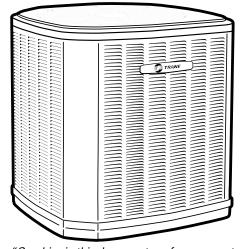


Product Data

Split System Heat Pump

4TWR5018N1000A 4TWR5024N1000A 4TWR5030N1000A 4TWR5036N1000A 4TWR5042N1000A 4TWR5048N1000A 4TWR5060N1000A



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





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Product Specifications

Model No. (a)	4TWR5018N1000A	4TWR5024N1000A	4TWR5030N1000A	4TWR5036N1000A		
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	15	18		
BR. CIR. PROT. RTG MAX. (AMPS)	25	25	25	30		
COMPRESSOR	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL	CLIMATUFF® - 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.)	38 x 30.1 x 33	38 x 30.1 x 33	34 x 30.1 x 33	42 x 35.1 x 38.7		
Weight - Shipping (lbs.)	208	208	208	246		
Weight - Net (lbs.)	174	174	163	199		
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	BAYECMT023	BAYECMT023	BAYECMT004	BAYECMT004		
Start Kit	-	BAYKSKT263	BAYKSKT263	BAYKSKT263		
Crankcase Heater Kit	BAYCCHT302	BAYCCHT302	BAYCCHT302	BAYCCHT302		
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001		
Low Ambient Kit	BAYLOAM107	BAYLOAM107	BAYLOAM107	BAYLOAM107		
Service Valve Panel Cover	TAYSVPANL3343AA	TAYSVPANL3343AA	TAAYSVPANL0044AA	TAYSVPANL0044AA		
Refrigerant Lineset (e)						

⁽a) Certified in accordance with the Air-Source 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,

⁽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.



Product Specifications

Model No. (a)	4TWR5042N1000A	4TWR5048N1000A	4TWR5060N1000A		
POWER CONNS. – V/PH/HZ (b)	208/230/1/60	208/230/1/60	208/230/1/60		
MIN. BRCH. CIR. AMPACITY	24	26	32		
BR. CIR. PROT. RTG. – MAX. (AMPS)	40	40	50		
COMPRESSOR	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLI		
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.)	51 x 35.1 x 38.7	51 x 35.1 x 38.7	51 x 35.1 x 38.7		
Weight – Shipping (lbs.)	277	300	301		
Weight – Net (lbs.)	227	250	251		
Optional Accessories:			1		
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		
Service Valve Panel Cover	TAYSVPANL0046AA	TAYSVPANL0046AA	TAYSVPANL0046AA		
Refrigerant Lineset (e)					

⁽a) Certified in accordance with the Air-Source 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 Trane Residential and Light Commercial Product Handbook.



Sound Power Level

Sound Power Level									
MODEL	A-Weighted Sound Power Level [dB(A)]		ınd Power	nd Power(dB)					
		63 Hz*	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
4TWR5018N	71	77	72	68	68	69	60	53	47
4TWR5024N	71	77	72	68	68	69	60	53	47
4TWR5030N	71	77	72	68	68	69	60	53	47
4TWR5036N	70	75	69	68	68	66	62	57	51
4TWR5042N	72	77	75	72	70	67	62	59	52
4TWR5048N	72	77	75	72	70	67	62	59	52
4TWR5060N	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.

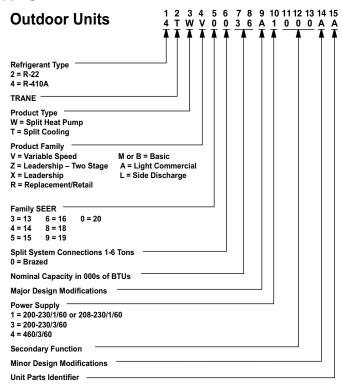
AHRI Standard Capacity Rating Conditions

