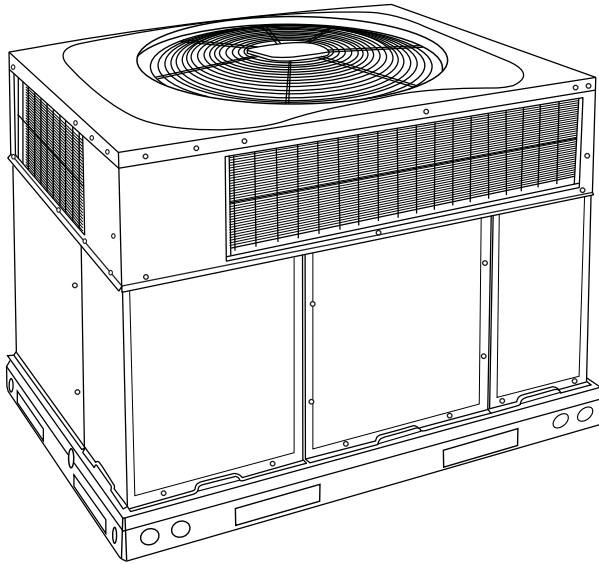


Product Data



A09034

Fig. 1 - Unit 574D--A

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

- Up to 13.5 SEER
- Up to 80.4% AFUE
- Factory-Installed TXV
- ECM Motor-Standard
- Direct Spark Ignition
- Low Sound Levels
- Dehumidification Feature

FEATURES/BENEFITS

One-piece heating and cooling units with low sound levels, easy installation, low maintenance, and dependable performance.

Puron Environmentally Sound Refrigerant is Bryant's unique refrigerant designed to help protect the environment. 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, environmentally sound performance.

Easy Installation

Factory-assembled package is a compact, fully self-contained, combination gas heating/electric cooling unit that is prewired, pre-piped, and pre-charged for minimum installation expense. These units are available in a variety of standard and optional heating/cooling size combinations 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 can be 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 13.5 and AFUE (Annual Fuel Utilization Efficiency) ratings as high as 80.4%.

Energy-saving, direct spark ignition saves gas by operating only when the room thermostat calls for heating. Standard units are furnished with natural gas controls. A low-cost field installed kit for propane conversion is available for all units.

Low NOx units are designed for California installations. These models meet the California maximum oxides of nitrogen (NOx) emissions requirement of 40 nanograms/joule or less as shipped from the factory and MUST be installed in California Air Quality Management Districts and wherever a Low NOx rule exists.

Durable, dependable components Compressors 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.

Monoport inshot burners produce precise air-to-gas mixture, which provides for clean and efficient combustion. The large monoport on the inshot (or injection type) burners seldom, if ever, requires cleaning. All gas furnace components are accessible in one compartment.

Turbo-tubular™ heat exchangers are constructed of aluminized steel for corrosion resistance and optimum heat transfer for improved efficiency. The tubular design permits hot gases to make multiple passes across the path of the supply air.

In addition, dimples located on the heat exchanger walls force the hot gases to stay in close contact with the walls, improving heat transfer.

ECM Motor is standard on all 574D--A models.

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 75dBA.

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.

Horizontal metal duct covers are standard 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.

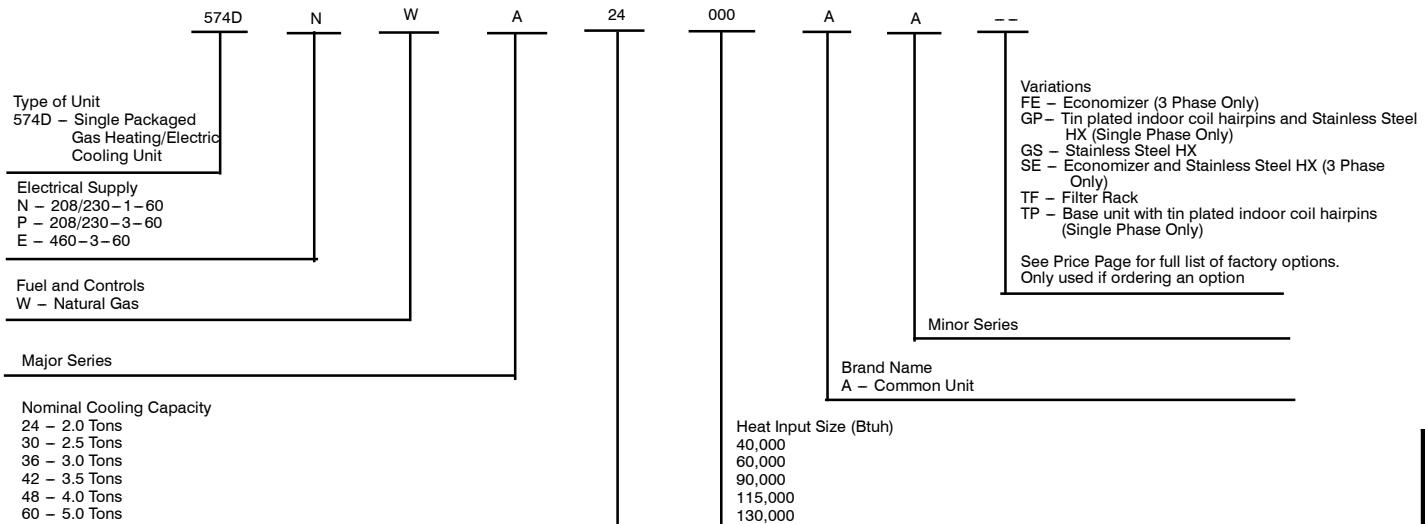
Integrated Gas Control (IGC) board provides safe and efficient control of heating and simplifies trouble-shooting through its built-in diagnostic function.

Cabinets are constructed of heavyduty, phosphated, zinc-coated prepainted steel capable of withstanding 500 hours in salt spray. Interior surfaces of the evaporator/heat exchanger compartment are insulated with cleanable semi-rigid insulation board, 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 62.2.) The sloped drain pan minimizes standing water in the drain. An external drain is provided.

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MODEL NUMBER NOMENCLATURE



574D--A



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.

AHRI* CAPACITIES

Cooling Capacities and Efficiencies

UNIT 574D--A	NOMINAL TONS	STANDARD CFM	NET COOLING CAPACITIES (Btuh)	EER**	SEER†
24	2	800	23,000	11.0	13.2
30	2-1/2	1000	28,400	11.2	13.5
36	3	1200	34,400	11.0	13.0
42	3-1/2	1400	40,500	11.2	13.2
48	4	1600	46,500	11.2	13.2
60	5	1750	57,000	11.0	13.4

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 ARI 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 your retailer.

574D--A

Gas Heating Capacities and Efficiencies

UNIT 574D--A	HEATING INPUT (Btuh)	OUTPUT CAPACITY (Btuh)	TEMPERATURE RISE RANGE °F (°C)	AFUE (%)
24040 30040	40,000	32,000	30-60 (16.7-33.3)	80.0
24060 30060 36060 42060	60,000	48,000 48,000 48,000 47,000	25-55 (13.9-30.6)	80.0 80.0 80.0 78.5
36090 42090 48090 60090	90,000	72,000 73,000 73,000 73,000	35-65 (19.4-36.1)	79.3 80.4 80.4 80.4
48115 60115	115,000	93,000	30-60 (16.7-33.3)	80.3
48130 60130	130,000	103,000	35-65 (19.4-36.1)	78.9

LEGEND

AFUE—Annual Fuel Utilization Efficiency

NOTE: Before purchasing this appliance, read important energy cost and efficiency information available from your retailer.

A-Weighted Sound Power Level (dBA)

UNIT 574D--A	STANDARD RATING dBA	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
24	76	66.0	66.0	70.5	71.5	67.5	62.5	58.5
30	75	66.0	63.5	68.0	68.5	67.5	61.5	55.0
36	75	64.0	63.5	68.0	70.5	64.5	61.0	61.0
42	77	67.0	67.0	69.5	70.5	68.0	65.5	61.0
48	78	71.5	66.5	73.0	71.5	68.0	64.0	57.0
60	78	74.5	66.5	70.0	70.0	66.5	64.0	57.0

* Tested in accordance with AHRI Standard 270 (not listed in AHRI).

PHYSICAL DATA

UNIT SIZE	24040	24060	30040	30060	36060	36090	42060	42090
NOMINAL COOLING CAPACITY (ton)	2	2	2-1/2	2-1/2	3	3	3-1/2	3-1/2
NOMINAL HEATING INPUT (Btu/hr)	40,000	60,000	40,000	60,000	60,000	90,000	60,000	90,000
SHIPPING WEIGHT** lb.	311	311	316	316	326	326	420	420
SHIPPING WEIGHT** (kg)	141	141	143	143	148	148	191	191
COMPRESSORS				Scroll				
Quantity				1				
REFRIGERANT (R-410A)								
Quantity lb.	4.8	4.8	6.2	6.2	6.4	6.4	6.1	6.1
Quantity (kg)	2.2	2.2	2.8	2.8	2.9	2.9	2.7	2.7
REFRIGERANT METERING DEVICE				TXV				
OUTDOOR COIL								
Rows...Fins/in. Face Area (sq ft)	1..21 10.2	1...21 10.2	1...21 11.9	1...21 11.9	1...21 15.4	1...21 15.4	1...21 13.6	1...21 13.6
OUTDOOR FAN								
Nominal CFM Diameter in. Diameter (mm) Motor Hp (Rpm)	2800 24 609.6 1/5 (810)	2800 24 609.6 1/5 (810)	3000 24 609.6 1/5 (810)	3000 24 609.6 1/5 (810)	3200 24 609.6 1/5 (810)	3200 24 609.6 1/5 (810)	3600 26 660.4 1/5 (810)	3600 26 660.4 1/5 (810)
INDOOR COIL								
Rows...Fins/in. Face Area (sq ft)	2...17 3.7	2...17 3.7	3...17 3.7	3...17 3.7	3...17 3.7	3...17 3.7	3...17 4.7	3...17 4.7
INDOOR BLOWER								
Nominal Cooling Airflow (Cfm) Size in. Size (mm.) Motor HP (RPM)	800 10x10 254x254 1/2 (1050)	800 10x10 254x254 1/2 (1050)	1000 10x10 254x254 1/2 (1050)	1000 10x10 254x254 1/2 (1050)	1200 11x10 279.4x254 3/4 (1000)	1200 11x10 279.4x254 3/4 (1000)	1400 11x10 279.4x254 3/4 (1075)	1400 11x10 279.4x254 3/4 (1075)
FURNACE SECTION*								
Burner Orifice No. (Qty...Drill Size) Natural Gas Factory Installed Propane Gas	2...44 2...55	2...38 2...53	2...44 2...55	2...38 2...53	2...38 2...53	3...38 3...53	2...38 2...53	3...38 3...53
HIGH-PRESSURE SWITCH (psig) Cut-out Reset (Auto)					650 +/- 15 420 +/- 25			
LOSS-OF-CHARGE / LOW-PRESSURE SWITCH (Liquid Line) (psig) cut-out Reset (auto)					20 +/- 5 45 +/- 10			
RETURN-AIR FILTERS†								
Throwaway Size in. (mm)	20x20x1 508x508x25		20x24x1 508x610x25			24x30x1 610x762x25		

574D--A

PHYSICAL DATA (CONT)

UNIT SIZE	48090	48115	48130	60090	60115	60130
NOMINAL CAPACITY (ton)	4	4	4	5	5	5
NOMINAL HEATING INPUT (Btu/hr)	90,000	115,000	130,000	90,000	115,000	130,000
SHIPPING WEIGHT** lb	428	428	428	450	450	450
SHIPPING WEIGHT** kg	194	194	194	204	204	204
COMPRESSORS Quantity			Scroll		1	
REFRIGERANT (R-410A) Quantity lb Quantity (kg.)	6.4 2.9	6.4 2.9	6.4 2.9	10.0 4.5	10.0 4.5	10.0 4.5
REFRIGERANT METERING DEVICE			TXV			
OUTDOOR COIL Rows...Fins/in. Face Area (sq ft)	1...21 15.5	1...21 15.5	1...21 15.5	2...21 15.5	2...21 15.5	2...21 15.5
OUTDOOR FAN Nominal Cfm Diameter in. Diameter (mm) Motor Hp (Rpm)	4000 26 660.4 1/5 (810)	4000 26 660.4 1/5 (810)	4000 26 660.4 1/5 (810)	3200 26 660.4 1/5 (810)	3200 26 660.4 1/5 (810)	3200 26 660.4 1/5 (810)
INDOOR COIL Rows...Fins/in. Face Area (sq ft)	3...17 4.7	3...17 4.7	3...17 4.7	3...17 5.7	3...17 5.7	3...17 5.7
INDOOR BLOWER Nominal Cooling Airflow (Cfm) Size in. Size (mm) Motor HP (RPM)	1600 11x10 279.4x254 1.0 (1075)	1600 11x10 279.4x254 1.0 (1075)	1600 11x10 279.4x254 1.0 (1075)	1750 11x10 279.4x254 1.0 (1040)	1750 11x10 279.4x254 1.0 (1040)	1750 11x10 279.4x254 1.0 (1040)
FURNACE SECTION* Burner Orifice No. Natural Gas Qty...Drill Size (Factory Installed) Propane Gas	3...38 3...53	3...33 3...51	3...31 3...49	3...38 3...53	3...33 3...51	3...31 3...49
HIGH-PRESSURE SWITCH (psig) Cut-out Reset (Auto)				650 +/- 15 420 +/- 25		
LOSS-OF-CHARGE / LOW-PRESSURE SWITCH (Liquid Line) (psig) cut-out Reset (auto)				20 +/- 5 45 +/- 10		
RETURN-AIR FILTERS Throwaway† in. (mm)				24x36x1 610x914x25		

*Based on altitude of 0 to 2000 ft (0–610 m).

† 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. 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.

** For 460 volt units, add 14 lbs (6.35 kg) to the shipping weight.

OPTIONS AND ACCESSORIES

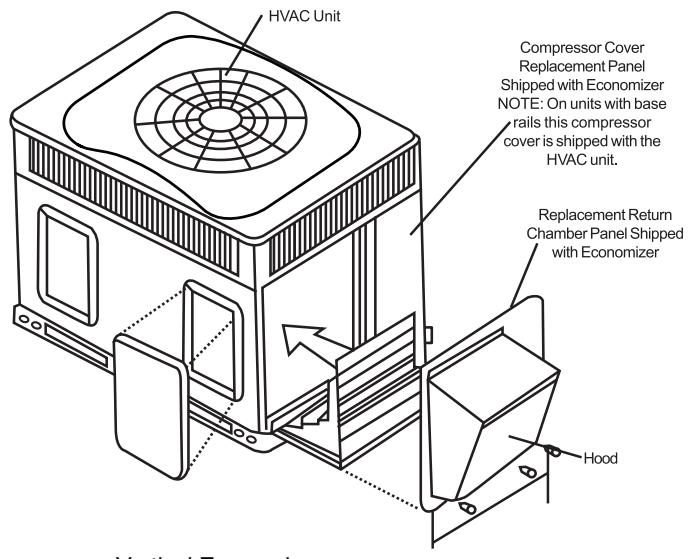
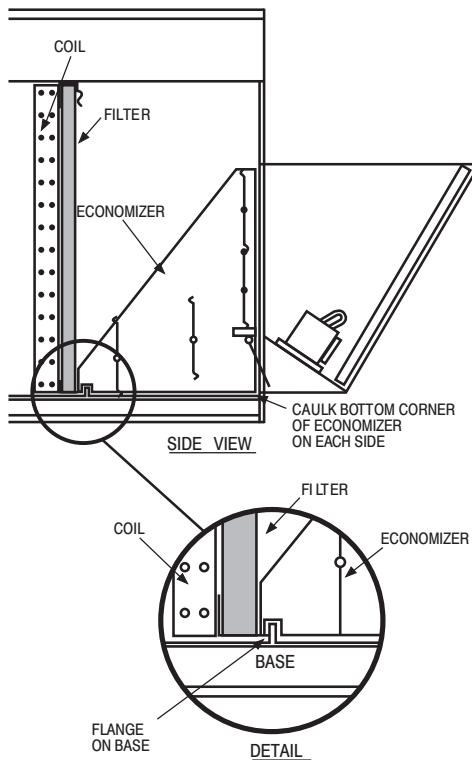
ITEM	DESCRIPTION	FACTORY INSTALLED OPTION	FIELD INSTALLED ACCESSORY
Coil Options	Base unit with tin plated indoor coil hairpins	X	
Compressor Start Kit	Compressor Start Kit assists compressor start-up by providing additional starting torque on sing phase units only.		X
Corporate Thermostats	Thermostats 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	Horizontal Economizer with solid state controls and barometric relief dampers includes filter racks and provide outdoor air during cooling and reduce compressor operation.		X
	Vertical Economizer with solid state controls and barometric relief dampers includes filter racks and provide outdoor air during cooling and reduce compressor operation.	X	X
Filter Rack	Filter Rack features easy installation, serviceability, and high-filtering performance for vertical applications. Includes 1-in. (25 mm) filter.	X	X
Flat Roof Curbs	Flat Roof Curbs in both 11-in (279 mm) and 14-in. (356 mm) sizes are available for roof mounted applications.		X
Flue Discharge Deflector	Directs flue gas exhaust 90 degrees upward from current discharge.		X
Heat Exchanger	Stainless Steel Heat Exchanger	X	
High Altitude Propane Conversion Kit	High Altitude Propane Conversion Kit is for use at 2001 to 6000 ft. (611 – 1829 m) above sea level. Kit consists of propane gas orifices that compensate for gas heat operation at high altitude.		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
Louver Metal Outdoor Coil Grilles	Louver Metal Outdoor Coil Grilles provides hail and vandalism protection.		
Manual Outside Air Damper	Manual Outside Air Damper includes hood and filter rack with adjustable damper blade for up to 25% outdoor air.		X
Natural to Propane Gas Conversion Kit	Natural to Propane Gas Conversion Kit allows for conversion from natural gas to propane gas (0–2000 ft) (0–610 m)		X
Propane to Natural Gas Conversion Kit	Propane to Natural Gas Conversion Kit allows for conversion from propane to natural gas for altitudes of 0–2000 ft (0–610 m)		X
Square-to-Round Duct Transition Kit	Square-to-Round Duct Transition Kit enable 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.		X
Curb Adapter	Adapter curb for new unit with base rail installed on existing curb		X
Gasket Kit	For field modified existing roof curb with new base rail unit.		X

*Refer to Price Page for application detail.

