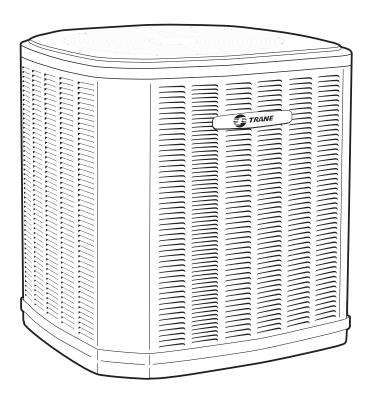


Split System Heat Pump Product Data

XR 13 4TWR3018-060

 $1\frac{1}{2} - 5$ Tons





Features and Benefits

- Climatuff® compressor
- All aluminum **Spine Fin™** coil
- Quick-Sess[™] cabinet, service access and refrigerant connections with full coil protection
- **DuraTuff™** base, fast complete drain, weather proof
- · Glossy corrosion resistant finish
- Internal compressor high/low pressure and temperature protection
- 030 ships with Start Kit
- · Liquid line filter-drier
- · Polyslate gray cabinet

- Low Pressure Switch
- Demand Defrost Control
- High Pressure Switch
- R-410A refrigerant
- 100% line run test
- Low ambient cooling to 55°F as shipped
- Low ambient cooling to 30°F with EDC accessory AY28X084 and TXV
- Extended warranties available



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General Data

Product Specifications

Model No. ①	4TWR3018D1000A	4TWR3024D1000A	4TWR3030C1000A	4TWR3036C1000A	
Electrical Data V/Ph/Hz 2	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60	
Min Cir Ampacity	12	17	15	22	
Max Fuse Size (Amps)	20	25	25	35	
Compressor	CLIMATUFF®-SCROLL	CLIMATUFF®-SCROLL	CLIMATUFF®	CLIMATUFF®-SCROLL	
RL Amps - LR Amps	9.0 - 48.8	12.8 - 59.1	11.5 - 63.5	16.7 - 79	
Outdoor Fan FL Amps	0.77	0.77	0.74	0.92	
Fan HP	1/8	1/8	1/8	1/5	
Fan Dia (inches)	23.0	23.0	23.0	27.5	
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™	
Refrigerant R-410A	5/5-LB/OZ	5/4-LB/OZ	6/05-LB/OZ	6/2-LB/OZ	
Line Size - (in.) O.D. Gas ③	5/8	5/8	3/4	3/4	
Line Size - (in.) O.D. Liquid ③	3/8	3/8	3/8	3/8	
Charge Spec. Subcooling	12°F	12°F	8°F	8°F	
Dimensions H x W x D (Crated)	34 x 30.1 x 33	34 x 30.1 x 33	38 x 30.1 x 33	38.4 x 35.1 x 38.7	
Weight - Shipping	185	184	221	229	
Weight - Net	160	159	193	198	
Start Components	NO	NO	YES	NO	
Sound Enclosure	NO	NO	NO	NO	
Compressor Sump Heat	NO	NO	NO	NO	
Optional Accessories: 4					
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A	
Evaporator Defrost Control	AY28X084	AY28X084	AY28X084	AY28X084	
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101	
Snow Leg-Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002	
Snow Leg-4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003	
Extreme Condition Mounting Kit	BAYECMT023	BAYECMT023	BAYECMT023	BAYECMT004	
Start Kit	BAYKSKT263	BAYKSKT263		BAYKSKT263	
Crankcase Heater Kit	BAYCCHT302	BAYCCHT302	BAYCCHT300	BAYCCHT302	
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001	
Low Ambient Kit	BAYLOAM103	BAYLOAM103	BAYLOAM103	BAYLOAM103	
Refrigerant Lineset ⑤	TAYREFLN9*	TAYREFLN9*	TAYREFLN7*	TAYREFLN7*	

① Certified in accordance with the Air-Source Unitary Heat Pump equipment certification program which is based on AHRI Standard 210/240. ② Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses. ③ Standard line lengths - 60'. Standard lift - 60' Suction and Liquid line.

