1.76	1726	2.02	1799	2.30
2400	1504	1.31	1593	1.57	1675	1.83	1752	2.11	1825	2.39
2550	1529	1.37	1618	1.64	1700	1.91	1777	2.19	1850	2.48
2700	1555	1.44	1643	1.70	1725	1.98	1802	2.27	1875	2.57
2850	1582	1.50	1668	1.78	1750	2.06	1827	2.36	1900	2.66
3000	1610	1.58	1695	1.86	1775	2.14	1852	2.45	1925	2.76

Medium Static 788-1695 rpm, 1.86 max bhp

High Static 788-1925 rpm, 2.76 max bhp

40RFAA07 Medium Static Fan Data (rpm - VDC)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
1800	788	3.8	942	4.0	1081	5.3	1202	5.9	1305	6.4
1950	828	4.0	975	4.7	1107	5.4	1227	6.0	1333	6.6
2100	870	4.2	1005	4.9	1134	5.5	1252	6.2	1358	6.7
2250	914	4.4	1040	5.1	1163	5.7	1279	6.3	1383	6.8
2400	958	4.6	1077	5.3	1194	5.8	1305	6.4	1409	7.0
2550	1004	4.9	1115	5.4	1228	6.0	1334	6.6	1435	7.1
2700	1050	5.1	1155	5.7	1261	6.2	1364	6.7	1462	7.2
2850	1097	5.4	1197	5.9	1297	6.4	1395	6.9	1491	7.4
3000	1144	5.6	1239	6.1	1334	6.6	1429	7.1	1521	7.5

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
1800	1403	6.9	1491	7.4	—	—	—	—	—	—
1950	1429	7.1	1517	7.5	—	—	—	—	—	—
2100	1454	7.3	1542	7.6	—	—	—	—	—	—
2250	1479	7.5	1568	7.9	—	—	—	—	—	—
2400	1504	7.4	1593	7.9	—	—	—	—	—	—
2550	1529	7.6	1618	8.0	—	—	—	—	—	—
2700	1555	7.7	1643	8.2	—	—	—	—	—	—
2850	1582	7.9	1668	8.3	—	—	—	—	—	—
3000	1610	8.0	1695	8.4	—	—	—	—	—	—

Medium Static 788-1695 rpm



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40RFAA07 High Static Fan Data (rpm - VDC)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
1800	788	3.5	942	4.2	1081	4.8	1202	5.4	1308	5.9
1950	828	3.7	973	4.3	1107	5.0	1227	5.5	1333	6.0
2100	870	3.9	1005	4.5	1134	5.1	1252	5.6	1358	6.1
2250	914	4.1	1040	4.6	1163	5.2	1278	5.7	1383	6.2
2400	958	4.3	1077	4.8	1194	5.4	1305	5.9	1409	6.3
2550	1004	4.5	1115	5.0	1226	5.5	1334	6.0	1435	6.5
2700	1050	4.7	1155	5.2	1261	5.7	1364	6.1	1462	6.6
2850	1097	4.9	1197	5.4	1297	5.8	1395	6.3	1491	6.7
3000	1144	5.1	1239	5.6	1334	6.0	1429	6.4	1521	6.9

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
1800	1403	6.3	1491	6.7	1571	7.1	1647	7.4	1718	7.8
1950	1429	6.4	1517	6.8	1598	7.2	1674	7.6	1745	7.9
2100	1454	6.6	1542	7.0	1624	7.3	1700	7.7	1772	8.0
2250	1479	6.7	1568	7.1	1650	7.5	1726	7.8	1799	8.1
2400	1504	6.8	1593	7.2	1675	7.6	1752	7.9	1825	8.3
2550	1529	6.9	1618	7.3	1700	7.7	1777	8.0	1850	8.4
2700	1555	7.0	1643	7.4	1725	7.8	1802	8.2	1875	8.5
2850	1582	7.1	1668	7.5	1750	7.9	1827	8.3	1900	8.6
3000	1610	7.3	1695	7.7	1775	8.0	1852	8.4	1925	8.7

High Static 788-1925 rpm



EL

Fan data (cont)



40RFAA08 Fan Data (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2250	884	0.23	1000	0.37	1131	0.54	1247	0.74	1354	0.85
2440	937	0.27	1053	0.42	1188	0.59	1279	0.79	1383	1.01
2625	991	0.32	1099	0.47	1206	0.64	1311	0.84	1412	1.07
2815	1048	0.37	1149	0.53	1249	0.70	1348	0.90	1445	1.13
3000	1103	0.43	1199	0.58	1293	0.77	1386	0.97	1478	1.20
3190	1161	0.50	1252	0.65	1340	0.85	1428	1.05	1516	1.26
3375	1218	0.57	1304	0.74	1388	0.93	1471	1.14	1554	1.37
3565	1277	0.65	1359	0.83	1438	1.02	1517	1.24	1596	1.47
3750	1335	0.75	1413	0.93	1489	1.13	1564	1.34	1639	1.56

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2250	1452	1.18	1542	1.43	1625	1.68	1703	1.94	1776	2.21
2440	1480	1.25	1570	1.50	1653	1.76	1731	2.03	1805	2.31
2625	1507	1.31	1597	1.57	1680	1.83	1759	2.11	1833	2.40
2815	1537	1.38	1625	1.64	1708	1.91	1797	2.20	1861	2.50
3000	1568	1.45	1654	1.72	1736	2.00	1814	2.29	1888	2.60
3190	1602	1.54	1685	1.80	1765	2.09	1842	2.39	1916	2.70
3375	1636	1.62	1717	1.90	1795	2.18	1871	2.49	1944	2.81
3565	1675	1.73	1752	2.00	1828	2.29	1902	2.60	1973	2.92
3750	1714	1.83	1788	2.11	1862	2.41	1933	2.71	2003	3.04

Medium Static 884-1788 rpm, 1.84 max bhp

High Static 884-2003 rpm, 2.70 max bhp

40RFAA08 Medium Static Fan Data (rpm - VDC)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
2250	884	4.3	1000	4.9	1131	5.5	1247	6.1	1354	6.7
2440	937	4.5	1053	5.1	1188	5.7	1279	6.3	1383	6.8
2625	991	4.8	1099	5.4	1206	5.9	1311	6.5	1412	7.0
2815	1048	5.1	1149	5.6	1248	6.1	1348	6.6	1445	7.1
3000	1103	5.4	1199	5.8	1293	6.4	1386	6.8	1478	7.3
3190	1161	5.7	1252	6.2	1340	6.6	1428	7.1	1516	7.5
3375	1218	6.0	1304	6.4	1388	6.9	1471	7.3	1554	7.7
3565	1277	6.3	1359	6.7	1438	7.1	1517	7.5	1596	7.9
3750	1335	6.6	1413	7.0	1489	7.4	1564	7.8	1639	8.1

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
2250	1452	7.2	1542	7.6	—	—	—	—	—	—
2440	1480	7.3	1570	7.8	—	—	—	—	—	—
2625	1507	7.5	1597	7.9	—	—	—	—	—	—
2815	1537	7.6	1625	8.1	—	—	—	—	—	—
3000	1568	7.8	1654	8.2	—	—	—	—	—	—
3190	1602	8.0	1685	8.4	—	—	—	—	—	—
3375	1636	8.1	1717	8.5	—	—	—	—	—	—
3565	1675	8.3	1752	8.7	—	—	—	—	—	—
3750	1714	8.5	1788	8.9	—	—	—	—	—	—

Medium Static 884-1788 rpm



ef

Fan data (cont)



40RFAA08 High Static Fan Data (rpm - VDC)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
2250	884	3.9	1009	4.5	1131	5.1	1247	5.6	1354	6.1
2440	937	4.2	1053	4.7	1188	5.2	1279	5.7	1383	6.2
2625	991	4.4	1099	4.9	1206	5.4	1311	5.9	1412	6.4
2815	1048	4.7	1149	5.1	1249	5.6	1348	6.1	1445	6.5
3000	1103	4.9	1199	5.4	1293	5.8	1386	6.2	1478	6.7
3190	1161	5.2	1252	5.6	1340	6.0	1428	6.4	1516	6.8
3375	1218	5.5	1304	5.9	1388	6.3	1471	6.6	1554	7.0
3565	1277	5.7	1359	6.1	1438	6.5	1517	6.8	1596	7.2
3750	1335	6.0	1413	6.4	1489	6.7	1564	7.1	1639	7.4

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
2250	1452	6.5	1542	7.0	1625	7.3	1703	7.7	1775	8.0
2440	1480	6.7	1570	7.1	1653	7.5	1731	7.8	1805	8.2
2625	1507	6.8	1597	7.2	1680	7.6	1759	8.0	1833	8.3
2815	1537	6.9	1625	7.3	1708	7.7	1787	8.1	1861	8.4
3000	1568	7.1	1654	7.5	1736	7.9	1814	8.2	1888	8.6
3190	1602	7.2	1685	7.6	1765	8.0	1842	8.3	1916	8.7
3375	1636	7.4	1717	7.8	1795	8.1	1871	8.5	1944	8.8
3565	1675	7.6	1752	7.9	1828	8.3	1902	8.6	1973	9.0
3750	1714	7.8	1788	8.1	1862	8.4	1933	8.8	2003	9.1

High Static 884-2003 rpm



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Fan data (cont)



40RFA08 Fan Data (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2250	850	0.20	975	0.33	1096	0.49	1210	0.67	1315	0.87
2440	900	0.24	1017	0.37	1130	0.53	1239	0.71	1342	0.93
2625	951	0.27	1060	0.41	1167	0.57	1270	0.76	1369	0.97
2815	1004	0.32	1107	0.46	1207	0.62	1305	0.81	1400	1.02
3000	1056	0.37	1154	0.51	1248	0.68	1341	0.87	1432	1.08
3190	1111	0.42	1203	0.57	1292	0.74	1380	0.94	1467	1.15
3375	1165	0.48	1253	0.64	1337	0.81	1421	1.01	1503	1.23
3565	1221	0.55	1304	0.71	1385	0.89	1464	1.09	1543	1.31
3750	1275	0.62	1355	0.79	1432	0.97	1508	1.18	1583	1.40

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2250	1412	1.09	1503	1.30	1587	1.56	1666	1.81	1740	2.08
2440	1437	1.14	1527	1.37	1611	1.62	1690	1.88	1765	2.15
2625	1463	1.19	1551	1.43	1634	1.68	1713	1.95	1788	2.22
2815	1490	1.25	1577	1.49	1659	1.75	1738	2.02	1812	2.30
3000	1519	1.31	1604	1.56	1685	1.82	1762	2.09	1836	2.38
3190	1551	1.38	1633	1.63	1712	1.90	1788	2.18	1861	2.47
3375	1584	1.46	1663	1.71	1740	1.98	1815	2.26	1886	2.55
3565	1621	1.55	1697	1.80	1771	2.07	1843	2.35	1914	2.65
3750	1658	1.64	1731	1.90	1803	2.17	1873	2.45	1942	2.75

Medium Static 850-1731 rpm, 1.90 max bhp

High Static 850-1942 rpm, 2.75 max bhp

40RFA08 Medium Static Fan Data (rpm - Vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
2250	850	4.1	975	4.7	1096	5.4	1210	6.1	1315	6.8
2440	900	4.3	1017	4.9	1130	5.5	1239	6.1	1342	6.8
2625	951	4.6	1060	5.2	1167	5.7	1270	6.2	1369	6.8
2815	1004	4.9	1107	5.4	1207	5.9	1305	6.4	1400	6.9
3000	1056	5.1	1154	5.6	1248	6.1	1341	6.6	1432	7.1
3190	1111	5.4	1203	5.9	1292	6.4	1380	6.8	1467	7.3
3375	1165	5.7	1253	6.2	1337	6.6	1421	7.0	1503	7.4
3565	1221	6.0	1304	6.4	1385	6.8	1464	7.2	1543	7.6
3750	1275	6.3	1355	6.7	1432	7.1	1508	7.5	1583	7.6

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
2250	1412	7.0	1503	7.4	—	—	—	—	—	—
2440	1437	7.1	1527	7.6	—	—	—	—	—	—
2625	1463	7.2	1551	7.7	—	—	—	—	—	—
2815	1490	7.4	1577	7.8	—	—	—	—	—	—
3000	1519	7.6	1604	8.0	—	—	—	—	—	—
3190	1551	7.7	1633	8.1	—	—	—	—	—	—
3375	1584	7.9	1663	8.3	—	—	—	—	—	—
3565	1621	8.1	1697	8.4	—	—	—	—	—	—
3750	1658	8.2	1731	8.6	—	—	—	—	—	—

Medium Static 850-1731 rpm



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Fan data (cont)



40RFSA08 High Static Fan Data (rpm - VDC)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
2250	850	3.8	975	4.3	1096	4.9	1210	5.4	1315	5.9
2440	900	4.0	1017	4.5	1130	5.1	1230	5.6	1342	6.0
2625	951	4.2	1060	4.7	1167	5.2	1270	5.7	1369	6.2
2815	1004	4.5	1107	5.0	1207	5.4	1305	5.9	1400	6.3
3000	1056	4.7	1154	5.2	1248	5.6	1341	6.0	1432	6.5
3190	1111	5.0	1203	5.4	1292	5.8	1380	6.2	1467	6.6
3375	1165	5.2	1253	5.6	1337	6.0	1421	6.4	1503	6.8
3565	1221	5.5	1304	5.9	1385	6.2	1464	6.6	1543	7.0
3750	1275	5.7	1355	6.1	1432	6.5	1506	6.8	1583	7.2

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
2250	1412	6.4	1503	6.8	1587	7.2	1666	7.5	1740	7.9
2440	1437	6.5	1527	6.9	1611	7.3	1690	7.6	1765	8.0
2625	1463	6.6	1551	7.0	1634	7.4	1713	7.8	1788	8.1
2815	1490	6.7	1577	7.1	1659	7.5	1738	7.9	1812	8.2
3000	1519	6.9	1604	7.2	1685	7.6	1762	8.0	1836	8.3
3190	1551	7.0	1633	7.4	1712	7.7	1788	8.1	1861	8.4
3375	1584	7.2	1663	7.5	1740	7.9	1815	8.2	1886	8.6
3565	1621	7.3	1697	7.7	1771	8.0	1843	8.4	1914	8.7
3750	1658	7.5	1731	7.8	1803	8.2	1873	8.5	1942	8.8

High Static 850-1942 rpm



EL

Fan data (cont)



40RFSA10 Fan Data (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2550	929	0.26	1041	0.38	1151	0.55	1256	0.74	1357	0.94
2765	986	0.30	1093	0.44	1195	0.61	1294	0.80	1390	1.00
2975	1048	0.35	1146	0.50	1241	0.67	1335	0.86	1425	1.07
3190	1110	0.42	1202	0.57	1291	0.74	1375	0.94	1455	1.15
3400	1171	0.49	1257	0.64	1342	0.82	1425	1.02	1507	1.23
3615	1234	0.57	1316	0.73	1396	0.91	1474	1.11	1552	1.33
3825	1296	0.65	1374	0.82	1450	1.01	1525	1.21	1598	1.43
4040	1360	0.75	1435	0.92	1507	1.12	1578	1.32	1648	1.55
4250	1423	0.85	1494	1.03	1563	1.23	1631	1.44	1695	1.67

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2550	1451	1.17	1540	1.40	1624	1.65	1703	1.92	1777	2.19
2765	1482	1.23	1595	1.47	1651	1.73	1730	2.00	1804	2.27
2975	1514	1.30	1650	1.55	1690	1.81	1757	2.08	1831	2.36
3190	1550	1.38	1692	1.63	1711	1.89	1795	2.17	1859	2.46
3400	1587	1.47	1666	1.72	1743	1.99	1817	2.27	1888	2.56
3615	1629	1.57	1704	1.82	1778	2.09	1850	2.37	1920	2.67
3825	1672	1.67	1744	1.93	1815	2.20	1884	2.49	1952	2.79
4040	1718	1.78	1786	2.05	1855	2.33	1922	2.62	1987	2.92
4250	1765	1.92	1831	2.19	1896	2.46	1950	2.75	2024	3.06

Medium Static 929-1831 rpm, 2.19 max bhp

High Static 929-2024 rpm, 3.06 max bhp

40RFSA10 Medium Static Fan Data (rpm - VDC)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
2550	929	4.5	1041	5.1	1151	5.6	1256	6.2	1357	6.7
2765	986	4.6	1093	5.3	1195	5.9	1294	6.4	1390	6.9
2975	1048	5.1	1146	5.6	1241	6.1	1335	6.6	1425	7.0
3190	1110	5.4	1202	5.9	1291	6.4	1370	6.8	1455	7.2
3400	1171	5.7	1257	6.2	1342	6.6	1425	7.0	1507	7.5
3615	1234	6.1	1316	6.5	1396	6.9	1474	7.3	1552	7.7
3825	1296	6.4	1374	6.8	1450	7.2	1525	7.6	1598	7.9
4040	1360	6.7	1435	7.1	1507	7.5	1578	7.8	1648	8.2
4250	1423	7.0	1494	7.4	1563	7.8	1631	8.1	1695	8.4

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
2550	1451	7.2	1540	7.6	—	—	—	—	—	—
2765	1482	7.3	1595	7.8	—	—	—	—	—	—
2975	1514	7.5	1650	7.9	—	—	—	—	—	—
3190	1550	7.7	1692	8.1	—	—	—	—	—	—
3400	1587	7.9	1666	8.3	—	—	—	—	—	—
3615	1629	8.1	1704	8.5	—	—	—	—	—	—
3825	1672	8.3	1744	8.7	—	—	—	—	—	—
4040	1718	8.5	1786	8.9	—	—	—	—	—	—
4250	1765	8.6	1831	9.1	—	—	—	—	—	—

Medium Static 929-1831 rpm



EJ

Fan data (cont)



40RFSA10 High Static Fan Data (rpm - VDC)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
2550	929	4.1	1041	4.7	1151	5.2	1256	5.6	1357	6.1
2765	989	4.4	1093	4.9	1195	5.4	1294	5.8	1390	6.3
2975	1048	4.7	1146	5.1	1241	5.6	1335	6.0	1426	6.4
3190	1110	5.0	1202	5.4	1291	5.8	1379	6.2	1465	6.6
3400	1171	5.3	1257	5.6	1342	6.0	1425	6.4	1507	6.8
3615	1234	5.5	1316	5.9	1396	6.3	1474	6.6	1552	7.0
3825	1296	5.8	1374	6.2	1450	6.5	1525	6.9	1598	7.2
4040	1360	6.1	1435	6.5	1507	6.8	1578	7.1	1648	7.5
4250	1423	6.4	1494	6.7	1563	7.1	1631	7.4	1698	7.7

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
2550	1451	6.5	1540	7.0	1624	7.3	1703	7.7	1777	8.0
2765	1482	6.7	1569	7.1	1651	7.5	1730	7.8	1804	8.2
2975	1514	6.8	1599	7.2	1680	7.6	1757	8.0	1831	8.3
3190	1550	7.0	1632	7.4	1711	7.7	1786	8.1	1859	8.4
3400	1587	7.2	1666	7.5	1743	7.9	1817	8.2	1888	8.6
3615	1629	7.4	1704	7.7	1778	8.1	1850	8.4	1920	8.7
3825	1672	7.6	1744	7.9	1815	8.2	1884	8.5	1952	8.9
4040	1718	7.8	1786	8.1	1855	8.4	1922	8.7	1987	9.0
4250	1765	8.0	1831	8.3	1896	8.6	1960	8.8	2024	9.2

