

# Trane Precedent Packaged Rooftop

# PRCTI20241365

Unit Ove	Unit Overview - WSK060A3S0E**R0C0A20100040000000000000000000000000000000									
Application	Unit Size	Supp	ly Fan	External Dimensions (in.)		Operating Weight	EER	IEER/SEER	Elevation	
Heat Pump / 5 Ton	Airflow	Total Static Pressure	Height	Width	Length	830.0 lb	12.00	0.00	0.00 ft	
		1600 cfm	1.470 in H2O	3.91 ft	3.69 ft	5.82 ft				

Unit Features			
Unit Efficancy	Standard Efficiency		
	R-454B Refrigerant		
Hinged Service Access/Filters	Hinged Access Panels with 2-in MERV 8		
Through the Base Provisions			
Disconnect / Circuit Breaker	Circuit Breaker		
Fresh Air Selection	DF Low Leak Econ Differential DB w BR		

City of Puyallup Development & Permitting Services ISSUED PERMIT					
Building	Planning				
Engineering	Public Works				
Fire					

Unit Electrical			
Voltage/phase/hertz	208-230/60/3		
MCA	61.00 A		
MCA (230 w Electric Heat)	66.00 A		
MOP	70.00 A		
MOP (230 w Electric Heat)	70.00 A		
Condenser Fan FLA	1.40 A		
Evaporator Fan FLA	6.90 A		
Electric Heat FLA	25.00 A		
Electric heat FLA (230V)	28.90 A		
Compressor 1 RLA			
Compressor 2 RLA	0.00 A		
Compressor Power	4.08 kW		
System Power	5.39 kW		



Controls

Unit Controls
Symbio 700

Communications Option
Advanced Controls and BACnet BAS
System Monitoring Controls 1
Clogged Filter & Condensate Overflow

Cooling Section			
Entering Dry Bulb	80.00 F	Сара	acity
Entering Wet Bulb	67.00 F	Gross Total	58.39 MBh
Ambient Temp	95.00 F	Gross Latent	16.18 MBh
Leaving Coil Dry Bulb	54.77 F	Gross Sensible	42.21 MBh
Leaving Coil Wet Bulb	54.68 F	Net Total	56.20 MBh
Leaving Unit Dry Bulb	57.43 F	Net Sensible	40.02 MBh
Leaving Unit Wet Bulb	55.76 F	Net Sensible Heat Ratio	71.20 %
Saturated Discharge Temperature	120.88 F	Fan Motor Heat	1.36 MBh
Saturated Suction Temperature	50.78 F	Refrig Charge-Circuit 1	8.0 lb

Heating Section	
Heating	12 kW Electric Heat
Output Heating Capacity	40.98 MBh
Heating EAT	60.00 F
Heating LAT	83.37 F
Heating Temp Rise	23.37 F
Heat	Pump
Heat pump Heating Capacity	53.28 MBh
Heat pump EAT	60.00 F
Heat pump LAT	96.10 F
Heat pump heating ambient temperature	47.00 F
Heat pump heating temperature rise	
Heat pump heating ambient relative humid	70.00 %
AHRI COP @ 47 F	3.50 Number
AHRI COP @ 17 F	2.20 Number

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Fan Section					
Indoor F	an Data	Indoor Fan Performance			
Airflow Application	Downflow	Airflow	1600 cfm		
Design ESP	1.200 in H2O	Supply Motor Horsepower	0.770 hp		
Component SP	0.216 in H2O	Indoor RPM	1142 rpm		
Heat SP	0.054 in H2O	Outdoor	Fan Data		
Total SP	1.470 in H2O	Outdoor Fan Drive Type	Direct		
Indoor Fan Drive Type	Direct	Outdoor Fan Quantity	1		
Indoor Fan Quantity	1.00 Number	Outdoor Fan Type	Propeller		
Indoor Fan Type	BC Plenum	Filt	ers		
		1st Filter Size and Qty	4 - 20 x 20 x 2		

