Dealer de Partes y Equipos

REFRIMATELCO

MATERIALES ELECTRICOS DE CONSTRUCCION Y REFRIGERACION, S.A

RNC: 1-01-60003-9

Carrier turn to the experts · SPORLAN · MUELLER INDUSTRIES, INC. · DUPONT The miracles of science · bryant Heating & Cooling Syst

C O T I Z A C I O N

Cotizado A:

539-5419
JUNTA CENTRAL ELECTORAL
DEPTO. COMPRAS
AV. LUPERON ESQ. AV. 27 DE FEBRERO
ZONA IND. HERRERA, SANTO DOMINGO OESTE
SANTO DOMINGO O RD

Datos de la Cotización

NUMERO	:	67220
FECHA	:	03/19/19
TERMINOS	:	CREDITO 30 DIAS
PAGINA	:	1

Plácenos cotizarles los artículos detallados a continuación:

CODIGO	DESCRIPCION	CANTIDAD	PRECIO	%DESC	VALOR
010101	A/A T/D 60000 BTU, R-410A, 1 MARCA: CARRIER EFICIENCIA 18 SEER, INVERTER, R-410A DUCTEABLE, 230V/1PH/60HZ.	5.0	472000.00	15.000	2006000.0
010101	A/A T/D 24000BTU R410A 19 SE MARCA: CARRIER EFICIENCIA 18 SEER, INVERTER, R-410A DUCTEABLE, 230V/1PH/60HZ.	1.0	396000.00	15.000	336,600.0
40-0264	A/A 12000BTU R410A 19SEER CI MARCA: CIAC (CARRIER ENTERPRISE) EFICIENCIA 19 SEER, INVERTER, R-410A SPLIT DE PARED, 230V, 1PH, 60HZ	1.0	36800.00	15.000	31,280.0
12-0072	GAS R-410A 25LB MEXICHEM KLE	1.0	7,200.00	15.000	6,120.0
01-0010	TUBO RIGIDO COBRE 1/2	1.0	1,985.00	15.000	1,687.2
01-0009	TUBO RIGIDO COBRE 3/8	8.0	1,350.00	15.000	9,180.0
01-0013	TUBO RIGIDO COBRE 7/8	15.0	3,600.00	15.000	45,900.0
01-0023	CODO COBRE 7/8 90 GRADOS*	40.0	65.00	15.000	2,210.0
03-0006	VASCOGEL 7/8 X 1/2 [illegible]	40.0	150.00	15.000	5,100.0
24-0004	TIME DELAY TGM A/A*	6.0	225.00	15.000	1,147.5
15-0001	MONITOR DE FASE SLA-440 ASA*	6.0	6,800.00	15.000	34,680.0
60-0026	REJILLA PLASTICA 2 x 4 *	8.0	575.00	15.000	3,910.0
30-0018	FILTRO VEGETAL 30x4x1 AZUL	20.0	3,950.00	15.000	67,150.0
05-0019	ALAMBRE GOMA 14/4*	500.0	30.00	15.000	12,750.0

Cotización válida por 90 dias.

SUBTOTAL RD$:
ITBIS RD$:
TOTAL RD$:

Firma Autorizada

- Sto. Dgo.: c/Juan Tomás Mejía y Cotes #57, Arroyo Hondo. Tel. 809-636-7000, Fax. 809-565-0116
- Santiago: c/Belisario Curiel No. 5, Pueblo Nuevo. Tel. 809-583-3300, Fax. 809-583-9222
- Báavaro: Av. Barceló Km.3 Plaza Meeting Point Local C1/C2. Tel. 809-933-3342, Fax. 809-933-3346

info@refrimatelco.com · www.refrimatelco.com · refrimatelco · @refrimatelco

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Datos de la Cotización

NUMERO	:	67220
FECHA	:	03/19/19
TERMINOS	:	CREDITO 30 DIAS
PAGINA	:	2

Plácenos cotizarles los artículos detallados a continuación:

CODIGO	DESCRIPCION	CANTIDAD	PRECIO	%DESC	VALOR
71-0027	ALAMBRE THHN AWG NO.8	320.0	10.00	15.000	2,720.0
71-0028	ALAMBRE THHN NO.10	120.0	10.00	15.000	1,020.0
03-0045	PLANCHA EASYPANEL 10x4 21MM	12.0	3,450.00	15.000	35,190.0
27-0003	TAPE ALUMINIO 3 " *	30.0	440.00	15.000	11,220.0
27-0000	TAPE GRIS*	5.0	345.00	15.000	1,466.2
70-9130	TIE WRAP 14"	100.0	6.00	15.000	510.0
70-0058	BARRA ROSCADA 3/8	26.0	750.00	15.000	16,575.0
01-0127	TUERCA CAMPANA 3/8*	100.0	8.00	15.000	680.0
70-6210	ARANDELAS PLANAS DE 3/8	100.0	4.00	15.000	340.0
70-6152	BARRA UNITROT 3/4	6.0	650.00	15.000	3,315.0
60-0008	DIFUSOR SUMINISTRO 12 x 12 4	28.0	975.00	15.000	23,205.0
70-6207	CEMENTO CONTACTO P3 GALON	3.0	2,900.00	15.000	7,395.0
70-6084	CEMENTO PVC	1.0	750.00	15.000	637.5
01-0045	COPLING COBRE 7/8*	6.0	48.00	15.000	244.8
16-0000	PROTECTOR TERM. 585-TG* gran	6.0	600.00	15.000	3,060.0
70-7001	TUBO PVC SDR-26 2 x 19	3.0	175.00	15.000	446.2
70-5616	ADAPTADOR MACHO PVC 3/4	12.0	8.00	15.000	81.6
70-5618	COPLING PVC 3/4	18.0	12.00	15.000	183.6
70-5617	TAPON HEMBRA PVC 3/4	12.0	7.00	15.000	71.4
71-0012	REDUCCION PVC 2 A 3/4	18.0	7.00	15.000	107.1
70-0229	TUBO FLEXIBLE 3/4 LIQUID TIG	120.0	225.00	15.000	22,950.0
70-0109	CONECTOR LT 3/4 RECTO	6.0	125.00	15.000	637.5
70-0110	CONECTOR LT 3/4 CURVO	6.0	125.00	15.000	637.5
42-0015	SW ALTA HK02ZA439 O/C 426/32	6.0	2,205.00	15.000	11,245.5
010101	MANO OBRA E INSTALACION	1.0	125000.00		125,000.0
	INCLUYE INSTALACION EQUIPOS A/A (7)				

Cotización válida por 90 **días.**

SUBTOTAL RD$:
ITBIS RD$:
TOTAL RD$:

Firma Autorizada

- Sto. Dgo.: c/Juan Tomás Mejía y Cotes #57, Arroyo Hondo. Tel. 809-636-7000, Fax. 809-565-0116
- Santiago: c/Belisario Curiel No. 5, Pueblo Nuevo. Tel. 809-583-3300, Fax. 809-583-9222
- Bávaro: Av. Barceló Km.3 Plaza Meeting Point Local C1/C2. Tel. 809-933-3342, Fax. 809-933-3346

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Datos de la Cotización

NUMERO	:	**67220**
FECHA	:	**03/19/19**
TERMINOS	:	**CREDITO 30 DIAS**
PAGINA	:	**3**

Plácenos cotizarles los artículos detallados a continuación:

CODIGO	DESCRIPCION	CANTIDAD	PRECIO	%DESC	VALOR

GARANTIA EQUIPOS: 1 AÑO PARTES
ENTREGA EQUIPOS/INSTALAC: 8-10 SEMANAS
PAGO 80% CON ORDEN + 20% CREDITO 60 DIAS
COTIZACION VALIDA POR 90 DIAS

Cotización válida por 90 días.

Firma Autorizada

SUBTOTAL RD$:	**2832653.75**
ITBIS RD$:	**509,877.68**
TOTAL RD$:	**3342531.43**

- Sto. Dgo.: c/Juan Tomás Mejía y Cotes #57, Arroyo Hondo. Tel. 809-696-7000, Fax. 809-565-0116
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RNC 1-01-60003-9

Carrier turn to the experts

DUPONT

Santo Domingo, D.N.
25 marzo 2019

SPORLAN

Señores
JUNTA CENTRAL ELECTORAL (JCE)
Ciudad.-
Asunto: ***TERMINOS DE ENTREGA / GARANTIA***

MUELLER INDUSTRIES, INC.

Estimados Señores:

De conformidad con la descripción de bienes de la Oferta Técnica para la **ADQUISICIÓN E INSTALACION DE EQUIPOS DE AIRE ACONDICIONADO PARA EL LOCAL DEL MUNICIPIO DE PUÑAL, SANTIAGO DE LOS CABALLEROS,** para uso de su Institución, registrado bajo **Proceso de Comparación de Precios Ref. 2019-000486 (CP-05-19),** sobre Términos de Entrega, nos **COMPROMETEMOS** a entregar los bienes y materiales, en un plazo de OCHO (8) A DIEZ (10) SEMANAS, a partir de la firma del contrato. La garantía de los equipos es de un (1) año en piezas fundamentales.

Copeland brand products

UNIWELD

Le saluda, muy atentamente

AIRGUIDE LIFETIME AIR DISTRIBUTION ADVANTAGE

Ing. Iván Fernando Reynoso Rodriguez
Director de Operaciones
Materiales Eléctricos de Construcción y Refrigeración, S.A.

Danfoss

embraco POWER IN. CHANGE ON

HEATCRAFT

Santo Domingo, D.N.
25 marzo de 2019

Señores
JUNTA CENTRAL ELECTORAL (JCE)
Ciudad.-
Asunto: ***TERMINOS DE PAGO***

Estimados Señores:

De conformidad con la Oferta Económica para la **ADQUISICIÓN E INSTALACION DE EQUIPOS DE AIRE ACONDICIONADO PARA EL LOCAL DEL MUNICIPIO DE PUÑAL, SANTIAGO DE LOS CABALLEROS,** para uso de su Institución, registrado bajo **Proceso de Comparación de Precios Ref. 2019-000486 (CP-05-19),** sobre Condiciones de Pago, **INFORMAMOS** la condición de pago de la misma con un 80% de avance con orden de compra y el restante, 20% a un crédito de hasta sesenta (60) días calendario, a partir de la entrega de los bienes y/o servicios y la fecha de depósito de la factura con comprobante fiscal gubernamental, firmada y sellada.

Le saluda, muy atentamente

Ing. Iván Fernando Reynoso Rodriguez
Director de Operaciones
Materiales Eléctricos de Construcción y R

24VNA0 [redacted] [redacted]
Infinity® Variable Speed Air Conditioner with Greenspeed® Intelligence
2 to 5 Nominal Tons

Carrier
turn to the experts

Product Data

INFINITY® SYSTEM

Carrier's 24VNA0 with Greenspeed® Intelligence is a variable speed cooling product providing up to 20.5 SEER cooling efficiency. Lower speed operation, when needed in cooling, for enhanced comfort and dehumidification.

This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency when matched with appropriate coil components. Refer to the combination ratings in the Product Data for system combinations that meet Energy Star® guidelines.

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 20.5 SEER / 15.5 EER
- Microtube Technology™ refrigeration system
- Indoor air quality accessories available

Sound

- Sound level as low as 58 dBA

Comfort

- Variable speed scroll compressor with capacity range from 40-100%
- Air cooled Inverter variable speed drive
  - — System requires Infinity® wall control (SYSTXCCITC01-A, SYSTXCCITC01-B or newer)
- Energy Tracking capability with the Infinity wall control w/software version 13 or later
  (Energy Tracking has the ability to monitor and estimate the energy consumption of your Infinity system.)

Reliability

- Non-ozone depleting Puron® refrigerant
- Front-seating service valves
- Greenspeed® Intelligence monitors critical system parameters
- High pressure switch
- Suction pressure transducer
- TXV for cooling
- Filter drier (field installed)
- Internal crankcase heater standard

Flexibility and installation:

- 2 control wires to outdoor unit
- Minimum and maximum airflow adjustments

Durability

WeatherArmor Ultra™ protection package:

- Solid, Durable sheet metal construction
- Steel louver coil guard
- Baked-on, complete outer coverage, powder paint

Applications

- Long-line - up to 250 feet (76.2 m) total equivalent length, up to 200 feet (60.96 m) condenser above evaporator, or up to 80 ft. (24.38 m) evaporator above condenser (See Longline Guide for more information.)

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	0	3	6	A	0	0	3	0
Product Series		Product Family	Tier	Major Series	SEER	Cooling Capacity		Variations	Open	Open	Voltage	Minor Series
24 = AC		V = VS AC	N= Infinity Series	A = Puron	0= 20 SEER	1,000 Btuh (nominal)		A = Standard	0=Not Defined	0=Not Defined	3=208/230–1	0, 1, 2...

Puron
the environmentally sound refrigerant

AHRI CERTIFIED
www.ahridirectory.org

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.ahridirectory.org.

Certified System

ISO 9001
QMI-SAI Global

c UL us

ENERGY STAR

This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency when matched with appropriate coil components. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow all manufacturing refrigerant charging and air flow instructions. **Failure to confirm proper charge and air flow may reduce energy efficiency and shorten equipment life.**

greenspeed INTELLIGENCE

IdealHumidity

STANDARD FEATURES

FEATURES	Unit Size – Voltage, Series			
	24–30	36–30	48–30	60–30
Puron Refrigerant	X	X	X	X
Louvered Coil Guard	X	X	X	X
Field Installed Filter Drier	X	X	X	X
Front Seating Service Valves	X	X	X	X
Temperature Protection	X	X	X	X
Long Line capability	X	X	X	X
Suction Pressure Transducer	X	X	X	X
High Pressure Switch	X	X	X	X
Internal Crankcase Heater	X	X	X	X
Low ambient cooling down to 0°F capability with Infinity® Wall Control	X	X	X	X
Utility Interface Connections	X	X	X	X
Enhanced Diagnostics with Infinity® Wall Control	X	X	X	X
Energy Tracking Capability with the Infinity® Wall Control (requires software version 13 or later)	X	X	X	X
Deluxe Sound Blanket	X	X	X	X
Outdoor Air Temperature Sensor	X	X	X	X

X = Standard

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 outdoor 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	200 (61)	250 (76.2)	N/A
Outdoor unit ABOVE indoor unit	**200 (61)**	**250 (76.2)**	200 (61)
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)
24	3/8	250*	250*	250*	250*	250*	250*	250*
36	3/8	250*	250*	250*	250*	250*	250*	250*
48	3/8	250*	250*	250*	250*	230	160	--
60	3/8	250*	225*	190	150*	110	--	--

*** Maximum actual length not to exceed 200 ft (61 m)**

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

-- = outside acceptable range

LONG LINE APPLICATIONS

An application is considered Long Line when the refrigerant level in the system requires the use of accessories to maintain acceptable refrigerant management for systems reliability. Defining a system as long line depends on the liquid line diameter, actual length of the tubing, and vertical separation between the indoor and outdoor units.

For air conditioner systems, the chart below shows when an application is considered Long Line. Beyond these lengths, long line accessories are required:

AC with Puron Referant Long Line Description ft. (m)
Beyond these lengths, long line accessoriews are required.

Liquid Line Size	Units On Same Level	Outdoor Below Indoor	Outdoor Above Indoor
3/8	80 (24.4)	20 (6.1) vertical or 80 (24.4) total	80 (24.4)

Note: See Long Line Guideline for details

COOLING CAPACITY LOSS TABLE

Nominal Size (Btuh)	Line OD (in.)	24VNA0 Cooling Capacity Loss (%) Total Equivalent Line Length (ft)										
		25	50	75	80	100	125	150	175	200	225	250
24000	5/8	0.5	1.2	1.8	1.9	2.4	3.0	3.7	4.3	4.9	5.5	6.2
	3/4	0.1	0.4	0.6	0.7	0.8	1.1	1.3	1.5	1.8	2.0	2.3
	7/8	0.0	0.1	0.3	0.3	0.4	0.5	0.6	0.7	0.8	1.0	1.1
36000	5/8	1.1	2.4	3.7	4.0	5.0	6.3	7.7	9.0	10.3	11.6	12.9
	3/4	0.3	0.8	1.3	1.4	1.8	2.3	2.8	3.2	3.7	4.2	4.7
	7/8	0.0	0.3	0.5	0.6	0.8	1.0	1.3	1.5	1.8	2.0	2.3
48000	3/4	0.7	1.6	2.4	2.6	3.2	4.1	4.9	5.7	6.5	7.4	8.2
	7/8	0.3	0.7	1.1	1.2	1.6	2.0	2.4	2.8	3.2	3.6	4.1
	1 1/8	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
60000	3/4	1.0	2.3	3.5	3.8	4.8	6.0	7.3	8.5	9.8	11.0	12.3
	7/8	0.4	1.0	1.7	1.8	2.3	2.9	3.5	4.2	4.8	5.4	6.0
	1 1/8	0.0	0.1	0.3	0.4	0.5	0.7	0.8	1.0	1.2	1.4	1.5

Rating Line Size in Bold

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 wall control air conditioner Setup screen.

Cooling – Comfort Mode			Minimum Cooling (Dehum or Zoning)
Size	Max Capacity	Min Capacity	
24	726	651	398
36	1168	651	398
48	1394	1186	693
60	1650	1186	693

Cooling – Efficiency Mode		
Size	Max Capacity	Min Capacity
24	949	830
36	1334	830
48	1593	1355
60	1885	1355

PHYSICAL DATA

UNIT SIZE SERIES	24–30	36–30	48–30	60–30
Operating Weight lb (kg)	315 (143)	315 (143)	324 (147)	324 (147)
Shipping Weight lb (kg)	351 (159)	351 (159)	362 (164)	362 (164)
Compressor Type	Variable Speed Scroll			
REFRIGERANT	Puron® (R–410A)			
Control	TXV (Puron® Hard Shutoff)			
Charge lb (kg)	12.7 (5.76)	12.7 (5.76)	14.0 (6.35)	14.0 (6.35)
COND FAN	Forward Swept Propeller Type, Direct Drive			
Air Discharge	Vertical			
Air Qty (CFM)	2700	4269	4350	5000
Motor HP	1/3	1/3	1/3	1/3
Motor RPM	500–900	500–900	500–900	500–900
COND COIL				
Face Area (Sq ft)	30.25	30.25	30.25	30.25
Fins per In.	20	20	20	20
Rows	2	2	2	2
Circuits	8	8	8	8
VALVE CONNECT. (In. ID)				
Vapor	7/8	7/8	7/8	7/8
Liquid	3/8			
REFRIGERANT TUBES (In. OD)				
Rated Vapor*	7/8	7/8	1–1/8	1–1/8
Max Liquid Line	3/8			

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

Note: See unit installation instruction for proper installation.