High Static 929-2024 rpm



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40RFAA12 Fan Data (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3000	1080	0.40	1175	0.55	1268	0.72	1361	0.92	1453	1.14
3250	1154	0.48	1243	0.64	1329	0.81	1415	1.01	1501	1.24
3500	1229	0.57	1312	0.74	1393	0.92	1473	1.13	1553	1.35
3750	1305	0.68	1384	0.86	1459	1.04	1534	1.26	1609	1.48
4000	1381	0.80	1456	0.99	1527	1.18	1598	1.40	1686	1.63
4250	1458	0.94	1529	1.13	1597	1.34	1664	1.56	1730	1.79
4500	1535	1.09	1603	1.29	1668	1.50	1731	1.73	1794	1.97
4750	1613	1.26	1678	1.47	1740	1.69	1800	1.92	1850	2.17
5000	1691	1.45	1753	1.67	1813	1.90	1870	2.14	1927	2.39

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3000	1543	1.38	1629	1.64	1712	1.91	1791	2.20	1868	2.50
3250	1588	1.48	1668	1.74	1748	2.02	1825	2.31	1899	2.62
3500	1632	1.59	1711	1.86	1787	2.14	1862	2.44	1935	2.75
3750	1683	1.73	1757	1.99	1830	2.28	1902	2.58	1972	2.89
4000	1738	1.88	1807	2.14	1877	2.43	1945	2.73	2013	3.05
4250	1795	2.04	1861	2.31	1927	2.60	1992	2.90	—	—
4500	1856	2.23	1918	2.50	1980	2.79	2042	3.09	—	—
4750	1919	2.43	1977	2.71	2036	3.00	—	—	—	—
5000	1983	2.65	2039	2.94	—	—	—	—	—	—

Medium Static 1080-1918 rpm, 2.50 max bhp

High Static 1080-2013 rpm, 3.09 max bhp

40RFAA12 Medium Static Fan Data (rpm - VDC)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
3000	1080	5.3	1175	5.8	1268	6.2	1361	6.7	1453	7.2
3250	1154	5.6	1243	6.1	1329	6.5	1415	7.0	1501	7.4
3500	1229	6.0	1312	6.5	1393	6.9	1473	7.3	1553	7.7
3750	1305	6.4	1384	6.8	1459	7.2	1534	7.8	1609	8.0
4000	1381	6.8	1456	7.2	1527	7.6	1598	7.9	1686	8.3
4250	1458	7.2	1529	7.6	1597	7.9	1664	8.3	1730	8.6
4500	1535	7.6	1603	8.0	1668	8.3	1731	8.6	1794	8.9
4750	1613	8.0	1678	8.3	1740	8.7	1800	9.0	1850	9.3
5000	1691	8.4	1753	8.7	1813	9.0	1870	9.3	1927	9.6

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
3000	1543	7.6	1629	8.1	—	—	—	—	—	—
3250	1588	7.9	1668	8.3	—	—	—	—	—	—
3500	1632	8.1	1711	8.5	—	—	—	—	—	—
3750	1683	8.4	1757	8.8	—	—	—	—	—	—
4000	1738	8.7	1807	9.0	—	—	—	—	—	—
4250	1795	8.9	1861	9.3	—	—	—	—	—	—
4500	1856	9.3	1918	9.6	—	—	—	—	—	—
4750	1919	9.6	—	—	—	—	—	—	—	—
5000	—	—	—	—	—	—	—	—	—	—

Medium Static 1080-1918 rpm



Fan data (cont)



40RFAA12 High Static Fan Data (rpm - VDC)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
3000	1080	4.8	1175	5.3	1268	5.7	1361	6.1	1453	6.6
3250	1154	5.2	1243	5.6	1329	6.0	1415	6.4	1501	6.8
3500	1229	5.5	1312	5.9	1393	6.3	1473	6.6	1553	7.0
3750	1305	5.9	1384	6.2	1459	6.6	1534	6.9	1609	7.3
4000	1381	6.2	1456	6.6	1527	6.9	1598	7.2	1668	7.5
4250	1458	6.6	1529	6.9	1597	7.2	1664	7.5	1730	7.8
4500	1535	6.9	1603	7.2	1668	7.5	1731	7.8	1794	8.1
4750	1613	7.3	1678	7.6	1740	7.9	1800	8.2	1860	8.4
5000	1691	7.7	1753	7.9	1813	8.2	1870	8.5	1927	8.7

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
3000	1543	7.0	1629	7.4	1712	7.7	1791	8.1	1866	8.5
3250	1586	7.2	1668	7.5	1748	7.9	1825	8.3	1899	8.6
3500	1632	7.4	1711	7.7	1787	8.1	1862	8.4	1935	8.8
3750	1683	7.6	1757	8.0	1830	8.3	1902	8.6	1972	8.9
4000	1738	7.9	1807	8.2	1877	8.5	1945	8.8	2013	9.1
4250	1795	8.1	1861	8.4	1927	8.7	1992	9.0	—	—
4500	1856	8.4	1918	8.7	1960	9.0	2042	9.3	—	—
4750	1919	8.7	1977	9.0	2036	9.2	—	—	—	—
5000	1983	9.0	2039	9.3	—	—	—	—	—	—

High Static: 1080-2013 rpm



EL

Fan data (cont)



40RFA12 Fan Data (rpm - bhp)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3000	1049	0.36	1140	0.50	1240	0.67	1333	0.85	1424	1.06
3250	1120	0.43	1211	0.58	1299	0.75	1385	0.94	1470	1.15
3500	1193	0.51	1278	0.67	1360	0.85	1440	1.04	1520	1.25
3750	1266	0.61	1346	0.77	1423	0.95	1490	1.15	1574	1.37
4000	1340	0.71	1415	0.88	1488	1.07	1560	1.28	1630	1.50
4250	1414	0.84	1486	1.01	1555	1.21	1623	1.42	1689	1.64
4500	1489	0.97	1557	1.15	1623	1.35	1687	1.57	1751	1.81
4750	1564	1.12	1629	1.31	1692	1.52	1753	1.74	1814	1.98
5000	1639	1.28	1702	1.48	1762	1.70	1820	1.93	1878	2.17

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3000	1512	1.29	1596	1.54	1677	1.79	1754	2.06	1828	2.35
3250	1553	1.38	1634	1.63	1712	1.89	1788	2.17	1861	2.46
3500	1599	1.49	1676	1.74	1751	2.00	1824	2.28	1895	2.58
3750	1648	1.61	1721	1.88	1793	2.13	1863	2.41	1932	2.71
4000	1700	1.74	1770	2.00	1838	2.27	1906	2.55	1972	2.85
4250	1756	1.89	1822	2.15	1887	2.42	1951	2.71	2015	3.01
4500	1814	2.05	1876	2.31	1938	2.59	2000	2.89	2060	3.19
4750	1874	2.23	1933	2.50	1992	2.78	2051	3.08	—	—
5000	1935	2.43	1992	2.70	2048	2.98	—	—	—	—

Medium Static 1049-1933 rpm, 2.50 max bhp

High Static 1049-2060 rpm, 3.19 max bhp

40RFA12 Medium Static Fan Data (rpm - VDC)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
3000	1049	5.1	1140	5.6	1240	6.1	1333	6.6	1424	7.0
3250	1120	5.5	1211	5.9	1299	6.4	1385	6.8	1470	7.3
3500	1193	5.8	1278	6.3	1360	6.7	1440	7.1	1520	7.6
3750	1266	6.2	1346	6.6	1423	7.0	1490	7.4	1574	7.8
4000	1340	6.6	1415	7.0	1488	7.4	1560	7.7	1630	8.1
4250	1414	7.0	1486	7.4	1555	7.7	1623	8.1	1689	8.4
4500	1489	7.4	1557	7.7	1623	8.1	1687	8.4	1751	8.7
4750	1564	7.8	1629	8.1	1692	8.4	1753	8.7	1814	9.0
5000	1639	8.1	1702	8.5	1762	8.8	1820	9.1	1878	9.4

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
3000	1512	7.5	1596	7.9	—	—	—	—	—	—
3250	1553	7.7	1634	8.1	—	—	—	—	—	—
3500	1599	7.9	1676	8.3	—	—	—	—	—	—
3750	1648	8.2	1721	8.6	—	—	—	—	—	—
4000	1700	8.5	1770	8.8	—	—	—	—	—	—
4250	1756	8.7	1822	9.1	—	—	—	—	—	—
4500	1814	9.0	1876	9.4	—	—	—	—	—	—
4750	1874	9.4	1933	9.7	—	—	—	—	—	—
5000	1935	9.7	—	—	—	—	—	—	—	—

Medium Static 1049-1933 rpm



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Fan data (cont)



40RFSA12 High Static Fan Data (rpm - VDC)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
3000	1049	4.7	1146	5.1	1240	5.6	1333	6.0	1424	6.4
3250	1120	5.0	1211	5.4	1299	5.8	1385	6.2	1470	6.6
3500	1193	5.4	1278	5.7	1360	6.1	1440	6.5	1520	6.9
3750	1266	5.7	1346	6.1	1423	6.4	1499	6.8	1574	7.1
4000	1340	6.0	1415	6.4	1488	6.7	1560	7.0	1630	7.4
4250	1414	6.4	1486	6.7	1555	7.0	1623	7.3	1689	7.6
4500	1489	6.7	1557	7.0	1623	7.3	1687	7.6	1751	7.9
4750	1564	7.1	1629	7.4	1692	7.7	1753	7.9	1814	8.2
5000	1639	7.4	1702	7.7	1762	8.0	1820	8.2	1876	8.5

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc	rpm	Vdc
3000	1512	6.8	1596	7.2	1677	7.6	1754	7.9	1828	8.3
3250	1553	7.0	1634	7.4	1712	7.7	1788	8.1	1861	8.4
3500	1599	7.2	1676	7.6	1751	7.9	1824	8.3	1895	8.6
3750	1648	7.5	1721	7.8	1793	8.1	1863	8.4	1932	8.8
4000	1700	7.7	1770	8.0	1838	8.3	1906	8.6	1972	8.9
4250	1756	8.0	1822	8.3	1887	8.6	1951	8.9	2015	9.1
4500	1814	8.2	1876	8.5	1938	8.8	2000	9.1	2060	9.4
4750	1874	8.5	1933	8.8	1992	9.0	2051	9.3	—	—
5000	1935	8.8	1992	9.0	2048	9.3	—	—	—	—

High Static 1049-2060 rpm



EL

Fan data (cont)



Standard Fan, 40RU**14-30, 0.0-1.2 in. wg ESP, 60 Hz — English^{a,b}

UNIT	AIRFLOW (Cfm)	EXTERNAL STATIC PRESSURE (in. wg) ^c													
		0.0		0.2		0.4		0.6		0.8		1.0		1.2	
		Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
40RUA*14 40RUS*14	3750	410	0.43	467	0.55	567	0.83	649	1.12	721	1.41	788	1.72	851	2.05
	4300	455	0.62	504	0.74	599	1.05	679	1.38	748	1.70	811	2.04	871	2.39
	5000	514	0.92	556	1.06	641	1.39	718	1.76	786	2.14	847	2.52	903	2.91
	5700	575	1.32	612	1.47	686	1.82	759	2.23	825	2.60	884	3.09	939	3.62
	6250	624	1.71	657	1.87	725	2.24	793	2.66	856	3.12	915	3.59	969	4.06
40RUA*16 40RUS*16	4500	437	0.61	483	0.72	576	1.01	660	1.35	732	1.69	797	2.03	856	2.38
	5300	499	0.95	538	1.07	617	1.37	696	1.74	767	2.13	830	2.53	888	2.94
	6000	555	1.34	590	1.48	659	1.79	730	2.17	798	2.59	860	3.04	918	3.49
	6800	620	1.91	651	2.06	712	2.39	774	2.78	836	3.22	896	3.71	952	4.21
	7500	677	2.52	706	2.69	761	3.04	817	3.44	873	3.89	929	4.39	984	4.93
40RUA*25 40RUS*25	6,000	542	1.29	577	1.42	646	1.72	716	2.09	785	2.51	849	2.95	907	3.40
	7,000	620	1.99	652	2.15	711	2.48	771	2.85	831	3.28	890	3.76	947	4.27
	8,000	700	2.92	728	3.10	781	3.46	833	3.85	885	4.29	938	4.78	990	5.32
	9,000	781	4.10	806	4.30	854	4.71	900	5.13	946	5.58	993	6.08	1039	6.62
	10,000	862	5.66	885	5.79	929	6.24	971	6.70	1012	7.18	1054	7.69	1096	8.24
40RUA*28 40RUS*28	7,500	476	1.39	510	1.58	579	1.99	644	2.40	701	2.81	752	3.29	804	3.96
	8,750	545	2.14	574	2.35	633	2.81	691	3.29	747	3.77	797	4.25	842	4.76
	10,000	615	3.12	641	3.35	692	3.87	743	4.41	794	4.96	843	5.51	888	6.05
	11,250	685	4.37	709	4.64	754	5.20	800	5.79	845	6.40	891	7.02	935	7.64
	12,500	758	5.92	778	6.22	819	6.83	860	7.47	901	8.14	942	8.83	983	9.52
40RUA*30 40RUS*30	9,000	539	2.18	569	2.39	626	2.85	683	3.34	739	3.83	791	4.32	837	4.82
	10,500	620	3.37	646	3.62	695	4.13	744	4.68	793	5.25	842	5.83	888	6.41
	12,000	701	4.94	724	5.22	789	5.80	811	6.40	854	7.04	897	7.69	940	8.36
	13,500	783	6.95	804	7.27	844	7.91	883	8.57	920	9.26	958	9.97	996	10.71
	15,000	865	9.45	884	9.81	921	10.52	956	11.24	991	11.98	1025	12.75	1059	13.54

NOTE(S):

- a. Maximum allowable fan speed is 1200 rpm for all sizes.
- b. Fan performance is based on deductions for wet coil, clean 2 in. filters, and unit casing. See table below for factory-supplied filter pressure drop.
- c. **Bold** indicates field-supplied drive is required.
Plain type indicates standard motor and standard drive.
Underlining indicates a different motor and drive combination other than the standard motor and standard drive combination is required.

Factory-Supplied Pressure Drop — English

UNIT	AIRFLOW (Cfm)	PRESSURE DROP (in. wg)
40RUA*14 40RUS*14	3,750	0.06
	5,000	0.10
	6,250	0.13
40RUA*16 40RUS*16	4,500	0.08
	6,000	0.12
	7,500	0.17
40RUA*25 40RUS*25	6,000	0.12
	8,000	0.19
	10,000	0.26
40RUA*28 40RUS*28	7,500	0.15
	10,000	0.22
	12,500	0.30
40RUA*30 40RUS*30	9,000	0.19
	12,000	0.29
	15,000	0.40

LEGEND

- Bhp — Brake Horsepower Input to Fan
- ESP — External Static Pressure



ef

Fan data (cont)



Standard Fan, 40RU*14-30, 1.4-2.4 in. wg ESP, 60 Hz — English^{a,b}

UNIT	AIRFLOW (Cfm)	EXTERNAL STATIC PRESSURE (in. wg) ^c											
		1.4		1.5		1.8		2.0		2.2		2.4	
		Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
40RUA*14 40RUS*14	3750	912	2.39	971	2.76	1028	3.14	1083	3.54	1138	3.95	1185	4.36
	4300	928	2.75	982	3.13	1036	3.53	1087	3.94	1138	4.37	1187	4.81
	5000	956	3.30	1007	3.71	1056	4.13	1104	4.56	1151	5.00	1196	5.46
	5700	990	3.95	1039	4.40	1086	4.85	1130	5.31	1174	5.78	—	—
	6250	1019	4.54	1067	5.02	1112	5.80	1156	5.99	1198	6.49	—	—
40RUA*16 40RUS*16	4500	912	2.75	967	3.12	1019	3.52	1070	3.92	1120	4.35	1168	4.79
	5300	942	3.34	992	3.76	1041	4.18	1088	4.61	1134	5.06	1179	5.52
	6000	971	3.95	1020	4.40	1067	4.86	1112	5.33	1156	5.81	1198	6.29
	6800	1005	4.72	1054	5.23	1101	5.75	1145	6.27	1187	6.79	—	—
	7500	1036	5.48	1084	6.04	1131	6.61	1174	7.17	—	—	—	—
40RUA*25 40RUS*25	6,000	961	3.86	1011	4.31	1058	4.77	1104	5.24	1147	5.71	—	—
	7,000	1000	4.79	1050	5.32	1097	5.85	1142	6.38	1184	6.91	—	—
	8,000	1041	5.88	1090	6.47	1137	7.07	1181	7.67	—	—	—	—
	9,000	1086	7.21	1133	7.92	1178	8.47	—	—	—	—	—	—
	10,000	1138	8.83	1180	9.46	—	—	—	—	—	—	—	—
40RUA*28 40RUS*28	7,500	874	5.33	897	5.91	940	6.80	990	7.50	—	—	—	—
	8,750	886	5.36	930	6.31	982	7.32	1020	8.10	—	—	—	—
	10,000	930	6.60	969	7.00	1007	7.89	1045	8.71	—	—	—	—
	11,250	975	8.25	1014	8.86	1051	9.49	1086	10.17	—	—	—	—
	12,500	1023	10.20	1061	10.88	1097	11.56	—	—	—	—	—	—
40RUA*30 40RUS*30	9,000	881	5.37	923	6.03	967	6.89	1020	8.25	—	—	—	—
	10,500	930	6.97	970	7.55	1008	8.17	1045	8.86	—	—	—	—
	12,000	981	9.02	1021	9.67	—	—	—	—	—	—	—	—
	13,500	1035	11.45	—	—	—	—	—	—	—	—	—	—
	15,000	—	—	—	—	—	—	—	—	—	—	—	—

NOTE(S):

- a. Maximum allowable fan speed is 1200 rpm for all sizes.
- b. Fan performance is based on deductions for wet coil, clean 2 in. filters, and unit casing. See table below for factory-supplied filter pressure drop.
- c. **Bold** indicates field-supplied drive is required.
Plain type indicates standard motor and standard drive.
Underlining indicates a different motor and drive combination other than the standard motor and standard drive combination is required.