Field Installed Acc	Field Installed Accessories							
Economizer Conversion Kit None								
	Symbio Adv Controls and BACnet Conv Kit None							
Acoustics								
Sound Path	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Ducted Discharge	89 dB	82 dB	73 dB	66 dB	63 dB	62 dB	63 dB	57 dB
Ducted Inlet	80 dB	75 dB	66 dB	58 dB	54 dB	53 dB	52 dB	46 dB
Outdoor Noise	83 dB	81 dB	80 dB	77 dB	73 dB	70 dB	67 dB	66 dB

Note: Ducted Discharge/Ducted Inlet prediction data conform to -- AHRI 260

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Labor (first year) 1st Yr Labor Whole Unit

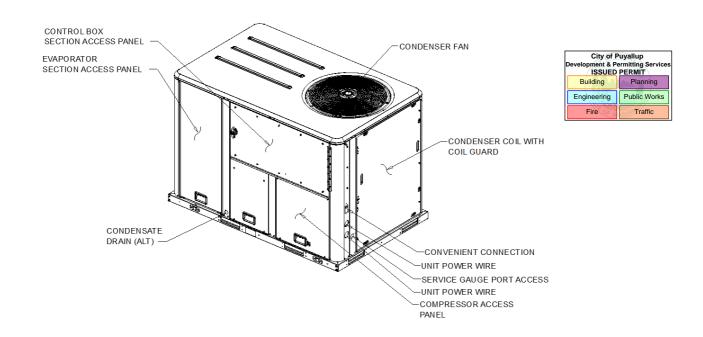


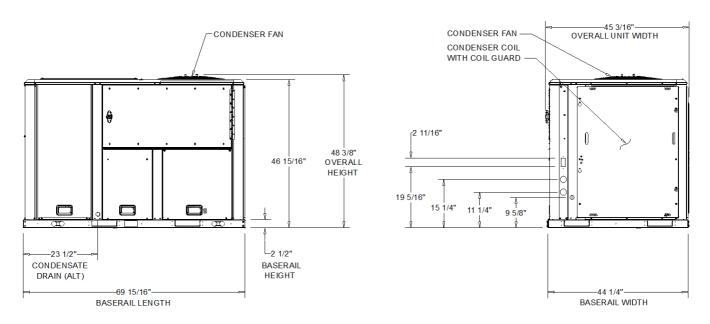
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#### NOTES:

1. VERIFY WEIGHTS, CONNECTIONS, AND ALL DIMENSIONS WITH INSTALLER DOCUMENTS BEFORE INSTALLATION





HEAT PUMP / ELECTRIC HEAT STANDARD EFFICIENCY

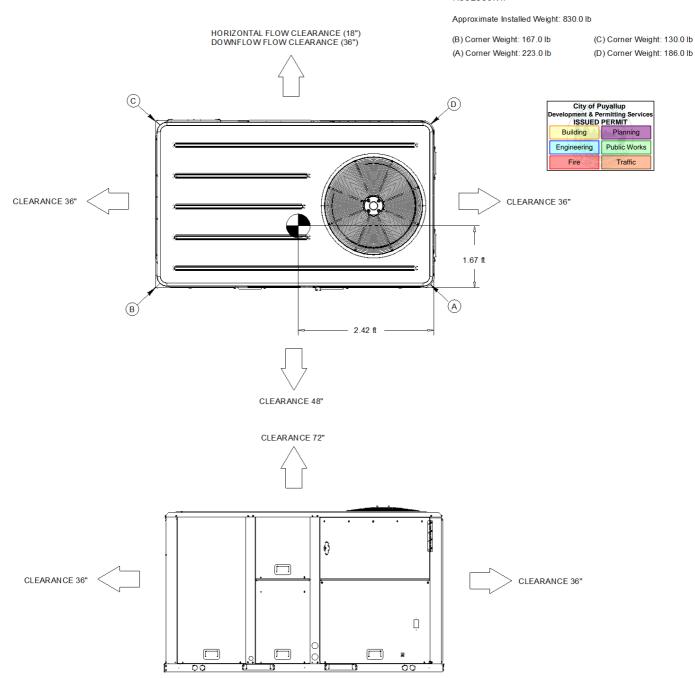
DIMENSION DRAWING

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- 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.