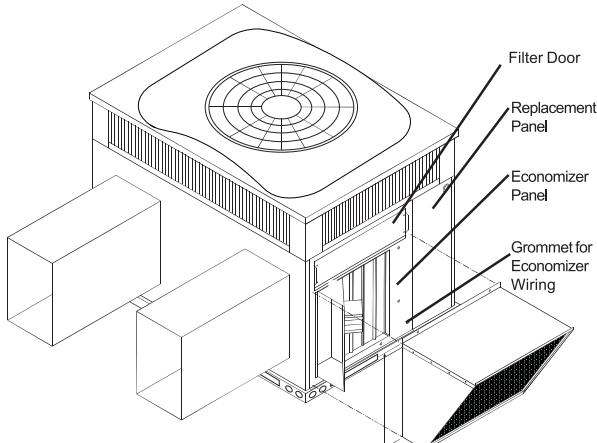
574D--A

ECONOMIZER

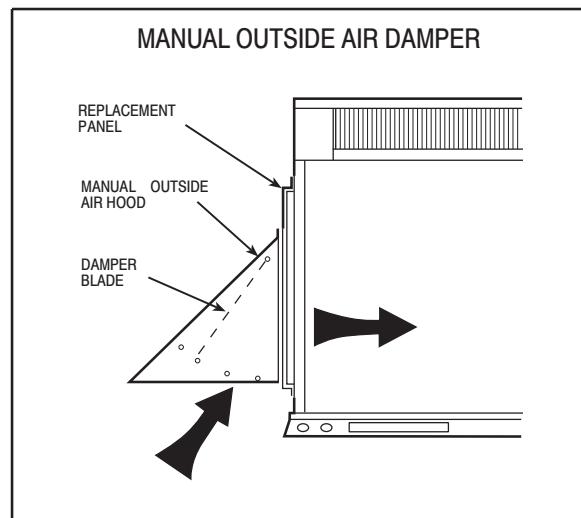
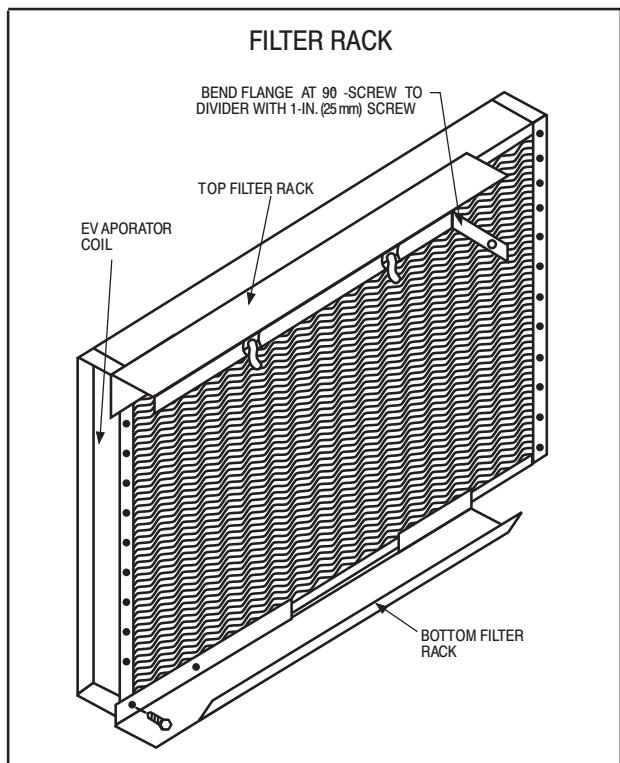
574D--A



Vertical Economizer

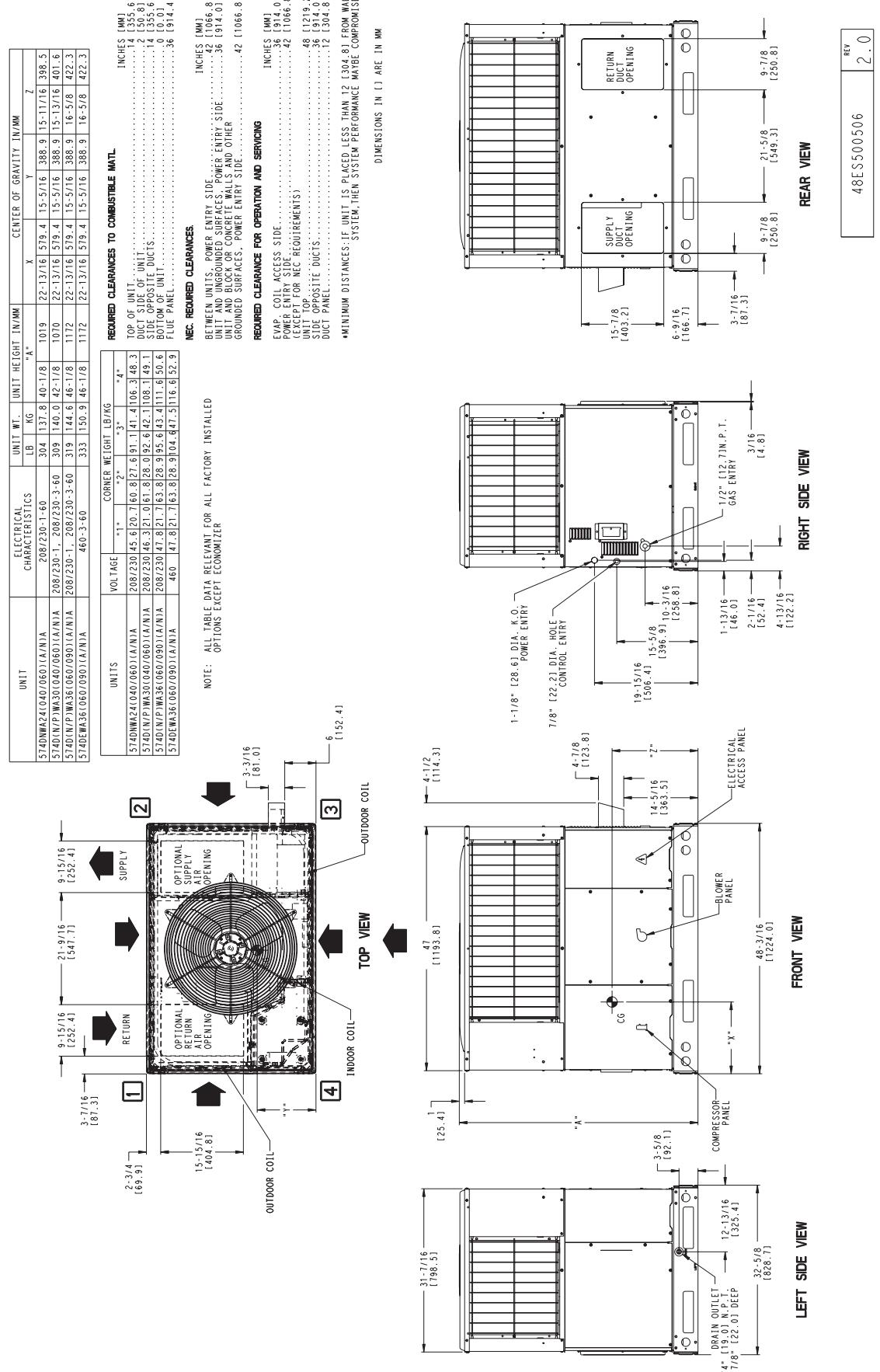


Horizontal Economizer



A09375

UNIT DIMENSIONS - 574D--A24-36

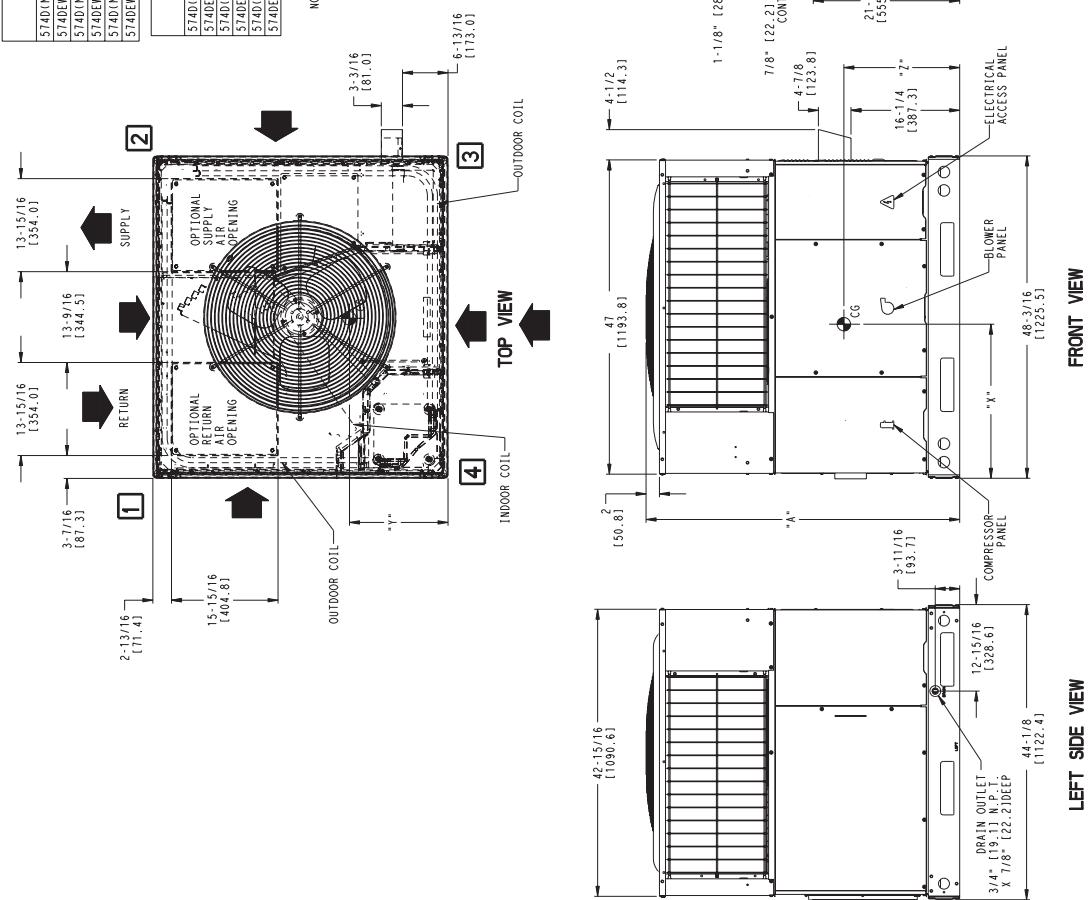


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574D-- A

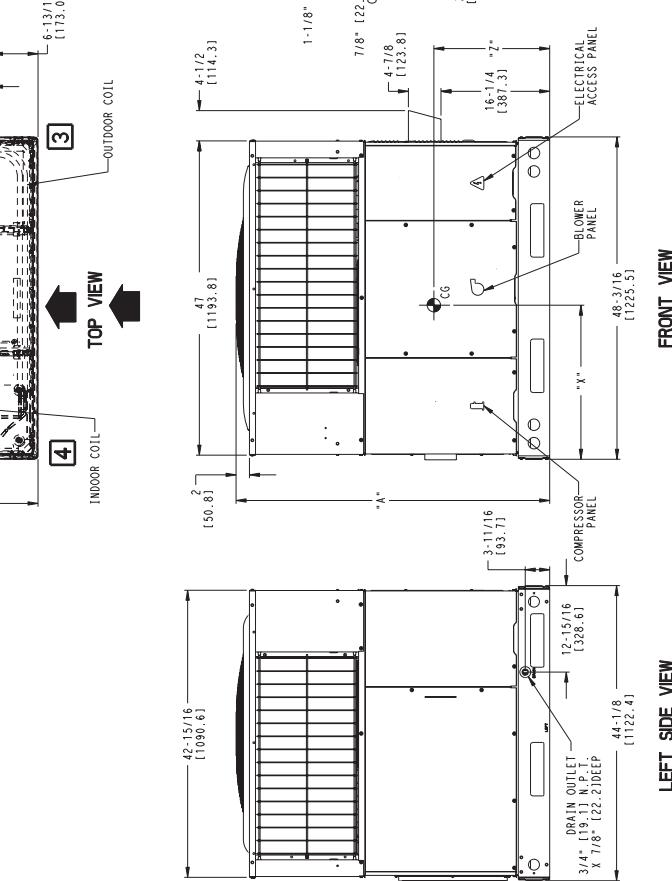
UNIT DIMENSIONS - 574D--A42-60

574D--A



UNIT	ELECTRICAL CHARACTERISTICS		UNIT HEIGHT IN MM "A"	CENTER OF GRAVITY IN MM X Y Z
	LB	KG		
574D1/N/P/WA42/060/090/1(A)/N/A	208/230-1...208/730-3:60	411	156.5	44-3/4 11-3/4 22-13/16 519.4 18
574D1/E42/060/090/1(A)/N/A	460	425	132.9	44-3/4 11-3/4 22-13/16 519.4 18
574D1/N/P/WA48/090/115/130/1(A)/N/A	208/230-1...208/730-3:60	419	190.2	46-3/4 11-8/7 22-13/16 519.4 18
574D1/E48/090/115/130/1(A)/N/A	460	435	136.5	46-3/4 11-8/7 22-13/16 519.4 18
574D1/N/P/WA40/090/115/130/1(A)/N/A	208/230-1...208/730-3:60	441	200.1	46-3/4 11-8/7 22-13/16 519.4 18
574D1/E40/090/115/130/1(A)/N/A	460	455	206.5	46-3/4 11-8/7 22-13/16 519.4 18
UNITS		VOLTAGE	CORNER WEIGHT / KG	
574D1/N/P/WA42/060/090/1(A)/N/A	208/230	61.7	28.0	317.3 [143.9]
574D1/E42/060/090/1(A)/N/A	460	61.7	28.0	317.3 [143.9]
574D1/N/P/WA48/090/115/130/1(A)/N/A	208/230	62.9	28.6	38.3 [146.7]
574D1/E48/090/115/130/1(A)/N/A	460	62.9	28.6	38.3 [146.7]
574D1/N/P/WA40/090/115/130/1(A)/N/A	208/230	66.2	30.0	88.2 [159.4]
574D1/E40/090/115/130/1(A)/N/A	460	66.2	30.0	88.2 [159.4]
REQUIRED CLEARANCES TO COMBUSTIBLE MATERIALS				
NEC REQUIRED CLEARANCES				
INCHES (MM)				
BETWEEN UNITS, POWER ENTRY SIDE.....	1-1/4 [35.6]			
DUCT SIDE OF UNIT.....	2-1/2 [64.0]			
SIDE OPPOSITE DUCTS.....	14 [35.6]			
UNIT AND UNGROUNDED SURFACES, POWER ENTRY SIDE.....	3-3/4 [96.8]			
UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES, POWER ENTRY SIDE.....	3-3/4 [96.8]			
REQUIRED CLEARANCE FOR OPERATION AND SERVICING				
INCHES (MM)				
TOP OF UNIT.....	1-1/4 [35.6]			
DUCT SIDE OF UNIT.....	2-1/2 [64.0]			
SIDE OPPOSITE DUCTS.....	14 [35.6]			
BOTTOM OF UNIT.....	0 [0.0]			
FLUE PANEL.....	36 [914.4]			
MINIMUM DISTANCES: IF UNIT IS PLACED LESS THAN 12 (304.8) MM FROM WALL, SYSTEM THEN PERFORMANCE MAY BE COMPROMISED. DIMENSIONS IN () ARE IN MM				
EQUIPMENT ACCESS, POWER ENTRY SIDE, MEET NEC REQUIREMENTS				
UNIT TOP.....	48 [1219.2]			
SIDE OPPOSITE DUCTS.....	36 [914.0]			
DUCT PANEL.....	12 [304.8]			

NOTE: ALL TABLE DATA PERTAIN TO ALL FACTORY INSTALLED OPTIONS EXCEPT ECONOMIZER.

