



Trane Precedent Packaged Rooftop

Unit Overview - THJ300A4S00**00D0A1B1000000000000000000

Application	Unit Size	Supply Fan		External Dimensions (in.)			Operating Weight	EER	IEER/SEER	Elevation
DX Cooling / Electric Heat	25 Ton	Airflow	Total Static Pressure	Height	Width	Length	2040.0 lb	10.70	15.80	0.00 ft
		8000 cfm	1.479 in H2O	4.92 ft	7.25 ft	10.25 ft				

Unit Features

Hinged Service Access/Filters	Standard Access Panels with 2-in MERV 13
Through the Base Provisions	Electric
Disconnect / Circuit Breaker	Non-Fused Disconnect Switch
Convenience Outlet	Powered 15A Convenience Outlet



Unit Electrical

Voltage/phase/hertz	460/60/3
MCA	59.00 A
MOP	80.00 A
Condenser Fan FLA	2.20 A
Evaporator Fan FLA	4.60 A
Compressor 1 RLA	23.90 A
Compressor 2 RLA	14.40 A
Compressor Power	20.12 kW
System Power	25.12 kW

Controls

Unit Controls	Symbio 700
Communications Option	Advanced Controls and BACnet BAS

Cooling Section

		Capacity
Entering Dry Bulb	80.00 F	Gross Total 272.72 MBh
Entering Wet Bulb	67.00 F	Gross Latent 77.32 MBh
Ambient Temp	95.00 F	Gross Sensible 195.40 MBh
Leaving Coil Dry Bulb	57.30 F	Net Total 21.95 tons
Leaving Coil Wet Bulb	55.83 F	Net Sensible 186.12 MBh
Leaving Unit Dry Bulb	59.05 F	Net Sensible Heat Ratio 70.65 %
Leaving Unit Wet Bulb	56.54 F	Fan Motor Heat 1.50 MBh
Saturated Discharge Temperature	121.35 F	Refrig Charge-Circuit 1 16.9 lb
Saturated Suction Temperature	47.85 F	

Fan Section

Indoor Fan Data		Indoor Fan Performance	
Airflow Application	Horizontal	Airflow	8000 cfm
Design ESP	1.000 in H2O	Supply Motor Horsepower	3.000 hp
Component SP	0.479 in H2O	Indoor Motor Operating Power	4.234 hp
Heat SP	0.000 in H2O	Indoor RPM	1483 rpm
Total SP	1.479 in H2O	Outdoor Fan Data	
Supply Fan Count	2.00 Number	Outdoor Fan Drive Type	Direct
Indoor Fan Drive Type	Variable Direct	Outdoor Fan Quantity	2.00 Number
Indoor Fan Quantity	2.00 Number	Outdoor Fan Type	Propeller
Indoor Fan Type	BC Plenum		

Field Installed Accessories

Fresh Air Options Module	Fresh Air Option Module
Enthalpy kit	Comparative enthalpy kit
Fresh air selection	0-100% Economizer, dry bulb control, Hor
CO2 sensor kit	CO2 wall mounted
Discharge air sensing tube	yes
Horizontal Conversion Panel	yes
Low Ambient Kit	None



Acoustics

Sound Path	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Ducted Discharge	87 dB	95 dB	81 dB	76 dB	71 dB	67 dB	67 dB	66 dB
Ducted Inlet	82 dB	85 dB	81 dB	80 dB	77 dB	73 dB	70 dB	65 dB
Outdoor Noise	94 dB	91 dB	98 dB	97 dB	94 dB	89 dB	87 dB	81 dB

