

City of Puyallup elopment & Permitting Service ISSUED PERMIT Building Planning

Public Works

Traffic

4WCY4036B-SUB-3

TAG:

Engineering

Fire

City of Puyallup Building ACCEPTED

> JMontgomery 09/01/2023 2:20:38 PM

OF PUYALL

SUBMITTAL

3 Ton Convertible Heat Pump Packaged Units 4WCY4036B3000A

PRODUCT	SPECIFIC	CATIONS

PRODUCT	
MODEL	4WCY4036B3000A
RATED Volts/PH/Hz	208-230/3/60
Performance Cooling BTUH	1200
Indoor Airflow (CFM)	
Power Input (KW)	3.15
EER/SEER (BTU/Watt-Hr.)	11.75 / 14.0
Sound Power Rating [dB(A)]@	69
Performance Heating ①	00400
(High Temp.)BTUH	32400
Power Input (KW)	2.4
(Low Temp.) BTUH	24800
Power Input (KW)	2.6
HSPF (BTU / Watt-Hr.) ©	8.0
POWER CONN.—V/Ph/Hz	208-230/3/60
Min. Brch. Cir. Ampacity ③	18.4
Fuse Size — Max. (amps) Fuse Size — Recmd. (amps)	25
<u>Fuse Size — Recmd. (amps)</u>	25
COMPRESSOR	SCROLL
Volts/Ph/Hz	208-230/3/60
R.L. Amps — L.R. Amps	10.4 / 73
OUTDOOR COIL — TYPE	SPINE-FIN
Rows/F.P.I.	2 / 24
Face Area (sq.ft.)	15.49
Tube Size (in.)	3/8
Refrigerant Control	EXPANSION VALVE
INDOOR COIL — TYPE	PLATE FIN
Rows/F.P.I.	4 / 15
Face Area (sq.ft.)	3.54
Tube Size (in.)	3/8
Refrigerant Control	EXPANSION VALVE
Drain Conn. Size (in.)	3/4 FEMALE NPT
OUTDOOR FAN — TYPE	PROPELLER
Dia. (in.)	23.4
Drive/No. Speeds	DIRECT / 1
CFM @ 0.0 in. w.g.④	3250
Motor — HP/R.P.M.	1/5 / 830
Volts/Ph/Hz	230/1/60
F.L. Amps/L.R. Amps	1.1 / 1.9
INDOOR FAN — TYPE	CENTRIFUGAL
Dia x Width (in.)	10 X 10
Drive/No. Speeds	DIRECT / VARIABLE
CFM @ 0.0 in. w.g. (5)	SEE FAN PERFORMANCE TABLE
Motor — HP/R.P.M.	1/2 / VARIABLE
Volts/Ph/Hz	200-230/1/60
F.L. Amps/L.R. Amps	4.3 / 4.3
FILTER / FURNISHED	NO
Type Recommended	THROWAWAY
Recmd. Face Area (sq. ft.)	4.0
REFRIGERANT	R410A
Charge (lbs.)	7.4
DIMENSIONS	HXWXL
Crated (in.)	47.86 / 44.5 / 52.03
WEIGHT	
Shipping (lbs.) / Net (lbs.)	468 / 372

