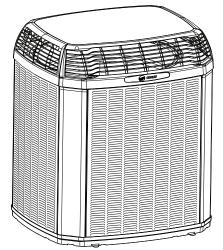


# **Product Data**

### **Split System Heat Pump**

4TWX5018N1000A 4TWX5024N1000A 4TWX5030N1000A 4TWX5036N1000A 4TWX5042N1000A 4TWX5048N1000A 4TWX5060N1000A



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

22-1975-1A-EN





### **Product Specifications**

Model No. <sup>(a)</sup>	4TWX5018N1000A	4TWX5024N1000A	4TWX5030N1000A	4TWX5036N1000A	
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	15	15	13	18	
BR. CIR. PROT. RTG. – MAX. (AMPS)	25	25	20	30	
COMPRESSOR	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL	CLIMATAUFF® - SCROLL	
RL AMPS – LR AMPS	11.5 - 59.5	11.5 – 59.5	10.2 - 71.3	14.1 - 72.2	
Outdoor Fan FL AMPS	0.77	0.77	0.77	0.64	
Fan HP	1/8	1/8	1/8	1/8	
Fan Dia (inches)	23	23	23	27.5	
Coil	SPINE FIN™	SPINE FIN™	SPINE FIN™	SPINE FIN™	
Refrigerant R-410A	6 LBS., 2 OZ	6 LBS., 2 OZ	6 LBS., 2 OZ	8 LBS., 5 OZ	
LINE SIZE - IN. O.D. GAS (c) (d)	3/4	3/4	3/4	7/8	
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.)	41.9 x 30.1 x 33	41.9 x 30.1 x 33	37.9 x 30.1 x 33	46.6 x 35.1 x 38.7	
Weight – Shipping (lbs.)	208	208	200	255	
Weight – Net (lbs.)	174	174	172	208	
Optional Accessories:			I	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	BAYECMT004	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	
Refrigerant Lineset <sup>(e)</sup>					

(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 # 32-3312xx 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 Trane Residential and Light Commercial Product Handbook.



Model No. <sup>(a)</sup>	4TWX5042N1000A	4TWX5048N1000A	4TWX5060N1000A
POWER CONNS. – V/PH/HZ (b)	280/230/1/60	280/230/1/60	280/230/1/60
MIN. BRCH. CIR. AMPACITY	24	26	32
BR. CIR. PROT. RTG. – MAX. (AMPS)	40	40	50
COMPRESSOR	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL
RL AMPS – LR AMPS	16.7 - 109	18.5 - 124	23.7 - 152.5
Outdoor Fan FL AMPS	2.80	2.80	2.80
Fan HP	1/3	1/3	1/3
Fan Dia (inches)	26.6	27.6	27.6
Coil	SPINE FIN™	SPINE FIN™	SPINE FIN™
Refrigerant R-410A	10 LBS., 5 OZ	11 LBS., 7 OZ	11 LBS., 12 OZ
LINE SIZE – IN. O.D. GAS (c) (d)	7/8	7/8	1-1/8
LINE SIZE – IN. O.D. LIQ.	3/8	3/8	3/8
Charge Spec. Subcooling	8°F	8°F	8°F
Dimensions H x W X D Crated (IN.)	55.6 x 35.1 x 38.7	55.6 x 35.1 x 38.7	55.6 x 35.1 x 38.7
Weight – Shipping (lbs.)	297	320	320
Weight – Net (lbs.)	247	270	270
Optional Accessories:			
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control	NA	NA	NA
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101
Extreme Condition Mount Kit	BAYECMT004	BAYECMT004	BAYECMT004
Start Kit	BAYKSKT263	BAYKSKT263	BAYKSKT263
Crankcase Heater Kit	BAYCCHT301	BAYCCHT301	BAYCCHT301
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001
Low Ambient Kit	BAYLOAM103	BAYLOAM103	BAYLOAM103
Refrigerant Lineset <sup>(e)</sup>			

(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 # 32-3312xx 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 Trane Residential and Light Commercial Product Handbook.