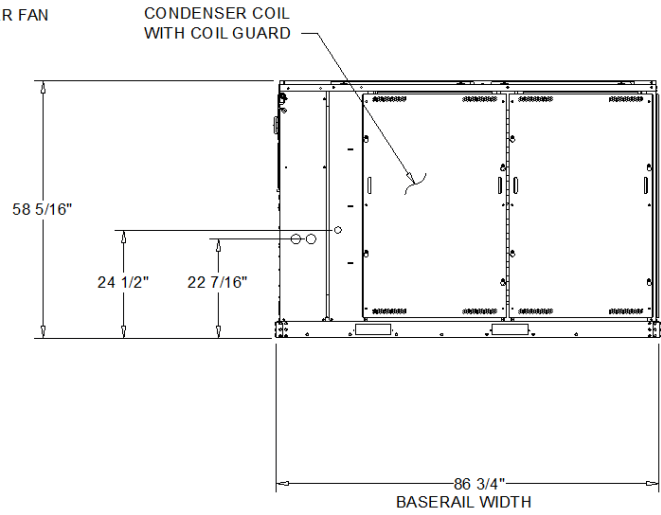
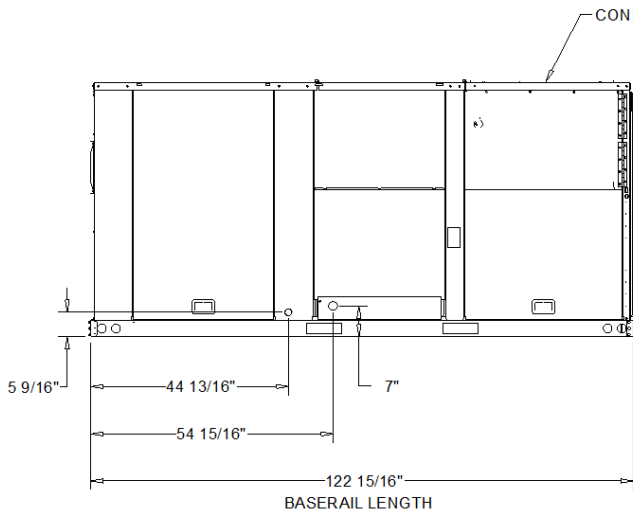
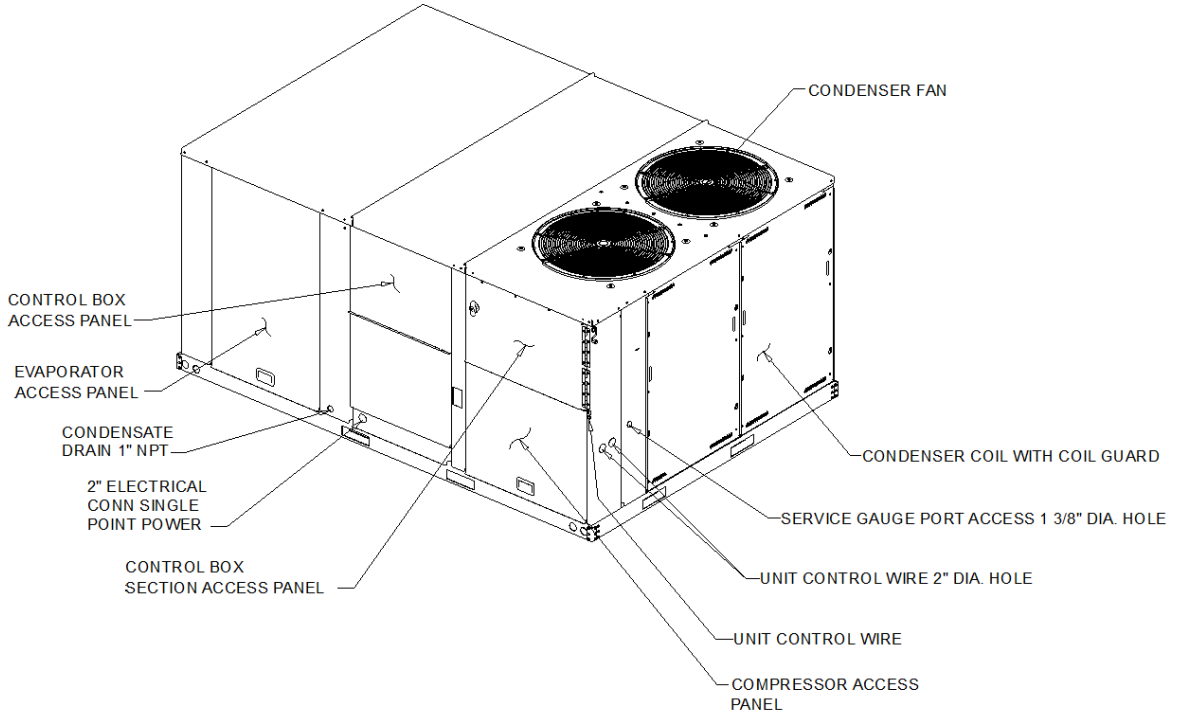
Note:Ducted Discharge and Ducted Inlet Sound in accordance with AHRI 260-2017

