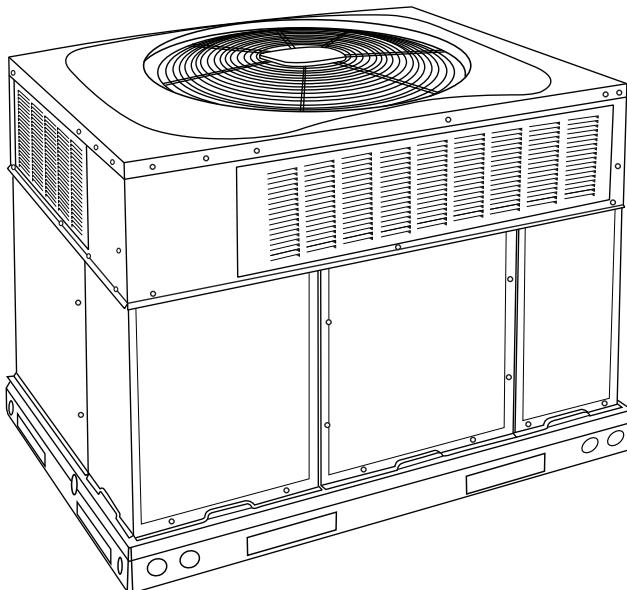


# Product Data



A09033

**Fig. 1 - Unit 607E**

Single-Packaged Products with Energy-Saving Features and Puron® refrigerant.

- 15.0-15.5 SEER / 12.0-12.5 EER at 95°F (35°C) OD
- 8.2 to 8.5 HSPF
- Factory-Installed TXV
- Multi-speed ECM Blower Motor - Standard
- Sound levels as low as 68dBA
- Two Stages of Cooling/Heating
- Dehumidification Feature

## FEATURES/BENEFITS

One-piece heat pump unit with optional electric heater, low sound levels, easy installation, low maintenance, and dependable performance.

Bryant's unique refrigerant designed to be environmentally balanced. Puron is an HFC refrigerant which does not contain chlorine that can harm the ozone layer. Puron refrigerant is in service in millions of systems proving highly reliable and is non-ozone depleting.

### Easy Installation

Factory-assembled package is a compact, fully self-contained, electric cooling unit that is prewired, pre-piped, and pre-charged for minimum installation expense. These units are available in a variety of standard cooling sizes with voltage options to meet residential and light commercial requirements. Units are lightweight and install easily on a rooftop or at ground level. The high tech composite base eliminates rust problems associated with ground level applications.

### Innovative Unit Base Design

On the inside a high-tech composite material will not rust and incorporates a sloped drain pan which improves drainage and helps inhibit mold, algae and bacterial growth. On the outside metal base rails provide added stability as well as easier handling and rigging.

### Convertible duct configuration

Unit is designed for use in either downflow or horizontal applications. Each unit is converted from horizontal to downflow and includes horizontal duct covers. Downflow operation is provided in the field to allow vertical ductwork connections. The basepan seals on the bottom openings to ensure a positive seal in the vertical airflow mode.

**Efficient operation** High-efficiency design offers SEER (Seasonal Energy Efficiency Ratios) of up to 15.5 and HSPF of up to 8.5. (See page 4.)

### Durable, dependable components

**Scroll Compressors** have 2 stages of cooling/heating and are designed for high efficiency. Each compressor is hermetically sealed against contamination to help promote longer life and dependable operation. Each compressor also has vibration isolation to provide quieter operation. All compressors have internal high pressure and overcurrent protection.

**Multi-speed ECM Blower Motor** is standard on all 607E.

**Direct-drive PSC (Permanent Split Capacitor) condenser-fan motors** are designed to help reduce energy consumption and provide for cooling operation down to 40°F (4.4°C) outdoor temperature. Motormaster® II low ambient kit is available as a field-installed accessory.

**Thermostatic Expansion Valve** - A hard shutoff, balance port TXV maintains a constant superheat at the evaporator exit (cooling cycle) resulting in higher overall system efficiency.

**Refrigerant system** is designed to provide dependability. Liquid filter driers are used to promote clean, unrestricted operation. Each unit leaves the factory with a full refrigerant charge. Refrigerant service connections make checking operating pressures easier.

**High and Low Pressure Switches** provide added reliability for the compressor.

**Indoor and Outdoor coils** are computer-designed for optimum heat transfer and efficiency. The indoor coil is fabricated from copper tube and aluminum fins and is located inside the unit for protection against damage. The outdoor coil is internally mounted on the top tier of the unit.

**Low sound ratings** ensure a quiet indoor and outdoor environment with sound ratings as low as 68dBA. (See Page 4.)

**Easy to service cabinets** provide easy 3 panel accessibility to serviceable components during maintenance and installation. The basepan with integrated drain pan provides easy ground level installation with a mounting pad. A nesting feature ensures a positive basepan to roof curb seal when the unit is roof mounted. A convenient 3/4-in. (19.05 mm) wide perimeter flange makes frame mounting on a rooftop easy.

**Dehumidification Feature**

This unit has independent fan speeds for low stage cooling and high stage cooling. In addition, 208/230 VAC models have the field-selectable capability to run an enhanced dehumidification ('DHUM') speed on high stage cooling (as low as 320CFM per ton). Coupled with the improved dehumidification associated with low stage cooling, the DHUM speed allows for a complete dehumidification solution independent of cooling stage. The dehumidification control must open the control circuit on humidity rise above the dehumidification set point.

**NOTE:** The enhanced dehumidification feature on high stage cooling does not support use of an economizer.

**Standard horizontal metal duct covers** with insulation come with the unit and cover the horizontal duct openings. These can be left in place if the units are converted to downflow.

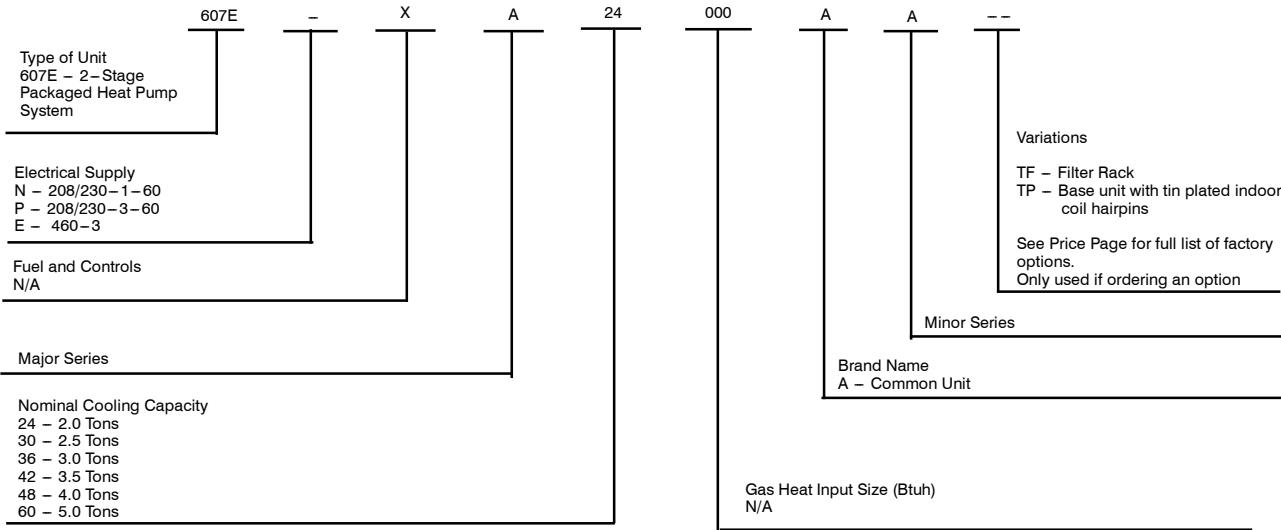
**Cabinets** are constructed of heavyduty, phosphated, zinc-coated prepainted steel capable of withstanding 500 hours in salt spray. Interior surfaces of the evaporator/electric heater compartment are insulated with foil-faced insulation, which keeps the conditioned air from being affected by the outdoor ambient temperature and provides improved indoor air quality. (Conforms to American Society of Heating, Refrigeration and Air Conditioning Engineers No. 62P.) The sloped drain pan minimizes standing water in the drain. An external drain is provided.

**Short-Cycling protection** for the compressor is incorporated into our defrost control board ensuring a five minute delay (+/-2 minutes) before restarting compressor after shutdown for any reason.

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## MODEL NUMBER NOMENCLATURE



607E



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](http://www.ahridirectory.org).



# AHRI\* CAPACITIES

## Cooling Capacities and Efficiencies

Unit Model 607E--C	Nominal Tons	Standard CFM (High / Low Stage)	Net Cooling Capacities - Btuh (High Stage)	EER @A**	SEER†
24	2	855 / 675	22800	12.0	15.0
30	2-1/2	1000 / 775	29400	12.0	15.0

Unit Model 607E--A	Nominal Tons	Standard CFM (High / Low Stage)	Net Cooling Capacities - Btuh (High Stage)	EER @A**	SEER†
36	3	1200 / 900	34000	12.0	15.0
42	3-1/2	1400 / 1050	42000	12.0	15.0
48	4	1600 / 1200	47500	12.5	15.5
60	5	1750 / 1400	57000	12.0	15.0

## Heat Pump Heating Capacities and Efficiencies

Unit Model 607E--C	Heating Capacity (BTUH) @ 47_F (8.3_C)	COP @ 47_F (8.3_C)	Heating Capacity (BTUH) @ 17_F ( ---8.3_C)	COP @ 17_F ( ---8.3_C)	HSPF	Heating Cd
24	23,400	3.9	12200	2.3	8.2	0.25
30	30,000	3.7	16200	2.3	8.2	0.25

Unit Model 607E--A	Heating Capacity (BTUH) @ 47_F (8.3_C)	COP @ 47_F (8.3_C)	Heating Capacity (BTUH) @ 17_F ( ---8.3_C)	COP @ 17_F ( ---8.3_C)	HSPF	Heating Cd
36	34,000	3.7	17200	2.3	8.2	0.25
42	42,000	3.6	24000	2.5	8.2	0.25
48	47,000	3.7	26000	2.3	8.2	0.25
60	57,000	3.5	32400	2.4	8.5	0.25

### LEGEND

dB—Sound Levels (decibels)

db—Dry Bulb

SEER—Seasonal Energy Efficiency Ratio

wb—Wet Bulb

COP—Coefficient of Performance

\* Air Conditioning, Heating & Refrigeration Institute.

\*\*At "A" conditions—80°F (26.7°C) indoor db/67°F (19.4°C) indoor wb & 95°F (35°C) outdoor db.

† Rated in accordance with U.S. Government DOE Department of Energy test procedures and/or AHRI Standards 210/240.

### Notes:

1. Ratings are net values, reflecting the effects of circulating fan heat. Ratings are based on:

**Cooling Standard:** 80°F (26.7°C) db, 67°F wb (19.4°C) indoor entering-air temperature and 95°F db (35°C) outdoor entering-air temperature.

2. Before purchasing this appliance, read important energy cost and efficiency information available from AHRIdirectory.org.

## A-WEIGHTED SOUND POWER LEVEL (dBA)

Model 607E--C	Sound Ratings (dBA)	TYPICAL OCTAVE BAND SPECTRUM(dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
24	68	77	65	65	63	57	52	48
30	69	70	66	67	65	58	56	54

Model 607E--A	Sound Ratings (dBA)	TYPICAL OCTAVE BAND SPECTRUM(dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
36	73	64	63.5	68	68	65.5	60.5	52.5
42	71	64	62	65	66	63.5	59.5	52.5
48	74	59.5	65	70	67	64.5	60.5	52.5
60	73	68	63	66	66	65	59.5	52.5

NOTE: Tested in accordance with AHRI Standard 270-1995 (not listed in AHRI).

## PHYSICAL DATA

MODEL FAMILY	607E--C			607E--A		
UNIT SIZE	24	30	36	42	48	60
NOMINAL CAPACITY (ton)	2	2-1/2	3	3-1/2	4	5
SHIPPING WEIGHT lb.	347	393	420	466	462	511
SHIPPING WEIGHT (kg)	157	178	191	212	210	232
COMPRESSORS			Scroll			
Quantity			1			
REFRIGERANT (R-410A)						
Quantity lb	8.2	11.2	11.0	14.6	12.0	14.8
Quantity (kg)	3.7	5.1	5.0	6.6	5.4	6.7
REFRIGERANT METERING DEVICE	TXV, Indoor TXV					
ORIFICE						
OD (in.)	.032 (2)	.035 (1)	.038 (1)	.042 (2)	.042 (2)	.052 (2)
OD (mm)	0.81 (2)	.89 (1)	.97 (1)	1.07 (2)	1.07 (2)	1.32 (2)
OUTDOOR COIL						
Rows...Fins/in.	1...21	2...21	2...21	2...21	2...21	2...21
Face Area (sq ft)	18.8	18.8	13.6	19.4	17.5	23.3
OUTDOOR FAN						
Nominal Cfm	2100	2500	3000	3000	3300	3600
Diameter in.	24	24	26	26	26	26
Diameter (mm)	609.6	609.6	660.4	660.4	660.4	660.4
Motor Hp (Rpm)	1/12 (800)	1/8 (810)	1/5 (810)	1/5 (810)	1/5 (810)	1/5 (810)
INDOOR COIL						
Rows...Fins/in.	3...17	3...17	3...17	3...17	3...17	4...17
Face Area (sq ft)	3.7	3.7	4.7	4.7	5.7	5.7
INDOOR BLOWER						
Nominal Low Stage Cooling Airflow (Cfm)	675	775	900	1050	1200	1400
Nominal High Stage Cooling Airflow (Cfm)	855	1000	1200	1400	1600	1750
Size in.	10x10	10x10	11x10	11x10	11x10	11x10
Size (mm.)	254x254	254x254	279.4x254	279.4x254	279.4x254	279.4x254
Motor HP (RPM)	1/2 (1050)	1/2 (1050)	3/4 (1000)	3/4 (1075)	1.0 (1075)	1.0 (1075)
HIGH-PRESSURE SWITCH (psig) Cut-out Reset (Auto)	650 +/- 15 420 +/- 25					
LOW-PRESSURE SWITCH (psig) cut-out Reset (auto)	20 +/- 5 45 +/- 5					
RETURN-AIR FILTERS†‡						
Throwaway Size in.	20x20x1	20x24x1	24x30x1	24x36x1		
Throwaway Size (mm)	508x508x25	508x610x25	610x762x25	610x914x25		

† Required filter sizes shown are based on the larger of the AHRI (Air Conditioning Heating and Refrigeration Institute) rated cooling airflow or the heating airflow velocity of 300 ft/minute for throwaway type or 450 ft/minute for high-capacity type. Air filter pressure drop for non-standard filters must not exceed 0.08 in. W.C.

‡ If using accessory filter rack refer to the filter rack installation instructions for correct filter sizes and quantity.

### Electric Heat Pressure Drop Tables (IN. W.C.)

#### Small Cabinet: 24-30

STATIC	STANDARD CFM (SCFM)											
	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600
5 kW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.07
10 kW	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.07	0.09	0.10	0.11
15 kW	0.00	0.00	0.00	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.16	0.18
20 kW	0.00	0.00	0.02	0.04	0.06	0.08	0.09	0.11	0.13	0.15	0.17	0.19

#### Large Cabinet: 36-60

STATIC	STANDARD CFM (SCFM)														
	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
5 kW	0.00	0.00	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12
10 kW	0.00	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13
15 kW	0.00	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15
20 kW	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16

## OPTIONS AND ACCESSORIES

ITEM	DESCRIPTION	FACTORY INSTALLED OPTION	FIELD INSTALLED ACCESSORY
Coil Options	Base unit with tin plated indoor coil hairpins	X	
Compressor Start Kit	Compressor Start Kit assists compressor start-up by providing additional starting torque on single phase units only.		X
Corporate Thermostats	Thermostats provide control for the system heating and cooling functions.		X
Crankcase Heater	Crankcase Heater provides anti-floodback protection for low-load cooling applications.		X*
Economizer	Vertical Economizer with Jade Honeywell W7220 Controller, Honeywell communicating actuator, and dry bulb sensor. (Contact MicroMetl Customer Service at 1-800-662-4822 to order.)		X
	Horizontal Economizer with Jade Honeywell W7220 Controller, Honeywell communicating actuator, and dry bulb sensor. (Contact MicroMetl Customer Service at 1-800-662-4822 to order.)		X
Electric Heaters	Electric Heat Supplement		X
Filter Rack	Filter Rack features easy installation, serviceability, and high-filtering performance for vertical applications. Includes 1-in. filter.	X	X
Flat Roof Curb	14-in. (356 mm) Flat Roof Curb is available for roof mounted applications.		X
Low Ambient Kit	Low Ambient Kit (Motormaster II Control) allows the use of mechanical cooling down to outdoor temperatures as low as 0°F (-18°C) when properly installed.		X
Manual Outside Air Damper	Manual Outside Air Damper includes hood and filter rack with adjustable damper blade for up to 25% outdoor air.		X
Square-to-Round Duct Transition Kit	Square-to-Round Duct Transition Kit enables 24–48 size units to be fitted to 14 in (356 mm) round ductwork.		X
Time Guard II	Automatically prevents the compressor from restarting for at least 4 minutes and 45 seconds after shutdown of the compressor. Not required when a corporate programmable thermostat is applied or with a RTU-MP control.		X
Dual Point Electric Heaters	Allows you to power the electric heater and unit contactor separately by having two individual field power supply circuits connected respectively.		X

\*Refer to Price Page for application detail.

### Electric Heaters

CATALOG ORDERING NO.	NOMINAL CAPACITY (kW)	FUSE QTY	USED WITH SIZES					
			24	30	36	42	48	60
<b>ELECTRIC HEATERS (208/230 — SINGLE PHASE — 60 Hz)</b>								
CPHEATER052A00	5.0	—	X	X	X			
CPHEATER064A00	5.0	4	X	X	X	X	X	X
CPHEATER069A00	7.2	—	X					
CPHEATER070A00	7.2	4	X	X	X	X	X	X
CPHEATER050A00	10.0	4	X	X	X	X	X	X
CPHEATER066A00	15.0	6		X	X	X	X	X
CPHEATER054A00	20.0	6				X	X	X
<b>ELECTRIC HEATERS (208/230 — THREE PHASE — 60 Hz)</b>								
CPHEATER055A00	5.0	—		X	X	X	X	X
CPHEATER056A00	10.0	—		X	X	X	X	X
CPHEATER068A00	10.0	6		X	X	X	X	X
CPHEATER058A00	15.0	6		X	X	X	X	X
CPHEATER059A01	20.0	6				X	X	X
<b>ELECTRIC HEATERS (460 — THREE PHASE — 60 Hz)</b>								
CPHEATER061A00	10.0	—			X	X	X	X
CPHEATER062A00	15.0	—			X	X	X	X
CPHEATER063A00	20.0	—				X	X	X

NOTE: Electric heaters are rated at 240v. Refer to Multiplication Factors table for other voltages.

X = Approved combinations.