ACCESSORIES

KIT NUMBER	KIT NAME	24–30	36–30	48–30	60–30
KHAEM0101EMI	ELECTRO–MAGNETIC INTERFERENCE (EMI) KIT	X	X	X	X
KHASS0606MPK*	SNOW STAND	X	X	X	X
KSASF0201AAA	SUPPORT FEET	X	X	X	X
KSATX0301PUR	TXV	X	X		
KSATX0401PUR	TXV			X	X
STANDARD	INTERNAL CRANKCASE HEATER	S	S	S	S

x = Accessory S = Standard * Available from RCD

CONTROLS

SYSTXCCITC01–A & B	Infinity Touch Control (Wi–Fi)
SYSTXCC4ZC01	Infinity 4–Zone Damper Control Module (Wall–mounted control for a four–zone system.)
SYSTXCCSMS01	Infinity Smart Sensor (Optional wall control used to monitor temperature and/or fan control in an individual zone.)
SYSTXCCRRS01	Infinity Remote Room Sensor (Monitors temperature in an individual zone.)
SYSTXCCNIM01	Infinity Network Interface Module (Connects Heat Recovery and Energy Recovery Ventilators on non–zoning applications.)

ACCESSORY USAGE GUIDELINE

ACCESSORY	REQUIRED FOR LOW–AMBIENT COOLING APPLICATIONS (Below 55°F/12.8°C)	REQUIRED FOR LONG LINE APPLICATIONS* (Over 80 ft/24.38 m)	REQUIRED FOR SEA COAST APPLICATIONS (Within 2 miles/3.22 km)	Installations with Radio Frequency Interference Concerns in the Range
Crankcase Heater	Standard	Standard	Standard	N/A
Electro–Magnetic Interference (EMI) Kit	No	No	No	Yes
Evaporator Freeze Protection	Standard with Infinity Control	No	No	N/A
Low–Ambient Control	Standard with Infinity Control	No	No	N/A
Puron Refrigerant Balance Port Hard–ShutOff TXV	Yes†	Yes†	Yes†	N/A
Winter Start Control	Standard with Infinity Control	No	No	N/A

* For tubing set lengths between 80 and 200 ft. (24.38 and 60.96 m) horizontal or 20 ft. (6.10 m) vertical differential (total equivalent length), refer to the Long Line Guideline—Air Conditioners and Heat Pumps using Puron® Refrigerant.

† Required on all indoor units. Standard on all new Greenspeed® compatible fan coils and furnace coils.

Accessory Description and Usage (Listed Alphabetically)

1. Compressor Start Assist

The inverter drive gently starts the variable speed compressor at all times. No other start device is compatible with this unit.

2. Crankcase Heater

Compressor motor winding resistance heater which is internal to compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes the chance of liquid slugging.

Usage:

Used in low ambient cooling applications.

Used in long line applications.

3. Electro–Magnetic Interference (EMI) Kit

Usage Guideline:

May be required to address radio frequency interference for equipment, such as HAM radios, operating between 6 and 30 mHz.

4. Evaporator Freeze Thermostat

An SPST temperature–actuated switch that stops unit operation when evaporator reaches freeze–up conditions.

Usage Guideline:

Required when low ambient kit has been added.

5. Thermostatic Expansion Valve (TXV) Bi–Flow

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:

Accessory required to meet AHRI rating and system reliability, where indoor not equipped.

Required in all Air conditioner applications designed with Puron refrigerant.

6. Winter Start Control

This control is designed to alleviate nuisance opening of the low–pressure switch by bypassing it for the first 3 minutes of operation.

ELECTRICAL DATA

UNIT SIZE–VOLTAGE, SERIES	V/PH	OPER VOLTS*		COMPR		FAN	MCA	MAX FUSE* * or CKT BRK AMPS
		MAX	MIN	LRA	RLA	FLA		
24–30	208–230–1	253	197	24	15.1	3.2	22.1	30
36–30				24	15.1	3.2	22.1	30
48–30				42	25.4	3.2	35	50
60–30				42	25.4	3.2	35	50

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

† If wire is applied at ambient greater than 30°C, consult table 310–16 of the NEC (NFPA 70). The ampacity of non–metallic–sheathed cable (NM), trade name ROMEX, shall be that of 60°C conditions, per the NEC (NFPA 70) Article 336–26. If other than uncoated (no–plated), 60 or 75°C insulation, copper wire (solid wire for 10 AWG or smaller, stranded wire for larger than 10 AWG) is used, consult applicable tables of the NEC (NFPA 70).

‡ Length shown is as measured 1 way along wire path between unit and service panel for voltage drop not to exceed 2%.

** 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

SOUND POWER LEVEL (dBA)

Unit Size–Voltage, Series	Typical Octave Band Spectrum (without tone adjustment)	Min Speed Cooling	Max Speed Cooling
024–30	Freq (Hz)	1800 RPM	3200 RPM
	125	60	61
	250	58	60
	500	56	58
	1000	52	58
	2000	48	51
	4000	44	47
	8000	51	55
	Sound Rating (dBA)	58	62
036–30	Freq (Hz)	1800 RPM	4500 RPM
	125	60	63
	250	58	62
	500	56	65
	1000	52	61
	2000	48	59
	4000	44	56
	8000	51	55
	Sound Rating (dBA)	58	67
048–30	Freq (Hz)	1800 RPM	3450 RPM
	125	64	68
	250	59	67
	500	57	65
	1000	57	63
	2000	52	59
	4000	51	52
	8000	55	58
	Sound Rating (dBA)	62	68
060–30	Freq (Hz)	1800 RPM	4250 RPM
	125	64	70
	250	59	71
	500	57	68
	1000	57	67
	2000	52	62
	4000	51	57
	8000	55	57
	Sound Rating (dBA)	62	71

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

* 024 & 036 tested at 44°F Outdoor Air Temperature. 048 & 060 tested at 40°F

**Testable RPM limited by outdoor temp. Max unit RPM is 6500 for the 4 ton and 7000 for the 3 and 5 ton.

CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE)

UNIT SIZE–VOLTAGE, SERIES	REQUIRED SUBCOOLING °F (°C) – See Wall Control
24–30	Subcooling recommendation displayed on wall control after the required stabilization period in Charging Mode must be followed
36–30	
48–30	
60–30	

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: http://cactaxcredits.info/carrier-ratings/ac_ratings_srch.php

Equipment performance calculator can be accessed at: http://rpmob.wrightsoft.com/

Model Number	Coil Model Number	Furnace Model Number	Clg. Cap. High	Clg. Cap. Low	EER	SEER	ID CFM	
							High	Low
24VNA024A**30	CAP**3617AL	58CV(A,X)070–12	24,000	16,100	14.5	18.0	900	650
24VNA036A**30	CAP**3617AL	58CV(A,X)070–12	33,000	16,100	12.5	18.0	1200	875
24VNA048A**30	CAP**6124AL	58CV(A,X)110–20	47,500	30,400	13.0	18.0	1500	1100
24VNA060A**30	CAP**6124AL	58CV(A,X)110–20	55,500	30,400	13.0	18.0	1500	1100

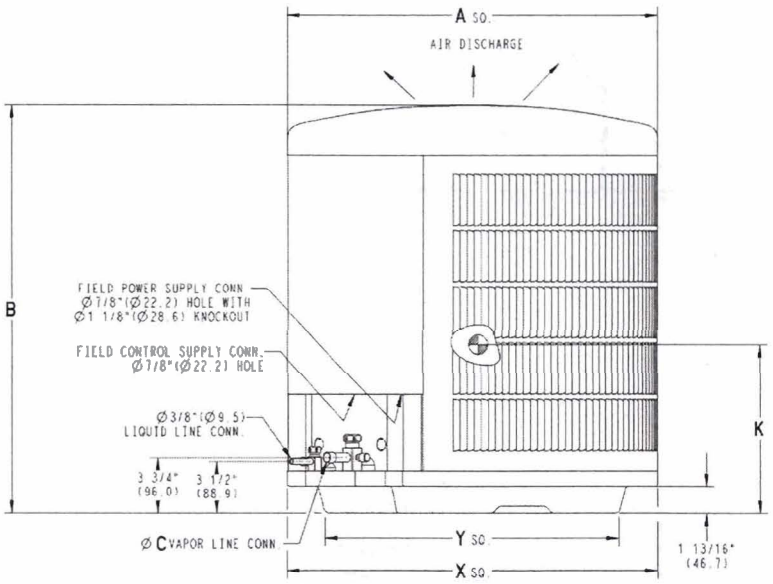
* Ratings are net values reflecting the effects of circulating fan heat. Supplemental electric heat is not included. Ratings are based on:
Cooling Standard: 80°F (27°C) db 67°F (19°C) wb indoor entering air temperature and 95°F (35°C) db air entering outdoor unit.
EER — Energy Efficiency Ratio
SEER — Seasonal Energy Efficiency Ratio
UI — User Interface

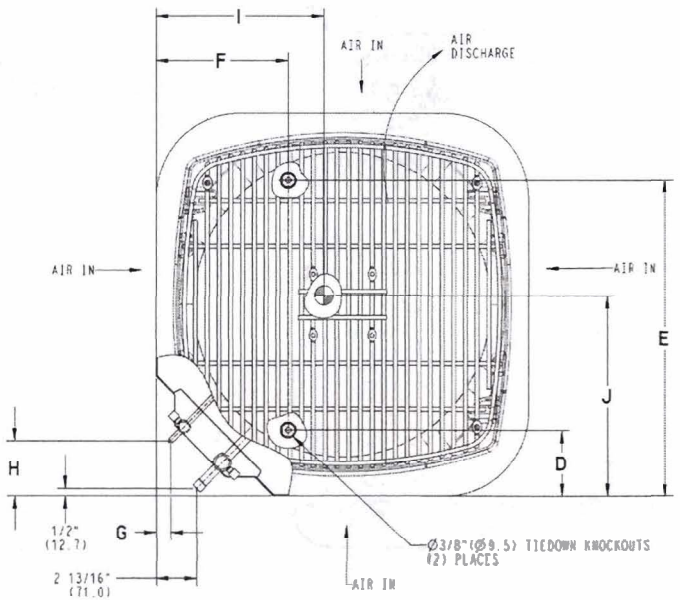
DIMENSIONS

UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A		B		C		D		E		F		G		H		I		J		K		OPERATING WEIGHT		SHIPPING WEIGHT		SHIPPING LENGTH / WIDTH (Sq.)		SHIPPING HEIGHT	
						INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	Lbs	Kgs	Lbs	Kgs	INCH	MM	INCH	MM
24VNA024A0030040	0	Y	N	N	N	35	889.0	43 13/16	1112.6	7/8	22.2	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	5/16	7.9	3	76.2	16 1/4	412.8	16 1/4	412.8	21 1/4	539.8	315	142.9	351	159.2	37 1/8	943.1	50 3/16	1274.9
24VNA036A0030040	0	Y	N	N	N	35	889.0	43 13/16	1112.6	7/8	22.2	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	5/16	7.9	3	76.2	16 1/4	412.8	16 1/4	412.8	21 1/4	539.8	315	142.9	351	159.2	37 1/8	943.1	50 3/16	1274.9
24VNA048A0030040	0	Y	N	N	N	35	889.0	43 13/16	1112.6	7/8	22.2	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	5/16	7.9	3	76.2	16 1/4	412.8	16 1/4	412.8	21 1/4	539.8	323	146.5	361	163.7	37 1/8	943.1	50 3/16	1274.9
24VNA060A0030040	0	Y	N	N	N	35	889.0	43 13/16	1112.6	7/8	22.2	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	5/16	7.9	3	76.2	16 1/4	412.8	16 1/4	412.8	21 1/4	539.8	323	146.5	361	163.7	37 1/8	943.1	50 3/16	1274.9
		208-230-1-60	208/230-3-60	460-3-60	575-3-60	Y=YES N=NO																													

NOTES:

1. CENTER OF GRAVITY ⊕ .





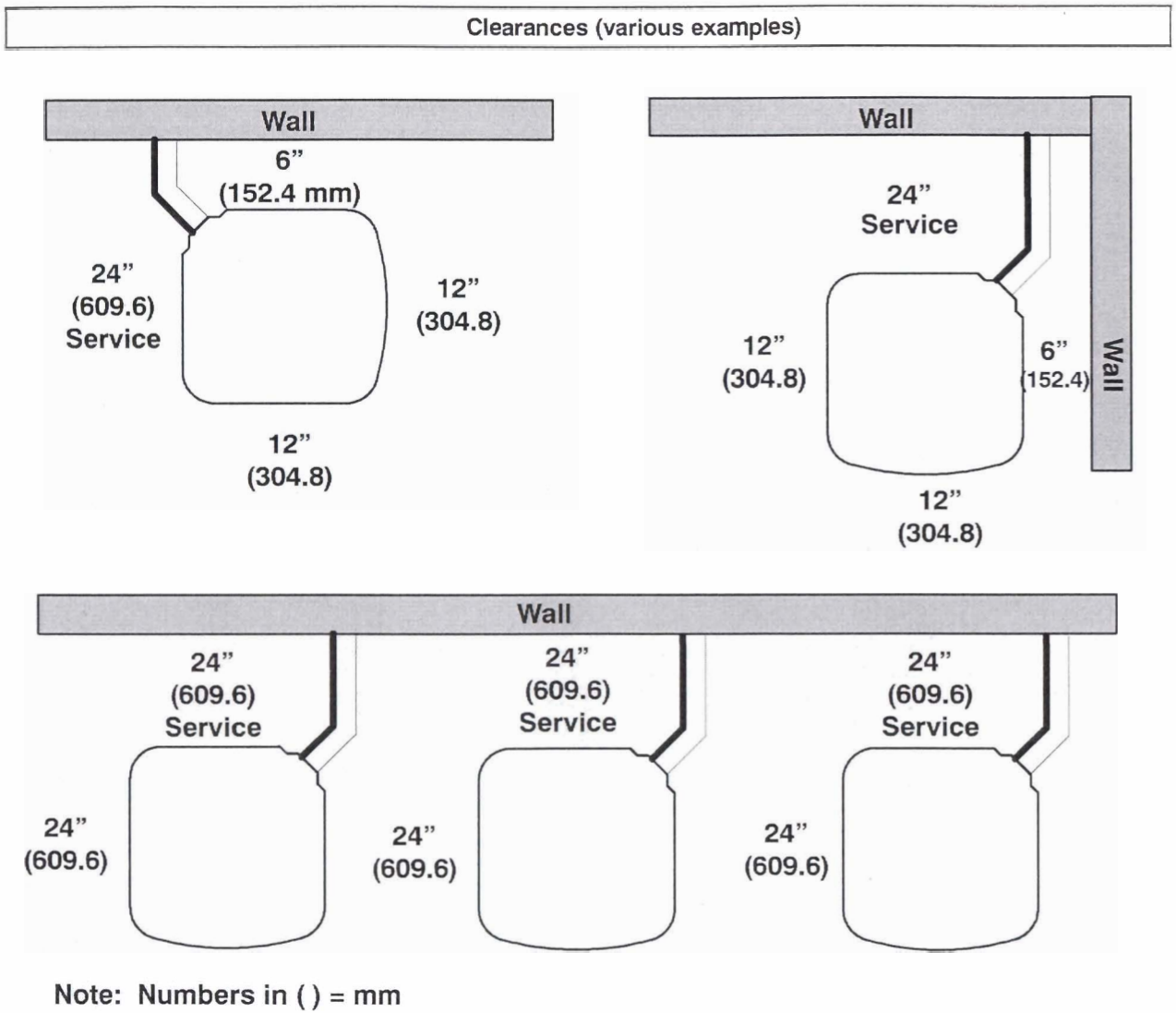
UNIT SIZE	"X" MINIMUM GROUND MOUNTING PAD APPLICATION DIMENSIONS		"Y" MINIMUM ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS	
-	23 1/8	587.3	17 7/8	454.6
-	25 3/4	654.0	20 7/16	518.5
-	31 3/16	792.5	22 15/16	583.2
24,36,48,60	35	889.0	26 3/4	679.7

NOTE: ALL DIMENSIONS IN INCH (MM)

U.S. ECCN: Not Subject to Regulation (N.S.R.)

SD5466-4 REV. A

CLEARANCES



Note: Numbers in ( ) = mm

IMPORTANT: When installing multiple units in an alcove, roof well, or partially enclosed area, ensure there is adequate ventilation to prevent re-circulation of discharge air.

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

24VNA024/CAP**3617AL+58CV(A,X)070-12 Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)																
EDB °F (°C)	EVAP. AIR EWB °F (°C)	125 (51.7)				115 (46.1)				105 (40.5)				95 (35)		
		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	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND																	
75 (23.9)	72 (22.2)	520	22.52	9.09	2.89	510	23.63	9.52	2.41	500	24.37	9.80	1.96	490	25.00	10.15	1.61
	67 (19.4)		20.21	11.61	2.95		21.22	12.04	2.46		21.92	12.28	2.01		22.57	12.52	1.66
	63 (17.2)		18.48	13.64	2.99		19.54	14.04	2.51		20.15	14.22	2.05		20.78	14.43	1.69
	57 (13.9)		16.80	15.94	3.03		17.33	16.93	2.56		17.95	17.13	2.11		19.68	13.39	1.70
80 (26.7)	72 (22.2)	520	22.47	11.94	2.89	510	23.57	12.14	2.41	500	24.33	12.37	1.96	490	25.03	12.60	1.61
	67 (19.4)		20.15	14.27	2.95		21.17	14.57	2.58		21.88	14.81	2.01		22.53	15.00	1.66
	63 (17.2)		18.48	16.23	2.98		19.48	16.57	2.51		20.15	16.74	2.05		20.78	16.90	1.69
	57 (13.9)		17.58	17.58	3.01		18.27	18.27	2.54		18.72	18.72	2.09		19.12	19.12	1.73
MEDIAN DEMAND																	
75 (23.9)	72 (22.2)	510	21.82	8.81	2.90	480	22.04	8.88	2.32	420	20.74	8.35	1.72	395	19.55	7.87	1.25
	67 (19.4)		19.62	11.30	2.96		19.78	11.21	2.38		18.64	10.39	1.77		17.59	9.80	1.29
	63 (17.2)		17.91	13.20	3.00		18.15	13.02	2.42		17.12	12.00	1.81		16.11	11.40	1.33
	57 (13.9)		16.00	16.00	3.05		16.09	15.73	2.47		15.21	14.40	1.86		14.39	13.59	1.38
80 (26.7)	72 (22.2)	510	21.78	11.39	2.90	480	21.99	11.30	2.32	420	20.70	10.47	1.71	395	19.51	9.87	1.25
	67 (19.4)		19.51	13.81	2.96		19.74	13.61	2.38		18.62	12.50	1.77		17.55	11.78	1.29
	63 (17.2)		20.71	10.41	2.92		18.11	13.80	2.33		17.11	14.09	1.81		16.17	13.29	1.33
	57 (13.9)		17.07	17.07	3.03		16.97	16.97	2.45		15.80	15.80	1.84		14.93	14.93	1.36
MINIMUM DEMAND																	
75 (23.9)	72 (22.2)	505	21.35	8.62	3.17	445	20.59	8.30	2.44	360	17.52	7.06	1.61	300	14.19	5.72	0.99
	67 (19.4)		19.11	11.08	3.23		18.48	10.43	2.49		15.74	8.79	1.66		12.74	7.17	1.03
	63 (17.2)		17.52	12.93	3.28		16.95	12.12	2.55		14.44	10.15	1.70		11.70	8.30	1.06
	57 (13.9)		15.64	15.64	3.33		15.05	14.61	2.60		12.81	12.19	1.75		10.38	10.01	1.11
80 (26.7)	72 (22.2)	505	21.32	11.15	3.17	445	20.56	10.52	2.44	360	17.52	8.81	1.61	300	14.16	7.22	0.99
	67 (19.4)		19.09	13.53	3.23		18.45	12.65	2.50		15.70	10.58	1.66		12.71	8.66	1.03
	63 (17.2)		17.54	15.41	3.28		16.95	14.30	2.55		14.44	11.93	1.70		11.69	9.79	1.06
	57 (13.9)		16.70	16.70	3.31		15.79	15.79	2.58		13.34	13.34	1.73		10.87	10.87	1.09

See additional notes on page 26

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE (CONT.)