Note:Outdoor Sound in accordance with AHRI 370-2015

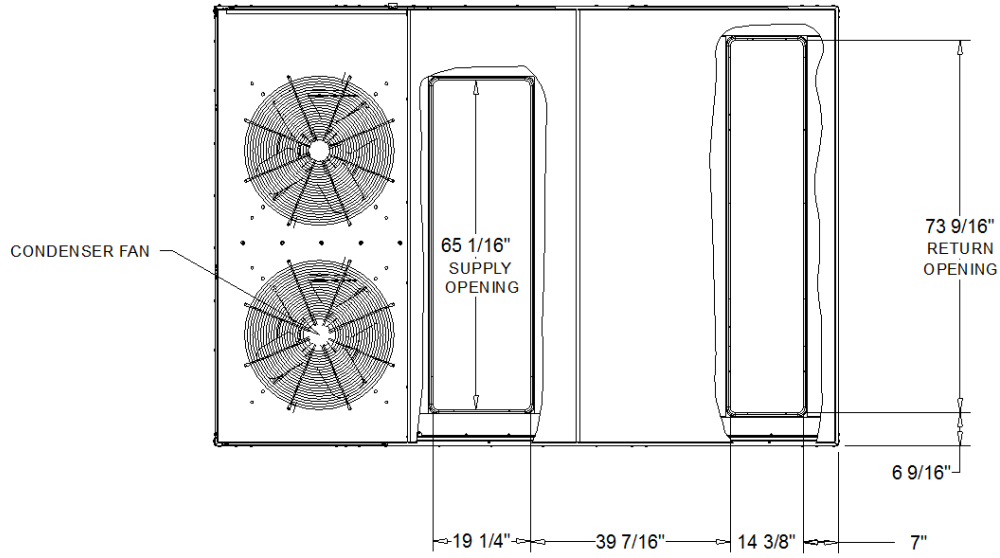
Warranty

Labor (first year)	1st Yr Labor Whole Unit
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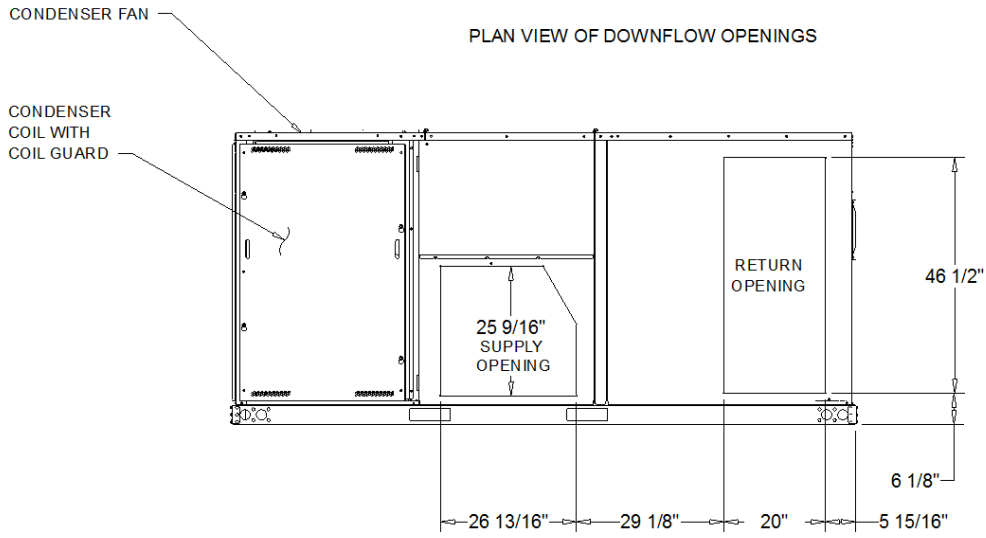
- NOTES:
 1. THRU -THE -BASE ELECTRICAL IS NOT STANDARD ON ALL UNITS.
 2. VERIFY WEIGHT, CONNECTION, AND ALL DIMENSION WITH
 INSTALLER DOCUMENTS BEFORE INSTALLATION