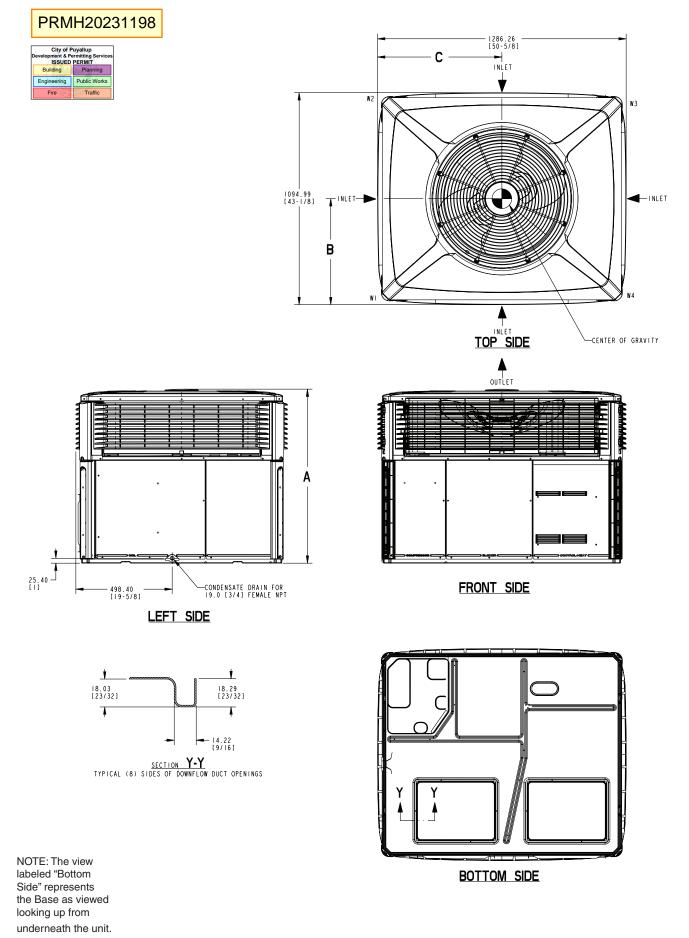
RT	U	2
RT	U	3
RT	U	5

- ① Certified in accordance with the Unitary Air-Conditioner Equipment certification program, which is based on AHRI Standard 210/240.
- ② Sound Power values are not adjusted for AHRI 270-95 tonal corrections.
- ③ Calculated in accordance with currently prevailing Nat'l Electrical Code.
- ④ Standard Air Dry Coil Outdoor.
- ⁵ Standard Air Wet Coil Indoor.
- $^{\textcircled{6}}$ Rated in accordance with D.O.E. test procedure.
- ⑦ Filters must be installed in return air system. Square footages listed are based on 300 f.p.m. face velocity. If permanent filters are used size per manufacturer's recommendations with clean resistance of 0.05" W.C.

FULL SIZED LEDGIBLE PLANS ARE REQUIRED TO BE PROVIDED BY THE PERMITTEE ON SITE FOR ALL INSPECTIONS

PROVIDE MANUFACTURES SPECIFICATIONS ON SITE FOR INSTALLATIONG AND INSPECTIONS

Dimensional Data and Weights



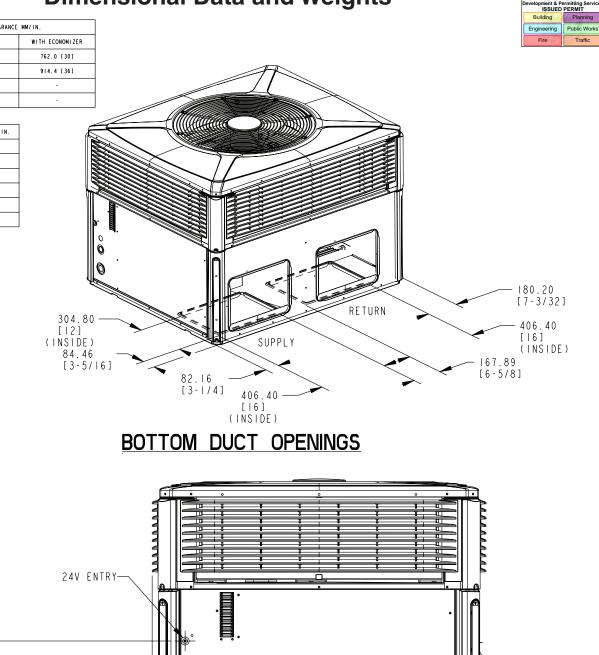
4WCY4024 through 4WCY4036 (1 of 3)

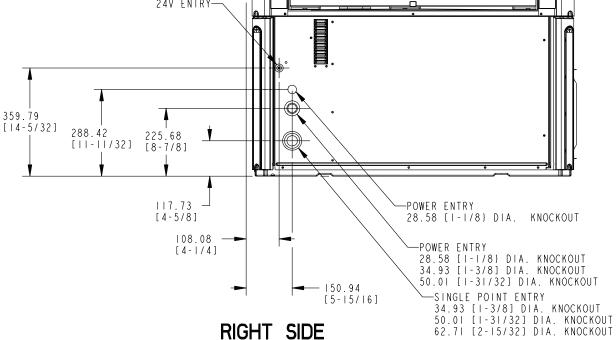
Dimensional Data and Weights

PRMH20231198

ENDED SERVICE CLEARANCE	MM/IN.
	WITH ECONOMIZER
304.8 [12]	762.0 [30]
762.0 [30]	914.4 [36]
609.6 [24]	
1066.8 [42]	
	762.0 [30] 609.6 [24]