Factory-Supplied Pressure Drop — English

UNIT	AIRFLOW (Cfm)	PRESSURE DROP (in. wg)
40RUA*14 40RUS*14	3,750	0.06
	5,000	0.10
	6,250	0.13
40RUA*16 40RUS*16	4,500	0.08
	6,000	0.12
	7,500	0.17
40RUA*25 40RUS*25	6,000	0.12
	8,000	0.19
	10,000	0.26
40RUA*28 40RUS*28	7,500	0.15
	10,000	0.22
	12,500	0.30
40RUA*30 40RUS*30	9,000	0.19
	12,000	0.29
	15,000	0.40

LEGEND

- Bhp — Brake Horsepower Input to Fan
- ESP — External Static Pressure



EL

Standard Fan, 40RU**14-30, 0-300 Pa ESP, 60 Hz — SI^{a,b}

UNIT	AIRFLOW (L/s)	EXTERNAL STATIC PRESSURE (Pa) ^c													
		0		50		100		150		200		250		300	
		r/s	kW	r/s	kW	r/s	kW	r/s	kW	r/s	kW	r/s	kW	r/s	kW
40RUA*14 40RUS*14	1770	6.84	0.32	7.78	0.41	9.46	0.62	10.82	0.83	12.02	1.05	13.13	1.28	14.19	1.53
	2030	7.58	0.46	8.40	0.55	9.98	0.78	11.31	1.03	12.47	1.27	13.52	1.52	14.51	1.78
	2350	8.57	0.69	9.27	0.79	10.68	1.04	11.96	1.31	13.09	1.60	14.11	1.88	15.05	2.17
	2690	9.59	0.99	10.20	1.10	11.44	1.36	12.64	1.66	13.74	1.98	14.74	2.30	15.65	2.63
	2950	10.40	1.28	10.98	1.39	12.09	1.67	13.21	1.98	14.27	2.33	15.25	2.68	16.15	3.03
40RUA*16 40RUS*16	2120	7.28	0.45	8.05	0.54	9.60	0.75	11.00	1.00	12.21	1.26	13.28	1.51	14.27	1.78
	2500	8.32	0.71	8.97	0.80	10.29	1.02	11.59	1.30	12.78	1.59	13.84	1.89	14.80	2.19
	2830	9.25	1.00	9.83	1.10	10.99	1.33	12.16	1.62	13.29	1.93	14.34	2.27	15.30	2.60
	3210	10.33	1.42	10.85	1.54	11.87	1.78	12.90	2.07	13.93	2.40	14.93	2.76	15.87	3.14
	3540	11.29	1.88	11.77	2.01	12.69	2.27	13.62	2.56	14.66	2.90	15.49	3.27	16.40	3.67
40RUA*25 40RUS*25	2830	9.03	0.96	9.62	1.06	10.77	1.28	11.93	1.56	13.08	1.87	14.15	2.20	15.12	2.54
	3300	10.33	1.48	10.87	1.60	11.85	1.85	12.85	2.13	13.85	2.45	14.83	2.80	15.78	3.18
	3780	11.67	2.18	12.13	2.31	13.02	2.58	13.88	2.87	14.75	3.20	15.63	3.56	16.50	3.97
	4260	13.02	3.06	13.43	3.21	14.23	3.51	15.00	3.83	15.77	4.16	16.55	4.53	17.32	4.94
	4720	14.37	4.15	14.75	4.32	15.48	4.65	16.18	5.00	16.87	5.35	17.57	5.73	18.27	6.14
40RUA*28 40RUS*28	3540	7.93	1.04	8.50	1.18	9.65	1.48	10.73	1.79	11.68	2.10	12.53	2.45	13.40	2.95
	4130	9.08	1.60	9.67	1.75	10.55	2.10	11.52	2.45	12.45	2.81	13.28	3.17	14.03	3.55
	4720	10.25	2.33	10.68	2.51	11.53	2.89	12.38	3.28	13.23	3.70	14.05	4.11	14.80	4.51
	5310	11.42	3.26	11.82	3.46	12.57	3.88	13.33	4.32	14.08	4.77	14.85	5.23	15.58	5.70
	5900	12.60	4.41	12.97	4.64	13.65	5.09	14.33	5.57	15.02	6.07	15.70	6.58	16.38	7.10
40RUA*30 40RUS*30	4250	8.98	1.63	9.48	1.78	10.43	2.13	11.38	2.49	12.32	2.86	13.18	3.22	13.95	3.59
	4960	10.33	2.51	10.77	2.70	11.58	3.08	12.40	3.49	13.22	3.91	14.03	4.35	14.80	4.78
	5660	11.68	3.88	12.07	3.89	12.82	4.33	13.52	4.77	14.23	5.25	14.95	5.73	15.67	6.23
	6370	13.05	5.18	13.40	5.42	14.07	5.90	14.72	6.39	15.33	6.91	15.97	7.43	16.60	7.99
	7080	14.42	7.05	14.73	7.32	15.35	7.84	15.93	8.38	16.52	8.93	17.08	9.51	17.65	10.10

NOTE(S):

- a. Maximum allowable fan speed is 20 r/s for all sizes.
- b. Fan performance is based on deductions for wet coil, clean 51 mm filters, and unit casing. See table below for factory-supplied filter pressure drop.
- c. **Bold** indicates field-supplied drive is required.
 Plain type indicates standard motor and standard drive.
Underlining indicates a different motor and drive combination other than the standard motor and standard drive combination is required.

Factory-Supplied Pressure Drop — SI

UNIT	AIRFLOW (L/s)	PRESSURE DROP (Pa)
40RUA*14 40RUS*14	1750	15
	2350	24
	3950	33
40RUA*16 40RUS*16	2100	20
	2800	30
	3500	42
40RUA*25 40RUS*25	2900	32
	3800	47
	4700	64
40RUA*28 40RUS*28	3500	36
	4700	55
	5900	76
40RUA*30 40RUS*30	4250	47
	5650	71
	7050	98

LEGEND

ESP — External Static Pressure



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Fan data (cont)



Standard Fan, 40RU**14-30, 350-600 Pa ESP, 60 Hz — SI^{a,b}

UNIT	AIRFLOW (L/s)	EXTERNAL STATIC PRESSURE (Pa) ^c											
		350		400		450		500		550		600	
		r/s	kW	r/s	kW	r/s	kW	r/s	kW	r/s	kW	r/s	kW
40RUA*14 40RUS*14	1770	15.21	1.78	16.19	2.06	17.13	2.34	18.04	2.64	18.91	2.94	19.75	3.25
	2030	15.46	2.05	16.37	2.33	17.26	2.63	18.12	2.94	18.96	3.26	19.78	3.59
	2360	15.94	2.46	16.78	2.77	17.60	3.08	18.40	3.40	19.18	3.73	19.94	4.07
	2690	16.51	2.95	17.32	3.28	18.09	3.62	18.84	3.96	19.57	4.31	—	—
	2950	16.99	3.39	17.78	3.74	18.54	4.10	19.26	4.47	19.96	4.84	—	—
40RUA*16 40RUS*16	2120	15.21	2.05	16.11	2.33	16.98	2.62	17.83	2.93	18.66	3.24	19.47	3.57
	2500	15.93	2.49	16.54	2.80	17.35	3.12	18.14	3.44	18.90	3.77	19.64	4.11
	2830	16.18	2.94	17.01	3.28	17.79	3.63	18.54	3.97	19.27	4.33	19.97	4.69
	3210	16.75	3.52	17.57	3.90	18.34	4.29	19.08	4.67	19.78	5.06	—	—
	3540	17.26	4.09	18.07	4.50	18.84	4.93	19.57	5.35	—	—	—	—
40RUA*25 40RUS*25	2830	16.02	2.88	16.85	3.21	17.63	3.56	18.40	3.91	19.12	4.26	—	—
	3300	16.87	3.57	17.50	3.97	18.28	4.38	19.03	4.76	19.73	5.15	—	—
	3780	17.35	4.38	18.17	4.82	18.95	5.27	19.68	5.72	—	—	—	—
	4250	18.10	5.38	18.88	5.83	19.63	6.32	—	—	—	—	—	—
	4720	18.97	6.58	19.67	7.05	—	—	—	—	—	—	—	—
40RUA*28 40RUS*28	3540	14.57	3.97	14.95	4.41	15.67	5.07	16.50	5.59	—	—	—	—
	4130	14.77	4.00	15.50	4.71	16.37	5.48	17.00	6.04	—	—	—	—
	4720	15.50	4.92	16.15	5.22	16.78	5.88	17.42	6.50	—	—	—	—
	5310	16.27	6.15	16.90	6.61	17.52	7.08	18.10	7.58	—	—	—	—
	5900	17.05	7.61	17.68	8.11	18.28	8.62	—	—	—	—	—	—
40RUA*30 40RUS*30	4250	14.88	4.00	15.38	4.50	16.12	5.14	17.00	6.15	—	—	—	—
	4960	15.50	5.20	16.17	5.63	16.80	6.09	17.42	6.61	—	—	—	—
	5660	16.35	6.73	17.02	7.21	—	—	—	—	—	—	—	—
	6370	17.25	8.54	—	—	—	—	—	—	—	—	—	—
	7080	—	—	—	—	—	—	—	—	—	—	—	—

NOTE(S):

- a. Maximum allowable fan speed is 20 r/s for all sizes.
- b. Fan performance is based on deductions for wet coil, clean 51 mm filters, and unit casing. See table below for factory-supplied filter pressure drop.
- c. **Bold** indicates field-supplied drive is required.
Plain type indicates standard motor and standard drive.
Underlining indicates a different motor and drive combination other than the standard motor and standard drive combination is required.

Factory-Supplied Pressure Drop — SI

UNIT	AIRFLOW (L/s)	PRESSURE DROP (Pa)
40RUA*14 40RUS*14	1750	15
	2350	24
	3950	33
40RUA*16 40RUS*16	2100	20
	2800	30
	3500	42
40RUA*25 40RUS*25	2900	32
	3800	47
	4700	64
40RUA*28 40RUS*28	3500	36
	4700	55
	5900	76
40RUA*30 40RUS*30	4250	47
	5650	71
	7050	96

LEGEND

ESP — External Static Pressure



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40RF/40RU**07-30, Electrical Data, Two-Speed Motors

UNIT ^{a,b}	NOMINAL V-PH-Hz ^c	IFM TYPE	UNIT VOLTAGE LIMITS		FAN MOTOR			POWER SUPPLY ^d	
			Min.	Max.	Hp	kW	FLA ^e	Minimum Circuit Amps (MCA)	Maximum Overcurrent Protection (MOCP)
40RFA*07	208/230-3-60	MED	187	253	2.4	1.76	6.4/5.8	8/8	15/15
		HIGH	187	253	3.0	2.24	7.5/6.7	10/9	15/15
	460-3-60	MED	414	506	2.4	1.76	3.0	4	15
		HIGH	414	506	3.0	2.24	3.5	5	15
	575-3-60	MED	518	632	2.4	1.76	2.5	4	15
		HIGH	518	632	3.0	2.24	3.0	4	15
40RFA*08 40RFS*08	208/230-3-60	MED	187	253	2.4	1.76	6.4/5.8	8/8	15/15
		HIGH	187	253	3.0	2.24	7.5/6.7	10/9	15/15
	460-3-60	MED	414	506	2.4	1.76	3.0	4	15
		HIGH	414	506	3.0	2.24	3.5	5	15
	575-3-60	MED	518	632	2.4	1.76	2.5	4	15
		HIGH	518	632	3.0	2.24	3.0	4	15
40RFS*10	208/230-3-60	MED	187	253	2.4	1.76	6.4/5.8	8/8	15/15
		HIGH	187	253	3.0	2.24	7.5/6.7	10/9	15/15
	460-3-60	MED	414	506	2.4	1.76	3.0	4	15
		HIGH	414	506	3.0	2.24	3.5	5	15
	575-3-60	MED	518	632	2.4	1.76	2.5	4	15
		HIGH	518	632	3.0	2.24	3.0	4	15
40RFA*12 40RFS*12	208/230-3-60	MED	187	253	2.4	1.76	6.4/5.8	8/8	15/15
		HIGH	187	253	3.0	2.24	7.5/6.7	10/9	15/15
	460-3-60	MED	414	506	2.4	1.76	3.0	4	15
		HIGH	414	506	3.0	2.24	3.5	5	15
	575-3-60	MED	518	632	2.4	1.76	2.5	4	15
		HIGH	518	632	3.0	2.24	3.0	4	15
40RUA*14 40RUS*14	208/230-3-60	STD	187	253	2.9	2.16	8.6	11	15
		MED	187	253	2.9	2.16	8.6	11	15
		HIGH	187	253	3.7	2.76	10.8	14	20
	460-3-60	STD	414	506	2.9	2.16	3.8	5	15
		MED	414	506	2.9	2.16	3.8	5	15
		HIGH	414	506	3.7	2.76	4.9	7	15
575-3-60	STD	518	632	3.7	2.76	4.6	6	15	
	MED	518	632	3.7	2.76	4.6	6	15	
	HIGH	518	632	5.0	3.73	8.0	10	15	
40RUA*16 40RUS*16	208/230-3-60	STD	187	253	3.7	2.76	10.8	14	20
		MED	187	253	3.7	2.76	10.8	14	20
		HIGH	187	253	5.0	3.73	18.0	23	40
	460-3-60	STD	414	506	3.7	2.76	4.9	7	15
		MED	414	506	3.7	2.76	4.9	7	15
		HIGH	414	506	5.0	3.73	9.1	12	20
575-3-60	STD	518	632	3.7	2.76	4.6	6	15	
	MED	518	632	3.7	2.76	4.6	6	15	
	HIGH	518	632	5.0	3.73	8.0	10	15	
40RUA*25 40RUS*25	208/230-3-60	STD	187	253	5.0	3.73	18.0	23	40
		MED	187	253	5.0	3.73	18.0	23	40
		HIGH	187	253	7.5	5.60	23.5	30	50
	460-3-60	STD	414	506	5.0	3.73	9.1	12	20
		MED	414	506	5.0	3.73	9.1	12	20
		HIGH	414	506	7.5	5.60	15.0	19	30
575-3-60	STD	518	632	5.0	3.73	8.0	10	15	
	MED	518	632	5.0	3.73	8.0	10	15	
	HIGH	518	632	7.5	5.60	10.0	13	20	



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Electrical data (cont)



40RF/40RU**07-30, Electrical Data, Two-Speed Motors (cont)

UNIT ^{a,b}	NOMINAL V-PH-Hz ^c	IFM TYPE	UNIT VOLTAGE LIMITS		FAN MOTOR			POWER SUPPLY ^e	
			Min.	Max.	Hp	kW	FLA ^d	Minimum Circuit Amps (MCA)	Maximum Overcurrent Protection (MOCP)
40RUA*28 40RUS*28	208/230-3-60	STD	187	253	7.5	5.60	23.5	30	50
		MED	187	253	10.0	7.46	32.0	40	70
		HIGH	187	253	10.0	7.46	32.0	40	70
	460-3-60	STD	414	506	7.5	5.60	15.0	19	30
		MED	414	506	10.0	7.46	16.0	20	35
		HIGH	414	506	10.0	7.46	16.0	20	35
	575-3-60	STD	518	632	7.5	5.60	10.0	13	20
		MED	518	632	10.0	7.46	13.0	17	25
		HIGH ^f	518	632	10.0	7.46	13.0	17	25
40RUA*30 40RUS*30	208/230-3-60	STD	187	253	10.0	7.46	32.0	40	70
		MED	187	253	10.0	7.46	32.0	40	70
		HIGH	187	253	10.0	7.46	32.0	40	70
	460-3-60	STD	414	506	10.0	7.46	16.0	20	35
		MED	414	506	10.0	7.46	16.0	20	35
		HIGH	414	506	10.0	7.46	16.0	20	35
	575-3-60	STD	518	632	10.0	7.46	13.0	17	25
		MED	518	632	10.0	7.46	13.0	17	25
		HIGH	518	632	10.0	7.46	13.0	17	25

NOTE(S):

- Unbalanced 3-Phase Supply Voltage: Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the formula in the example below to determine the percentage of voltage imbalance.
- Installation with Accessory Electric Heaters: Size the Field Power Wiring between the heater TB1 and the 40RU indoor fan motor per NEC Article 430-28 (1) or (2) (depends on length of conduit between heater enclosure and 40RF/40RU power entry location). Install wires in field-installed conduit.
- Motors are designed for satisfactory operation within 10% of normal voltage shown. Voltages should not exceed the limits shown in the Voltage Limits column.
- Minimum circuit amps (MCA) and MOCP values are calculated in accordance with The NEC, Article 440.
- Motor FLA values are established in accordance with Underwriters' Laboratories (UL), Standard 1995.
- Data for 575v high static applies to 40RUA*28 only, not 40RUS*28.

$$\% \text{ Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 230-3-60



AB = 224 v
BC = 231 v
AC = 226 v

$$\text{Average Voltage} = \frac{(224 + 231 + 226)}{3} = \frac{681}{3} = 227$$

Determine maximum deviation from average voltage.

(AB) 227-224 = 3 v

(BC) 231-227 = 4 v

(AC) 227-226 = 1 v

Maximum deviation is 4 v.

Determine percent of voltage imbalance.

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{227} = 1.78\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

LEGEND

- FLA** — Full Load Amps
- MCA** — Minimum Circuit Amps
- MOCP** — Maximum Overcurrent Protection



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Electrical data (cont)

Legend and Notes for Electrical Heater Data tables, pages 51-58

LEGEND

- FLA — Full Load Amps
- MCA — Minimum Circuit Amps
- MOCP — Maximum Overcurrent Protection (Amps)

NOTES:

1. Electrical resistance heaters are rated at 240v, 480v, 575v. To determine heater capacity (kW) at unit nameplate multiply the 240v, 480v, or 575v capacity (kW) by the factor shown in the table below for the unit voltage.
2. The following equation converts kW of heat energy to Btuh: kW x 3412 = Btuh.
3. Heater contactor coils are 24v and require 8va holding current.
4. Electric heaters are tested and UL approved at maximum total external static pressure of 1.9 in. wg.

HEATER RATING VOLTAGE	ACTUAL HEATER VOLTAGE AT SITE										
	200	208	230	240	400	440	460	480	550	575	600
240	0.694	0.751	0.918	1	—	—	—	—	—	—	—
480	—	—	—	—	0.694	0.84	0.918	1	—	—	—
575	—	—	—	—	—	—	—	—	0.915	1	1.089



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40RF**07-12, 60 Hz Electrical Heater Data

UNIT	NOMINAL VOLTS	IFM TYPE	UNIT VOLTAGE		FAN MOTOR (QTY 1)			ELECTRIC HEATER(S)						POWER SUPPLY*			
			Range		hp	kW	FLA	CAELHEAT ****00	Heater Voltage	Nom. Cap. (kW)	Actual Capacity (kW)			FLA (Full Load Amps)	MCA (Minimum Ckt Amps)	MOCP (Maximum Overcurrent Protection)	
			Min	Max							Stage 1	Stage 2	Total				
40RF**07	208/230	Med	187	253	2.4	1.76	6.4/5.8	050A	208/240	5	3.8/5.0	—	3.8/5.0	10.4/12.0	21.0/22.3	25/25	
			187	253	2.4	1.76	6.4/5.8	052A	208/240	10	7.5/10.0	—	7.5/10.0	20.8/24.1	34.0/37.4	35/40	
			187	253	2.4	1.76	6.4/5.8	055A	208/240	15	11.3/15.0	—	11.3/15.0	31.3/36.1	47.1/52.4	50/60	
			187	253	2.4	1.76	6.4/5.8	058A	208/240	25	11.3/15.0	7.5/10.0	18.8/25.0	52.1/60.1	73.1/82.4	80/90	
		High	187	253	3.0	2.24	7.5/6.7	050A	208/240	5	3.8/5.0	—	3.8/5.0	10.4/12.0	22.4/23.4	25/25	
			187	253	3.0	2.24	7.5/6.7	052A	208/240	10	7.5/10.0	—	7.5/10.0	20.8/24.1	35.4/38.5	40/40	
			187	253	3.0	2.24	7.5/6.7	055A	208/240	15	11.3/15.0	—	11.3/15.0	31.3/36.1	48.5/53.5	50/60	
			187	253	3.0	2.24	7.5/6.7	058A	208/240	25	11.3/15.0	7.5/10.0	18.8/25.0	52.1/60.1	74.5/83.5	80/90	
		460	Med	414	506	2.4	1.76	3.0	051A	480	5	5.0	—	5.0	6.0	11.3	15
				414	506	2.4	1.76	3.0	053A	480	10	10.0	—	10.0	12.0	18.8	20
				414	506	2.4	1.76	3.0	056A	480	15	15.0	—	15.0	18.0	26.3	30
				414	506	2.4	1.76	3.0	059A	480	25	15.0	10.0	25.0	30.1	41.4	50
	High		414	506	3.0	2.24	3.5	051A	480	5	5.0	—	5.0	6.0	11.9	15	
			414	506	3.0	2.24	3.5	053A	480	10	10.0	—	10.0	12.0	19.4	20	
			414	506	3.0	2.24	3.5	056A	480	15	15.0	—	15.0	18.0	26.9	30	
			414	506	3.0	2.24	3.5	059A	480	25	15.0	10.0	25.0	30.1	42.0	50	
	575	Med	518	632	2.4	1.76	2.5	064A	575	5	5.0	—	5.0	4.8	9.1	15	
			518	632	2.4	1.76	2.5	054A	575	10	10.0	—	10.0	9.6	15.1	20	
			518	632	2.4	1.76	2.5	057A	575	15	15.0	—	15.0	14.4	21.1	25	
			518	632	2.4	1.76	2.5	060A	575	25	15.0	10.0	25.0	24.1	33.3	35	
		High	518	632	3.0	2.24	3.0	064A	575	5	5.0	—	5.0	4.8	9.8	15	
			518	632	3.0	2.24	3.0	054A	575	10	10.0	—	10.0	9.6	15.8	20	
			518	632	3.0	2.24	3.0	057A	575	15	15.0	—	15.0	14.4	21.8	25	
			518	632	3.0	2.24	3.0	060A	575	25	15.0	10.0	25.0	24.1	33.9	35	
	40RF**08	208/230	Med	187	253	2.4	1.76	6.4/5.8	050A	208/240	5	3.8/5.0	—	3.8/5.0	10.4/12.0	21.0/22.3	25/25
				187	253	2.4	1.76	6.4/5.8	052A	208/240	10	7.5/10.0	—	7.5/10.0	20.8/24.1	34.0/37.4	35/40
				187	253	2.4	1.76	6.4/5.8	055A	208/240	15	11.3/15.0	—	11.3/15.0	31.3/36.1	47.1/52.4	50/60
				187	253	2.4	1.76	6.4/5.8	058A	208/240	25	11.3/15.0	7.5/10.0	18.8/25.0	52.1/60.1	73.1/82.4	80/90
High			187	253	2.4	1.76	6.4/5.8	061A	208/240	32	12.0/16.0	12.0/16.0	24.0/32.0	66.7/77.0	91.4/103.5	100/110	
			187	253	3.0	2.24	7.5/6.7	050A	208/240	5	3.8/5.0	—	3.8/5.0	10.4/12.0	22.4/23.4	25/25	
			187	253	3.0	2.24	7.5/6.7	052A	208/240	10	7.5/10.0	—	7.5/10.0	20.8/24.1	35.4/38.5	40/40	
			187	253	3.0	2.24	7.5/6.7	055A	208/240	15	11.3/15.0	—	11.3/15.0	31.3/36.1	48.5/53.5	50/60	
			187	253	3.0	2.24	7.5/6.7	058A	208/240	25	11.3/15.0	7.5/10.0	18.8/25.0	52.1/60.1	74.5/83.5	80/90	
			187	253	3.0	2.24	7.5/6.7	061A	208/240	32	12.0/16.0	12.0/16.0	24.0/32.0	66.7/77.0	92.8/104.6	100/110	