24VNA024/CAP**3617AL+58CV(A,X)070-12 Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)												
EDB °F (°C)	EVAP. AIR EWB °F (°C)	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**
			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND													
75 (23.9)	72 (22.2)	510	26.37	10.61	1.33	530	27.63	11.10	1.10	540	28.76	11.57	0.87
	67 (19.4)		23.77	13.21	1.38		24.95	13.76	1.15		25.96	14.35	0.92
	63 (17.2)		21.97	15.17	1.42		23.04	15.85	1.18		24.04	16.45	0.96
	57 (13.9)		19.60	18.16	1.48		20.60	18.98	1.24		21.50	19.61	1.01
80 (26.7)	72 (22.2)	510	26.34	13.23	1.33	530	27.60	13.83	1.09	540	28.72	14.36	0.87
	67 (19.4)		23.76	15.74	1.38		24.92	16.44	1.14		25.96	17.01	0.92
	63 (17.2)		21.96	17.74	1.42		23.04	18.53	1.18		24.03	19.15	0.96
	57 (13.9)		20.16	20.16	1.46		21.14	21.14	1.22		21.96	21.96	1.00
MEDIAN DEMAND													
75 (23.9)	72 (22.2)	415	20.66	8.32	1.02	435	21.73	8.75	0.83	450	22.70	9.14	0.65
	67 (19.4)		18.61	10.36	1.07		19.60	10.89	0.87		20.49	11.36	0.70
	63 (17.2)		17.14	11.96	1.11		18.06	12.57	0.91		18.91	13.11	0.73
	57 (13.9)		15.29	14.36	1.16		16.14	15.11	0.96		16.92	15.74	0.78
80 (26.7)	72 (22.2)	415	20.65	10.37	1.02	435	21.69	10.94	0.83	450	22.66	11.41	0.65
	67 (19.4)		18.58	12.43	1.07		19.56	13.06	0.87		20.45	13.61	0.70
	63 (17.2)		17.13	14.02	1.11		18.06	14.74	0.91		18.91	15.35	0.73
	57 (13.9)		15.81	15.81	1.14		16.67	16.67	0.94		17.42	17.42	0.77
MINIMUM DEMAND													
75 (23.9)	72 (22.2)	320	15.08	6.08	0.81	340	15.94	6.42	0.65	355	16.71	6.74	0.50
	67 (19.4)		13.57	7.63	0.85		14.36	8.08	0.69		15.07	8.47	0.55
	63 (17.2)		12.47	8.86	0.88		13.21	9.39	0.72		13.88	9.84	0.58
	57 (13.9)		11.10	10.69	0.93		11.79	11.35	0.76		13.10	10.65	0.60
80 (26.7)	72 (22.2)	320	15.05	7.68	0.81	340	15.90	8.12	0.65	355	16.68	8.51	0.50
	67 (19.4)		13.54	9.22	0.85		14.32	9.77	0.69		15.04	10.23	0.55
	63 (17.2)		12.46	10.44	0.88		13.21	11.08	0.72		13.88	11.60	0.58
	57 (13.9)		11.61	11.61	0.91		12.32	12.32	0.75		12.94	12.94	0.60

See additional notes on page 26

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE (CONT.)

24VNA036/CAP3617AL+58CV(A,X)070–12 Comfort + Dehumidify Mode**
Condenser Entering Air Temperature °F (°C)

EDB °F (°C)	EVAP. AIR EWB °F (°C)	125				115				105				95			
		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	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND																	
75 (23.9)	72 (22.2)	685	29.28	11.77	3.82	705	31.29	12.55	3.29	730	33.23	13.32	2.82	750	34.98	14.00	2.43
	67 (19.4)		26.25	15.09	3.88		28.00	15.91	3.35		29.90	16.88	2.87		31.53	17.67	2.48
	63 (17.2)		24.06	17.67	3.92		25.82	18.66	3.40		27.52	19.66	2.91		29.22	20.67	2.51
	57 (13.9)		21.49	21.49	3.97		23.06	22.60	3.45		24.64	23.84	2.97		26.06	24.89	2.57
80 (26.7)	72 (22.2)	685	29.24	15.24	3.82	705	31.25	16.10	3.29	730	33.18	17.00	2.82	750	34.95	17.79	2.43
	67 (19.4)		26.20	18.49	3.88		28.07	19.49	3.36		29.86	20.47	2.87		31.48	21.38	2.48
	63 (17.2)		24.11	21.07	3.92		25.86	22.17	3.39		27.54	23.28	2.91		29.09	24.26	2.51
	57 (13.9)		22.90	22.90	3.96		24.36	24.36	3.42		25.88	25.88	2.94		27.21	27.21	2.55
MEDIAN DEMAND																	
75 (23.9)	72 (22.2)	595	25.69	10.35	3.37	580	26.45	10.63	2.77	535	25.79	10.36	2.12	480	24.68	9.92	1.62
	67 (19.4)		23.07	13.28	3.44		23.76	13.49	2.82		23.20	13.01	2.18		22.22	12.31	1.67
	63 (17.2)		21.13	15.57	3.48		21.82	15.72	2.87		21.33	15.09	2.22		20.46	14.18	1.71
	57 (13.9)		18.88	18.88	3.53		19.46	19.06	2.93		19.02	18.21	2.28		18.23	16.99	1.76
80 (26.7)	72 (22.2)	595	25.68	13.40	3.37	580	26.40	13.60	2.76	535	25.75	13.11	2.12	480	24.64	12.38	1.62
	67 (19.4)		22.99	16.28	3.49		23.72	16.41	2.82		23.16	15.72	2.18		22.14	14.82	1.67
	63 (17.2)		21.16	18.55	3.48		23.96	11.06	2.78		21.33	17.79	2.22		20.47	16.59	1.71
	57 (13.9)		20.07	20.07	3.50		20.50	20.50	2.90		19.87	19.87	2.26		18.81	18.81	1.75
MINIMUM DEMAND																	
75 (23.9)	72 (22.2)	505	21.35	8.62	3.17	445	20.59	8.30	2.44	360	17.52	7.06	1.61	300	14.19	5.72	0.99
	67 (19.4)		19.11	11.08	3.23		18.48	10.43	2.49		15.74	8.79	1.66		12.74	7.17	1.03
	63 (17.2)		17.52	12.93	3.28		16.95	12.12	2.55		14.44	10.15	1.70		11.70	8.30	1.06
	57 (13.9)		15.64	15.64	3.33		15.05	14.61	2.60		12.81	12.19	1.75		10.38	10.01	1.11
80 (26.7)	72 (22.2)	505	21.32	11.15	3.17	445	20.56	10.52	2.44	360	17.52	8.81	1.61	300	14.16	7.22	0.99
	67 (19.4)		19.09	13.53	3.23		18.45	12.65	2.50		15.70	10.58	1.66		12.71	8.66	1.03
	63 (17.2)		17.54	15.41	3.28		16.95	14.30	2.55		14.44	11.93	1.70		11.69	9.79	1.06
	57 (13.9)		16.70	16.70	3.31		15.79	15.79	2.58		13.34	13.34	1.73		10.87	10.87	1.09

See additional notes on page 26

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE (CONT.)

24VNA036/CAP**3617AL+58CV(A,X)070–12 Expanded Ratings Cooling Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)												
EDB °F (°C)	EVAP. AIR EWB °F (°C)	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**
			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND													
75 (23.9)	72 (22.2)	805	36.98	14.78	2.07	855	38.83	15.51	1.76	885	40.44	16.13	1.49
	67 (19.4)		33.36	18.72	2.12		35.09	19.71	1.81		36.58	20.48	1.53
	63 (17.2)		30.81	21.81	2.16		32.41	22.98	1.85		33.79	23.86	1.57
	57 (13.9)		27.66	26.44	2.21		30.91	22.57	1.86		30.47	28.95	1.62
80 (26.7)	72 (22.2)	805	36.93	18.81	2.07	855	38.80	19.79	1.76	885	40.39	20.52	1.49
	67 (19.4)		33.31	22.67	2.12		35.02	23.85	1.81		36.52	24.77	1.53
	63 (17.2)		30.84	25.78	2.16		32.45	27.16	1.85		33.89	28.25	1.57
	57 (13.9)		28.91	28.91	2.19		30.48	30.48	1.88		31.83	31.83	1.60
MEDIAN DEMAND													
75 (23.9)	72 (22.2)	500	26.01	10.45	1.35	520	27.27	10.96	1.10	535	28.43	11.42	0.88
	67 (19.4)		23.44	12.95	1.40		24.61	13.57	1.15		25.67	14.11	0.93
	63 (17.2)		21.62	14.92	1.43		22.72	15.62	1.19		23.73	16.23	0.97
	57 (13.9)		19.30	17.86	1.49		20.31	18.69	1.24		21.23	19.40	1.02
80 (26.7)	72 (22.2)	500	25.96	13.02	1.34	520	27.23	13.63	1.10	535	28.38	14.17	0.88
	67 (19.4)		23.41	15.48	1.40		24.57	16.20	1.15		25.64	16.82	0.93
	63 (17.2)		21.62	17.45	1.43		22.72	18.25	1.19		23.72	18.94	0.97
	57 (13.9)		19.84	19.84	1.48		20.83	20.83	1.23		21.70	21.70	1.01
MINIMUM DEMAND													
75 (23.9)	72 (22.2)	320	15.08	6.08	0.81	340	15.94	6.42	0.65	355	16.71	6.74	0.50
	67 (19.4)		13.57	7.63	0.85		14.36	8.08	0.69		15.07	8.47	0.55
	63 (17.2)		12.47	8.86	0.88		13.21	9.39	0.72		13.88	9.84	0.58
	57 (13.9)		11.10	10.69	0.93		11.79	11.35	0.76		13.10	10.65	0.60
80 (26.7)	72 (22.2)	320	15.05	7.68	0.81	340	15.90	8.12	0.65	355	16.68	8.51	0.50
	67 (19.4)		13.54	9.22	0.85		14.32	9.77	0.69		15.04	10.23	0.55
	63 (17.2)		12.46	10.44	0.88		13.21	11.08	0.72		13.88	11.60	0.58
	57 (13.9)		11.61	11.61	0.91		12.32	12.32	0.75		12.94	12.94	0.60

See additional notes on page 26

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE (CONT.)

24VNA048/CAP6124AL+58CV(A,X)110–22 Expanded Ratings Cooling Comfort with Dehumidify Mode**
Condenser Entering Air Temperature °F (°C)

EDB	EVAP. AIR EWB °F (°C)	125				115				105				95			
		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	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND																	
75 (23.9)	72 (22.2)	790	41.50	16.59	4.64	840	44.64	17.83	4.15	900	47.72	19.05	3.69	950	50.57	20.18	3.30
	67 (19.4)		37.50	20.69	4.64		40.29	22.34	4.14		43.17	23.74	3.68		45.76	25.03	3.28
	63 (17.2)		34.54	23.89	4.63		37.22	25.64	4.14		39.83	27.42	3.67		42.31	28.94	3.27
	57 (13.9)		30.62	28.62	4.63		33.07	30.69	4.13		35.47	32.87	3.67		39.45	28.03	3.27
80 (26.7)	72 (22.2)	790	41.43	20.75	4.64	840	44.55	22.25	4.15	900	47.62	23.78	3.69	950	50.28	25.44	3.30
	67 (19.4)		37.41	24.81	4.64		40.25	26.65	4.14		43.02	28.48	3.68		45.66	30.08	3.28
	63 (17.2)		34.47	28.05	4.64		37.07	30.12	4.14		39.73	32.08	3.67		42.18	33.98	3.27
	57 (13.9)		31.54	31.54	4.64		33.86	33.86	4.13		36.31	36.30	3.67		38.49	38.49	3.27
MEDIAN DEMAND																	
75 (23.9)	72 (22.2)	775	40.90	16.35	4.46	795	42.20	16.87	3.80	780	40.83	16.32	3.03	755	39.44	15.77	2.40
	67 (19.4)		36.95	20.39	4.46		38.16	21.00	3.80		36.91	20.38	3.03		35.55	19.86	2.39
	63 (17.2)		33.95	23.71	4.46		35.13	24.31	3.80		34.02	23.59	3.03		32.87	22.82	2.39
	57 (13.9)		30.18	28.23	4.45		32.88	24.36	3.79		30.33	28.34	3.03		29.29	27.45	2.39
80 (26.7)	72 (22.2)	775	40.83	20.45	4.46	795	42.13	21.08	3.80	780	40.72	20.43	3.03	755	39.33	19.71	2.39
	67 (19.4)		36.88	24.45	4.46		38.05	25.18	3.80		36.80	24.49	3.03		35.56	23.67	2.39
	63 (17.2)		33.98	27.61	4.46		36.96	18.84	3.78		33.96	27.68	3.03		32.84	26.70	2.39
	57 (13.9)		31.07	31.07	4.47		32.05	32.05	3.80		31.12	31.12	3.03		30.09	30.09	2.39
MINIMUM DEMAND																	
75 (23.9)	72 (22.2)	760	40.67	16.26	4.60	750	40.09	16.03	3.72	635	33.63	13.46	2.54	535	27.58	11.05	1.68
	67 (19.4)		36.68	20.26	4.60		36.20	19.99	3.72		30.38	16.82	2.54		24.93	13.88	1.68
	63 (17.2)		33.92	23.29	4.61		33.35	23.10	3.72		28.00	19.46	2.55		22.95	16.14	1.69
	57 (13.9)		29.98	28.07	4.60		29.64	27.73	3.73		24.86	23.37	2.55		20.39	19.42	1.69
80 (26.7)	72 (22.2)	760	40.46	20.29	4.60	750	39.99	20.05	3.72	635	33.53	16.86	2.54	535	27.49	13.91	1.68
	67 (19.4)		36.65	24.33	4.60		36.12	23.99	3.72		30.32	20.21	2.54		24.84	16.72	1.68
	63 (17.2)		33.75	27.45	4.60		33.28	27.08	3.72		27.93	22.83	2.55		22.88	19.00	1.69
	57 (13.9)		30.84	30.84	4.60		30.44	30.44	3.73		25.61	25.61	2.55		21.11	21.11	1.69

See additional notes on page 26

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE (CONT.)

24VNA048/CAP**6124AL+58CV(A,X)110–22 Expanded Ratings Cooling Comfort with Dehumidify Mode Condenser Entering Air Temperature °F (°C)												
EDB °F (°C)	EVAP. AIR EWB °F (°C)	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**
			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND													
75 (23.9)	72 (22.2)	970	52.97	21.14	2.94	985	54.98	21.95	2.60	995	56.94	22.76	2.32
	67 (19.4)		47.91	26.21	2.92		49.81	27.13	2.57		51.58	27.97	2.29
	63 (17.2)		44.18	30.49	2.91		46.09	31.23	2.56		47.81	32.10	2.27
	57 (13.9)		39.51	36.09	2.90		41.16	37.22	2.54		42.71	38.21	2.25
80 (26.7)	72 (22.2)	970	52.83	26.22	2.93	985	54.87	27.13	2.60	995	56.84	27.99	2.33
	67 (19.4)		47.80	31.25	2.92		49.90	32.05	2.58		51.50	33.17	2.29
	63 (17.2)		44.21	35.22	2.91		46.02	36.32	2.56		47.65	37.40	2.27
	57 (13.9)		40.15	40.15	2.90		41.63	41.63	2.54		43.11	42.93	2.53
MEDIAN DEMAND													
75 (23.9)	72 (22.2)	790	41.57	16.61	2.12	790	43.06	17.22	1.86	805	44.72	17.89	1.63
	67 (19.4)		37.56	20.74	2.11		38.99	21.38	1.84		40.52	22.14	1.61
	63 (17.2)		34.67	24.00	2.10		35.94	24.82	1.84		37.47	25.48	1.61
	57 (13.9)		30.91	28.84	2.11		33.70	23.32	1.83		33.45	30.43	1.60
80 (26.7)	72 (22.2)	790	41.45	20.78	2.11	790	42.98	21.40	1.85	805	44.69	22.17	1.63
	67 (19.4)		37.45	24.95	2.11		38.95	25.56	1.84		40.45	26.36	1.61
	63 (17.2)		34.56	28.20	2.10		35.90	28.87	1.84		37.45	29.63	1.60
	57 (13.9)		31.71	31.70	2.10		32.71	32.71	1.84		33.89	33.89	1.60
MINIMUM DEMAND													
75 (23.9)	72 (22.2)	555	29.04	11.63	1.47	580	30.47	12.20	1.28	600	31.85	12.75	1.10
	67 (19.4)		26.24	14.57	1.47		27.57	15.28	1.27		28.81	15.94	1.10
	63 (17.2)		24.20	16.87	1.47		25.42	17.72	1.27		26.56	18.46	1.10
	57 (13.9)		21.54	20.34	1.47		22.67	21.33	1.28		23.71	22.20	1.10
80 (26.7)	72 (22.2)	555	28.95	14.60	1.47	580	30.43	15.32	1.27	600	31.76	15.96	1.10
	67 (19.4)		26.17	17.51	1.47		27.57	18.23	1.27		28.80	19.05	1.10
	63 (17.2)		24.14	19.83	1.47		25.37	20.78	1.27		26.52	21.63	1.10
	57 (13.9)		22.21	22.21	1.47		23.33	23.33	1.28		24.35	24.35	1.10

See additional notes on page 26

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE (CONT.)