### Minimum Airflow for Safe Electric Heater Operation (CFM)

SIZE	24	30	36	42	48	60
Cfm	800	1000	1200	1400	1600	1750

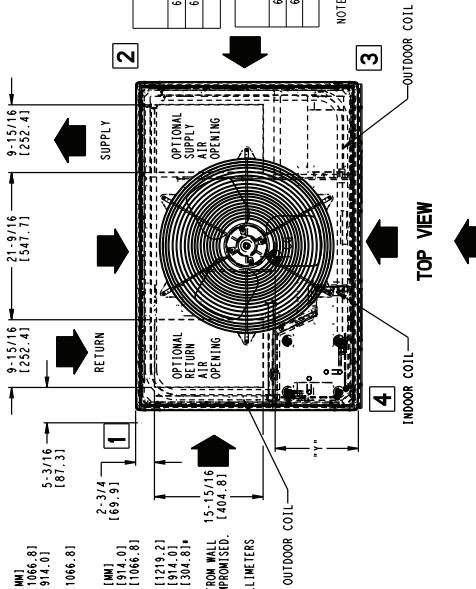
## **UNIT DIMENSIONS - 607E--C24-30**

RECOMMENDED CLEARANCES TO COMBUSTIBLE MTL.	INCHES [MM]
TOP OF UNIT.....	14 [355, 6]
DUCT SIDE.....	2 [50, 0]
SIDE OPPOSITE DUCTS.....	14 [355, 6]
BOTTOM OF UNIT.....	0 [0, 0]
ELECTRICAL PANEL.....	36 [914, 4]

RECOMMENDED CLEARANCES	INCHES (MM)	INCHES (MM)
UNIT TO GROUNDED SURFACES, POWER ENTRY SIDE.....	12 [304.8]	36 [914.0]
UNIT AND UNGROUNDED SURFACES, POWER ENTRY SIDE.....	12 [304.8]	36 [914.0]
UNIT TO CONCRETE WALLS AND OTHER GROUNDED SURFACES, POWER ENTRY SIDE.....	12 [304.8]	42 [1066.8]
UNIT TO OPPOSITE DUCTS.....	12 [304.8]	12 [304.8]

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DIMENSIONS IN [ ] ARE IN MILLIMETERS



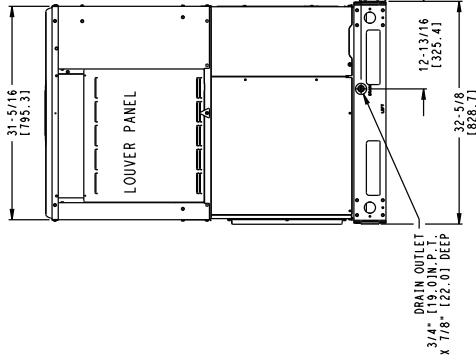
UNIT	VOLTAGE	CORNER W.
607EKC20000A0A1.../IT/TP	208/230	47.3
607EKC30000A0A1.../IT/TP	208/230	58.3
607PC30000A0A1.../IT	208/230	58.8

NOTE : ALL TABLE DATA RELEVANT FOR ALL FACTORY INSTALLED  
OPTIONS EXCEPT ECONOMIZER

**NOTE:** ALL TABLE DATA RELEVANT FOR ALL FACTORY INSTALLED  
OPTIONS EXCEPT ECONOMIZED

UNIT	ELECTRICAL CHARACTERISTICS	UNIT WT.	UNIT HEIGHT IN MM	UNIT WIDTH IN MM	UNIT DEPTH IN MM	CENTER OF GRAVITY IN MM
601EN/C24000A(A...)/TF(P)	208/261-1-60	338	153.3	51.3/4	1315	20-1/2
601EN/C30000A(A...)/TF(P)	209/230-1-60	384	174.2	51.3/4	1315	20-1/2
601TP/C30000A(A...)/TF	208/230-3-60	384	174.2	51.3/4	1315	20-1/2

VOLTAGE UNIT



**SIDE VIEW**

**FRONT VIEW**

RIGHT SIDE VIEW

NEW VIEW

-

A170010

607E

# 607E--A36-60 UNIT DIMENSIONS

**607E**

UNIT	ELECTRICAL CHARACTERISTICS	UNIT WT.	UNIT HEIGHT IN/MM		CENTER OF GRAVITY IN/MM				
			LB	KG	"A"	X	Y	Z	
607E(N/P/E)XA36000A**	208/230-1, 208/230-3-60, 460-3	413	187.3	44-3/4	1137	20-1/4	514.4	17-5/8	444.5
607E(N/P/E)XA42000A**	208/230-1, 208/230-3-60, 460-3	444	201.4	50-3/4	1289	20-1/4	514.4	17-5/8	444.5
607E(N/P/E)XA48000A**	208/230-1, 208/230-3-60, 460-3	447	202.8	48-3/4	1238	20-1/4	514.4	17-1/2	444.5
607E(N/P/E)XA60000A**	208/230-1, 208/230-3-60, 460-3	503	228.2	54-3/4	1391	20-1/4	514.4	17-1/2	444.5
									457.2

UNIT	VOLTAGE	CORNER WEIGHTS LB/KG			
		"1"	"2"	"3"	"4"
607E(N/P/E)XA36000A**	208/230/460	49.6	28.1	66.1	37.5
607E(N/P/E)XA42000A**	208/230/460	53.3	30.2	71.0	40.3
607E(N/P/E)XA48000A**	208/230/460	53.6	30.4	71.5	40.6
607E(N/P/E)XA60000A**	208/230/460	60.4	34.2	80.5	45.6
					120.7
					68.4
					201.2
					79.9

NOTE : ALL TABLE DATA RELEVANT FOR ALL FACTORY INSTALLED  
OPTIONS EXCEPT ECONOMIZER

### REQUIRED CLEARANCES TO COMBUSTIBLE MATL.

	INCHES [MM]
TOP OF UNIT.....	14 [35.6]
DUCT SIDE OF UNIT.....	2 [50.8]
SIDE OPPOSITE DUCTS.....	14 [35.6]
BOTTOM OF UNIT.....	0 [0]
ELECTRICAL PANEL.....	36 [914.4]

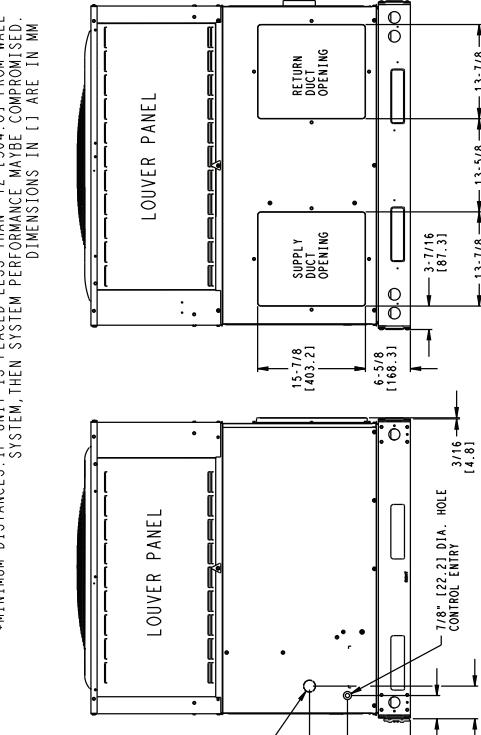
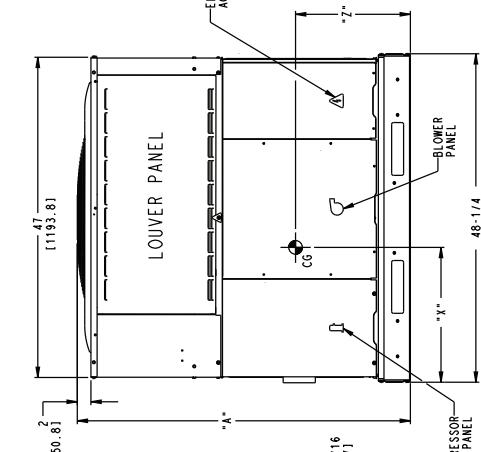
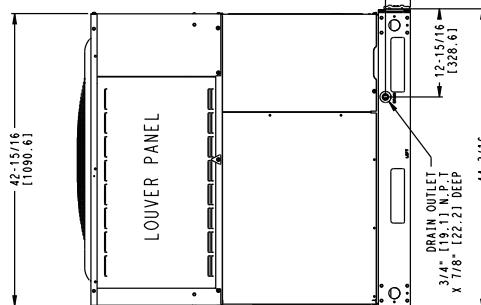
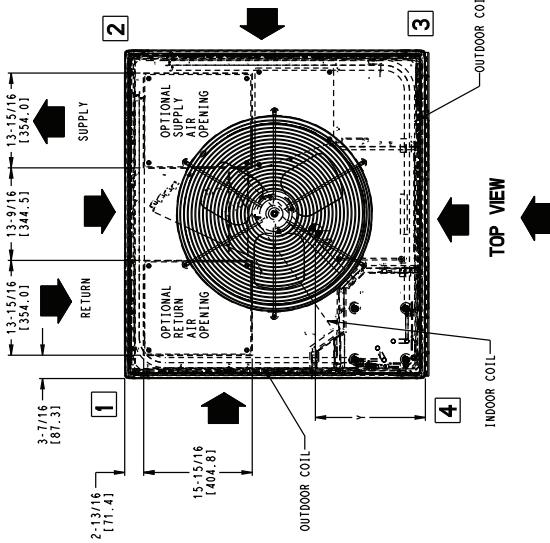
### NEC. REQUIRED CLEARANCES.

	INCHES [MM]
BETWEEN UNITS, POWER ENTRY SIDE.....	42 [106.8]
UNIT AND UNGROUNDED SURFACES, POWER ENTRY SIDE.....	36 [914.0]
UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES, POWER ENTRY SIDE.....	42 [106.8]
ELECTRICAL PANEL.....	36 [914.4]

### REQUIRED CLEARANCE FOR OPERATION AND SERVICING

	INCHES [MM]
EVAP. COIL ACCESS SIDE.....	36 [914.0]
POWER ENTRY SIDE.....	42 [106.8]
(EXCEPT FOR NEC REQUIREMENTS)	
UNIT TOP.....	48 [1219.2]
SIDE OPPOSITE DUCTS.....	36 [914.0]
DUCT PANEL.....	12 [304.8]*

\*MINIMUM DISTANCES IF UNIT IS PLACED LESS THAN 12 [304.8] FROM WALL SYSTEM, THEN SYSTEM PERFORMANCE MAY BE COMPROMISED.  
DIMENSIONS IN [ ] ARE IN MM



LEFT SIDE VIEW

FRONT VIEW

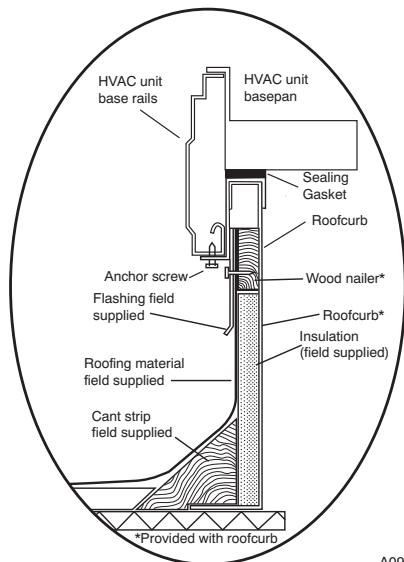
RIGHT SIDE VIEW

REAR VIEW

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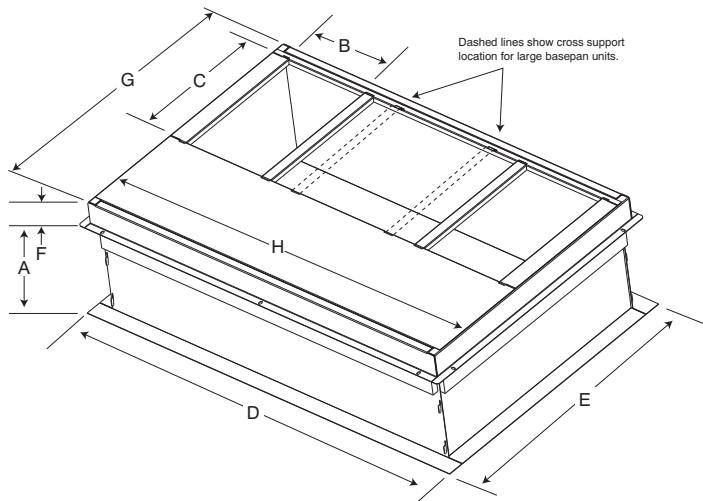
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# ROOF CURB ACCESSORY - 607E---24-60



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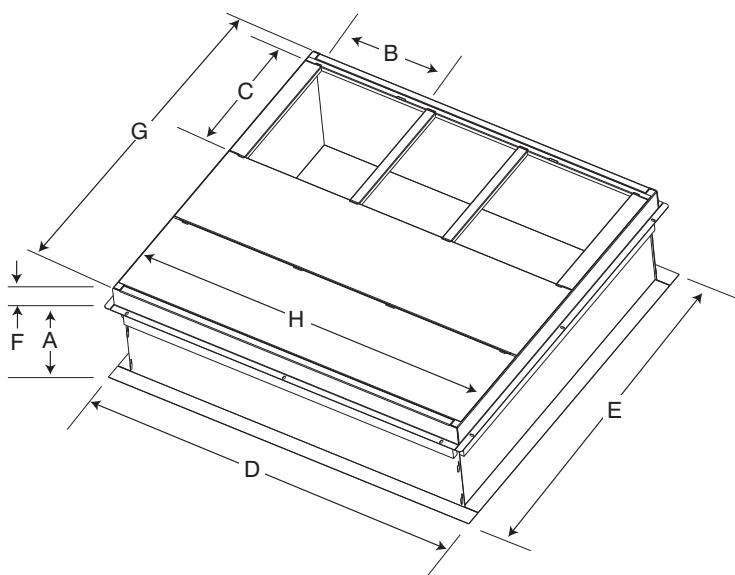
ROOF CURB DETAIL



A09413

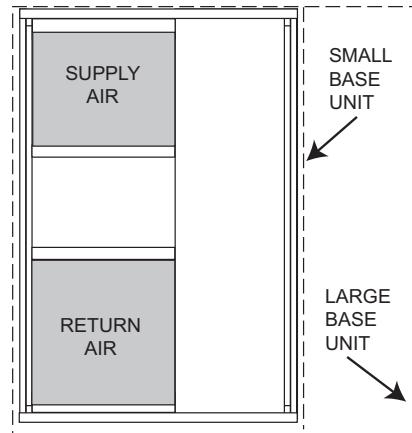
607E

SMALL/COMMON CURB



A09415

LARGE CURB



UNIT PLACEMENT ON  
COMMON CURB

A09094

SMALL OR LARGE BASE UNIT

A09414

UNIT SIZE	CATALOG NUMBER	A IN. (mm)	B (small/common base) IN. (mm)*	B (large base) IN. (mm)*	C IN. (mm)	D IN. (mm)	E IN. (mm)	F IN. (mm)	G IN. (mm)	H IN. (mm)
Small or Large	CPRFCURB011A00	14 (356)	10 (254)	14 (356)	16 (406)	47.8 (1214)	32.4 (822)	2.7 (69)	30.6 (778)	46.1 (1170)
Large	CPRFCURB013A00	14 (356)	14 (356)				43.9 (1116)		42.2 (1072)	

\* Part Number CPRFCURB011A00 can be used on both small and large basepan units. The cross supports must be located based on whether the unit is a small basepan or a large basepan.

NOTES:

1. Roof curb must be set up for unit being installed.
2. Seal strip must be applied, as required, to unit being installed.
3. Roof curb is made of 16-gauge steel.
4. Attach ductwork to curb (flanges of duct rest on curb).
5. Insulated panels: 1-in. (25.4 mm) thick fiberglass 1 lb. density.

## SELECTION PROCEDURE (WITH EXAMPLE)

### 1. Determine cooling and heating requirements at design conditions:

Given:

Required Cooling Capacity (TC) .....	34,000 Btuh
Sensible Heat Capacity (SHC) .....	24,000 Btuh
Required Heating Capacity .....	12,500 Btuh
Condenser Entering Air Temperature .....	95°F(35°C)
Indoor-Air Temperature .....	80°F (26°C) edb 67°F (19°C) ewb
Evaporator Air Quantity .....	1200 CFM
External Static Pressure .....	0.20 IN. W.C.
Electrical Characteristics .....	230-1-60

### 2. Select unit based on required cooling capacity.

Enter Net Cooling Capacities table at condenser entering temperature of 95°F (35°C), indoor air entering at 1200 cfm and 67°F (19°C) ewb (entering wet bulb). The unit will provide a total capacity of 34,200 Btuh and a SHC of 24,500 Btuh.

### 3. Select electric heat.

The required heating capacity is 15,000 Btuh.

Determine additional electric heat capacity in kW.

$$\begin{array}{ll} \underline{15,000 \text{ Btuh}} & = 4.4 \text{kW of heat required} \\ 3,414 \text{ Btuh/kW} & \end{array}$$

Enter the electric Heater Packages table for 208/240, single-phase, 607E--A36 unit. The 5 kW heater at 240v most closely satisfies the heating required. To calculate kW at the 208v, multiply the heater kW by multiplication factor 0.75 found in the Wattage Multiplication Factors table.

$$5 \text{ kW} \times 0.75 = 3.75 \text{ kW}$$

$$3.75 \text{ kW} \times 3414 = 12802.50 \text{ Btuh}$$

### 4. Determine fan speed and power requirements at design conditions.

Before entering the air delivery tables, calculate the total static pressure required. From the given example, the Wet Coil Pressure Drop Table, and the Filter Pressure Drop Table:

External Static Pressure	0.200 IN. W.C.
Filter	0.000 IN. W.C.
Wet Coil Pressure Drop	<u>0.130 IN. W.C.</u>
Total Static Pressure	0.330 IN. W.C.

Enter the table for Wet Coil Air Delivery—horizontal discharge, 230. At 0.33 IN. W.C. ESP (external static pressure) and medium speed, the fan will deliver 1293 cfm. Adjusting for 208v, the motor delivers 114 cfm (deduct 10%).

### 5. Select unit that corresponds to power source available.

The Electrical Data Table shows that the unit is designed to operate at 208-1-60.

## PERFORMANCE DATA

### 024 High Cool

EVAPORATOR AIR		75 (23.9)						85 (29.4)						CONDENSER ENTERING AIR TEMPERATURES °F (°C)						115 (46.1)						125 (51.7)					
		Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens						
CFM	EWB	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens				
<b>700</b>	57 (13.8)	21.49	21.49	1.52		20.88	1.68	20.17	1.86	19.34	19.34	2.07		18.35	18.35	2.33		17.24	17.24												
	62 (16.6)	22.16	20.20	1.53		21.34	1.92	1.69	20.42	19.56	1.87	19.39	19.31	2.07		18.38	18.38	2.33		17.27	17.27										
	63* (17.2)	22.52	16.49	1.53		21.70	16.18	1.69	20.76	15.83	1.87	19.72	15.37	2.08		18.47	14.84	2.33		17.08	14.20										
	67 (19.4)	24.17	17.07	1.55		23.27	16.75	1.71	22.26	16.40	1.89	21.16	15.98	2.10		19.94	15.50	2.35		18.54	14.96										
	72 (22.2)	26.41	13.85	1.57		25.43	13.48	1.73	24.35	13.08	1.91	23.16	12.65	2.13		21.88	12.19	2.38		20.48	11.70										
	57 (13.8)	22.87	22.87	1.55		22.18	1.71	21.38	21.38	1.90	20.49	20.49	2.11		19.46	19.46	2.36		18.29	18.29											
<b>855</b>	62 (16.6)	23.05	22.37	1.56		22.21	22.21	1.71	21.42	21.42	1.90	20.52	20.52	2.11		19.48	19.48	2.36		18.31	18.31										
	63* (17.2)	23.32	18.13	1.56		22.40	17.85	1.72	21.40	17.49	1.89	20.26	17.06	2.10		18.97	16.52	2.36		17.54	15.88										
	67 (19.4)	25.01	18.82	1.57		24.02	18.52	1.73	22.93	18.17	1.91	21.73	17.78	2.13		20.43	17.31	2.38		18.99	16.76										
	72 (22.2)	27.31	15.01	1.59		26.24	14.65	1.75	25.06	14.26	1.94	23.79	13.83	2.15		22.43	13.35	2.41		20.95	12.85										
	57 (13.8)	23.27	23.27	1.56		22.55	1.72	21.73	21.73	1.91	20.81	20.81	2.12		19.76	19.76	2.37		18.58	18.58											
	62 (16.6)	23.63	22.15	1.57		22.58	1.72	21.76	21.76	1.91	20.84	20.84	2.12		19.79	19.79	2.37		18.60	18.60											
<b>900</b>	63* (17.2)	23.53	18.66	1.57		22.59	18.38	1.72	21.56	18.02	1.90	20.41	17.59	2.11		19.10	17.05	2.36		17.67	16.41										
	67 (19.4)	25.24	19.38	1.58		24.22	19.08	1.74	23.11	18.74	1.92	21.90	18.34	2.13		20.57	17.88	2.39		19.12	17.31										
	72 (22.2)	27.55	15.36	1.60		26.45	15.01	1.76	25.25	14.62	1.95	23.94	14.21	2.16		22.57	13.73	2.41		21.07	13.22										

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

## 024 High Heat

		OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)											
		0 (-17.8)			10 (-12.2)			20 (-6.7)					
EDB	CFM	Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh			
		Total	Integ	Total	Integ	Total	Integ	Total	Integ	Total	Integ		
<b>65 (18.3)</b>	700	5.87	5.40	1.15	7.69	6.60	1.27	10.57	9.71	1.40	13.29	12.05	1.50
	855	5.92	5.45	1.15	7.75	6.65	1.29	10.63	9.76	1.42	13.35	12.10	1.51
<b>900</b>	5.93	5.45	1.15	7.76	6.66	1.30	10.64	9.77	1.42	13.37	12.12	1.51	
	700	5.80	5.34	1.20	7.60	6.52	1.33	10.44	9.58	1.46	13.10	11.88	1.55
<b>70 (21.1)</b>	855	5.87	5.40	1.20	7.66	6.58	1.34	10.50	9.63	1.47	13.16	11.94	1.56
	900	5.87	5.40	1.20	7.67	6.59	1.35	10.51	9.65	1.47	13.17	11.95	1.58
<b>75 (23.9)</b>	700	5.72	5.26	1.26	7.50	6.44	1.39	10.29	9.44	1.51	12.92	11.72	1.61
	855	5.80	5.33	1.26	7.56	6.50	1.40	10.35	9.50	1.52	12.99	11.77	1.63
<b>900</b>	5.80	5.34	1.26	7.58	6.50	1.40	10.36	9.51	1.52	12.99	11.78	1.63	

		OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)										
		50 (10)			40 (4.4)			30 (-1.1)				
EDB	CFM	Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		
		Total	Integ	Total	Integ	Total	Integ	Total	Integ	Total	Integ	
<b>65 (18.3)</b>	700	16.97	14.87	1.70	20.83	1.68	25.42	1.77	29.44	29.44	1.88	
	855	16.93	14.84	1.70	20.80	1.68	25.35	1.77	29.32	29.32	1.88	
<b>900</b>	16.94	14.85	1.71	20.80	20.80	1.68	25.35	1.78	29.30	29.30	1.88	
	700	16.64	14.58	1.75	20.58	1.76	25.26	1.85	29.34	29.34	1.97	
<b>70 (21.1)</b>	855	16.72	14.65	1.76	20.65	1.75	25.21	1.85	29.22	29.22	1.97	
	900	16.73	14.66	1.76	20.65	1.75	25.20	1.85	29.21	29.21	1.97	
<b>75 (23.9)</b>	700	16.42	14.38	1.83	20.45	20.45	1.85	25.11	1.92	29.21	29.21	2.06
	855	16.49	14.45	1.84	20.60	1.84	25.06	1.93	29.12	29.12	2.05	
<b>900</b>	16.50	14.46	1.84	20.38	20.38	1.84	25.05	1.93	29.11	29.11	2.05	

See Legend and Notes on Page 35.