DX COOLING / ELECTRIC HEAT HIGH EFFICIENCY
 DIMENSION DRAWING



PLAN VIEW OF DOWNFLOW OPENINGS



HORIZONTAL AIR FLOW OPENING

DX COOLING / ELECTRIC HEAT HIGH EFFICIENCY

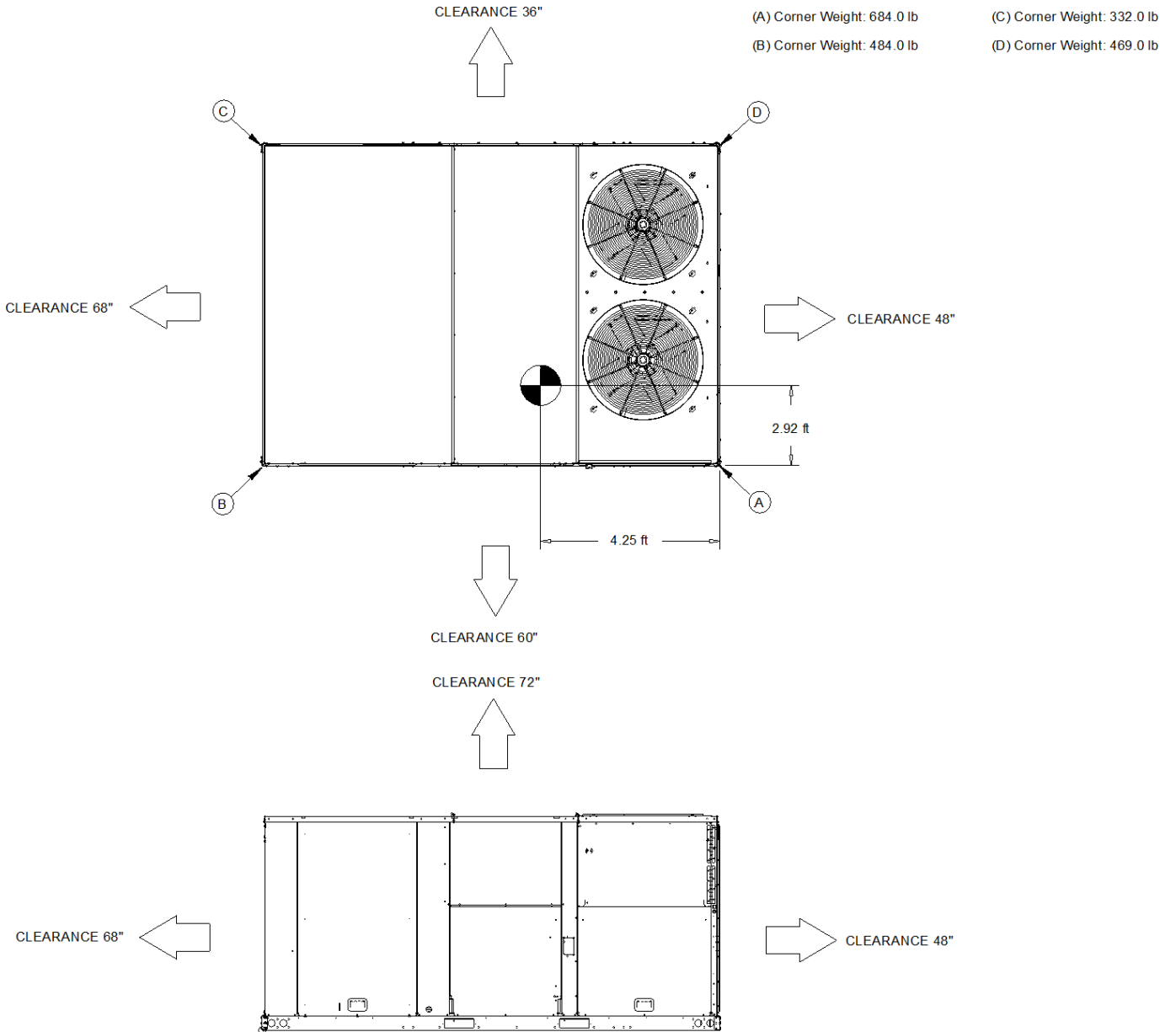
DIMENSION DRAWING



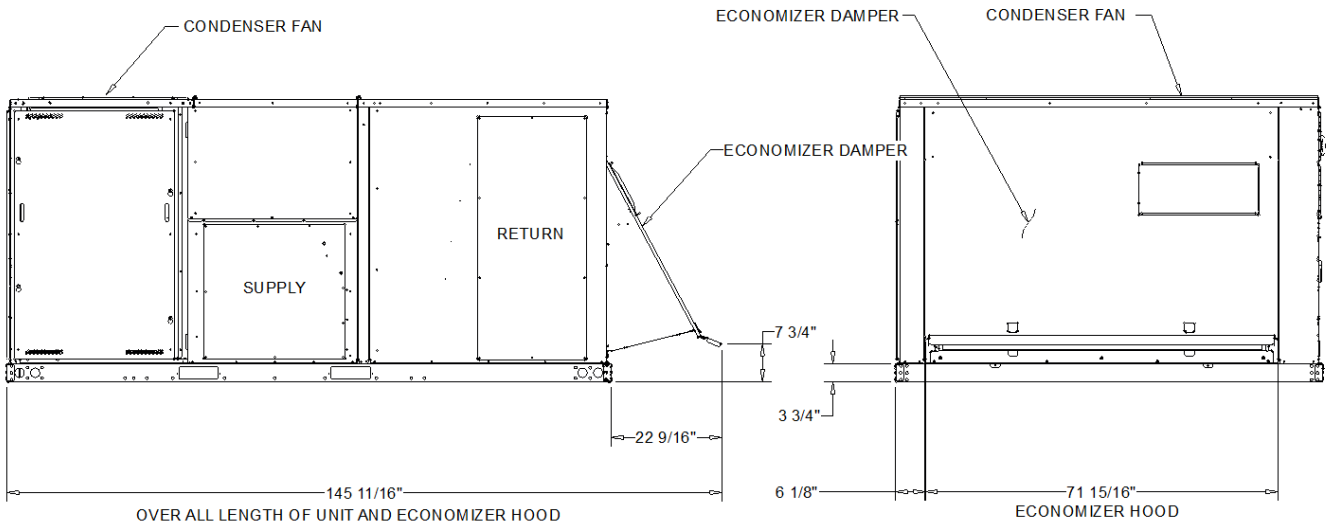
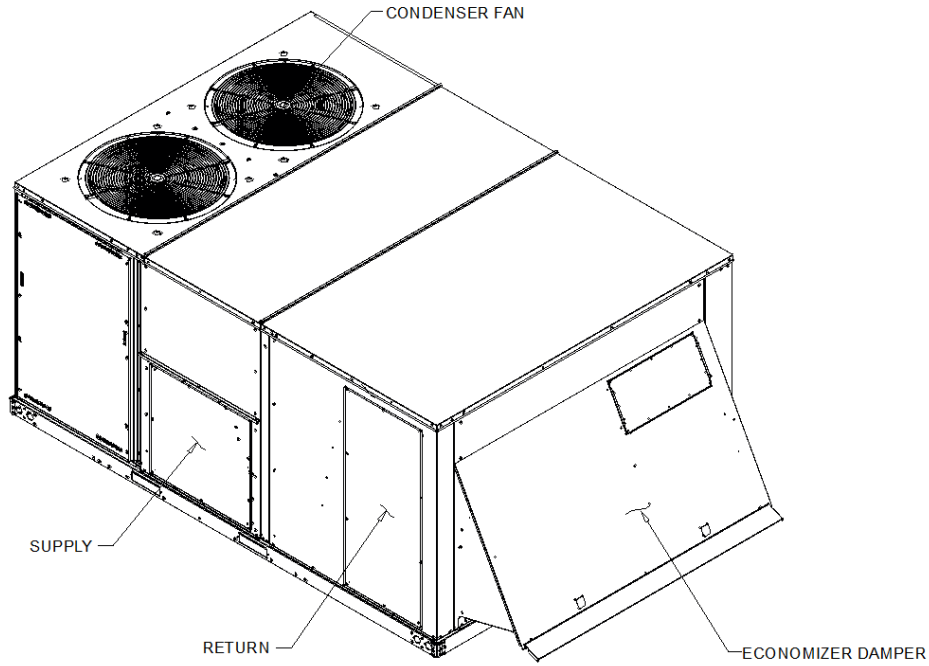
- NOTES:
1. APPROX. INSTALLED WEIGHT INCLUDES ALL SELECTED OPTIONS AND ACCESSORIES.
2. CORNER WEIGHTS ARE FOR BASE UNIT ONLY AND DO NOT INCLUDE OPTIONS OR ACCESSORIES.
3. WEIGHT INCLUDES BOTH FACTORY AND FIELD INSTALLED ACCESSORY.