Electrical data (cont)



40RF**07-12, 60 Hz Electrical Heater Data (cont)

Electrical data (cont)

UNIT	NOMINAL VOLTS	IFM TYPE	UNIT VOLTAGE		FAN MOTOR (QTY 1)			ELECTRIC HEATER(S)						POWER SUPPLY*		
			Range		hp	kW	FLA	CAELHEAT ***00	Heater Voltage	Nom. Cap. (kW)	Actual Capacity (kW)			FLA (Full Load Amps)	MCA (Minimum Ckt Amps)	MOCP (Maximum Overcurrent Protection)
			Min	Max							Stage 1	Stage 2	Total			
40RF**08 (cont)	460	Med	414	506	2.4	1.76	3.0	051A	480	5	5.0	—	5.0	6.0	11.3	15
			414	506	2.4	1.76	3.0	053A	480	10	10.0	—	10.0	12.0	18.8	20
			414	506	2.4	1.76	3.0	056A	480	15	15.0	—	15.0	18.0	26.3	30
			414	506	2.4	1.76	3.0	059A	480	25	15.0	10.0	25.0	30.1	41.4	50
			414	506	2.4	1.76	3.0	062A	480	35	20.0	15.0	35.0	42.1	56.4	60
		414	506	3.0	2.24	3.5	051A	480	5	5.0	—	5.0	6.0	11.9	15	
		414	506	3.0	2.24	3.5	053A	480	10	10.0	—	10.0	12.0	19.4	20	
		414	506	3.0	2.24	3.5	056A	480	15	15.0	—	15.0	18.0	26.9	30	
		414	506	3.0	2.24	3.5	059A	480	25	15.0	10.0	25.0	30.1	42.0	50	
		414	506	3.0	2.24	3.5	062A	480	35	20.0	15.0	35.0	42.1	57.0	60	
	575	Med	518	632	2.4	1.76	2.5	064A	575	5	5.0	—	5.0	4.8	9.1	15
			518	632	2.4	1.76	2.5	054A	575	10	10.0	—	10.0	9.6	15.1	20
			518	632	2.4	1.76	2.5	057A	575	15	15.0	—	15.0	14.4	21.1	25
			518	632	2.4	1.76	2.5	060A	575	25	15.0	10.0	25.0	24.1	33.3	35
			518	632	2.4	1.76	2.5	063A	575	35	20.0	15.0	35.0	33.7	45.3	50
		518	632	3.0	2.24	3.0	064A	575	5	5.0	—	5.0	4.8	9.8	15	
		518	632	3.0	2.24	3.0	054A	575	10	10.0	—	10.0	9.6	15.8	20	
		518	632	3.0	2.24	3.0	057A	575	15	15.0	—	15.0	14.4	21.8	25	
		518	632	3.0	2.24	3.0	060A	575	25	15.0	10.0	25.0	24.1	33.9	35	
		518	632	3.0	2.24	3.0	063A	575	35	20.0	15.0	35.0	33.7	45.9	50	
40RF**12	460	Med	187	253	2.4	1.76	6.4/5.8	050A	208/240	5	3.8/5.0	—	3.8/5.0	10.4/12.0	21.0/22.3	25/25
			187	253	2.4	1.76	6.4/5.8	052A	208/240	10	7.5/10.0	—	7.5/10.0	20.8/24.1	34.0/37.4	35/40
			187	253	2.4	1.76	6.4/5.8	055A	208/240	15	11.3/15.0	—	11.3/15.0	31.3/36.1	47.1/52.4	50/60
			187	253	2.4	1.76	6.4/5.8	058A	208/240	25	11.3/15.0	7.5/10.0	18.8/25.0	52.1/60.1	73.1/82.4	80/90
			187	253	2.4	1.76	6.4/5.8	061A	208/240	32	12.0/16.0	12.0/16.0	24.0/32.0	66.7/77.0	91.4/103.5	100/110
		187	253	3.0	2.24	7.5/6.7	050A	208/240	5	3.8/5.0	—	3.8/5.0	10.4/12.0	22.4/23.4	25/25	
		187	253	3.0	2.24	7.5/6.7	052A	208/240	10	7.5/10.0	—	7.5/10.0	20.8/24.1	35.4/38.5	40/40	
		187	253	3.0	2.24	7.5/6.7	055A	208/240	15	11.3/15.0	—	11.3/15.0	31.3/36.1	48.5/53.5	50/60	
		187	253	3.0	2.24	7.5/6.7	058A	208/240	25	11.3/15.0	7.5/10.0	18.8/25.0	52.1/60.1	74.5/83.5	80/90	
		187	253	3.0	2.24	7.5/6.7	061A	208/240	32	12.0/16.0	12.0/16.0	24.0/32.0	66.7/77.0	92.8/104.6	100/110	
40RF**12	460	Med	414	506	2.4	1.76	3.0	051A	480	5	5.0	—	5.0	6.0	11.3	15
			414	506	2.4	1.76	3.0	053A	480	10	10.0	—	10.0	12.0	18.8	20
			414	506	2.4	1.76	3.0	056A	480	15	15.0	—	15.0	18.0	26.3	30
			414	506	2.4	1.76	3.0	059A	480	25	15.0	10.0	25.0	30.1	41.4	50
			414	506	2.4	1.76	3.0	062A	480	35	20.0	15.0	35.0	42.1	56.4	60
		414	506	3.0	2.24	3.5	051A	480	5	5.0	—	5.0	6.0	11.9	15	
		414	506	3.0	2.24	3.5	053A	480	10	10.0	—	10.0	12.0	19.4	20	
		414	506	3.0	2.24	3.5	056A	480	15	15.0	—	15.0	18.0	26.9	30	
		414	506	3.0	2.24	3.5	059A	480	25	15.0	10.0	25.0	30.1	42.0	50	
		414	506	3.0	2.24	3.5	062A	480	35	20.0	15.0	35.0	42.1	57.0	60	



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40RF**07-12, 60 Hz Electrical Heater Data (cont)

UNIT	NOMINAL VOLTS	IFM TYPE	UNIT VOLTAGE		FAN MOTOR (QTY 1)			ELECTRIC HEATER(S)						POWER SUPPLY*		
			Range		hp	kW	FLA	CAELHEAT ****00	Heater Voltage	Nom. Cap. (kW)	Actual Capacity (kW)			FLA (Full Load Amps)	MCA (Minimum Ckt Amps)	MOCP (Maximum Overcurrent Protection)
			Min	Max							Stage 1	Stage 2	Total			
40RF**12 (cont)	575	Med	518	632	2.4	1.76	2.5	064A	575	5	5.0	—	5.0	4.8	9.1	15
			518	632	2.4	1.76	2.5	054A	575	10	10.0	—	10.0	9.6	15.1	20
			518	632	2.4	1.76	2.5	057A	575	15	15.0	—	15.0	14.4	21.1	25
			518	632	2.4	1.76	2.5	060A	575	25	15.0	10.0	25.0	24.1	33.3	35
			518	632	2.4	1.76	2.5	063A	575	35	20.0	15.0	35.0	33.7	45.3	50
		High	518	632	3.0	2.24	3.0	064A	575	5	5.0	—	5.0	4.8	9.8	15
			518	632	3.0	2.24	3.0	054A	575	10	10.0	—	10.0	9.6	15.8	20
			518	632	3.0	2.24	3.0	057A	575	15	15.0	—	15.0	14.4	21.8	25
			518	632	3.0	2.24	3.0	060A	575	25	15.0	10.0	25.0	24.1	33.9	35
			518	632	3.0	2.24	3.0	063A	575	35	20.0	15.0	35.0	33.7	45.9	50

NOTE(S):

a. MCA and MOCP Values shown are for single-point connection of electric heat accessory and air handler.

Electrical data (cont)



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40RU**14-30, 60 Hz Electrical Heater Data

UNIT	NOM. VOLTS	IFM TYPE	UNIT VOLTAGE		FAN MOTOR (QTY 1)			ELECTRIC HEATER(S)						POWER SUPPLY*		
			Range		hp	kW	FLA	CAEL HEAT ****00	Heater Voltage	Nom. Cap. (kW)	Actual Capacity (kW)			FLA (Full Load Amps)	MCA (Minimum Ckt Amps)	MOCP (Maximum Overcurrent Protection)
			Min	Max							Stage 1	Stage 2	Total			
208/230		STD	187	253	2.9	2.16	8.6	016A	208/240	10	7.5/10	—	7.5/10	20.8/24.1	35.8/40.9	40/50
			187	253	2.9	2.16	8.6	019A	208/240	20	15/20	—	15/20	41.7/48.1	62.9/70.9	70/80
			187	253	2.9	2.16	8.6	022A	208/240	30	15/20	7.5/10	22.5/30	62.5/72.2	88.9/101	90/110
			187	253	2.9	2.16	8.6	025A	208/240	50	22.6/30	15/20	37.6/50	104.2/120.3	141/161.1	150/175
		MED	187	253	2.9	2.16	8.6	016A	208/240	10	7.5/10	—	7.5/10	20.8/24.1	35.8/40.9	40/50
			187	253	2.9	2.16	8.6	019A	208/240	20	15/20	—	15/20	41.7/48.1	62.9/70.9	70/80
			187	253	2.9	2.16	8.6	022A	208/240	30	15/20	7.5/10	22.5/30	62.5/72.2	88.9/101	90/110
		HIGH	187	253	2.9	2.16	8.6	025A	208/240	50	22.6/30	15/20	37.6/50	104.2/120.3	141/161.1	150/175
			187	253	3.7	2.76	10.8	016A	208/240	10	7.5/10	—	7.5/10	20.8/24.1	35.8/40.9	40/50
			187	253	3.7	2.76	10.8	019A	208/240	20	15/20	—	15/20	41.7/48.1	62.9/70.9	70/80
			187	253	3.7	2.76	10.8	022A	208/240	30	15/20	7.5/10	22.5/30	62.5/72.2	88.9/101	90/110
		40RU**14	460	STD	414	506	2.9	2.16	3.8	017A	480	10	10	—	10	12
414	506				2.9	2.16	3.8	020A	480	20	20	—	20	23.9	34.6	35
414	506				2.9	2.16	3.8	023A	480	30	20	10	30	36.1	49.9	50
414	506				2.9	2.16	3.8	026A	480	50	30	20	50	60.1	79.9	80
MED	414			506	2.9	2.16	3.8	017A	480	10	10	—	10	12	19.8	20
	414			506	2.9	2.16	3.8	020A	480	20	20	—	20	23.9	34.6	35
	414			506	2.9	2.16	3.8	023A	480	30	20	10	30	36.1	49.9	50
HIGH	414			506	2.9	2.16	3.8	026A	480	50	30	20	50	60.1	79.9	80
	414			506	3.7	2.76	4.9	017A	480	10	10	—	10	12	21.1	25
	414			506	3.7	2.76	4.9	020A	480	20	20	—	20	23.9	36	40
	414			506	3.7	2.76	4.9	023A	480	30	20	10	30	36.1	51.3	60
	414			506	3.7	2.76	4.9	026A	480	50	30	20	50	60.1	81.3	90
575	STD	518	632	3.7	2.76	4.5	018A	575	10	10	—	10	10	18.1	20	
		518	632	3.7	2.76	4.5	021A	575	20	20	—	20	20.1	30.8	35	
		518	632	3.7	2.76	4.5	024A	575	30	20	10	30	30.1	43.3	50	
		518	632	3.7	2.76	4.5	027A	575	50	30	20	50	50.2	68.4	70	
	MED	518	632	3.7	2.76	4.5	018A	575	10	10	—	10	10	18.1	20	
		518	632	3.7	2.76	4.5	021A	575	20	20	—	20	20.1	30.8	35	
		518	632	3.7	2.76	4.5	024A	575	30	20	10	30	30.1	43.3	50	
	HIGH	518	632	3.7	2.76	4.5	027A	575	50	30	20	50	50.2	68.4	70	
		518	632	5.0	3.73	8.0	018A	575	10	10	—	10	10	22.5	25	
		518	632	5.0	3.73	8.0	021A	575	20	20	—	20	20.1	35.1	40	
		518	632	5.0	3.73	8.0	024A	575	30	20	10	30	30.1	47.6	50	
		518	632	5.0	3.73	8.0	027A	575	50	30	20	50	50.2	72.8	80	

Electrical data (cont)



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40RU**14-30, 60 Hz Electrical Heater Data (cont)

UNIT	NOM. VOLTS	IFM TYPE	UNIT VOLTAGE		FAN MOTOR (QTY 1)			ELECTRIC HEATER(S)						POWER SUPPLY*			
			Range		hp	kW	FLA	CAEL HEAT ****00	Heater Voltage	Nom. Cap. (kW)	Actual Capacity (kW)			FLA (Full Load Amps)	MCA (Minimum Ckt Amps)	MOCP (Maximum Overcurrent Protection)	
			Min	Max							Stage 1	Stage 2	Total				
40RU**16	208/230	STD	187	253	3.7	2.76	10.8	018A	208/240	10	7.5/10	—	7.5/10	20.8/24.1	39.5/43.6	40/50	
			187	253	3.7	2.76	10.8	019A	208/240	20	15/20	—	15/20	41.7/48.1	65.6/73.6	70/80	
			187	253	3.7	2.76	10.8	022A	208/240	30	15/20	7.5/10	22.5/30	62.5/72.2	91.6/103.8	100/110	
			187	253	3.7	2.76	10.8	025A	208/240	50	22.6/30	15/20	37.6/50	104.2/120.3	143.8/163.9	150/175	
			187	253	3.7	2.76	10.8	018A	208/240	10	7.5/10	—	7.5/10	20.8/24.1	39.5/43.6	40/50	
			187	253	3.7	2.76	10.8	019A	208/240	20	15/20	—	15/20	41.7/48.1	65.6/73.6	70/80	
			187	253	3.7	2.76	10.8	022A	208/240	30	15/20	7.5/10	22.5/30	62.5/72.2	91.6/103.8	100/110	
			187	253	3.7	2.76	10.8	025A	208/240	50	22.6/30	15/20	37.6/50	104.2/120.3	143.8/163.9	150/175	
			187	253	5.0	3.73	18.0	016A	208/240	10	7.5/10	—	7.5/10	20.8/24.1	48.5/52.6	50/60	
		HIGH	187	253	5.0	3.73	18.0	019A	208/240	20	15/20	—	15/20	41.7/48.1	74.6/82.6	80/90	
			187	253	5.0	3.73	18.0	022A	208/240	30	15/20	7.5/10	22.5/30	62.5/72.2	100.6/112.8	110/125	
			187	253	5.0	3.73	18.0	025A	208/240	50	22.6/30	15/20	37.6/50	104.2/120.3	152.8/172.9	175/175	
		460	STD	414	506	3.7	2.76	4.9	017A	480	10	10	—	10	12	21.1	25
				414	506	3.7	2.76	4.9	020A	480	20	20	—	20	23.9	36	40
				414	506	3.7	2.76	4.9	023A	480	30	20	10	30	36.1	51.3	60
				414	506	3.7	2.76	4.9	026A	480	50	30	20	50	60.1	81.3	90
			MED	414	506	3.7	2.76	4.9	017A	480	10	10	—	10	12	21.1	25
				414	506	3.7	2.76	4.9	020A	480	20	20	—	20	23.9	36	40
414	506			3.7	2.76	4.9	023A	480	30	20	10	30	36.1	51.3	60		
414	506			3.7	2.76	4.9	026A	480	50	30	20	50	60.1	81.3	90		
HIGH	414		506	5.0	3.73	9.1	017A	480	10	10	—	10	12	26.4	30		
	414		506	5.0	3.73	9.1	020A	480	20	20	—	20	23.9	41.3	50		
	414		506	5.0	3.73	9.1	023A	480	30	20	10	30	36.1	56.5	60		
	414		506	5.0	3.73	9.1	026A	480	50	30	20	50	60.1	86.5	90		
575	STD	518	632	3.7	2.76	4.5	018A	575	10	10	—	10	10	18.1	20		
		518	632	3.7	2.76	4.5	021A	575	20	20	—	20	20.1	30.8	35		
		518	632	3.7	2.76	4.5	024A	575	30	20	10	30	30.1	43.3	50		
		518	632	3.7	2.76	4.5	027A	575	50	30	20	50	50.2	68.4	70		
	MED	518	632	3.7	2.76	4.5	018A	575	10	10	—	10	10	18.1	20		
		518	632	3.7	2.76	4.5	021A	575	20	20	—	20	20.1	30.8	35		
		518	632	3.7	2.76	4.5	024A	575	30	20	10	30	30.1	43.3	50		
		518	632	3.7	2.76	4.5	027A	575	50	30	20	50	50.2	68.4	70		
	HIGH	518	632	5.0	3.73	8.0	018A	575	10	10	—	10	10	22.5	25		
		518	632	5.0	3.73	8.0	021A	575	20	20	—	20	20.1	35.1	40		
		518	632	5.0	3.73	8.0	024A	575	30	20	10	30	30.1	47.6	50		
		518	632	5.0	3.73	8.0	027A	575	50	30	20	50	50.2	72.8	80		

Electrical data (cont)



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40RU**14-30, 60 Hz Electrical Heater Data (cont)

Electrical data (cont)