**PERFORMANCE DATA (CONT)**

**024 Low Cool**

EVAPORATOR AIR		75 (23.9)				85 (29.4)				CONDENSER ENTERING AIR TEMPERATURES °F (°C)				105 (40.6)				115 (46.1)				125 (51.7)							
		Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens				
CFM	EWB	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens				
<b>525</b>	57 (13.8)	18.15	18.15	1.06		17.65	1.19	16.95	1.34	16.00	1.52	14.98	1.73	13.94	1.96														
	62 (16.6)	18.61	17.42	1.05		17.93	1.19	17.04	1.34	16.03	1.52	15.00	1.73	13.97	1.96														
	63* (17.2)	18.94	14.19	1.05		18.25	1.19	17.37	1.34	16.17	1.52	14.86	1.73	13.54	1.96														
	67 (19.4)	20.32	14.68	1.04		19.55	1.18	18.63	1.40	17.55	1.52	16.22	1.73	14.83	1.96														
	72 (22.2)	22.23	11.87	1.03		21.38	1.18	20.38	1.19	1.34	19.27	10.78	1.52	18.06	10.35	1.73	16.65	9.85	1.96										
	77 (26.0)	24.17	11.20	1.02		23.32	1.17	22.31	1.26	1.36	21.20	10.28	1.52	19.06	9.85	1.73	17.65	9.35	1.96										
<b>675</b>	57 (13.8)	19.64	19.64	1.06		19.04	1.20	18.28	1.36	17.36	1.53	16.24	1.74	15.08	1.98														
	62 (16.6)	19.85	18.78	1.06		19.07	1.20	18.31	1.36	17.38	1.53	16.27	1.74	15.11	1.98														
	63* (17.2)	19.76	16.08	1.06		18.98	1.20	18.01	15.55	1.36	16.80	15.03	1.53	15.42	14.43	1.74	14.05	13.83	1.97										
	67 (19.4)	21.20	16.70	1.05		20.33	16.47	1.19	19.31	16.18	1.35	18.14	15.80	1.53	16.79	15.25	1.74	15.34	14.66	1.98									
	72 (22.2)	23.17	13.18	1.04		22.22	12.89	1.19	21.11	12.54	1.35	19.91	12.14	1.53	18.61	11.69	1.74	17.16	11.19	1.98									
	57 (13.8)	19.85	19.85	1.06		19.23	1.20	18.46	1.36	17.54	1.54	16.41	16.41	1.74	15.24	15.24	1.98												
<b>700</b>	62 (16.6)	20.11	18.71	1.06		19.26	1.20	18.49	1.36	17.56	1.54	16.44	1.74	15.26	1.98														
	63* (17.2)	19.86	16.40	1.06		19.07	16.18	1.20	18.09	15.87	1.36	16.88	15.35	1.54	15.49	14.74	1.74	14.13	14.11	1.98									
	67 (19.4)	21.32	17.02	1.05		20.44	16.80	1.20	19.39	16.51	1.36	18.22	16.14	1.54	16.87	15.59	1.74	15.41	14.99	1.98									
	72 (22.2)	23.29	13.38	1.04		22.33	13.09	1.19	21.20	12.75	1.35	19.98	12.36	1.54	18.68	11.91	1.75	17.21	11.41	1.98									

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

## 024 Low Heat

OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)																			
INDOOR AIR		0 (-17.8)		10 (-12.2)		20 (-6.7)		30 (-1.1)		40 (4.4)		50 (10)		60 (15.6)					
EDB	CFM	Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity Sys KW		Capacity MBtuh		Capacity Sys KW		Capacity MBtuh		Capacity Sys KW			
		Total	Integ	Total	Integ	Total	Integ	Total	Integ	Total	Integ	Total	Integ	Total	Integ	Total	Integ		
65 (18.3)	525	4.54	4.50	1.00	6.59	6.06	1.06	8.44	7.65	1.13	11.85	10.38	1.17	14.14	12.22	17.65	1.27	21.47	1.29
675 (20.0)	675	4.56	4.52	0.99	6.64	6.09	1.04	8.48	7.69	1.13	11.90	10.43	1.17	14.21	12.22	17.60	1.26	21.49	1.29
700 (21.1)	700	4.56	4.52	0.98	6.65	6.10	1.04	8.51	7.71	1.13	11.92	10.45	1.18	14.22	12.22	17.58	1.26	21.47	1.29
750 (23.9)	525	4.52	4.48	1.07	6.52	5.99	1.12	8.31	7.53	1.19	11.65	10.20	1.22	13.90	12.26	17.35	1.32	21.24	1.33
750 (23.9)	675	4.56	4.52	1.05	6.59	6.06	1.11	8.38	7.60	1.18	11.71	10.26	1.22	13.96	12.27	17.37	1.31	21.28	1.34
750 (23.9)	700	4.58	4.54	1.05	6.62	6.07	1.10	8.40	7.62	1.19	11.73	10.28	1.23	13.98	12.27	17.37	1.31	21.22	1.34
750 (23.9)	525	4.43	4.39	1.13	6.42	5.89	1.18	8.15	7.39	1.25	11.42	10.01	1.26	13.65	12.31	17.05	1.37	21.01	1.39
750 (23.9)	675	4.50	4.46	1.12	6.50	5.96	1.17	8.24	7.47	1.24	11.50	10.07	1.27	13.70	12.31	17.11	1.38	20.93	1.39
750 (23.9)	700	4.52	4.48	1.11	6.52	5.99	1.16	8.26	7.50	1.24	11.51	10.09	1.27	13.72	12.32	17.25	1.38	20.91	1.39

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

### 030 High Cool

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)						CONDENSER ENTERING AIR TEMPERATURES °F (°C)											
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
CFM	EWB	Capacity MBtuh		Total Sys KW		Capacity MBtuh		Total Sys KW		Capacity MBtuh		Total Sys KW		Capacity MBtuh		Total Sys KW			
		Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens		
<b>875</b>	57 (13.9)	27.21	27.21	1.90	26.37	2.10	25.44	2.34	24.37	2.62	23.17	2.92	21.82	21.82	3.26				
	62 (16.7)	28.23	25.45	1.92	27.09	2.02	2.11	25.89	24.50	2.35	24.58	2.62	23.21	2.92	21.86	21.86	3.26		
	63* (17.2)	28.71	20.79	1.92	27.58	2.04	2.12	26.35	19.83	2.35	24.99	19.25	2.62	23.47	18.57	2.93	21.78	17.81	3.26
	67 (19.4)	30.91	21.57	1.95	29.69	2.12	2.14	28.37	20.62	2.38	26.94	20.05	2.65	25.35	19.42	2.96	23.60	18.72	3.29
<b>1000</b>	72 (13.9)	33.94	17.52	1.99	32.62	1.93	2.19	31.20	16.50	2.42	29.67	15.94	2.70	27.97	15.33	3.00	26.12	14.67	3.33
	57 (13.9)	28.45	28.45	1.95	27.55	2.14	2.14	26.54	26.54	2.38	25.40	25.40	2.66	24.13	24.13	2.97	22.71	22.71	3.30
	62 (16.7)	29.02	27.38	1.95	27.83	2.15	2.15	26.60	26.53	2.38	25.44	25.44	2.66	24.16	24.16	2.97	22.74	22.74	3.30
	63* (17.2)	29.44	22.19	1.96	28.24	2.13	2.15	26.93	21.21	2.39	25.49	20.61	2.66	23.90	19.93	2.96	22.15	19.17	3.29
<b>1125</b>	67 (19.4)	31.69	23.08	1.98	30.39	22.61	2.18	29.00	22.10	2.42	27.48	21.53	2.69	25.81	20.89	2.99	23.99	20.17	3.32
	72 (13.9)	34.81	18.55	2.03	33.40	18.03	2.22	31.90	17.49	2.46	30.27	16.91	2.73	28.50	16.28	3.04	26.55	15.60	3.37
	57 (13.9)	29.54	29.54	1.99	28.56	2.18	27.48	27.48	2.42	26.27	26.27	2.70	24.93	24.93	3.01	23.44	23.44	3.34	
	62 (16.7)	29.72	29.10	1.99	28.61	2.18	27.52	27.52	2.42	26.31	26.31	2.70	24.96	24.96	3.01	23.47	23.47	3.34	
<b>1607E</b>	63* (17.2)	30.03	23.53	1.99	28.76	2.07	2.19	27.39	22.53	2.42	25.88	21.92	2.69	24.24	21.24	2.99	22.45	20.46	3.32
	67 (19.4)	32.34	24.51	2.02	30.95	2.22	29.49	23.52	2.45	27.91	22.94	2.72	26.16	22.29	3.03	24.30	21.55	3.36	
	72 (13.9)	35.47	19.51	2.07	33.98	19.01	2.26	32.41	18.44	2.50	30.72	17.85	2.77	28.87	17.21	3.07	26.86	16.52	3.40

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

## 030 High Heat

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)			
		-10 (-23.3)		0 (-17.8)	
EDB	CFM	Capacity MBtuh		Capacity MBtuh	
		Total	Integ	Total	Integ
<b>65 (18.3)</b>	875	6.87	6.32	1.51	8.94
	1000	6.94	6.39	1.54	9.00
	1125	7.00	6.45	1.55	9.06
<b>70 (21.1)</b>	875	6.73	6.19	1.57	8.81
	1000	6.80	6.26	1.58	8.86
	1125	6.87	6.32	1.60	8.92
<b>75 (23.9)</b>	875	6.59	6.06	1.61	8.67
	1000	6.67	6.14	1.62	8.74
	1125	6.74	6.20	1.64	8.79

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)				60 (15.6)	
		30 (-1.1)		40 (4.4)		50 (10)	
EDB	CFM	Capacity MBtuh		Capacity MBtuh		Capacity MBtuh	
		Total	Integ	Total	Integ	Total	Integ
<b>65 (18.3)</b>	875	22.48	19.70	2.03	26.63	2.17	31.28
	1000	22.56	19.77	2.05	26.70	2.19	31.36
	1125	22.64	19.83	2.08	26.77	2.21	31.44
<b>70 (21.1)</b>	875	22.24	19.49	2.09	26.34	2.23	30.91
	1000	22.32	19.56	2.12	26.41	2.26	30.97
	1125	22.40	19.62	2.14	26.49	2.28	31.06
<b>75 (23.9)</b>	875	22.00	19.28	2.17	26.05	2.31	30.52
	1000	22.08	19.34	2.20	26.12	2.32	30.60
	1125	22.15	19.41	2.21	26.20	2.34	30.67

See Legend and Notes on Page 35.

**PERFORMANCE DATA (CONT)**

**030 Low Cool**

CONDENSER ENTERING AIR TEMPERATURES °F (°C)																					
EVAPORATOR AIR		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)				
CFM	EWB	Capacity MBtuh		Total Sys KW		Capacity MBtuh		Total Sys KW		Capacity MBtuh		Total Sys KW		Capacity MBtuh		Total Sys KW		Capacity MBtuh		Total Sys KW	
		Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens		
<b>655</b>	57	22.68	22.68	1.40	22.01	1.57	21.21	1.76	20.22	1.98	19.08	2.22	17.83	17.83	2.51						
	62	23.35	21.67	1.40	22.42	1.57	21.41	20.94	1.76	20.29	20.17	1.98	19.11	19.11	2.22	17.86	17.86	2.51			
	63*	(17.2)	23.75	17.64	1.40	22.85	17.28	1.57	21.82	16.83	1.76	20.56	16.29	1.97	19.12	15.62	2.22	17.54	14.94	2.51	
	67	(19.4)	25.55	18.28	1.39	24.57	17.94	1.56	23.50	17.52	1.75	22.28	17.03	1.97	20.83	16.45	2.21	19.17	15.76	2.49	
	72	(22.2)	28.05	14.77	1.38	26.99	14.38	1.55	25.83	13.95	1.75	24.56	13.48	1.96	23.12	12.96	2.20	21.47	12.37	2.48	
	57	(13.8)	23.95	1.42	23.20	1.59	22.35	1.78	21.33	21.33	2.00	20.14	20.14	2.24	18.79	18.79	2.52				
	62	(16.6)	24.15	23.69	1.42	23.24	1.59	22.39	1.78	21.36	21.36	2.00	20.17	20.17	2.24	18.82	18.82	2.52			
<b>775</b>	63*	(17.2)	24.46	19.16	1.42	23.47	18.83	1.59	22.36	18.41	1.78	21.07	17.85	2.00	19.58	17.17	2.25	17.93	16.46	2.53	
	67	(19.4)	26.31	19.90	1.41	25.25	19.58	1.58	24.08	19.20	1.77	22.78	18.73	1.99	21.29	18.13	2.24	19.59	17.42	2.51	
	72	(22.2)	28.86	15.87	1.41	27.73	15.47	1.58	26.50	15.02	1.77	25.14	14.54	1.98	23.62	14.00	2.23	21.89	13.40	2.50	
	57	(13.8)	24.54	24.54	1.43	23.76	23.76	1.60	22.87	1.79	21.83	21.83	2.01	20.61	20.61	2.25	19.23	19.23	2.53		
	62	(16.6)	25.08	23.76	1.43	23.80	23.80	1.60	22.91	1.79	21.86	21.86	2.01	20.64	20.64	2.25	19.25	19.25	2.53		
	63*	(17.2)	24.76	19.96	1.43	23.75	19.63	1.60	22.60	19.21	1.79	21.28	18.66	2.01	19.77	17.98	2.26	18.11	17.25	2.54	
	67	(19.4)	26.64	20.76	1.43	25.54	20.44	1.60	24.34	20.06	1.79	23.01	19.59	2.00	21.48	19.00	2.25	19.77	18.28	2.53	
		72	(22.2)	29.22	16.40	1.42	28.04	16.02	1.59	26.77	15.59	1.78	25.38	15.10	2.00	23.82	14.56	2.24	22.06	13.96	2.51

See Legend and Notes on Page 35.

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## PERFORMANCE DATA (CONT)

## 030 Low Heat

OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)																			
INDOOR AIR		0 (-17.8)		10 (-12.2)		20 (-6.7)		30 (-1.1)		40 (4.4)		50 (10)		60 (15.6)					
EDB	CFM	Capacity	Total	Capacity	Total	Capacity	Total	Capacity	Total	Capacity	Total	Capacity	Total	Capacity	Total				
		MBtuh	Sys	MBtuh	Sys	MBtuh	Sys	MBtuh	Sys	MBtuh	Sys	MBtuh	Sys	MBtuh	Sys				
Total	Integ	KW	Total	Integ	KW	Total	Integ	KW	Total	Integ	KW	Total	Integ	KW	Total				
65 (18.3)	655 775	5.49 5.13	5.05 1.47	1.47 8.16	8.07 7.49	7.41 1.52	1.51 11.49	10.35 10.42	1.55 1.57	13.66 13.73	11.97 12.03	1.62 1.64	18.53 18.61	1.69 1.72	22.40 22.44	1.73 1.74	27.08 27.17	1.75 1.77	
70 (21.1)	655 775	5.39 5.47	5.16 5.04	1.48 1.53	8.20 8.03	7.53 7.37	1.53 1.58	10.46 10.27	1.58 1.63	13.77 11.87	12.07 11.87	1.65 1.70	18.65 18.36	1.73 1.78	22.48 22.15	1.75 1.81	27.21 26.82	1.79 1.84	
75 (23.9)	655 775	5.28 5.38	5.08 4.95	1.53 1.59	8.08 7.91	7.42 7.26	1.58 1.64	10.30 11.17	1.64 1.70	13.58 13.36	11.90 11.70	1.71 1.77	18.40 18.03	1.79 1.84	22.19 21.78	1.81 1.85	26.86 26.40	1.84 1.88	
840	840	5.42	4.99	1.59	7.96	7.30	1.65	11.21	10.16	1.71	13.39	11.73	1.79	18.14	1.86	21.89	1.88	26.52	1.91

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

### 036 High Cool

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)																
		95 (35)			105 (40.5)			115 (46.1)			125 (51.7)							
CFM	EWB	Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh						
		Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens					
57	34.39	34.39	2.37	32.14	32.14	2.56	29.88	29.88	2.77	27.60	27.60	2.99	25.28	25.28	3.24	22.91	22.91	3.52
62	35.59	31.08	2.38	33.00	30.10	2.57	30.42	29.04	2.77	27.85	27.91	2.99	25.32	25.32	3.24	22.94	22.94	3.52
63*	36.08	25.33	2.39	33.45	24.43	2.57	30.80	23.49	2.77	28.15	22.54	2.99	25.46	21.55	3.24	22.75	20.51	3.52
67	38.94	26.37	2.41	36.08	25.44	2.60	33.23	24.49	2.80	30.37	23.50	3.02	27.47	22.48	3.26	24.56	21.42	3.54
72	42.65	21.59	2.44	39.53	20.70	2.63	36.41	19.78	2.83	33.27	18.83	3.05	30.12	17.84	3.29	26.94	16.81	3.57
57	35.97	35.97	2.42	33.58	33.58	2.60	31.18	31.18	2.81	28.75	28.75	3.03	26.29	26.29	3.28	23.78	23.78	3.56
62	36.62	33.39	2.42	33.94	32.28	2.61	31.27	31.27	2.81	28.80	28.80	3.03	26.33	26.33	3.28	23.81	23.81	3.56
63*	37.03	27.00	2.42	34.27	26.05	2.61	31.52	25.09	2.81	28.76	24.10	3.03	25.98	23.06	3.28	23.17	21.97	3.55
67	39.95	28.16	2.45	36.97	27.19	2.63	34.00	26.20	2.83	31.02	25.17	3.05	28.01	24.11	3.30	25.00	23.00	3.57
72	43.73	22.73	2.48	40.48	21.79	2.67	37.23	20.84	2.87	33.97	19.86	3.09	30.70	18.84	3.33	27.41	17.78	3.60
57	37.34	37.34	2.46	34.82	34.82	2.64	32.29	2.85	29.73	29.73	3.07	27.14	27.14	3.32	24.51	24.51	3.59	
62	37.64	35.05	2.46	34.88	34.88	2.65	32.34	2.85	29.78	29.78	3.07	27.18	27.18	3.32	24.54	24.54	3.59	
63*	37.79	28.60	2.46	34.93	27.62	2.64	32.09	26.62	2.84	29.25	25.59	3.06	26.38	24.50	3.31	23.51	23.35	3.58
67	40.75	29.88	2.49	37.68	28.88	2.67	34.61	27.85	2.87	31.53	26.79	3.09	28.45	25.67	3.33	25.35	24.49	3.60
72	44.59	23.79	2.52	41.23	22.83	2.71	37.88	21.85	2.90	34.52	20.84	3.12	31.15	19.79	3.36	27.76	18.70	3.63
	(13.9)																	

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

## 036 High Heat

INDOOR AIR				OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)			
EDB °F (°C)		CFM		Capacity MBtuh		Capacity MBtuh	
Total	Integ	Total	Integ	Total	Integ	Total	Integ
65 (18.3)	1050	9.02	8.29	1.99	12.22	11.25	14.60
	1200	9.14	8.41	2.01	12.39	11.40	14.79
	1350	9.28	8.54	2.02	12.54	11.54	14.96
70 (21.1)	1050	8.61	7.92	2.09	11.81	10.87	14.20
	1200	8.76	8.06	2.10	12.00	11.04	15.69
	1350	8.90	8.19	2.12	12.16	11.19	15.89
75 (23.9)	1050	8.18	7.52	2.18	11.37	10.46	15.02
	1200	8.33	7.66	2.19	11.56	10.64	15.24
	1350	8.46	7.78	2.21	11.72	10.78	15.43

INDOOR AIR				OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)			
EDB °F (°C)		CFM		Capacity MBtuh		Capacity MBtuh	
Total	Integ	Total	Integ	Total	Integ	Total	Integ
65 (18.3)	1050	24.91	21.83	2.46	29.96	2.57	35.89
	1200	25.17	22.05	2.43	30.31	2.53	36.38
	1350	25.39	22.25	2.42	30.60	2.51	36.78
70 (21.1)	1050	24.58	21.54	2.58	29.54	2.69	35.33
	1200	24.83	21.75	2.55	29.88	2.65	35.81
	1350	25.05	21.95	2.53	30.16	2.62	36.19
75 (23.9)	1050	24.24	21.24	2.70	29.12	2.81	34.79
	1200	24.50	21.46	2.67	29.45	2.77	35.25
	1350	24.70	21.64	2.65	29.73	2.74	35.63

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

### 036 Low Cool

EVAPORATOR AIR		75 (23.9)				85 (29.4)				CONDENSER ENTERING AIR TEMPERATURES °F (°C)				105 (40.6)				115 (46.1)				125 (51.7)																		
		Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens	Capacity MBtuh		Total Sys KW	Sens															
CFM	EWB	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens															
785	57 (13.8)	24.53	1.58	23.23	23.23	1.75	21.88	1.94	20.46	20.46	2.15	18.94	18.94	2.39	17.33	17.33	2.66	62 (16.6)	25.14	1.57	23.61	22.37	1.75	22.06	1.94	20.49	20.49	2.15	18.98	18.98	2.39	17.36	17.36	2.66						
	63* (17.2)	25.47	18.96	1.57	23.90	18.03	1.75	22.29	17.10	1.94	20.59	16.15	2.15	18.79	15.18	2.39	16.90	14.19	14.19	2.66	67 (19.4)	27.50	19.76	1.55	25.80	18.79	1.72	24.05	1.92	22.22	16.84	2.13	20.30	15.84	2.37	18.28	14.82	2.64		
	72 (22.2)	30.11	15.99	1.52	28.26	15.09	1.70	26.37	14.21	1.89	24.39	13.28	2.11	22.32	12.36	2.35	20.13	11.42	11.42	2.62	57 (13.8)	25.61	1.59	24.22	24.22	1.77	22.78	1.96	21.26	21.26	2.17	19.66	19.66	2.41	17.95	17.95	2.67			
	62 (16.6)	25.85	25.13	1.59	24.29	24.29	1.77	22.82	22.82	1.96	21.30	21.30	2.17	19.69	19.69	2.41	17.98	17.98	17.98	63* (17.2)	26.08	20.23	1.59	24.44	19.26	1.77	22.75	18.29	1.96	20.98	17.30	2.17	19.12	16.28	2.41	17.17	15.23	2.68		
	67 (19.4)	28.14	21.11	1.57	26.37	20.10	1.74	24.54	19.09	1.94	22.65	18.07	2.15	20.65	17.02	2.40	18.57	15.95	15.95	2.67	72 (22.2)	30.81	16.82	1.54	28.88	15.89	1.72	26.90	14.98	1.91	24.84	14.02	2.13	22.69	13.07	2.37	20.43	12.11	12.11	2.64
	57 (13.8)	26.49	1.61	25.03	25.03	1.78	23.51	1.97	21.91	21.91	2.19	20.23	20.23	2.42	18.44	18.44	18.44	62 (16.6)	26.53	1.61	25.07	25.07	1.78	23.54	1.97	21.95	21.95	2.18	20.26	20.26	2.42	18.47	18.47	18.47						
1010	63* (17.2)	26.53	21.40	1.61	24.84	20.39	1.79	23.09	19.38	1.98	21.28	18.33	2.19	19.38	17.26	2.43	17.40	16.12	16.12	2.70	67 (19.4)	28.64	22.35	1.59	26.80	21.33	1.76	24.92	20.27	1.96	22.96	19.18	2.17	20.93	18.08	2.42	18.80	16.93	16.93	
	72 (22.2)	31.34	17.57	1.56	29.34	16.61	1.74	27.29	15.67	1.93	25.17	14.69	2.15	22.96	13.71	2.39	20.64	12.73	12.73	2.66	See Legend and Notes on Page 35.																			