24VNA060/CAP6124AL+58CV(A,X)110–22 Expanded Ratings Cooling Comfort + Dehumidify Mode**
Condenser Entering Air Temperature °F (°C)

EDB °F (°C)	EVAP. AIR EWB °F (°C)	125				115				105				95			
		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	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND																	
75 (23.9)	72 (22.2)	945	48.54	19.36	5.48	1020	52.28	20.84	4.94	1095	55.87	22.22	4.47	1165	59.24	23.55	4.04
	67 (19.4)		43.80	24.19	5.46		47.35	25.95	4.92		50.51	27.88	4.44		53.63	29.60	4.00
	63 (17.2)		40.39	28.00	5.44		43.64	30.26	4.90		46.65	32.32	4.42		49.56	34.33	3.98
	57 (13.9)		35.89	33.64	5.42		38.88	36.36	4.88		41.61	38.90	4.40		44.26	41.36	3.96
80 (26.7)	72 (22.2)	945	48.47	24.29	5.48	1020	52.18	26.15	4.94	1095	55.72	27.91	4.47	1165	59.13	29.62	4.03
	67 (19.4)		43.70	29.07	5.46		47.17	31.39	4.92		50.41	33.54	4.44		53.50	35.60	4.00
	63 (17.2)		40.33	32.88	5.44		43.58	35.48	4.90		46.59	37.94	4.42		49.49	40.31	3.98
	57 (13.9)		36.93	36.93	5.43		39.95	39.95	4.88		42.81	42.81	4.41		45.52	45.52	3.97
MEDIAN DEMAND																	
75 (23.9)	72 (22.2)	850	44.71	17.86	4.88	870	46.24	18.46	4.21	850	45.39	18.13	3.41	835	44.05	17.60	2.74
	67 (19.4)		40.36	22.34	4.87		41.80	23.05	4.20		41.04	22.58	3.40		39.83	21.97	2.73
	63 (17.2)		37.29	25.70	4.87		38.52	26.60	4.19		37.87	26.08	3.39		36.77	25.42	2.72
	57 (13.9)		33.05	30.92	4.86		34.24	31.85	4.19		33.72	31.30	3.39		32.77	30.56	2.72
80 (26.7)	72 (22.2)	850	44.55	22.32	4.88	870	46.13	23.06	4.21	850	45.29	22.62	3.41	835	43.94	22.01	2.74
	67 (19.4)		40.32	26.75	4.87		41.71	27.59	4.20		40.95	27.04	3.40		39.74	26.36	2.73
	63 (17.2)		36.97	30.12	4.86		38.48	31.14	4.19		37.80	30.53	3.39		36.69	29.78	2.72
	57 (13.9)		33.96	33.96	4.86		35.15	35.15	4.19		34.50	34.50	3.39		33.61	33.61	2.72
MINIMUM DEMAND																	
75 (23.9)	72 (22.2)	760	40.67	16.26	4.60	750	40.09	16.03	3.72	635	33.63	13.46	2.54	535	27.58	11.05	1.68
	67 (19.4)		36.68	20.26	4.60		36.20	19.99	3.72		30.38	16.82	2.54		24.93	13.88	1.68
	63 (17.2)		33.92	23.29	4.61		33.35	23.10	3.72		28.00	19.46	2.55		22.95	16.14	1.69
	57 (13.9)		29.98	28.07	4.60		29.64	27.73	3.73		24.86	23.37	2.55		20.39	19.42	1.69
80 (26.7)	72 (22.2)	760	40.46	20.29	4.60	750	39.99	20.05	3.72	635	33.53	16.86	2.54	535	27.49	13.91	1.68
	67 (19.4)		36.65	24.33	4.60		36.12	23.99	3.72		30.32	20.21	2.54		24.84	16.72	1.68
	63 (17.2)		33.75	27.45	4.60		33.28	27.08	3.72		27.93	22.83	2.55		22.88	19.00	1.69
	57 (13.9)		30.84	30.84	4.60		30.44	30.44	3.73		25.61	25.61	2.55		21.11	21.11	1.69

See additional notes on page 26

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE (CONT.)

24VNA060/CAP**6124AL+58CV(A,X)110–22 Expanded Ratings Cooling Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)												
EDB °F (°C)	EVAP. AIR EWB °F (°C)	85				75				65		
		ID SCFM	Capacity MBtuh†		Total Sys. KW**	ID SCFM	Capacity MBtuh†		Total Sys. KW**	ID SCFM	Capacity MBtuh†		Total Sys. KW**
			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND													
75 (23.9)	72 (22.2)	1175	61.85	24.60	3.59	1175	64.03	25.50	3.23	1185	66.06	26.29	2.97
	67 (19.4)		55.93	30.67	3.55		57.98	31.58	3.18		59.93	32.48	2.91
	63 (17.2)		51.74	35.48	3.53		53.69	36.43	3.15		55.58	37.40	2.87
	57 (13.9)		46.25	42.58	3.50		48.02	43.54	3.11		49.72	44.59	2.81
80 (26.7)	72 (22.2)	1175	61.74	30.72	3.59	1175	63.93	31.62	3.22	1185	65.98	32.48	2.96
	67 (19.4)		55.86	36.73	3.55		57.91	37.68	3.17		59.86	38.63	2.90
	63 (17.2)		51.70	41.51	3.53		53.65	42.46	3.14		55.53	43.49	2.86
	57 (13.9)		47.24	47.24	3.50		48.69	48.69	3.11		50.13	50.13	2.82
MEDIAN DEMAND													
75 (23.9)	72 (22.2)	855	46.17	18.45	2.42	870	48.07	19.21	2.13	895	50.03	20.00	1.88
	67 (19.4)		41.81	22.84	2.41		43.51	23.78	2.12		45.30	24.71	1.86
	63 (17.2)		38.58	26.47	2.41		40.26	27.32	2.11		41.91	28.44	1.84
	57 (13.9)		34.40	31.72	2.40		35.89	32.74	2.10		37.43	33.95	1.83
80 (26.7)	72 (22.2)	855	46.06	22.97	2.42	870	47.96	23.81	2.13	895	49.92	24.73	1.88
	67 (19.4)		41.67	27.42	2.41		43.42	28.35	2.12		45.21	29.41	1.86
	63 (17.2)		38.51	30.94	2.41		40.03	32.14	2.11		41.85	33.10	1.84
	57 (13.9)		35.10	35.10	2.40		36.43	36.43	2.10		37.87	37.87	1.83
MINIMUM DEMAND													
75 (23.9)	72 (22.2)	555	29.04	11.63	1.47	580	30.47	12.20	1.28	600	31.85	12.75	1.10
	67 (19.4)		26.24	14.57	1.47		27.57	15.28	1.27		28.81	15.94	1.10
	63 (17.2)		24.20	16.87	1.47		25.42	17.72	1.27		26.56	18.46	1.10
	57 (13.9)		21.54	20.34	1.47		22.67	21.33	1.28		23.71	22.20	1.10
80 (26.7)	72 (22.2)	555	28.95	14.60	1.47	580	30.43	15.32	1.27	600	31.76	15.96	1.10
	67 (19.4)		26.17	17.51	1.47		27.57	18.23	1.27		28.80	19.05	1.10
	63 (17.2)		24.14	19.83	1.47		25.37	20.78	1.27		26.52	21.63	1.10
	57 (13.9)		22.21	22.21	1.47		23.33	23.33	1.28		24.35	24.35	1.10

See additional notes on page 26

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE

24VNA024/CAP3617AL+58CV(A,X)070–12 Cooling EFFICIENCY Mode**
Condenser Entering Air Temperature °F (°C)

EDB °F (°C)	EVAP. AIR EWB °F (°C)	125				115				105				95			
		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	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND																	
75 (23.9)	72 (22.2)	700	23.70	9.48	2.90	775	25.23	10.39	2.43	840	26.41	10.88	2.00	900	27.54	11.34	1.67
	67 (19.4)		21.17	13.11	2.96		22.65	14.15	2.49		23.76	14.97	2.05		24.81	15.72	1.72
	63 (17.2)		19.43	15.76	3.01		20.87	17.18	2.53		16.82	15.96	1.55		22.91	19.09	1.76
	57 (13.9)		18.17	18.17	3.04		19.63	19.63	2.56		20.74	20.74	2.12		21.76	21.76	1.78
80 (26.7)	72 (22.2)	700	23.50	13.20	2.90	775	25.17	14.26	2.43	840	26.35	15.06	2.00	900	27.48	15.80	1.67
	67 (19.4)		21.19	16.50	2.95		22.66	18.02	2.49		23.77	19.13	2.05		24.80	20.15	1.72
	63 (17.2)		20.36	15.36	2.89		21.10	20.91	2.53		22.77	20.69	2.07		23.76	21.80	1.74
	57 (13.9)		19.52	19.52	3.01		21.03	21.03	2.53		22.18	22.18	2.09		23.27	23.26	1.75
MEDIAN DEMAND																	
75 (23.9)	72 (22.2)	695	22.82	9.41	2.91	745	23.64	9.75	2.34	710	22.67	9.37	1.72	680	21.38	8.87	1.25
	67 (19.4)		20.56	12.78	2.97		21.25	13.31	2.40		20.42	12.76	1.78		19.33	12.16	1.30
	63 (17.2)		18.86	15.40	3.01		19.54	16.15	2.44		18.80	15.49	1.82		17.82	14.78	1.33
	57 (13.9)		17.67	17.67	3.04		18.43	18.43	2.47		17.72	17.72	1.84		16.84	16.84	1.36
80 (26.7)	72 (22.2)	695	22.86	12.82	2.90	745	23.59	13.43	2.34	710	22.63	12.88	1.72	680	21.42	12.21	1.25
	67 (19.4)		20.51	16.17	2.97		21.21	16.98	2.40		20.39	16.27	1.78		19.32	15.50	1.29
	63 (17.2)		19.04	18.69	3.01		19.79	19.65	2.43		19.02	18.85	1.81		18.05	17.97	1.32
	57 (13.9)		18.93	18.93	3.01		19.72	19.72	2.43		18.95	18.95	1.81		18.00	18.00	1.33
MINIMUM DEMAND																	
75 (23.9)	72 (22.2)	690	22.30	9.22	3.18	700	22.06	9.12	2.45	595	19.16	7.93	1.60	480	15.45	6.41	0.98
	67 (19.4)		20.11	12.54	3.25		19.94	12.52	2.51		17.23	10.80	1.65		13.88	8.73	1.02
	63 (17.2)		18.45	15.14	3.30		18.33	15.20	2.56		15.85	13.07	1.69		12.77	10.59	1.05
	57 (13.9)		17.24	17.24	3.32		17.29	17.29	2.59		14.92	14.92	1.72		12.04	12.04	1.07
80 (26.7)	72 (22.2)	690	22.41	12.59	3.17	700	22.17	12.57	2.44	595	19.11	10.89	1.60	480	15.39	8.79	0.98
	67 (19.4)		20.10	15.90	3.24		19.92	15.92	2.51		17.21	13.71	1.65		13.86	11.11	1.02
	63 (17.2)		19.80	14.96	3.25		19.44	15.72	2.52		16.02	15.89	1.68		12.91	12.88	1.05
	57 (13.9)		18.54	18.54	3.29		18.50	18.50	2.55		15.94	15.94	1.71		12.88	12.88	1.05

See additional notes on page 26

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE (CONT.)

24VNA024/CAP**3617AL+58CV(A,X)070–12 Cooling EFFICIENCY Mode Condenser Entering Air Temperature °F (°C)												
EDB °F (°C)	EVAP. AIR EWB °F (°C)	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**
			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND													
75 (23.9)	72 (22.2)	875	28.81	11.77	1.39	940	30.27	12.36	1.17	1000	31.64	12.90	0.98
	67 (19.4)		25.99	16.05	1.44		27.29	16.91	1.22		28.52	17.70	1.03
	63 (17.2)		23.94	19.41	1.48		25.23	20.54	1.26		26.41	21.54	1.07
	57 (13.9)		22.54	22.54	1.51		23.79	23.79	1.28		24.95	24.95	1.09
80 (26.7)	72 (22.2)	875	28.75	16.12	1.39	940	30.16	16.97	1.17	1000	31.50	17.76	0.98
	67 (19.4)		25.97	20.36	1.44		27.31	21.53	1.22		28.56	22.56	1.03
	63 (17.2)		26.13	17.86	1.43		27.63	18.28	1.21		28.97	18.81	1.02
	57 (13.9)		24.04	24.03	1.47		25.37	25.37	1.25		26.61	26.61	1.06
MEDIAN DEMAND													
75 (23.9)	72 (22.2)	750	22.72	9.43	1.05	750	23.75	9.79	0.85	785	24.84	10.23	0.69
	67 (19.4)		20.48	13.07	1.10		21.43	13.44	0.90		22.42	14.04	0.73
	63 (17.2)		18.91	15.93	1.13		19.78	16.31	0.93		20.72	17.04	0.76
	57 (13.9)		18.01	18.01	1.15		18.71	18.71	0.96		19.59	19.59	0.79
80 (26.7)	72 (22.2)	750	22.67	13.12	1.05	750	23.69	13.49	0.85	785	24.78	14.08	0.69
	67 (19.4)		20.48	16.72	1.09		21.41	17.10	0.90		22.41	17.85	0.73
	63 (17.2)		19.27	19.27	1.12		20.25	19.36	0.92		21.03	20.65	0.76
	57 (13.9)		19.24	19.24	1.12		19.96	19.96	0.93		20.89	20.89	0.76
MINIMUM DEMAND													
75 (23.9)	72 (22.2)	560	16.53	6.93	0.81	650	17.55	7.44	0.66	640	18.27	7.71	0.52
	67 (19.4)		14.88	9.65	0.85		15.77	10.75	0.70		16.60	11.15	0.57
	63 (17.2)		13.73	11.81	0.88		14.65	13.08	0.73		15.39	13.77	0.60
	57 (13.9)		13.14	13.14	0.90		14.21	14.21	0.74		14.94	14.94	0.61
80 (26.7)	72 (22.2)	560	16.48	9.70	0.80	650	17.50	10.65	0.66	640	18.34	11.19	0.53
	67 (19.4)		14.88	12.40	0.85		15.85	13.75	0.70		16.63	14.48	0.57
	63 (17.2)		14.09	14.09	0.87		15.23	15.23	0.71		16.02	16.02	0.58
	57 (13.9)		14.06	14.06	0.87		15.21	15.21	0.71		15.99	15.99	0.58

See additional notes on page 26

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE (CONT.)

24VNA036/CAP3617AL+58CV(A,X)070–12 Cooling EFFICIENCY Mode**
Condenser Entering Air Temperature °F (°C)

EDB °F (°C)	EVAP. AIR EWB °F (°C)	125				115				105				95			
		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	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND																	
75 (23.9)	72 (22.2)	830	30.35	12.51	3.85	955	32.91	13.58	3.37	1080	35.16	14.53	2.97	1200	37.12	15.40	2.71
	67 (19.4)		27.22	16.91	3.91		29.56	18.52	3.43		31.63	19.76	3.03		33.38	20.98	2.75
	63 (17.2)		24.97	20.38	3.96		27.16	22.45	3.47		29.03	23.91	3.06		30.75	25.51	2.79
	57 (13.9)		23.02	23.02	4.00		25.26	25.26	3.51		27.28	27.28	3.10		29.00	29.00	2.82
80 (26.7)	72 (22.2)	830	30.32	17.00	3.85	955	32.87	18.71	3.37	1080	35.11	19.98	2.97	1200	37.05	21.12	2.70
	67 (19.4)		27.16	21.41	3.91		29.53	23.64	3.42		31.61	25.23	3.02		33.37	26.77	2.75
	63 (17.2)		25.11	24.65	3.95		27.39	27.21	3.46		32.78	32.48	3.00		34.01	33.85	2.74
	57 (13.9)		24.55	24.55	3.97		27.01	27.01	3.48		29.14	29.14	3.07		31.00	31.00	2.76
MEDIAN DEMAND																	
75 (23.9)	72 (22.2)	760	26.73	10.90	3.39	835	27.98	11.42	2.81	875	27.79	11.39	2.18	880	27.15	11.17	1.68
	67 (19.4)		23.99	14.60	3.46		25.14	15.47	2.87		25.01	15.65	2.23		24.61	15.55	1.74
	63 (17.2)		21.97	17.53	3.51		23.12	18.66	2.91		23.03	19.02	2.28		22.58	18.87	1.77
	57 (13.9)		20.41	20.41	3.54		21.62	21.62	2.95		21.76	21.76	2.31		21.42	21.42	1.80
80 (26.7)	72 (22.2)	760	26.70	14.71	3.39	835	27.80	15.54	2.80	875	27.74	15.72	2.17	880	27.10	15.52	1.68
	67 (19.4)		23.93	18.32	3.45		25.10	19.71	2.88		24.99	19.96	2.23		24.44	19.78	1.73
	63 (17.2)		22.17	21.22	3.50		23.35	22.69	2.90		24.17	20.74	2.25		24.09	19.28	1.74
	57 (13.9)		21.84	21.84	3.50		23.12	23.12	2.91		23.27	23.27	2.27		22.94	22.94	1.76
MINIMUM DEMAND																	
75 (23.9)	72 (22.2)	690	22.30	9.22	3.18	700	22.06	9.12	2.45	595	19.16	7.93	1.60	480	15.45	6.41	0.98
	67 (19.4)		20.11	12.54	3.25		19.94	12.52	2.51		17.23	10.80	1.65		13.88	8.73	1.02
	63 (17.2)		18.45	15.14	3.30		18.33	15.20	2.56		15.85	13.07	1.69		12.77	10.59	1.05
	57 (13.9)		17.24	17.24	3.32		17.28	17.28	2.59		14.92	14.92	1.72		12.04	12.04	1.07
80 (26.7)	72 (22.2)	690	22.41	12.59	3.17	700	22.17	12.56	2.44	595	19.11	10.89	1.60	480	15.39	8.79	0.98
	67 (19.4)		20.10	15.90	3.24		19.92	15.92	2.51		17.21	13.71	1.65		13.86	11.11	1.02
	63 (17.2)		19.80	14.96	3.25		19.43	15.72	2.52		16.02	15.89	1.68		12.91	12.88	1.05
	57 (13.9)		18.54	18.54	3.29		18.49	18.49	2.55		15.94	15.94	1.71		12.87	12.87	1.05

See additional notes on page 26

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE (CONT.)