UNIT	NOM. VOLTS	IFM TYPE	UNIT VOLTAGE		FAN MOTOR (QTY 1)			ELECTRIC HEATER(S)						POWER SUPPLY*		
			Range		hp	kW	FLA	CAEL HEAT ****00	Heater Voltage	Nom. Cap. (kW)	Actual Capacity (kW)			FLA (Full Load Amps)	MCA (Minimum Ckt Amps)	MOCP (Maximum Overcurrent Protection)
			Min	Max							Stage 1	Stage 2	Total			
40RU**25	208/230	STD	187	253	5.0	3.73	18.0	016A	208/240	10	7.5/10	—	7.5/10	20.8/24.1	48.5/52.8	50/60
			187	253	5.0	3.73	18.0	019A	208/240	20	15/20	—	15/20	41.7/48.1	74.8/82.8	80/90
			187	253	5.0	3.73	18.0	022A	208/240	30	15/20	7.5/10	22.5/30	62.5/72.2	100.8/112.8	110/125
			187	253	5.0	3.73	18.0	025A	208/240	50	22.6/30	15/20	37.6/50	104.2/120.3	152.8/172.9	175/175
		MED	187	253	5.0	3.73	18.0	016A	208/240	10	7.5/10	—	7.5/10	20.8/24.1	48.5/52.8	50/60
			187	253	5.0	3.73	18.0	019A	208/240	20	15/20	—	15/20	41.7/48.1	74.8/82.8	80/90
			187	253	5.0	3.73	18.0	022A	208/240	30	15/20	7.5/10	22.5/30	62.5/72.2	100.8/112.8	110/125
			187	253	5.0	3.73	18.0	025A	208/240	50	22.6/30	15/20	37.6/50	104.2/120.3	152.8/172.9	175/175
		HIGH	187	253	7.5	5.60	23.5	016A	208/240	10	7.5/10	—	7.5/10	20.8/24.1	55.4/69.5	60/60
			187	253	7.5	5.60	23.5	019A	208/240	20	15/20	—	15/20	41.7/48.1	81.5/89.5	90/90
			187	253	7.5	5.60	23.5	022A	208/240	30	15/20	7.5/10	22.5/30	62.5/72.2	107.5/119.6	110/125
			187	253	7.5	5.60	23.5	025A	208/240	50	22.6/30	15/20	37.6/50	104.2/120.3	159.8/179.8	175/200
	460	STD	414	506	5.0	3.73	9.1	017A	480	10	10	—	10	12	26.4	30
			414	506	5.0	3.73	9.1	020A	480	20	20	—	20	23.9	41.3	50
			414	506	5.0	3.73	9.1	023A	480	30	20	10	30	36.1	56.5	60
			414	506	5.0	3.73	9.1	026A	480	50	30	20	50	60.1	86.5	90
		MED	414	506	5.0	3.73	9.1	017A	480	10	10	—	10	12	26.4	30
			414	506	5.0	3.73	9.1	020A	480	20	20	—	20	23.9	41.3	50
			414	506	5.0	3.73	9.1	023A	480	30	20	10	30	36.1	56.5	60
			414	506	5.0	3.73	9.1	026A	480	50	30	20	50	60.1	86.5	90
		HIGH	414	506	7.5	5.60	15.0	017A	480	10	10	—	10	12	33.8	35
			414	506	7.5	5.60	15.0	020A	480	20	20	—	20	23.9	48.6	50
			414	506	7.5	5.60	15.0	023A	480	30	20	10	30	36.1	63.9	70
			414	506	7.5	5.60	15.0	026A	480	50	30	20	50	60.1	93.9	100
	575	STD	518	632	5.0	3.73	8.0	018A	575	10	10	—	10	10	22.5	25
			518	632	5.0	3.73	8.0	021A	575	20	20	—	20	20.1	35.1	40
			518	632	5.0	3.73	8.0	024A	575	30	20	10	30	30.1	47.6	50
			518	632	5.0	3.73	8.0	027A	575	50	30	20	50	50.2	72.8	80
MED		518	632	5.0	3.73	8.0	018A	575	10	10	—	10	10	22.5	25	
		518	632	5.0	3.73	8.0	021A	575	20	20	—	20	20.1	35.1	40	
		518	632	5.0	3.73	8.0	024A	575	30	20	10	30	30.1	47.6	50	
		518	632	5.0	3.73	8.0	027A	575	50	30	20	50	50.2	72.8	80	
HIGH		518	632	7.5	5.60	10.0	018A	575	10	10	—	10	10	25	25	
		518	632	7.5	5.60	10.0	021A	575	20	20	—	20	20.1	37.6	40	
		518	632	7.5	5.60	10.0	024A	575	30	20	10	30	30.1	50.1	60	
		518	632	7.5	5.60	10.0	027A	575	50	30	20	50	50.2	75.3	80	



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40RU**14-30, 60 Hz Electrical Heater Data (cont)

UNIT	NOM. VOLTS	IFM TYPE	UNIT VOLTAGE		FAN MOTOR (QTY 1)			ELECTRIC HEATER(S)						POWER SUPPLY*		
			Range		hp	kW	FLA	CAEL HEAT ****00	Heater Voltage	Nom. Cap. (kW)	Actual Capacity (kW)			FLA (Full Load Amps)	MCA (Minimum Ckt Amps)	MOCP (Maximum Overcurrent Protection)
			Min	Max							Stage 1	Stage 2	Total			
40RU**28	208/230	STD	187	253	7.5	5.60	23.5	028A	208/240	20	15/20	—	15/20	41.7/48.1	81.5/89.5	80/90
			187	253	7.5	5.60	23.5	031A	208/240	40	15/20	15/20	30/40	83.4/96.2	133.6/149.6	150/150
			187	253	7.5	5.60	23.5	034A	208/240	50	22.6/30	15/20	37.6/50	104.3/120.3	159.8/179.8	175/200
			187	253	7.5	5.60	23.5	037A	208/240	70	30/40	22.6/30	52.6/70	145.9/168.4	211.8/239.9	225/250
		MED	187	253	10.0	7.46	32.0	028A	208/240	20	15/20	—	15/20	41.7/48.1	92.1/100.1	100/110
			187	253	10.0	7.46	32.0	031A	208/240	40	15/20	15/20	30/40	83.4/96.2	144.3/160.3	150/175
			187	253	10.0	7.46	32.0	034A	208/240	50	22.6/30	15/20	37.6/50	104.3/120.3	170.4/190.4	175/200
			187	253	10.0	7.46	32.0	037A	208/240	70	30/40	22.6/30	52.6/70	145.9/168.4	222.4/250.5	225/275
		HIGH	187	253	10.0	7.46	32.0	028A	208/240	20	15/20	—	15/20	41.7/48.1	92.1/100.1	100/110
			187	253	10.0	7.46	32.0	031A	208/240	40	15/20	15/20	30/40	83.4/96.2	144.3/160.3	150/175
			187	253	10.0	7.46	32.0	034A	208/240	50	22.6/30	15/20	37.6/50	104.3/120.3	170.4/190.4	175/200
			187	253	10.0	7.46	32.0	037A	208/240	70	30/40	22.6/30	52.6/70	145.9/168.4	222.4/250.5	225/275
	460	STD	414	506	7.5	5.60	15.0	028A	480	20	20	—	20	24.1	48.9	50
			414	506	7.5	5.60	15.0	032A	480	40	20	20	40	48.1	78.9	80
			414	506	7.5	5.60	15.0	035A	480	50	30	20	50	60.1	93.9	100
			414	506	7.5	5.60	15.0	038A	480	70	40	30	70	84.2	124	125
		MED	414	506	10.0	7.46	16.0	029A	480	20	20	—	20	24.1	50.1	60
			414	506	10.0	7.46	16.0	032A	480	40	20	20	40	48.1	80.1	90
			414	506	10.0	7.46	16.0	035A	480	50	30	20	50	60.1	95.1	100
			414	506	10.0	7.46	16.0	038A	480	70	40	30	70	84.2	125.3	150
		HIGH	414	506	10.0	7.46	16.0	029A	480	20	20	—	20	24.1	50.1	60
			414	506	10.0	7.46	16.0	032A	480	40	20	20	40	48.1	80.1	90
			414	506	10.0	7.46	16.0	035A	480	50	30	20	50	60.1	95.1	100
			414	506	10.0	7.46	16.0	038A	480	70	40	30	70	84.2	125.3	150
575	STD	518	632	7.5	5.60	10.0	030A	575	20	20	—	20	20.1	37.6	40	
		518	632	7.5	5.60	10.0	033A	575	40	20	20	40	40.2	62.8	70	
		518	632	7.5	5.60	10.0	036A	575	50	30	20	50	50.2	75.3	80	
		518	632	7.5	5.60	10.0	039A	575	70	40	30	70	70.3	100.4	110	
	MED	518	632	10.0	7.46	13.0	030A	575	20	20	—	20	20.1	41.4	50	
		518	632	10.0	7.46	13.0	033A	575	40	20	20	40	40.2	66.5	70	
		518	632	10.0	7.46	13.0	036A	575	50	30	20	50	50.2	79	80	
		518	632	10.0	7.46	13.0	039A	575	70	40	30	70	70.3	104.1	110	
	HIGH	518	632	10.0	7.46	13.0	030A	575	20	20	—	20	20.1	41.4	50	
		518	632	10.0	7.46	13.0	033A	575	40	20	20	40	40.2	66.5	70	
		518	632	10.0	7.46	13.0	036A	575	50	30	20	50	50.2	79	80	
		518	632	10.0	7.46	13.0	039A	575	70	40	30	70	70.3	104.1	110	

Electrical data (cont)



40RU**14-30, 60 Hz Electrical Heater Data (cont)

Electrical data (cont)

UNIT	NOM. VOLTS	IFM TYPE	UNIT VOLTAGE		FAN MOTOR (QTY 1)			ELECTRIC HEATER(S)						POWER SUPPLY ^a		
			Range		hp	kW	FLA	CAEL HEAT ***00	Heater Voltage	Nom. Cap. (kW)	Actual Capacity (kW)			FLA (Full Load Amps)	MCA (Minimum Ckt Amps)	MOCP (Maximum Overcurrent Protection)
			Min	Max							Stage 1	Stage 2	Total			
40RU**30	208/230	STD	187	253	10.0	7.46	32.0	028A	208/240	20	15/20	—	15/20	41.7/48.1	92.1/100.1	100/110
			187	253	10.0	7.46	32.0	031A	208/240	40	15/20	15/20	30/40	83.4/96.2	144.3/160.3	150/175
			187	253	10.0	7.46	32.0	034A	208/240	50	22.6/30	15/20	37.6/50	104.3/120.3	170.4/190.4	175/200
			187	253	10.0	7.46	32.0	037A	208/240	70	30/40	22.6/30	52.6/70	145.9/168.4	222.4/250.5	225/275
		MED	187	253	10.0	7.46	32.0	028A	208/240	20	15/20	—	15/20	41.7/48.1	92.1/100.1	100/110
			187	253	10.0	7.46	32.0	031A	208/240	40	15/20	15/20	30/40	83.4/96.2	144.3/160.3	150/175
			187	253	10.0	7.46	32.0	034A	208/240	50	22.6/30	15/20	37.6/50	104.3/120.3	170.4/190.4	175/200
			187	253	10.0	7.46	32.0	037A	208/240	70	30/40	22.6/30	52.6/70	145.9/168.4	222.4/250.5	225/275
		HIGH	187	253	10.0	7.46	32.0	028A	208/240	20	15/20	—	15/20	41.7/48.1	92.1/100.1	100/110
			187	253	10.0	7.46	32.0	031A	208/240	40	15/20	15/20	30/40	83.4/96.2	144.3/160.3	150/175
			187	253	10.0	7.46	32.0	034A	208/240	50	22.6/30	15/20	37.6/50	104.3/120.3	170.4/190.4	175/200
			187	253	10.0	7.46	32.0	037A	208/240	70	30/40	22.6/30	52.6/70	145.9/168.4	222.4/250.5	225/275
	460	STD	414	506	10.0	7.46	16.0	029A	480	20	20	—	20	24.1	50.1	60
			414	506	10.0	7.46	16.0	032A	480	40	20	20	40	48.1	80.1	90
			414	506	10.0	7.46	16.0	035A	480	50	30	20	50	60.1	95.1	100
			414	506	10.0	7.46	16.0	038A	480	70	40	30	70	84.2	125.3	150
		MED	414	506	10.0	7.46	16.0	029A	480	20	20	—	20	24.1	50.1	60
			414	506	10.0	7.46	16.0	032A	480	40	20	20	40	48.1	80.1	90
			414	506	10.0	7.46	16.0	035A	480	50	30	20	50	60.1	95.1	100
			414	506	10.0	7.46	16.0	038A	480	70	40	30	70	84.2	125.3	150
		HIGH	414	506	10.0	7.46	16.0	029A	480	20	20	—	20	24.1	50.1	60
			414	506	10.0	7.46	16.0	032A	480	40	20	20	40	48.1	80.1	90
			414	506	10.0	7.46	16.0	035A	480	50	30	20	50	60.1	95.1	100
			414	506	10.0	7.46	16.0	038A	480	70	40	30	70	84.2	125.3	150
575	STD	518	632	10.0	7.46	13.0	030A	575	20	20	—	20	20.1	41.4	50	
		518	632	10.0	7.46	13.0	033A	575	40	20	20	40	40.2	66.5	70	
		518	632	10.0	7.46	13.0	036A	575	50	30	20	50	50.2	79	80	
		518	632	10.0	7.46	13.0	039A	575	70	40	30	70	70.3	104.1	110	
	MED	518	632	10.0	7.46	13.0	030A	575	20	20	—	20	20.1	41.4	50	
		518	632	10.0	7.46	13.0	033A	575	40	20	20	40	40.2	66.5	70	
		518	632	10.0	7.46	13.0	036A	575	50	30	20	50	50.2	79	80	
		518	632	10.0	7.46	13.0	039A	575	70	40	30	70	70.3	104.1	110	
	HIGH	518	632	10.0	7.46	13.0	030A	575	20	20	—	20	20.1	41.4	50	
		518	632	10.0	7.46	13.0	033A	575	40	20	20	40	40.2	66.5	70	
		518	632	10.0	7.46	13.0	036A	575	50	30	20	50	50.2	79	80	
		518	632	10.0	7.46	13.0	039A	575	70	40	30	70	70.3	104.1	110	

NOTE(S):

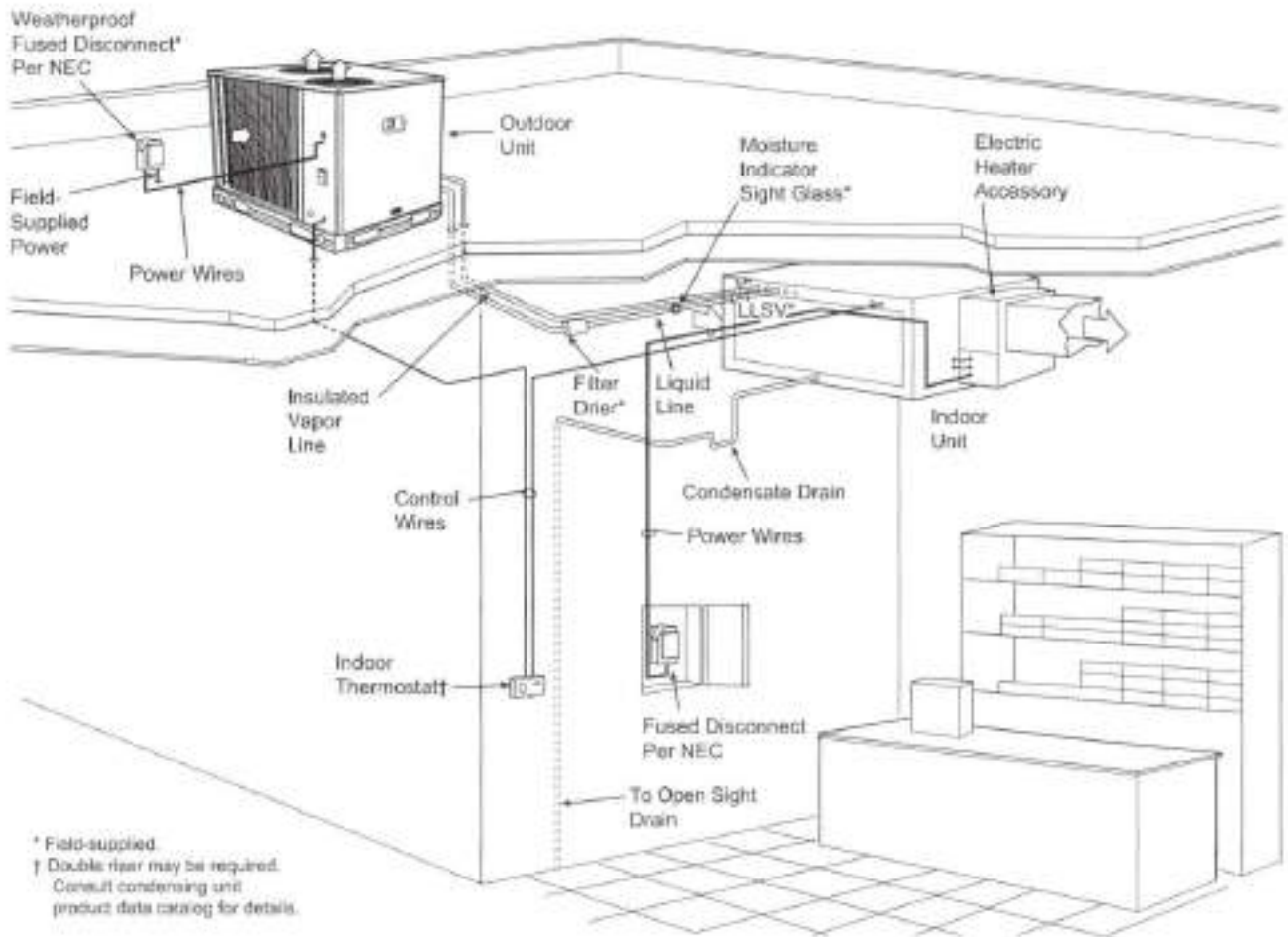
a. MCA and MOCP values apply to both standard and alternate factory supplied motors.



Typical piping and wiring diagrams



Horizontal Installation — 40RF/40RU



* Field-supplied
 † Double riser may be required.
 Consult condensing unit
 product data catalog for details.

LEGEND
 NEC — National Electrical Code
 TXV — Thermostatic Expansion Valve

- NOTES**
1. All piping must follow standard refrigerant piping techniques. Refer to Carrier System Design Manual for details.
 2. All wiring must comply with the applicable local and national codes.
 3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.
 4. Liquid line solenoid valve (solenoid drop control) is recommended to prevent refrigerant migration to the compressor.
 5. Internal factory-supplied TXVs not shown.