**607E**

## PERFORMANCE DATA (CONT)

## 036 Low Heat

OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)																						
INDOOR AIR		0 (-17.8)		10 (-12.2)		20 (-6.7)		30 (-1.1)		40 (4.4)		50 (10)		60 (15.6)								
EDB	CFM	Capacity MBtuh																				
		Total	Integ																			
<b>65</b> <b>(18.3)</b>	785	6.33	5.82	1.76	9.00	8.26	1.78	12.07	10.95	1.80	15.61	13.68	1.82	19.82	1.84	24.39	1.86	29.08	29.08	1.87		
900	6.46	5.95	1.77	9.17	8.41	1.78	12.30	11.15	1.80	15.89	13.92	1.80	20.50	20.50	1.83	24.73	1.83	29.54	29.54	1.82		
1010	6.60	6.07	1.79	9.34	8.57	1.80	12.50	11.33	1.80	16.13	14.13	1.80	20.74	20.74	1.82	25.01	25.01	1.80	29.90	29.90	1.79	
<b>70</b> <b>(21.1)</b>	785	5.88	5.41	1.84	8.54	7.84	1.86	11.62	10.54	1.88	15.14	13.27	1.90	19.18	19.18	1.93	24.04	24.04	1.96	28.64	28.64	1.97
900	6.03	5.55	1.86	8.74	8.02	1.87	11.86	10.76	1.88	15.44	13.53	1.89	19.59	19.59	1.90	24.36	24.36	1.92	29.09	29.09	1.92	
1010	6.16	5.67	1.87	8.90	8.17	1.88	12.06	10.94	1.89	15.68	13.74	1.89	19.96	19.96	1.90	24.64	24.64	1.90	29.44	29.44	1.89	
<b>75</b> <b>(23.9)</b>	785	5.38	4.95	1.92	8.06	7.40	1.95	11.13	10.10	1.97	14.65	12.84	1.99	18.65	18.65	2.02	23.65	23.65	2.07	28.19	28.19	2.08
900	5.53	5.09	1.94	8.25	7.58	1.96	11.38	10.32	1.97	14.94	13.09	1.98	19.03	19.03	2.00	23.99	23.99	2.02	28.63	28.63	2.02	
1010	5.66	5.21	1.96	8.41	7.72	1.97	11.58	10.50	1.98	15.19	13.31	1.98	19.33	19.33	1.99	24.27	24.27	2.00	28.98	28.98	1.99	

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

### 042 High Cool

EVAPORATOR AIR										CONDENSER ENTERING AIR TEMPERATURES °F (°C)										CONDENSER ENTERING AIR TEMPERATURES °F (°C)											
75 (23.9)					85 (29.4)					95 (35)					105 (40.5)					115 (46.1)					125 (51.7)						
CFM	EWB	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh					
		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens				
57 (13.9)	42.15	42.15	2.91	39.67	3.15	37.10	3.43	34.44	34.44	3.74	31.67	31.67	4.09	28.80	28.80	4.46	28.80	28.80	4.46	28.84	28.84	4.46	28.84	28.84	4.46	28.84	28.84	4.46			
62 (16.7)	43.66	37.75	2.91	40.79	36.21	3.16	37.82	34.59	3.43	34.81	32.83	3.74	31.72	31.72	4.09	28.84	28.84	4.46	28.84	28.84	4.46	28.84	28.84	4.46	28.84	28.84	4.46	28.84	28.84	4.46	
63* (17.2)	44.22	30.75	2.92	41.29	29.38	3.16	38.26	27.98	3.44	35.13	26.53	3.75	31.92	25.05	4.09	28.64	28.64	4.46	23.52	23.52	4.46	23.52	23.52	4.46	23.52	23.52	4.46	23.52	23.52	4.46	
67 (19.4)	47.58	31.92	2.93	44.40	30.51	3.17	41.12	29.05	3.45	37.74	27.56	3.76	34.27	26.03	4.11	30.73	30.73	4.46	24.46	24.46	4.48	24.46	24.46	4.48	24.46	24.46	4.48	24.46	24.46	4.48	
72 (13.9)	51.88	26.10	2.94	48.39	24.77	3.19	44.80	23.40	3.48	41.12	22.00	3.79	37.36	20.56	4.13	33.50	33.50	4.50	19.08	19.08	4.50	19.08	19.08	4.50	19.08	19.08	4.50	19.08	19.08	4.50	
57 (13.9)	44.00	44.00	2.96	41.36	3.20	38.61	3.48	35.76	35.76	3.79	32.82	32.82	4.14	29.77	29.77	4.51	29.77	29.77	4.51	29.77	29.77	4.51	29.77	29.77	4.51	29.77	29.77	4.51	29.77	29.77	4.51
62 (16.7)	44.86	40.47	2.96	41.88	38.78	3.20	38.84	36.91	3.48	35.83	35.83	3.79	32.87	32.87	4.14	29.81	29.81	4.51	29.81	29.81	4.51	29.81	29.81	4.51	29.81	29.81	4.51	29.81	29.81	4.51	
63* (17.2)	45.32	32.69	2.96	42.25	31.27	3.21	39.08	29.80	3.48	35.82	28.30	3.79	32.48	26.75	4.13	29.08	29.08	4.50	25.14	25.14	4.50	25.14	25.14	4.50	25.14	25.14	4.50	25.14	25.14	4.50	
67 (19.4)	48.76	34.00	2.97	45.44	32.52	3.22	42.00	31.00	3.50	38.47	29.45	3.81	34.87	27.85	4.15	31.20	31.20	4.52	26.20	26.20	4.52	26.20	26.20	4.52	26.20	26.20	4.52	26.20	26.20	4.52	
72 (13.9)	53.13	27.39	2.99	49.49	26.01	3.24	45.74	24.58	3.52	41.91	23.13	3.84	38.00	21.64	4.18	34.00	34.00	4.55	20.11	20.11	4.55	20.11	20.11	4.55	20.11	20.11	4.55	20.11	20.11	4.55	
57 (13.9)	45.59	45.59	3.00	42.79	42.79	3.25	39.89	39.89	3.53	36.89	36.89	3.84	33.78	33.78	4.18	30.57	30.57	4.56	30.57	30.57	4.56	30.57	30.57	4.56	30.57	30.57	4.56	30.57	30.57	4.56	
62 (16.7)	45.93	42.90	3.01	42.88	42.88	3.25	39.95	39.95	3.53	36.94	36.94	3.84	33.83	33.83	4.18	30.61	30.61	4.56	30.61	30.61	4.56	30.61	30.61	4.56	30.61	30.61	4.56	30.61	30.61	4.56	
63* (17.2)	46.20	34.55	3.01	43.02	33.07	3.25	39.73	31.55	3.53	36.36	29.98	3.84	32.93	28.36	4.18	29.42	29.42	4.55	26.65	26.65	4.55	26.65	26.65	4.55	26.65	26.65	4.55	26.65	26.65	4.55	
67 (19.4)	49.71	36.01	3.02	46.25	34.46	3.27	42.69	32.88	3.55	39.04	31.27	3.86	35.34	29.58	4.20	31.57	31.57	4.57	27.83	27.83	4.57	27.83	27.83	4.57	27.83	27.83	4.57	27.83	27.83	4.57	
72 (13.9)	54.13	28.61	3.04	50.36	27.18	3.29	46.48	25.71	3.57	42.52	24.21	3.88	38.49	22.67	4.22	34.37	34.37	4.59	21.10	21.10	4.59	21.10	21.10	4.59	21.10	21.10	4.59	21.10	21.10	4.59	

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

## 042 High Heat

INDOOR AIR				OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)			
				0 (-17.8)		10 (-12.2)	
EDB °F (°C)	CFM	Capacity MBtuh		Total Sys KW	Capacity MBtuh	Total Sys KW	Capacity MBtuh
		Total	Integ		Total	Integ	
65 (18.3)	1225	12.38	11.39	2.44	16.20	14.91	2.58
	1400	12.54	11.54	2.46	16.40	15.09	2.59
70 (21.1)	1575	12.70	11.68	2.48	16.57	15.25	2.60
	1225	12.00	11.04	2.55	15.81	14.55	2.69
75 (23.9)	1400	12.18	11.21	2.56	16.02	14.74	2.69
	1575	12.34	11.36	2.58	16.21	14.92	2.71
	1225	11.58	10.65	2.66	15.39	14.16	2.80
	1400	11.76	10.82	2.68	15.61	14.36	2.81
	1575	11.93	10.98	2.70	15.80	14.53	2.82

INDOOR AIR				OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)			
				40 (4.4)		50 (10)	
EDB °F (°C)	CFM	Capacity MBtuh		Total Sys KW	Capacity MBtuh	Total Sys KW	Capacity MBtuh
		Total	Integ		Total	Integ	
65 (18.3)	1225	30.72	26.92	3.00	36.92	3.17	44.40
	1400	31.04	27.20	2.98	37.35	3.14	44.96
70 (21.1)	1575	31.32	27.44	2.97	37.71	3.12	45.36
	1225	30.32	26.57	3.13	36.37	3.30	43.69
75 (23.9)	1400	30.63	26.84	3.11	36.81	3.27	44.28
	1575	30.91	27.08	3.10	37.16	3.25	44.67
	1225	29.92	26.21	3.27	35.85	3.45	43.00
	1400	30.23	26.49	3.24	36.26	3.40	43.56
	1575	30.49	26.72	3.23	36.61	3.38	43.98

See Legend and Notes on Page 35.

**PERFORMANCE DATA (CONT)**

**042 Low Cool**

EVAPORATOR AIR		75 (23.9)				85 (29.4)				CONDENSER ENTERING AIR TEMPERATURES °F (°C)			
CFM	EWB	Capacity MBtuh		Total Sys KW		Capacity MBtuh		Total Sys KW		Capacity MBtuh		Total Sys KW	
		Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens
<b>915</b>	57 (13.8)	29.52	29.52	1.89	29.22	2.01	28.70	2.13	27.93	2.27	26.88	2.41	25.49
	62 (16.6)	30.35	27.95	1.89	29.81	27.74	2.00	29.02	27.38	2.13	28.00	2.27	26.92
	63* (17.2)	30.73	22.60	1.89	30.17	22.37	2.00	29.34	22.03	2.13	28.23	2.27	26.79
	67 (19.4)	33.18	23.50	1.86	32.56	23.25	1.98	31.66	22.90	2.10	30.47	22.48	28.92
	72 (22.2)	36.31	19.06	1.83	35.62	18.72	1.95	34.66	18.28	2.07	33.38	17.76	2.20
	57 (13.8)	30.80	30.80	1.92	30.44	30.44	2.03	29.85	29.85	2.15	29.01	29.01	2.29
<b>1050</b>	62 (16.6)	31.19	29.95	1.92	30.63	29.64	2.03	29.90	29.90	2.15	29.06	29.06	2.28
	63* (17.2)	31.46	24.07	1.91	30.84	23.84	2.03	29.94	23.52	2.15	28.76	23.12	2.29
	67 (19.4)	33.99	25.06	1.89	33.28	24.83	2.00	32.32	24.48	2.13	31.03	24.06	2.26
	72 (22.2)	37.17	20.01	1.86	36.41	19.66	1.97	35.37	19.22	2.09	34.01	18.69	2.23
	57 (13.8)	31.85	31.85	1.94	31.44	31.44	2.05	30.79	30.79	2.17	29.88	29.88	2.30
	62 (16.6)	31.93	31.93	1.94	31.49	31.49	2.05	30.84	30.84	2.17	29.92	29.92	2.30
<b>1180</b>	63* (17.2)	32.02	25.41	1.94	31.34	25.20	2.06	30.40	24.88	2.18	29.15	24.46	2.31
	67 (19.4)	34.59	26.49	1.92	33.84	26.29	2.03	32.80	25.94	2.15	31.47	25.52	2.29
	72 (22.2)	37.82	20.86	1.89	37.00	20.51	2.00	35.90	20.07	2.12	34.47	19.54	2.25

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

## 042 Low Heat

		OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)																							
		0 (-17.8)				10 (-12.2)				20 (-6.7)				30 (-1.1)				40 (4.4)				50 (10)			
EDB	CFM	Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh			
		Total	Integ	Total	Sys	Total	Sys	Total	Integ	Total	Sys	Total	Integ												
<b>65</b> <b>(18.3)</b>	915	9.04	8.31	1.92	12.13	11.13	1.98	15.70	14.24	2.05	20.29	17.77	2.15	24.62	2.22	29.49	2.29	35.11	35.11	35.11	35.11	35.11	35.11	2.37	
	1050	9.18	8.45	1.94	12.35	11.33	1.99	15.98	14.50	2.05	20.62	18.07	2.14	24.92	2.19	29.90	2.26	35.67	35.67	35.67	35.67	35.67	35.67	2.32	
<b>70</b> <b>(21.1)</b>	915	8.66	7.97	2.00	11.79	10.82	2.07	15.35	13.93	2.14	19.49	17.08	2.23	24.31	2.33	29.09	2.40	34.59	34.59	34.59	34.59	34.59	34.59	2.48	
	1050	8.83	8.12	2.02	11.99	11.01	2.08	15.61	14.15	2.14	19.90	17.44	2.22	24.61	2.30	29.49	2.49	35.14	35.14	35.14	35.14	35.14	35.14	2.43	
<b>75</b> <b>(23.9)</b>	915	8.28	8.26	2.04	12.16	11.16	2.09	15.82	14.35	2.15	20.46	17.93	2.23	24.86	2.29	29.82	2.34	35.58	35.58	35.58	35.58	35.58	35.58	2.40	
	1050	8.42	7.58	2.08	11.35	10.42	2.16	14.93	13.54	2.24	19.01	16.65	2.33	23.97	2.44	28.67	2.52	34.06	34.06	34.06	34.06	34.06	34.06	2.60	
	1180	8.57	7.89	2.13	11.77	10.80	2.19	15.42	13.98	2.25	19.63	17.20	2.32	24.54	2.40	29.40	2.45	35.05	35.05	35.05	35.05	35.05	35.05	2.51	

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

### 048 High Cool

EVAPORATOR AIR				CONDENSER ENTERING AIR TEMPERATURES °F (°C)										
		75 (23.9)		85 (29.4)		95 (35)		105 (40.5)		115 (46.1)		125 (51.7)		
CFM	EWB	Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		
		Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	
57 (13.9)	47.11	2.97	44.71	3.38	42.15	42.15	3.86	39.43	39.43	4.41	36.54	5.03	33.45	5.72
62 (16.7)	48.61	2.98	45.76	3.39	42.79	40.20	3.87	39.69	38.37	4.41	36.59	5.03	33.49	5.72
63* (17.2)	49.20	2.98	46.30	3.40	43.23	32.41	3.87	40.00	30.92	4.41	36.61	5.03	33.04	27.72
67 (19.4)	53.05	36.63	3.01	49.87	35.20	3.42	46.54	33.72	3.90	43.04	32.17	4.44	39.37	5.05
72 (13.9)	57.95	29.84	3.04	54.46	28.46	3.45	50.80	27.03	3.93	46.99	25.54	4.47	42.99	24.00
57 (13.9)	49.16	49.16	3.03	46.58	46.58	3.45	43.82	43.82	3.93	40.91	40.91	4.48	37.82	5.10
62 (16.7)	49.94	46.53	3.04	47.00	44.81	3.45	43.92	43.92	3.93	40.98	40.98	4.48	37.87	5.10
63* (17.2)	50.40	37.46	3.04	47.35	36.04	3.46	44.12	34.55	3.93	40.73	33.00	4.48	37.20	5.09
67 (19.4)	54.35	39.05	3.07	51.01	37.55	3.48	47.50	36.00	3.96	43.83	34.41	4.50	40.01	32.71
72 (13.9)	59.33	31.33	3.10	55.66	29.89	3.51	51.82	28.40	3.99	47.83	26.86	4.53	43.65	25.25
57 (13.9)	50.93	50.93	3.10	48.17	48.17	3.51	45.25	45.25	4.00	42.16	42.16	4.54	38.88	5.16
62 (16.7)	51.07	51.07	3.10	48.26	48.26	3.51	45.32	45.32	4.00	42.22	42.22	4.54	38.94	5.16
63* (17.2)	51.36	39.62	3.10	48.17	38.15	3.51	44.83	36.60	3.99	41.31	34.98	4.54	37.65	5.15
67 (19.4)	55.37	41.38	3.12	51.89	39.81	3.54	48.24	38.21	4.02	44.44	36.52	4.56	40.49	34.75
72 (13.9)	60.42	32.73	3.15	56.58	31.25	3.57	52.59	29.71	4.05	48.47	28.11	4.59	44.14	26.45

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

## 048 High Heat

INDOOR AIR				OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)			
				0 (-17.8)		10 (-12.2)	
EDB °F (°C)	CFM	Capacity MBtuh		Total Sys KW	Capacity MBtuh	Total Sys KW	Capacity MBtuh
		Total	Integ		Total	Integ	
65 (18.3)	1400	14.53	13.37	2.55	19.50	2.69	25.15
	1600	14.79	13.60	2.58	19.77	2.71	25.42
70 (21.1)	1800	15.01	13.81	2.62	20.02	2.74	25.66
	1400	14.00	12.88	2.66	18.97	2.81	24.76
75 (23.9)	1600	14.26	13.12	2.69	19.26	2.72	25.08
	1800	14.49	13.33	2.72	19.53	2.79	25.33
75 (23.9)	1400	13.37	12.30	2.76	18.38	2.93	23.58
	1600	13.63	12.54	2.80	18.68	2.95	23.94
75 (23.9)	1800	13.87	12.76	2.83	18.95	2.98	24.26

INDOOR AIR				OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)			
				40 (4.4)		50 (10)	
EDB °F (°C)	CFM	Capacity MBtuh		Total Sys KW	Capacity MBtuh	Total Sys KW	Capacity MBtuh
		Total	Integ		Total	Integ	
65 (18.3)	1400	35.53	31.13	3.21	41.86	3.43	49.38
	1600	35.92	31.48	3.20	42.35	3.40	49.83
70 (21.1)	1800	36.26	31.77	3.20	42.74	3.40	49.29
	1400	35.05	30.71	3.36	41.24	3.58	48.65
75 (23.9)	1600	35.46	31.07	3.34	41.74	3.55	49.26
	1800	35.80	31.37	3.34	42.14	3.55	49.00
75 (23.9)	1400	34.59	30.31	3.52	40.64	3.75	47.91
	1600	34.97	30.64	3.50	41.13	3.71	48.49
75 (23.9)	1800	35.31	30.94	3.50	41.53	3.70	48.62

See Legend and Notes on Page 35.