CLEARANCE TO COMBUSTIBLE MATERIAL MM/IN.							
BOTTOM	0						
BACK SIDE	25.4 [1]						
LEFT SIDE	152.4 [6]						
RIGHT SIDE	152.4 [6]						
FRONT SIDE	304.8 [12]						
TOP	914.4 [36]						

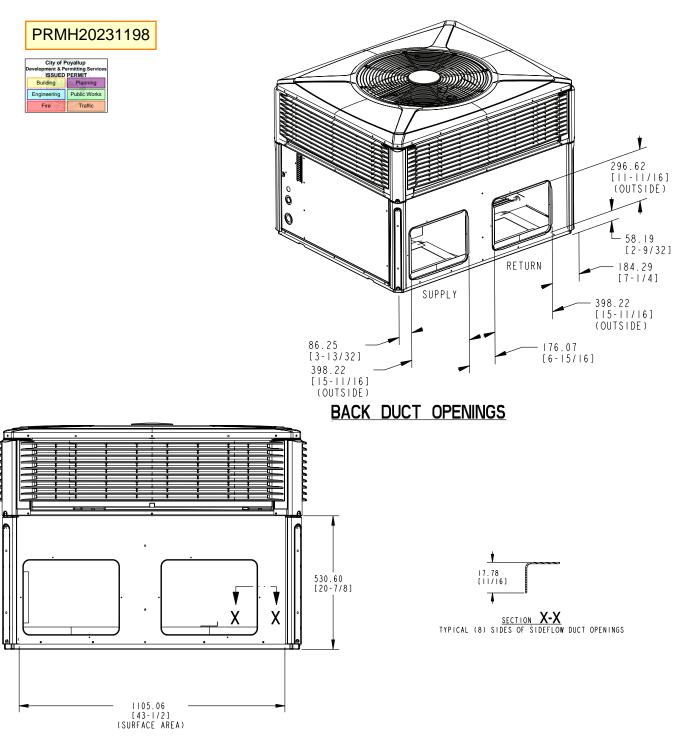




4WCY4024 through 4WCY4036 (2 of 3)

City of Puvallu

Dimensional Data and Weights



BACK SIDE

MODEL	HEIGHT MM/IN.		APPROX. CORNER	WEIGHT - KG/LBS		SHIPPING WEIGHT	TOTAL UNIT WEIGHT	CENTER OF GRAVITY MM/IN.			
MODEL	A	WI	W2	W3	W4	KG/LBS	KG/LBS	В	С		
4TCY4024/030	898.53 [35-3/8]	56.7 [25]	35.8 [79]	25.4 [56]	39.9 [88]	201.6 [444]	157.9 [348]	401.3 [15.8]	508.0 [20.0]		
4 T C Y 4 0 3 6	949.33 [37-3/8]	57.6 [27]	36.3 [80]	25.9 [57]	40.8 [90]	204.3 [450]	160.6 [354]	401.3 [15.8]	508.0 [20.0]		
4WCY4024/030	898.53 [35-3/8]	57.6 [127]	36.3 [80]	26.3 [58]	41.7 [92]	205.7 [453]	161.9 [357]	401.3 [15.8]	515.6 [20.3]		
4WC Y 4036	949.33 [37-3/8]	60.8 [34]	38. [84]	27.2 [60]	42.6 [94]	212.5 [468]	168.7 [372]	401.3 [15.8]	508.0 [20.0]		
4WCZ6036	949.33 [37-3/8]	60.8 [34]	38. [84]	27.2 [60]	42.6 [94]	212.5 [468]	68.7 [372]	401.3 [15.8]	508.0 [20.0]		