24VNA036/CAP**3617AL+58CV(A,X)070–12 Cooling EFFICIENCY Mode Condenser Entering Air Temperature °F (°C)													
EDB °F (°C)	EVAP. AIR EWB °F (°C)	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**
			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND													
75 (23.9)	72 (22.2)	1050	38.62	16.02	2.18	1225	40.79	16.82	1.96	1405	42.58	17.53	1.87
	67 (19.4)		34.81	22.20	2.23		36.80	23.08	2.01		38.38	24.03	1.92
	63 (17.2)		32.10	27.05	2.26		33.98	28.02	2.04		35.42	29.14	1.95
	57 (13.9)		30.48	30.48	2.29		31.71	31.71	2.08		33.44	33.44	1.98
80 (26.7)	72 (22.2)	1050	38.53	22.30	2.18	1225	40.66	23.16	1.96	1405	42.41	24.09	1.87
	67 (19.4)		34.78	28.39	2.22		36.76	29.35	2.01		38.37	30.57	1.92
	63 (17.2)		34.93	34.93	2.22		37.07	35.43	2.00		38.67	37.97	1.91
	57 (13.9)		31.42	31.42	2.27		33.75	33.75	2.05		35.66	35.66	1.95
MEDIAN DEMAND													
75 (23.9)	72 (22.2)	870	28.45	11.62	1.40	925	29.86	12.18	1.18	985	31.23	12.72	0.99
	67 (19.4)		25.62	15.87	1.46		26.96	16.69	1.23		28.20	17.49	1.04
	63 (17.2)		23.66	19.25	1.49		24.87	20.27	1.27		26.04	21.29	1.08
	57 (13.9)		22.35	22.35	1.52		23.46	23.46	1.29		24.61	24.61	1.10
80 (26.7)	72 (22.2)	870	28.40	15.97	1.40	925	29.80	16.75	1.18	985	31.16	17.55	0.99
	67 (19.4)		25.63	20.15	1.45		26.93	21.22	1.23		28.29	22.47	1.04
	63 (17.2)		23.95	23.36	1.48		25.20	24.61	1.26		26.60	25.78	1.07
	57 (13.9)		23.76	23.76	1.49		25.05	25.05	1.26		26.35	26.35	1.07
MINIMUM DEMAND													
75 (23.9)	72 (22.2)	560	16.52	6.93	0.81	650	17.55	7.44	0.66	640	18.27	7.71	0.52
	67 (19.4)		14.88	9.64	0.85		15.77	10.74	0.70		16.60	11.15	0.57
	63 (17.2)		13.73	11.81	0.88		14.64	13.08	0.73		15.39	13.77	0.60
	57 (13.9)		13.14	13.14	0.90		14.21	14.21	0.74		14.94	14.94	0.61
80 (26.7)	72 (22.2)	560	16.47	9.70	0.80	650	17.50	10.65	0.66	640	18.34	11.19	0.53
	67 (19.4)		14.88	12.40	0.85		15.85	13.75	0.70		16.63	14.48	0.57
	63 (17.2)		14.09	14.09	0.87		15.23	15.23	0.71		16.02	16.02	0.58
	57 (13.9)		14.06	14.06	0.87		15.21	15.21	0.71		15.99	15.99	0.58

See additional notes on page 26

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE (CONT.)

24VNA048/CAP6124AL+58CV(A,X)110–20 Cooling EFFICIENCY Mode**
Condenser Entering Air Temperature °F (°C)

EDB °F (°C)	EVAP. AIR EWB °F (°C)	125				115				105				95			
		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	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND																	
75 (23.9)	72 (22.2)	1250	44.80	18.05	4.82	1335	48.29	19.48	4.31	1425	51.30	20.55	3.94	1500	54.20	21.61	3.60
	67 (19.4)		40.50	24.61	4.81		43.71	26.49	4.30		46.44	28.04	3.92		49.06	29.49	3.58
	63 (17.2)		37.39	29.82	4.81		40.35	31.97	4.30		42.87	33.87	3.91		45.31	35.64	3.57
	57 (13.9)		34.65	34.65	4.80		37.39	37.39	4.29		39.77	39.77	3.90		42.00	42.00	3.56
80 (26.7)	72 (22.2)	1250	44.42	24.80	4.81	1335	48.10	26.47	4.31	1425	51.10	28.02	3.94	1500	53.99	29.49	3.60
	67 (19.4)		40.39	31.08	4.81		43.58	33.40	4.30		46.33	35.44	3.92		48.94	37.27	3.58
	63 (17.2)		37.47	36.12	4.81		40.31	38.70	4.30		43.05	41.16	3.91		45.51	43.28	3.57
	57 (13.9)		36.92	36.92	4.81		39.80	39.80	4.30		42.33	42.33	3.91		44.69	44.69	3.57
MEDIAN DEMAND																	
75 (23.9)	72 (22.2)	1230	43.75	17.64	4.62	1265	45.55	18.36	3.97	1240	43.91	17.72	3.21	1200	42.45	17.16	2.55
	67 (19.4)		39.95	24.25	4.63		41.34	24.75	3.96		39.81	24.30	3.20		38.40	23.53	2.54
	63 (17.2)		36.84	29.35	4.63		38.08	30.30	3.96		40.64	13.45	3.19		35.52	28.50	2.54
	57 (13.9)		34.16	34.16	4.62		35.30	35.30	3.96		34.18	34.18	3.20		33.07	33.07	2.54
80 (26.7)	72 (22.2)	1230	43.94	24.26	4.63	1265	45.35	25.01	3.97	1240	43.71	24.25	3.21	1200	42.25	23.48	2.55
	67 (19.4)		39.81	30.69	4.63		41.11	31.60	3.96		39.56	30.88	3.20		38.23	29.91	2.55
	63 (17.2)		36.92	35.75	4.63		38.18	36.75	3.96		36.85	35.75	3.20		35.62	34.59	2.54
	57 (13.9)		36.40	36.40	4.63		37.60	37.60	3.96		36.40	36.40	3.20		35.21	35.21	2.54
MINIMUM DEMAND																	
75 (23.9)	72 (22.2)	1205	43.93	17.73	4.76	1190	43.26	17.46	3.88	1005	36.36	14.77	2.64	845	29.84	12.07	1.75
	67 (19.4)		39.71	24.18	4.76		39.15	23.86	3.88		32.87	20.13	2.64		26.98	16.71	1.75
	63 (17.2)		36.68	29.26	4.76		36.13	28.85	3.88		30.35	24.47	2.64		24.90	20.29	1.75
	57 (13.9)		34.01	34.01	4.76		33.53	33.53	3.88		28.25	28.25	2.65		23.28	23.28	1.75
80 (26.7)	72 (22.2)	1205	43.76	24.18	4.76	1190	43.08	23.83	3.88	1005	36.17	20.19	2.64	845	29.65	16.69	1.75
	67 (19.4)		38.20	30.00	4.74		39.03	30.18	3.88		32.80	25.52	2.64		26.86	21.20	1.75
	63 (17.2)		36.74	35.53	4.76		36.20	35.04	3.88		30.44	29.65	2.64		24.95	24.68	1.75
	57 (13.9)		36.25	36.24	4.76		35.72	35.72	3.88		30.09	30.09	2.64		24.79	24.79	1.75

See additional notes on page 26

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE (CONT.)

24VNA048/CAP**6124AL+58CV(A,X)110–20 Cooling EFFICIENCY Mode
Condenser Entering Air Temperature °F (°C)

EDB °F (°C)	EVAP. AIR EWB °F (°C)	85				75				65			
		ID SCFM	Capacity MBtuh†		Total Sys. KW**	ID SCFM	Capacity MBtuh†		Total Sys. KW**	ID SCFM	Capacity MBtuh†		Total Sys. KW**
			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND													
75 (23.9)	72 (22.2)	1500	56.79	22.56	3.23	1540	59.15	23.42	2.94	1575	61.40	24.30	2.67
	67 (19.4)		51.40	30.44	3.21		53.58	31.55	2.91		55.72	32.64	2.64
	63 (17.2)		47.47	36.60	3.20		49.52	37.89	2.88		51.56	39.15	2.60
	57 (13.9)		43.67	43.67	3.19		45.47	45.47	2.87		47.24	47.24	2.59
80 (26.7)	72 (22.2)	1500	56.61	30.43	3.23	1540	58.95	31.49	2.94	1575	61.20	32.57	2.67
	67 (19.4)		51.29	38.19	3.21		53.43	39.51	2.90		55.76	40.86	2.63
	63 (17.2)		47.61	44.27	3.20		49.67	45.75	2.89		51.72	47.21	2.61
	57 (13.9)		46.39	46.39	3.20		48.24	48.24	2.88		50.10	50.10	2.60
MEDIAN DEMAND													
75 (23.9)	72 (22.2)	1170	44.41	17.87	2.24	1260	46.64	18.75	2.03	1280	48.45	19.39	1.83
	67 (19.4)		40.23	24.06	2.23		42.22	25.41	2.03		43.90	26.13	1.82
	63 (17.2)		37.12	28.91	2.23		39.01	30.62	2.01		40.56	31.48	1.81
	57 (13.9)		34.17	34.17	2.22		36.09	36.09	2.01		37.36	37.36	1.80
80 (26.7)	72 (22.2)	1170	44.24	24.04	2.24	1260	46.42	25.23	2.04	1280	48.33	25.82	1.83
	67 (19.4)		40.09	30.18	2.23		42.13	32.00	2.02		43.72	32.82	1.82
	63 (17.2)		37.21	34.93	2.23		39.15	37.15	2.01		40.66	38.07	1.81
	57 (13.9)		36.32	36.32	2.23		38.36	38.36	2.01		39.71	39.71	1.81
MINIMUM DEMAND													
75 (23.9)	72 (22.2)	870	31.39	12.79	1.53	875	32.81	13.31	1.34	895	34.20	13.84	1.18
	67 (19.4)		28.42	17.43	1.54		29.70	18.00	1.34		30.98	18.65	1.17
	63 (17.2)		26.24	21.14	1.53		27.41	21.70	1.34		28.60	22.45	1.17
	57 (13.9)		24.42	24.42	1.54		25.35	25.35	1.34		26.37	26.37	1.17
80 (26.7)	72 (22.2)	870	31.24	17.43	1.54	875	32.66	17.99	1.34	895	34.06	18.63	1.18
	67 (19.4)		28.30	22.09	1.53		29.59	22.66	1.34		30.86	23.41	1.17
	63 (17.2)		26.78	24.33	1.53		28.43	23.77	1.34		29.79	24.02	1.17
	57 (13.9)		25.99	25.99	1.53		26.96	26.96	1.34		28.03	28.03	1.17

See additional notes on page 26

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE (CONT.)

24VNA060/CAP6124AL+58CV(A,X)110–20 Expanded Ratings Cooling EFFICIENCY Mode**
Condenser Entering Air Temperature °F (°C)

EDB °F (°C)	EVAP. AIR EWB °F (°C)	125				115				105				95			
		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	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND																	
75 (23.9)	72 (22.2)	1200	50.55	20.14	5.59	1300	54.52	21.67	5.09	1400	58.22	23.07	4.64	1500	61.68	24.37	4.26
	67 (19.4)		45.83	26.41	5.57		49.35	28.44	5.06		52.67	30.34	4.61		55.81	32.16	4.22
	63 (17.2)		42.22	31.27	5.56		45.53	33.70	5.04		48.60	36.01	4.59		51.49	38.23	4.20
	57 (13.9)		37.97	37.81	5.53		41.03	40.86	5.02		43.88	43.88	4.57		46.61	46.61	4.18
80 (26.7)	72 (22.2)	1200	50.19	26.29	5.59	1300	54.14	28.35	5.09	1400	57.83	30.26	4.64	1500	61.32	32.10	4.26
	67 (19.4)		45.66	32.55	5.57		49.23	35.11	5.06		52.52	37.55	4.61		55.67	39.84	4.22
	63 (17.2)		42.19	37.38	5.55		45.52	40.34	5.04		48.62	43.16	4.59		51.55	45.87	4.20
	57 (13.9)		40.23	40.23	5.54		43.45	43.45	5.03		46.49	46.49	4.58		49.40	49.40	4.19
MEDIAN DEMAND																	
75 (23.9)	72 (22.2)	1230	47.61	19.05	5.04	1330	49.56	19.83	4.42	1350	48.89	19.62	3.62	1320	47.39	19.08	2.93
	67 (19.4)		43.00	25.53	5.03		44.83	26.86	4.40		44.25	26.77	3.61		42.91	26.07	2.92
	63 (17.2)		39.72	30.65	5.02		41.31	32.32	4.40		40.83	32.40	3.60		39.62	31.59	2.91
	57 (13.9)		36.42	36.42	5.02		38.06	38.06	4.39		37.89	37.89	3.60		36.83	36.83	2.90
80 (26.7)	72 (22.2)	1230	47.42	25.54	5.04	1330	49.24	27.01	4.42	1350	48.69	26.74	3.62	1320	47.21	26.04	2.93
	67 (19.4)		42.94	31.99	5.03		44.72	33.81	4.40		44.12	33.80	3.61		42.78	33.00	2.91
	63 (17.2)		39.75	36.97	5.02		41.46	39.20	4.40		41.00	39.28	3.60		39.78	38.32	2.91
	57 (13.9)		38.68	38.68	5.03		40.60	40.60	4.40		40.32	40.32	3.60		39.19	39.19	2.91
MINIMUM DEMAND																	
75 (23.9)	72 (22.2)	1205	43.93	17.73	4.76	1190	43.26	17.46	3.88	1005	36.36	14.77	2.64	845	29.84	12.07	1.75
	67 (19.4)		39.71	24.18	4.76		39.15	23.86	3.88		32.87	20.13	2.64		26.98	16.71	1.75
	63 (17.2)		36.68	29.26	4.76		36.13	28.85	3.88		30.35	24.47	2.64		24.90	20.29	1.75
	57 (13.9)		34.01	34.01	4.76		33.53	33.53	3.88		28.25	28.25	2.65		23.28	23.28	1.75
80 (26.7)	72 (22.2)	1205	43.76	24.18	4.76	1190	43.08	23.83	3.88	1005	36.17	20.19	2.64	845	29.65	16.69	1.75
	67 (19.4)		38.20	30.00	4.74		39.03	30.18	3.88		32.80	25.52	2.64		26.86	21.20	1.75
	63 (17.2)		36.74	35.53	4.76		36.20	35.04	3.88		30.44	29.65	2.64		24.95	24.68	1.75
	57 (13.9)		36.25	36.24	4.76		35.72	35.72	3.88		30.09	30.09	2.64		24.79	24.79	1.75

See additional notes on page 26

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE (CONT.)

24VNA060/CAP**6124AL+58CV(A,X)110–20 Expanded Ratings Cooling EFFICIENCY Mode
Condenser Entering Air Temperature °F (°C)

EDB °F (°C)	EVAP. AIR EWB °F (°C)	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**
			Total	Sens‡			Total	Sens‡			Total	Sens‡	
MAXIMUM DEMAND													
75 (23.9)	72 (22.2)	1500	64.31	25.37	3.82	1675	67.74	26.64	3.60	1880	70.82	26.76	3.57
	67 (19.4)		58.23	33.16	3.78		61.37	35.35	3.54		64.01	37.30	3.50
	63 (17.2)		53.80	39.28	3.75		56.69	42.14	3.50		59.21	44.95	3.46
	57 (13.9)		48.73	47.70	3.72		51.56	51.56	3.47		54.41	54.41	3.41
80 (26.7)	72 (22.2)	1500	64.07	33.21	3.83	1675	67.51	35.32	3.59	1880	70.29	37.20	3.56
	67 (19.4)		58.16	40.88	3.78		61.22	43.90	3.54		63.84	46.86	3.50
	63 (17.2)		53.87	46.94	3.75		56.82	50.67	3.51		59.40	54.40	3.46
	57 (13.9)		51.22	51.22	3.73		54.60	54.60	3.49		57.69	57.69	3.44
MEDIAN DEMAND													
75 (23.9)	72 (22.2)	1300	49.53	19.83	2.61	1365	51.83	20.72	2.35	1420	53.98	21.54	2.12
	67 (19.4)		44.84	26.73	2.59		46.98	27.91	2.33		48.96	29.10	2.10
	63 (17.2)		41.41	32.09	2.59		43.40	33.62	2.32		45.27	34.99	2.09
	57 (13.9)		38.10	38.10	2.58		39.96	39.96	2.31		41.69	41.69	2.07
[illegible]	72 (22.2)	[illegible]	49.36	26.69	2.61	[illegible]	51.63	27.92	2.35	[illegible]	53.77	29.03	2.12
	67 (19.4)		44.72	33.50	2.59		46.84	35.08	2.33		48.84	36.50	2.10
	[illegible]		[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	2.09
	[illegible]		[illegible]	[illegible]	2.59		[illegible]	[illegible]	2.32		[illegible]	[illegible]	2.08
MINIMUM DEMAND													
75 (23.9)	72 (22.2)	870	31.39	12.79	1.53	875	32.81	13.31	1.34	895	34.20	13.84	1.18
	67 (19.4)		28.42	17.43	1.54		29.70	18.00	1.34		30.98	18.65	1.17
	63 (17.2)		26.24	21.14	1.53		27.41	21.70	1.34		28.60	22.45	1.17
	57 (13.9)		24.42	24.42	1.54		25.35	25.35	1.34		26.37	26.37	1.17
80 (26.7)	72 (22.2)	870	31.24	17.43	1.54	875	32.66	17.99	1.34	895	34.06	18.63	1.18
	67 (19.4)		28.30	22.09	1.53		29.59	22.66	1.34		30.86	23.41	1.17
	63 (17.2)		26.78	24.33	1.53		28.43	23.77	1.34		29.79	24.02	1.17
	57 (13.9)		25.99	25.99	1.53		26.96	26.96	1.34		28.03	28.03	1.17

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 pubilshed data, interpolation may be performed. Extrapolation is not an acceptable practice.

EWB — Entering Wet Bulb

GENERAL

System Description

Outdoor-mounted, air-cooled, split-system air conditioner 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 conditioner. 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.
- 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.
- 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.

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.

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 qualified for low ambient cooling operation (below 55°F / 12.8°C) with an Infinity User Interface **ONLY.**
3. The maximum outdoor operating ambient in cooling mode is 125°F (51.67°C).
4. For reliable operation, unit should be level in all horizontal planes.
5. For interconnecting refrigerant tube lengths greater than 80 ft (23.4 m) and/or elevation differences between indoor and outdoor units greater than 20 ft (6.1 m), consult Residential Piping and Longline Guideline and Service Manual available from equipment distributor.
6. 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).
7. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
8. Do not apply capillary tube indoor coils to these units.
9. Factory-supplied filter drier must be installed.