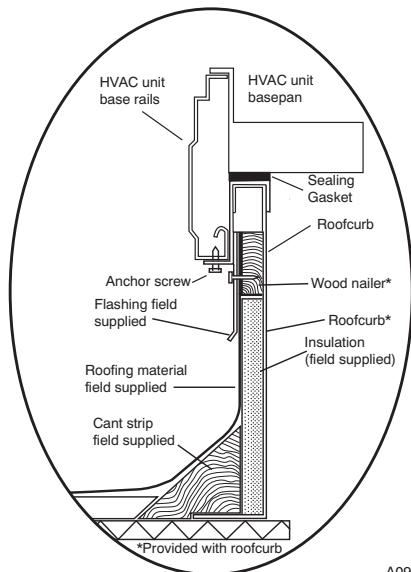


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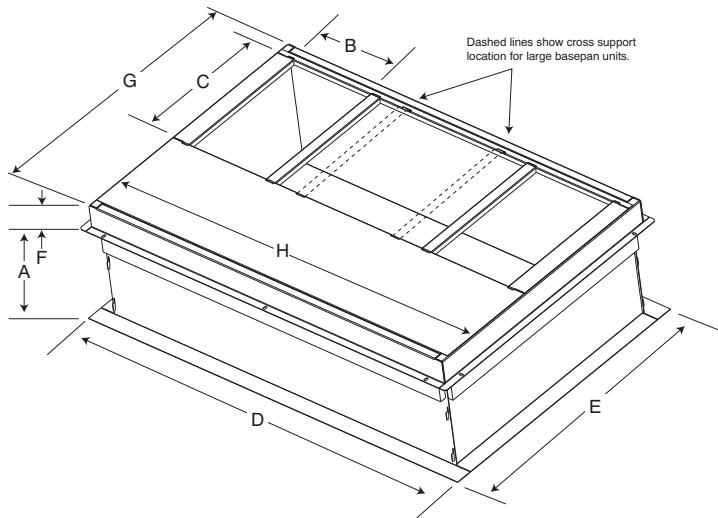
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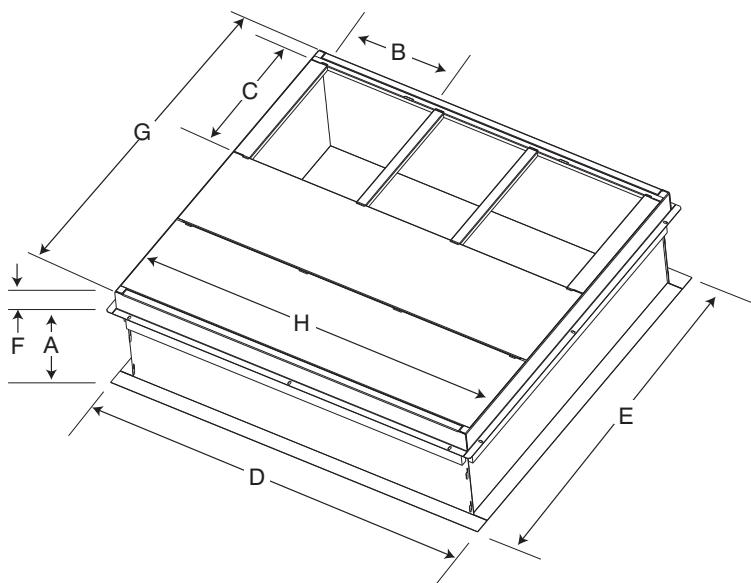
ACCESSORY DIMENSIONS



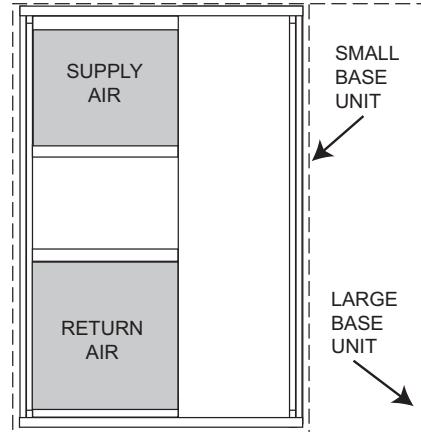
ROOF CURB DETAIL



574D--A



LARGE CURB



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	CPRFCURB010A00	11 (279)	10 (254)	14 (356)	16 (406)	47.8 (1214)	32.4 (822)	2.7 (69)	30.6 (778)	46.1 (1170)
	CPRFCURB011A00	14 (356)					43.9 (1116)			
Large	CPRFCURB012A00	11 (279)	14 (356)	14 (356)	16 (406)	47.8 (1214)	32.4 (822)	2.7 (69)	30.6 (778)	46.1 (1170)
	CPRFCURB013A00	14 (356)					43.9 (1116)			

* Part Numbers CPRFCURB010A00 and 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) 25,000 Btuh
Required Heating Capacity 60,000 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 0.30 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). Unit 036 at 1200 CFM and 67°F (19°C) ewb (entering wet bulb) will provide a total capacity of 34,400 Btuh and a SHC of 25,900 Btuh. Calculate SHC correction, if required, using Note 4 under Cooling Capacities tables.

3. Select heating capacity of unit to provide design condition requirement.

In the Heating Capacities and Efficiencies table, note that the unit 036090 will provide 72,000 Btuh with an input of 90,000 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	0.30 in. W.C.
Filter	0.13 in. W.C.
Wet Coil Pressure Drop	<u>0.10 in. W.C.</u>
Total Static Pressure	0.53 in. W.C

Enter the table for Dry Coil Air Delivery—Horizontal and Downflow Discharge. At .53 in. W.C. ESP, the closest speed to 1200 CFM is Med-High (orange wire), which delivers 1316 CFM at .6 in. ESP.

5. Select unit that corresponds to power source available.

The Electrical Data Table shows that the unit is designed to operate at 230-1-60.

PERFORMANCE DATA

574D--A24

CONDENSER ENTERING AIR TEMPERATURES °F (°C)									
					115 (46.1)				
					95 (35)		105 (40.5)		Capacity MBtuh
					Total	Sys	Total	Sys	Total
EVAPORATOR AIR		75 (23.9)		85 (29.4)		Capacity MBtuh		Total	
CFM/BF	EWB °F (°C)	Total	Sens	Total	Sys kW	Total	Sens	Total	Sys kW
700/0.07	57 (13.8)	22.74	22.74	1.68	21.26	19.77	2.06	18.28	2.29
	62 (16.6)	23.94	20.55	1.66	22.18	19.57	2.07	18.67	2.30
	63* (17.2)	24.48	17.00	1.67	22.68	16.12	2.08	19.08	2.30
	67 (19.4)	26.34	17.55	1.67	24.42	16.65	2.07	20.57	2.30
	72 (22.2)	28.95	14.51	1.67	26.85	13.70	2.08	22.66	2.31
	57 (13.8)	23.78	23.78	1.68	22.21	1.87	20.64	2.08	2.31
	62 (16.6)	24.57	22.03	1.68	22.75	20.99	1.87	20.94	19.93
	63* (17.2)	25.10	18.06	1.68	23.23	17.14	1.88	21.36	16.21
	67 (19.4)	27.00	18.66	1.69	25.00	17.73	1.88	23.00	16.80
	72 (22.2)	29.65	15.23	1.69	27.48	14.39	1.89	25.30	13.54
	57 (13.8)	24.67	24.67	1.70	23.02	1.89	21.37	21.37	2.10
	62 (16.6)	25.09	23.40	1.70	23.23	22.27	1.89	21.39	21.39
900/0.1	63* (17.2)	25.60	19.06	1.70	23.66	18.11	1.89	21.74	17.15
	67 (19.4)	27.52	19.73	1.70	25.45	18.76	1.90	23.40	17.80
	72 (22.2)	30.21	15.91	1.71	27.97	15.04	1.90	25.72	14.18

See Legend and Notes on Page 19.

PERFORMANCE DATA

574D--A30

		EVAPORATOR AIR				CONDENSER ENTERING AIR TEMPERATURES °F (°C)					
		75 (23.9)		85 (29.4)		95 (35)		105 (46.1)		115 (46.1)	
CFM/BF	EWB °F (°C)	Capacity MBtuh		Total Sys Kw		Capacity MBtuh		Total Sys Kw		Capacity MBtuh	
		Total	Sens	Total	Sens	Total	Sens	Total	Sens	Total	Sens
875/0.03	57 (13.8)	29.20	29.20	2.09	27.20	27.20	2.30	25.19	25.19	2.52	23.18
	62 (16.6)	30.09	28.44	2.09	27.78	25.28	2.30	25.48	24.10	2.52	23.22
	63* (17.2)	30.75	21.95	2.09	28.36	20.61	2.30	25.99	19.56	2.52	23.63
	67 (19.4)	33.12	22.39	2.08	30.58	21.34	2.29	28.05	20.29	2.52	25.52
	72 (22.2)	36.50	18.28	2.08	33.73	17.33	2.29	30.97	16.37	2.52	28.22
1000/0.03	57 (13.8)	30.51	30.51	2.12	28.39	28.39	2.33	26.27	26.27	2.56	24.14
	62 (16.6)	30.85	28.45	2.12	28.49	28.24	2.33	26.26	26.26	2.56	24.14
	63* (17.2)	31.44	23.11	2.12	28.97	22.02	2.33	26.51	20.93	2.56	24.07
	67 (19.4)	33.86	23.94	2.12	31.22	22.85	2.33	28.60	21.75	2.55	25.99
	72 (22.2)	37.30	19.27	2.11	34.43	18.29	2.32	31.58	17.30	2.55	28.74
1125/0.04	57 (13.8)	31.61	31.61	2.15	29.39	29.39	2.36	27.17	27.17	2.59	24.95
	62 (16.6)	31.61	31.61	2.15	29.39	29.39	2.36	27.17	27.17	2.59	24.95
	63* (17.2)	31.97	24.51	2.15	29.43	23.38	2.36	26.91	22.25	2.59	24.41
	67 (19.4)	34.42	25.44	2.15	31.71	24.30	2.36	29.02	23.16	2.59	26.35
	72 (22.2)	37.91	20.22	2.14	34.96	19.20	2.35	32.03	18.19	2.58	29.12

See Legend and Notes on Page 19.

PERFORMANCE DATA

574D--A36

CONDENSER ENTERING AIR TEMPERATURES: °F (°C)									
95 (35) 105 (40.6)									
CFM/BF	EVWB °F (°C)	75 (23.9)		85 (29.4)		115 (46.1)		125 (51.7)	
		Capacity MBtuh	Total Sys KW						
		Total	Sens	Total	Sens	Total	Sens	Total	Sens
1050/0.04	57/ (13.8)	35.66	35.66	2.38	32.84	2.71	30.06	3.07	27.32
	62/ (16.6)	37.06	32.25	2.39	33.82	30.46	2.71	30.65	28.68
1200/0.04	63*/ (17.2)	37.87	26.52	2.39	34.55	24.93	2.71	31.28	23.37
	67/ (19.4)	40.79	27.41	2.39	37.23	25.80	2.72	33.74	24.21
1350/0.05	72/ (22.2)	44.91	22.49	2.39	41.02	21.04	2.72	37.19	19.62
	57/ (13.8)	37.24	37.24	2.43	34.27	2.76	31.33	3.12	28.44
1400/0.05	62/ (16.6)	37.97	34.65	2.43	34.64	32.72	2.76	31.35	31.35
	63*/ (17.2)	38.73	28.25	2.43	35.29	26.59	2.76	31.91	24.95
1500/0.05	67/ (19.4)	41.71	28.24	2.44	38.02	27.56	2.76	34.40	25.90
	72/ (22.2)	45.90	23.85	2.44	41.86	22.16	2.77	37.91	20.68
1600/0.05	57/ (13.8)	38.59	38.59	2.48	35.47	2.81	32.40	3.17	29.37
	62/ (16.6)	38.77	36.79	2.48	35.46	2.81	32.39	3.17	29.37
1700/0.05	63*/ (17.2)	39.40	28.91	2.48	35.85	28.18	2.81	32.38	26.47
	67/ (19.4)	42.41	31.01	2.48	38.61	29.26	2.81	34.89	27.52
1800/0.05	72/ (22.2)	46.05	24.77	2.49	42.51	23.22	2.82	38.45	21.70

See Legend and Notes on Page 19.

PERFORMANCE DATA

574D--A42

CONDENSER ENTERING AIR TEMPERATURES °F (°C)											
EVAPORATOR AIR		75 (23.9)		85 (29.4)		95 (35)		105 (40.5)		115 (46.1)	
CFM/BF	EVB	Capacity MBtuh									
		Total	Sens								
		Sys KW		Sys KW		Sys KW		Sys KW		Sys KW	
1225/0.03	57 (13.8)	40.45	3.00	37.98	3.37	35.49	3.78	32.98	4.20	30.44	4.65
	62 (16.6)	42.06	37.63	2.94	39.15	3.33	36.25	33.83	3.74	31.92	4.18
	63* (17.2)	42.93	30.96	2.91	39.95	29.27	3.31	36.96	27.59	33.97	4.17
	67 (19.4)	46.12	2.80	42.92	30.23	3.19	39.72	28.52	3.61	36.53	4.05
	72 (22.2)	50.58	26.16	47.09	24.61	3.04	43.59	23.08	3.46	40.11	21.56
	57 (13.8)	42.24	2.98	39.61	3.35	36.97	3.76	34.32	4.18	31.63	4.63
	62 (16.6)	43.11	2.95	40.11	38.38	3.34	37.15	36.28	3.75	34.31	4.18
	63* (17.2)	43.91	32.97	2.92	40.81	31.21	3.32	37.71	29.45	3.73	34.61
	67 (19.4)	47.15	34.07	2.81	43.82	32.28	3.20	40.50	30.50	3.62	37.19
	72 (22.2)	51.67	2.65	48.05	25.91	3.05	44.42	24.32	3.46	40.81	22.75
	57 (13.8)	43.75	2.97	40.99	33.44	3.21	38.22	38.22	3.75	35.43	4.17
	62 (16.6)	44.02	42.95	2.98	41.01	3.34	38.21	38.21	3.75	35.43	4.17
	63* (17.2)	44.67	34.90	2.94	41.47	33.06	3.33	38.28	31.23	3.75	35.10
	67 (19.4)	47.93	36.13	2.82	44.51	34.26	3.21	41.09	32.40	3.63	37.69
	72 (22.2)	52.51	28.80	2.67	48.78	27.15	3.06	45.05	25.51	3.48	41.34

See Legend and Notes on Page 19.