Sound Power Level

Model	A-Weighted Sound	Full Octave Sound Power [dB]							
Wodei	Power Level [dB(A)]	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
4TWR3018D	71	76	69	66	69	67	61	53	49
4TWR3024D	71	76	69	66	69	67	61	53	49
4TWR3030C	76	80	72	61	64	70	70	61	56
4TWR3036C	72	84	75	70	72	67	62	57	50
4TWR3042B	75	83	74	68	71	68	63	59	55
4TWR3048B	75	83	72	67	70	69	65	59	56
4TWR3060B	75	78	71	68	69	68	66	63	62

Note: Rated in accordance with AHRI Standard 270-2008

For Greater lengths and lifts refer to refrigerant piping software Pub# 32-3312-0[†]. (†denotes latest revision)

For accessory description and usage, see page 5.
 * = 15, 20, 25, 30, 40 and 50 foot lineset available.



General Data

Product Specifications

Model No. ①	4TWR3042B1000C	4TWR3048B1000C	4TWR3060B1000C	
Electrical Data V/Ph/Hz ②	208/230/1/60	208/230/1/60	208/230/1/60	
Min Cir Ampacity	26	28	34	
Max Fuse Size (Amps)	45	50	60	
Compressor	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL	
RL Amps - LR Amps	19.9 - 109	21.8 - 117	26.3 - 134	
Outdoor Fan FL Amps	0.97	1.01	0.94	
Fan HP	1/5	1/5	1/5	
Fan Dia (inches)	27.6	27.5	27.5	
Coil	Spine Fin™	Spine Fin™	Spine Fin™	
Refrigerant R-410A	7/07-LB/OZ	8/09-LB/OZ	8/14-LB/OZ	
Line Size - (in.) O.D. Gas 3	3/4	7/8	7/8	
Line Size - (in.) O.D. Liquid 3	3/8	3/8	3/8	
Charge Spec. Subcooling	8°F	8°F	8°F	
Dimensions H x W x D (Crated)	38.4 x 35.1 x 38.7	42.4 x 35.1 x 38.7	46.4 x 35.1 x 38.7	
Weight - Shipping	253	269	284	
Weight - Net	219	234	248	
Start Components	NO	NO	NO	
Sound Enclosure	NO	NO	NO	
Compressor Sump Heat	NO	NO	NO	
Optional Accessories: 4				
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	
Evaporator Defrost Control	AY28X084	AY28X084	AY28X084	
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	
Snow Leg-Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002	
Snow Leg-4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	
Extreme Condition Mounting Kit	BAYECMT004	BAYECMT004	BAYECMT004	
Start Kit	BAYKSKT263	BAYKSKT263		
Crankcase Heater Kit	BAYCCHT301	BAYCCHT301	BAYCCHT301	
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	
Low Ambient Kit	BAYLOAM103	BAYLOAM103	BAYLOAM103	
Refrigerant Lineset 5	TAYREFLN7*	TAYREFLN3*	TAYREFLN3*	

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.

Evaporator 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 —

- (A) Cooling 80°F DB, 67°F WB air entering indoor coil, 95°F DB air entering outdoor coil.
- (B) High Temperature Heating 47°F DB, 43°F WB air entering outdoor coil, 70°F DB air entering indoor coil.
- (C) Low Temperature Heating 17°F DB, 15°F WB air entering outdoor coil, 70°F DB air entering indoor coil.
- outdoor coil, 70°F DB air entering indoor coil.
 (D) Rated indoor airflow for heating is the same as for cooling.

AHRI STANDARD 270 RATING CONDITIONS — (Noise rating numbers are determined with the unit in cooling operation.) Standard Noise Rating number is at 95°F outdoor air.

