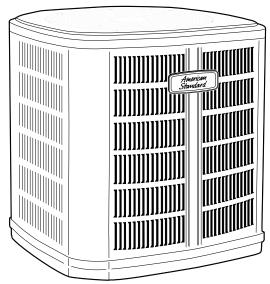


Product Data

Split System Heat Pump

4A6H4017N1000A 4A6H4018N1000A 4A6H4024N1000A 4A6H4030N1000A 4A6H4036N1000A 4A6H4042N1000A 4A6H4048N1000A 4A6H4060N1000A



Note: "Graphics in this document are for representation only. Actual model may differ in appearance."



Product Specifications

Model No. (a)	4A6H4017N1000A	4A6H4018N1000A	4A6H4024N1000A	4A6H4030N1000A	
POWER CONNS. – V/PH/HZ (b)	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60	
MIN. BRCH. CIR. AMPACITY	12	15	15	15	
BR. CIR. PROT. RTG MAX. (AMPS)	20	25	25	25	
COMPRESSOR	DURATION™ - SCROLL	DURATION™ - SCROLL	DURATION™ - SCROLL	DURATION™ - SCROLL	
RL AMPS – LR AMPS	9 - 56	11.5 - 59.5	11.5 - 59.5	10.2 - 71.3	
Outdoor Fan FL AMPS	0.54	0.77	0.77	0.77	
Fan HP	1/12	1/8	1/8	1/8	
Fan Dia (inches)	19.1	23	23	23	
Coil	SPINE FIN™	SPINE FIN™	SPINE FIN™	SPINE FIN™	
Refrigerant R-410A	5 LBS., 12 OZ	6 LBS., 2 OZ	6 LBS., 2 OZ	6 LBS., 2 OZ	
LINE SIZE - IN. O.D. GAS (c) (d)	3/4	3/4	3/4	3/4	
LINE SIZE - IN. O.D. LIQ.	3/8	3/8	3/8	3/8	
Charge Spec. Subcooling	10°F	10°F	10°F	10°F	
Dimensions H x W X D Crated (IN.)	30.1 x 30 x 26.7	38 x 30.1 x 33	38 x 30.1 x 33	34 x 30.1 x 33	
Weight - Shipping (lbs.)	161	208	208	191	
Weight - Net (lbs.)	141	174	174	163	
Optional Accessories:		1			
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A	
Evaporator Defrost Control	NA	NA	NA	NA	
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101	
Extreme Condition Mount Kit	BAYECMT023	BAYECMT023	BAYECMT023	BAYECMT004	
Start Kit	-	-	BAYKSKT263	BAYKSKT263	
Crankcase Heater Kit	BAYCCHT302	BAYCCHT302	BAYCCHT302	BAYCCHT302	
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001	
Low Ambient Kit	BAYLOAM107	BAYLOAM107	BAYLOAM107	BAYLOAM107	
Sound Enclosure	BAYSDEN003	-	-	-	
Service Valve Panel Cover	AAYSVPANL0022AA	AAYSVPANL3343AA	AAYSVPANL3343AA	AAYSVPANL0044AA	
Refrigerant Lineset (e)					
	•				

⁽a) Certified in accordance with the Unitary Air-conditioner equipment certification program which is based on AHRI standard 210/240.

⁽b) Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.

⁽c) Reference the outdoor unit ship-with literature for refrigerant piping length and lift guidelines. Reference the refrigerant piping software pub # 32-3312-xx or refrigerant piping application guide SS-APG006-xx for long line sets or specialty applications (xx denotes latest revision).

⁽d) The outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit, ten (10) feet of tested connecting line, and the smallest rated indoor evaporative coil match. Always verify proper system charge via subcooling (TXV/EEV) or superheat (fixed orifice) per the unit nameplate.

⁽e) 25, 30, 35, and 50 foot linesets available. For a complete listing of lineset options available from equipment or supply stores, refer to the American Standard Quick Reference Guide.