Edition Date: 04/18

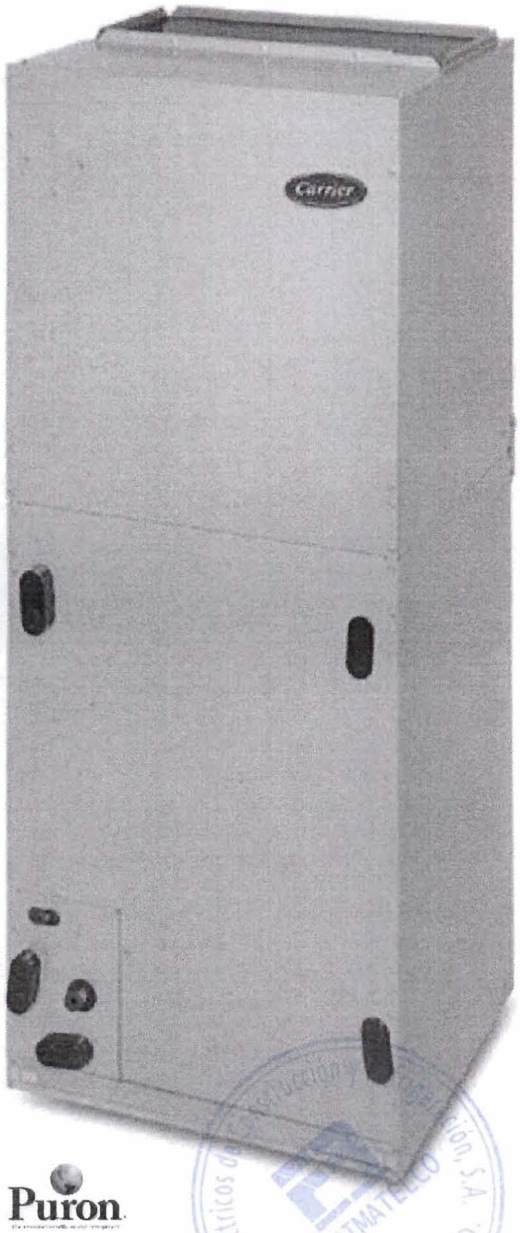
Catalog No: 24VNA0-02PD

Replaces:24VNA0-01PD

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

Carrier
turn to the experts

Product Data



PREMIUM ENVIRONMENTALLY-SOUND FAN COIL

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 sound 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 safety.

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.

For superior technology and unmatched comfort, the environmentally sound and efficient FE4A and FE5A fan coils can't be beat.

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-Sound 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
- Unique cabinet design that meets new stringent regulations for air leakage. Meets requirements of a 2% cabinet leakage rate when tested at 1.0 in wc of static pressure.

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
- Discreet 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.
- FE4A unit is multipoise
- FE5A 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

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

Cabinet / Insulation
B = Modular
F = Single piece

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

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

ArmorTech

AHRI CERTIFIED

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.ahridirectory.org.

Certified System ISO 9001 QMI-SAI Global

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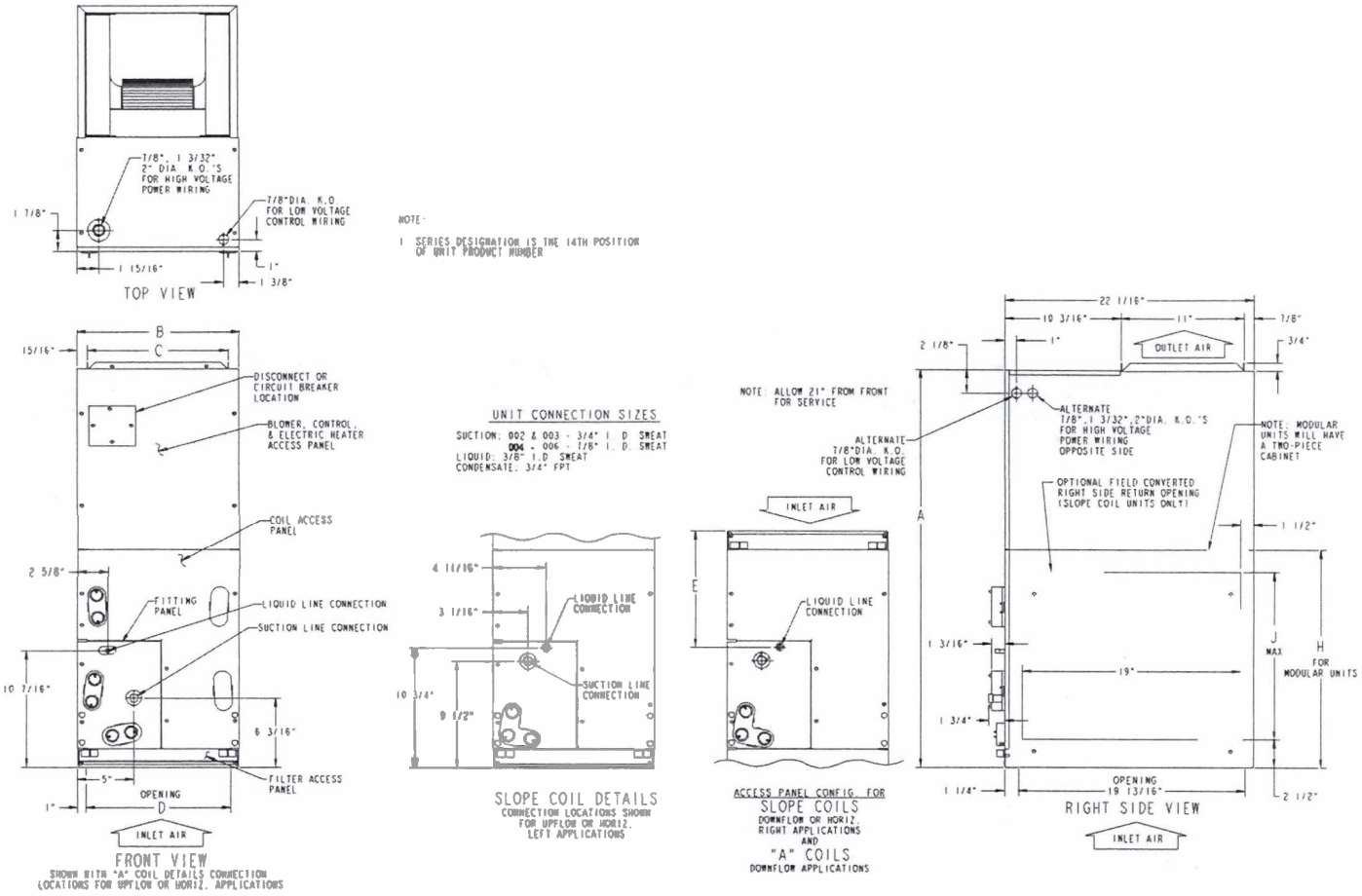
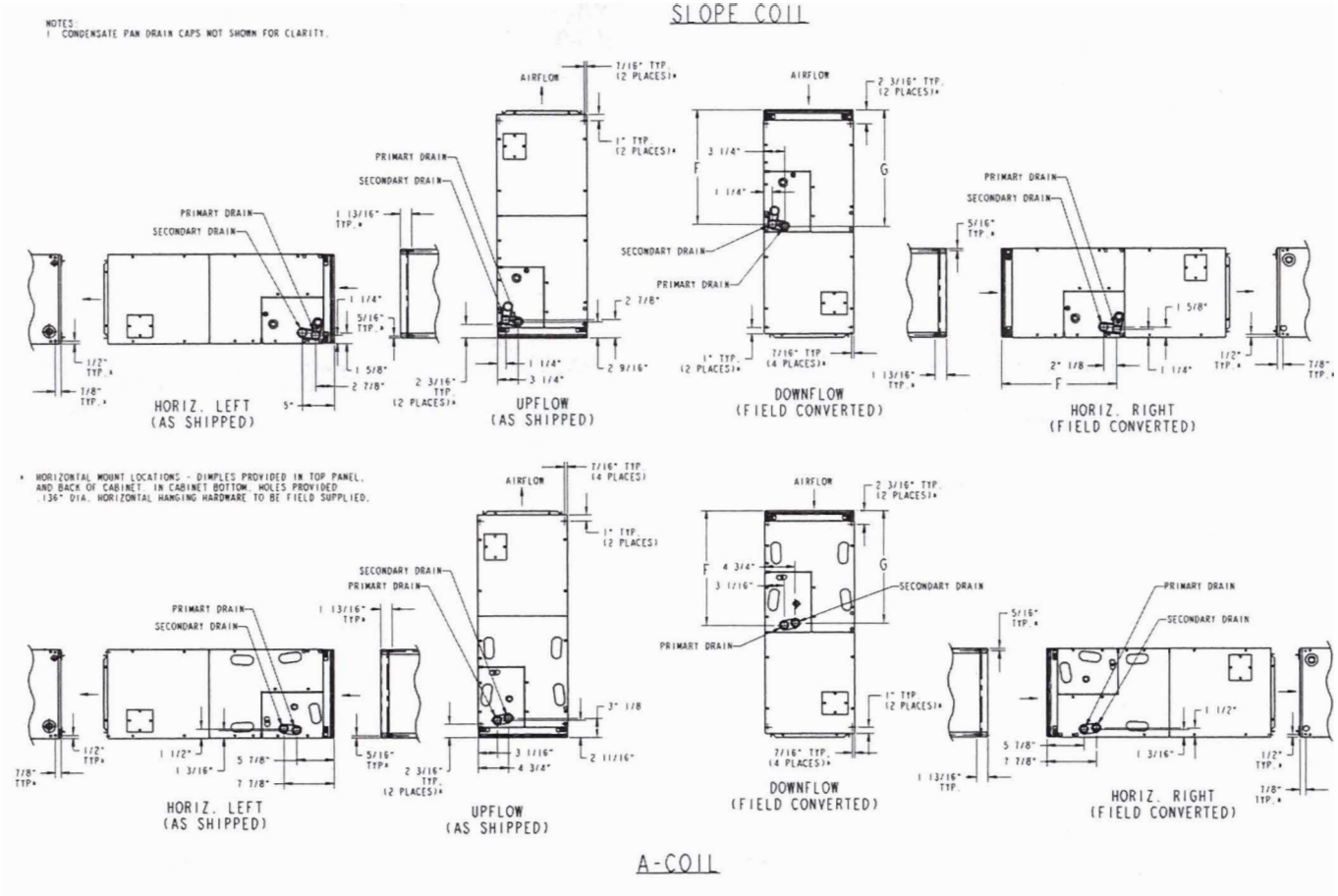


DIMENSIONS

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



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*	26–15/16	684	27–1/2	699	Yes	—	150 / 68
FE4A	005	27–1/4	692	26–15/16	684	—	Yes	172 / 78
FE4A	005*	27–1/4	692	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

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–in10 84 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

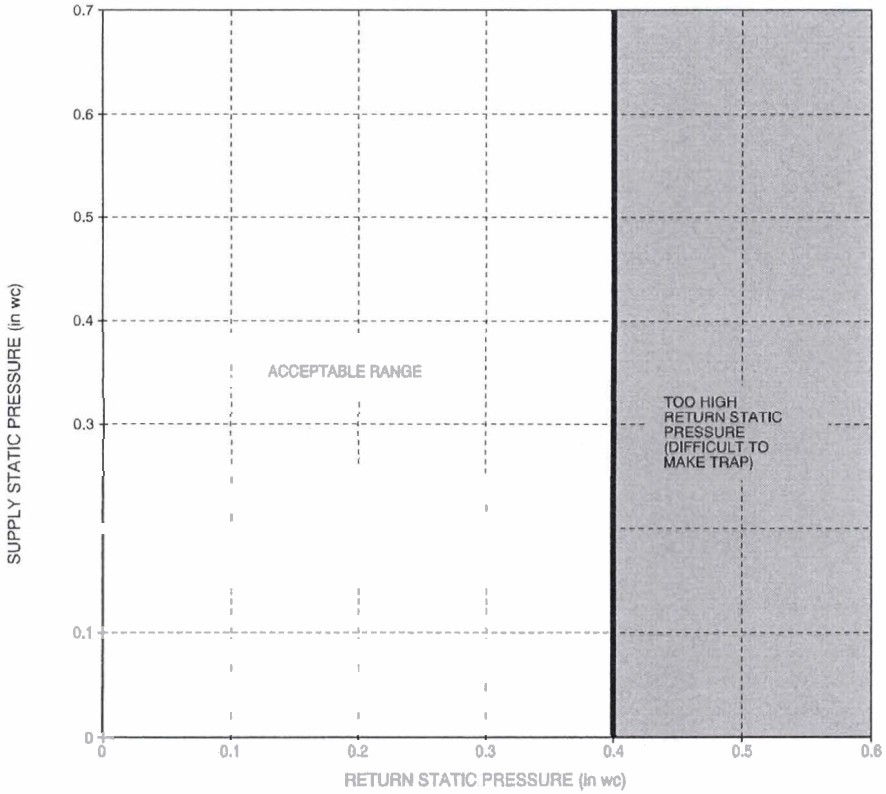
MODEL FE4A	OUTDOOR UNIT CAPACITY BTUH	ELECTRIC HEATER kW RANGE						
		5	9	10	15	20	24	30
002	EMERGENCY	625	625	675	775	950	—	—
	18,000	625	625	675	—	—	—	—
	24,000	650	725	775	900	—	—	—
	30,000	800	875	875	925	1125	—	—
	36,000	975	975	975	1025	1125	—	—
003	EMERGENCY	675	700	775	850	1050	—	—
	24,000	675	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.

ACCEPTABLE DUCT CONDITIONS



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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.

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

GROSS COOLING CAPACITIES (MBTUH)