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

TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES LEGEND A/C RECTIFIER COIL BOTTOM SENSOR CF FAN CAPACITOR CN WIRE CONNECTOR SEE SERVICE FACTS FOR OPTIONAL START KIT ACCESSORY CPR COMPRESSOR CR RUN CAPACITOR CS STARTING CAPACITOR CSR CAPACITOR SWITCHING RELAY DEC DEFROST CONTROL EEV ELECTRONIC EXP VALVE ELECTRONIC EXP VALVE CONTROL EEVC INDOOR FAN RELAY HPCO HIGH PRESSURE CUTOUT SWITCH ~ΛΛΛΔ 10Γδ IOL INTERNAL OVERLOAD PROTECTOR CPR I PCO LOW PRESSURE CUTOUT SWITCH COMPRESSOR MOTOR CONTACTOR MS BR/RD OUTDOOR ANTICIPATOR ODA YL/BR OFT OUTDOOR FAN THERMOSTAT OUTDOOR TEMPERATURE SENSOR ODS ODT OUTDOOR THERMOSTAT DFC CBS $\overline{\mathbb{A}}$ P-TRD PRESSURE TRANSDUCER VARIABLE SPEED SC SWITCH OVER VALVE SOLENOID SM SYSTEM ON-OFF SWITCH OD FAN DISCHARGE LINE THERMOSTAT TDL P(44) ** TIME DELAY RELAY (5 SEC DELAY ON) SENSOR, TEMPERATURE LPCO AIR HANDLER TYPICAL THERMOSTAT HIGH CAPACITY CONTROL RELAY T (0 (0 COLOR OF WIRE (YI)BK/BL COLOR OF MARKER BK BLACK RD RED OR ORANGE BL BLUE WH WHITE GR GREEN BR BROWN YL YELLOW PR PURPLE (w3) NOTE 4 OPTIONAL REMOTE **△L**WARNING (W2) HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRICAL POWER ВК INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. Failure to disconnect power before servicing can cause severe 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. 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 I A TERRE

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

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22-1832-14L-EN

TO POWER SUPPLY PER LOCAL CODES

Schematic Diagrams

VARIABLE SPEED LEGEND 24 V FACTORY WIRING OD FAN CPR 24 V) FIELD WIRING MAGNETIC COIL GROUND JUNCTION -BI CAPACITOR WIRE NUT OR TERMINAL ⊭ TRANSFORMER CR FUSE TERMINAL BLOCK/BOARD RELAY CONTACT (N.O) # RELAY CONTACT (N.C) THERMISTOR TEMP ACTUATED SWITCH PRESSURE ACTUATED SWITCH SEE SERVICE FACTS FOR OPTIONAL START KIT ACCESSORY To **→**VV OMOTOR WINDING BK/BL \triangle POL.PLUG FEMALE HOUSING (MALE TERMINALS) DFC BOARD POL. PLUG MALE HOUSING (FEMALE TERMINALS) CSR ↑ SINGLE INLINE CONNECTION \oplus OPTIONAL REMOT ODT-B (NOTE-485) BK 0 5 0BK -ODT-A OPTIONAL BK SOBK _B__ _o_A__o_ Y I A TO POWER SUPPLY PER UNIT NAMEPLATES AND LOCAL CODES Y 2△

Figure 2. 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.