### **Sound Power Level**

Sound Power Level													
MODEL	A-Weighted Sound Power Level [dB (A)]	Full Octave Sound Power(dB)											
		63 Hz*	63 Hz* 125 Hz 250 Hz 500 Hz 1000 Hz 2000 Hz 4000 Hz 8000 Hz										
4TWX5018N	71	77	72	68	68	69	60	53	47				
4TWX5024N	71	77	72	68	68	69	60	53	47				
4TWX5030N	71	77	72	68	68	69	60	53	47				
4TWX5036N	70	75	69	68	68	66	62	57	51				
4TWX5042N	72	77	75	72	70	67	62	59	52				
4TWX5048N	72	77	75	72	70	67	62	59	52				
4TWX5060N	72	77	75	72	70	67	62	59	52				
lote: Rated in acco	rdance with AHRI Standard	270-2008 *	For Referen	ce Only	•			•					



### **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.
- 2. 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.

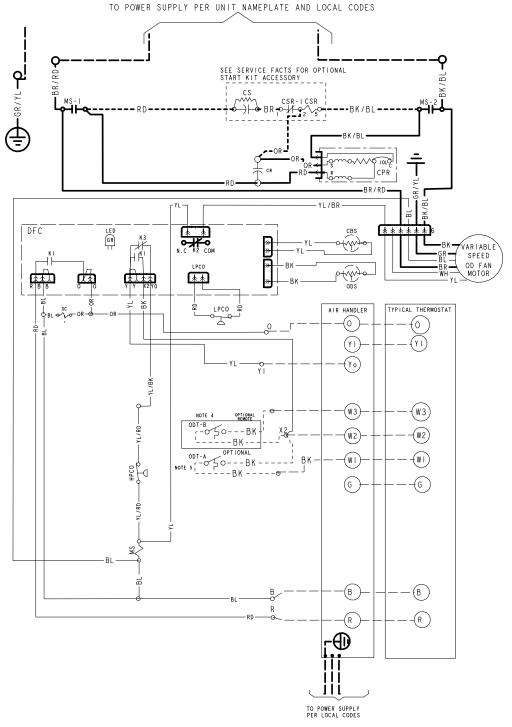
**AHRI Standard 270 Rating Conditions** – (Noise rating numbers are determiend with the unit in cooling operations.) Standard Noise Rating number is at 95°F outdoor air.

### **Model Nomenclature**

<b>Outdoor Units</b>		12 4 T	3 W	4 V		78 36				13 0	
Refrigerant Type 2 = R-22 4 = R-410A TRANE W = Split Heat Pump T = Split Cooling Product Family V = Variable Speed Z = Leadership – Two Stage		sic	rcial	T		<u>3</u>	Ā		0	0	Ā
Family SEER 3 = 13 6 = 16 0 = 20 4 = 14 8 = 18 5 = 15 9 = 19											
Split System Connections 1-6 0 = Brazed	Tons —										
Nominal Capacity in 000s of E					 						
Major Design Modifications											
Power Supply 1 = 200-230/1/60 or 208-230/1/ 3 = 200-230/3/60 4 = 460/3/60	60							]			
Secondary Function											
Minor Design Modifications										 	
Unit Parts Identifier ———					 						



### **Schematic Diagrams**



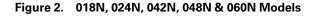
#### Figure 1. 018N, 024N, 042N, 048N & 060N Models