Product Specifications

Model No. (a)	4A6H4036N1000A	4A6H4042N1000A	4A6H4048N1000A	4A6H4060N1000A	
POWER CONNS. – V/PH/HZ (b)	208/230/1/60	280/230/1/60	280/230/1/60	280/230/1/60	
MIN. BRCH. CIR. AMPACITY	18	24	26	32	
BR. CIR. PROT. RTG MAX. (AMPS)	30	40	40	50	
COMPRESSOR	DURATION™ - SCROLL	DURATION™ - SCROLL	DURATION™ - SCROLL	DURATION™ - SCROLL	
RL AMPS – LR AMPS	14.1 - 72.2	16.7 - 109	18.5 - 124	23.7 - 152.5	
Outdoor Fan FL AMPS	0.64	2.80	2.80	2.80	
Fan HP	1/8	1/3	1/3	1/3	
Fan Dia (inches)	27.5	26.6	27.6	27.6	
Coil	SPINE FIN™	SPINE FIN™	SPINE FIN™	SPINE FIN™	
Refrigerant R-410A	8 LBS., 5 OZ	10 LBS., 5 OZ	11 LBS., 7 OZ	11 LBS., 12 OZ	
LINE SIZE – IN. O.D. GAS (c) (d)	7/8	7/8	7/8	1-1/8	
LINE SIZE - IN. O.D. LIQ.	3/8	3/8	3/8	3/8	
Charge Spec. Subcooling	10°F	8°F	8°F	8°F	
Dimensions H x W X D Crated (IN.)	42 x 35.1 x 38.7	51 x 35.1 x 38.7	51 x 35.1 x 38.7	51 x 35.1 x 38.7	
Weight - Shipping (lbs.)	246	277	300	301	
Weight - Net (lbs.)	199	227	250	251	
Optional Accessories:					
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A	
Evaporator Defrost Control	NA	NA	NA	NA	
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101	
Extreme Condition Mount Kit	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004	
Start Kit	BAYKSKT263	BAYKSKT263	BAYKSKT263	BAYKSKT263	
Crankcase Heater Kit	BAYCCHT302		BAYCCHT301	BAYCCHT301	
Seacoast Kit	BAYSEAC001	BAYSEAC001 BAYSEAC001 BAYS		BAYSEAC001	
Low Ambient Kit	BAYLOAM107	BAYLOAM103	BAYLOAM103	BAYLOAM103	
Service Valve Panel Cover	AAYSVPANL0044AA	AAYSVPANL0046AA	AAYSVPANL0046AA	AAYSVPANL0046AA	
Refrigerant Lineset (e)					

⁽a) Certified in accordance with the Unitary Air-conditioner equipment certification program which is based on AHRI standard 210/240.

⁽b) Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.

⁽c) Reference the outdoor unit ship-with literature for refrigerant piping length and lift guidelines. Reference the refrigerant piping software pub # 32-3312-xx or refrigerant piping application guide SS-APG006-xx for long line sets or specialty applications (xx denotes latest revision).

⁽d) The outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit, ten (10) feet of tested connecting line, and the smallest rated indoor evaporative coil match. Always verify proper system charge via subcooling (TXV/EEV) or superheat (fixed orifice) per the unit namenlate

⁽e) 25, 30, 35, and 50 foot linesets available. For a complete listing of lineset options available from equipment or supply stores, refer to the American Standard Quick Reference Guide.



Product Specifications

Sound Power Level

Sound Power Level									
MODEL	A-Weighted Sound Power Level [dB(A)]	Full Octave Sound Power(dB)							
		63 Hz*	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
4A6H4017N	73	72	66	64	66	71	64	56	47
4A6H4018N	71	77	72	68	68	69	60	53	47
4A6H4024N	71	77	72	68	68	69	60	53	47
4A6H4030N	71	77	72	68	68	69	60	53	47
4A6H4036N	70	75	69	68	68	66	62	57	51
4A6H4042N	72	77	75	72	70	67	62	59	52
4A6H4048N	72	77	75	72	70	67	62	59	52
4A6H4060N	72	77	75	72	70	67	62	59	52



Accessory Description and Usage

Anti-Short Cycle Timer — Solid state timing device that prevents compressor recycling until five (5) minutes have elapsed after satisfying call or power interruptions. Use in area with questionable power delivery, commercial applications, long lineset, etc.