PERFORMANCE DATA

574D--A48

CONDENSER ENTERING AIR TEMPERATURES °F (°C)									
EVAPORATOR AIR					75 (23.9)				
CFMBF	EWB °F (°C)	Capacity MBtuh		Total Sys Kw	85 (29.4)		Capacity MBtuh	95 (35)	
		Total	Sens		Total	Sens		Total	Sens
1400/0.04	57 (13.8)	46.51	46.51	3.29	43.60	3.68	40.66	4.11	37.70
	62 (16.6)	48.43	41.91	3.29	45.02	40.09	41.60	38.24	4.10
	63* (17.2)	49.45	34.51	3.29	45.95	32.87	3.68	42.43	31.22
	67 (19.4)	53.14	35.61	3.29	49.39	33.95	3.68	45.62	32.29
	72 (22.2)	58.33	29.19	3.28	54.23	27.68	3.67	50.11	26.15
	57 (13.8)	48.55	3.35	45.46	45.46	3.74	42.35	4.16	39.21
	62 (16.6)	49.62	44.99	3.35	46.10	43.02	3.74	42.60	40.97
	63* (17.2)	50.57	36.73	3.35	46.92	35.02	3.74	43.27	33.30
	67 (19.4)	54.31	37.96	3.34	50.41	36.23	3.73	46.50	34.50
	72 (22.2)	59.58	30.68	3.34	55.32	29.12	3.73	51.05	27.54
	57 (13.8)	50.26	34.40	47.02	47.02	3.79	43.76	43.76	4.21
	62 (16.6)	50.64	47.75	3.40	47.06	47.06	3.79	43.75	43.75
	63* (17.2)	51.44	38.88	3.40	47.67	37.10	3.79	43.92	35.31
	67 (19.4)	55.22	40.25	3.40	51.19	38.45	3.79	47.17	36.64
	72 (22.2)	60.54	32.12	3.40	56.16	30.51	3.78	51.77	28.89

See Legend and Notes on Page 19.

PERFORMANCE DATA

574D--A60

CONDENSER ENTERING AIR TEMPERATURES °F (°C)									
EVAPORATOR AIR					75 (23.9)				
CFM/BF (°C)	EWB °F (°C)	Capacity MBtuh		Total	Capacity MBtuh		Total	Capacity MBtuh	
		Sys Kw	Total Sens	Sys Kw	Total Sens	Sys Kw	Total Sens	Sys Kw	Total Sens
57 (13.8)	57.89	57.89	4.22	54.53	54.53	4.64	51.13	50.08	47.68
62 (16.6)	59.66	51.98	4.24	55.71	49.84	4.65	51.77	47.68	5.09
63* (17.2)	60.79	42.58	4.25	56.72	40.64	4.66	52.64	38.69	5.10
67 (19.4)	65.28	43.94	4.28	60.89	41.97	4.70	56.50	40.00	5.14
72 (22.2)	71.52	35.78	4.34	66.71	33.95	4.75	61.88	32.13	5.19
57 (13.8)	60.39	60.39	4.33	56.80	56.80	4.74	53.18	53.18	5.18
62 (16.6)	61.11	55.94	4.33	57.07	53.59	4.74	53.18	53.18	5.18
63* (17.2)	62.07	45.41	4.34	57.83	43.39	4.75	53.59	41.36	5.19
67 (19.4)	66.60	46.95	4.38	62.04	44.89	4.79	57.48	42.84	5.23
72 (22.2)	72.91	37.66	4.43	67.90	35.78	4.85	62.90	33.90	5.28
57 (13.8)	62.47	62.47	4.43	58.69	58.69	4.84	54.87	52.28	51.00
62 (16.6)	62.48	62.48	4.43	58.68	58.68	4.84	54.86	52.28	50.99
63* (17.2)	63.04	48.14	4.43	58.67	46.04	4.84	54.31	43.93	5.28
67 (19.4)	67.60	49.85	4.47	62.90	47.72	4.88	58.21	45.59	5.32
72 (22.2)	73.95	39.47	4.53	68.79	37.54	4.94	63.63	35.61	5.37

See Legend and Notes on Page 19.

PERFORMANCE DATA

* 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 Btu/h)
 TC—Total Capacity (1000 Btu/h) (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:

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

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

$$h_{ewb} = h_{ewb} - \frac{\text{total capacity (Btu/h)}}{4.5 \times \text{cfm}}$$

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

4. The SHC is based on 80°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.

Dry Coil Air Delivery* - Horizontal Discharge -
Unit 574D--A24-60

UNIT	HEATING RISE RANGE °F (°C)	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
574D(N,PE)WA24040 (30 – 60 (17 – 33)	Low	Blue	CFM	754	630	538	429	—	—	—	—
			Heating Rise (°F)	40	46	56	NA	NA	NA	NA	NA
		Pink	Heating Rise (°C)	22	26	31	NA	NA	NA	NA	NA
			CFM	851	777	675	591	475	—	—	—
	Med-Low	Red	Heating Rise (°F)	36	39	45	51	NA	NA	NA	NA
			CFM	941	851	774	684	576	479	—	—
		Orange	Heating Rise (°C)	32	36	39	44	52	NA	NA	NA
			CFM	1009	917	840	759	667	577	447	—
574D(N,PE)WA24060 (25 – 55 (14 – 31)	Med-High	Black	Heating Rise (°F)	30	33	36	40	45	52	NA	NA
			CFM	1241	1167	1111	1036	969	881	818	731
		High	Heating Rise (°C)	17	18	20	22	25	29	NA	NA
			CFM	754	630	538	429	—	—	—	—
	Low	Blue	Heating Rise (°F)	NA	NA	NA	NA	31	34	37	41
			CFM	941	851	777	675	591	475	—	—
		Pink	Heating Rise (°C)	52	NA	NA	NA	NA	NA	NA	NA
			CFM	1009	917	840	759	667	577	447	—
574D(N,PE)WA24060 (25 – 55 (14 – 31)	Med-Low	Red	Heating Rise (°F)	29	NA	NA	NA	NA	NA	NA	NA
			CFM	941	851	774	684	576	479	—	—
		Orange	Heating Rise (°C)	47	52	NA	NA	NA	NA	NA	NA
			CFM	1009	917	840	759	667	577	447	—
	Med-High	Black	Heating Rise (°F)	24	27	29	NA	NA	NA	NA	NA
			CFM	1241	1167	1111	1036	969	881	818	731
		High	Heating Rise (°C)	36	38	40	43	46	50	54	NA
			CFM	20	21	22	24	25	28	30	NA

Dry Coil Air Delivery* - Horizontal Discharge -
Unit 574D--A24-60

UNIT	HEATING RISE RANGE OF (°C)	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
574D(N,P,E)WA300-40	30 - 60 (17 - 33)	Low	Blue	CFM (°F)	741	638	547	415	--	--	--
			Heating Rise (°C)	41	47	55	NA	NA	NA	NA	NA
		Med-Low ¹	CFM (°F)	973	887	823	733	665	538	451	--
			Heating Rise (°C)	31	34	37	41	45	56	NA	NA
			CFM (°F)	1088	1023	954	881	800	723	658	563
	Med-High ² (N,P,E)WA300-40	Medium	Red	Heating Rise (°F)	NA	30	32	34	38	42	46
			CFM (°C)	1140	1064	996	915	840	758	687	564
		High	Orange	Heating Rise (°F)	NA	NA	30	33	36	40	44
			CFM (°C)	1202	1140	1082	1015	961	881	810	732
			Black	Heating Rise (°F)	NA	NA	NA	30	31	34	37
574D(N,P,E)WA300-60	25 - 55 (14 - 31)	Low	Blue	CFM (°C)	741	638	547	415	--	--	--
			Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA
		Med-Low	Pink	CFM (°C)	973	887	823	733	665	538	451
			Heating Rise (°F)	46	50	54	NA	NA	NA	NA	NA
			CFM (°C)	1088	1023	954	881	800	723	658	563
	Med-High ² (N,P,E)WA300-60	Medium	Red	Heating Rise (°F)	41	43	47	50	NA	NA	NA
			CFM (°C)	1140	1064	996	915	840	758	687	564
		High ¹	Orange	Heating Rise (°F)	39	42	45	49	53	NA	NA
			CFM (°C)	1202	1140	1082	1015	961	881	810	732
			Black	Heating Rise (°C)	37	39	41	44	46	50	55

574D -- A

Dry Coil Air Delivery* - Horizontal Discharge -
Unit 574D--A24-60

UNIT	HEATING RISE RANGE OF (°C)	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
574D(N,P,E)WA36060 (14 – 31)	Low ¹	Blue	CFM	1234	1168	1093	1021	961	894	825	759
			Heating Rise (°F) (°C)	36	38	41	44	46	50	54	NA
	Med-Low	Pink	CFM	1290	1223	1154	1090	1027	977	894	828
			Heating Rise (°F) (°C)	34	36	39	41	43	45	50	54
	Medium ²	Red	CFM	1354	1290	1226	1158	1102	1046	981	918
			Heating Rise (°F) (°C)	33	34	36	38	40	42	45	48
	Med-High	Orange	CFM	1606	1546	1489	1430	1371	1316	1258	1208
			Heating Rise (°F) (°C)	28	29	30	31	32	34	35	37
	High	Black	CFM	1630	1580	1517	1463	1407	1339	1277	1210
			Heating Rise (°F) (°C)	27	28	29	30	32	33	35	37
574D(N,P,E)WA36090 (19 – 36)	Low	Blue	CFM	1234	1168	1093	1021	961	894	825	759
			Heating Rise (°F) (°C)	55	58	62	NA	NA	NA	NA	NA
	Med-Low	Pink	CFM	1290	1223	1154	1090	1027	977	894	828
			Heating Rise (°F) (°C)	53	56	59	62	NA	NA	NA	NA
	Medium ²	Red	CFM	1354	1290	1226	1158	1102	1046	981	918
			Heating Rise (°F) (°C)	50	53	55	59	62	65	NA	NA
	Med-High	Orange	CFM	1606	1546	1489	1430	1371	1316	1258	1208
			Heating Rise (°F) (°C)	42	44	46	48	50	52	54	56
	High ¹	Black	CFM	1630	1580	1517	1463	1407	1339	1277	1210
			Heating Rise (°F) (°C)	42	43	45	46	48	51	53	56

Dry Coil Air Delivery* - Horizontal Discharge -
Unit 574D--A24-60

UNIT	HEATING RISE RANGE °F (°C)	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
574D(N;P;E)WA42060	25 – 55 (14 – 31)	Low ¹	Blue	CFM Heating Rise (°F) 34	1295	1234	1182	1126	1075	1016	955
			CFM Heating Rise (°C) 19	36	38	39	41	44	47	49	52
		Med – Low	Pink	CFM Heating Rise (°F) 33	1345	1282	1235	1194	1140	1095	1027
			CFM Heating Rise (°C) 18	35	36	37	39	41	43	46	48
			CFM Heating Rise (°F) 30	1505	1452	1413	1358	1323	1282	1234	1169
	Med – High ²	Red	CFM Heating Rise (°C) 16	31	31	33	34	35	36	38	39
			CFM Heating Rise (°C) 29	1545	1492	1449	1411	1362	1313	1278	1231
		Orange	CFM Heating Rise (°F) 16	30	31	31	33	34	35	36	37
			CFM Heating Rise (°C) 26	1705	1643	1607	1568	1518	1483	1448	1404
			CFM Heating Rise (°F) 14	15	15	16	16	17	18	19	20
574D(N;P;E)WA42090	35 – 65 (19 – 36)	Low	Blue	CFM Heating Rise (°F) 53	1295	1234	1182	1126	1075	1016	955
			CFM Heating Rise (°C) 29	55	58	60	63	NA	NA	NA	NA
		Med – Low	Pink	CFM Heating Rise (°F) 51	1345	1282	1235	1194	1140	1095	1027
			CFM Heating Rise (°C) 28	53	55	57	60	62	NA	NA	NA
			CFM Heating Rise (°F) 45	1505	1452	1413	1358	1323	1282	1234	1169
	Med – High ²	Red	CFM Heating Rise (°C) 25	47	48	50	51	53	55	58	60
			CFM Heating Rise (°F) 44	46	47	48	50	52	53	55	57
		Orange	CFM Heating Rise (°C) 40	41	42	43	45	46	47	48	50
			CFM Heating Rise (°F) 22	23	24	24	25	25	26	27	28

Dry Coil Air Delivery* - Horizontal Discharge -
Unit 574D--A24-60

UNIT	HEATING RISE °F (°C)	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
574D(N,P,E)WA48090	Low ¹	Blue	CFM	1402	1351	1311	1263	1224	1172	1136	1080
			Heating Rise (°F)	49	50	52	54	56	58	60	63
		Pink	CFM	1457	1404	1367	1318	1284	1233	1197	1144
			Heating Rise (°C)	47	48	50	52	53	55	57	62
	Med-Low	Red	CFM	1736	1695	1642	1601	1553	1512	1465	1427
			Heating Rise (°F)	39	40	41	42	44	45	46	48
		Orange	CFM	2149	2111	2062	2026	1980	1945	1905	1864
			Heating Rise (°C)	22	22	23	24	24	25	26	27
	Med-High	Black	CFM	2344	2306	2259	2203	2141	2070	1991	1902
			Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA
		High	CFM	1402	1351	1311	1263	1224	1172	1136	1080
			Heating Rise (°C)	NA	NA	NA	NA	NA	NA	NA	NA
574D(N,P,E)WA48115	Low	Blue	CFM	1457	1404	1367	1318	1284	1233	1197	1144
			Heating Rise (°F)	60	NA						
		Pink	CFM	1736	1695	1642	1601	1553	1512	1465	1427
			Heating Rise (°C)	33	NA						
	Med-Low	Red	CFM	2149	2111	2062	2026	1980	1945	1905	1864
			Heating Rise (°F)	50	51	53	54	56	57	59	NA
		Orange	CFM	2344	2306	2259	2203	2141	2070	1991	1902
			Heating Rise (°C)	37	38	38	39	41	42	44	48
	Med-High ¹	Black	CFM	2149	2111	2062	2026	1980	1945	1905	1864
			Heating Rise (°C)	21	21	22	23	23	25	25	27

Dry Coil Air Delivery* - Horizontal Discharge -
Unit 574D--A24-60

UNIT	HEATING RISE RANGE °F (°C)	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
574D(N,P,E)WA48130	Low	Blue	CFM	1402	1351	1311	1263	1224	1172	1136	1080
			Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA
		Pink	CFM	1457	1404	1367	1318	1284	1233	1197	1144
	Med-Low	Blue	Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA
			CFM	1736	1695	1642	1601	1553	1512	1465	1427
		Red	Heating Rise (°F)	55	57	59	60	62	64	NA	NA
	Medium ²	Blue	CFM	2149	2111	2062	2026	1980	1945	1905	1864
			Heating Rise (°C)	31	32	33	33	34	34	35	NA
		Orange	CFM	2344	2306	2259	2203	2141	2070	1991	1902
	Med-High ¹	Blue	Heating Rise (°F)	45	46	47	48	49	50	51	52
			CFM	25	25	26	26	27	28	28	29
		Black	Heating Rise (°F)	41	42	43	44	45	47	48	51
574D(N,P,E)WA60900	High	Blue	CFM	1445	1389	1341	1281	1236	1189	1139	1072
			Heating Rise (°F)	47	49	51	53	55	57	60	63
		Pink	CFM	1678	1635	1602	1558	1513	1474	1438	1404
	Med-Low	Blue	Heating Rise (°F)	41	42	42	44	45	46	47	48
			CFM	1962	1915	1880	1843	1794	1753	1711	1675
		Red	Heating Rise (°F)	35	36	36	37	38	39	40	41
	Medium ²	Blue	CFM	2131	2088	2065	2013	1982	1941	1888	1860
			Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA
		Orange	CFM	2461	2409	2339	2286	2192	2140	2062	1968
	Med-High	Blue	Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA
			CFM	25	25	25	25	26	26	27	28
		Black	Heating Rise (°C)	19	20	20	20	21	22	23	23

Dry Coil Air Delivery* - Horizontal Discharge -
Unit 574D--A24-60

		EXTERNAL STATIC PRESSURE (IN. W.C.)										
UNIT	HEATING RISE °F (°C)	MOTOR SPEED	WIRE COLOR	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
574D(N,PE)WA60115	30 - 60 (17 - 33)	Low	Blue	CFM	1445	1389	1341	1281	1236	1189	1139	1072
				Heating Rise (°F)	60	NA						
		Med-Low	Pink	CFM	1678	1635	1602	1558	1513	1474	1438	1404
				Heating Rise (°F)	52	53	54	56	57	59	60	NA
		Medium ²	Red	CFM	1962	1915	1880	1843	1794	1753	1711	1675
				Heating Rise (°F)	44	45	46	47	48	50	51	52
				Heating Rise (°C)	25	25	26	26	27	28	28	30
	Med-High ¹	Orange	CFM	2131	2088	2065	2013	1982	1941	1888	1860	1785
				Heating Rise (°F)	41	42	42	43	44	45	46	47
		High	Black	CFM	2461	2409	2339	2286	2192	2140	2062	1968
				Heating Rise (°F)	35	36	37	38	40	41	42	46
				Heating Rise (°C)	20	20	21	21	22	23	23	25
574D(N,PE)WA60130	35 - 65 (19 - 36)	Low	Blue	CFM	1445	1389	1341	1281	1236	1189	1139	1072
				Heating Rise (°F)	NA							
		Med-Low	Pink	CFM	1678	1635	1602	1558	1513	1474	1438	1404
				Heating Rise (°F)	57	59	60	62	64	65	NA	NA
		Medium ²	Red	CFM	1962	1915	1880	1843	1794	1753	1711	1675
				Heating Rise (°F)	49	50	51	52	54	55	56	57
				Heating Rise (°C)	27	28	28	29	30	31	32	33
	Med-High ¹	Orange	CFM	2131	2088	2065	2013	1982	1941	1888	1860	1785
				Heating Rise (°F)	45	46	47	48	49	50	51	52
		High	Black	CFM	2461	2409	2339	2286	2192	2140	2062	1968
				Heating Rise (°F)	39	40	41	42	44	45	47	51
				Heating Rise (°C)	22	22	23	23	24	25	26	27

*Air delivery values are without air filter and are for dry coil (See 574D-A Wet Coil Pressure Drop table).