Approximate Installed Weight: 2,040.0 lb

- (A) Corner Weight: 684.0 lb (C) Corner Weight: 332.0 lb
(B) Corner Weight: 484.0 lb (D) Corner Weight: 469.0 lb

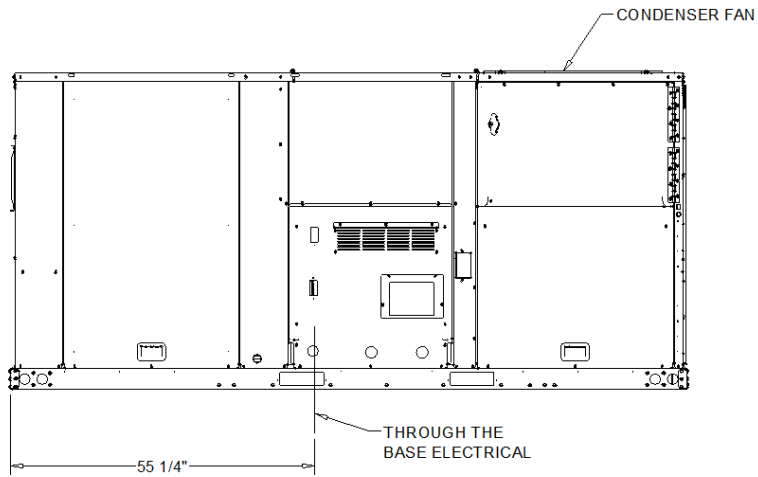
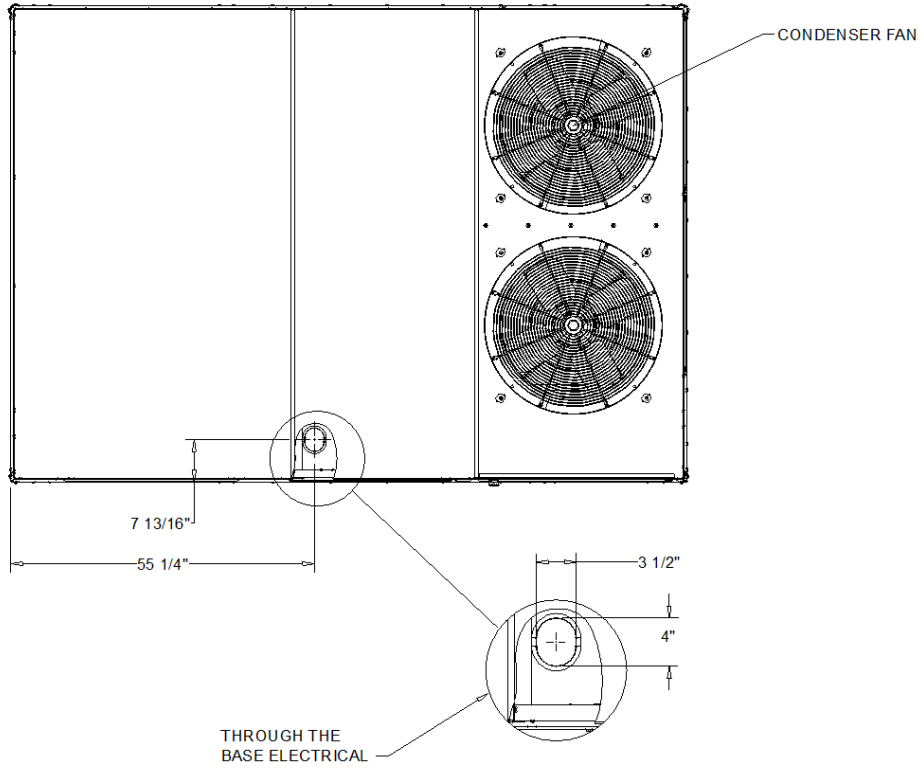


DX COOLING / ELECTRIC HEAT HIGH EFFICIENCY
WEIGHTS AND CLEARANCES



ECONOMIZER AIR DAMPER(S) (FIELD ACCESSORY)