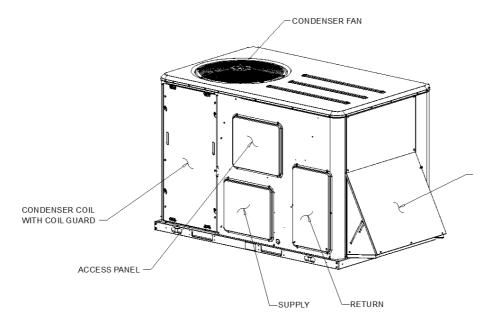


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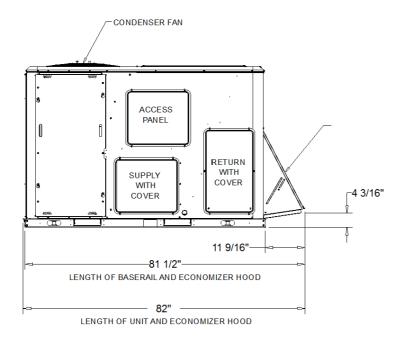
WEIGHTS AND CLEARANCES

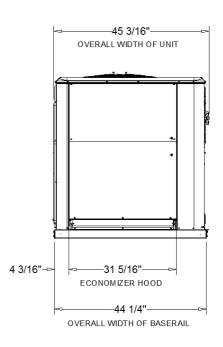
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Building	Planning			
Engineering	Public Works			
Fire OF W	Traffic			

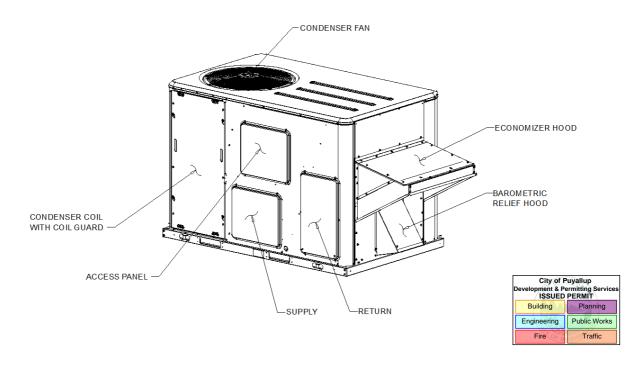


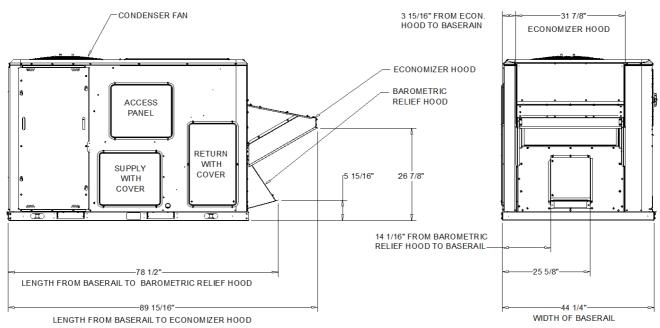


HEAT PUMP / ELECTRIC HEAT STANDARD EFFICIENCY

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LOW LEAK ECONOMIZER AIR DAMPER (OPTION)