¹ Factory-shipped heating speed

² Factory-shipped cooling speed

"NA" = Not allowed for heating speed
Note: Deduct field-supplied air filter pressure drop and wet coil pressure drop to obtain external static pressure available for ducting.
Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.

Dry Coil Air Delivery - Downflow Discharge

UNIT	HEATING RISE RANGE	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
574D--A24040 30 - 60°F (17 - 33°C)	Low	Blue	CFM	809	664	554	447	---	---	---	---
			WATTS	85	82	87	95	---	---	---	---
			BHP	0.09	0.09	0.09	0.10	---	---	---	---
			Heating Rise (°F)	37	46	55	NA	---	---	---	---
			Heating Rise (°C)	21	25	30	NA	---	---	---	---
	Med-Low	Pink	CFM	875	787	693	612	498	392	---	---
			WATTS	101	111	115	125	131	142	---	---
			BHP	0.11	0.12	0.12	0.13	0.14	0.15	---	---
			Heating Rise (°F)	35	38	44	49	NA	NA	---	---
			Heating Rise (°C)	19	21	24	27	NA	NA	---	---
574D--A24040 30 - 60°F (17 - 33°C)	Med-High ¹	Red	CFM	939	860	748	663	591	472	399	---
			WATTS	119	124	134	138	147	155	164	---
			BHP	0.13	0.13	0.14	0.15	0.16	0.17	0.18	---
			Heating Rise (°F)	32	35	40	46	51	NA	NA	---
			Heating Rise (°C)	18	20	22	25	28	NA	NA	---
	High	Black	CFM	1026	949	873	786	694	604	516	---
			WATTS	146	151	161	167	177	183	195	---
			BHP	0.16	0.16	0.17	0.18	0.19	0.20	0.21	---
			Heating Rise (°F)	NA	32	35	38	44	50	59	---
			Heating Rise (°C)	NA	18	19	21	24	28	33	---

Dry Coil Air Delivery - Downflow Discharge

UNIT	HEATING RISE RANGE	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
Low	Blue	CFM	809	664	554	447	---	---	---	---	---
			WATTS	85	82	87	95	---	---	---	---
			BHP	0.09	0.09	0.09	0.10	---	---	---	---
			Heating Rise (°F)	37	46	55	68	---	---	---	---
	Med-Low	CFM	21	25	30	38	---	---	---	---	---
			WATTS	101	111	115	125	131	142	---	---
			BHP	0.11	0.12	0.12	0.13	0.14	0.15	---	---
			Heating Rise (°F)	35	38	44	49	NA	NA	---	---
Medium ²	Pink	CFM	19	21	24	27	NA	NA	NA	---	---
			WATTS	860	748	663	591	472	392	---	---
			BHP	0.13	0.13	0.14	0.15	0.16	0.17	0.18	---
			Heating Rise (°F)	32	35	40	46	51	NA	NA	---
	Red	CFM	18	20	22	25	28	NA	NA	---	---
			WATTS	119	124	134	138	147	155	164	---
			BHP	0.13	0.13	0.14	0.15	0.16	0.17	0.18	---
			Heating Rise (°C)	25 - 55°F (14 - 31°C)	25 - 55°F (14 - 31°C)	25 - 55°F (14 - 31°C)	25 - 55°F (14 - 31°C)	25 - 55°F (14 - 31°C)	25 - 55°F (14 - 31°C)	25 - 55°F (14 - 31°C)	25 - 55°F (14 - 31°C)
Med-High ¹	Orange	CFM	29	32	35	38	44	50	NA	NA	---
			WATTS	146	151	161	167	177	183	195	---
			BHP	0.16	0.16	0.17	0.18	0.19	0.20	0.21	---
			Heating Rise (°F)	29	32	35	38	44	694	604	516
	Black	CFM	16	18	19	21	24	28	NA	---	---
			WATTS	1264	1202	1134	1070	1002	931	870	806
			BHP	0.25	0.26	0.27	0.28	0.29	0.296	0.308	0.319
			Heating Rise (°F)	NA	NA	NA	NA	30	32	35	37
High	Black	CFM	NA	NA	NA	NA	17	18	19	21	24
			Heating Rise (°C)	28	28	28	28	28	28	28	28

Dry Coil Air Delivery - Downflow Discharge

UNIT	HEATING RISE RANGE	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
574D--A30040 30 - 60°F (17 - 33°C)	Low	Blue	CFM	756	669	548	457	---	---	---	---
			WATTS	84	90	96	106	---	---	---	---
			BHP	0.09	0.10	0.10	0.11	---	---	---	---
			Heating Rise (°F)	40	45	55	NA	---	---	---	---
			Heating Rise (°C)	22	25	31	NA	---	---	---	---
	Med-Low	Pink	CFM	1002	928	842	733	660	560	450	---
			WATTS	144	155	161	173	185	192	203	---
			BHP	0.15	0.17	0.17	0.19	0.20	0.21	0.22	---
			Heating Rise (°F)	30	33	36	41	46	54	NA	---
			Heating Rise (°C)	17	18	20	23	25	30	NA	---
574D--A30040 30 - 60°F (17 - 33°C)	Med-High ¹	Red	CFM	1110	1025	967	879	814	706	611	509
			WATTS	188	195	205	211	223	236	243	255
			BHP	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27
			Heating Rise (°F)	27	29	31	34	37	43	49	59
			Heating Rise (°C)	15	16	17	19	21	24	27	33
	High	Black	CFM	1160	1091	1004	945	866	804	699	615
			WATTS	213	225	232	243	249	261	273	285
			BHP	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30
			Heating Rise (°F)	NA	NA	30	32	35	38	43	49
			Heating Rise (°C)	NA	NA	17	18	19	21	24	27

Dry Coil Air Delivery - Downflow Discharge

UNIT	HEATING RISE RANGE	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
574D--A300060 25 - 55°F (14 - 31°C)	Low	Blue	CFM	756	669	548	457	---	---	---	---
			WATTS	84	90	96	106	---	---	---	---
			BHP	0.09	0.10	0.10	0.11	---	---	---	---
			Heating Rise (°F)	40	45	55	NA	---	---	---	---
	Med-Low	Pink	Heating Rise (°C)	22	25	31	NA	---	---	---	---
			CFM	1002	928	842	733	660	560	450	---
			WATTS	144	155	161	173	185	192	203	---
			BHP	0.15	0.17	0.17	0.19	0.20	0.21	0.22	---
	Med-High ¹	Red	Heating Rise (°F)	30	33	36	41	46	54	NA	---
			Heating Rise (°C)	17	18	20	23	25	30	NA	---
			CFM	1110	1025	967	879	814	706	611	509
			WATTS	188	195	205	211	223	236	243	255
	High	Black	BHP	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27
			Heating Rise (°F)	27	29	31	34	37	43	49	59
			Heating Rise (°C)	15	16	17	19	21	24	27	33
			CFM	1160	1091	1004	945	866	804	699	615
	Orange	Orange	WATTS	213	225	232	243	249	261	273	285
			BHP	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.31
			Heating Rise (°F)	NA	NA	30	32	35	38	43	49
			Heating Rise (°C)	NA	NA	17	18	19	21	24	27
	Black	Black	CFM	1240	1173	1110	1031	966	902	821	726
			WATTS	254	266	274	284	295	302	315	327
			BHP	0.27	0.29	0.29	0.30	0.32	0.34	0.35	0.35
			Heating Rise (°F)	NA	NA	NA	NA	31	34	37	42
	Medium ²	Medium ²	Heating Rise (°C)	NA	NA	NA	NA	17	19	20	23
			CFM	1110	1025	967	879	814	706	611	509
			WATTS	188	195	205	211	223	236	243	255
			BHP	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27

Dry Coil Air Delivery - Downflow Discharge

UNIT	HEATING RISE RANGE	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	
574D--A36060 <small>25 - 55°F (14 - 31°C)</small>	Low	Blue	CFM	1277	1215	1147	1094	1045	992	932	874	826
			WATTS	285	289	299	305	314	319	328	335	347
			BHP	0.31	0.31	0.32	0.33	0.34	0.34	0.35	0.36	0.37
			Heating Rise (°F)	NA	25	26	28	29	30	32	35	37
	Med-Low	Pink	Heating Rise (°C)	NA	14	15	15	16	17	18	19	20
			CFM	1312	1260	1203	1153	1095	1050	995	943	889
			WATTS	314	324	329	340	344	355	361	372	382
			BHP	0.34	0.35	0.35	0.36	0.37	0.38	0.39	0.40	0.41
574D--A36060 <small>25 - 55°F (14 - 31°C)</small>	Med-High ¹	Red	Heating Rise (°F)	NA	NA	25	26	28	29	30	32	34
			CFM	1381	1326	1269	1212	1161	1121	1070	1019	974
			WATTS	358	365	375	383	391	395	406	418	424
			BHP	0.38	0.39	0.40	0.41	0.42	0.42	0.44	0.45	0.45
	High	Black	Heating Rise (°F)	NA	NA	14	15	15	16	17	18	19
			CFM	1631	1579	1525	1477	1423	1372	1336	1284	1233
			WATTS	567	576	581	592	598	609	617	619	613
			BHP	0.61	0.62	0.62	0.63	0.64	0.65	0.66	0.66	0.66
574D--A36060 <small>25 - 55°F (14 - 31°C)</small>	Orange		Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA	25
			Heating Rise (°C)	NA	NA	NA	NA	NA	NA	NA	NA	26
			CFM	1681	1633	1575	1526	1478	1415	1366	1312	1249
			WATTS	618	626	636	644	652	653	649	642	627
	High	Black	Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA	26
			Heating Rise (°C)	NA	NA	NA	NA	NA	NA	NA	NA	14
			CFM	1681	1633	1575	1526	1478	1415	1366	1312	1249
			WATTS	618	626	636	644	652	653	649	642	627

Dry Coil Air Delivery - Downflow Discharge

UNIT	HEATING RISE RANGE	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
574D -- A36090 35 - 65°F (19 - 36°C)	Low	Blue	CFM	1277	1215	1147	1094	1045	992	932	874
			WATTS	285	289	299	305	314	319	328	335
			BHP	0.31	0.31	0.32	0.33	0.34	0.34	0.35	0.37
			Heating Rise (°F)	NA	25	26	28	29	30	32	35
	Med-Low	Pink	CFM	1312	1260	1203	1153	1095	1050	995	943
			WATTS	314	324	329	340	344	355	361	372
			BHP	0.34	0.35	0.35	0.36	0.37	0.38	0.39	0.40
			Heating Rise (°F)	NA	NA	25	26	28	29	30	32
574D -- A36090 35 - 65°F (19 - 36°C)	Med-High ¹	Red	CFM	1381	1326	1269	1212	1161	1121	1070	1019
			WATTS	358	365	375	383	391	395	406	418
			BHP	0.38	0.39	0.40	0.41	0.42	0.42	0.44	0.45
			Heating Rise (°F)	NA	NA	14	15	15	16	17	18
	High	Orange	CFM	1631	1579	1525	1477	1423	1372	1336	1284
			WATTS	567	576	581	592	598	609	617	619
			BHP	0.61	0.62	0.62	0.63	0.64	0.65	0.66	0.66
			Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA
574D -- A36090 35 - 65°F (19 - 36°C)	High	Black	CFM	1681	1633	1575	1526	1478	1415	1366	1312
			WATTS	618	626	636	644	652	653	649	642
			BHP	0.66	0.67	0.68	0.69	0.70	0.70	0.69	0.67
			Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA
	High	Black	CFM	NA	NA	NA	NA	NA	NA	NA	NA
			WATTS	NA	NA	NA	NA	NA	NA	NA	NA
			BHP	NA	NA	NA	NA	NA	NA	NA	NA
			Heating Rise (°C)	NA	NA	NA	NA	NA	NA	NA	NA

Dry Coil Air Delivery - Downflow Discharge

UNIT	HEATING RISE RANGE	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	
Low ¹	Blue	CFM	1365	1324	1284	1233	1181	1127	1084	1039	984	939
			WATTS	177	189	201	210	222	236	248	261	281
		BHP	0.19	0.20	0.22	0.23	0.24	0.25	0.27	0.28	0.29	0.30
		Heating Rise (°F)	NA	34	35	36	38	39	41	43	45	47
	Pink	Heating Rise (°C)	NA	19	19	20	21	22	23	24	25	26
		CFM	1425	1384	1339	1301	1254	1199	1151	1104	1065	1015
		WATTS	197	210	223	235	248	257	271	284	296	305
		BHP	0.21	0.23	0.24	0.25	0.27	0.28	0.29	0.30	0.32	0.33
Med-Low	Heating Rise (°F)	NA	NA	NA	NA	34	35	37	39	40	42	44
		NA	NA	NA	NA	19	20	21	21	22	23	24
		CFM	1582	1549	1509	1469	1433	1392	1346	1300	1249	1213
		WATTS	267	280	294	308	322	336	344	359	374	387
	Red	BHP	0.29	0.30	0.32	0.33	0.35	0.36	0.37	0.38	0.40	0.42
		Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Heating Rise (°C)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		CFM	1623	1586	1553	1511	1470	1433	1393	1350	1309	1261
574D--A42060 25 - 55°F (14 - 31°C)	Orange	WATTS	285	299	312	324	335	349	363	378	393	407
		BHP	0.31	0.32	0.33	0.35	0.36	0.37	0.39	0.41	0.42	0.44
		Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Heating Rise (°C)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Black	CFM	1775	1736	1696	1660	1622	1588	1557	1516	1472	1426
		WATTS	371	386	401	410	424	439	453	468	483	497
		BHP	0.40	0.41	0.43	0.44	0.45	0.47	0.49	0.50	0.52	0.53
		Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	High	Heating Rise (°C)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Dry Coil Air Delivery - Downflow Discharge