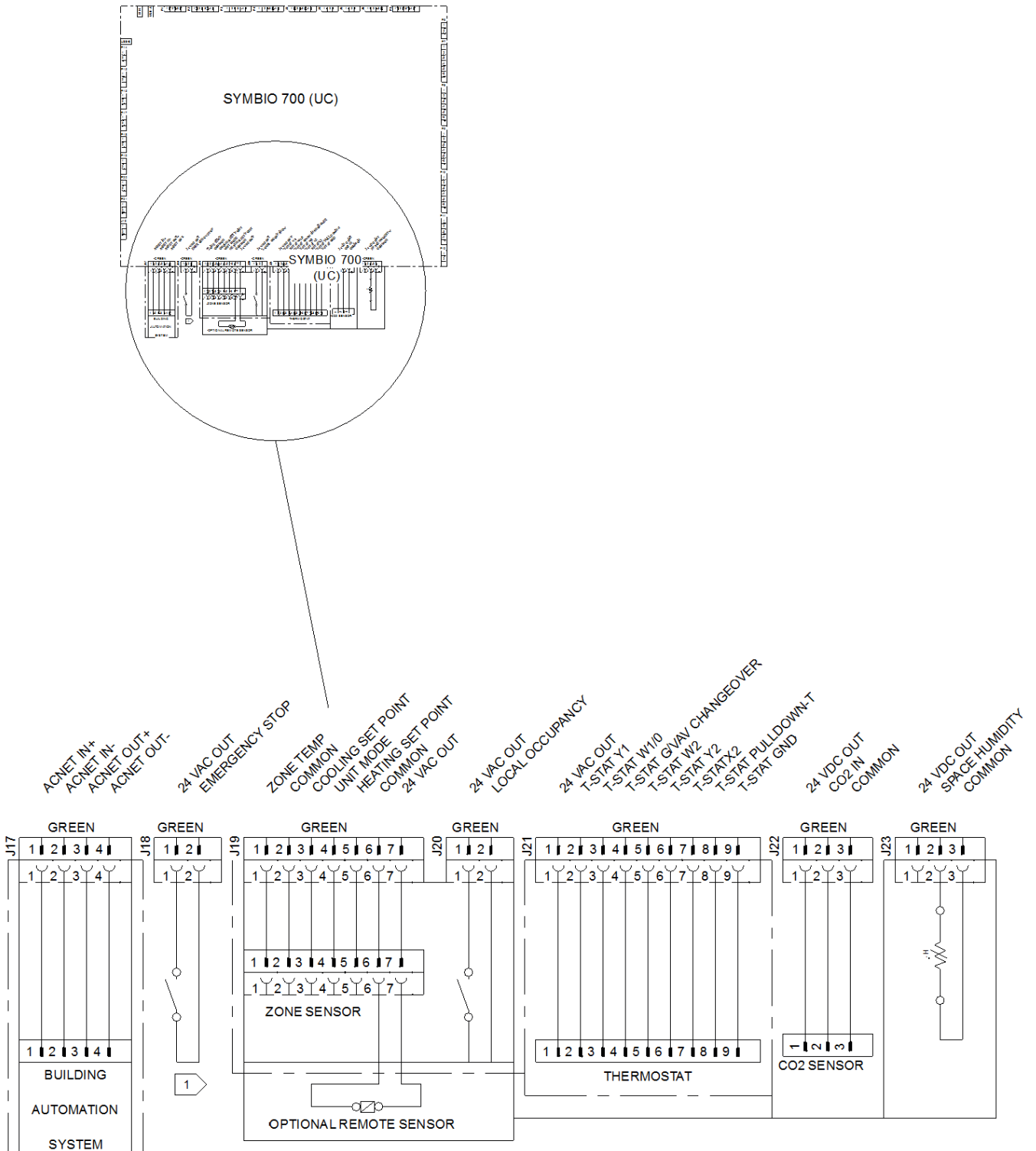
DX COOLING / ELECTRIC HEAT HIGH EFFICIENCY



THROUGH-THE-BASE ELECTRICAL (OPTION)