Unit Performance Data



Indoor Fan Performance 4WCY4036A

Horizontal Airflow

4WCY4036-HOR	DIPS	WITCH	I SETT	INGS	External Static Pressure (in. wg)											
AIRFLOW SETTING	1	2	3	4		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
			0		Watts	162	173	197	226	256	285	313	343	360	-	-
350 CFM/TON	OFF	OFF	OFF	ON	CFM	1058	1062	1063	1063	1062	1060	1057	1053	1010	-	-
400 CFM/TON*	OFF	OFF	OFF	OFF	Watts	179	230	265	296	329	366	403	431	436	-	-
400 CPM/TON					CFM	1179	1196	1204	1206	1205	1203	1199	1194	1185	-	-
450 CFM/TON	OFF	OFF	F ON	OFF	Watts	318	336	365	399	435	469	502	533	-	-	-
450 CFW/TON					CFM	1390	1376	1370	1366	1361	1354	1349	1351	-	-	-

Down Airflow

4WCY4036-DOWN	DIPS	WITCH	I SETT	INGS	External Static Pressure (in. wg)												
AIRFLOW SETTING	1	2	3	4		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	
			DFF OFF			Watts	169	182	210	243	273	301	331	370	433	-	-
350 CFM/TON	OFF			ON	CFM	1025	1062	1068	1063	1060	1061	1064	1055	1015	-	-	
400 CFM/TON*	OFF		OFF		OFF	Watts	225	253	283	315	348	381	414	449	484	-	-
400 CFM/TON		OFF		UFF	CFM	1187	1201	1203	1201	1198	1197	1194	1184	1157	-	-	
450 CFM/TON	OFF	OFF		OFF	Watts	339	357	390	424	455	483	516	571	-	-	-	
450 CFM/TON			FON	OFF	CFM	1391	1377	1377	1375	1366	1352	1344	1360	-	-	-	

*Factory Default Setting

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4WCY4036 AIRFLOW WITH AUXILIARY HEAT (CFM)

SWITCH	SETTINGS	SELECTION	NOMINAL AIRFLOW		
7-OFF	8-OFF	LOW	1050 CFM		
7-ON	8-OFF	HIGH	1200 CFM		
7-OFF	8-ON	HIGH	1200 CFM		
7-ON	8-ON	HIGH	1200 CFM		

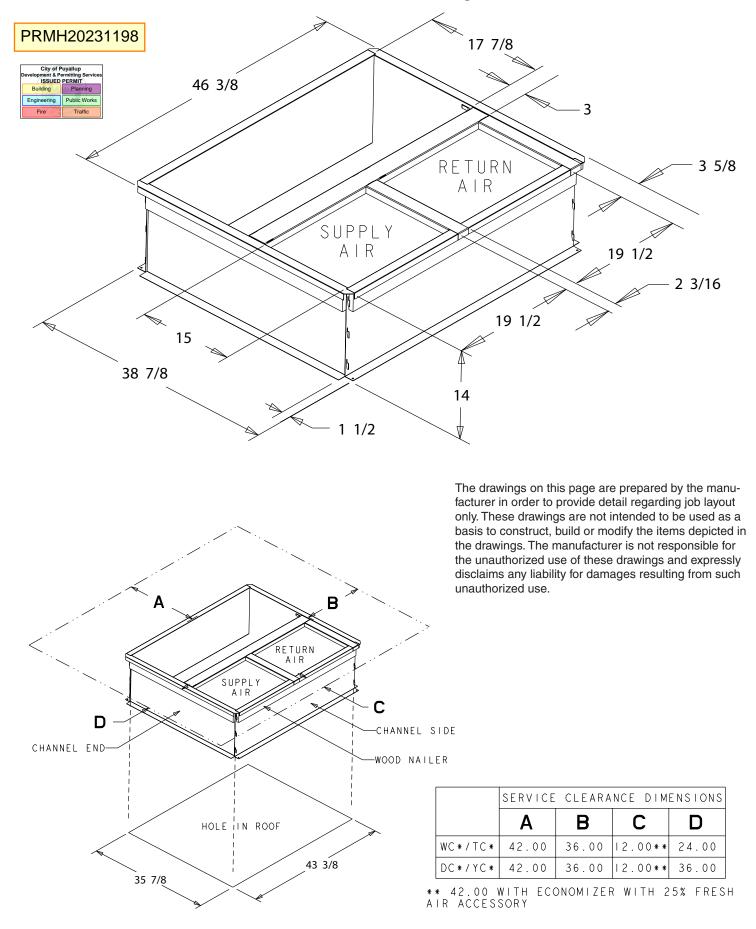
BAYHTRV305, 308, 310, 315E, Supplementary Electric Heater