INDOOR COIL AIR		SATURATED TEMPERATURE LEAVING EVAPORATOR (°F / °C)														
		35 / 2			40 / 4			45 / 7			50 / 10			55 / 13		
CFM	EWB	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF
FE4ANF002																
500	72/22	40.19	19.65	0.00	36.23	17.59	0.00	31.86	15.48	0.00	27.00	13.31	0.00	21.65	11.11	0.00
	67/19	32.99	19.92	0.01	28.96	17.79	0.01	24.52	15.62	0.01	19.64	13.40	0.01	14.28	11.17	0.01
	62/17	26.44	20.11	0.01	22.36	17.93	0.01	17.93	15.73	0.01	13.56	13.56	0.03	11.28	11.28	0.19
650	72/22	49.76	24.23	0.00	44.85	21.76	0.00	39.40	19.20	0.00	33.36	16.55	0.01	26.66	13.83	0.01
	67/19	40.90	24.80	0.01	35.90	22.22	0.01	30.37	19.55	0.02	24.27	16.82	0.02	17.58	14.06	0.02
	62/17	32.84	25.24	0.02	27.75	22.56	0.02	22.25	19.85	0.02	17.13	17.13	0.06	14.25	14.25	0.21
875	72/22	61.99	30.08	0.00	55.87	27.15	0.00	49.04	24.04	0.01	41.48	20.80	0.02	33.10	17.46	0.02
	67/19	51.08	31.23	0.03	44.83	28.09	0.03	37.91	24.84	0.03	30.23	21.47	0.03	21.83	18.03	0.03
	62/17	41.11	32.14	0.03	34.76	28.88	0.03	27.91	25.53	0.04	22.04	22.04	0.10	18.33	18.33	0.25
1000	72/22	67.83	32.91	0.00	61.10	29.76	0.00	53.66	26.40	0.02	45.36	22.89	0.03	36.17	19.27	0.03
	67/19	55.96	34.39	0.04	49.12	31.01	0.04	41.53	27.48	0.04	33.11	23.83	0.04	23.88	20.06	0.04
	62/17	45.09	35.62	0.04	38.13	32.08	0.04	30.69	28.43	0.05	24.54	24.54	0.12	20.40	20.40	0.27
1250	72/22	77.77	37.84	0.00	70.13	34.30	0.03	61.59	30.55	0.05	52.04	26.60	0.05	41.42	22.50	0.05
	67/19	64.36	40.02	0.06	56.52	36.24	0.06	47.77	32.27	0.06	38.04	28.12	0.06	27.46	23.81	0.07
	62/17	51.98	41.92	0.06	44.00	37.93	0.06	35.61	33.77	0.08	29.12	29.12	0.16	24.20	24.20	0.30
FE4ANF003																
600	72/22	43.01	20.98	0.00	38.69	18.78	0.00	33.92	16.51	0.00	28.64	14.18	0.00	22.85	11.81	0.01
	67/19	35.27	21.34	0.01	30.88	19.04	0.01	26.07	16.71	0.01	20.79	14.34	0.01	15.03	11.95	0.01
	62/17	28.24	21.59	0.01	23.81	19.25	0.01	19.05	16.90	0.02	14.56	14.56	0.05	12.11	12.11	0.21
800	72/22	53.83	26.15	0.00	48.40	23.49	0.00	42.36	20.71	0.00	35.72	17.83	0.02	28.38	14.89	0.02
	67/19	44.23	26.92	0.02	38.71	24.10	0.02	32.61	21.20	0.03	25.91	18.24	0.03	18.65	15.26	0.03
	62/17	35.47	27.49	0.03	29.87	24.58	0.03	23.89	21.65	0.03	18.67	18.67	0.09	15.51	15.51	0.24
1000	72/22	63.07	30.60	0.00	56.66	27.57	0.00	49.58	24.36	0.02	41.76	21.04	0.03	33.10	17.62	0.03
	67/19	51.91	31.82	0.04	45.41	28.58	0.04	38.24	25.24	0.04	30.31	21.78	0.04	21.76	18.29	0.05
	62/17	41.71	32.80	0.04	35.12	29.43	0.04	28.13	26.00	0.05	22.41	22.41	0.12	18.60	18.60	0.27
1200	72/22	71.01	34.48	0.00	63.77	31.12	0.02	55.79	27.57	0.04	46.95	23.88	0.05	37.18	20.08	0.05
	67/19	58.54	36.17	0.05	51.21	32.59	0.05	43.10	28.87	0.06	34.13	25.02	0.06	24.47	21.08	0.06
	62/17	47.12	37.60	0.06	39.70	33.86	0.06	31.89	30.00	0.07	25.83	25.83	0.15	21.43	21.43	0.29
1400	72/22	77.95	37.95	0.01	70.07	34.31	0.04	61.29	30.47	0.06	51.54	26.47	0.06	40.78	22.33	0.07
	67/19	64.44	40.15	0.07	56.37	36.28	0.07	47.43	32.24	0.07	37.54	28.04	0.07	26.89	23.69	0.08
	62/17	51.95	42.08	0.07	43.78	37.99	0.08	35.30	33.73	0.09	28.95	28.95	0.19	24.01	24.01	0.32
FE5ANB004																
600	72/22	40.42	19.84	0.00	36.59	17.80	0.00	32.35	15.70	0.00	27.64	13.54	0.00	22.39	11.33	0.00
	67/19	33.22	20.00	0.00	29.31	17.90	0.00	24.99	15.74	0.00	20.19	13.53	0.00	14.87	11.27	0.00
	62/17	26.67	20.11	0.00	22.69	17.95	0.00	18.31	15.75	0.00	13.60	13.54	0.00	11.29	11.29	0.17
800	72/22	52.07	25.46	0.00	47.19	22.92	0.00	41.75	20.28	0.00	35.66	17.53	0.00	28.84	14.70	0.00
	67/19	42.88	25.89	0.00	37.88	23.24	0.00	32.31	20.49	0.00	26.10	17.66	0.00	19.18	14.75	0.00
	62/17	34.51	26.21	0.00	29.39	23.46	0.00	23.73	20.64	0.00	17.81	17.81	0.01	14.85	14.85	0.18
1000	72/22	62.54	30.48	0.00	56.75	27.53	0.00	50.25	24.45	0.00	42.94	21.21	0.00	34.73	17.84	0.00
	67/19	51.63	31.28	0.00	45.66	28.17	0.01	38.98	24.93	0.01	31.49	21.55	0.01	23.12	18.06	0.01
	62/17	41.65	31.91	0.01	35.51	28.66	0.01	28.71	25.30	0.01	21.89	21.89	0.03	18.26	18.26	0.19
1200	72/22	71.89	34.94	0.00	65.33	31.70	0.00	57.89	28.24	0.00	49.50	24.59	0.00	40.06	20.76	0.00
	67/19	59.49	36.20	0.01	52.68	32.73	0.01	45.02	29.06	0.01	36.39	25.22	0.01	26.71	21.21	0.01
	62/17	48.10	37.22	0.01	41.07	33.55	0.01	33.27	29.72	0.01	25.77	25.77	0.05	21.51	21.51	0.20
1400	72/22	80.24	38.94	0.00	73.00	35.45	0.00	64.73	31.69	0.00	55.41	27.69	0.01	44.86	23.46	0.01
	67/19	66.53	40.71	0.01	58.99	36.93	0.01	50.47	32.91	0.02	40.84	28.66	0.02	29.98	24.20	0.02
	62/17	53.91	42.17	0.02	46.10	38.14	0.02	37.43	33.92	0.02	29.46	29.46	0.07	24.60	24.60	0.22
FE4ANF005																
750	72/22	57.24	28.01	0.00	51.64	25.08	0.00	45.46	22.08	0.00	38.59	19.00	0.00	30.99	15.85	0.00
	67/19	46.98	28.35	0.00	41.29	25.33	0.00	35.01	22.24	0.00	28.09	19.09	0.00	20.47	15.90	0.01
	62/17	37.67	28.59	0.01	31.89	25.50	0.01	25.61	22.37	0.01	19.28	19.28	0.02	16.05	16.05	0.19
950	72/22	69.68	33.97	0.00	62.89	30.52	0.00	55.32	26.92	0.00	46.89	23.21	0.00	37.57	19.40	0.00
	67/19	57.29	34.68	0.01	50.33	31.06	0.01	42.64	27.33	0.01	34.14	23.51	0.01	24.80	19.63	0.01
	62/17	45.99	35.21	0.01	38.92	31.47	0.01	31.24	27.68	0.01	23.90	23.90	0.04	19.89	19.89	0.20
1150	72/22	80.80	39.28	0.00	72.96	35.40	0.00	64.17	31.32	0.00	54.37	27.06	0.01	43.48	22.66	0.01
	67/19	66.56	40.46	0.02	58.50	36.34	0.02	49.54	32.05	0.02	39.60	27.64	0.02	28.70	23.15	0.02
	62/17	53.51	41.36	0.02	45.29	37.07	0.02	36.38	32.70	0.02	28.26	28.26	0.07	23.51	23.51	0.22
1500	72/22	97.47	47.29	0.00	88.05	42.83	0.00	77.49	38.05	0.01	65.68	33.04	0.02	52.41	27.78	0.02
	67/19	80.52	49.40	0.03	70.85	44.58	0.03	60.01	39.53	0.03	47.89	34.25	0.03	34.64	28.83	0.04
	62/17	64.96	51.12	0.03	55.02	46.04	0.03	44.30	40.80	0.04	35.27	35.27	0.10	29.34	29.34	0.25
1700	72/22	105.61	51.26	0.00	95.43	46.52	0.01	84.03	41.43	0.03	71.21	36.06	0.03	56.82	30.42	0.03
	67/19	87.38	53.92	0.04	76.93	48.80	0.04	65.20	43.40	0.04	52.01	37.70	0.04	37.60	31.83	0.05
	62/17	70.60	56.17	0.04	59.87	50.74	0.04	48.32	45.08	0.05	38.96	38.96	0.13	32.40	32.40	0.27
FE4ANB006																
1050	72/22	76.01	37.07	0.00	68.82	33.39	0.00	60.76	29.56	0.00	51.72	25.55	0.00	41.64	21.42	0.00
	67/19	62.63	37.91	0.01	55.22	34.04	0.01	46.97	30.03	0.01	37.78	25.89	0.01	27.60	21.64	0.01
	62/17	50.40	38.54	0.01	42.81	34.53	0.01	34.49	30.41	0.01	26.28	26.28	0.03	21.90	21.90	0.19
1300	72/22	89.66	43.58	0.00	81.26	39.43	0.00	71.77	35.02	0.00	61.13	30.39	0.00	49.17	25.55	0.01
	67/19	74.04	45.04	0.01	65.36	40.60	0.01	55.62	35.94	0.01	44.72	31.09	0.01	32.62	26.09	0.01
	62/17	59.73	46.18	0.01	50.78	41.52	0.02	40.97	36.70	0.02	31.77	31.77	0.06	26.48	26.48	0.21
1750	72/22	110.09	53.41	0.00	99.92	48.64	0.00	88.41	43.46	0.01	75.38	37.95	0.02	60.66	32.13	0.02
	67/19	91.28	56.16	0.02	80.74	50.96	0.03	68.83	45.42	0.03	55.35	39.55	0.03	40.35	33.42	0.03
	62/17	73.94	58.45	0.03	63.04	52.91	0.03	51.08	47.08	0.03	40.82	40.82	0.10	34.04	34.04	0.24
2050	72/22	121.19	58.89	0.00	110.14	53.79	0.01	97.57	48.25	0.02	83.25	42.30	0.03	67.02	35.98	0.03
	67/19	100.75	62.56	0.04	89.24	56.99	0.04	76.15	51.01	0.04	61.30	44.63	0.04	44.72	37.88	0.04
	62/17	81.81	65.71	0.04	69.88	59.72	0.04	56.88	53.37	0.05	46.27	46.27	0.12	38.60	38.60	0.26
2200	72/22	126.10	61.36	0.00	114.71	56.14	0.02	101.67	50.45	0.03	86.78	44.32	0.03	69.87	37.76	0.04
	67/19	104.99	65.51	0.04	93.05	59.79	0.04	79.44	53.62	0.04	63.97	47.02	0.04	46.71	40.00	0.05
	62/17	85.35	69.12	0.04	72.98	62.94	0.05	59.55	56.35	0.06	48.85	48.85	0.14	40.75	40.75	0.27

CFM – Cubic Ft per Minute
SHC – Gross Sensible Capacity 1000 Btuh
EWB – Entering Wet Bulb (°F / °C)
BF – Bypass Factor
LWB – Leaving Wet Bulb (°F / °C)
MBH – 1000 Btuh
TC – Gross Cooling Capacity 1000 Btuh

NOTES:

1. Contact manufacturer for cooling capacities at conditions other than shown in table.
2. Formulas:
   Leaving db = entering db $-\frac{\text{sensible heat cap.}}{1.09 \times \text{CFM}}$
   Leaving wb = wb corresponding to enthalpy of air leaving coil (h_{lwb})
   $h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{CFM}}$
   where h_{ewb} = enthalpy of air entering coil. Direct interpolation is permissible. Do not extrapolate.
3. 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.
4. 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)					
	79	78	77	76	75	Under 75
	81	82	83	84	85	Over 85
	Correction Factor					
0.10	.098	1.96	2.94	3.92	4.91	Use formula shown below
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
	1600	0.25	67.0	63.0	59.0	58.0	54.0	52.0	48.0
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
	1600	0.25	67.0	63.0	59.0	58.0	54.0	52.0	48.0
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 at a given CFM from the table may be corrected by adding or subtracting pressure. Use table for this correction.

FACTORY-INSTALLED FILTER STATIC PRESSURE DROP (in wc)

MODEL	CFM								
FE4A	400	600	800	1000	1200	1400	1600	1800	2000
002	0.020	0.044	0.048	0.072	0.100	—	—	—	—
003	—	0.020	0.035	0.051	0.070	0.092	—	—	—
005	—	—	0.035	0.051	0.070	0.092	0.120	—	—
006	—	—	—	0.038	0.053	0.070	0.086	0.105	0.133
MODEL	CFM								
FE5A	400	600	800	1000	1200	1400	1600	1800	2000
004	—	0.015	0.026	0.038	0.053	0.070	—	—	—

AIR DELIVERY PERFORMANCE CORRECTION COMPONENT PRESSURE DROP (in wc) AT INDICATED AIRFLOW (DRY TO WET COIL)

MODEL	CFM										
FE4A	600	700	800	900	1000	1100	1200	1300	1400	1500	1600
002	0.012	0.016	0.022	0.028	0.034	0.040	0.049	—	—	—	—
003	—	0.026	0.034	0.042	0.052	0.063	0.075	0.083	0.091	0.098	0.110
005	—	0.006	0.008	0.010	0.012	0.015	0.017	0.020	0.023	0.027	0.030
	CFM										
	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100
006	0.013	0.016	0.018	0.020	0.023	0.027	0.030	0.034	0.039	0.044	0.048
MODEL	CFM										
FE5A	600	700	800	900	1000	1100	1200	1300	1400	1500	1600
004	0.004	0.005	0.007	0.009	0.011	0.013	0.016	0.018	0.020	0.023	—

NOTE: Subtract the above pressure drop corrections from unit airflow data when that component or condition is used. The remaining external static pressure will be available for the duct system.

UNITS WITHOUT ELECTRIC HEAT

UNIT SIZE	VOLTS–PHASE	FLA	MIN CKT AMPS	BRANCH CIRCUIT	
				Min Wire Size Awg*	Fuse/Ckt Bkr Amps
002	208/230–1	4.3	5.4	14	15
003	208/230–1	4.3	5.4	14	15
005	208/230–1	4.3	5.4	14	15
004, 006	208/230–1	6.8	8.5	14	15

* Use copper wire only to connect unit. If other than uncoated (non–plated) 75° C ambient, copper wire (solid wire for 10 AWG and smaller, stranded wire for larger than 10 AWG) is used consult applicable tables of the National Electric Code (ANSI/NFPA 70).

NOTE: If branch circuit wire length exceeds 100 ft / 30.5 m, consult NEC 210–19a to determine maximum wire length. Use 2% voltage drop.

FLA — Full Load Amps

ACCESSORY ELECTRIC HEATERS

HEATER PART NO.	kW @ 240V	VOLTS/ PHASE	STAGES (kW OPERATING)	INTERNAL CIRCUIT PROTECTION	FAN COIL SIZE USED WITH	HEATING CAP. @ 230V‡	INTELLIGENT HEAT CAPABLE (kW OPERATING)
KFCEH0501N05	5	230/1	5	None	All	15,700	—
KFCEH0901N10	10	230/1	10	None	All	31,400	—
KFCEH3001F15	15	230/1	5, 15	Fuses**	All	47,100	5, 10, 15
KFCEH3201F20	20	230/1	5, 20	Fuses**	All	62,800	5, 10, 15, 20
KFCEH2901N09	9	230/1*	3, 9	None	All	28,300	3, 6, 9
KFCEH1601315	15	230/3	5, 15	None	All	47,100	—
KFCEH3401F24	24	230/3†	8, 16, 24	Fuses	005, 006	78,500	8, 16, 24
KFCEH3501F30	30	230/3†	10, 20, 30	Fuses	005, 006	94,200	10, 20, 30
KFCEH2401C05	5	230/1	5	Ckt Bkr	All	15,700	—
KFCEH2601C10	10	230/1	10	Ckt Bkr	All	31,400	—
KFCEH3101C15	15	230/1	5, 15	Ckt Bkr	All	47,100	5, 10, 15
KFCEH3301C20	20	230/1	5, 20	Ckt Bkr	All	62,800	5, 10, 15, 20

* Field convertible to 3 phase.

† These heaters field convertible to single phase.

** Single point wiring kit required for these heaters in Canada.

‡ Blower motor heat not included.

ELECTRIC HEATER INTERNAL PROTECTION

HEATER kW	PHASE	FUSES QTY / SIZE	CKT BKR QTY / SIZE*
5	1	—	1/60
8	1	—	1/60
9	1/3	—	—
10	1	—	1/60
15	1	2/30, 2/60	2/60
15	3	—	—
18	3	—	—
20	1	4/60	2/60
24	3/1	6/60	—
30	3/1	6/60	—

* All circuit breakers are 2 pole.

ACCESSORY ELECTRIC HEATER ELECTRICAL DATA

HEATER PART NO.	kW		PHASE	INTERNAL CIRCUIT PROTECTION	HEATER AMPS 208/230V			BRANCH CIRCUIT												
								Min Ampacity 208/230V**			Min Wire Size (AWG) 208/230V††			Min Gnd Wire Size 208/230V			Max Fuse/Ckt Bkr Amps 208/230V			Max Wire Length 208/230V (ft)‡‡		
	240v	208v			Single Circuit	Dual Circuit		Single Circuit	Dual Circuit		Single Circuit	Dual Circuit		Single Circuit	Dual Circuit		Single Circuit	Dual Circuit		Single Circuit	Dual Circuit	
						L1,L2	L3,L4		L1,L2	L3,L4		L1,L2	L3,L4		L1,L2	L3,L4		L1,L2	L3,L4		L1,L2	L3,L4
KFCEH0501N05	5	3.8	1	None	18.1/20.0	—	—	31.2/33.5	—	—	8/8	—	—	10/10	—	—	35/35	—	—	85/88	—	—
KFCEH2401C05	5	3.8	1	Ckt Bkr	18.1/20.0	—	—	31.2/33.5	—	—	8/8	—	—	10/10	—	—	35/35	—	—	85/88	—	—
KFCEH0801N08	8	6.0	1	None	28.9/32.0	—	—	44.7/48.5	—	—	8/8	—	—	10/10	—	—	45/50	—	—	59/60	—	—
KFCEH2501C08	8	6.0	1	Ckt Bkr	28.9/32.0	—	—	44.7/48.5	—	—	8/8	—	—	10/10	—	—	45/50	—	—	59/60	—	—
KFCEH2901N09*	9	6.8	1	None	32.8/36.0	—	—	49.5/53.5	—	—	8/6	—	—	10/10	—	—	50/60	—	—	54/87	—	—
KFCEH2901N09*‡	9	6.8	3	None	18.8/20.8	—	—	32.0/34.5	—	—	8/8	—	—	10/10	—	—	35/35	—	—	83/85	—	—
KFCEH0901N10	10	7.5	1	None	36.2/40.0	—	—	53.8/58.5	—	—	6/6	—	—	10/10	—	—	60/60	—	—	78/80	—	—
KFCEH2601C10	10	7.5	1	Ckt Bkr	36.2/40.0	—	—	53.8/58.5	—	—	6/6	—	—	10/10	—	—	60/60	—	—	78/80	—	—
KFCEH3001F15*[1]	15	11.3	1	Fuse	54.2/59.9	36.2/40.0	18.1/20.0	76.3/83.4	53.8/58.5	22.7/25.0	4/4	6/6	10/10	8/8	10/10	10/10	80/90	60/60	25/25	88/89	78/80	75/76
KFCEH3101C15*	15	11.3	1	Ckt Bkr	—	36.2/40.0	18.1/20.0	—	53.8/58.5	22.7/25.0	—	6/6	10/10	—	10/10	10/10	—	60/60	25/25	—	78/80	75/76
KFCEH1601315	15	11.3	3	None	31.3/34.6	—	—	47.7/51.8	—	—	8/6	—	—	10/10	—	—	50/60	—	—	56/90	—	—
KFCEH2001318	18	13.5	3	None	37.6/41.5	—	—	55.5/60.4	—	—	6/6	—	—	10/8	—	—	60/70	—	—	76/77	—	—
KFCEH3201F20*[1]	20	15.0	1	Fuse	72.3/79.9	36.2/40.0	36.2/40.0	98.9/108.4	53.8/58.5	45.3/50.0	3/2	6/6	8/8	8/6	10/10	10/10	100/110	60/60	50/50	85/109	78/80	59/59
KFCEH3301C20*	20	15.0	1	Ckt Bkr	—	36.2/40.0	36.2/40.0	—	53.8/58.5	45.3/50.0	—	6/6	8/8	—	10/10	10/10	—	60/60	50/50	—	78/80	59/59
KFCEH3401F24*†	24	18.0	3	Fuse	50.1/55.4	—	—	71.2/77.8	—	—	4/4	—	—	8/8	—	—	80/80	—	—	94/95	—	—
	24	18.0	1	Fuse	86.7/95.5	—	—	116.9/127.9	—	—	1/1	—	—	6/6	—	—	125/150	—	—	115/116	—	—
KFCEH3501F30*†	30	22.5	3	Fuse	62.6/69.2	—	—	86.8/95.0	—	—	3/3	—	—	8/8	—	—	90/100	—	—	97/98	—	—
	30	22.5	1	Fuse	109.0/120.0	—	—	144.8/158.5	—	—	0/00	—	—	6/6	—	—	150/175	—	—	117/150	—	—

FIELD MULTIPOINT WIRING OF 24-AND 30-kW SINGLE PHASE

HEATER PART NO.	kW		PHASE	HEATER AMPS 208/230V			MIN AMPACITY 208/230V**			MIN WIRE SIZE (AWG) 208/230V††			MIN GND WIRE SIZE 208/230V	MAX FUSE/CKT BKR AMPS 208/230V			MAX WIRE LENGTH 208/230V (FT)‡‡		
	240V	208V		L1,L2	L3,L4	L5,L6	L1,L2	L3,L4	L5,L6	L1,L2	L3,L4	L5,L6		L1,L2	L3,L4	L5,L6	L1,L2	L3,L4	L5,L6
KFCEH3401F24*†	24	18.0	1	28.9/32.0	28.9/32.0	28.9/32.0	44.7/48.5	36.2/40.0	36.2/40.0	8/8	8/8	8/8	10/10	45/50	40/40	40/40	59/60	73/73	73/73
KFCEH3501F30*†	30	22.5	1	36.2/40.0	36.2/40.0	36.2/40.0	53.8/58.5	45.3/50.0	45.3/50.0	6/6	8/8	8/8	10/10	60/60	50/50	50/50	78/80	59/59	59/59

* Heaters are Intelligent Heat capable when used with the FE fan coil and Comfort Zone II™ or Infinity Control™.

† Field convertible to 1 phase, single or multiple supply circuit.

‡ Field convertible to 3 phase.