**PERFORMANCE DATA (CONT)**

**048 Low Cool**

EVAPORATOR AIR										CONDENSER ENTERING AIR TEMPERATURES °F (°C)										
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)			
CFM	EWB	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	
		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		Total	Sens		
1050	57 (13.8)	33.27	33.27	2.13	32.91	2.29	32.31	2.44	31.43	2.61	30.20	2.77	28.53	2.85	28.53	2.94				
	62 (16.6)	34.14	31.57	2.12	33.49	31.34	2.28	32.60	30.95	2.44	31.48	31.48	2.61	30.25	2.77	28.57	28.57	2.94		
	63* (17.2)	34.56	25.44	2.12	33.88	25.18	2.28	32.92	24.83	2.44	31.64	24.39	2.61	29.96	23.82	2.78	27.79	23.09	2.95	
	67 (19.4)	37.33	26.48	2.10	36.59	26.21	2.26	35.55	25.84	2.42	34.17	25.38	2.59	32.36	24.80	2.76	30.02	24.05	2.93	
	72 (22.2)	40.83	21.39	2.07	40.03	21.00	2.23	38.91	20.52	2.40	37.44	19.93	2.57	35.50	19.21	2.74	33.03	18.36	2.91	
	57 (13.8)	34.64	34.64	2.17	34.21	34.21	2.32	33.54	33.54	2.48	32.56	32.56	2.64	31.21	2.80	29.39	29.39	2.97		
	62 (16.6)	35.04	33.73	2.16	34.34	34.34	2.32	33.59	33.59	2.48	32.61	32.61	2.64	31.26	2.80	29.43	29.43	2.97		
1200	63* (17.2)	35.33	27.01	2.16	34.58	26.78	2.32	33.54	26.45	2.48	32.17	26.02	2.64	30.39	25.43	2.81	28.12	24.64	2.98	
	67 (19.4)	38.18	28.17	2.14	37.34	27.92	2.30	36.22	27.58	2.46	34.73	27.11	2.62	32.82	26.52	2.79	30.37	25.73	2.96	
	72 (22.2)	41.74	22.41	2.11	40.84	22.01	2.27	39.64	21.52	2.43	38.06	20.93	2.60	36.01	20.21	2.77	33.40	19.33	2.94	
	57 (13.8)	35.51	35.51	2.19	35.04	35.04	2.35	34.31	34.31	2.50	33.27	33.27	2.66	31.84	2.83	29.92	29.92	2.99		
	62 (16.6)	35.63	35.63	2.19	35.10	35.10	2.35	34.37	34.37	2.50	33.32	33.32	2.66	31.88	2.82	29.95	29.95	2.99		
	63* (17.2)	35.78	28.12	2.19	34.98	27.92	2.35	33.90	27.57	2.51	32.48	27.13	2.67	30.64	26.54	2.84	28.32	25.67	3.00	
	67 (19.4)	38.66	29.36	2.17	37.79	29.14	2.33	36.60	28.77	2.49	35.06	28.32	2.65	33.08	27.71	2.82	30.57	26.86	2.99	
1310	72 (22.2)	42.26	23.11	2.14	41.32	22.71	2.30	40.06	22.22	2.46	38.41	21.62	2.63	36.28	20.89	2.80	33.60	20.03	2.97	

See Legend and Notes on Page 35.

**607E**

## PERFORMANCE DATA (CONT)

## 048 Low Heat

		OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)																				
		0 (-17.8)			10 (-12.2)			20 (-6.7)			30 (-1.1)			40 (4.4)			50 (10)			60 (15.6)		
EDB	CFM	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW	Capacity MBtuh		Total Sys KW
		Total	Integ		Total	Integ		Total	Integ		Total	Integ		Total	Integ		Total	Integ		Total	Integ	
<b>65</b> <b>(18.3)</b>	1050	11.11	10.22	2.08	14.97	13.74	2.18	19.32	17.52	2.28	24.76	21.69	2.40	29.74	29.74	2.50	35.43	35.43	2.60	41.98	41.98	2.72
<b>65</b> <b>(18.3)</b>	1200	11.33	10.43	2.10	15.24	13.98	2.19	19.64	17.81	2.29	25.09	21.98	2.39	30.12	30.12	2.47	35.92	35.92	2.56	42.67	42.67	2.66
<b>70</b> <b>(21.1)</b>	1310	11.50	10.58	2.12	15.42	14.15	2.21	19.86	18.01	2.30	25.30	22.17	2.40	30.37	30.37	2.47	36.23	36.23	2.55	43.10	43.10	2.64
<b>70</b> <b>(21.1)</b>	1050	10.58	9.73	2.18	14.45	13.26	2.29	18.80	17.05	2.39	23.87	20.91	2.51	29.36	29.36	2.63	34.95	34.95	2.74	41.35	41.35	2.86
<b>70</b> <b>(21.1)</b>	1200	10.82	9.96	2.21	14.75	13.53	2.30	19.14	17.36	2.40	24.71	21.66	2.52	29.73	29.73	2.60	35.44	35.44	2.70	42.01	42.01	2.80
<b>75</b> <b>(23.9)</b>	1310	10.99	10.11	2.23	14.94	13.71	2.32	19.37	17.56	2.41	24.94	21.85	2.52	29.99	29.99	2.60	35.74	35.74	2.68	42.43	42.43	2.78
<b>75</b> <b>(23.9)</b>	1050	9.98	9.18	2.28	13.89	12.74	2.39	18.25	16.55	2.51	23.17	20.30	2.63	28.97	28.97	2.77	34.46	34.46	2.84	40.76	40.76	3.01
<b>75</b> <b>(23.9)</b>	1200	10.23	9.42	2.31	14.18	13.01	2.41	18.59	16.86	2.52	23.59	20.67	2.62	29.34	29.34	2.74	34.94	34.94	2.84	41.38	41.38	2.95
<b>75</b> <b>(23.9)</b>	1310	10.39	9.56	2.33	14.37	13.19	2.43	18.82	17.06	2.53	23.90	20.94	2.63	29.58	29.58	2.73	35.25	35.25	2.82	41.77	41.77	2.92

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

### 060 High Cool

EVAPORATOR AIR		75 (23.9)				85 (29.4)				CONDENSER ENTERING AIR TEMPERATURES °F (°C)					
		Capacity MBtuh		Total Sys KW	Total Capacity MBtuh	Total Sys KW	Total Capacity MBtuh	Total Sys KW	Total Capacity MBtuh	Total Sys KW	Total Capacity MBtuh	Total Sys KW	Total Capacity MBtuh	Total Sys KW	
CFM	EWB	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens		
57 (13.9)	57.44	57.44	3.93	54.77	4.30	51.93	4.72	48.86	48.86	5.20	45.50	5.74	41.82	6.35	
62 (16.7)	58.92	53.63	3.94	55.72	51.56	4.30	52.40	49.33	4.72	48.95	5.20	45.56	5.74	41.87	6.35
63* (17.2)	59.72	43.48	3.95	56.43	41.68	4.31	53.00	39.81	4.72	49.26	5.20	45.27	5.74	40.98	6.33
67 (19.4)	64.33	45.27	3.96	60.76	43.42	4.33	57.00	41.50	4.75	52.98	5.23	48.64	37.41	5.78	44.00
72 (13.9)	70.52	36.52	3.98	66.58	34.82	4.35	62.44	33.03	4.78	58.02	31.15	5.27	53.26	29.17	5.82
57 (13.9)	59.81	59.81	4.03	56.94	56.94	4.40	53.87	53.87	4.82	50.58	5.30	46.95	5.84	43.01	6.45
62 (16.7)	60.44	57.39	4.04	57.14	57.14	4.40	53.98	53.98	4.82	50.65	5.30	47.02	5.85	43.07	6.45
63* (17.2)	60.98	46.34	4.04	57.52	44.46	4.40	53.86	42.50	4.82	50.02	40.45	5.29	45.85	38.28	5.83
67 (19.4)	65.66	48.34	4.06	61.92	46.40	4.42	57.95	44.40	4.84	53.76	42.29	5.33	49.23	40.05	5.87
72 (13.9)	71.93	38.45	4.07	67.84	36.64	4.44	63.49	34.76	4.87	58.87	32.81	5.36	53.87	30.76	5.91
57 (13.9)	61.83	41.13	58.77	4.49	55.50	4.91	51.98	5.40	48.14	48.14	5.94	43.96	37.68	6.47	
62 (16.7)	61.94	61.94	4.13	58.88	4.49	55.59	4.91	52.06	52.06	5.40	48.20	5.95	44.01	44.01	6.55
63* (17.2)	61.94	49.07	4.13	58.35	47.09	4.49	54.57	45.04	4.91	50.55	42.88	5.39	46.29	40.56	5.92
67 (19.4)	66.67	51.29	4.15	62.78	49.25	4.51	58.68	47.14	4.93	54.31	44.93	5.42	49.66	42.54	5.96
72 (13.9)	73.03	40.23	4.16	68.77	38.36	4.53	64.27	36.42	4.96	59.45	34.41	5.45	54.27	32.28	6.00

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

## 060 High Heat

INDOOR AIR				OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)			
EDB °F (°C)		CFM		Capacity MBtuh		Capacity MBtuh	
Total	Integ	Total	Integ	Total	Integ	Total	Integ
65 (18.3)	1750	17.80	16.38	3.09	23.12	21.27	3.24
	2000	18.09	16.65	3.14	23.46	21.58	3.29
	2250	18.38	16.91	3.20	23.78	21.88	3.34
70 (21.1)	1750	17.37	15.98	3.23	22.62	20.81	3.39
	2000	17.67	16.26	3.28	22.97	21.14	3.43
	2250	17.95	16.52	3.34	23.30	21.44	3.48
75 (23.9)	1750	16.92	15.57	3.38	22.13	20.37	3.54
	2000	17.23	15.85	3.43	22.48	20.68	3.58
	2250	17.51	16.11	3.49	22.80	20.98	3.63

INDOOR AIR				OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)			
EDB °F (°C)		CFM		Capacity MBtuh		Capacity MBtuh	
Total	Integ	Total	Integ	Total	Integ	Total	Integ
65 (18.3)	1750	42.61	37.33	3.90	50.89	4.17	60.88
	2000	43.12	37.78	3.91	51.52	4.17	61.59
	2250	43.57	38.18	3.94	52.05	4.20	62.16
70 (21.1)	1750	42.05	36.84	4.06	50.17	4.34	59.99
	2000	42.55	37.28	4.07	50.79	4.34	60.73
	2250	42.99	37.67	4.10	51.31	4.37	61.29
75 (23.9)	1750	41.51	36.37	4.23	49.47	4.52	59.13
	2000	41.99	36.79	4.24	50.07	4.52	59.86
	2250	42.42	37.16	4.27	50.58	4.54	60.44

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

### 060 Low Cool

		CONDENSER ENTERING AIR TEMPERATURES °F (°C)									
EVAPORATOR AIR CFM	EWB	75 (23.9)		85 (29.4)		95 (35)		105 (40.6)		115 (46.1)	
		Total Capacity MBtuh	Sys KW	Total Capacity MBtuh	Sys KW	Total Capacity MBtuh	Sys KW	Total Capacity MBtuh	Sys KW	Total Capacity MBtuh	Sys KW
1200	57 (13.8)	40.13	2.50	39.38	2.95	38.39	3.46	37.11	4.05	35.44	4.74
	62 (16.6)	41.27	2.49	40.14	2.94	38.78	3.46	37.18	4.05	35.49	4.74
	63* (17.2)	41.89	2.49	40.71	2.98	39.27	3.45	37.48	4.05	35.23	4.74
	67 (19.4)	45.24	32.06	2.46	43.95	31.22	2.91	42.39	30.32	3.43	40.45
	72 (22.2)	49.70	26.10	2.42	48.29	25.23	2.87	46.59	24.29	3.39	44.50
	57 (13.8)	42.19	2.53	41.32	2.98	40.21	40.21	3.49	38.78	4.09	36.94
1400	62 (16.6)	42.61	41.01	2.53	41.43	41.43	2.98	40.30	40.30	3.49	38.84
	63* (17.2)	43.05	33.17	2.53	41.75	32.33	2.98	40.19	31.42	3.49	38.27
	67 (19.4)	46.48	34.60	2.50	45.07	33.74	2.95	43.37	32.81	3.47	41.30
	72 (22.2)	51.04	27.68	2.46	49.50	26.79	2.91	47.65	25.81	3.43	45.42
	57 (13.8)	43.47	43.47	2.55	42.52	42.52	3.00	41.32	41.32	3.52	39.79
	62 (16.6)	43.55	43.55	2.55	42.59	42.59	3.00	41.38	41.38	3.52	39.85
1545	63* (17.2)	43.71	34.82	2.55	42.35	33.95	3.01	40.72	33.01	3.53	38.74
	67 (19.4)	47.19	36.38	2.52	45.70	35.50	2.98	43.93	34.53	3.50	41.78
	72 (22.2)	51.81	28.77	2.48	50.18	27.86	2.94	48.25	26.87	3.46	45.91

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

## 060 Low Heat

OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)																				
INDOOR AIR		0 (-17.8)		10 (-12.2)		20 (-6.7)		30 (-1.1)		40 (4.4)		50 (10)		60 (15.6)						
EDB	CFM	Capacity	Total	Capacity	Total	Capacity	Total	Capacity	Total	Capacity	Total	Capacity	Total	Capacity	Total					
		MBtuh	Sys	MBtuh	Sys	MBtuh	Sys	MBtuh	Sys	MBtuh	Sys	MBtuh	Sys	MBtuh	Sys					
Total	Integ	Total	Integ	Total	Integ	Total	Integ	Total	Integ	Total	Integ	Total	Integ	Total	Integ					
<b>65</b> <b>(18.3)</b>	1200	13.75	12.65	2.74	18.28	16.78	2.81	23.27	21.10	2.88	25.83	2.99	34.90	3.04	40.90	3.11	47.80	47.80	3.19	
	1400	14.02	12.90	2.76	18.61	17.08	2.81	23.65	21.45	2.87	29.87	26.17	2.95	35.33	2.98	41.47	3.03	48.64	48.64	3.09
	1545	14.20	13.07	2.77	18.83	17.29	2.82	23.92	21.69	2.87	30.11	26.38	2.94	35.61	2.96	41.82	2.99	49.14	49.14	3.04
<b>70</b> <b>(21.1)</b>	1200	13.07	12.02	2.88	17.65	16.20	2.96	22.63	20.53	3.03	28.19	24.70	3.11	34.46	3.21	40.36	3.28	47.09	47.09	3.37
	1400	13.34	12.27	2.90	17.97	16.49	2.96	23.03	20.88	3.02	28.69	25.14	3.08	34.88	3.15	40.92	3.20	47.90	47.90	3.26
	1545	13.52	12.44	2.92	18.18	16.69	2.97	23.29	21.12	3.02	29.10	25.50	3.07	35.15	3.12	41.27	3.16	48.38	48.38	3.21
<b>75</b> <b>(23.9)</b>	1200	12.34	11.35	3.02	16.96	15.56	3.10	21.96	19.92	3.18	27.47	24.07	3.27	34.00	3.39	39.82	3.46	46.37	46.37	3.55
	1400	12.59	11.59	3.04	17.28	15.86	3.11	22.36	20.28	3.17	27.95	24.49	3.23	34.45	3.33	40.38	3.38	47.15	47.15	3.44
	1545	12.78	11.76	3.06	17.50	16.06	3.12	22.62	20.52	3.17	28.27	24.77	3.22	34.71	3.30	40.72	3.34	47.63	47.63	3.39

See Legend and Notes on Page 35.

## PERFORMANCE DATA (CONT)

\* At 75°F (24°C) entering dry bulb – Tennessee Valley Authority (TVA) rating conditions; all others at 80°F (27°C) dry bulb.

### LEGEND

BF— Bypass Factor  
 edb— Entering Dry-Bulb  
 Ewb— Entering Wet-Bulb  
 kW— Total Unit Power Input  
 SHC— Sensible Heat Capacity (1000 Btuh)  
 TC— Total Capacity (1000 Btuh) (net)  
 rh—Relative Humidity

### COOLING NOTES:

1. Ratings are net; they account for the effects of the evaporator–fan motor power and heat.
2. Direct interpolation is permissible. Do not extrapolate.
3. The following formulas may be used:

$$t_{edb} = t_{edb} - \frac{\text{Sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

$$t_{lwb} = \frac{\text{Wet-bulb temperature corresponding to enthalpy air leaving evaporator coil (}t_{lwb})}{\text{enthalpy of air leaving evaporator coil (}h_{lwb})}$$

Where:  $h_{lwb}$  = Enthalpy of air entering evaporator coil

4. The SHC is based on 805 F (26.6°C) edb temperature of air entering evaporator coil. Below 80°F (26.6°C) edb, subtract (corr factor x cfm) from SHC.

Above 80°F (26.6°C) edb, add (corr factor x cfm) to SHC.

Correction Factor =  $1.10 \times (1 + BF) \times (edb - 80)$ .

5. Integrated capacity is maximum (instantaneous) capacity less the effect of frost on the outdoor coil and the heat required to defrost it.

**Multiplication Factors**

HEATER KW RATING		VOLTAGE DISTRIBUTION V/3/60				MULTIPLICATION FACTOR			
	240	200	208	230	240	0.69	0.75	0.92	1.00

**Dry Coil Air Delivery\* - Horizontal and Downflow Discharge - Unit 607E--(A,C)24-60 208/230 VAC Models**

UNIT	MOTOR SPEED	WIRE COLOR	EXTERNAL STATIC PRESSURE (IN. W.C.)							
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	
607E--C24	Low <sup>1</sup>	Blue	CFM BHP	777 0.09	692 0.10	583 0.11	465 0.12	318 0.12	---	---
		Pink	CFM BHP	877 0.12	779 0.12	698 0.13	598 0.14	410 0.15	---	---
		Red	CFM BHP	904 0.16	841 0.17	769 0.18	705 0.19	522 0.19	372 0.20	---
	Med-High	Orange	CFM BHP	1229 0.28	1171 0.30	1105 0.31	1049 0.32	980 0.33	838 0.33	775 0.34
		Black	CFM BHP	1291 0.31	1206 0.32	1142 0.33	1081 0.34	1017 0.35	951 0.36	888 0.36
		Blue	CFM BHP	777 0.09	692 0.10	583 0.11	465 0.12	318 0.12	---	---
	Med-Low <sup>1</sup>	Pink	CFM BHP	831 0.11	765 0.12	670 0.13	586 0.13	466 0.14	299 0.14	---
		Red	CFM BHP	1139 0.22	1069 0.23	1012 0.24	937 0.25	870 0.25	786 0.26	724 0.26
		Orange	CFM BHP	1229 0.28	1171 0.30	1105 0.31	1049 0.32	980 0.33	838 0.33	775 0.34
607E--C30	High	Black	CFM BHP	1531 0.53	1460 0.52	1382 0.50	1301 0.48	1209 0.46	1114 0.44	1003 0.42
		Blue	CFM BHP	1097 0.12	971 0.11	823 0.10	747 0.11	669 0.12	558 0.13	490 0.13
		Pink	CFM BHP	934 0.10	864 0.10	810 0.11	745 0.12	698 0.13	571 0.14	525 0.14
	Med-Low <sup>1</sup>	Red	CFM BHP	1251 0.19	1198 0.21	1149 0.21	1066 0.23	1017 0.24	970 0.25	932 0.26
		Orange	CFM BHP	1451 0.29	1372 0.30	1327 0.31	1287 0.32	1249 0.33	1212 0.35	1168 0.36
		Black	CFM BHP	1466 0.30	1423 0.31	1384 0.33	1343 0.34	1263 0.35	1183 0.36	1106 0.37

**Dry Coil Air Delivery\* - Horizontal and Downflow Discharge (CONT)- Unit 607E---(A,C)24-60 208/230 VAC Model**

UNIT	MOTOR SPEED	WIRE COLOR	EXTERNAL STATIC PRESSURE (IN. W.C.)							
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	
607E-A42	Low	Blue	CFM BHP	1097 0.12	971 0.11	823 0.10	747 0.11	669 0.12	636 0.13	558 0.13
		Pink	CFM BHP	1076 0.13	1026 0.14	972 0.15	918 0.15	872 0.17	827 0.18	771 0.18
	Medium	Red	CFM BHP	1251 0.19	1198 0.21	1149 0.21	1104 0.23	1066 0.23	1017 0.24	970 0.25
		Orange	CFM BHP	1451 0.29	1415 0.30	1372 0.31	1327 0.32	1287 0.32	1249 0.35	1212 0.36
	High	Black	CFM BHP	1633 0.41	1590 0.43	1552 0.44	1518 0.45	1483 0.47	1444 0.47	1406 0.49
		Low <sup>1</sup>	Blue	CFM BHP	1271 0.19	1229 0.20	1177 0.21	1121 0.23	1066 0.24	1027 0.25
	Med-Low	Pink	CFM BHP	1340 0.22	1299 0.23	1240 0.24	1191 0.25	1139 0.26	1091 0.26	1050 0.27
		Medium <sup>2</sup>	Red	CFM BHP	1686 0.42	1650 0.44	1617 0.45	1576 0.46	1544 0.48	1503 0.49
	Med-High	Orange	CFM BHP	1854 0.56	1837 0.57	1781 0.60	1784 0.59	1720 0.62	1698 0.63	1655 0.64
		High	Black	CFM BHP	1934 0.59	1900 0.61	1855 0.62	1815 0.64	1778 0.65	1737 0.67
607E-A60	Low	Blue	CFM BHP	1182 0.21	1137 0.22	1102 0.23	1053 0.24	1012 0.25	966 0.26	920 0.27
		Pink	CFM BHP	1454 0.34	1405 0.35	1364 0.36	1316 0.37	1281 0.38	1234 0.40	1198 0.40
	Med-Low <sup>1</sup>	Red	CFM BHP	1818 0.56	1770 0.57	1731 0.59	1693 0.60	1657 0.62	1621 0.63	1579 0.64
		Med-High	Orange	CFM BHP	1881 0.67	1849 0.69	1818 0.70	1793 0.71	1763 0.72	1729 0.73
	High	Black	CFM BHP	2138 0.98	2084 0.95	2025 0.93	1967 0.90	1893 0.86	1829 0.84	1754 0.80

\* Air delivery values are without air filter and are for dry coil (See 607E--A Wet Coil Pressure Drop table).