UNIT	HEATING RISE RANGE	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	
574D--A48090 35 - 65°F (19 - 36°C)	Low ¹	Blue	CFM	1503	1457	1423	1374	1330	1287	1241	1199	1153
			WATTS	225	233	246	254	269	282	292	307	314
			BHP	0.24	0.25	0.26	0.27	0.29	0.30	0.31	0.33	0.34
			Heating Rise (°F)	45	47	48	49	51	53	55	57	59
			Heating Rise (°C)	25	26	27	27	28	29	30	32	33
	Med-Low	Pink	CFM	1556	1508	1461	1432	1388	1346	1302	1256	1221
			WATTS	244	261	268	281	290	305	319	330	345
			BHP	0.26	0.28	0.29	0.30	0.31	0.33	0.34	0.35	0.37
			Heating Rise (°F)	44	45	47	47	49	51	52	54	56
			Heating Rise (°C)	24	25	26	26	27	28	29	30	31
574D--A48090 35 - 65°F (19 - 36°C)	Medium ²	Red	CFM	1861	1822	1786	1758	1716	1688	1660	1619	1583
			WATTS	400	417	426	441	452	467	482	492	507
			BHP	0.43	0.45	0.46	0.47	0.48	0.50	0.52	0.53	0.54
			Heating Rise (°F)	37	37	38	39	40	40	41	42	43
			Heating Rise (°C)	20	21	21	21	22	22	23	23	24
	Med-High	Orange	CFM	2319	2291	2255	2230	2193	2166	2118	2057	1992
			WATTS	758	769	787	799	808	823	822	805	780
			BHP	0.81	0.82	0.84	0.86	0.87	0.88	0.88	0.86	0.84
			Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA	36
			Heating Rise (°C)	NA	NA	NA	NA	NA	NA	NA	NA	20
High	Black	Black	CFM	2532	2487	2444	2391	2330	2259	2179	2111	2033
			WATTS	1014	1022	1015	994	965	935	898	858	823
			BHP	1.09	1.10	1.09	1.07	1.03	1.00	0.96	0.92	0.88
			Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA	35
			Heating Rise (°C)	NA	NA	NA	NA	NA	NA	NA	NA	19

Dry Coil Air Delivery - Downflow Discharge

UNIT	HEATING RISE RANGE	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	
574D--A48130 35 - 65°F (19 - 36°C)	Low ¹	Blue	CFM	1503	1457	1423	1374	1330	1287	1241	1199	1153
			WATTS	225	233	246	254	269	282	292	307	314
			BHP	0.24	0.25	0.26	0.27	0.29	0.30	0.31	0.33	0.34
			Heating Rise (°F)	45	47	48	49	51	53	55	57	59
			Heating Rise (°C)	25	26	27	27	28	29	30	32	33
	Med-Low	Pink	CFM	1556	1508	1461	1432	1388	1346	1302	1256	1221
			WATTS	244	261	268	281	290	305	319	330	345
			BHP	0.26	0.28	0.29	0.30	0.31	0.33	0.34	0.35	0.37
			Heating Rise (°F)	44	45	47	47	49	51	52	54	56
			Heating Rise (°C)	24	25	26	26	27	28	29	30	31
574D--A48130 35 - 65°F (19 - 36°C)	Medium ²	Red	CFM	1861	1822	1786	1758	1716	1688	1660	1619	1583
			WATTS	400	417	426	441	452	467	482	492	507
			BHP	0.43	0.45	0.46	0.47	0.48	0.50	0.52	0.53	0.54
			Heating Rise (°F)	37	37	38	39	40	40	41	42	43
			Heating Rise (°C)	20	21	21	21	22	22	23	23	24
	Med-High	Orange	CFM	2319	2291	2255	2230	2193	2166	2118	2057	1992
			WATTS	758	769	787	799	808	823	822	805	780
			BHP	0.81	0.82	0.84	0.86	0.87	0.88	0.88	0.86	0.84
			Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA	36
			Heating Rise (°C)	NA	NA	NA	NA	NA	NA	NA	NA	20
High	Black	Black	CFM	2532	2487	2444	2391	2330	2259	2179	2111	2033
			WATTS	1014	1022	1015	994	965	935	898	858	823
			BHP	1.09	1.10	1.09	1.07	1.03	1.00	0.96	0.92	0.88
			Heating Rise (°F)	NA	NA	NA	NA	NA	NA	NA	NA	35
			Heating Rise (°C)	NA	NA	NA	NA	NA	NA	NA	NA	19

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

UNIT SIZE	STANDARD CFM (SCFM)									
	600	700	800	900	1000	1100	1200	1300	1400	1500
24	0.03	0.04	0.04	0.05	0.06	0.07	0.08	0.11	0.11	0.14
30				0.05	0.06	0.07	0.08	0.11	0.11	0.14
36				0.06	0.06	0.09	0.10	0.11	0.11	0.14
42				0.05	0.05	0.06	0.07	0.08	0.08	0.09
48						0.04	0.06	0.09	0.10	0.11
60							0.04	0.06	0.07	0.09

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

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

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

FILTER SIZE IN. (MM)	STANDARD CFM (SCFM)									
	600	700	800	900	1000	1100	1200	1300	1400	1500
600-1400 CFM 12x20x1+12x20x1 (305x508x25+305x508x25)	2.0, 2.5, 3.0	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)	3.5, 4.0	-	-	-	-	-	0.07	0.08	0.09	0.10
1500-2200 CFM 16x24x1+18x24x1 (406x610x25+457x610x25)	5.0	-	-	-	-	-	-	0.04	0.06	0.08

High Altitude Compensation, Propane Gas

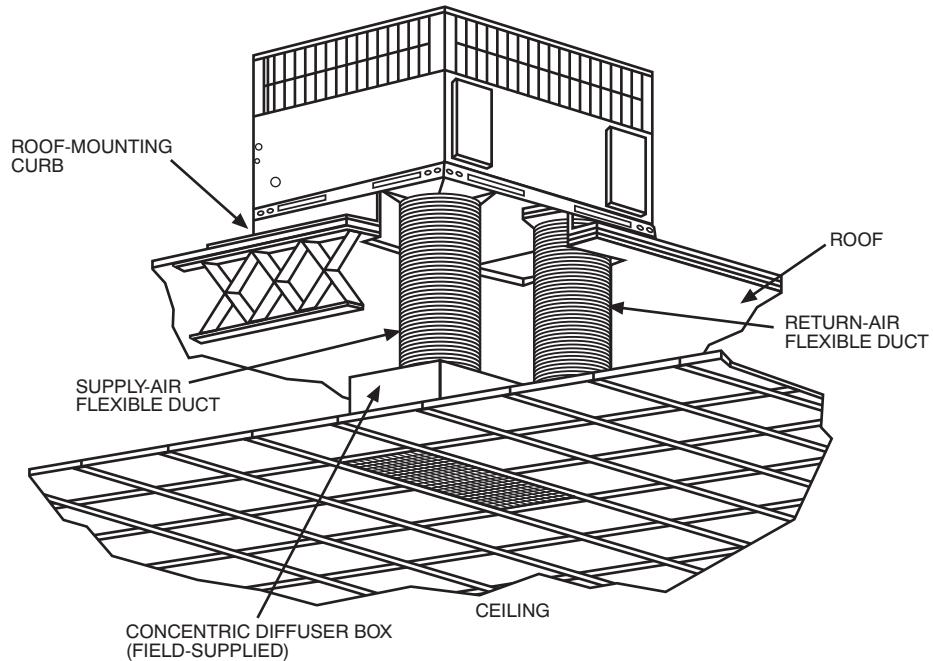
Nameplate Input (Btu/hr)	Rated Heating Input (Btu/hr), Propane Gas at Installation Altitude Above Sea Level, U.S.A.*			
	0 to 2000 ft (0–610 m)	2001 to 3000 ft* (611 to 914 m)	3001 to 4000 ft (915 to 1219 m)	4001 to 5000 ft (1220 to 1524 m)
40000	38000	31700	31700	31700
60000	53000	45900	45900	45800
90000	79000	68900	68900	68600
115000	103000	100400	98900	83000
130000	116000	115500	111800	101300
				100400

*In the U.S.A., the input rating for altitudes above 2000 ft (610m) must be reduced by 4% for each 1000 ft (305 m) above sea level.

In Canada, the input rating for altitudes from 2001 to 4500 ft (611 to 1372 m) above sea level must be derated by 10% by an authorized gas conversion station or dealer.

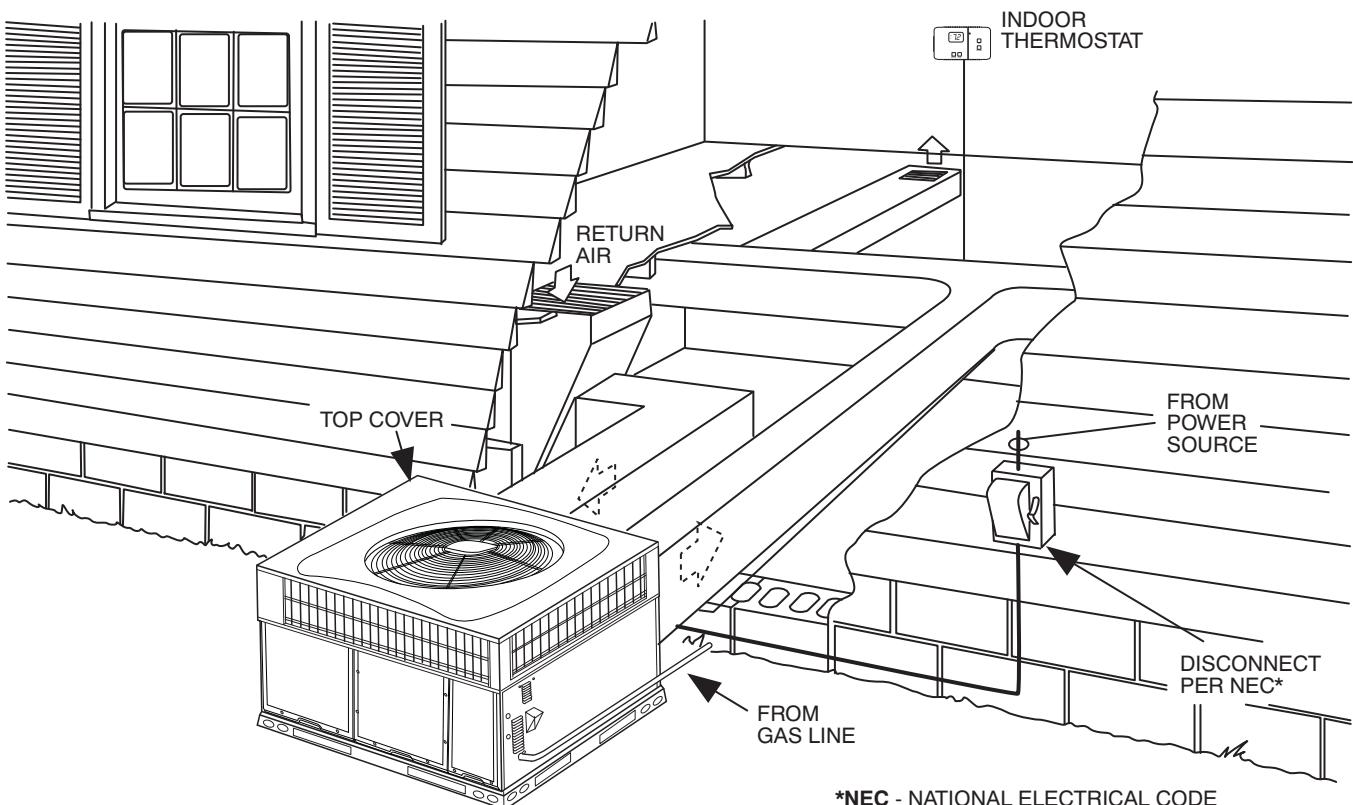
For Canadian installations from 2000 to 4500 ft (610–1372 m), use U.S.A. column 2001 to 3000 ft (611 to 914 m).

TYPICAL PIPING AND WIRING



574D--A

A09230



*NEC - NATIONAL ELECTRICAL CODE

A09231

APPLICATION DATA

Condensate trap — A 2-in. (51 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 down-flow openings. Removal of the inserts is similar to removing an electrical knock-out. Use the duct cover to seal the horizontal discharge openings in the unit. Units installed in horizontal discharge orientation do not require duct covers.

Airflow — Units are draw-thru in the cooling mode and blow-thru in the heating mode.

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).

Minimum temperature — Air entering the heat exchanger in heating mode must be a minimum of 50°F (10°C) continuous and/or 45°F (7°C) intermittent.

574D--A

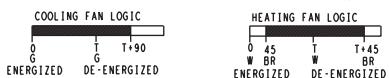
CONNECTION TYPICAL WIRING SCHEMATIC 208/230-1-60

CONNECTION WIRING DIAGRAM

DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING

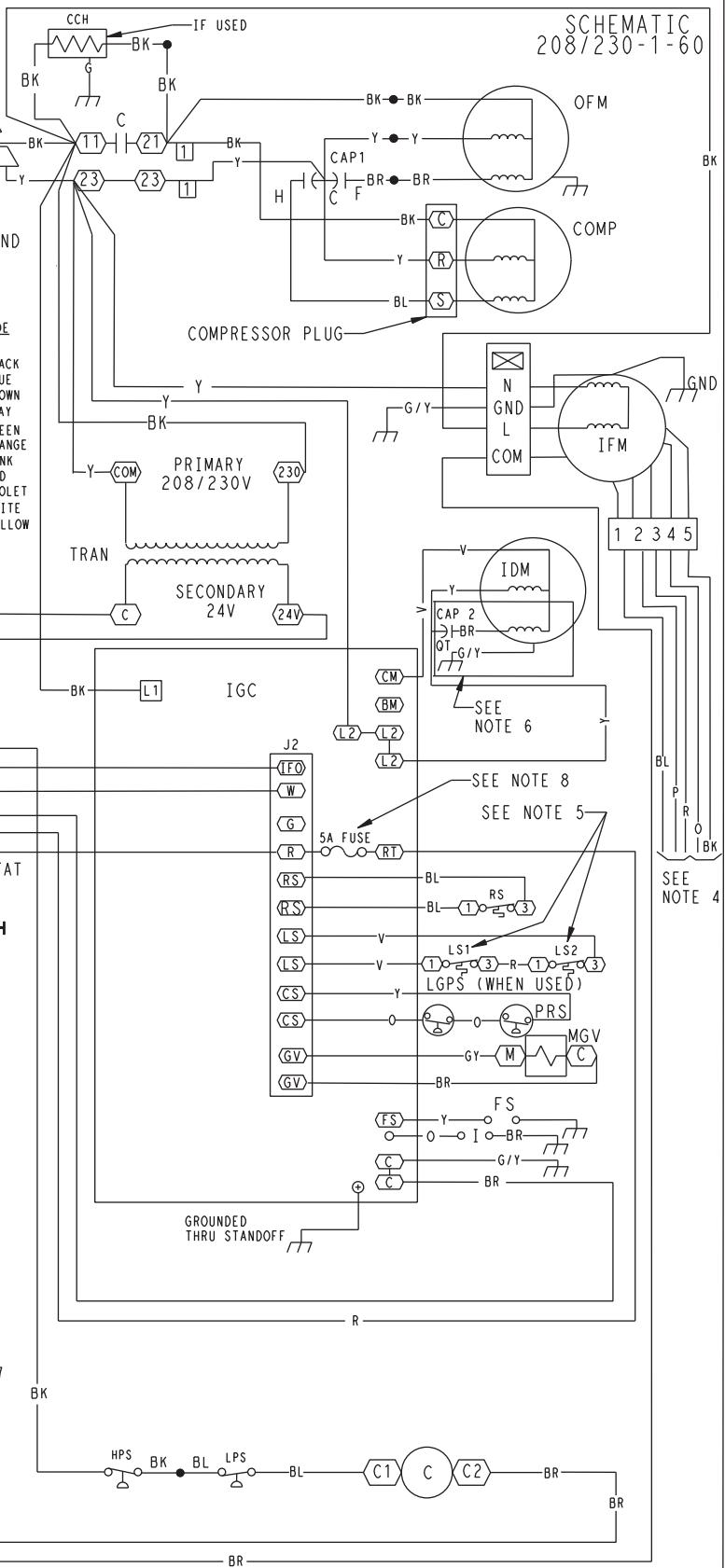
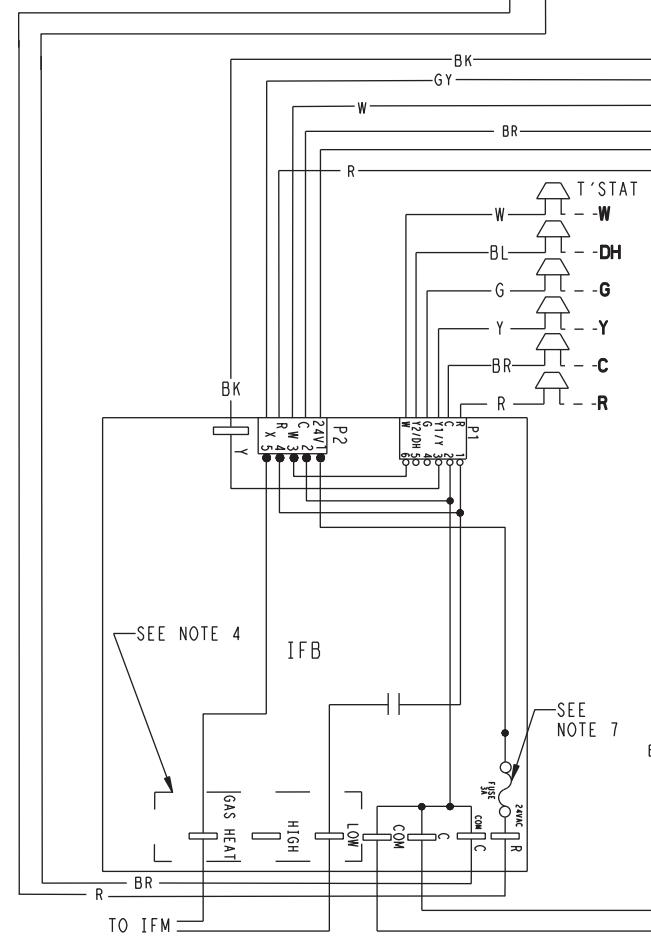
NOTES:

1. IF ANY OF THE ORIGINAL WIRES FURNISHED ARE REPLACED, THEY MUST BE REPLACED WITH TYPE 90 DEG. C WIRE OR ITS EQUIVALENT.
2. SEE PRICE PAGES FOR THERMOSTAT AND SUBBASES.
3. USE 75 DEG. COPPER CONDUCTORS FOR FIELD INSTALLATION.
4. SEE INSTALLATION INSTRUCTIONS FOR PROPER HEATING AND COOLING CONNECTIONS FOR YOUR UNIT. INDOOR FAN MOTOR PLUGS - "DO NOT DISCONNECT UNDER LOAD".
5. ON SMALL BASE MODELS LS1 AND LS2 ARE WIRED IN SERIES. LARGE BASE MODELS HAVE LS1 ONLY.
6. INDUCER CAPACITOR AND WIRING ON CERTAIN MODELS ONLY. IF CAP2 IS PRESENT, YELLOW WIRES FROM IGC AND IDM CONNECT ON SAME SIDE OF CAP2.
7. THIS FUSE IS MANUFACTURED BY LITTELFUSE, P/N 257003.
8. THIS FUSE IS MANUFACTURED BY LITTELFUSE, P/N 257005.



COLOR CODE

△ FIELD SPLICE	FS FLAME SENSOR	BK BLACK
□ TERMINAL (MARKED)	FU FUSE	BL BLUE
○ TERMINAL (UNMARKED)	GND GROUND	BR BROWN
● SPLICE (IF USED)	GVR GAS VALVE RELAY	GY GRAY
□ SPLICE (MARKED)	HV TRAN HIGH VOLTAGE TRANSFORMER	G GREEN
— FACTORY WIRING	I IGNITOR	ORANGE
- - FIELD CONTROL WIRING	IFB INDOOR FAN BOARD	P PINK
- - FIELD POWER WIRING	IGC INTEGRATED GAS UNIT	R RED
- - - ACCESSORY OR OPTIONAL WIRING	CONTROLLER	V VIOLET
— TO INDICATE COMMON POTENTIAL ONLY; NOT TO REPRESENT WIRING	IDM INDUCED DRAFT MOTOR	W WHITE
BLR BLOWER RELAY	IFM INDOOR FAN MOTOR	Y YELLOW
C CONTACTOR	LGPS LOW GAS PRESSURE SWITCH (WHEN USED)	
CAP 1 CAPACITOR, COMP	LS1 PRIMARY LIMIT SWITCH	
CAP 2 CAPACITOR, INDUCER	LS2 SECONDARY LIMIT SWITCH	
COMP COMPRESSOR MOTOR	MGV MAIN GAS VALVE	
CR COMBUSTION RELAY	PR PRESSURE SWITCH	
EQUIP EQUIPMENT	QT QUADRUPLE TERMINAL	
	RS ROLLOUT SWITCH	
	TRAN TRANSFORMER	
	T-STAT THERMOSTAT	



574D--A

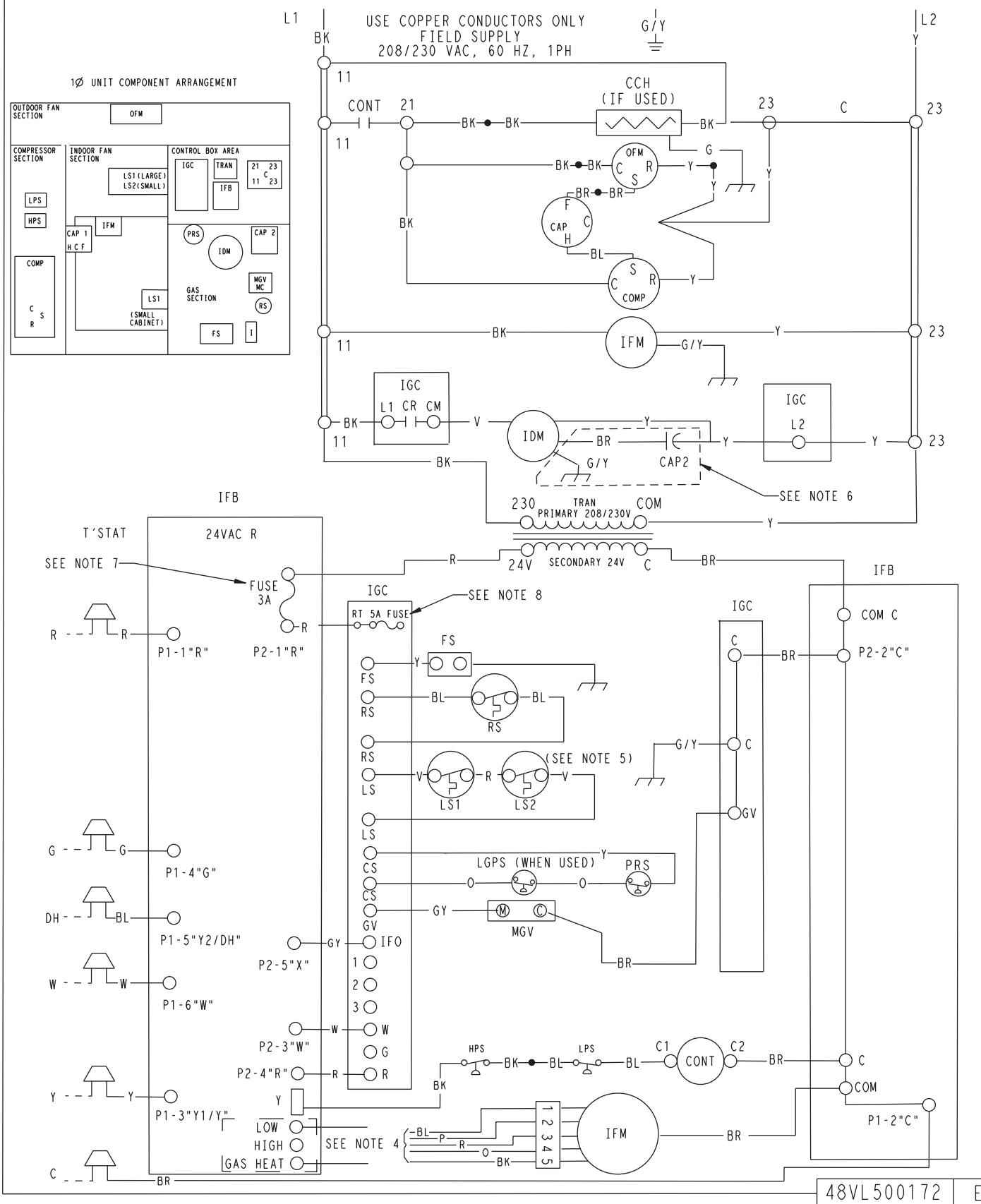
A09282C

LADDER TYPICAL WIRING SCHEMATIC 208/230-1-60

LADDER WIRING DIAGRAM

DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING

574D--A

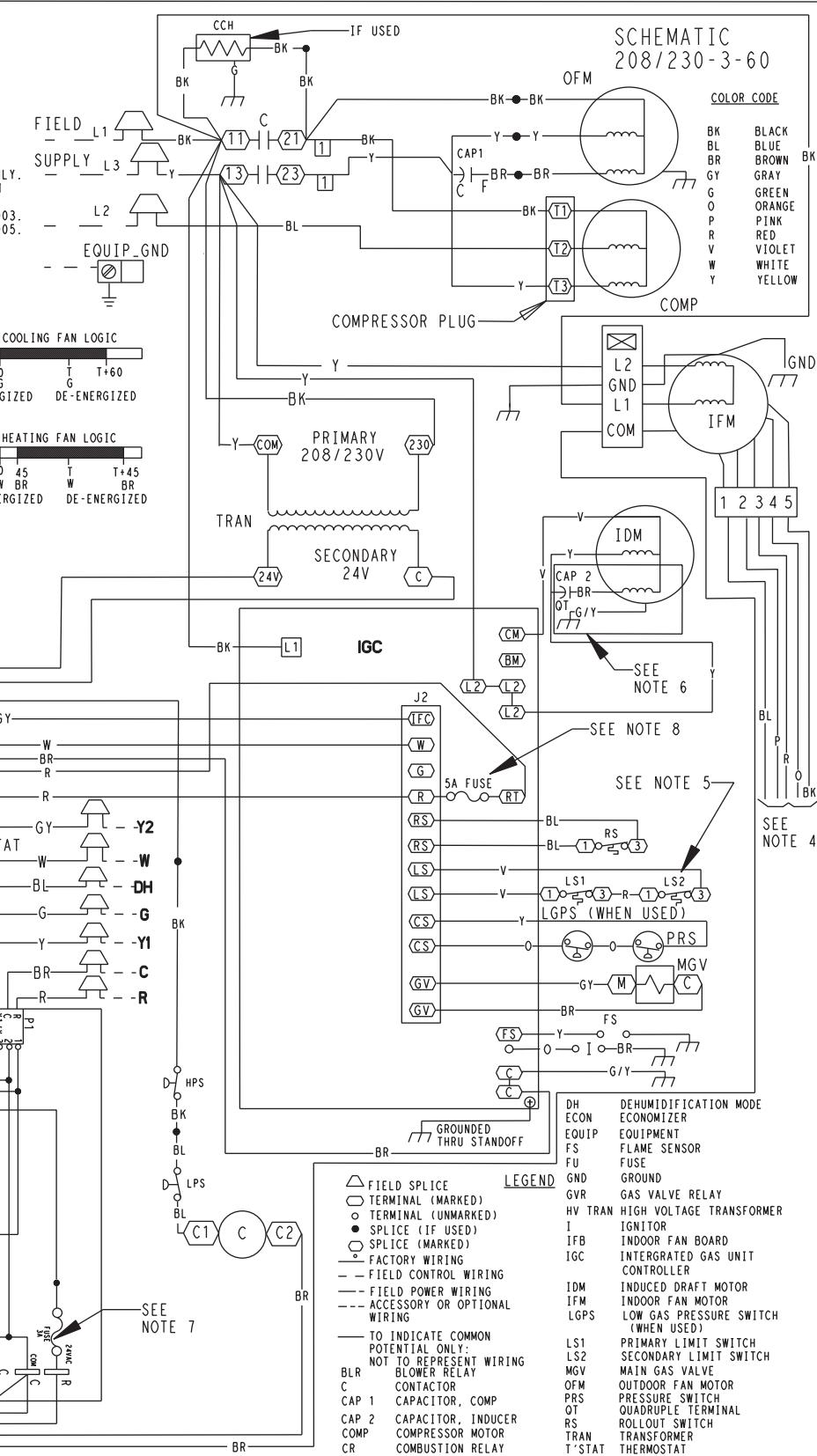


CONNECTION TYPICAL WIRING SCHEMATIC 208/230-3-60

CONNECTION WIRING DIAGRAM

DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING

- NOTES:
1. IF ANY OF THE ORIGINAL WIRES FURNISHED ARE REPLACED, THEY MUST BE REPLACED WITH TYPE 90 DEG. C WIRE OR ITS EQUIVALENT.
 2. SEE PRICE PAGES FOR THERMOSTAT AND SUBBASES.
 3. USE 75 DEG. COPPER CONDUCTORS FOR FIELD INSTALLATION.
 4. SEE INSTALLATION INSTRUCTIONS FOR PROPER HEATING AND COOLING CONNECTIONS FOR YOUR UNIT. INDOOR FAN MOTOR PLUGS - "DO NOT DISCONNECT UNDER LOAD"
 5. LS2 USED ON SMALL CHASSIS ONLY.
 6. INDUCER CAPACITOR AND WIRING ON CERTAIN MODELS ONLY. IF CAP2 IS PRESENT, YELLOW WIRES FROM IGC AND IDM CONNECT ON SAME SIDE OF CAP2.
 7. THIS FUSE IS MANUFACTURED BY LITTELFUSE, P/N 257003.
 8. THIS FUSE IS MANUFACTURED BY LITTELFUSE, P/N 257005.
 9. DEHUMIDIFICATION FEATURE CANNOT BE USED WHEN ECONOMIZER IS INSTALLED.