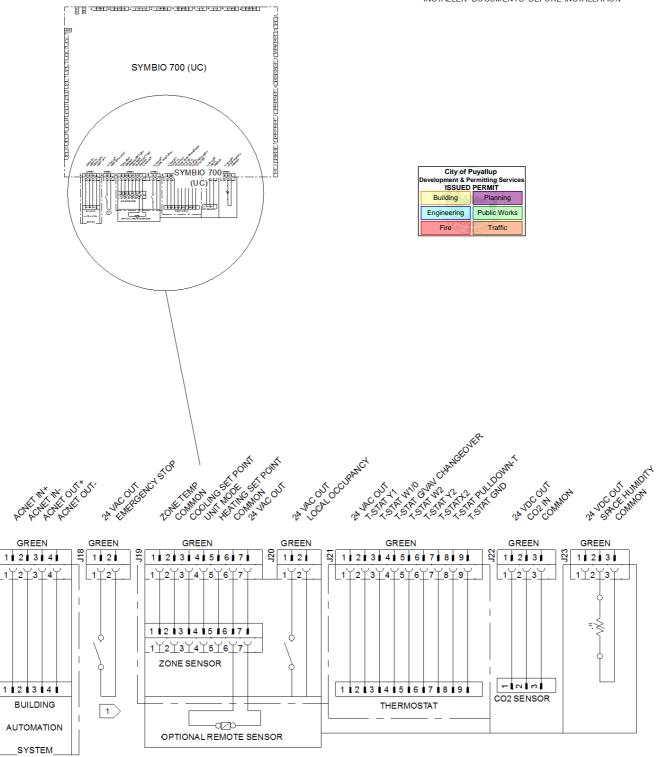
HEAT PUMP / ELECTRIC HEAT STANDARD EFFICIENCY

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#### NOTES:

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



SYMBIO 700 (J17, j18, J19, J20, J21, J22, AND J23)

FIELD WIRING DRAWING

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#### **Heatpump - 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.

#### **Heatpump - Coils Evaporator and Condenser**

- Internally finned, 5/16" copper tubes mechanically bonded to a configured aluminum plate fin are standard.
- Coils are leak tested at the factory to ensure integrity.
- Evaporator coil and condenser coil are leak tested to 600 psig.
- Assembled unit is leak tested to 465 psig.
- Condenser coil is patent pending 1+1+1 hybrid coil, designed with slight gaps for cleaning ease.
- Composite, dual-sloped, removable condensate drain pan is standard.

## **Heatpump - Coil Guards**

- Provides condenser coil protection.

#### **Heatpump - 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.
- Crankcase heaters are standard on all compressors.
- All units have dual compressors.
- Three stages of cooling available on 12.5 to 17.5 tons units and four stages of cooling available on 20 and 25 tons units.

#### **Heatpump - Filters**

- Standard throwaway filters
- Optional 2 inch MERV 8 and MERV 13 filters

## **Heatpump - Frostat**

- Utilized as a safety device.
- Opens to prevent freezing temperatures on evaporator coil.
- Temperature will need to rise to 50.0 F before closing.
- Utilized in low airflow or high outside air applications (cooling only).

## **Heatpump - Through-the-Base Electrical with Circuit Breaker**

- Thermal magnetic, molded case, HACR circuit breaker with provisions for through-the-base electrical connections.
- Circuit breaker installed within unit in water tight enclosure.
- Wiring provided from the switch to the unit high voltage terminal block.
- Circuit breaker will provide overcurrent protection, sized per NEC and cULus guidelines, and agency recognized by cULus.

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Building Planning
Engineering Public Works
Fire Traffic

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#### **Heatpump - Low Leak Economizer**

- This accessory meets the low leak requirements for ASHRAE 90.1, IECC, and CA Title 24 standards (4 cfm/ ft2@1" wg exterior air/return air). This option allows for 100% outdoor air supply from 0% to 100% modulating dampers and comes standard with barometric relief. It can be paired with powered exhaust for additional building pressure relief. This option can be paired with or without fault detection and diagnostics (FDD) to meet the current mandatory CA Title 24 requirements. The economizers come with four control options: dry bulb, reference enthalpy, comparative enthalpy, or differential dry bulb.



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