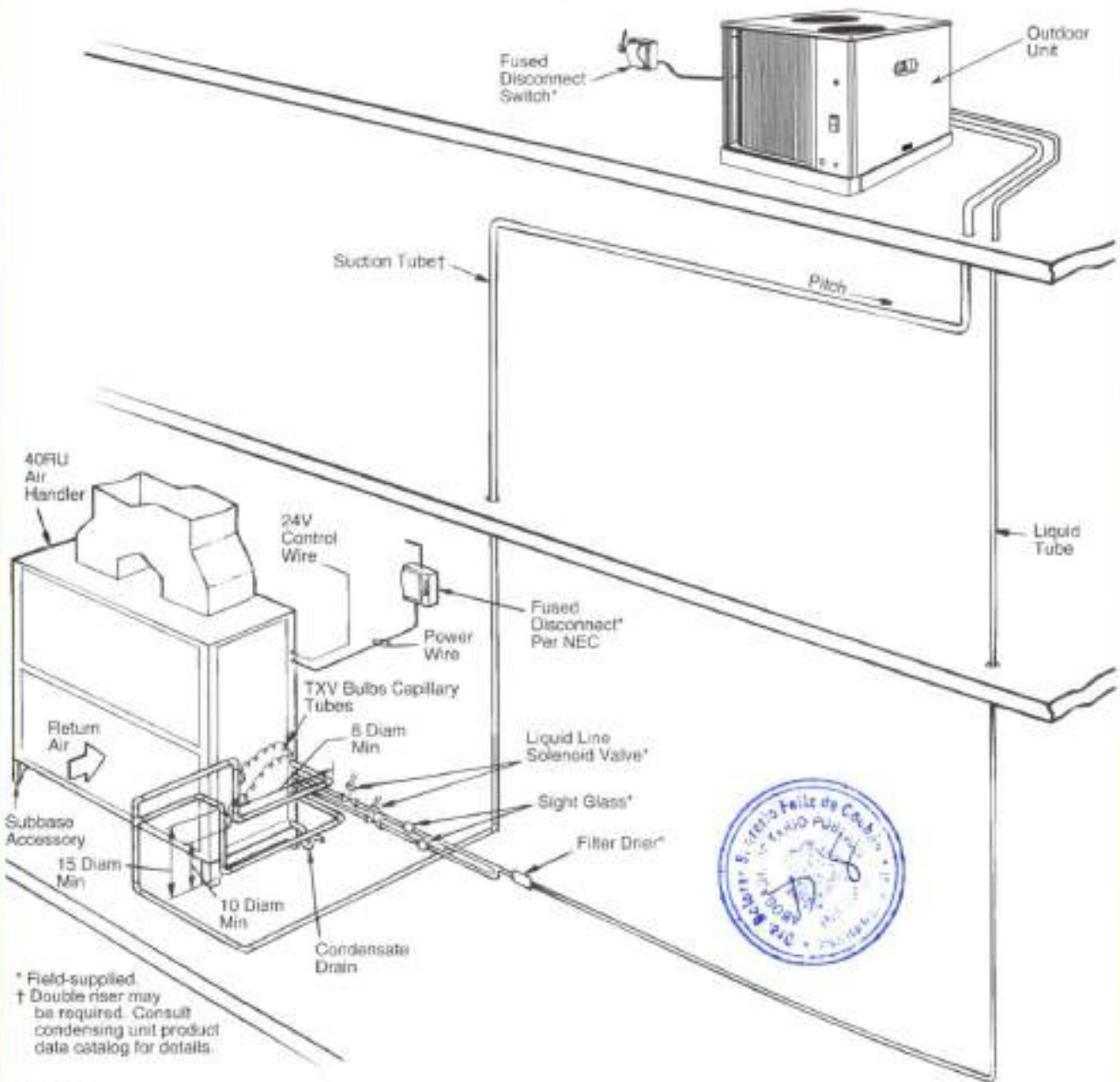


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Typical piping and wiring diagrams (cont)



Vertical Installation — 40RF/40RU



LEGEND

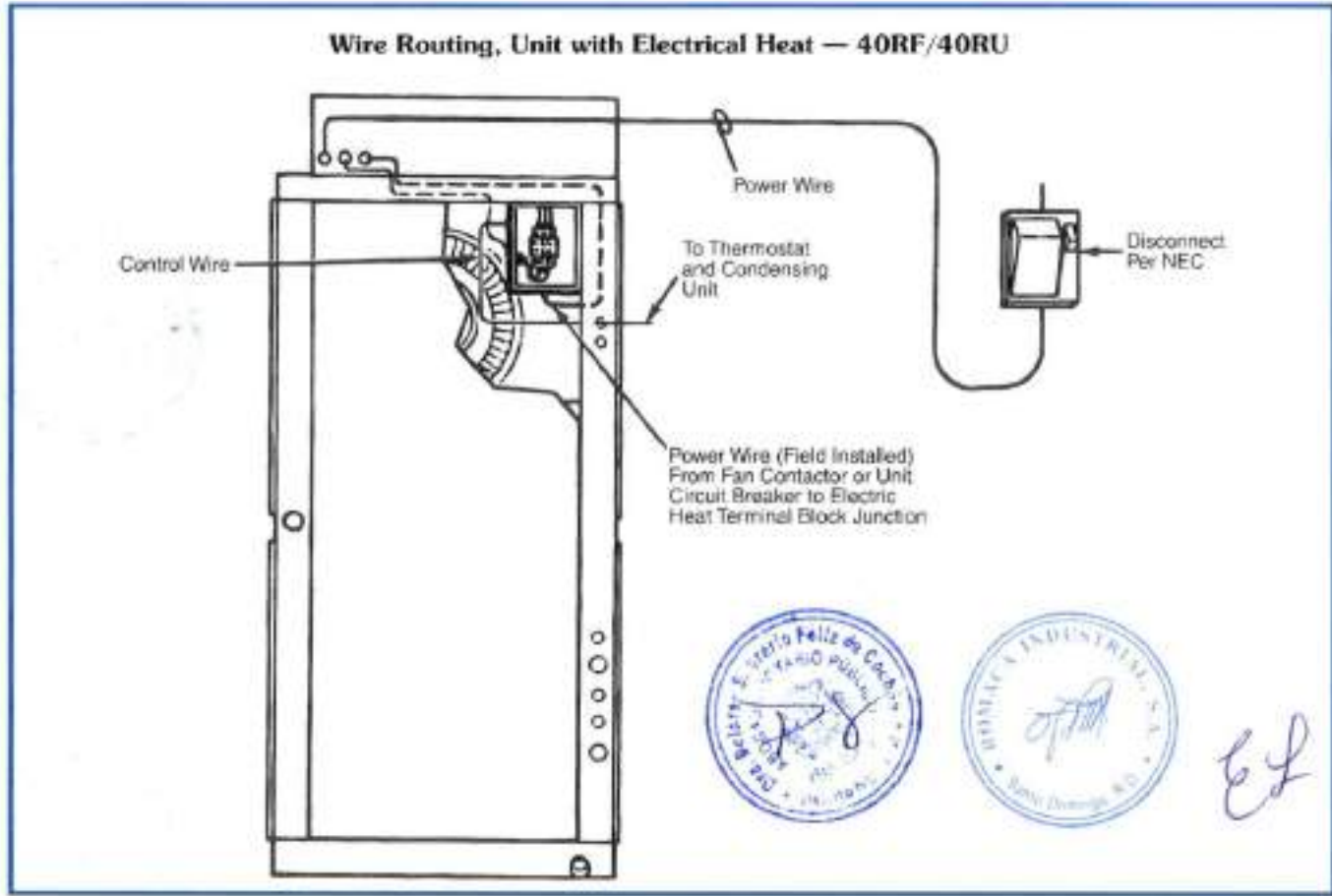
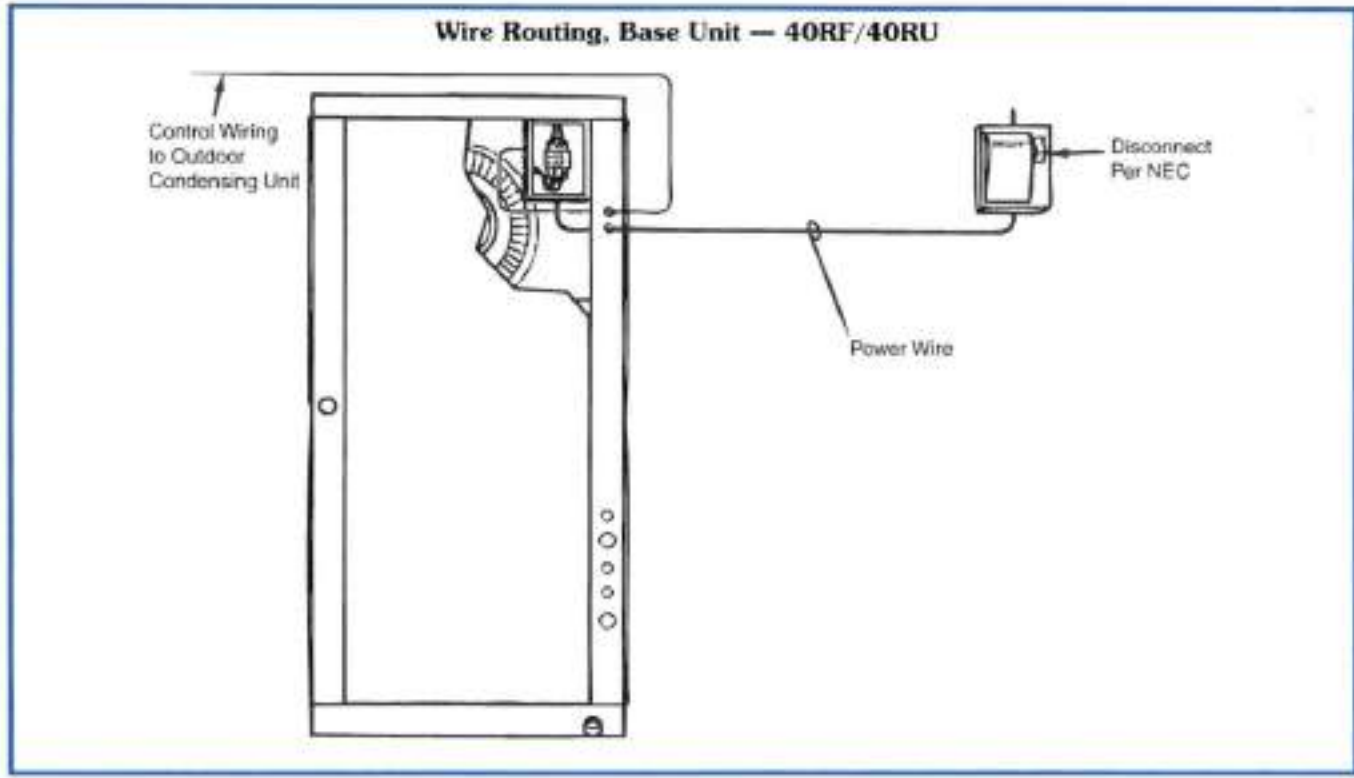
- NEC — National Electrical Code
- TXV — Thermostatic Expansion Valve
- LLSV — Liquid Line Solenoid Valve

NOTES:

1. All piping must follow standard refrigerant piping techniques. Refer to Carrier System Design Manual for details.
2. All wiring must comply with the applicable local and national codes.
3. Wiring and piping shown are general points-of-connection guides only and are not intended for, or to include all details for, a specific installation.



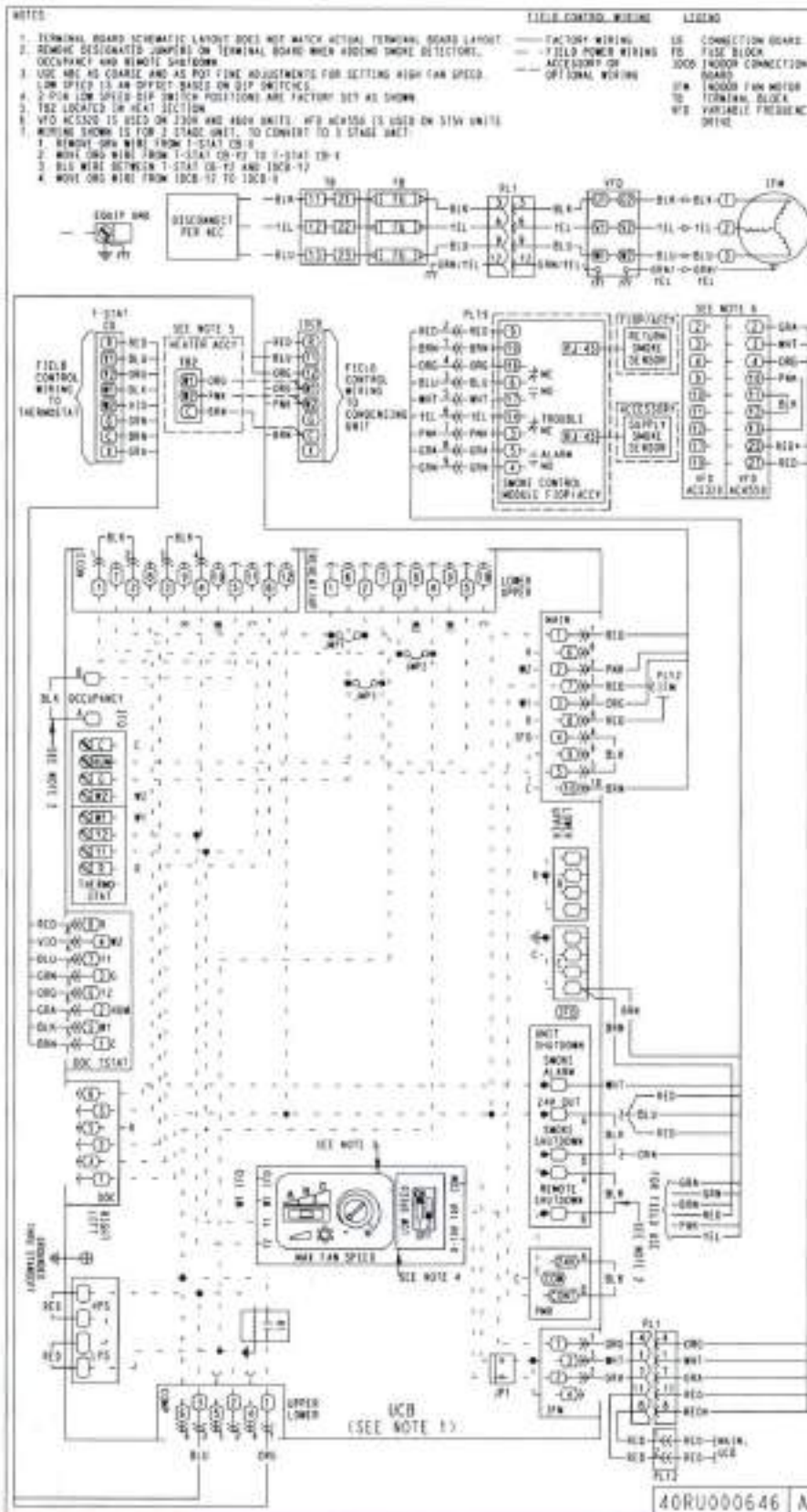
Typical piping and wiring diagrams (cont)



Typical piping and wiring diagrams (cont)



Unit Wiring Diagram — 40RU[®]14-30



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Application data

General

IMPORTANT: Do not bury refrigerant piping underground.

Select equipment to match or to be slightly less than peak load. This provides better humidity control, less unit cycling, and less part-load operation. Equipment should be selected to perform at no less than 300 cfm/ton (40 L/s per kW).

The air handler fan must always be operating when the condensing unit is operating.

Ductwork should be sized according to unit size, not building load. For larger units with two fans, a split duct transition is recommended at the fan outlets, but a plenum can be used with slight reduction in external static pressure capability.

Auxiliary Side Connector Data

UNIT	CARRIER P/N	INLET/OUTLET DIAMETER — ODF (in.)	AUXILIARY (HOT GAS) DIAMETER — ODF (in.)
40RFA/S*07	EA19BA705	1-1/8	5/8
40RFA/S*08	EA19BA905	1-3/8	7/8
40RFA/S*12	EA19BA705	1-1/8	5/8
40RUA/S*14	EA19BA705	1-1/8	5/8
40RUA/S*16	EA19BA705	1-1/8	5/8
40RUA/S*25	EA19BA705	1-1/8	5/8
40RUA/S*28	EA19BA905	1-3/8	7/8
40RUA/S*30	EA19BA905	1-3/8	7/8

Factory-Installed Nozzle and Distributor Data^a

UNIT	COIL TYPE	TXV QTY...P/N	DISTRIBUTOR QTY...P/N	FEEDER TUBES PER DISTRIBUTOR ^b QTY...SIZE (in.)	NOZZLE QTY...P/N
40RFA*07	4 Row	1...BBIZE-5-GA	1...1135	12...1/4	1...G4
40RFA*08	4 Row	1...BBIZE-6-GA	1...1136	15...1/4	1...G5
40RFA*12	4 Row	2...HXAE-5-KX	2...1135	9...1/4	2...G3
40RUA*14	4 Row	2...HXAE-6-KX	2...1113	12...3/16	2...G3
40RUA*16	4 Row	2...BBIZE-6-GA	2...1136	16...3/16	2...G4
40RUA*25	4 Row	2...BBIZE-8-GA	2...D195-18-3/16	18...3/16	2...G6
40RUA*28	4 Row	2...BBIZE-15-GA	2...1128	20...3/16	2...C15
40RUA*30	4 Row	2...BBIZE-15-GA	2...1126	24...3/16	2...C17

NOTE(S):

- a. For 40RUA*16-30 units, hot gas bypass applications require field-supplied auxiliary side connector.
- b. Feeder tube size is 1/4 in. (6.35 mm).

LEGEND

TXV — Thermoetatic Expansion Valve



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Commercial Packaged Air-Handling Unit

HVAC Guide Specifications

Size Range: **2,400 to 4,000 Cfm, Nominal Airflow, 6-10 Tons, Nominal Cooling**

Carrier Model Numbers: **40RFA (Direct-Expansion Coil) and 40RFS (Chilled Water Coil)**

Part 1 — General

1.01 System Description

A. Indoor, packaged air-handling unit for use in commercial split systems. Unit shall have a multi-position design and shall be capable of horizontal or vertical installation on a floor or in a ceiling, with or without ductwork. (Only vertical units are to be applied without ductwork.)

B. Unit with direct-expansion coil shall be used in a refrigerant circuit with a matching air-cooled condensing unit. Unit with chilled water coil shall be used in a chilled water circuit.

1.02 Quality Assurance

A. Coils shall be designed and tested in accordance with ASHRAE 15 Safety Code for Mechanical Refrigeration (U.S.A.), latest edition.

B. Unit shall be constructed in accordance with UL (U.S.A.) and UL, Canada, standards and shall carry the UL and UL, Canada, labels.

C. Unit insulation and adhesive shall comply with NFPA-90A (U.S.A.) requirements for flame spread and smoke generation. Insulation shall be treated with an immobilized antimicrobial agent to inhibit the growth of bacteria and fungi on the insulation as proven by tests in accordance with ASTM standards G21 and 22 (U.S.A.).

D. Unit shall be manufactured in a facility registered to the ISO 9001 manufacturing quality standard.

E. Direct-expansion and chilled water coils shall be burst and leak tested at 435 psi.

1.03 Delivery And Storage

A. Units shall be stored and handled per manufacturer recommendations.

Part 2 — Products

2.01 Equipment

A. Indoor mounted, draw-thru, packaged air-handling unit that can be used in a suspended horizontal configuration or a vertical configuration. Unit shall consist of a direct drive vane axial fan and motor assembly, pre-wired fan motor controller, factory-installed refrigerant metering devices (direct-expansion coil units), cooling coil, 2 in. (51 mm) disposable air filters, and condensate drain pans for vertical or horizontal configurations.

1. Cabinet shall be constructed of mill-galvanized steel.

2. Cabinet panels shall be fully insulated with 1/2 in. (12.7 mm) fire-retardant material. Insulation shall be treated with an immobilized antimicrobial agent to inhibit the growth of bacteria

and fungi on the insulation as proven by tests in accordance with ASTM standards G21 and 22 (U.S.A.).

3. Unit shall contain non-corroding condensate drain pans for both vertical and horizontal applications. Drain pans shall have connections on right and left sides of unit to facilitate field connection. Drain pans shall have the ability to be sloped toward the right or left side of the unit to prevent standing water from accumulating in pans.

4. Unit shall have factory-supplied 2 in. (51 mm) throwaway-type filters installed upstream from the cooling coil. Filter access shall be from either the right or left side of the unit.

B. Evaporator Fan and Motor with EcoBlue™ Technology:

1. Direct Drive Evaporator fan motor:

a. Shall be an ECM motor design.

b. Shall have permanently lubricated bearings.

c. Shall have inherent automatic-reset thermal overload protection.

d. Shall have slow ramp up to speed capabilities.

e. Shall require no fan/motor belts for operation, adjustments and or initial fan speed set up.

f. Shall be internally protected from electrical phase reversal and loss.