DX COOLING / ELECTRIC HEAT HIGH EFFICIENCY

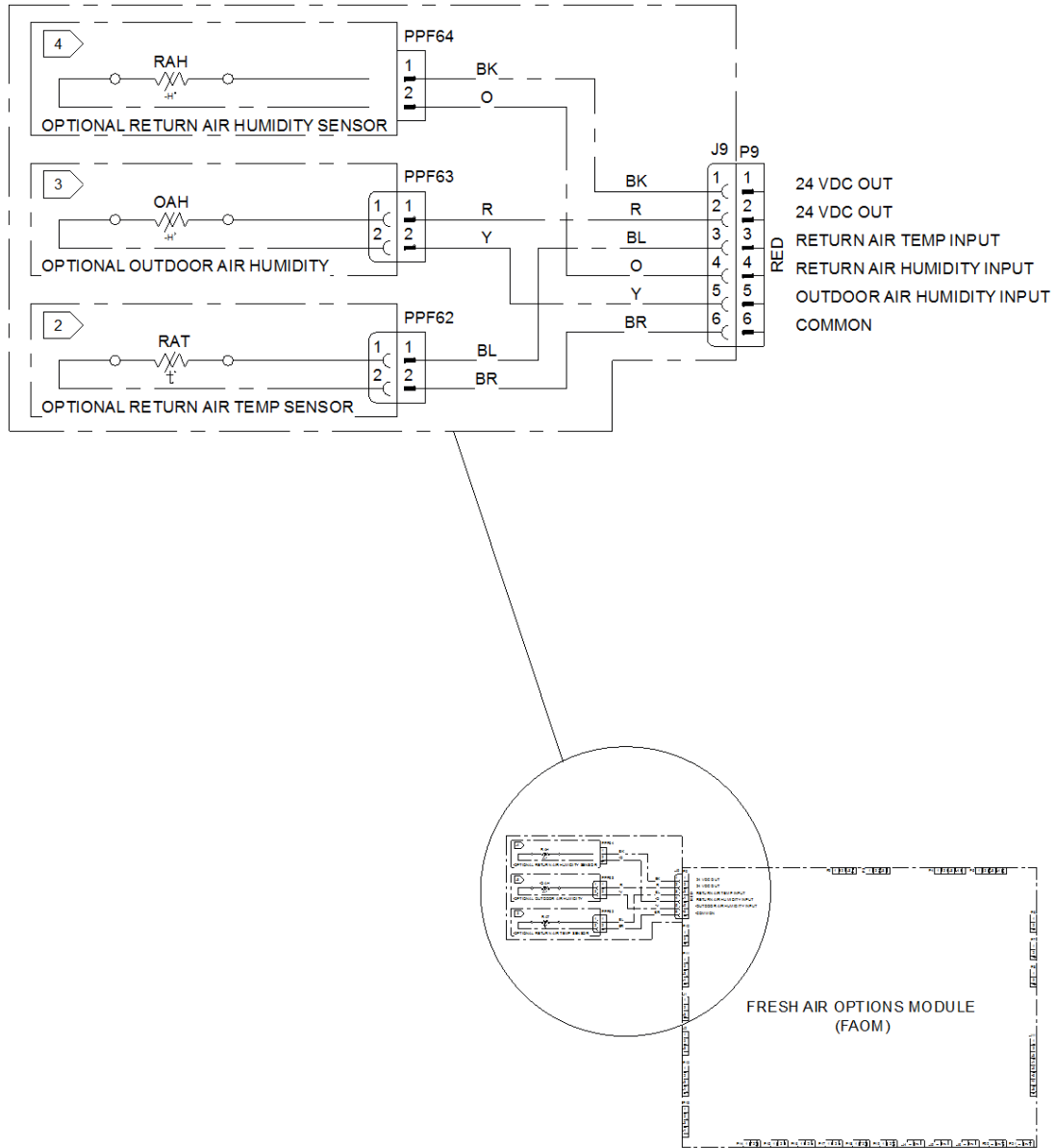
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SYMBIO 700 (J17, J18, J19, J20, J21, J22, AND J23)

FIELD WIRING DRAWING

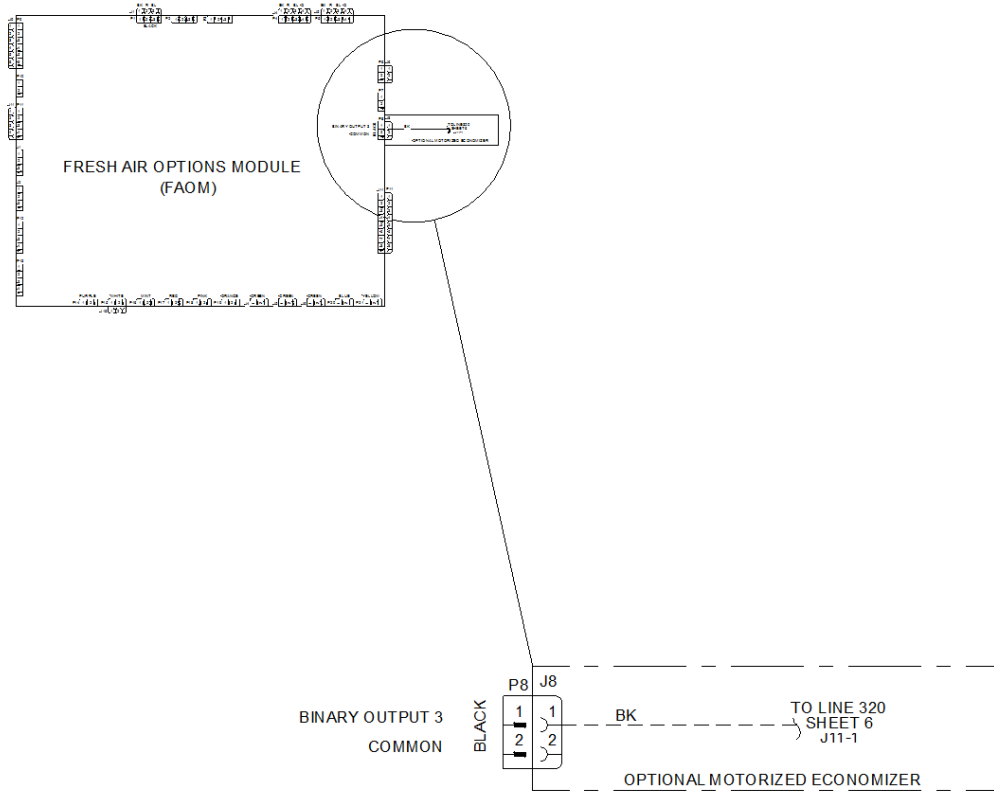
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OPTIONAL RETURN AIR HUMIDITY SENSOR, OUTDOOR AIR & RETURN AIR TEMP SENSOR (J9)
 FIELD WIRING DRAWING (FRESH AIR OPTIONS MODULE)