	ELECTRIC	LECTRIC RATED PHASE AMPS NO. OF	KW/ST	KW/STAGE								
UNIT MODEL	HEATER MODEL	VOLTAGE	PHASE	AMPS	ĸw	BTUH	STAGES	1	2	MCA	HACR CKT BKR SIZE (4)	MAX. CKT BKR SIZE (5)
^W/TCY4036-060A3	BAYHTRV305E	208/240	3	10/12	3.76/5.0	12800/17100	1	3.76/5.0		13/15	15/15	15/15
^W/TCY4036-060A3	BAYHTRV308E	208/240	3	17/19	6.0/8.0	20500/27300	1	6.0/8.0		21/24	25/25	25/25
^W/TCY4036-060A3	BAYHTRV310E	208/240	3	21/24	7.5/10.0	25600/34100	1	7.5/10.0		26/30	30/30	30/30
^W/TCY4036-060A3	BAYHTRV315E	208/240	3	31/36	11.27/15.0	38500/51200	2	7.5/10.0	3.76/5.0	39/45	40/45	40/45

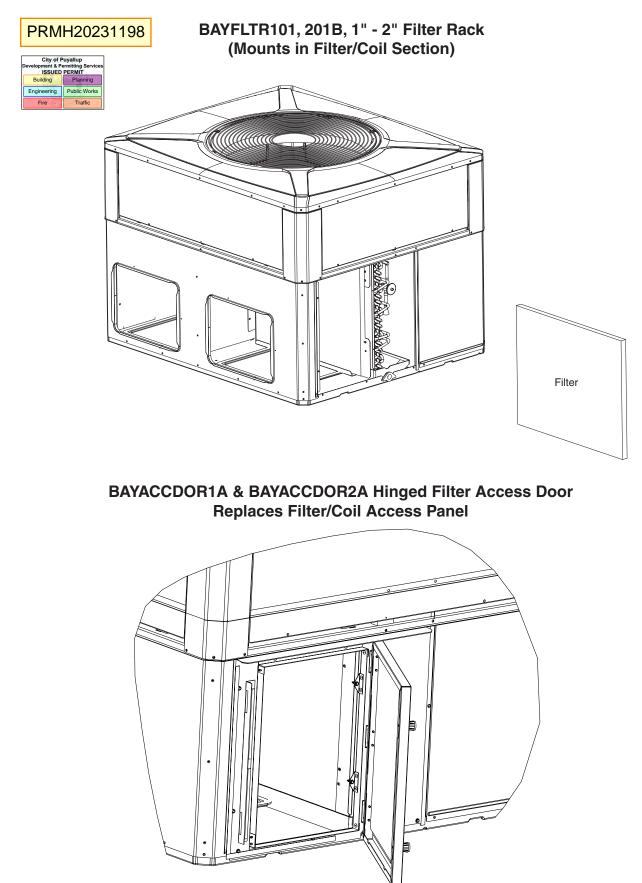
BAYSPEK61, 64E Single Power Entry Kit

SINGLE POWER ENTRY KIT	HEATER MODEL	UNIT MODEL
	BAYHTRV305E	4WCY4036-060A3
BAYSPEK061E	BAYHTRV308E	4WCY4036-060A3
	BAYHTRV310E	4WCY4036-048A3
BAYSPEK064E	BAYHTRV315E	4WCY4036-060A3

BAYCURB050A Full Perimeter Roof Mounting Curb for 4WCY4024-036



Optional Equipment



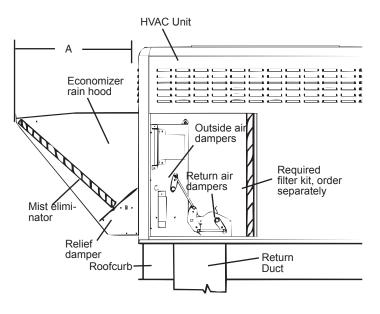
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City of Puyallup Development & Permitting Services (ISSUED PERMIT Building Planning Engineering Public Works Fire Traffic