2. Evaporator Fan:

a. Shall be easily set with dedicated selection switch and adjustment pot on unit control board.

b. Shall provide two stage cooling capacity control, the indoor fan speed is automatically controlled to meet the code-compliant <66% low fan speed and 100% at full fan speed operation.

c. Blower fan shall be a Vane Axial fan design with 75% less moving parts than a conventional belt drive system.

d. Shall be constructed of a high impact composite material on stator, rotor and air inlet casing.

e. Shall be a patented / pending design with a corrosion resistant material and dynamically balanced.

f. Shall have slow ramp up to speed capabilities to help reduce sound and comfort issues typically associated with single speed belt drive systems.

g. Shall be a slide out design with removal of a few support brackets.

3. Shall include an easily accessible Unit Control Board to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, economizer, thermostat, and low and high pressure



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switches. Controller shall also provide an intuitive means to adjust the indoor fan speed through a simple switch and pot adjustment design.

C. Coils:

DX coil is 4-row and consists of copper tubes with sine-wave aluminum fins bonded to the tubes by mechanical expansion. Suction and liquid line connections or supply and discharge connections shall be made on the same side of the coil.

1. Direct-expansion coils shall feature factory-installed thermostatic expansion valves (TXVs) for refrigerant control. The TXVs shall be Puron® R-410A compatible and capable of external adjustment. Coil tubing shall be internally rifled to maximize heat transfer.
2. Chilled water coils shall be rated for an operating pressure of not less than 300 psig (2069 kPag).

D. Operating Characteristics:

1. When combined with matching 38AU condensing unit the system shall be capable of starting and running at ambient outdoor temperatures from 35°F (2°C) to 125°F (52°C) in cooling mode.
2. Unit shall operate at ±10% from rated voltage.

E. Motor:

1. Fan motor of the size and electrical characteristics specified on the equipment schedule shall be factory supplied and installed.
2. Evaporator motors are designed specifically for Carrier and do not have conventional horsepower (hp) ratings listed on the motor nameplate. Motors are designed and qualified in the "air-over" location downstream of the cooling coil and carry a maximum continuous bhp rating that is the maximum application bhp rating for the motor; no "safety factors" above that rating may be applied.

F. Special Features:

1. Alternate Motor and Drive:

An alternate high-static motor shall be available to meet the airflow and external static pressure requirements specified on the equipment schedule.

2. External Paint:

Where conditions require, units shall be painted with an American Sterling Gray finish.

3. Hot Water Coil:

Coil shall be 2-row, U-bend coil with copper tubes and aluminum plate fins bonded to the tubes by mechanical expansion. Coil shall be mounted in a galvanized steel housing that shall be fastened to the unit's fan deck for blow-thru heating operation. Coil shall have maximum working pressure of 150 psig.

4. Steam Distributing Coil:

Coil shall consist of one row of copper tubes with aluminum plate fins, and shall have inner steam distributing tubes. Coil shall be mounted in a galvanized steel housing and shall be fastened to the unit's fan deck for blow-thru heating operation. Coil shall have maximum working pressure of 20 psig at 260°F.

5. Electric Heaters:

Heaters for nominal 240v, 480v, or 575v, 3-phase, 60 Hz shall be factory-supplied and field-installed as shown on the equipment drawings. Electric heat assembly shall be ETL (U.S.A.) and ETL, Canada, agency approved, and shall have single-point power wiring. Heater assembly shall include contactors with 24-v coils, power wiring, 24-v control wiring terminal blocks, and a hinged access panel. Electric heaters shall not be used with air discharge plenum.

6. Air Discharge Plenum:

Plenum shall be factory-supplied for field installation to provide free-blow air distribution for vertical floor-mounted units. A grille with movable vanes for horizontal or vertical airflow adjustment shall be included. Plenum shall be field-assembled and field-installed on the unit's fan deck for blow-thru air distribution. Plenum shall not be used with electric heaters.

7. Return-Air Grille:

Grille shall be factory-supplied for field installation on the unit's return air opening.

8. Unit Subbase:

Subbase assembly shall be factory-supplied for field installation. Subbase shall elevate floor-mounted vertical units to provide access for correct condensate drain connection.

9. Economizers:

- a. Accessory Ultra Low Leak EconoMiser X (Field-installed) Economizer for ventilation or "free" cooling shall be factory provided for field installation on either return air opening of air handler.

Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.

Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.

- 3) Shall include all hardware, actuator and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.

- 4) Shall be equipped with gear driven dampers for both the outdoor ventilation



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Guide specifications – 40RF (cont)



- air and the return air for positive air stream control.
- 5) Ultra Low Leak design meets California Title 24 section 140.4 and ASHRAE 90.1 requirements for 4 cfm per sq ft on the outside air dampers and 10 cfm per sq ft on the return dampers.
 - 6) Economizer controller on EconoMi\$er X models shall be the Honeywell W7220 that provides:
 - a) 2-line LCD interface screen for setup, configuration and troubleshooting.
 - b) On-board Fault Detection and Diagnostics (FDD) that senses and alerts when the economizer is not operating properly, per California Title 24.
 - c) Sensor failure loss of communication identification.
 - d) Automatic sensor detection.
 - e) Capabilities for use with multiple-speed indoor fan systems.
 - f) Utilizing digital sensors: Dry bulb and Enthalpy. Accessory comes standard with dry bulb sensing.
 - g) Field installing enthalpy sensor required.
 - b. Accessory Standard Leak EconoMi\$er IV (field-installed) Economizer for ventilation or "free" cooling shall be factory provided for field installation on either return air opening of air handler.
 - 1) Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
 - 2) Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
 - 3) Shall include all hardware, actuator and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
 - 4) Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
 - 5) Standard leak rate shall be equipped with dampers not to exceed 2% leakage at 1 in. wg pressure differential.
 - 6) Economizer controller on EconoMi\$er IV models shall be Honeywell W7212 that provides:
 - a) Combined minimum and DCV maximum damper position potentiometers with compressor staging relay.
 - b) Functions with solid state analog enthalpy or dry bulb changeover control sensing.
 - c) Contains LED indicates for when free cooling is available, when module is in DCV mode, when exhaust fan is closed.
10. Overhead Suspension Package:
Package shall include necessary brackets to support units in a horizontal ceiling installation.
11. CO₂ Sensor:
Sensor shall provide the ability to signal the economizer to open when the space CO₂ level exceeds the predetermined setpoint.
12. Condensate Drain Trap:
Trap shall have transparent, serviceable design for easy cleaning. Kit shall include overflow shutoff switch and wiring harness for connection to an alarm if desired.
13. Discharge Duct Adapter:
Adapter shall be required for replacements using 40RF units with or without electric heat. It shall not be required for new installations or when using steam coil, hot water coil, or discharge plenum accessories.



EL

Commercial Packaged Air-Handling Unit

HVAC Guide Specifications

Size Range: 5,000 to 12,000 Cfm, Nominal Airflow,
12.5 to 30 Tons, Nominal Cooling

Carrier Model Numbers: 40RUA (Direct-Expansion
Coil) and 40RUS (Chilled Water Coil)

Part 1 — General

1.01 System Description

- A. Indoor, packaged air-handling unit for use in commercial split systems. Unit shall have a multi-position design and shall be capable of horizontal or vertical installation on a floor or in a ceiling, with or without ductwork. (Only vertical units are to be applied without ductwork.)
- B. Unit with direct-expansion coil shall be used in a refrigerant circuit with a matching air-cooled condensing unit. Unit with chilled water coil shall be used in a chilled water circuit.

1.02 Quality Assurance

- A. Coils shall be designed and tested in accordance with ASHRAE 15 Safety Code for Mechanical Refrigeration (U.S.A.), latest edition.
- B. Unit shall be constructed in accordance with ETL (U.S.A.) and ETL, Canada, standards and shall carry the ETL and ETL, Canada, labels.
- C. Unit insulation and adhesive shall comply with NFPA-90A (U.S.A.) requirements for flame spread and smoke generation. Insulation shall be treated with an immobilized antimicrobial agent to inhibit the growth of bacteria and fungi on the insulation as proven by tests in accordance with ASTM standards G21 and 22 (U.S.A.).
- D. Unit shall be manufactured in a facility registered to the ISO 9001 manufacturing quality standard.
- E. Direct-expansion and chilled water coils shall be burst and leak tested at 435 psi.

1.03 Delivery And Storage

- A. Units shall be stored and handled per manufacturer's recommendations.

Part 2 — Products

2.01 Equipment

- A. Indoor mounted, draw-thru, packaged air-handling unit that can be used in a suspended horizontal configuration or a vertical configuration. Unit shall consist of forward-curved belt-driven centrifugal fan(s), motor and drive assembly, pre-wired fan motor contactor, factory-installed refrigerant metering devices (direct-expansion coil units), cooling coil, 2 in. (51 mm) disposable air filters, and condensate drain pans for vertical or horizontal configurations.

1. Cabinet shall be constructed of mill-galvanized steel.
2. Cabinet panels shall be fully insulated with 1/2 in. (12.7 mm) fire-retardant material. Insulation shall be treated with an immobilized antimicrobial agent to inhibit the growth of bacteria

and fungi on the insulation as proven by tests in accordance with ASTM standards G21 and 22 (U.S.A.).

3. Unit shall contain non-corroding condensate drain pans for both vertical and horizontal applications. Drain pans shall have connections on right and left sides of unit to facilitate field connection. Drain pans shall have the ability to be sloped toward the right or left side of the unit to prevent standing water from accumulating in pans.
4. Unit shall have factory-supplied 2 in. (51 mm) throwaway-type filters installed upstream from the cooling coil. Filter access shall be from either the right or left side of the unit.

B. Coils:

DX coil is 4-row and consists of copper tubes with sine-wave aluminum fins bonded to the tubes by mechanical expansion. Suction and liquid line connections or supply and discharge connections shall be made on the same side of the coil.

1. Direct-expansion coils shall feature factory-installed thermostatic expansion valves (TXVs) for refrigerant control. The TXVs shall be Puron® R-410A compatible and capable of external adjustment. Coil tubing shall be internally rifled to maximize heat transfer. The 40RUAA28 and 30 have EA36UZ031 TXVs. These are Sporlan™ BBIZE-15-GA-BP5, which have a 5% bleed.
2. Chilled water coils shall be rated for an operating pressure of not less than 300 psig (2069 kPag).

C. Operating Characteristics:

1. When combined with matching 38AU condensing unit the system shall be capable of starting and running at ambient outdoor temperatures from 35°F (2°C) to 125°F (52°C) in cooling mode and from -10°F (-23°C) to 60°F (16°C) in heating mode.

2. Unit shall operate at ±10% from rated voltage.

Motor:

Fan motor of the size and electrical characteristics specified on the equipment schedule shall be factory supplied and installed.

2. Motors rated at 1.3 through 3.7 hp shall have inherent thermal overload protection. Motors rated at 5 hp shall be protected by a circuit breaker.
3. Evaporator-fan motor shall have permanently lubricated, sealed bearings and inherent automatic-reset thermal overload protection or manual reset calibrated circuit breakers. Evaporator motors are designed specifically for Carrier and do not have conventional

1. Third-party trademarks and logos are the property of their respective owners.



horsepower (hp) ratings listed on the motor nameplate. Motors are designed and qualified in the "air-over" location downstream of the cooling coil and carry a maximum continuous bhp rating that is the maximum application bhp rating for the motor; no "safety factors" above that rating may be applied.

4. All evaporator-fan motors 5 hp and larger shall meet the minimum efficiency requirements as established by the Energy Policy Act of 1992 (EPACT, U.S.A.), effective October 24, 1997.

E. Control Box:

1. Shall include an easily accessible Unit Control Board to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, economizer, thermostat, and low and high pressure switches. Controller shall also provide an intuitive means to adjust the indoor fan speed through a simple switch and pot adjustment design.

F. Staged Air Volume System (SAV[®]) for 2-stage cooling models (standard):

1. Evaporator fan motor.
 - a. Shall have permanently lubricated bearings.
 - b. Shall have a maximum continuous bhp rating for continuous duty operation; no safety factors above that rating.
 - c. Shall be Variable Frequency duty and 2-speed control.
 - d. Shall contain motor shaft grounding ring to prevent electrical bearing fluting damage by safely diverting harmful shaft voltages and bearing currents to ground.
2. Variable Frequency Drive (VFD) Standard:
 - a. Shall be installed inside the unit cabinet, mounted, wired and tested.
 - b. Shall contain Electromagnetic Interference (EMI) frequency protection.
 - c. Insulated Gate Bi-Polar Transistors (IGBT) used to produce the output pulse width modulated (PWM) wave-form, allowing for quiet motor operation.
 - d. Self diagnostics with fault and power code LED indicator, Field accessory Display Kit available for further diagnostics and special setup applications.
 - e. RS485 capability standard.
 - f. Electronic thermal overload protection.
 - g. 5% swinging chokes for harmonic reduction and improved power factor.
 - h. All printed circuit boards shall be conformal coated.

G. Special Features:

1. Alternate Motor and Drive:

An alternate motor and/or medium-static or high-static drive shall be available to meet the airflow and external static pressure requirements specified on the equipment schedule.
2. External Paint:

Where conditions require, units shall be painted with an American Sterling Gray finish.
3. Hot Water Coil:

Coil shall be 2-row, U-bend coil with copper tubes and aluminum plate fins bonded to the tubes by mechanical expansion. Coil shall be mounted in a galvanized steel housing that shall be fastened to the unit's fan deck for blow-thru heating operation. Coil shall have maximum working pressure of 150 psig.
4. Steam Distributing Coil:

Coil shall consist of one row of copper tubes with aluminum plate fins, and shall have inner steam distributing tubes. Coil shall be mounted in a galvanized steel housing and shall be fastened to the unit's fan deck for blow-thru heating operation. Coil shall have maximum working pressure of 20 psig at 260°F.
5. Electric Heaters:

Heaters for nominal 240v, 480v, or 575v, 3-phase, 60 Hz shall be factory-supplied and field-installed as shown on the equipment drawings. Electric heat assembly shall be ETL (U.S.A.) and ETL, Canada, agency approved, and shall have single-point power wiring. Heater assembly shall include contactors with 24-v coils, power wiring, 24-v control wiring terminal blocks, and a hinged access panel. Electric heaters shall not be used with air discharge plenum.
6. Air Discharge Plenum:

Plenum shall be factory-supplied to provide free-blow air distribution for vertical floor-mounted units. A grille with movable vanes for horizontal or vertical airflow adjustment shall be included. Plenum shall be field-assembled and field-installed on the unit's fan deck for blow-thru air distribution. Plenum shall not be used with electric heaters.
7. Return-Air Grille:

Grille shall be factory-supplied for field installation on the unit's return air opening.
8. Unit Subbase:

Subbase assembly shall be factory-supplied for field installation. Subbase shall elevate floor-mounted vertical units to provide access for correct condensate drain connection.
9. Economizers:
 - a. Accessory Ultra Low Leak EconomiSer X. (Field-installed) Economizer for ventilation or



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"free" cooling shall be factory provided for field installation on either return air opening of air handler.

- 1) Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
- 2) Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
- 3) Shall include all hardware, actuator and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
- 4) Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
- 5) Ultra Low Leak design meets California Title 24 section 140.4 and ASHRAE 90.1 requirements for 4 cfm per sq ft on the outside air dampers and 10 cfm per sq ft on the return dampers.
- 6) Economizer controller on EconoMi\$er X models shall be the Honeywell W7220 that provides:
 - a) 2-line LCD interface screen for setup, configuration and troubleshooting.
 - b) Onboard Fault Detection and Diagnostics (FDD) that senses and alerts when the economizer is not operating properly, per California Title 24.
 - c) Sensor failure loss of communication identification.
 - d) Automatic sensor detection.
 - e) Capabilities for use with multiple-speed indoor fan systems.
 - f) Utilizing digital sensors: Dry bulb and Enthalpy. Accessory comes standard with dry bulb sensing.
 - g) Field installing enthalpy sensor required.
- b. Accessory Standard Leak EconoMi\$er IV (field-installed) Economizer for ventilation or "free" cooling shall be factory provided for

field installation on either return air opening of air handler.

- 1) Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
- 2) Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
- 3) Shall include all hardware, actuator and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
- 4) Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
- 5) Standard leak rate shall be equipped with dampers not to exceed 2% leakage at 1 in. wg pressure differential.
- 6) Economizer controller on EconoMi\$er IV models shall be Honeywell W7212 that provides:
 - a) Combined minimum and DCV maximum damper position potentiometers with compressor staging relay.
 - b) Functions with solid state analog enthalpy or dry bulb changeover control sensing.
 - c) Contains LED indicates for when free cooling is available, when module is in DCV mode, when exhaust fan is closed.
10. Overhead Suspension Package: Package shall include necessary brackets to support units in a horizontal ceiling installation.
11. CO₂ Sensor: Sensor shall provide the ability to signal the economizer to open when the space CO₂ level exceeds the predetermined setpoint.
12. Condensate Drain Trap: Trap shall have transparent, serviceable design for easy cleaning. Kit shall include overflow shutoff switch and wiring harness for connection to an alarm if desired.





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Santo Domingo, D. N.
13 de febrero de 2024

Señores:
CONSEJO DEL PODER JUDICIAL

Santo Domingo

Por medio de la presente, les informamos que los equipos presentados en la propuesta asociada al No. de Expediente LPN-CPJ-35-2023 constan de 1 año de garantía en piezas y servicios; adicional, se otorga garantía extendida de 5 años en el compresor de equipos inverter, en caso de consolas de pared inverter, la garantía extendida resulta de 10 años en el compresor de los mismos.

Atentamente,



Edgar López
Gerente Romaca Industrial



Santo Domingo, D. N.
13 de febrero de 2024

Señores:
CONSEJO DEL PODER JUDICIAL
Santo Domingo

Por medio de la presente, aprovechamos para resaltar nuestro compromiso y esmero en la entrega del proyecto para la **ADQUISICION E INSTALACION DE ACONDICIONADORES DE AIRE EN LAS DIFERENTES DEPENDENCIAS DEL PODER JUDICIAL**, de referencia **LPN-CPJ-35-2023**, de su institución. En ese sentido, confirmamos la ejecución del servicio en máximo treinta (30) días laborables a partir de emitida la orden de compra y entregado el primer pago que corresponde al veinte por ciento (20%) de avance, conforme lo establece el pliego de condiciones.

Ante cualquier adicional, quedamos a su disposición.

Atentamente,


Edgar López
Gerente





EXPERIENCIA COMO CONTRATISTA ROMACA INDUSTRIAL



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30 de agosto 2022

Carta de Referencia

A quien pueda interesar:

Por medio de la presente, hacemos constar que la empresa **Romaca Industrial, SA, Rnc. 101-09203-3**, realizó la instalación del proyecto de climatización del edificio de la **DCJA**, de 95 toneladas, proceso No. **REF: MH-CCC-CP-2019-0006**, "Contratación de empresa calificada para llevar los trabajos de readecuación de las nuevas oficinas de la Dirección de Casinos y Juegos de Azar, Archivo general y Salones de Capacitación de este M.H."

Los trabajos realizados por Romaca Industrial, S.A. incluyeron el suministro e instalación de equipos de climatización tipo cassette y fancoil, así como todo el recorrido de ductos de suministro, alambrado eléctrico y de control, y sistema de inyección de aire fresco. El proyecto concluyó de manera satisfactoria."

Atentamente,


DENNIS J. BATISTA
Director Administrativo



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30 de Agosto 2022

Carta de Referencia

A quien pueda interesar

Por medio de la presente, hacemos constar que la empresa **Romaca Industrial, SA, Rnc. 101-09203-3**, realizó la instalación del proyecto de climatización del edificio de la **DGJP** de 245 toneladas, proceso No. **REF: MH-CCC-CP-2018-0019**, "Solicitud contratación de empresa o persona calificada para llevar a cabo la adquisición e instalación del sistema de climatización del Edf. Que albergará la Dirección General de Jubilaciones y pensiones."