Evaporation Defrost Control — SPST Temperature actuated switch that cycles the condenser off as indoor coil reaches freeze-up conditions. Used for low ambient cooling to 30°F with TXV.

Rubber Isolators — Five (5) large rubber donuts to isolate condensing unit from transmitting energy into mounting frame or pad. Use on any application where sound transmission needs to be minimized.

Hard Start Kit — Start capacitor and relay to assist compressor motor startup. Use in areas with marginal power supply, on long linesets, low ambient conditions, etc.

Extreme Condition Mount Kit — Bracket kits to securely mount condensing unit to a frame or pad without removing any panels. Use in areas with high winds, or on commercial roof tops, etc.

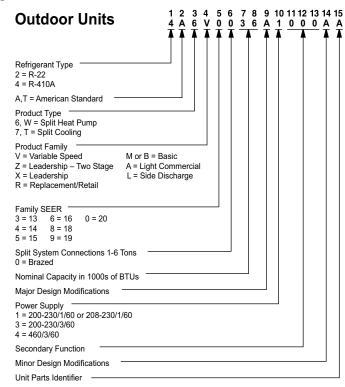
AHRI Standard Capacity Rating Conditions

AHRI Standard 210/240 Rating Conditions

- 1. Cooling 80°F DB, 67°F WB air entering indoor coil, 95°F DB air entering outdoor coil.
- High Temperature Heating 47°F DB, 43°F WB air entering outdoor coil, 70°F DB air entering indoor coil
- 3. Low Temperature Heating 17°F DB air entering indoor coil.
- 4. Rated indoor airflow for heating is the same as for cooling.

AHRI Standard 270 Rating Conditions — (Noise rating numbers are determiend with the unit in cooling operations.) Standard Noise Rating number is at 95°F outdoor air.

Model Nomenclature





Schematic Diagrams

Figure 1. 017N, 030N & 036N Models

LEGEND TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES COIL BOTTOM SENSOR FAN CAPACITOR WIRE CONNECTOR COMPRESSOR RUN CAPACITOR STARTING CAPACITOR CAPACITOR SWITCHING RELAY ժ SEE SERVICE FACTS FOR OPTIONAL START KIT ACCESSORY DEFROST CONTROL ELECTRONIC EXP VALVE CONTROL EEVC F INDOOR FAN RELAY HPCO HIGH PRESSURE CUTOUT SWITCH CAPACITOR INTERNAL OVERLOAD PROTECTOR LPCO LOW PRESSURE CUTOUT SWITCH MS COMPRESSOR MOTOR CONTACTOR OD BR-FAN PR-MTR BK **3**6⊢ (− С OUTDOOR ANTICIPATOR OUTDOOR FAN THERMOSTAT OUTDOOR TEMPERATURE SENSOR THERMALLY PROTECTED OUTDOOR THERMOSTAT INTERNALLY P-TRD PRESSURE TRANSDUCER SC SWITCH OVER VALVE SOI SWITCH OVER VALVE SOLENOID SYSTEM ON-OFF SWITCH DISCHARGE LINE THERMOSTAT TIME DELAY RELAY (5 SEC DELAY ON) LED GR CBS TRANSFORMER кз НҚ TEMP SENSOR, TEMPERATURE Y2C HIGH CAPACITY CONTROL RELAY COLOR OF WIRE LPCO [| | 本 BK BLACK RD RED OR ORANGE BL BLUE WH WHITE GR GREEN BR BROWN YL YELLOW PR PURPLE PK PINK 꾥 LPCO AIR HANDLER TYPICAL THERMOSTAT T (0) 0 POL.PLUG FEMALE HOUSING (MALE TERMINALS) POL. PLUG MALE HOUSING (FEMALE TERMINALS) RELAY CONTACT (N.C) # (r o) TEMP ACTUATED SWITCH INTERNAL OVERLOAD PROTECTION (w3) ODT-B PRESSURE ACTUATED SWITCH (W2) ____ RESISTER OR HEATING ELEMENT OPTIONAL ODT-A OPTIONAL | ВK (WI) OMOTOR WINDING _--BK ----∞ FOR CANADIAN INSTALLATIONS POUR INSTALLATIONS CANADIENNES CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE **∆**WARNING (В HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRICAL POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. Failure to disconnect power before servicing can cause severe personal injury or death. R \oplus **A**CAUTION USE COPPER CONDUCTORS ONLY! UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. Failure to do so may cause damage to the equipment. 111 TO POWER SUPPLY