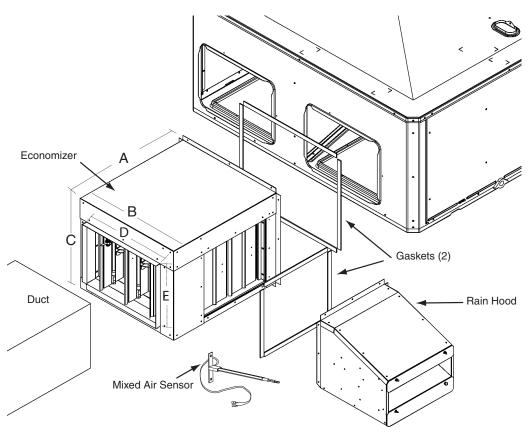
Optional Equipment

BAYECON101,102A Down Discharge Economizer and Rain Hood (Mounts Over Horizontal Return Air Opening)



Economizer	Unit Application Models	Α		
BAYECON101A	4TC*,WC*,YC*,DC* *018-036	20.125"		
BAYECON102A	4TC*,WC*,YC*, DC* *042-060	24.375"		

BAYCON200,201A Horizontal Economizer and Rain Hood



Economizer	Α	В	С	D	E	F
BAYECON200AA	22"	20"	16 7/8"	15 11/16	11 11/16	15
BAYECON201AA	26"	22 21/32"	19"	17 11/16	14 11/16	21-3/8

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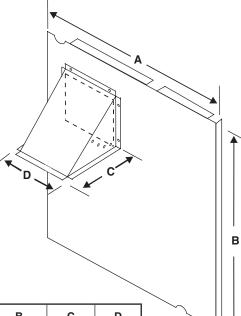
Optional Equipment

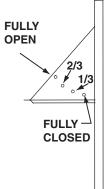
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Building	Planning				
Engineering	Public Works				
Fire	Traffic				

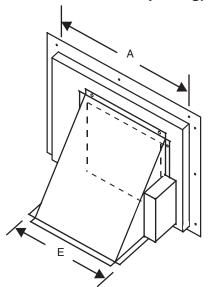
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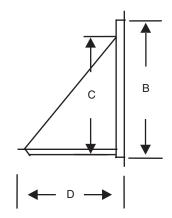




Manual Fresh Air Model	Unit Application Models	Α	В	С	D
BAYOSAH001	4YC,WC3018-036 4TC*3018-036 4W/T/Y/DCY4024-036 4W/Y/DCZ6036	22 7/16"	20 11/16"	12 3/8"	9 3/16"
BAYOSAH002	4YC,WC3042-060 4TC*3042-060 4W/T/Y/DCY4042-060 4W/Y/DCZ6048-060	25 3/16"	20 11/16"	12 3/8"	9 3/16"

BAYDMPR101,102A, 25% Motorized Outside Air Damper (Mounts Over Horizontal Return Alr Opening)





	Unit Application Models	А	В	С	D	E
BAYDMPR101A	4YC,WC3018-036 4TC3018-036 4W/T/Y/DCY4024-036 4W/Y/DCZ6036	15 13/16"	11 13/16"	10 1/4"	11 1/2"	12 1/4"
BAYDMPR102A	4YC,WC3042-060 4TC3042-060 4W/T/Y/DCY4042-060 4W/Y/DCZ6048-060	18 3/16"	15 1/8"	10 1/4"	11 1/2"	12 1/4"

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General



The units shall be horizontal airflow as shipped and convertible to downflow. All units shall be factory assembled, piped, internally wired and fully charged with refrigerant. All units shall be factory run tested to check cooling operation, fan and blower rotation and control or TXV sequence. Units shall be designed to operate at ambient temperatures between 115°F and 55°F in cooling as manufactured. Cooling performance shall be rated in accordance with A.H.R.I. standards.