<sup>1</sup> Factory-shipped low stage cooling speed.

<sup>2</sup> Factory-shipped high stage cooling speed.

Note: Ducted field-supplied air filter pressure drop and wet coil pressure drop to obtain external static pressure available for ducting. Speeds (Dehum. Mode is High Stage Only, 208/230 VAC Models Only).

## Dry Coil Air Delivery\* - Horizontal and Downflow Discharge - Unit 607E---A36-60 460VAC Models

UNIT	MOTOR SPEED	WIRE COLOR	EXTERNAL STATIC PRESSURE (IN. W.C.)							
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
607E-A36	Low <sup>1</sup>	Blue	CFM BHP	934 0.10	864 0.11	810 0.12	745 0.13	698 0.14	649 0.15	571 0.16
	Med-Low	Pink	CFM BHP	1076 0.13	1026 0.14	972 0.15	918 0.15	872 0.17	827 0.18	771 0.20
	Medium	Red	CFM BHP	1213 0.16	1169 0.17	1110 0.17	1065 0.19	1016 0.20	964 0.21	923 0.22
	Med-High <sup>2</sup>	Orange	CFM BHP	1251 0.19	1198 0.21	1149 0.21	1104 0.23	1066 0.24	1017 0.25	970 0.26
	High	Black	CFM BHP	1451 0.29	1372 0.30	1327 0.31	1287 0.32	1249 0.35	1212 0.36	1168 0.37
	Low <sup>1</sup>	Blue	CFM BHP	1076 0.13	1026 0.14	972 0.15	918 0.15	872 0.17	827 0.18	771 0.20
607E-A42	Med-Low	Pink	CFM BHP	1213 0.16	1169 0.17	1110 0.19	1065 0.20	1016 0.21	964 0.22	923 0.23
	Medium	Red	CFM BHP	1251 0.19	1198 0.21	1149 0.21	1104 0.23	1066 0.24	1017 0.25	970 0.26
	Med-High <sup>2</sup>	Orange	CFM BHP	1451 0.29	1372 0.30	1327 0.31	1287 0.32	1249 0.35	1212 0.36	1168 0.37
	High	Black	CFM BHP	1633 0.41	1590 0.43	1552 0.44	1518 0.45	1483 0.47	1444 0.48	1406 0.49
	Low <sup>1</sup>	Blue	CFM BHP	1271 0.19	1229 0.20	1177 0.21	1121 0.23	1066 0.24	1027 0.25	974 0.26
	Med-Low	Pink	CFM BHP	1340 0.22	1299 0.23	1240 0.24	1191 0.25	1139 0.26	1091 0.28	1050 0.29
607E-A48	Medium <sup>2</sup>	Red	CFM BHP	1686 0.42	1650 0.44	1617 0.45	1576 0.46	1544 0.48	1503 0.49	1468 0.51
	Med-High	Orange	CFM BHP	1854 0.56	1837 0.57	1781 0.60	1784 0.59	1720 0.62	1698 0.63	1655 0.64
	High	Black	CFM BHP	2131 0.72	2088 0.74	2065 0.75	2013 0.77	1982 0.79	1941 0.80	1888 0.81

### Dry Coil Air Delivery\* - Horizontal and Downflow Discharge - Unit 607E-A36-60 460VAC Models

UNIT	MOTOR SPEED	WIRE COLOR	EXTERNAL STATIC PRESSURE (IN. W.C.)								
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
607E-A60	Low	Blue	CFM	1415	1384	1340	1314	1270	1236	1192	1159
		BHP	0.32	0.34	0.35	0.36	0.37	0.39	0.41	0.42	0.44
	Med-Low <sup>1</sup>	Pink	CFM	1454	1405	1364	1316	1281	1234	1198	1147
		BHP	0.34	0.35	0.36	0.37	0.38	0.40	0.41	0.42	0.43
	Medium <sup>2</sup>	Red	CFM	1818	1770	1731	1693	1657	1621	1579	1546
		BHP	0.56	0.57	0.59	0.60	0.62	0.63	0.64	0.66	0.67
Med-High	Orange	CFM	1881	1849	1818	1793	1763	1729	1679	1610	1523
		BHP	0.67	0.69	0.70	0.71	0.72	0.73	0.74	0.71	0.68
	High	Black	CFM	2138	2084	2025	1967	1893	1829	1754	1678
		BHP	0.98	0.95	0.93	0.90	0.86	0.84	0.80	0.76	0.74
											0.68

\* Air delivery values are without air filter and are for dry coil (See 607E--A Wet Coil Pressure Drop table).

1 Factory–shipped low stage cooling speed.

2 Factory–shipped high stage cooling speed.

Note: Deduct field–supplied air filter pressure drop and wet coil pressure drop to obtain external static pressure available for ducting.

Table 1 – Filter Pressure Drop Table (IN. W.C.)

FILTER SIZE IN. (MM)	COOLING TONS	STANDARD CFM (SCFM)															
		600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100
600-1400CFM 12x20x1+12x20x1 (305x508x25+305x508x25)	2.0, 2.5	0.03	0.05	0.06	0.08	0.10	0.11	0.13	0.14	0.16	-	-	-	-	-	-	-
1200-1800 CFM 16x24x1+14x24x1 (406x610x25+356x610x25)	3.0, 3.5	-	-	-	-	-	0.07	0.08	0.09	0.09	0.10	0.11	0.12	-	-	-	-
1500-2200 CFM 16x24x1+18x24x1 (406x610x25+457x610x25)	4.0 5.0	-	-	-	-	-	-	-	-	0.04	0.06	0.08	0.10	0.11	0.13	0.14	0.15

Wet Coil Pressure Drop (IN. W.C.)

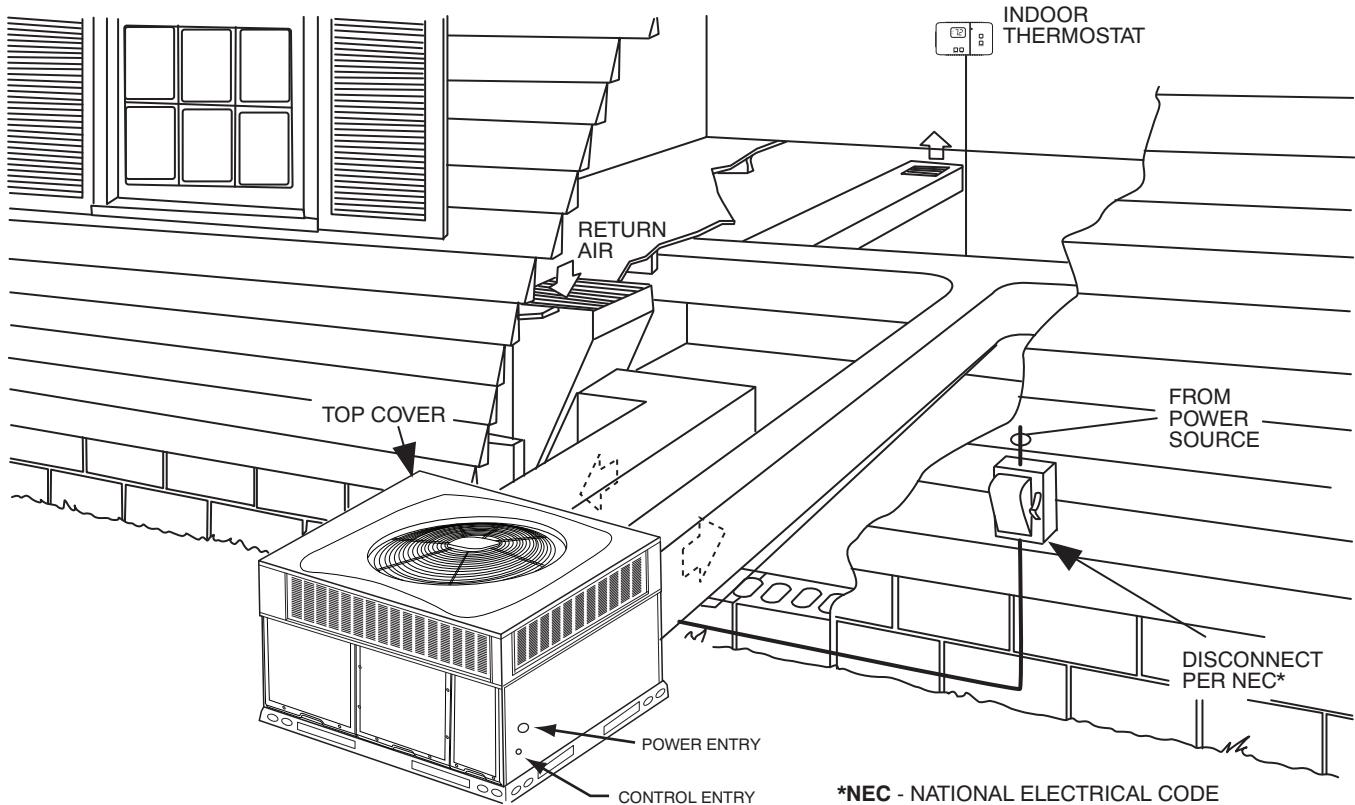
UNIT SIZE	STANDARD CFM (SCFM)																
	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
24	0.03	0.04	0.05	0.06	0.07	0.07	0.08	0.09	0.09	0.10	0.11	0.11	0.12	0.12	0.12	0.12	0.12
30					0.06	0.07	0.08	0.09	0.10	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12
36					0.06	0.07	0.08	0.09	0.10	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12
42					0.07	0.08	0.09	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12
48					0.07	0.08	0.09	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12
60					0.08	0.09	0.10	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12

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**Economizer with 1-in. Filter Pressure Drop (IN. W.C.)**

FILTER SIZE IN. (MM)	COOLING TONS	STANDARD CFM (SCFM)															
		600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100
600-1400CFM 12x20x1+12x20x1 (305x508x25+305x508x25)	2.0, 2.5	-	-	0.09	0.14	0.16	0.18	0.25	0.28	0.3	-	-	-	-	-	-	-
1200-1800 CFM 16x24x1+14x24x1 (406x610x25+356x610x25)	3.0, 3.5	-	-	-	-	-	-	0.10	0.11	0.12	0.13	0.14	0.16	0.16	-	-	-
1500-2200 CFM 16x24x1+18x24x1 (406x610x25+457x610x25)	4.0 5.0	-	-	-	-	-	-	-	-	0.15	0.17	0.18	0.20	0.21	0.22	0.23	0.23

## TYPICAL PIPING AND WIRING



607E

## APPLICATION DATA

**Condensate trap** — A 2-in. (50.8 mm) condensate trap must be field supplied.

**Ductwork** — Secure downflow discharge ductwork to roof curb. For horizontal discharge applications, attach ductwork to unit with flanges.

**To convert a unit to downflow discharge** — Units are equipped with factory-installed inserts in the downflow openings. Removal of the inserts is similar to removing an electrical knock-out.

**Maximum cooling airflow** — To minimize the possibility of condensate blow-off from the evaporator, airflow through the units should not exceed 450 cfm per ton.

**Minimum cooling airflow** — Minimum cooling airflow is 350 cfm per ton.

**Minimum ambient cooling operation temperature** — All standard units have a minimum ambient operating temperature of 40°F (4°C). With accessory low ambient temperature kit, units can operate at temperatures down to 0°F (-17°C).

## ELECTRICAL DATA

UNIT	NOMINAL	VOLTAGE RANGE		COMPRESSOR		OFM	IFM	ELECTRIC HEAT		POWER SUPPLY	
		MIN	MAX	RLA	LRA	FLA	FLA	NOMINAL kW	FLA	MCA	MOCP
607ENXC24	208/230-1-60	197	253	11.7	58.3	0.6	4.1	-/-	-/-	19.3	30
								3.8/5	18.1/20.8	42/45.3	45/50
								5.4/7.2	25.9/30	51.7/56.8	60/60
								7.5/10	36.1/41.7	64.5/71.5	70/80
607ENXC30	208/230-1-60	197	253	13.4	73.0	0.9	4.1	-/-	-/-	21.8	30
								3.8/5	18.1/20.8	44.4/47.8	45/50
								5.4/7.2	25.9/30	54.1/59.3	60/60
								7.5/10	36.1/41.7	66.9/73.9	70/80
								11.3/15	54.2/62.5	89.5/99.9	90/100
607EPXC30	208/230-3-60	197	253	9.0	58.0	0.9	4.1	-/-	-/-	16.3	20
								3.8/5	10.4/12	29.3/31.3	30/35
								7.5/10	20.8/24.1	42.3/46.4	45/50
								11.3/15	31.2/36.1	55.3/61.4	60/70
607ENXA36	208/230-1-60	197	253	15.3	83.0	1.2	6.0	-/-	-/-	26.3	40
								3.8/5	18.1/20.8	49/52.3	50/60
								5.4/7.2	25.9/30	58.7/63.8	60/70
								7.5/10	36.1/41.7	71.5/78.5	80/80
								11.3/15	54.2/62.5	94.1/104.5	100/110
607EPXA36	208/230-3-60	197	253	11.6	73.0	1.2	6.0	-/-	-/-	21.7	30
								3.8/5	10.4/12	34.7/36.7	35/40
								7.5/10	20.8/24.1	47.7/51.8	50/60
								11.3/15	31.2/36.1	60.7/66.8	70/70
607EEXA36	460-3-60	414	506	5.7	38.0	0.53	3.2	-/-	-/-	10.8	15
								10	12	25.9	30
								15	18	33.4	35
								-/-	-/-	32.7	45
607ENXA42	208/230-1-60	197	253	20.4	96.0	1.2	6.0	-/-	-/-	55.3/58.7	60/60
								3.8/5	18.1/20.8	65.1/70.2	70/80
								5.4/7.2	25.9/30	77.8/84.8	80/90
								7.5/10	36.1/41.7	100.5/110.8	110/125
								11.3/15	54.2/62.5	123/136.8	125/150
								15/20	72.2/83.3	-	-
607EPXA42	208/230-3-60	197	253	14.2	88.0	1.2	6.0	-/-	-/-	25	35
								3.8/5	10.4/12	38/40	40/40
								7.5/10	20.8/24.1	51/55.1	60/60
								11.3/15	31.2/36.1	64/70.1	70/80
								15/20	41.4/47.9	76.7/84.8	80/90
607EEXA42	460-3-60	414	506	6.4	44.0	0.53	3.2	-/-	-/-	11.7	15
								10	12	26.7	30
								15	18	34.2	35
								20	24.1	41.9	45
								-/-	-/-	35.3	50
607ENXA48	208/230-1-60	197	253	21.2	104.0	1.2	7.6	-/-	-/-	57.9/61.3	60/70
								3.8/5	18.1/20.8	67.7/72.8	70/80
								5.4/7.2	25.9/30	80.4/87.4	90/90
								7.5/10	36.1/41.7	103.1/113.4	110/125
								11.3/15	54.2/62.5	125.6/139.4	150/150
								15/20	72.2/83.3	-	-
607EPXA48	208/230-3-60	197	253	14.0	83.1	1.2	7.6	-/-	-/-	26.3	40
								3.8/5	10.4/12	39.3/41.3	40/45
								7.5/10	20.8/24.1	52.3/56.4	60/60
								11.3/15	31.2/36.1	65.3/71.4	70/80
								15/20	41.4/47.9	78.1/86.2	80/90
607EEXA48	460-3-60	414	506	6.4	41.0	0.53	4.0	-/-	-/-	12.5	15
								10	12	27.5	30
								15	18	35	35
								20	24.1	42.7	45

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## ELECTRICAL DATA (CONT)

UNIT	NOMINAL	VOLTAGE RANGE		COMPRESSOR		OFM	IFM	ELECTRIC HEAT		POWER SUPPLY	
		MIN	MAX	RLA	LRA	FLA	FLA	NOMINAL kW	FLA	MCA	MOCP
607ENXA60	208/230-1-60	197	253	28.8	152.9	1.2	7.6	-/-	-/-	44.8	60
								3.8/5	18.1/20.8	67.4/70.8	70/80
								5.4/7.2	25.9/30	77.2/82.3	80/90
								7.5/10	36.1/41.7	89.9/96.9	90/100
								11.3/15	54.2/62.5	112.6/122.9	125/125
								15/20	72.2/83.3	135.1/148.9	150/150
607EPXA60	208/230-3-60	197	253	16.2	110.0	1.2	7.6	-/-	-/-	29.1	40
								3.8/5	10.4/12	42.1/44.1	45/45
								7.5/10	20.8/24.1	55.1/59.2	60/60
								11.3/15	31.2/36.1	68.1/74.2	70/80
								15/20	41.4/47.9	80.8/88.9	90/90
607EEXA60	460-3-60	414	506	7.6	52.0	0.53	4.0	-/-	-/-	14	20
								10	12	29	30/30
								15	18	36.5	40/40
								20	24.1	44.2	45/45

607E

### LEGEND

FLA - Full Load Amps  
 IDM - Inducer Motor  
 IFM - Indoor Fan Motor  
 LRA -Locked Rotor Amps  
 MCA - Minimum Circuit Amps  
 MOCP - Maximum Over Current Protection  
 OFM - Outdoor Fan Motor  
 RLA - Rated Load Amps

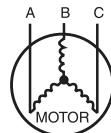
### NOTES:

- In compliance with NEC (National Electrical Code) requirements for multimotor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be Power Supply fuse or circuit breaker.
- Minimum wire size is based on 60 C copper wire. If other than 60 C wire is used, or if length exceeds wire length in table, determine size from NEC.
- Unbalanced 3-Phase Supply Voltage  
*Never operate a motor where a phase imbalance in supply voltage is greater than 2%.* Use the following formula to determine the percentage of voltage imbalance

% Voltage imbalance

$$= 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

EXAMPLE: Supply voltage is 230-3-60.



$$\begin{aligned} AB &= 228 \text{ v} \\ BC &= 231 \text{ v} \\ AC &= 227 \text{ v} \\ \text{Average Voltage} &= \frac{228 + 231 + 227}{3} \\ &= \frac{686}{3} \\ &= 229 \end{aligned}$$

Determine maximum deviation from average voltage.

$$\begin{aligned} (AB) 229 - 228 &= 1 \text{ v} \\ (BC) 231 - 229 &= 2 \text{ v} \\ (AC) 229 - 227 &= 2 \text{ v} \end{aligned}$$

Maximum deviation is 2 v.

Determine percent of voltage imbalance

$$\begin{aligned} \% \text{ Voltage Imbalance} &= 100 \times \frac{2}{229} \\ &= 0.8\% \end{aligned}$$

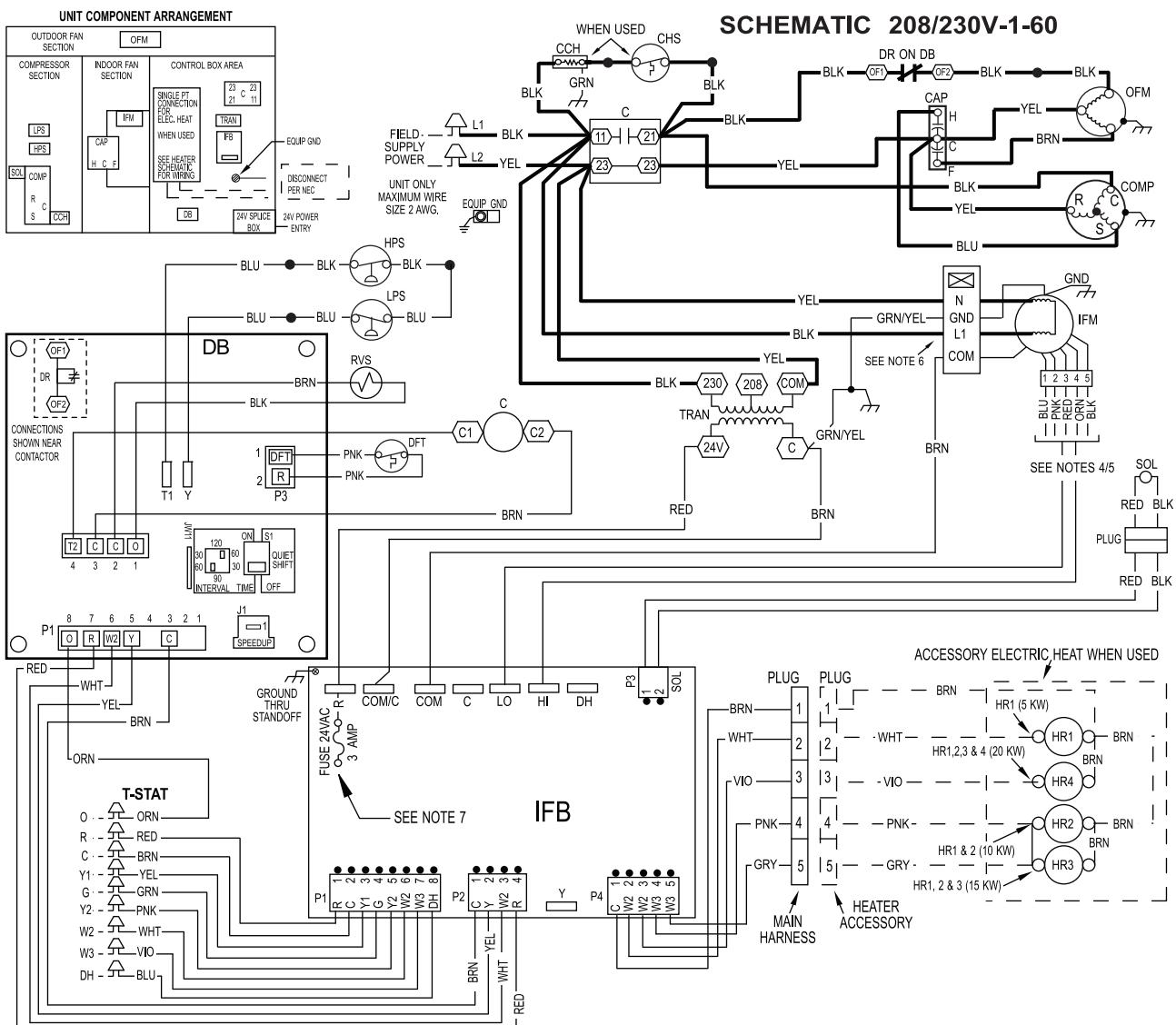
This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

A06564

# CONNECTION WIRING DIAGRAM 208/230-1-60

## CONNECTION WIRING DIAGRAM DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING



### NOTES:

1. IF ANY OF THE ORIGINAL WIRES FURNISHED ARE REPLACED IT MUST BE REPLACED WITH THE SAME OR ITS EQUIVALENT.
2. SEE PRE SALE LITERATURE FOR THERMOSTATS.
3. USE 75 DEGREES C COPPER CONDUCTORS FOR FIELD INSTALLATION.
4. REFER TO INSTALLATION INSTRUCTIONS FOR CORRECT SPEED SELECTION FOR IFM.
5. RELOCATION OF SPEED TAPS MAY BE REQUIRED WHEN USING FIELD INSTALLED ELECTRIC HEATERS. CONSULT INSTALLATION INSTRUCTIONS TO DETERMINE CORRECT SPEED TAP SETTING.
6. "DO NOT DISCONNECT PLUG UNDER LOAD".
7. THIS FUSE IS MANUFACTURED BY LITTLE FUSE, P/N 287003.