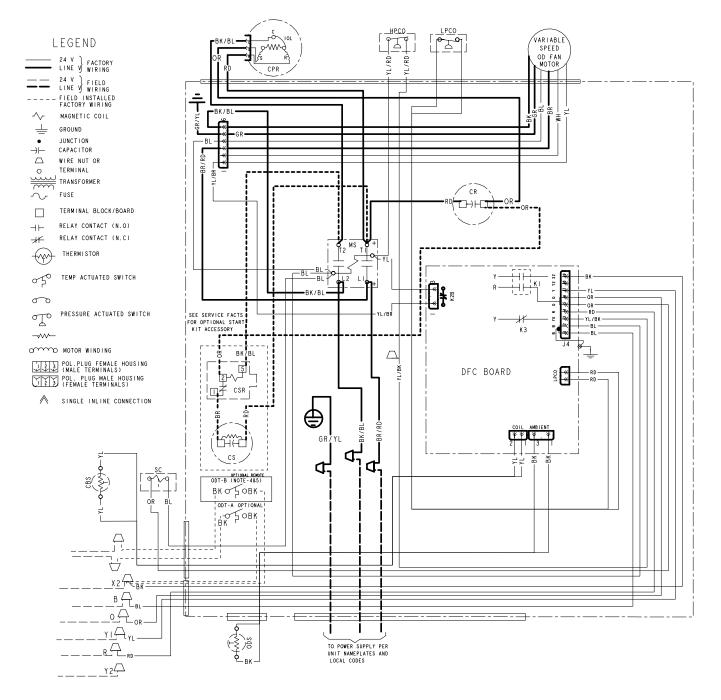
LEGEND
ACR A/C RECTIFIER
CBS COIL BOTTOM SENSOR
CF FAN CAPACITOR
CN WIRE CONNECTOR
CPR COMPRESSOR
CR RUN CAPACITOR
CS STARTING CAPACITOR
CSR CAPACITOR SWITCHING RELAY
DFC DEFROST CONTROL
EEV ELECTRONIC EXP VALVE
EEVC ELECTRONIC EXP VALVE CONTROL
F INDOOR FAN RELAY
HPCO HIGH PRESSURE CUTOUT SWITCH
IOL INTERNAL OVERLOAD PROTECTOR
LPCO LOW PRESSURE CUTOUT SWITCH
MS COMPRESSOR MOTOR CONTACTOR
ODA OUTDOOR ANTICIPATOR
OFT OUTDOOR FAN THERMOSTAT
ODS OUTDOOR TEMPERATURE SENSOR ODT OUTDOOR THERMOSTAT
ODT OUTDOOR THERMOSTAT P-TRD PRESSURE TRANSDUCER
SC SWITCH OVER VALVE SOLENOID
SM SYSTEM ON-OFF SWITCH
TDL DISCHARGE LINE THERMOSTAT
TDR TIME DELAY RELAY (5 SEC DELAY ON)
TNS TRANSFORMER
TEMP SENSOR, TEMPERATURE
Y2C HIGH CAPACITY CONTROL RELAY
BK/BL COLOR OF MARKER BL BLACK RD RED OR ORANGE BL BLUE WH WHITE GR GREEN BR BROWN YL YELLOW PR PURPLE PK PINK
∠ MARNING
HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRICAL POWER INCLUDING REMOTE DISCONNECTS
BEFORE SERVICING.
Failure to disconnect power
before servicing can cause severe personal injury or death.
personal injury or death.
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.
to the equipment.
FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES
CAUTION: NOT SUITABLE FOR USE ON
SYSTEMS EXCEEDING 150V-TO-GROUND
ATTENTION:NE CONVIENT PAS AUX

PRINTED FROM DI58596P05 REVB

INSTALLATIONS DE PLUS DE 150 V A

LA TERRE





NOTES:

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

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ACR CBS CF

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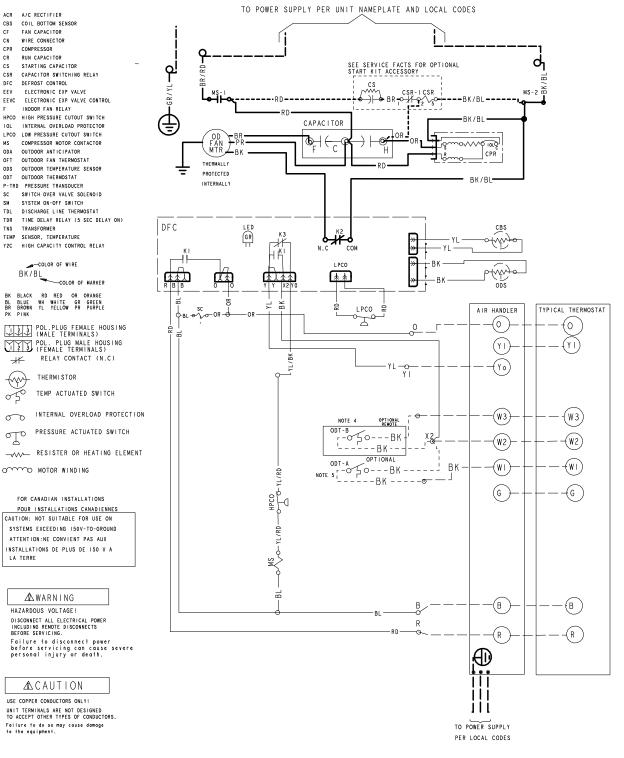
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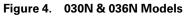
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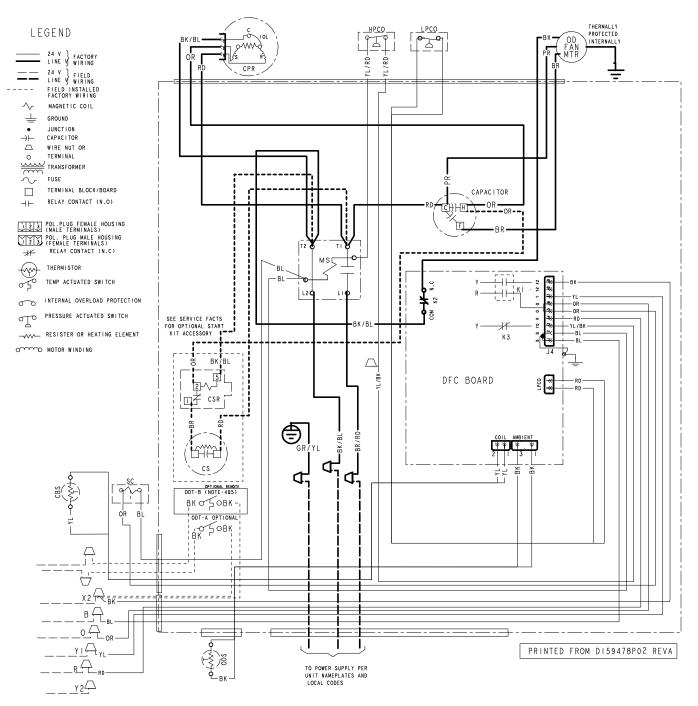


#### LEGEND



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#### 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



## **Outline Drawing**

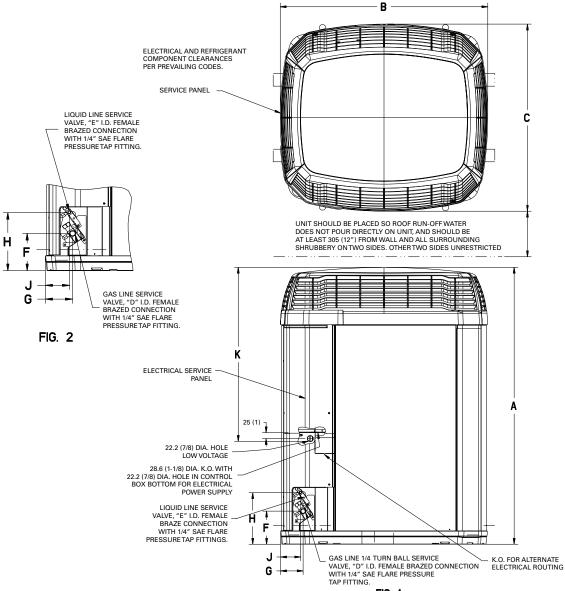


FIG. 1	
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Model	Base	А	В	С	D	Е	F	G	Н	J	К
4TWX5018N	3	975.106 (38.39)	829 (32-5/8)	756 (29-3/4)	3/4	3/8	143 (5-5/8)	92 (3-5/8)	210 (8-1/4)	79 (3-1/8)	651.106 (25.64)
4TWX5024N	3	975.106 (38.39)	829 (32-5/8)	756 (29-3/4)	3/4	3/8	143 (5-5/8)	92 (3-5/8)	210 (8-1/4)	79 (3-1/8)	651.106 (25.64)
4TWX5030N	3	829.106 (35.14)	829 (32-5/8)	756 (29-3/4)	3/4	3/8	127 (5)	76 (3)	197 (7-3/4)	60 (2-3/8)	668.024 (26.31)
4TWX5036N	4	1103.024 (43.435)	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)	668.024 (26.31)
4TWX5042N	4	1307.024 (51.435)	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)	668.024 (26.31)
4TWX5048N	4	1307.024 (51.435)	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)	668.024 (26.31)
4TWX5060N	4	1307.024 (51.435)	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)	668.024 (26.31)



### **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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