Los trabajos realizados por **Romaca Industrial, S.A.** incluyeron el suministro e instalación de equipos de climatización tipo cassette y fancoil, así como todo el recorrido de ductos de suministro, alambrado eléctrico y de control, y sistema de inyección de aire fresco. El proyecto concluyó de manera satisfactoria."

Atentamente,


DENNIS J. BATISTA
Director Administrativo









INSTITUTO DOMINICANO DE AVIACIÓN CIVIL

Cabo Caucedo, S.T.E
01 de septiembre del 2022

“A quien pueda interesar”

Por medio de la presente, hacemos constar que la Compañía **ROMACA Industrial S.A.**, realizó el proyecto (IDAC-CCC-LPN-2019-0003) el cual consistió en la instalación de 480 toneladas de climatización para el edificio Norge Botello, estos trabajos incluyeron el suministro e instalación de 3 chillers de 160 toneladas cada uno, todos los componentes de la planta helada, así como todo el recorrido de tuberías de agua helada, la interconexión eléctrica y de control. El proyecto concluyó de manera satisfactoria, y luego de su implementación hemos recibido un excelente servicio pos-venta de soporte técnico.

Atentamente,

Rafael Absen Diaz

Rafael Absen Diaz
Encargado de la División de Energía CNS y Meteorología
Lider del Proyecto



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País
Suroamericano
de la Calidad



Premio Oro
2018



Premio Nacional
a la Calidad
2019
“Gran Premio”





18 de Abril 2018
Santo Domingo, D. N.

A QUIEN PUEDA INTERESAR

Mediante la presente notificamos que la compañía **Romaca Industrial, S.A** y su representante el **Sr. Juan Luis Machado**, es nuestro proveedor desde el año 2002 en servicios de ventas de materiales para todas nuestras tiendas y oficinas. Hasta ahora podemos confirmar que el servicio prestado es oportuno, de buena calidad y de entera satisfacción.

Sin otro particular por el momento, se despide

Atentamente,

Ing. Mario Cesa
Gte. Mantenimiento Refrigeración.



EXPERIENCIA COMO CONTRATISTA

Nombre del Oferente: **Romaca Industrial, S.A**

Relación de contratos de naturales y magnitud similares realizados durante los últimos años.

Titulo del proyecto	Valor total del proyecto del que ha sido responsable el contratista	Periodo del contrato	Fecha de comienzo	% del proyecto completado	Órgano de contratación y lugar	Titular principal (P) o Subcontratista (S)	¿Certificación definitiva expedida? - Sí -Aún No (contratos en curso)-No
A) Nacionales							
SUMINISTRO E INSTALACION DE SISTEMA DE A/A PARA EDIF. HUACAL	RD\$ 3,522,895.55	3 MESES	ENE-2024	30%	PROGRAMA DE PROYECTOS ESPECIALES DE LA PRESIDENCIA (PROPEEP)	P	
MANTENIMIENTO DE CHILLER 30RB, BOMBAS PRIMARIAS/SECUNDARIAS Y VARIADORES DE FRECUENCIA EN EDIFICIO CORPORATIVO	RD\$ 98,032.04	2 DIAS	DIC-2023	100%	CERVECERIA NACIONAL DOMINICANA	P	
REPARACION DE CHILLER CARRIER MODELO 30RB	RD\$ 1,072,375.99	7 DIAS	SEPT-2023	100%	CERVECERIA NACIONAL DOMINICANA	P	



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PLAN ANUAL DE MANTENIMIENTO DE TORRES DE ENFRIAMIENTO	RD\$ 7,391,850.17	3 MESES	JUL-22	100%	CONSORCIO ENERGETICO PUNTA CANA MACAO (CEPM)	P	
SUMINISTRO E INSTALACION DE SISTEMA DE SISTEMA DE CLIMATIZACION	RD\$1,271,281.3132	1 AÑO	ago-23	95%	INTEC	P	
ADECUACION DE TORRES DE ENFRIAMIENTO, REPARACION DE CHILLER Y MANTENIMIENTO DE MANEJADORA DE AIRE EN AREA DE IMPRESIÓN	RD\$ 1,425,644.89	30 DIAS	feb-23	100%	EDITORA HOY	P	
REPARACION DE CHILLER E INSTALACION DE 4 COMPRESORES EN CHILLER 1 Y 2	RD\$ 2,255,542.44	6 MESES	ago-22	100%	EDITORA HOY	P	
SUMINISTRO E INSTALACION DE COMPRESORES	RD\$ 961,437.91	30 DIAS	oct-22	100%	EDITORA HOY	P	
SUMINISTRO E INSTALACION DE CHILLER DE 170 TONELADAS Y ACCESORIOS	USD\$ 404,472.53	1 AÑO	jul-2022	100%	PRICESMART	P	
MANTENIMIENTO PREVENTIVO CHILLER 275 TONELADAS, 4 JORNADAS AL AÑO	RD\$428,162.95	1 AÑO	jun-22	100%	CERVECERÍA NACIONAL DOMINICANA	P	
REPARACIÓN CÁMARAS DE REFRIGERACIÓN	RD\$74,621.69	5 DÍAS	mar-22	100%	ORION INVESTMENT - JW MARRIOTT	P	

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REPARACIÓN UNIDAD TIPO PAQUETE MARCA YORK	RD\$194,599.52	2 DÍAS	nov-21	100%	GILDAN ACTIVEWEAR	P	
SUMINISTRO E INSTALACIÓN EQUIPOS MINISPLIT	RD\$471,281.75	7 DÍAS	oct-21	100%	DEUTSCHE GESELLSCHAFT FUR INTERNATIONALE	p	
MANTENIMIENTO PREVENTIVO PARA 12 FANCOILS DE AGUA HELADA	RD\$275,351.60	6 DÍAS	oct-21	100%	CERVECERÍA NACIONAL DOMINICANA	P	
INSTALACIÓN SISTEMA DE CONTROL PARA 10 MANEJADORAS DE 5 TON DE AGUA HELADA, 1 CUARTO FRÍO Y 4 UNIDADES SPLIT	RD\$456,561.73	3 DÍAS	oct-21	100%	CESAR IGLESIAS, S.A.	P	
MANTENIMIENTO CORRECTIVO Y PREVENTIVO CHILLER 30RAP050 MARCA CARRIER	RD\$183,390.05	5 DÍAS	jul-21	100%	CERVECERÍA NACIONAL DOMINICANA	P	
MANTENIMIENTO PREVENTIVO CHILLER 275 TONELADAS, 4 JORNADAS AL AÑO	RD\$428,162.95	1 AÑO	jun-21	100%	CERVECERÍA NACIONAL DOMINICANA	P	
REPARACIÓN DE UNIDADES DE AIRE ACONDICIONADO TIPO MANEJADORA DE EXPANSIÓN DIRECTA, MARCA CARRIER DE 20 TON	RD\$439,866.9	2 DÍAS	jun-21	100%	FERRETERÍA AMERICANA	P	

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SUMINISTRO E INSTALACIÓN SISTEMA DE CONTROLES IVU CARRIER	US\$ 54,999.26	3 MESES	may-21	100%	LA AURORA	P	
SUMINISTRO E INSTALACIÓN FANCOIL DE 5 TONELADAS	RD\$412,456.44	2 DÍAS	may-21	100%	CLINICA DENTAL ALMONTE VARGAS	P	
MANTENIMIENTO Y REPARACIÓN CHILLER CARRIER 30XAB1206-0-J33 DE 120 TONELADAS	RD\$274,512.00	1 DÍA	mar-21	100%	INDUSTRIAS SAN MIGUEL DEL CARIBE	P	
SUMINISTRO E INSTALACIÓN AIRE ACONDICIONADO DE 5 TONELADAS	RD\$545,341.98	4 DÍAS	mar-21	100%	HONESTLY DOMINICANA	P	
MANTENIMIENTO Y REPARACIÓN CHILLER CARRIER 19XR- 50514Q2LBH64- DE 500 TONELADAS	RD\$941,680.45	5 DÍAS	feb-21	100%	GILDAN ACTIVEWEAR	P	
SUMINISTRO E INSTALACIÓN 3 CHILLERS 160 TONELADAS PARA LA CLIMATIZACIÓN DEL EDIFICIO NORGE BÓTELLO	RD\$57,986,528.54	6 MESES	dic-19	100%	IDAC	P	
SUMINISTRO E INSTALACION SISTEMA DE CLIMATIZACION PISO 7 EDIFICIO GUBERNAMENTAL JUAN PABLO DUARTE	RD\$22,501,953.58	12 MESES	jul-19	100%	MINISTERIO DE HACIENDA	P	

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ALIMENTADORES ELECTRICOS IMVF CIAC Y AIRE ACONDICIONADO AREA DE PATIO ESPAÑOL. ADICIONAL PROYECTO MH-CCC-CP-2018-19	RD\$695,627.28	10 DIAS	jul-19	100%	MINISTERIO DE HACIENDA	P	
MANTENIMIENTO Y REPARACION DE LAS PIEZAS DEL SISTEMA DE CLIMATIZACION	RD\$380,911.94	7 DIAS	ago-19	100%	INSTITUTO DOMINICANO DE LAS TELECOMUNICACIONES	P	
CLIMATIZACION COMEDOR Y COCINA	RD\$4,628,193.01	40 DIAS	abr-19	100%	QUALA DOMINICANA	P	
SUMINISTRO E INSTALACION DEL SISTEMA DE CLIMATIZACION EDIFICIO DGJP MH-CCC-CP-2018-19	RD\$56,710,573.32	8 MESES	nov-18	85%	MINISTERIO DE HACIENDA	P	
SUMINISTRO E INSTALACION DE EQUIPOS DE A/A 50TC-A12A1A5-0A0A0 10 TONELADAS	RD\$1,486,187.23	30 DIAS	ene-19	100%	BANCO CENTRAL DE LA REPUBLICA DOMINICANA	P	
CLIMATIZACION CON CHILLER TIENDA PRICE SMART CHARLES SUMMER (90 TON)	US\$ 277,841.07	35 DIAS	sep-18	100%	PRICE SMART	P	
SUMINISTRO EQUIPO ALTA PRECISION COMPU AIRE CKA-412	RD\$1,190,472.80	6 MESES	oct-18	100%	CERVECERIA NACIONAL DOMINICANA	P	



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CLIMATIZACION CON CHILLER EDIFICIO CORPORATIVO BOHEMIA SANTO DOMINGO (50 TON)	US\$138,712.01	30 DIAS	sep-18	100%	CERVECERIA NACIONAL DOMINICANA	P	
CLIMATIZACION CON VRF OFICINAS GOMEPE (89 TON)	US\$5,302,049.87	6 MESES	sep-17	100%	M&K MAINTENANCE	P	
CLIMATIZACION CON EQUIPOS UNITARIOS 12 CENTROS A NIVEL NACIONAL CERVECERIA NACIONAL DOMINICANA (110 TON)	US\$133,735.95	40 DIAS	ago-18	100%	CERVECERIA NACIONAL DOMINICANA	P	
CLIMATIZACION CON CHILLER TIENDA PRICE SMART SANTIAGO 190 TON)	US\$ 298,169.25	35 DIAS	may-18	100%	PRICE SMART	P	
SISTEMA DE CLIMATIZACION CON EQUIPOS TIPO PAQUETE PANADERIA PRICE SMART ARROYO HONDO (10 TON)	US\$33,635.55	15 DIAS	ago-18	100%	PRICE SMART	P	
CLIMATIZACION EDIFICIO CORPORATIVO CERVECERIA NACIONAL DOMINICANA (275 TON)	US\$ 285,241.49	58 DIAS	sep-17	100%	CERVECERIA NACIONAL DOMINICANA	P	
CLIMATIZACION CON CHILLER RESIDENCIA EMBAJADOR DE USA (50 TON)	US\$118,474.73	2 MESES	ago-17	100%	EMBAJADA AMERICANA	P	

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CLIMATIZACION CON VRF RESTAURANT APPLEBEES BLUE MALL PUNTA CANA (64 TON)	RD\$ 4,207,245.00	4 MESES	may-17	100%	DESARROLLOS RDC	P	
CLIMATIZACION CON VRF ESTACIONES DE COMUNICACIÓN A NIVEL NACIONAL	US\$ 210,260.13	2 AÑOS	jun-17	100%	CLARO	P	
CLIMATIZACION CON EQUIPOS UNITARIOS PLANET FITNESS PLAZA CENTRAL (120 TON)	US\$ 212,553.00	90 DIAS	nov-16	100%	BAILEY CONSTRUCTING INC	P	
CLIMATIZACION CON EQUIPOS DE AGUA HELADA Y VENTILACION FORZADA APPLEBEES DOWNTOWN CENTER SANTO DOMINGO 55T	RD\$ 1,628,072.00	2 MESES	ago-16	100%	DESARROLLOS RDC	P	
CLIMATIZACION CON EQUIPOS DE AGUA HELADA CASA DEL ALTISIMO EN SILVERSUN GALLERY (90 TON)	RD\$ 1,997,073.00	45 DIAS	sep-16	100%	DESARROLLOS RDC	P	
CLIMATIZACION CON EQUIPOS DE EXPANSION DIRECTA VARIAS AREAS TABACALERA DE GARCIA, LA ROMANA	RD\$ 2,256,284.40	60 DIAS	mar-16	100%	ALTADISUSA	P	

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CLIMATIZACION CON CHILLER HOSPITAL TRAUMATOLOGICO JUAN BOSCH, LA VEGA (600 TON)	RD\$ 22,386,968.00	90 DIAS	abr-15	100%	MINISTERIO DE SALUD PUBLICA	P	
CLIMATIZACION CON EQUIPOS DE AGUA HELADA PLANET FITNESS SILVERSUN GALLERY (105 TON)	US\$ 135,855.00	90 DIAS	jul-15	100%	BAILEY CONSTRUCTING INC	P	
CLIMATIZACION CON CHILLER TIENDA PRICE SMART CHARLES SUMNER (105 TON)	US\$ 231,819.37	35 DIAS	may-15	100%	PRICE SMART	P	
01-078-2015 CLIMATIZACION CON UNIDADES DE EXPANSION DIRECTA ENFRIADAS POR AGUA Y VENTILACION 4 ESTACIONES L2B METRO DE SANTO DOMINGO (155 ton)	RD\$ 63,725,431.00	7 MESES	nov-15	100%	OPRET	P	
CLIMATIZACION CON VRF CATHEDRAL INTERNATIONAL SCHOOL (81 TON)	RD\$ 5,058,099.00	3 MESES	may-12	100%	INVERSIONES SABATER	P	
CLIMATIZACION CON AGUA HELADA EDIFICIO HOTEL EMBASSY SUITES EN SILVERSUN GALLERY (900 TON)	US\$ 1,153,670.00	20 MESES	jun-13	100%	CONSTRUCTORA PEÑA SA	P	

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CLIMATIZACIÓN CON EQUIPOS DE AGUA HELADA DRONENA SA (150 TON)	US\$ 353,318.00	14 SEMANAS	jun-10	100%	DRONENA SA	P	
01-062/2006 Y 01-066/2007 INSTALACIÓN SISTEMA DE CLIMATIZACIÓN EDIFICIO DE CONTROL MSD L1	RD\$ 19,858,880.55	14 SEMANAS	2007	100%	OPRET CONTRATO 01-062/2006 Y ADENDA 01-066/2007	P	
04-101/2007 SISTEMA DE VENTILACIÓN FORZADA SET ISABELA MSD L1	RD\$ 3,247,652.76	12 SEMANAS	2007	100%	OPRET CONTRATO 04-101/2007	P	
04-125/2007 SISTEMA DE VENTILACIÓN FORZADA SET KENNEDY MSD L1	RD\$ 2,571,764.82	12 SEMANAS	2007	100%	OPRET CONTRATO 04-125/2007	P	
05-010/2008 SISTEMA DE VENTILACIÓN FORZADA SET UASD MSD L1	RD\$ 2,093,255.78	12 SEMANAS	2008	100%	OPRET CONTRATO 05-010/2008	P	
04-003/2008 SISTEMA DE VENTILACIÓN FORZADA SET LA PAZ MSD L1	RD\$ 2,455,575.93	12 SEMANAS	2008	100%	OPRET CONTRATO 04-003/2008	P	
01-078/2008 EQUIPOS SISTEMA DE CLIMATIZACIÓN EDIFICIO DE CONTROL MSD L1	RD\$ 14,119,321.86	14 SEMANAS	2008	100%	OPRET CONTRATO 01-078/2008	P	

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04-089/2007 SISTEMA DE CLIMATIZACIÓN COM, ENC, CCI, TIC, SEG Y VENTILACIÓN FORZADA AT/BT/BAÑOS ESTACIONES ELEVADAS Y SUPERFICIAL MSD L1	RD\$ 24,542,503.22	16 SEMANAS	2008	100%	OPRET CONTRATO 04-089/2007	P	
05-044-2008 SISTEMA DE CLIMATIZACIÓN ELEVADORES DE SUPERFICIE MSD L1	RD\$ 3,373,452.62	14 SEMANAS	2008	100%	OPRET CONTRATO 05-044/2008	P	
05-023/2008 VENTILACIÓN FORZADA EDIFICIO AUX 2 MSD L1	RD\$ 3,024,002.51	12 SEMANAS	2008	100%	OPRET CONTRATO 05-023/2008	P	
05-001/2009 VENTILACIÓN FORZADA CORREDOR DE CABLES MSD L1	RD\$ 877,613.31	10 SEMANAS	2009	100%	OPRET CONTRATO 05-001/2009	P	
05-002//2009 CLIMATIZACIÓN NIVEL 1 TALLERES MSD L1	RD\$ 2,473,023.66	12 SEMANAS	2009	100%	OPRET CONTRATO 05-002/2009	P	
05-003/2009 CLIMATIZACIÓN NIVEL 2 TALLERES MSD L1	RD\$ 4,719,066.54	10 SEMANAS	2009	100%	OPRET CONTRATO 05-003/2009	P	
05-030/2009 ALIMENTACIÓN ELÉCTRICA EQUIPOS ESTACIONES ELEVADAS Y SUPERFICIAL MSD L1	RD\$ 1,792,755.86	4 SEMANAS	2008	100%	OPRET CONTRATO 05-030/2009	P	



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05-019/2010 ALIMENTACIÓN ELÉCTRICA PARA EQUIPOS DE VENTILACIÓN Y AIRE ACONDICIONADO PATIO Y TALLERES MSD L1	RDS 4,683,074.86	10 SEMANAS	2010	100%	OPRET CONTRATO 05- 019/2010	P	
05-009/2012 ALIMENTADORES ELÉCTRICOS MAQUINARIAS TIM MSD L1	RDS 5,014,293.44	18 SEMANAS	2012	100%	OPRET CONTRATO 05- 009/2012	P	
05-020/2010 SISTEMA DE PUESTA A TIERRA CONTRA PLACA E16 Y 17 MSD L2-A	RDS 2,798,276.39	4 SEMANAS	2010	100%	OPRET CONTRATO 05- 020/2010	P	
05-030/2010 SISTEMA DE PUESTA A TIERRA CONTRA PLACA E15 MSD L2-A	RDS 1,197,565.16	12 SEMANAS	2010	100%	OPRET CONTRATO 05- 030/2010	P	
05-029/2012 SISTEMA DE CLIMATIZACIÓN PROVISIONAL ESTACIONES 7 A 17 MSD L2-A	RDS 3,724,706.10	2 SEMANAS	2012	100%	OPRET CONTRATO 05- 029/2012	P	
01-306/2012 SISTEMA DE CLIMATIZACIÓN, CCI, TIC, SEG, CDOR, 1 AUX, CA, TE, MSD L2-A	RDS 25,657,433.87	24 SEMANAS	2012	100%	OPRET CONTRATO 01- 306/2012	P	



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B) Internacionales

Se adjuntan las referencias y los certificados disponibles expedidos por los Órganos de Contratación correspondientes.

Firma: _____

Edgar Fournier