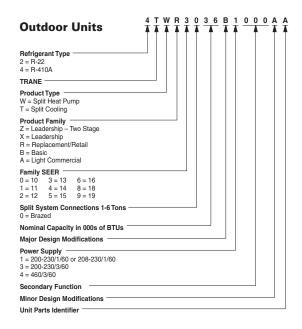


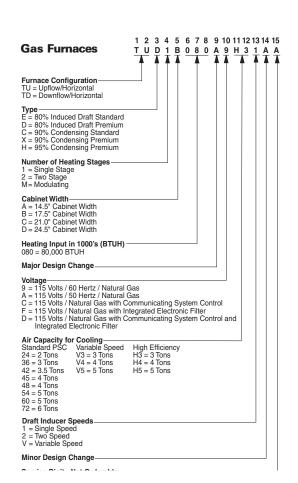


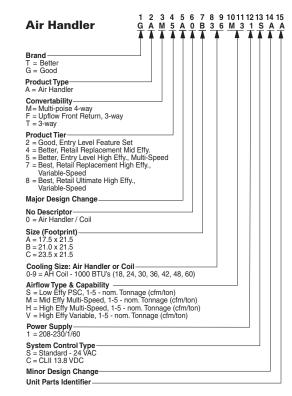
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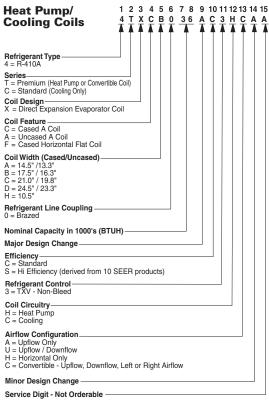


Model Nomenclature







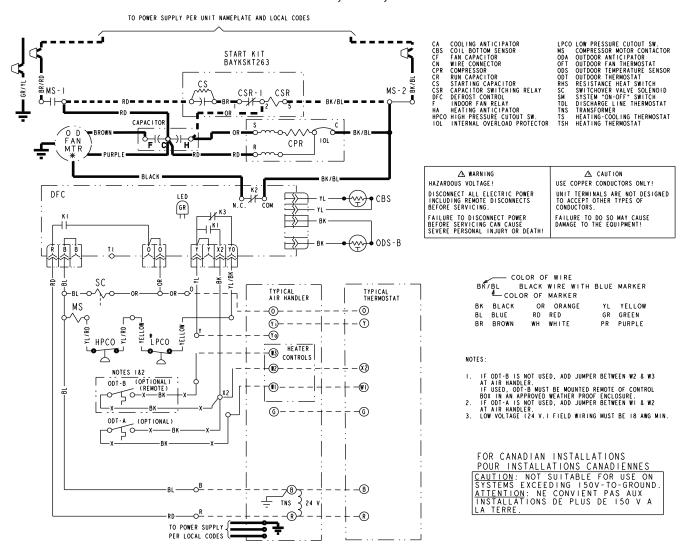




Electrical Data

SCHEMATIC DIAGRAMS

4TWR3018D, 024D, 036C



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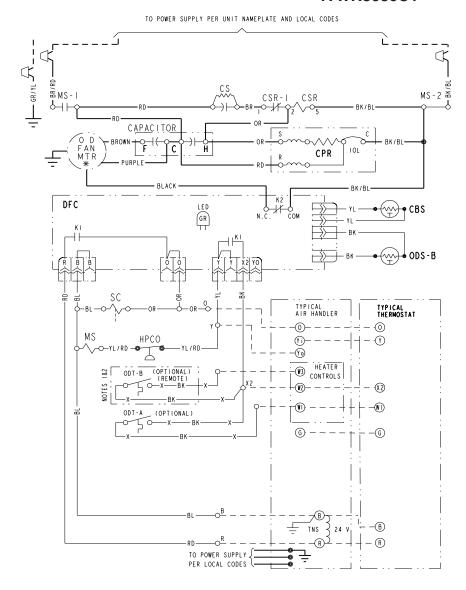


Electrical Data

SCHEMATIC DIAGRAMS

(SEE LEGEND)

4TWR3030C1



CA COOLING ANTICIPATOR
CBS COIL BOTTOM SENSOR
CF FAN CAPACITOM
CPR COMPETSOR
CPR COMPETSOR
CR RUN CAPACITOR
CS STARTING CAPACITOR
CS CAPACITOR SWITCHING RELAY
DFC DEFROST CONTROL
F INDOOR FAN RELAY
HA HEATING ANTICIPATOR
HPCO HIGH PRESSURE CUTOUT SW.
IOL INTERNAL OVERLOAD PROTECTOR
INCLUDIOLISM INTERNAL OVERLOAD PROTECTOR
LPCO LOW PRESSURE CUTOUT SW.
MS COMPRESSOR MOTOR CONTACTOR
ODA OUTDOOR ANTICIPATOR
OTT OUTDOOR FAN THERMOSTAT
ODS OUTDOOR THERMOSTAT
RHS RESISTANCE HEAT SWITCH
SC SWITCHOVER VALVE SOLEMOID
SM SYSTEM "ON-OFF" SWITCH
TUL DISCHARGE LINE THERMOSTAT
TNS TRANSFORMER
TS HEATING-COOLING THERMOSTAT
TSH HEATING-THERMOSTAT

COLOR OF WIRE BLACK WIRE WITH BLUE MARKER - COLOR OF MARKER BLACK OR ORANGE

YELLOW RD RED GREEN BL BLUE GR BROWN WH WHITE PURPLE

⚠ WARNING HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH!