### LEGEND

△	FIELD SPLICE	C	CONTACTOR	IFM	INDOOR FAN MOTOR
□	TERMINAL (MARKED)	CAP	CAPACITOR	LPS	LOW PRESSURE SWITCH
○	TERMINAL (UNMARKED)	CCH	CRANKCASE HEATER	OFM	OUTDOOR FAN MOTOR
●	SPLICE	CHS	CRANKCASE HEATER SWITCH	RVS	REVERSING VALVE
□	SPLICE (MARKED)	COMP	COMPRESSOR MOTOR	SOL	COMPRESSOR SOLENOID
—	FACTORY LO VOLTAGE	CTD	COMPRESSOR TIME DELAY	TRAN	TRANSFORMER
—	FIELD CONTROL WIRING	DH	DEHUM	T-STAT	TERMOSTAT
—	FIELD POWER WIRING	DB	DEFROST BOARD		
—	ACCESSORY OR OPTIONAL	DFT	DEFROST TEMPERATURE SWITCH		
—	WIRING	DR	DEFROST RELAY		
—	FACTORY HI VOLTAGE	GND	GROUND		
		HPS	HIGH PRESSURE SWITCH		
		HR	HEATER RELAY		
		IFB	INDOOR FAN BOARD		

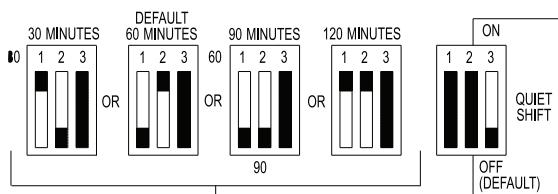
A13144

# LADDER WIRING DIAGRAM 208/230-1-60 (CONT)

## LADDER WIRING DIAGRAM

**DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING**

### DIP SWITCH SETTINGS



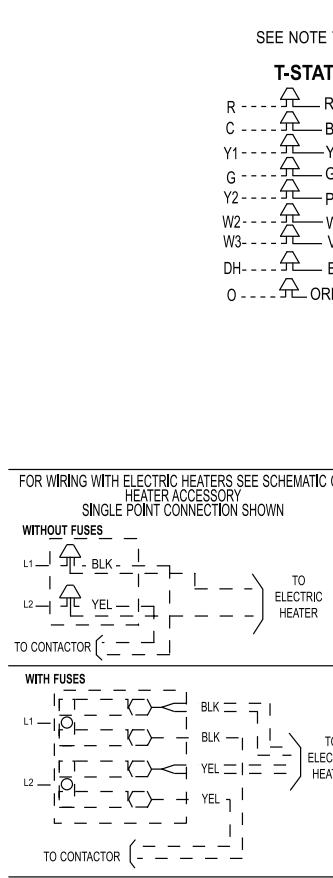
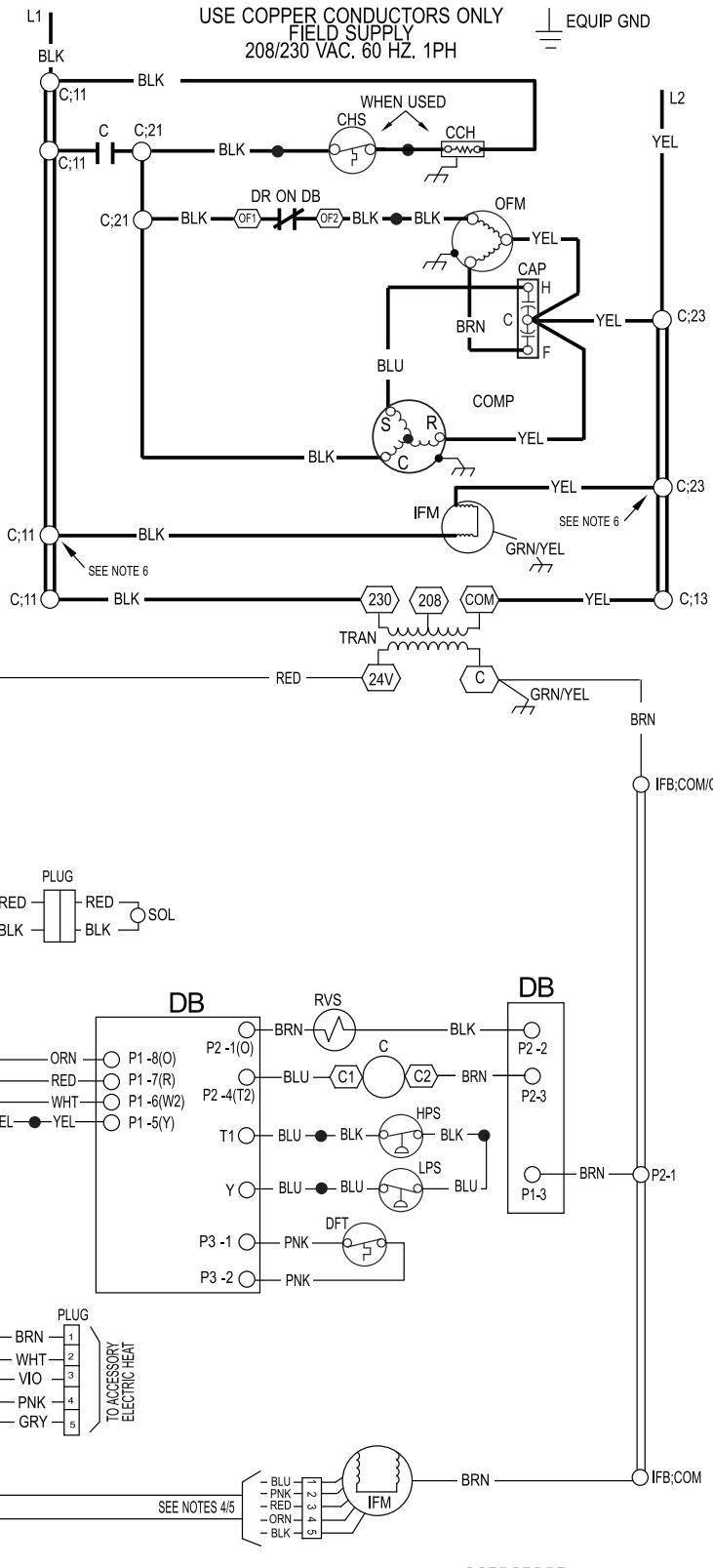
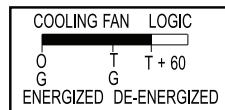
FIELD SELECTABLE OPTIONS FOR TIME PERIOD  
BETWEEN DEFROST CYCLES (MINUTES)

SPEED UP  JUMPERED TEST PINS (USE METAL OBJECT)  
FIELD SPEED-UP CYCLE

- 1) MOMENTARILY SHORT PINS AND RELEASE TO BYPASS COMPRESSOR OFF DELAY.
- 2) SHORT FOR 5+ SEC. AND RELEASE FOR FORCED DEFROST.
- 3) PERMANENT SHORT WILL BE IGNORED.

DEFROST WILL TERMINATE IN 30 SEC. IF DFT OPEN.  
DEFROST WILL TERMINATE NORMALLY IF DFT IS CLOSED.

THE COMPRESSOR WILL SHUT OFF FOR 30 SEC. ON DEFROST INITIATION AND TERMINATION IN THE "QUIET SHIFT" ON POSITION.



50VR500009 REV.-

50VR500009 REV.-



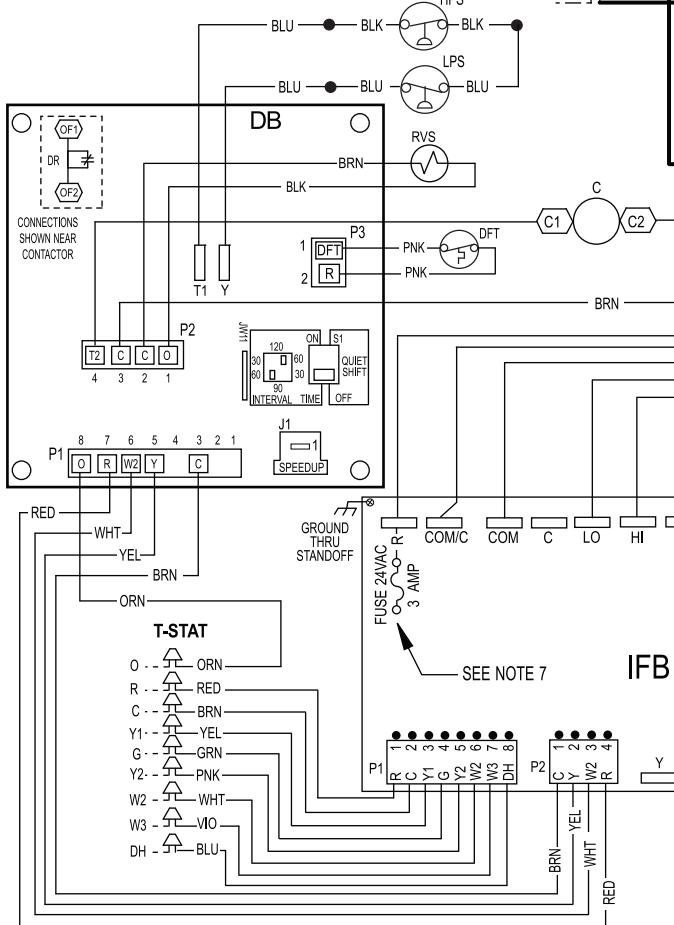
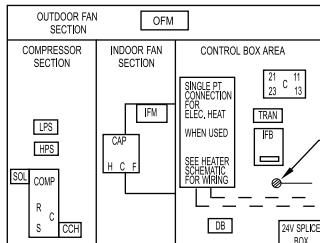
A13145

# CONNECTION WIRING DIAGRAM 208/230-3-60

## CONNECTION WIRING DIAGRAM DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING

SCHEMATIC 208/230V-3-60

### UNIT COMPONENT ARRANGEMENT

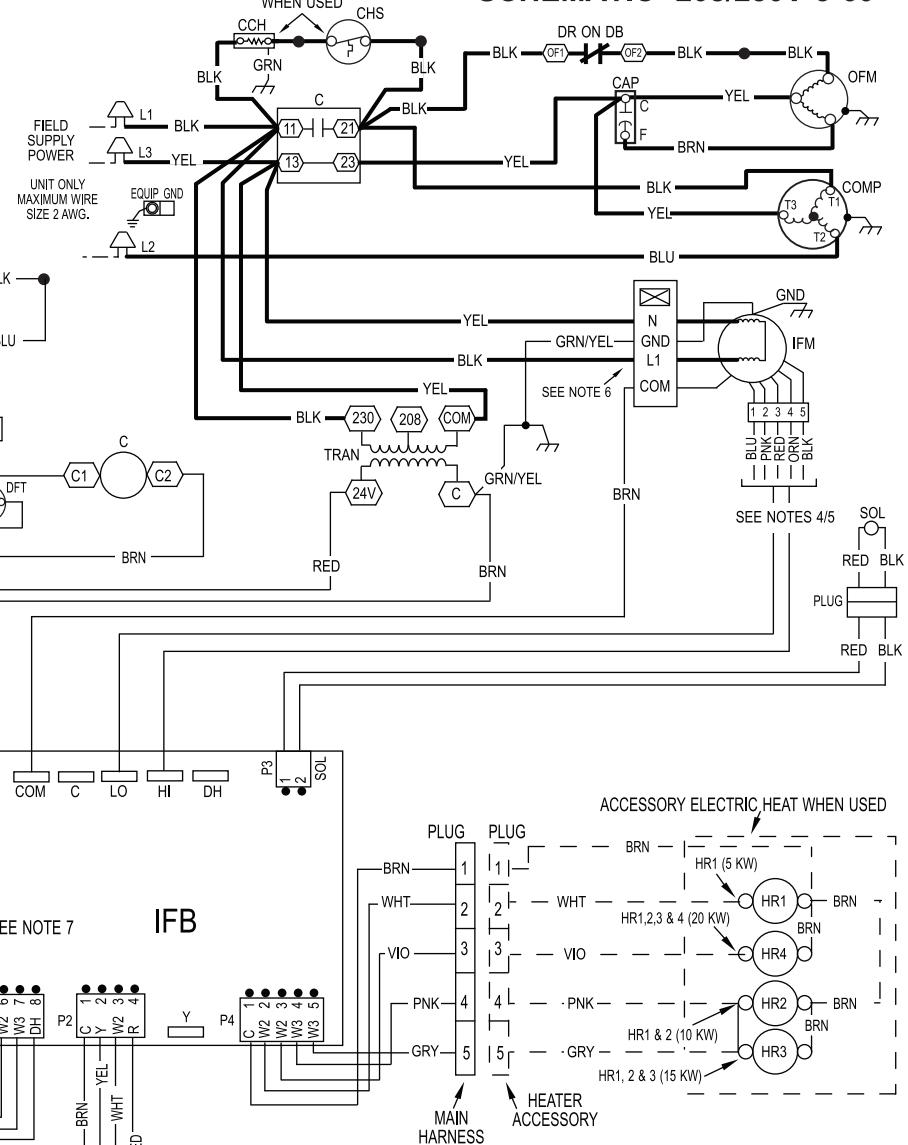


### NOTES:

1. IF ANY OF THE ORIGINAL WIRES FURNISHED ARE REPLACED IT MUST BE REPLACED WITH THE SAME OR ITS EQUIVALENT.
2. SEE PRE SALE LITERATURE FOR THERMOSTATS.
3. USE 75 DEGREES C COPPER CONDUCTORS FOR FIELD INSTALLATION.
4. REFER TO INSTALLATION INSTRUCTIONS FOR CORRECT SPEED SELECTION FOR IFM.
5. RELOCATION OF SPEED TAPS MAY BE REQUIRED WHEN USING FIELD INSTALLED ELECTRIC HEATERS. CONSULT INSTALLATION INSTRUCTIONS TO DETERMINE CORRECT SPEED TAP SETTING.
6. "DO NOT DISCONNECT PLUG UNDER LOAD".
7. THIS FUSE IS MANUFACTURED BY LITTLE FUSE, P/N 287003.

### LEGEND

△	FIELD SPLICE	C	CONTACTOR	IFM	INDOOR FAN MOTOR
□	TERMINAL (MARKED)	CAP	CAPACITOR	LPS	LOW PRESSURE SWITCH
○	TERMINAL (UNMARKED)	CCH	CRANKCASE HEATER	OFM	OUTDOOR FAN MOTOR
●	SPLICE	CHS	CRANKCASE HEATER SWITCH	RVS	REVERSING VALVE
◎	SPLICE (MARKED)	COMP	COMPRESSOR MOTOR	SOL	COMPRESSOR SOLENOID
—	FACTORY LO VOLTAGE	CTD	COMPRESSOR TIME DELAY	TRAN	TRANSFORMER
- - -	FIELD CONTROL WIRING	DB	DEFROST BOARD	T-STAT	THERMOSTAT
- - -	FIELD POWER WIRING	DFT	DEFROST TEMPERATURE SWITCH		
- - -	ACCESSORY OR OPTIONAL	DR	DEFROST RELAY		
—	WIRING	GND	GROUND		
—	FACTORY HI VOLTAGE	HPS	HIGH PRESSURE SWITCH		
		HR	HEATER RELAY		
		IFB	INDOOR FAN BOARD		



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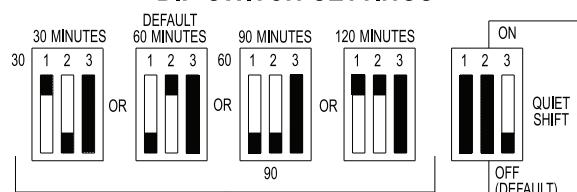
A13146

# LADDER WIRING DIAGRAM 208/230-3-60 (CONT)

## LADDER WIRING DIAGRAM

**DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING**

### DIP SWITCH SETTINGS



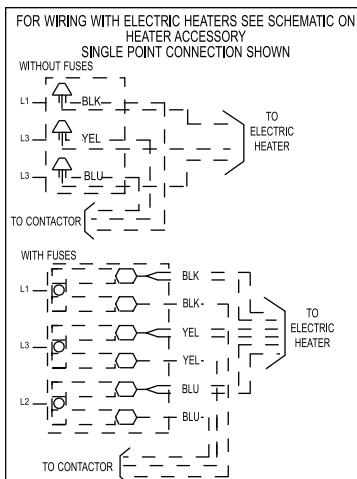
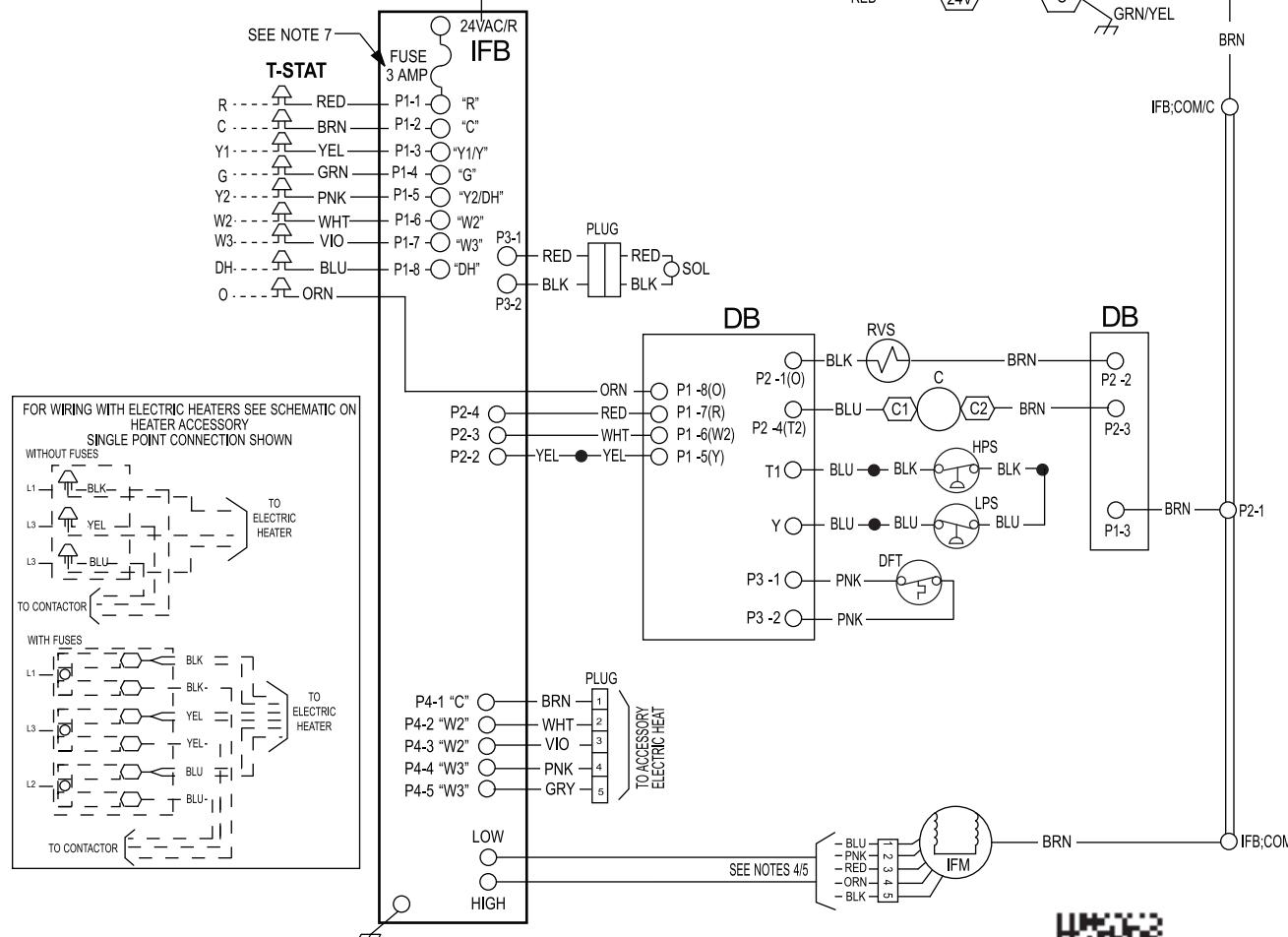
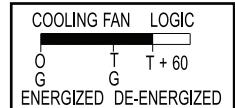
FIELD SELECTABLE OPTIONS FOR TIME PERIOD  
BETWEEN DEFROST CYCLES (MINUTES)

SPEED UP  JUMPERED TEST PINS (USE METAL OBJECT)  
FIELD SPEED-UP CYCLE

- 1) MOMENTARILY SHORT PINS AND RELEASE TO BYPASS COMPRESSOR OFF DELAY.
- 2) SHORT FOR 5+ SEC. AND RELEASE FOR FORCED DEFROST.
- 3) PERMANENT SHORT WILL BE IGNORED.