NOTES:

1. VERIFY WEIGHT, CONNECTION, AND ALL DIMENSION WITH INSTALLER DOCUMENTS BEFORE INSTALLATION



OPTIONAL MOTORIZED ECONOMIZER (J8)

FIELD WIRING DRAWING (INDOOR OPTION MODULE)



General

- Packaged rooftop units cooling, heating capacities, and efficiencies are AHRI Certified within scope of AHRI Standard 210-240 for 6 to 25 Tons and ANSIZ21.47 and 10 CFR Part 431 pertaining to Commercial Warm Air Furnaces (all gas heating units).
- Convertible airflow.
- Symbio controls operating range is from 0-125.0 F from factory; if designing for cooling mode operation below 40.0 F ambient temp, add low ambient kit to assure continuous and reliable operation.
- Factory assembled, internally wired, fully charged with R-410A, and 100 percent run tested to check cooling operation, fan and blower rotation, and control sequence before leaving the factory.
- Colored and numbered wiring internal to the unit for simplified identification.
- Units cULus listed and labeled, classified in accordance for Central Cooling Air Conditioners.

Casing

- Zinc coated, heavy gauge, galvanized steel.
- Weather resistant pre-painted metal with galvanized substrate.
- Meets ASTM B117, 672 hour salt spray test.
- Removable single side maintenance access panels.
- Lifting handles in maintenance access panels (can be removed and reinstalled by removing fasteners while providing a water and air tight seal).
- Exposed vertical panels and top covers in the indoor air section insulated with a cleanable foil-faced, fire-retardant permanent, odorless glass fiber material.
- Base pan shall have no penetrations within the perimeter of the curb other than the raised 1 inch high downflow supply/return openings to provide an added water integrity precaution, if the condensate drain backs up.
- Base of the unit insulated with 1/8 inch, foil-faced, closed-cell insulation.
- Unit base provisions for forklift and/or crane lifting on three sides of unit.

Hail Guards

- Provides condenser coil protection.

Powered or Unpowered Convenience Outlet

- Powered GFCI, 120V/15A, 2 plug, convenience outlet or unpowered GFCI, 120V/20A, 2 plug, convenience outlet.
- When convenience outlet is powered, a service receptacle disconnect will be available.
- Convenience outlet is powered from the line side of the disconnect or circuit breaker, and therefore will not be affected by the position of the disconnect or circuit breaker.
- Available to order when through-the-base electrical with disconnect switch or circuit breaker option is ordered.

Microchannel Coils

- Optimal heat transfer performance due to flat, streamlined tubes with small ports, and metallurgical tube-to-fin bond.
- Reduce system refrigerant charge by up to 50% leading to better compressor reliability.
- Compact all-aluminum microchannel coils reduce the unit weight.
- Recyclable all aluminum coils All aluminium construction minimizes galvanic corrosion.
- Strong aluminum brazed structure provides better fin protection.
- Flat streamlined tubes more dust resistant and easy to clean.
- Coils leak tested at the factory to ensure the pressure integrity.

Compressors

- All units have direct-drive, hermetic, scroll type compressors with centrifugal type oil pumps.
- Suction gas-cooled motor with voltage utilization range of plus or minus 10 percent of unit nameplate voltage.
- Internal overloads standard with scroll compressors.
- All units have dual compressors.
- Three stages of cooling available on 6 to 17.5 tons units and four stages of cooling available on 20 and 25 tons units.

Filters

- Two inch pleated media filters shall be available on all models.

Frostat



- Utilized as a safety device.
- Opens to prevent freezing temperatures on evaporator coil.
- Temperature will need to rise to 50°F before closing.
- Utilized in low airflow or high outside air applications (cooling only).

Indoor Fan

- Direct drive plenum fan design - 6 to 25 tons units.
- Plenum fan design - backward-curved fan wheel along with an external rotor direct drive variable speed indoor motor.
- Supply fan speed adjustments can be made using the Symbio 700 or Mobile App.
- Motors are thermally protected.
- Variable speed direct drive motors are high efficiency - 6 to 25 tons.

Through-the-Base Electrical with Disconnect Switch

- 3-pole, molded case, disconnect switch with provisions for through-the-base electrical connections.
 - Disconnect switch installed within unit in a water tight enclosure.
 - Wiring provided from the switch to the unit high voltage terminal block.
 - Switch cULus agency recognized.
- Note: Disconnect switch sized per NEC and cULus guidelines but will not be used in place of unit overcurrent protection.*

Reference or Comparative Enthalpy

- Reference enthalpy used to measure and communicate outdoor humidity.
- Unit receives and uses information to provide improved comfort cooling while using the economizer.
- Comparative enthalpy measures and communicates humidity for both outdoor and return air conditions, and return air temperature.
- Unit receives and uses information to maximize use of economizer cooling, and to provide maximum occupant comfort control.
- Reference or comparative enthalpy available when a factory or field installed downflow economizer ordered.