Unit Casing

All components shall be mounted in a weather-resistant steel cabinet with an enamel finish. Access panels shall be provided for unit controls and indoor coil and fans. Indoor air section compartment shall be completely insulated with fireproof, permanent, odorless glass fiber material. Knockouts shall be provided for utility and control connections. Drain connections shall be provided to accommodate indoor water runoff.

Compressor

The compressor shall be hermetically sealed, high efficiency Climatuff[®] compressors. Internal overcurrent and over temperature protection, internal pressure relief shall be standard.

Refrigeration System

All units shall have TXV in cooling and TXV in heating. Service pressure tap ports, and a refrigerant line filter dryer shall be standard.

Indoor Coil

Coils shall be internally finned or smooth bore 3/8" copper tubes mechanically bonded to configured aluminum plate fin as standard. Evaporator coil leak and pressure tested to 200 psig; condenser coil tested to 450 psig.

Mechanical Specifications

Condenser Coil -

The Spine Fin[™]condenser coil shall be continuously wrapped, corrosion resistant all aluminum with minimum brazed joints. This coil is 3/8 inch O.D. seamless aluminum tubing glued to a continuous aluminum fin. Coils are lab tested to withstand 2,000 pounds of pressure per square inch. The outdoor coil provides low airflow resistance and efficient heat transfer. The coil is protected on all four sides by louvered panels.

Indoor Air Fan — Direct-drive, forwardcurved, centrifugal wheel in a Composite Vortica[®] Blower housing. Motor shall have thermal overload protection. Permanently lubricated motor bearings. Motor/blower assembly isolated from unit with rubber mounts.

Condenser Fan — Direct-drive, draw thru propeller type. Weather-proofed permanent split capacitor fan motor shall have built-in thermal overload and permanently lubricated motor bearings.

System Controls

System controls include condenser fan, evaporator fan and compressor contactors.

Accessories

Roof Curb — The roof curb shall be designed to mate with the unit and provide support and complete weathertight installation when properly installed. Adhesive back polyurethane sealing strips shall be provided to ensure an airtight seal between supply and return openings of the curb and unit. The roof curb design allows field fabricated ductwork to be connected directly to the curb. Curb ships knocked down for field assembly, and includes factory-installed wood nailer strips.

Electric Heaters — Each heater assembly shall include power supply fusing if over 48 amps, automatic resetting limit switches and heat limiters for thermal protection. Heaters shall be provided with polarized plugs for quick connection to unit low voltage wiring. Electric heat modules shall be UL listed.

Single Source Power Entry — This accessory when used with electric heat accessory shall allow single source power connection to unit and heater combination. Single source power entry kits shall have specific matching heater(s). Kit shall include high voltage terminal blocks, fuse blocks and fuses, cut-to-length interconnecting wiring, and junction box (if required) to provide power sources with fuse protection as required for both the unit and accessory heater. Kit components shall install within the unit cabinet in the heater access section. Single source branch power circuit shall be protected and wired in accordance with local codes.

Fully Modulating Economizer - This accessory shall be field installed and be composed of the following items: 0-100% fresh air damper, damper drive motor, fixed dry bulb enthalpy control, and low voltage wiring plug for electrical connections. Solid state enthalpy or differential enthalpy control is optional. Economizer operations shall be controlled by the preset position of the enthalpy control. A barometic relief damper shall be standard with the economizer and provide a pressure operated damper that shall be gravity closing and prohibit entrance of outside air on equipment "off" cycle. Economizer requires BAYRLAY004A relay kit to interface the economizer to the heat pump.

Manual Outside Air Dampers — Rain hood and screen shall be field installed. Suitable for up to 25% outside air.

Start Kit — Extra compressor starting capacity for single phase equipment.

Control Options

Standard Indoor Thermostats — Two stage heating/cooling or one stage heating/cooling thermostats shall be available in either manual or automatic changeover.

Programmable Electronic Night Setback Thermostat — Programmable electronic thermostat shall provide heating setback and cooling setup with 7-day, programming capability. 1H/1C or 2H/2C models available.



The manufacturer has a policy of continuous product and product data improvement **and** it reserves the right to change design and specifications without notice.

Trane 6200 Troup Highway Tyler, TX 75707-9010