DEFROST WILL TERMINATE IN 30 SEC. IF DFT OPEN.  
DEFROST WILL TERMINATE NORMALLY IF DFT IS CLOSED.

THE COMPRESSOR WILL SHUT OFF FOR 30 SEC. ON DEFROST INITIATION AND TERMINATION IN THE "QUIET SHIFT" ON POSITION.



50VR500010 REV.-

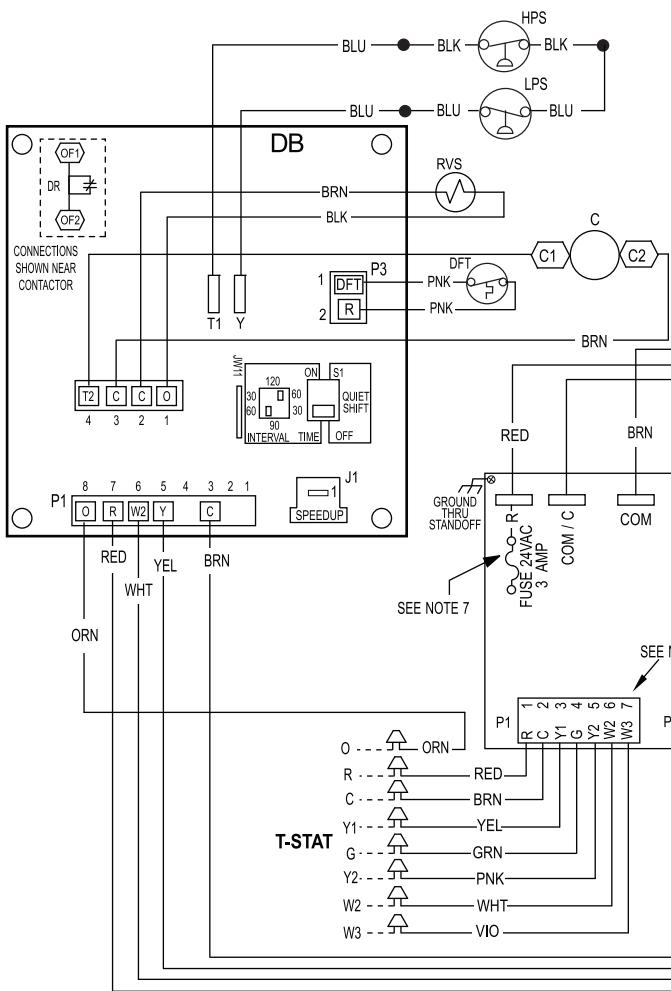
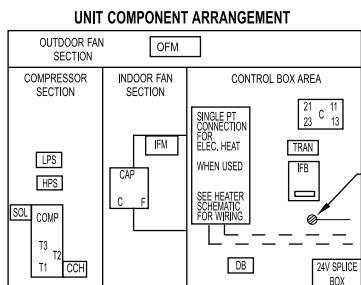
50VR500010 REV.-



A13147

# CONNECTION WIRING DIAGRAM 460-3-60

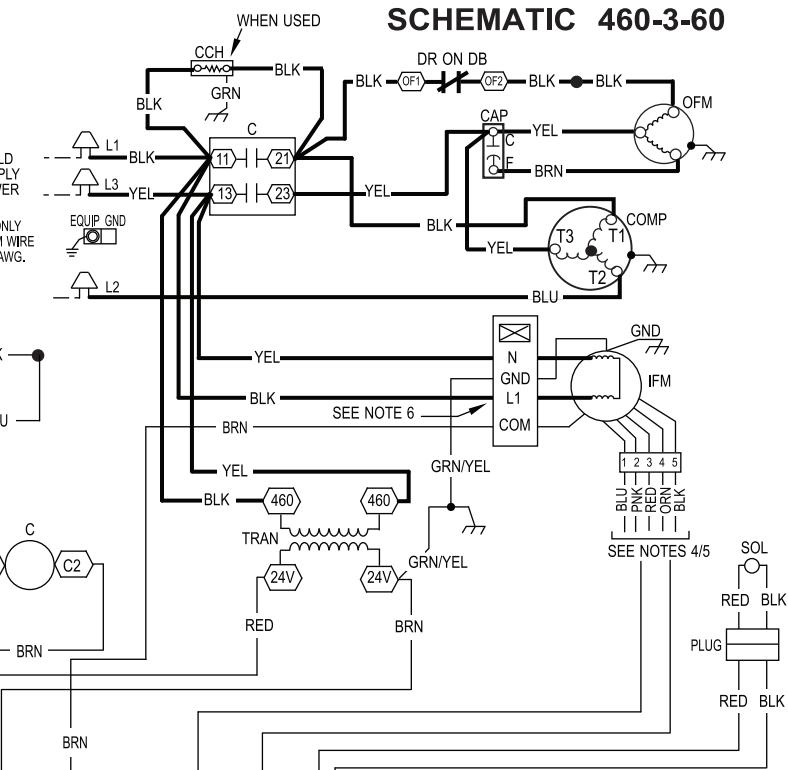
## CONNECTION WIRING DIAGRAM DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING



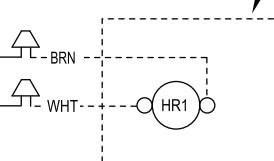
### NOTES:

1. IF ANY OF THE ORIGINAL WIRES FURNISHED ARE REPLACED IT MUST BE REPLACED WITH THE SAME OR ITS EQUIVALENT.
2. SEE PRE SALE LITERATURE FOR THERMOSTATS.
3. USE 75 DEGREES C COPPER CONDUCTORS FOR FIELD INSTALLATION.
4. REFER TO INSTALLATION INSTRUCTIONS FOR CORRECT SPEED SELECTION FOR IFM.
5. RELOCATION OF SPEED TAPS MAY BE REQUIRED WHEN USING FIELD INSTALLED ELECTRIC HEATERS. CONSULT INSTALLATION INSTRUCTIONS TO DETERMINE CORRECT SPEED TAP SETTING.
6. "DO NOT DISCONNECT PLUG UNDER LOAD".
7. THIS FUSE IS MANUFACTURED BY LITTLE FUSE, P/N 287003.
8. DEHUM FEATURE IS NOT AVAILABLE IN THESE UNITS.

## SCHEMATIC 460-3-60



ACCESSORY ELECTRIC HEAT WHEN USED



IFB

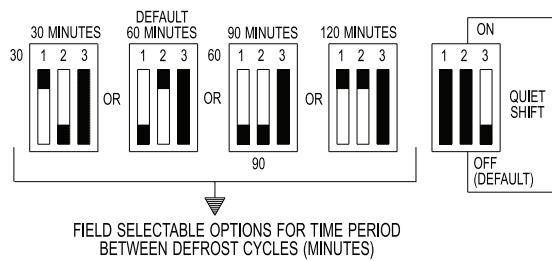
LEGEND	
△	FIELD SPLICE
□	TERMINAL (MARKED)
○	TERMINAL (UNMARKED)
●	SPLICE
□	SPLICE (MARKED)
—	FACTORY LO VOLTAGE
- -	FIELD CONTROL WIRING
- -	FIELD POWER WIRING
- -	ACCESSORY OR OPTIONAL WIRING
—	FACTORY HI VOLTAGE
C	CONTACTOR
CAP	CAPACITOR
CCH	CRANK CASE HEATER
COMP	COMPRESSOR MOTOR
CS	COMPRESSOR SOLENOID
DB	DEFROST BOARD
DFT	DEFROST TEMPERATURE SWITCH
DR	DEFROST RELAY
GND	GROUND
HPS	HIGH PRESSURE SWITCH
HR	HEATER RELAY
IFB	INDOOR FAN BOARD
IFM	INDOOR FAN MOTOR
LPS	LOW PRESSURE SWITCH
OFM	OUTDOOR FAN MOTOR
RVS	REVERSING VALVE
TRAN	TRANSFORMER
T-STAT	THERMOSTAT

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# LADDER WIRING DIAGRAM 460-3-60 (CONT)

## LADDER WIRING DIAGRAM DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING DIP SWITCH SETTINGS



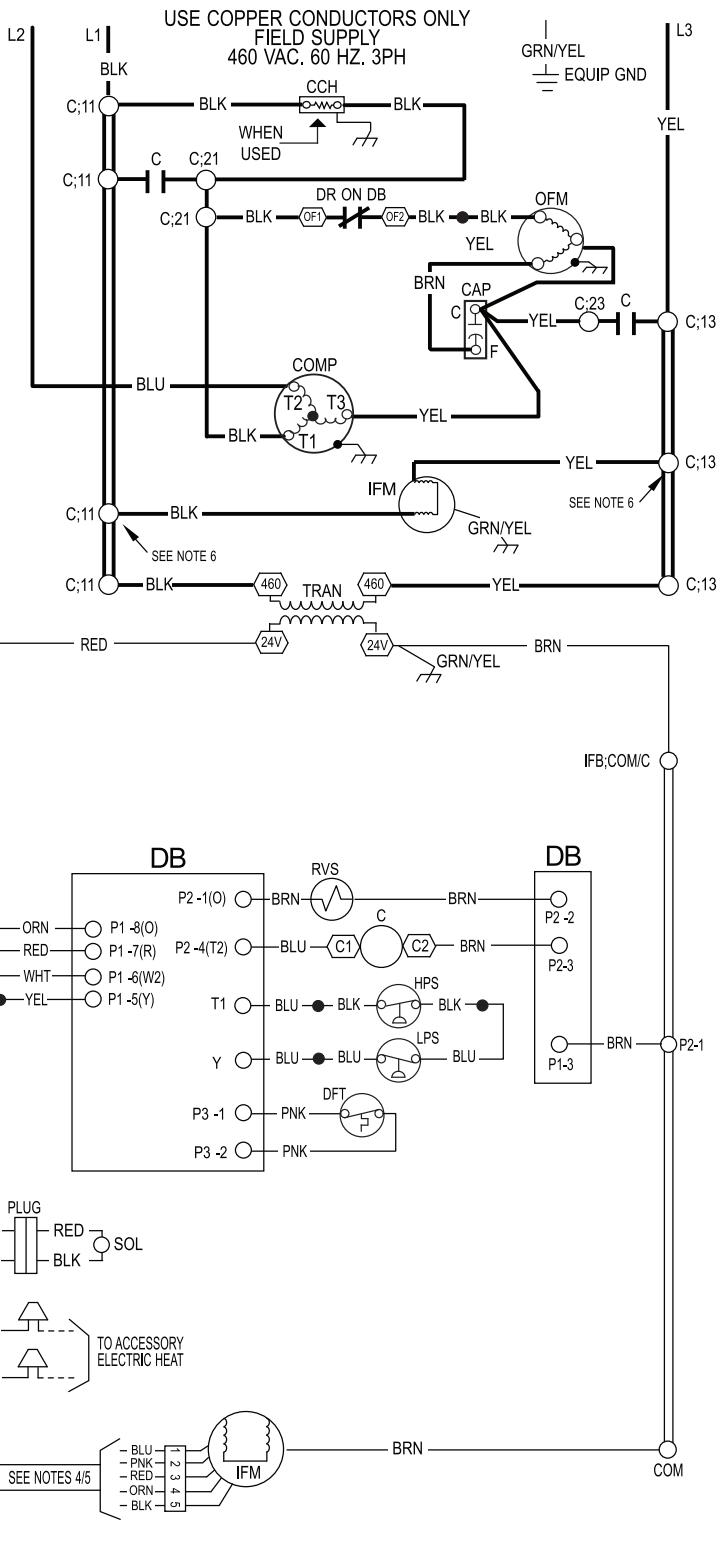
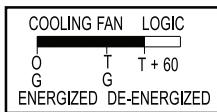
FIELD SELECTABLE OPTIONS FOR TIME PERIOD  
BETWEEN DEFROST CYCLES (MINUTES)

SPEED UP  JUMPERED TEST PINS (USE METAL OBJECT)  
FIELD SPEED-UP CYCLE

- 1) MOMENTARILY SHORT PINS AND RELEASE TO BYPASS COMPRESSOR OFF DELAY.
- 2) SHORT FOR 5+ SEC. AND RELEASE FOR FORCED DEFROST.
- 3) PERMANENT SHORT WILL BE IGNORED.

DEFROST WILL TERMINATE IN 30 SEC. IF DFT OPEN.  
DEFROST WILL TERMINATE NORMALLY IF DFT IS CLOSED.

THE COMPRESSOR WILL SHUT OFF FOR 30 SEC. ON DEFROST INITIATION AND TERMINATION IN THE "QUIET SHIFT" POSITION.



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## CONTROLS

### SEQUENCE OF OPERATION

#### a. Continuous Fan

- (1.) Thermostat closes circuit R to G energizing the blower motor for continuous fan. The indoor fan is energized on low speed.

#### b. Cooling Mode

- (1.) Low Stage: Thermostat closes R to G, R to Y1, and R to O. The compressor and indoor fan are energized on low speed. The outdoor fan is also energized
- (2.) High Stage: Thermostat closes R to G, R to Y1, R to Y2, and R to O. The compressor and indoor fan are energized on high speed. The outdoor fan is also energized.

#### c. Electric Heating Mode

- (1.) Thermostat closes circuit R to W2 or W3, and R to G. There are no on or off delays.

#### d. Heat Pump Heating

- (1.) Low Stage: Thermostat closes R to G, R to Y1. The compressor and indoor fan are energized on low speed. The outdoor fan is also energized
- (2.) High Stage: Thermostat closes R to G, R to Y1, R to Y2. The compressor and indoor fan are energized on high speed. The outdoor fan is also energized.

#### e. Heat Pump Heating with Auxiliary Heat

- (1.) Thermostat closes circuits R to G, R to Y and R to W/W1 or W2. The compressor, indoor and outdoor fans are energized, as well as the electric heat relays.

#### f. Defrost Mode

The defrost mode is automatically energized by the defrost board during heating mode. The defrost board energizes "O" (reversing valve) and "W2" (electric heat). It also de-energizes the outdoor fan. When defrost is complete, unit will return to heating mode. If room thermostat is satisfied during defrost, unit will shut down and restart in defrost on next call for heat.

# GUIDE SPECIFICATIONS

## Packaged Air Conditioner System Constant Volume Application HVAC Guide Specifications

Size Range: **2 to 5 Tons, Nominal Cooling**

Model Number: 607E--A

### Part 1 — General

#### SYSTEM DESCRIPTION

Outdoor rooftop mounted or ground mounted, electric cooling unit utilizing a hermetic 2-stage scroll compressor for cooling duty. Unit shall discharge supply air vertically or horizontally as shown on contract drawings. Condenser fan/coil section shall have a draw-thru design with vertical discharge for minimum sound levels.

#### QUALITY ASSURANCE

- A. Unit shall be rated in accordance with AHRI Standards 210/240 and 270.**
- B. Unit shall be designed in accordance with UL Standard 1995.**
- C. Unit shall be manufactured in a facility registered to ISO 9001 manufacturing quality standard.**
- D. Unit shall be UL listed and c-UL certified as a total package for safety requirements.**
- E. Roof curb shall be designed to conform to NRCA Standards.**
- F. Insulation and adhesives shall meet NFPA 90A requirements for flame spread and smoke generation.**
- G. Cabinet insulation shall meet ASHRAE Standard 62P.**

#### DELIVERY, STORAGE AND HANDLING

Unit shall be stored and handled per manufacturer's recommendations.

### Part 2 — Products

#### EQUIPMENT

##### A. General:

Factory-assembled, single-piece, heating and cooling unit. Contained within the enclosure shall be all factory wiring, piping, controls, refrigerant charge with R-410A refrigerant, and special features required prior to field start-up.

##### B. Unit Cabinet:

1. Unit cabinet shall be constructed of phosphated, zinc-coated, pre-painted steel capable of with-standing 500 hours in salt spray.
2. Normal service shall be through a single removable cabinet panel.
3. The unit shall be constructed on a rust proof unit base that has an externally trapped, integrated sloped drain.
4. Evaporator fan compartment top surface shall be insulated with a minimum 1/2-in. (12.7 mm) thick, flexible fiberglass insulation, coated on the air side and retained by adhesive and mechanical means. The evaporator wall sections will be insulated with a minimum semi-rigid foil-faced board capable of being wiped clean. Aluminum foil-faced fiberglass insulation shall be used in the entire indoor air cavity section.
5. Unit shall have a field-supplied condensate trap.

##### C. Fans:

1. The evaporator fan shall be a multi-speed ECM Blower Motor.
2. Fan wheel shall be made from steel, be double-inlet type with forward curved blades with corrosion resistant finish. Fan wheel shall be dynamically balanced.

3. Condenser fan shall be direct drive propeller type with aluminum blades riveted to corrosion resistant steel spiders, be dynamically balanced, and discharge air vertically.

##### D. Compressor:

1. Fully hermetic compressors with factory-installed vibration isolation.
2. 2-Stage scroll compressor shall be standard on all units.

##### E. Coils:

Evaporator and condenser coils shall have aluminum plate fins mechanically bonded to seamless copper tubes with all joints brazed. Tube sheet openings shall be belled to prevent tube wear.

##### F. Refrigerant Components:

Refrigerant expansion device shall be of the TXV (thermostatic expansion valve) for cooling and fixed orifice for heating.

##### G. Filters:

Filter section shall consist of field-installed, throwaway, 1-in. (25 mm) thick fiberglass filters of commercially available sizes.

##### H. Controls and Safeties:

1. Unit controls shall be complete with a self-contained low voltage control circuit.
2. Compressors shall incorporate a solid-state compressor protector that provides reset capability.

##### I. Operating Characteristics:

1. Unit shall be capable of starting and running at 125°F (51°C) ambient outdoor temperature per maximum load criteria of AHRI Standard 210.
2. Compressor with standard controls shall be capable of operation down to 40°F (4°C) ambient outdoor temperature.
3. Units shall be provided with fan time delay to prevent cold air delivery before the heat exchanger warms up.
4. Unit shall be provided with 90-second fan time delay after the thermostat is satisfied.

##### J. Electrical Requirements:

All unit power wiring shall enter the unit cabinet at a single location.

##### K. Motors:

1. Compressor motors shall be of the refrigerant-cooled type with line-break thermal and current overload protection.
2. All fan motors shall have permanently lubricated bearings, and inherent, automatic reset, thermal overload protection.

##### L. Special Options/Kits Available:

1. Coil Options:  
Base unit with tin plated indoor coil hairpins.
2. Compressor Start Kit (single phase units only):  
Shall provide additional starting torque for single-phase compressors.
3. Corporate Thermostat:  
To provide for one-stage heating and cooling in addition manual or automatic changeover and indoor fan control.
4. Crankcase Heater Kit:  
Shall provide anti-floodback protection for low-load cooling applications.
5. Economizer for 2-stage operation:  
(Horizontal and Vertical with Jade Honeywell W7220 controller, Honeywell communicating actuator, and dry bulb sensor. (Contact MicroMetl Customer Service at 1-800-662-4822 to order.)

**NOTE:** The enhanced dehumidification feature on high stage cooling does not support use of an economizer.

## **GUIDE SPECIFICATIONS (CONT)**

- a. Economizer controls capable of providing free cooling using outside air.
- b. Equipped with low leakage dampers not to exceed 3% leakage, at 1.0 IN. W.C. pressure differential.
- c. Spring return motor shuts off outdoor damper on power failure.
- 6. Electric Heaters:
  - a. Electric heater shall be available as a field-installed option.
  - b. Heater elements shall be open wire type, adequately supported and insulated with ceramic bushings.
  - c. Electric heater packages must provide single point power connection capability.
- 7. Filter Rack Option or Kit:  
Shall provide filter mounting for downflow applications.  
Offered as an accessory or a factory installed option.
- 8. Flat Roof Curb Kit:  
Curbs shall have seal strip and a wood nailing for flashing and shall be installed per manufacturer's instructions.
- 9. Low Ambient Package Kit:  
Shall consist of a solid-state control and condenser coil temperature sensor for controlling condenser-fan motor operation, which shall allow unit to operate down to 0°F (-17.7°C) outdoor ambient temperature when properly installed.
- 10. Manual Outdoor Air Damper Kit:  
Package shall consist of damper, birdscreen, and rainhood which can be preset to admit outdoor air for year-round ventilation.
- 11. Square-To-Round Duct Transitions Kit (24-48 size):  
Shall have the ability to convert the supply and return openings from rectangular to round.
- 12. Dual Point Electric Heaters Kit  
Allows you to power the electric heater and unit contactor separately by having two individual field power supply circuits connected respectively.

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