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!

△ CAUTION

NOTES:

- IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3 AT AIR HANDLER. IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AN APPROVED WEATHER PROOF ENCLOSURE. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN WI & W2 AT AIR HANDLER. LOW VOLTAGE (24 V.) FIELD WIRING MUST BE I8 AWG MIN.

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 14 TERPE

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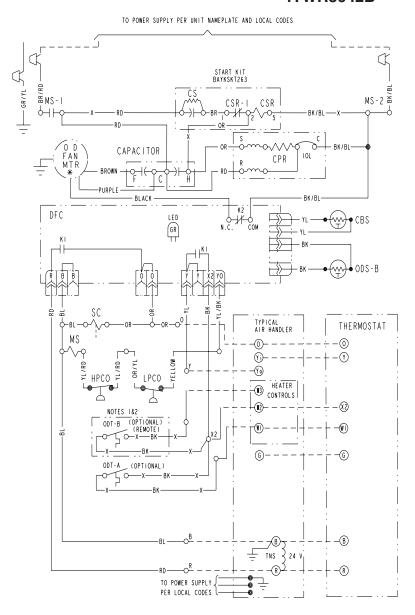
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Electrical Data

SCHEMATIC DIAGRAMS

4TWR3042B



LPCO LOW PRESSURE CUTOUT SW.

MS COMPRESSOR MOTOR CONTACTOR
ODA OUTDOOR FAN THEAMOSTAT
ODS OUTDOOR FAN THEAMOSTAT
ODS OUTDOOR FEMPERATURE SENSOR
OUT OUTDOOR TEMPERATURE SENSOR
SYSTEM "ON-OFF" SWITCH
TOL DISCHARGE LINE THERMOSTAT
TINS TRANSFORMER
TS HEATING-COOLING THERMOSTAT
TSH HEATING THERMOSTAT CA COOLING ANTICIPATOR
CBS COIL BOTTOM SENSOR
CF FAN CAPACITOR
N WIRE CONNECTOR
CPR COMPRESSOR
CS STARTING CAPACITOR
CS STARTING CAPACITOR
CS CAPACITOR SWITCHING RELAY
DFC DEFROST CONTROL
F INDOOR FAN RELAY
HA HEATING ANTICIPATOR
HEATING ANTICIPATOR
HOCO HIGH PRESSURE CUTOUT SW.
IOL INTERNAL OVERLOAD PROTECTOR

 WARNING △ CAUTION HAZARDOUS VOLTAGE! USE COPPER CONDUCTORS ONLY! DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT! FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH!

> COLOR OF WIRE BK/BL BLACK WILL
>
> COLOR OF MARKER
>
> ORANGE BLACK WIRE WITH BLUE MARKER

> BK BLACK OR ORANGE YL YELLOW BI BILLE RD RED GR GREEN WH WHITE PR PURPLE BROWN

NOTES:

- IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3
 AT AIR HANDLER.
 IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL
 BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.
 IF ODT-A IS NOT USED, ADD JUMPER BETWEEN WI & W2
 AT AIR HANDLER.
 LOW YOLTAGE (24 V.) FIELD WIRING MUST BE 18 AWG MIN.

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.

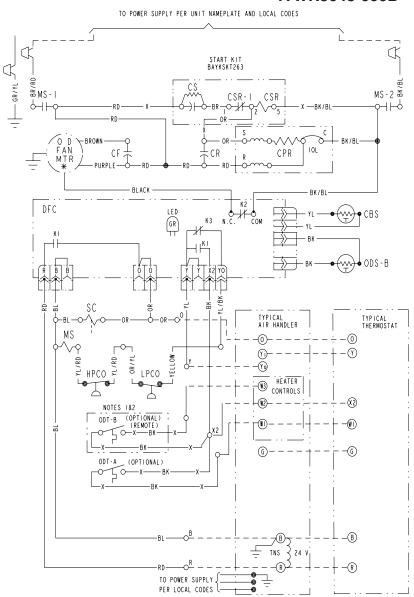
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Electrical Data

SCHEMATIC DIAGRAMS

4TWR3048-060B



CA COOLING ANTICIPATOR
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
F INDOOR FAN RELAY
HACHING ANTICIPATOR
HPCO HIGH PRESSURE CUTOUT SW.
IOL INTERNAL OVERLOAD PROTECTOR MS COMPRESSURE CUTOUT SW.