** Includes blower motor amps of largest fan coil used with heater.

†† Copper wire must be used. If other than uncoated (non–plated), 75°C ambient, copper wire (solid wire for 10 AWG and smaller, stranded wire for larger than 10 AWG) is used, consult applicable tables of the National Electric Code (ANSI/NFPA 70).

‡‡ Length shown is as measured 1 way along wire path between unit and service panel for a voltage drop not to exceed 2%.

NOTES:

1. Single circuit application of F15 and F20 heaters requires single–point wiring kit accessory.

ACCESSORIES

REQUIRED ACCESSORY

ITEM		ACCESSORY PART NO.*	FAN COIL SIZE USED WITH
1.	Infinity® Touch Control with Integrated Wi–Fi	SYSTXCCITC01	All
	or		
	Infinity® Touch Control Wi–Fi with bundled router	SYSTXCCITW01	All
	or		
	Infinity® Touch Control	SYSTXCCITN01	All

ADDITIONAL ACCESSORIES

ITEM		ACCESSORY PART NO.*	FAN COIL SIZE USED WITH
2.	Infinity® Series 4 Zone Board	SYSTXCC4ZC01	All
3.	Infinity® Series Smart Sensor	SYSTXCCSMS01–A	All
4.	Infinity® Remote Room Sensor	SYSTXCCRRS01	All
5.	Infinity® Series Network Interface Module	SYSTXCCNIM01	All
6.	Disconnect Kit	KFADK0201DSC	Cooling controls and heaters 3– through 10–kW
7.	Downflow Base Kit	KFACB0201CFB	002
		KFACB0301CFB	003, 005
		KFACB0401CFB	004, 006
8.	Downflow Conversion Kit	KFADC0201SLP	003
		KFADC0401ACL	002, 004, 005, 006
9.	Single–Point Wiring Kit	KFASP0101SPK	Only with 15– and 20–kW Fused Heaters
10.	Filter Kit (12 Pack)	KFAFK0212MED	002
		KFAFK0312LRG	003, 005
		KFAFK0412XXL	004, 006
11.	Filter Media Cabinet	FNCCABCC0017	002
		FNCCABCC0021	003, 005
		FNCCABCC0024	004, 006
12.	Media Filter Cartridges	FILCCFNC0017	002
		FILCCFNC0021	003, 005
		FILCCFNC0024	004, 006
13.	Infinity® Series Air Purifier	GAPABXCC1620	002
		GAPABXCC2020	003, 005
		GAPABXCC2024	004, 006
14.	PVC Condensate Trap Kit (50 pack)	KFAET0150ETK	All
15.	Air Cleaner 240–volt Conversion Kit	KEAVC0201240	All
16.	Downflow/Horizontal Conversion Gasket Kit	KFAHD0101SLP	All
17.	Airflow Sensor Kit (Air Cleaner)	KEAAC0101AAA	All
18.	Horizontal Water Management Kit (25 pack)	KFAHC0125AAA	All
19.	Standard Filter Rack Kit	KFAFR0101FRM	NA
		KFAFR0201FRM	002
		KFAFR0301FRM	003, 005
		KFAFR0401FRM	004, 006
20.	Hydronic Relay Interface Kit	KFAIF0101HWC	All

* Factory authorized and listed, field installed.

ACCESSORIES (CONT.)

Accessory Kits Description Suggested and Required Use

1. **Infinity® Touch Control with Integrated Wi-Fi**
   Deluxe programmable wall-mounted system control with integrated Wi-Fi.
   or
   Infinity® Touch Control Wi-Fi with bundled router
   Deluxe programmable wall-mounted system control with integrated Wi-Fi.
   Sold bundled with Wi-Fi router
   or
   Infinity® Touch Control
   Deluxe programmable wall-mounted system control without remote access.
2. **Infinity® Series 4 Zone Board**
   4-Zone Damper Control Module wall-mounted control.
   REQUIRED USE: For all four-zone systems. For systems with 5 to 8 zones, a second Damper Control Module is required.
3. **Infinity® Series Smart Sensor**
   Wall control used to monitor temperature and/or fan control.
   SUGGESTED USE: For use in zone systems.
4. **Infinity® Remote Room Sensor**
   Wired remote temperature sensor for zone control.
   SUGGESTED USE: For use in zone systems.
5. **Infinity® Series Network Interface Module**
   Connects Heat Recovery and Energy Recovery Ventilators on non-zoning applications and non-communicating 2-speed units.
   REQUIRED USE: For non-zoned systems installed with HRV or ERV, Hybrid Heat with non-communicating heatpumps or non-communicating 2-speed units.
6. **Disconnect Kit**
   The kit is used to disconnect electrical power to the fan coil so service or maintenance may be performed safely.
   SUGGESTED USE: Units for 3- through 10-kW electric resistance heaters and cooling controls.
7. **Downflow Base Kit**
   This kit is designed to provide a 1-in. minimum clearance between unit discharge plenum, ductwork, and combustible materials. It also provides a gap-free seal with the floor.
   REQUIRED USE: This kit must be used whenever fan coils are used in downflow applications.
8. **Downflow Conversion Kit**
   Fan coils are shipped from the factory for upflow or horizontal-left applications. Downflow conversion kits provide proper condensate water drainage and support for the coil when used in downflow applications. Separate kits are available for slope coils and A-coils.
   REQUIRED USE: This kit must be used whenever fan coils are used in downflow applications.
9. **Single Point Wiring Kit**
   The single point wiring kit acts as a jumper between L1 and L3 lugs, and between the L2 and L4 lugs. This allows the installer to run 2 heavy-gauge, high-voltage wires into the fan coil rather than 4 light-gauge, high-voltage wires.
   SUGGESTED USE: Fan coils with 15- and 20-kW fused heaters only.
10. **Filter Kit (12 pack)**
    The kit consists of 12 fan coil framed filters. These filters collect large dust particles from the return air entering the fan coil and prevents them from collecting on the coil. This process helps to keep the coil clean, which increases heat transfer and, in turn, the efficiency of the system.
    SUGGESTED USE: To replace filters in fan coils.
    REQUIRED USE: All units unless a filter grille is used.
11. **Filter Media Cabinet**
    This cabinet is mounted to the fan coil on the return air end and designed to slip over the outer fan coil casing. The cabinets are insulated using the same insulation as production fan coils. They are designed for the removal of particulates from indoor air using FILCCFNC00(14, 17, 21, 24) media filter cartridges.
    SUGGESTED USE: All fan coils.
12. **Media Filter Cartridges**
    These fan coil media filter cartridge kits are designed for the removal of particles from indoor air. The cartridge is installed in the return air duct next to the air handler or further upstream.
    SUGGESTED USE: All fan coils.
13. **Infinity® Series Air Purifier**
    The Infinity Series Air Purifier wires directly to fan coil and requires no duct transitions with Carrier units. It comes with an airflow sensor.
    SUGGESTED USE: All fan coils.
14. **Condensate Drain Trap Kit**
    This kit consists of 50 PVC condensate traps. Each trap is pre-formed and ready for field installation. This deep trap helps the system make and hold proper condensate flow even during blower initiation.
    SUGGESTED USE: All fan coils.
15. **Air Cleaner 240-volt Conversion Kit**
    The AIRA electronic air cleaner comes ready for 115-v operation.
    REQUIRED USE: This kit is required when running 240-volt circuit to air cleaner.

ACCESSORIES (CONT.)

16. **Downflow/Horizontal Conversion Gasket Kit**
    This kit provides the proper gasketing of units when applied in either a downflow or horizontal application.
    REQUIRED USE: Fan coils in either downflow or horizontal applications.
17. **Airflow Sensor Kit (Air Cleaner)**
    The AIRA electronic air cleaner comes ready for 115-v operation
    REQUIRED USE: This kit is required whenever an electronic air cleaner is used.
18. **Horizontal Water Management Kit**
    This kit provides proper installation of fan coils under conditions of high static pressure and high relative humidty.
    SUGGESTED USE: All fan coils (except FE5 and FF1).
19. **Standard Filter Rack Kit**
    This kit mounts in fan coil filter rack area and modifies the existing filter rack to support standard 1-in. filter sizes.
    SUGGESTED USE: Fan coils using standard filter sizes.
20. **Hydronic Relay Interface Kit**
    This kit provides interface of the FE4 and FE5 fan coils with Hydronic Heat equipment.
    NOTE: Electric heat cannot be used with Hydronic Interface Relay Kit.
    SUGGESTED USE: All FE4 and FE5 fan coils installed with hydronic heat.

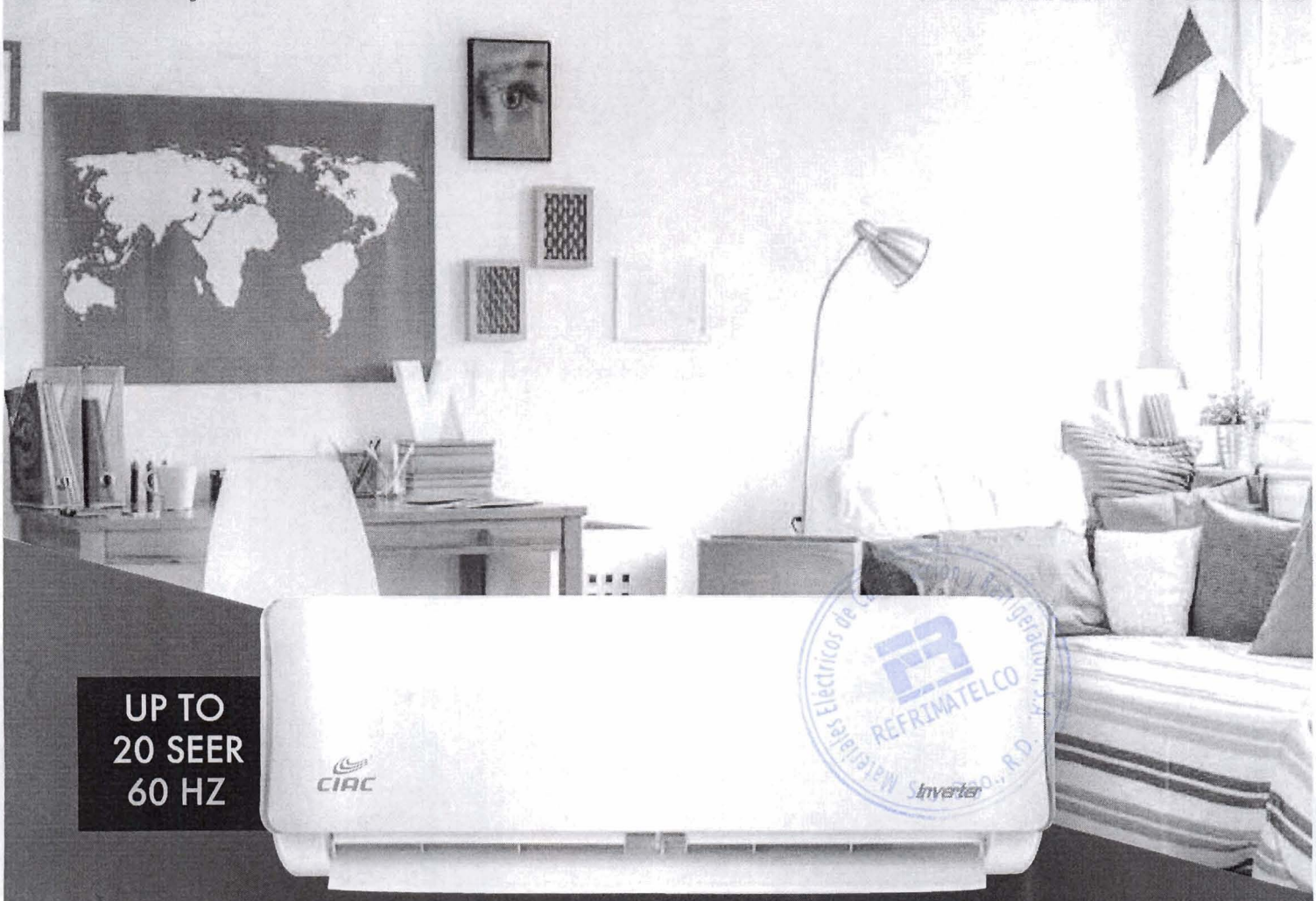
 Edition Date: 09/15 U.S. Export Classification: EAR99. **Catalog No: FE4A–10PD**

 Replaces: FE4A–09PD

CIAC
Air conditioning

HIWALL

INVERTER I P SERIES



UP TO 20 SEER 60 HZ

FEATURES:

- Auto restart function
- 12 grades indoor fan speeds
- 5 grades outdoor fan speeds
- Turbo mode
- 2 way draining
- Self diagnosis and auto protection
- Auto desfrosting
- Emergency using function
- Refrigerant leakage detect
- Low ambient cooling
- Anti cold air function
- Louver position memory function
- Manual switch button
- Silent mode
- Auto swing
- Two directional airflow
- Timer
- High density filter

CIAC
Air conditioning

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INVERTER I P SERIES

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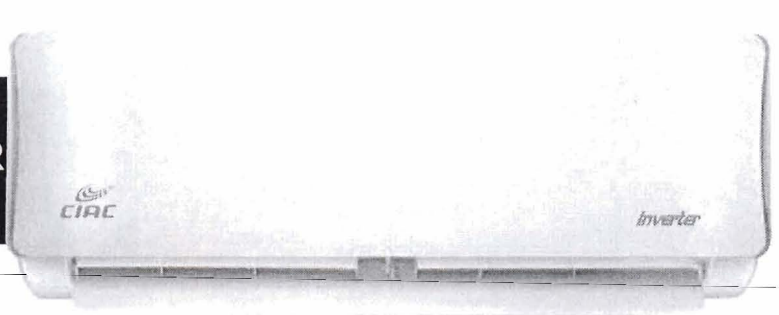
UP TO
20 SEER
60 HZ

R-410A
REFRIGERANT



CHNICAL SPECIFICATIONS

ITDOOR UNIT MODEL			CG43PX012PH1N1C	CG43PX009PH3N1C	CG43PX012PH3N1C	CG43PX018PH3N1C	CG43PX024PH3N1C	CG43PX030PH3N1H	CG43PX036PH3N1H
)OOR UNIT MODEL			CH43PX012-H1N1C	CH43PX009-H3N1C	CH43PX012-H3N1C	CH43PX018-H3N1C	CH43PX024-H3N1C	CH43PX030-H3N1H	CH43PX036-H3N1H
WER SUPPLY		V-Hz-Ph	115V,60Hz ,1Ph	208-230V, 60Hz ,1Ph	208-230V, 60Hz ,1Ph	208-230V~60Hz ,1Ph	208-230V~60Hz ,1Ph	208-230V~60Hz ,1Ph	208-230V~60Hz ,1Ph
	CAPACITY	Btu/h	12000(4500~13500)	9000(3200~10200)	11500(2900-12900)	17000(5000-18700)	22000(4700~23900)	30000(12300-42900)	36000 (15480 - 48960
	INPUT	W	1200 (200~1700)	812(100~1385)	1037 (100~1400)	1583 (150~2200)	960(200~2950)	2857 (1120-3971)	4235(1736-5889)
OLING	RATED CURRENT	A	10.43(2~15)	3.53 (1~6)	4.5 (1~7)	6.7(1.5~11)	9.0(2~14.5)	12.5(4.9-17.4)	18.5 (7.6-25.8)
	EER	Btu/h*w	10.00	11.00	10.00	10.80	11.23	10.5	10
	SEER	W/W	16.5	19	19	20	19	18	16
	CAPACITY	Btu/h	N/A	N/A	N/A	N/A	N/A	30000	36000
	INPUT	W	N/A	N/A	N/A	N/A	N/A	3110	3835
ATING	RATED CURRENT	A	N/A	N/A	N/A	N/A	N/A	13.5	16.7
	COP	W/W	N/A	N/A	N/A	N/A	N/A	2.83	2.75
	HSPF-4	Btu/w	N/A	N/A	N/A	N/A	N/A	9.6	10
	AIR FLOW (Hi/Mi/Lo)	CFM	280/252/171	241/206/147	280/248/170	530/441/353	581/45/331	795/618/471	853/647/471
	NOISE LEVEL (Hi/Mi/Lo)	dB (A)	39.6/-/26.1	37.6/-/25	39.8/-/25.5	42.5/34/31	46/40.5/34.0	52/44/35	52/44/36
OOR UNIT	DIMENSION(W*D*H)	inch	31.57x7.44x11.69	28.43x7.36x11.42	31.57x7.44x11.69	37.99x8.46x12.56	42.5x8.89x13.8	49.57x11.10x14.25	49.57x11.10x14.25
	PACKING(W*D*H)	inch	34.45x11.22x14.76	31.10x10.63x14.57	34.45x11.22x14.76	41.14x12.01x15.94	45.47x16.33x12.4	52.76x17.72x14.96	52.76x17.72x14.96
	NET/GROSS WEIGHT	lbs.	18.7/24.3	17.4/21.6	18.1/23.8	25.1/30.9	31.15/39.46	43.2/55.6	43.2/55.6
	NOISE LEVEL (Hi/Mi/Lo)	dB (A)	53.2	54.5	53	53	57.0	62	63
TDOOR	DIMENSION(W*D*H)	inch	30.31x11.81x21.85	30.31x11.81x21.85	30.31x11.81x21.85	30.31x11.81x21.85	33.26x14.29x27.63	37.24/16.14/31.89	37.24/16.14/31.89
IT	PACKING(W*D*H)	inch	35.43x13.58x23.03	35.43x13.58x23.03	35.43x13.58x23.03	35.43x13.58x23.03	37.99x155.55x30.11	42.91x19.69x34.45	42.91x19.69x34.45
	NET/GROSS WEIGHT	lbs.	57.3/62.6	54/59.3	54.7/59.5	65.9/72.3	88.6/95.90	137.79/147.71	143.3/153.22
	LIQUID SIDE / GAS SIDE	mm (inch)	Φ6.35/Φ12.7(1/4"/1/2")	Φ6.35/Φ9.52(1/4"/3/8")	Φ6.35/Φ12.7(1/4"/1/2")	Φ6.35/Φ12.7(1/4"/1/2")	9.52mm(3/8in)/15.9mm(5/8in)	Φ9.52/Φ15.9(3/8"/5/8")	Φ9.52/Φ15.9(3/8"/5/8
NNECTION	MAX. DISTANCE HEIGHT	m/ft	25/ 82	25/ 82	25/ 82	30/98	30/98	50/164	65/213
	MAX. DISTANCE LENGTH	m/ft	10/ 33	10/ 33	10/ 33	20/66	20/66	25/82	30/98
'PER 20' /40' /40'HQ		Unit	105/220/242	115/235/260	105/220/242	78/165/190	60/126/142	37/78/92	37/78/92

AUTHORIZED DEALER:

CARRIER INTERAMERICA CORPORATION
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