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PER LOCAL CODES

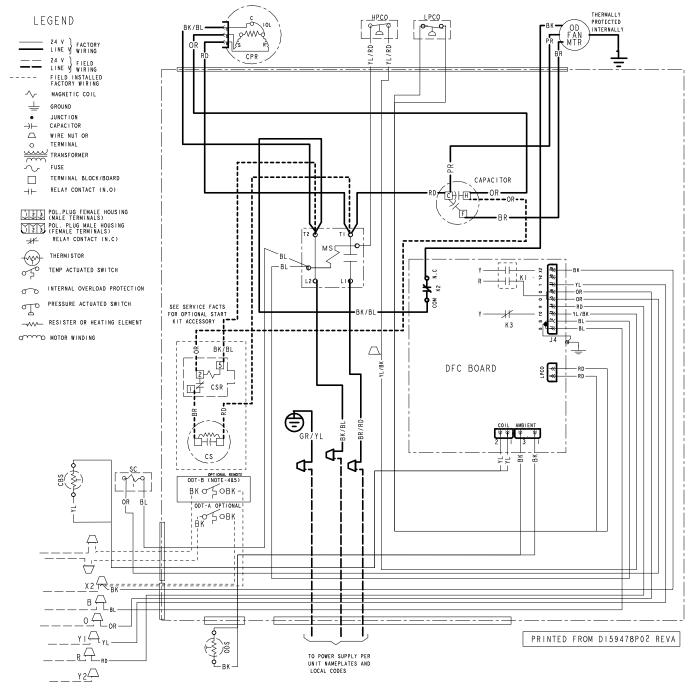


Figure 2. 017N, 030N & 036N Models

NOTES:

- I. BE SURE POWER SUPPLY AGREES WITH EQUIPMENT NAMEPLATE.
- POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
- 3. LOW VOLTAGE WIRING TO BE NO. 18 AWG MINIMUM CONDUCTOR.
- 4. ODT-B MUST BE SET LOWER THAN ODT-A
- 5. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN WI AND W2 AT AIR HANDLER