MS COMPRESSOR MOTOR CONTACTOR
ODA OUTDOOR ANTICIPATOR
OFT OUTDOOR FAN THEAMOSTAT
ODS OUTDOOR TEMPERATURE SENSOR
ODT OUTDOOR THEAMOSTAT
OUTDOOR THEAMOSTAT
SWITCHOVER VALVE SOLENOID
SWITCHOVER VALVE SOLENOID
SWITCHOVER VALVE SOLENOID
DISCHARGE LINE THERMOSTAT
TOST PARSFORMER
TS HASTING-COOLING THERMOSTAT
TSH HEATING THERMOSTAT

△ CAUTION WARNING USE COPPER CONDUCTORS ONLY! HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH! FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT!

> - COLOR OF WIRE BK/BL BLACK WINE COLOR OF MARKER BLACK WIRE WITH BLUE MARKER

BLACK OR ORANGE YI YELLOW BLUE RD RED GR GREEN ΒL WHITE PR PURPLE

NOTES:

1. IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3
AT AIR HANDLER.

1F USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL
BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.

2. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN WI & W2
AT AIR HANDLER.

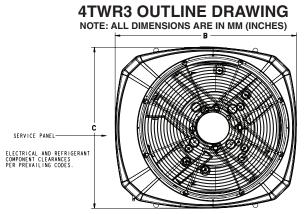
3. LOW VOLTAGE (24 V.) FIELD WIRING MUST BE I8 AWG MIN.

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.

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Dimensions



TOP DISCHARGE AREA SHOULD BE UNRESTRICTED FOR AT LEAST 1524 (5 FEET) ABOVE UNIT. UNIT SHOULD BE PLACED SO ROOF ROUN-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.

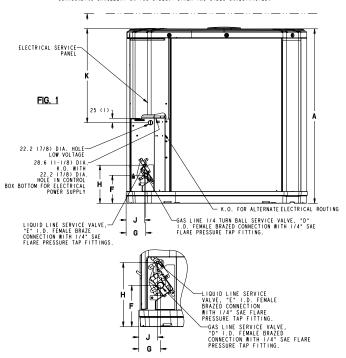


FIG. :	2
FIG. 2	∠

<u> </u>												
MODELS	BASE	FIG.	Α	В	С	D	E	F	G	н	J	К
4TWR3018D	3	1	730 (28-3/4)	829 (32-5/8)	756 (29-3/4)	5/8	3/8	143 (5-5/8)	92 (3-5/8)	210 (8-1/4)	79 (3-1/8)	508 (20)
4TWR3024D	3	1	730 (28-3/4)	829 (32-5/8)	756 (29-3/4)	5/8	3/8	143 (5-5/8)	92 (3-5/8)	210 (8-1/4)	79 (3-1/8)	508 (20)
4TWR3030C	3	1	832 (32-3/4)	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)	508 (20)
4TWR3036C	4	1	841 (33-1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TWR3042B	4	1	841 (33-1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4TWR3048B	4	1	943 (37-1/8)	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)	508 (20)
4TWR3060B	4	1	1045 (41-1/8)	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)	508 (20)



Mechanical Specification Options

General

The 4TWR3 is fully charged from the factory for up to 15 feet of piping. 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 UL listed. Exterior is designed for outdoor application.

Casing

Unit casing is constructed of heavy gauge, G90 galvanized steel and painted with a weather-resistant powder paint on all louvers, panels, prepaint on all other panels. Corrosion and weather-proof CMBP-G30 DuraTuff™ base.

Refrigerant Controls

Refrigeration system controls include condenser fan, compressor contactor and high pressure switch. High and low pressure controls are inherent to the compressor. A factory installed liquid line drier is standard.

Compressor

The Climatuff® compressor features internal over temperature and pressure protection and total dipped hermetic motor. 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 unit has a cooling capability 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.

Accessories

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

Evaporator Defrost Control — See Low Ambient Cooling.







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

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