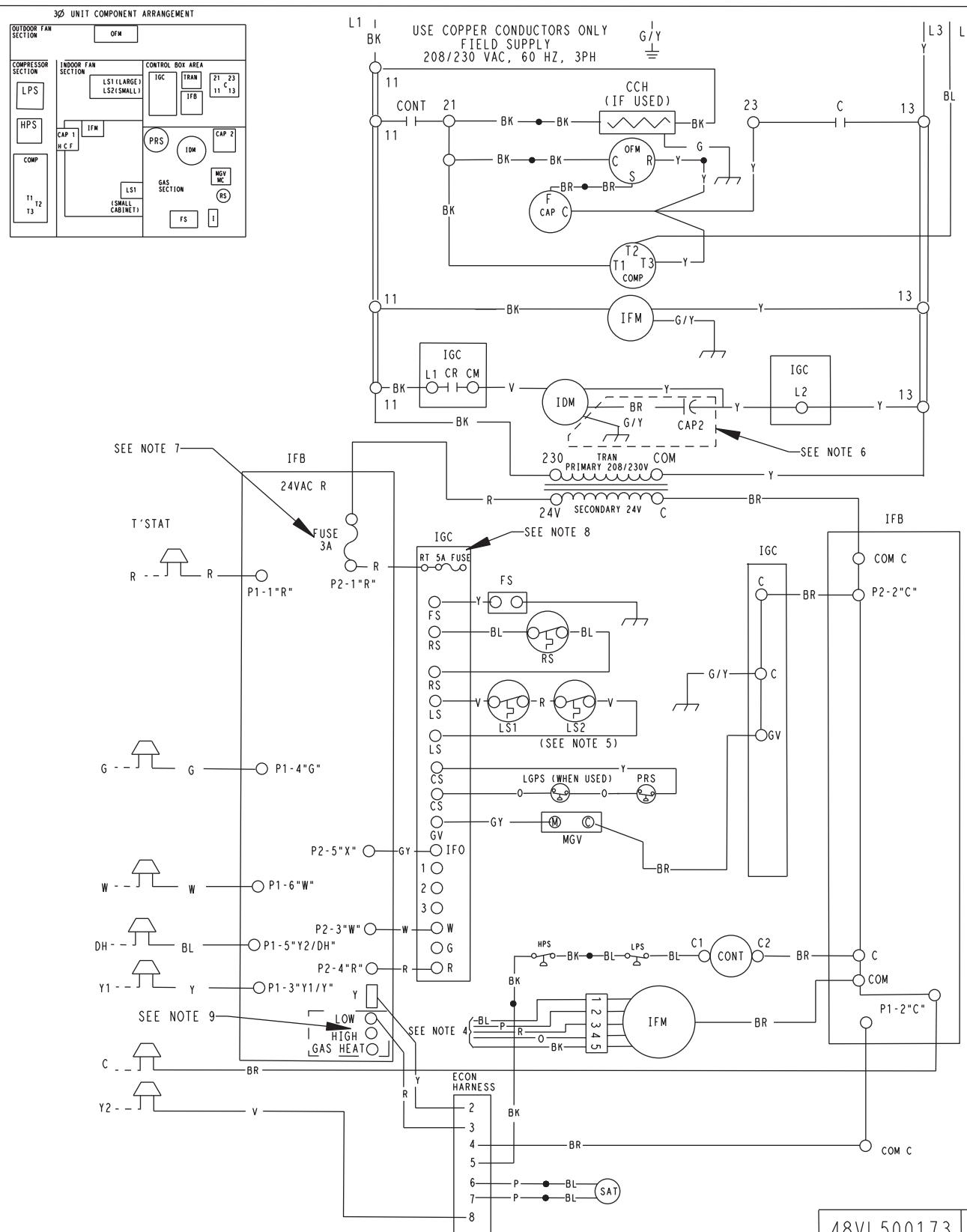


LADDER TYPICAL WIRING SCHEMATIC 208/230-3-60

LADDER WIRING DIAGRAM

DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING

574D--A



48VL500173

C

A09264L

CONNECTION TYPICAL WIRING SCHEMATIC 460-3-60

CONNECTION WIRING DIAGRAM

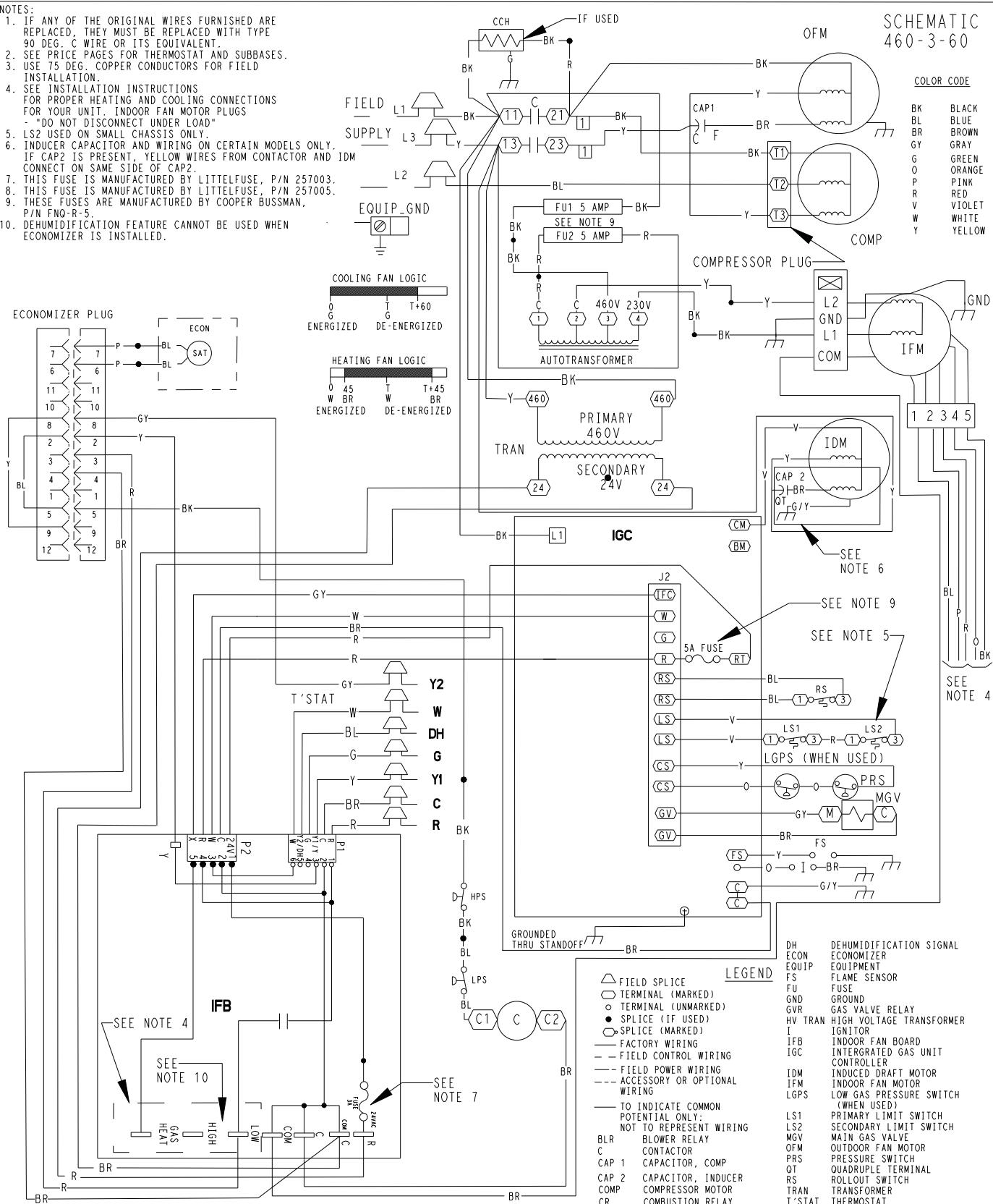
DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING

- NOTES:
1. IF ANY OF THE ORIGINAL WIRES FURNISHED ARE REPLACED, THEY MUST BE REPLACED WITH TYPE 90 DEG C WIRE OR ITS EQUIVALENT.
 2. SEE PRICE PAGES FOR THERMOSTAT AND SUBBASES.
 3. USE 75 DEG. COPPER CONDUCTORS FOR FIELD INSTALLATION.
 4. SEE INSTALLATION INSTRUCTIONS FOR PROPER HEATING AND COOLING CONNECTIONS FOR YOUR UNIT. INDOOR FAN MOTOR PLUGS - "DO NOT DISCONNECT UNDER LOAD"
 5. LS2 USED ON SMALL CHASSIS ONLY.
 6. INDUCER CAPACITOR AND WIRING ON CERTAIN MODELS ONLY. IF CAP2 IS PRESENT, YELLOW WIRES FROM CONTACTOR AND IDM CONNECT ON SAME SIDE OF CAP2.
 7. THIS FUSE IS MANUFACTURED BY LITTELFUSE, P/N 257003.
 8. THIS FUSE IS MANUFACTURED BY LITTELFUSE, P/N 257005.
 9. THESE FUSES ARE MANUFACTURED BY COOPER BUSSMAN, P/N FNO-R-5.
 10. DEHUMIDIFICATION FEATURE CANNOT BE USED WHEN ECONOMIZER IS INSTALLED.

SCHEMATIC
460-3-60

	COLOR CODE
BK	BLACK
BL	BLUE
BR	BROWN
GY	GRAY
G	GREEN
O	ORANGE
P	PINK
R	RED
V	VIOLET
W	WHITE
Y	YELLOW

574D--A

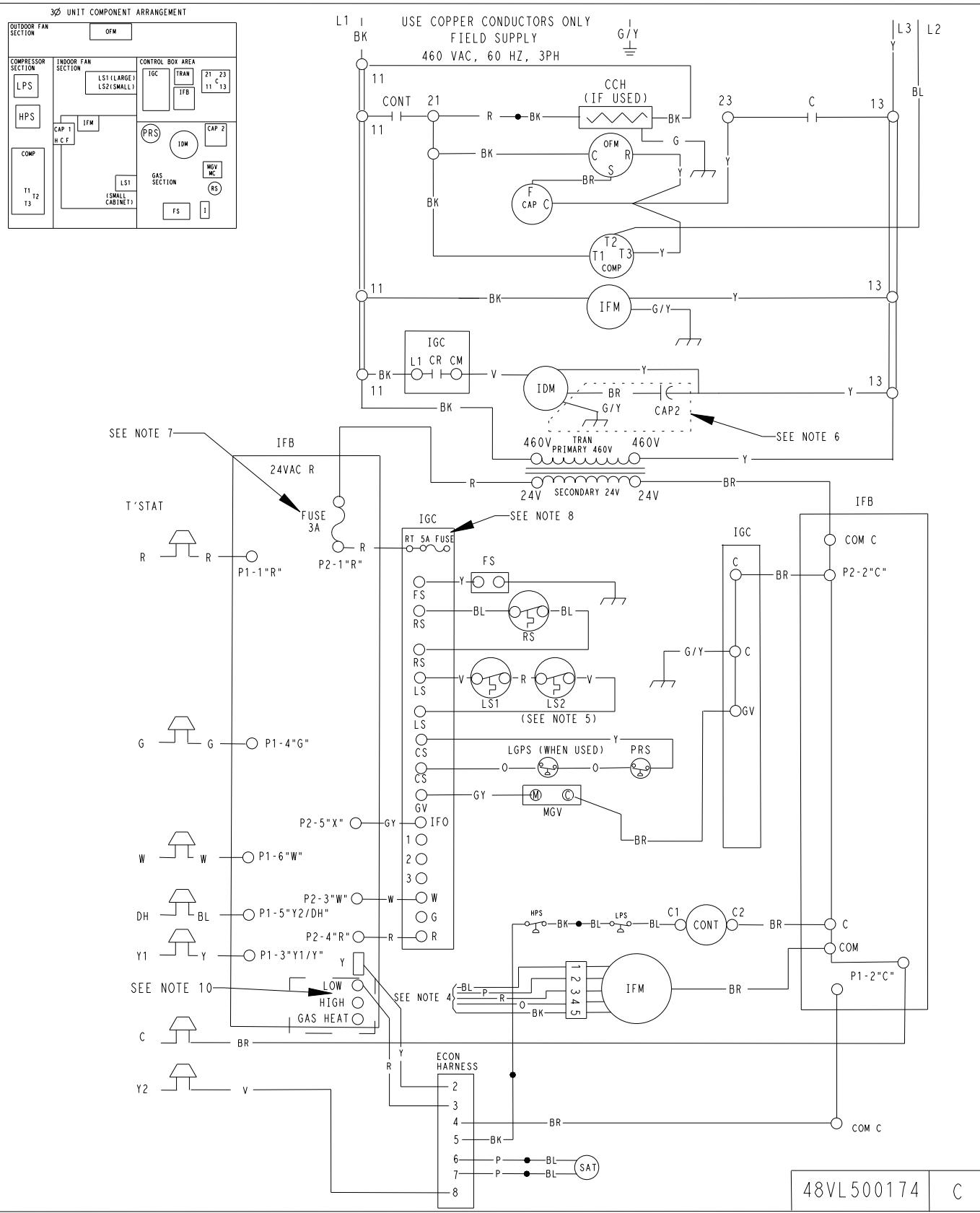


LADDER TYPICAL WIRING SCHEMATIC 460-3-60

LADDER WIRING DIAGRAM

DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING

574D--A



CONTROLS

Operating sequence

Heating — On a call for heating, terminal “W” of the thermostat is energized, starting the induced-draft motor. When the pressure switch senses that the induced-draft motor is moving sufficient combustion air, the burner sequence begins. This function is performed by the integrated gas unit controller (IGC). The indoor (evaporator)-fan motor is energized 45 sec after flame is established. When the thermostat is satisfied and W is de-energized, the burners stop firing and the indoor (evaporator) fan motor shuts off after a 45-sec time-off delay. Please note that the IGC has the capability to automatically reduce the indoor fan motor on delay and increase the indoor fan motor off delay in the event of high duct static and/or partially-clogged filter.

Cooling — When the system thermostat calls for cooling, 24 V is supplied to the “Y1/Y” and “G” terminals of the thermostat. This completes the circuit to the contactor coil (C) and indoor (evaporator) fan relay (IFR). The normally open contacts of energized C close and complete the circuit through compressor motor (COMP) to outdoor (condenser) fan motor (OFM). Both motors start instantly. The set of normally open contacts of energized IFR close and complete the circuit through IFM. The IFM starts instantly.

On the loss of the thermostat call for cooling, 24 V is removed from both the “Y1/Y” and “G” terminals (provided the fan switch is in the “AUTO” position) de-energizing the compressor contactor and opening the contacts supplying power to compressor/OFM. After a 90-second delay, the IFM shuts off. If the thermostat fan selector switch is in the “ON” position, the IFM will run continuously.

NOTE: On units with a Time Guard® II device: Once the compressor has started and then stopped, it cannot be restarted again until 5 minutes have elapsed.

574D--A

GUIDE SPECIFICATIONS

Packaged Gas Heating/Electric Cooling Units

Constant Volume Application

HVAC Guide Specifications

Size Range: **2 to 5 Tons, Nominal Cooling
40,000 to 130,000 Btuh,
Nominal Heating Input**

Model Number: 574D--A

Part 1 — General

SYSTEM DESCRIPTION

Outdoor rooftop mounted, gas heating/electric cooling unit utilizing a hermetic 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 ARI Standards 210/240 and 270.
- B. Unit shall be designed in accordance with UL Standard 1995 and ANSI Z21.47.
- 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 90.1 requirements for flame spread and smoke generation.
- G. Cabinet insulation shall meet ASHRAE Standard 62.2.

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 multiple removable cabinet panels.
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 motor shall be a multi-speed, direct-drive, as shown on equipment drawings.
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. Scroll compressors 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. Heating Section:

1. Induced-draft combustion type with energy saving direct spark ignition system and redundant main gas valve.
2. Induced-draft motors shall provide adequate airflow for combustion.
3. The heat exchangers shall be constructed of aluminized steel for corrosion resistance.
4. Burners shall be of the in-shot type constructed of aluminum coated steel.
5. All gas piping and electric power shall enter the unit cabinet at a single location.

G. Refrigerant Components:

Refrigerant expansion device shall be of the TXV (thermostatic expansion valve) type.

H. Filters:

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

I. 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.

J. Operating Characteristics:

1. Unit shall be capable of starting and running at 125°F (51°C) ambient outdoor temperature per maximum load criteria of ARI 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.

K. Electrical Requirements:

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

L. 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.
3. Condenser fan motor shall be totally enclosed.
4. Evaporator Fan Motor to be high-efficiency brushless DC motor.

M. Low NOx:

Shall provide NOx reduction to values below 40 nanograms/joule to meet California's and other localities' emission requirements as shipped from factory.

GUIDE SPECIFICATIONS (CONT)

N. Special Features Available:

1. Coil Options
Base unit with tin plated indoor coil hairpins available as a factory installed option.
2. Compressor Start Kit (single phase units only):
Shall provide additional starting torque for single-phase compressors.
3. Thermostat:
To provide for one-stage heating and cooling in addition manual or automatic changeover and indoor fan control.
4. Crankcase Heater:
Shall provide anti-floodback protection for low-load cooling applications.
5. Economizer:
(Horizontal - field installed accessory)
(Vertical - field installed accessory or factory installed option)
 - 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. Filter Rack Kit:
Shall provide filter mounting for downflow applications.
Offered as an accessory or as a factory installed option.
7. Flat Roof Curb:
Curbs shall have seal strip and a wood nailer for flashing and shall be installed per manufacturer's instructions.
8. Flue Discharge Deflector
Directs flue gas exhaust 90 degrees upward from current discharge.
9. Heat Exchanger
Stainless Steel Heat Exchanger available as a factory installed option.

10. High Altitude Propane Conversion Kit:

Shall consist of all required hardware to convert to propane gas heat operation at 2001 to 6000 ft (611 to 1829 m) above sea level.

11. Low Ambient Package:

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°C) outdoor ambient temperature when properly installed.

12. Louver Metal Outdoor Coil Grilles

Available as a field accessory. Provides hail and vandalism protection.

13. Manual Outdoor Air Damper:

Package shall consist of damper, birdscreen, and rainhood which can be preset to admit outdoor air for year-round ventilation.

14. Natural-to-Propane Conversion Kit:

Shall be complete with all required hardware to convert to propane gas operation at 10.0 IN. W.C. manifold pressure.

15. Propane-to-Natural Conversion Kit

Shall be complete with all hardware to convert to natural gas at standard altitude (0 to 2000 ft [0 to 610 m] above sea level).

16. Square-To-Round Duct Transitions (24-48 size):

Shall have the ability to convert the supply and return openings from rectangular to round.

17. 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.

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