Schematic Diagrams

LEGEND A/C RECTIFIER CBS COIL BOTTOM SENSOR CF FAN CAPACITOR CN WIRE CONNECTOR SEE SERVICE FACTS FOR OPTIONAL START KIT ACCESSORY CPR COMPRESSOR /RD CR RUN CAPACITOR CS STARTING CAPACITOR BR CSR-ICSR CSR CAPACITOR SWITCHING RELAY DEC DEFROST CONTROL EEV ELECTRONIC EXP VALVE ELECTRONIC EXP VALVE CONTROL FEVC INDOOR FAN RELAY HPCO HIGH PRESSURE CUTOUT SWITCH ~~\\\\Q 101Ğ IOL INTERNAL OVERLOAD PROTECTOR CPR LPCO LOW PRESSURE CUTOUT SWITCH COMPRESSOR MOTOR CONTACTOR MS BR/RD OUTDOOR ANTICIPATOR ODA OFT OUTDOOR FAN THERMOSTAT -BL OUTDOOR TEMPERATURE SENSOR ODS OUTDOOR THERMOSTAT ODT * * * * DFC LED CBS $\overline{\mathbb{A}}$ N.C K2 COM P-TRD PRESSURE TRANSDUCER K3 |-||-||-|-||-||-* * o (vh)-e VARIABLE SPEED SC SWITCH OVER VALVE SOLENOID SM SYSTEM ON-OFF SWITCH OD FAN LPCO DISCHARGE LINE THERMOSTAT TDL P(44) ***** TIME DELAY RELAY (5 SEC DELAY ON) TDR TRANSFORMER SENSOR, TEMPERATURE LPCO AIR HANDLER TYPICAL THERMOSTAT HIGH CAPACITY CONTROL RELAY I (0) (0 COLOR OF WIRE (YI)BK/BL -COLOR OF MARKER (Y0) BK BLACK RD RED OR ORANGE BLUE WH WHITE GR GREEN BROWN YL YELLOW PR PURPLE (w3) NOTE 4 OPTIONAL REMOTE **△MARNING** (W2) HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRICAL POWER ВK (WI INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. Н Failure to disconnect power before servicing can cause severe personal injury or death. (G) **A**CAUTION USE COPPER CONDUCTORS ONLY! UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. Failure to do so may cause damage to the equipment. (в FOR CANADIAN INSTALLATIONS R POUR INSTALLATIONS CANADIENNES CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE

Figure 3. 018N, 024N, 042N, 048N & 060N Models

TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES

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TO POWER SUPPLY PER LOCAL CODES

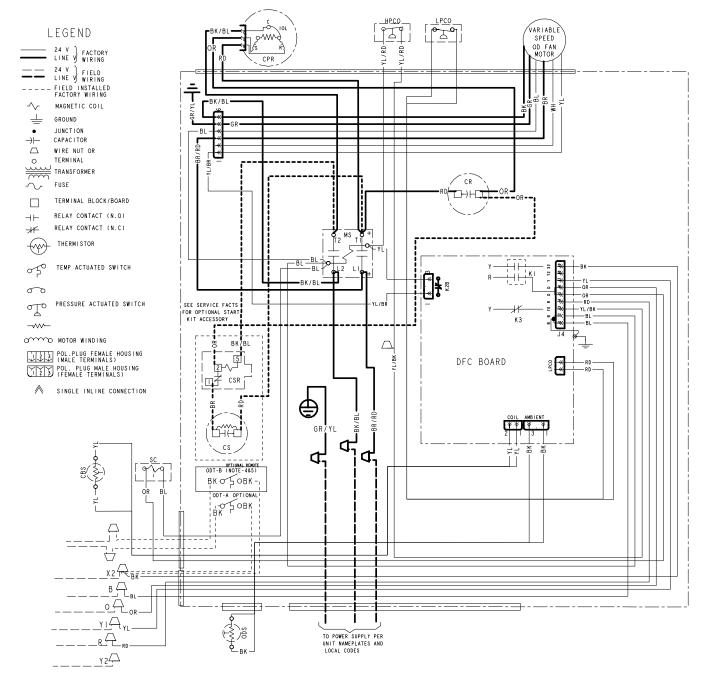


Figure 4. 018N, 024N, 042N, 048N & 060N Models

NOTES:

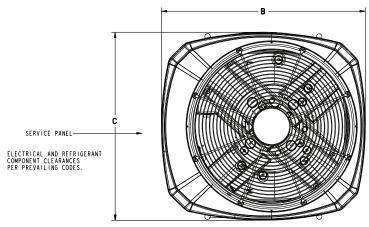
- I. BE SURE POWER SUPPLY AGREES WITH EQUIPMENT NAMEPLATE.
- 2. POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.