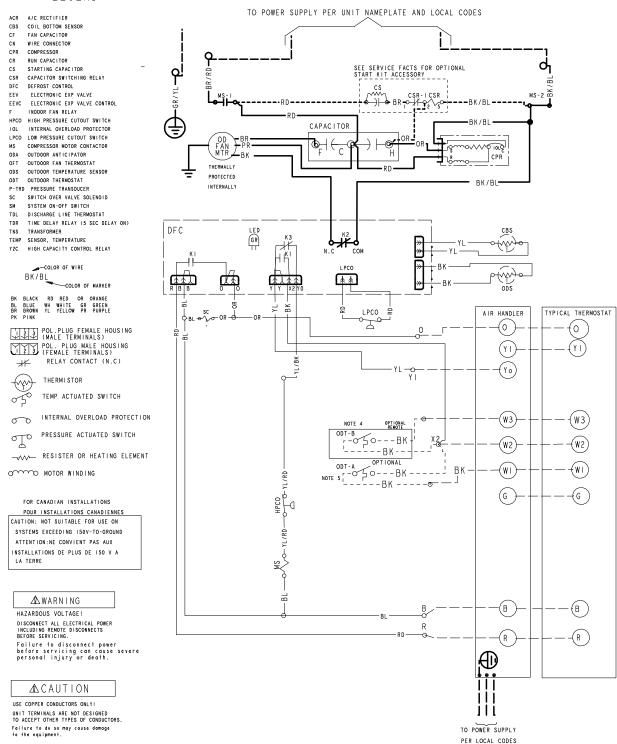
- 3. LOW VOLTAGE WIRING TO BE NO. 18 AWG MINIMUM CONDUCTOR.
 4. ODT-B MUST BE SET LOWER THAN ODT-A
 5. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN WI AND W2 AT AIR HANDLER

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Figure 3. 030N & 0306N Models

LEGEND



PRINTED FROM DI59478P02 REVA

Schematic Diagrams

THERMALLY PROTECTED INTERNALLY LEGEND 24 V FACTORY YL/RD-24 V) FIELD LINE V WIRING CPR FIELD INSTALLED FACTORY WIRING MAGNETIC COIL GROUND JUNCTION CAPACITOR WIRE NUT OR
TERMINAL
TRANSFORMER $\dot{\sim}$ FUSE TERMINAL BLOCK/BOARD CAPACITOR RELAY CONTACT (N.O) POL.PLUG FEMALE HOUSING (MALE TERMINALS) POL. PLUG MALE HOUSING

(FEMALE TERMINALS)

RELAY CONTACT (N.C) THERMISTOR ~<u>~</u> TEMP ACTUATED SWITCH L2 C INTERNAL OVERLOAD PROTECTION 2 PRESSURE ACTUATED SWITCH SEE SERVICE FACTS FOR OPTIONAL START KIT ACCESSORY -YL/BK ____ RESISTER OR HEATING ELEMENT К3 OMO MOTOR WINDING ВК 3 DFC BOARD CSR ODT-B (NOTE-4&5) BK 0 5 0BK -ODT-A OPTIONAL BK SOBK В △ <u>...</u> PRINTED FROM DI59478P02 REVA TO POWER SUPPLY PER UNIT NAMEPLATES AND LOCAL CODES

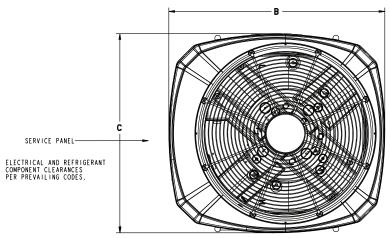
Figure 4. 030N & 0306N Models

NOTES:

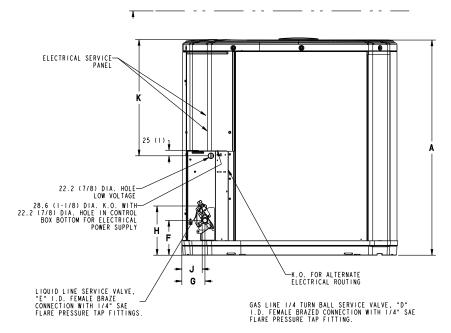
- I. BE SURE POWER SUPPLY AGREES WITH EQUIPMENT NAMEPLATE.
- POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH LOCAL CODES.
- 3. LOW VOLTAGE WIRING TO BE NO. 18 AWG MINIMUM CONDUCTOR.
- 4. ODT-B MUST BE SET LOWER THAN ODT-A
- 5. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN WI AND W2 $\,$ AT AIR HANDLER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



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	E	F	G	Н	J	K
4TWR5018N	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)
4TWR5024N	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)
4TWR5030N	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)
4TWR5036N	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)
4TWR5042N	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)
4TWR5048N	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)
4TWR5060N	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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