- 3. LOW VOLTAGE WIRING TO BE NO. 18 AWG MINIMUM CONDUCTOR.
 4. ODT-B MUST BE SET LOWER THAN ODT-A
 5. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN WI AND W2 AT AIR HANDLER

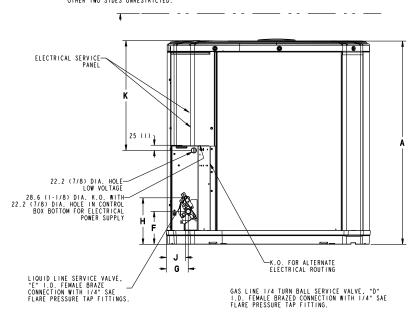
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Outline Drawing



TOP DISCHARGE AREA SHOULD BE UNRESTRICTED FOR AT LEAST 1524 (5 FEET) ABOVE UNIT, UNIT SHOULD BE PLACED SO ROOF RUN-OFF WATER DOES NOT POUR DIRECTLY ON UNIT, AND SHOULD BE AT LEAST 305 (12") FROM WALL AND ALL SURROUNDING SHRUBBERY ON TWO SIDES. OTHER TWO SIDES UNRESTRICTED.



Model	Base	Α	В	С	D	Е	F	G	Н	J	K
4A6H4017N	2	730 (28-3/4)	724 (28-1/2)	651 (25-5/8)	3/4	3/8	127 (5)	57 (2-1/4)	194 (7-5/8)	38 (1-1/2)	457 (18)
4A6H4018N	3	832 (32-3/4)	829 (32-5/8)	756 (29-3/4)	3/4	3/8	127 (5)	76 (3)	197 (7-3/4)	60 (2-3/8)	508 (20)
4A6H4024N	3	832 (32-3/4)	829 (32-5/8)	756 (29-3/4)	3/4	3/8	127 (5)	76 (3)	197 (7-3/4)	60 (2-3/8)	508 (20)
4A6H4030N	3	730 (28 – 3/4)	829 (32-5/8)	756 (29-3/4)	3/4	3/8	127 (5)	76 (3)	197 (7-3/4)	60 (2-3/8)	508 (20)
4A6H4036N	4	943 (37-1/8)	946 (37-1/4)	870 (34-1/4)	7/8	3/8	143 (5-5/8)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4A6H4042N	4	1147 (45-1/8)	946 (37-1/4)	870 (34-1/4)	7/8	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	813 (32)
4A6H4048N	4	1147 (45-1/8)	946 (37-1/4)	870 (34-1/4)	7/8	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	813 (32)
4A6H4060N	4	1147 (45-1/8)	946 (37-1/4)	870 (34-1/4)	1-1/8	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	813 (32)



Mechanical Specification Options

General

The outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit, ten (10) feet of tested connecting line, and the smallest rated indoor evaporative coil match. This unit is designed to operate at outdoor ambient temperatures as high as 115°F. Cooling capacities are matched with a wide selection of air handlers and furnace coils that are AHRI certified. The unit is certified to UL 1995. Exterior is designed for outdoor application.

Casing

Unit casing is constructed of heavy gauge, galvanized steel and painted with a weather-resistant powder paint finish. The corner panels are prepainted. All panels are subjected to our 1,000 hour salt spray test.

Refrigerant Controls

Refrigeration system controls include condenser fan, compressor contactor and low and high pressure switches. A factory supplied, field installed liquid line drier is standard.

Compressor

The compressor features internal over temperature and pressure protection. Other features include: Centrifugal oil pump and low vibration and noise.

Condenser Coil

The outdoor coil provides low airflow resistance and efficient heat transfer. The coil is protected on all four sides by louvered panels.

Low Ambient Cooling

As manufactured, this system has a cooling capacity to 55°F. The addition of an evaporator defrost control permits operation to 40°F. The addition of an evaporator defrost control with TXV permits low ambient cooling to 30°F.

The addition of the BAYLOAM107A low ambient kit permits ambient cooling to 20°F.

Thermostats – Cooling only and heat/cooling (manual and automatic change over). Sub-base to match thermostat and locking thermostat cover.



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