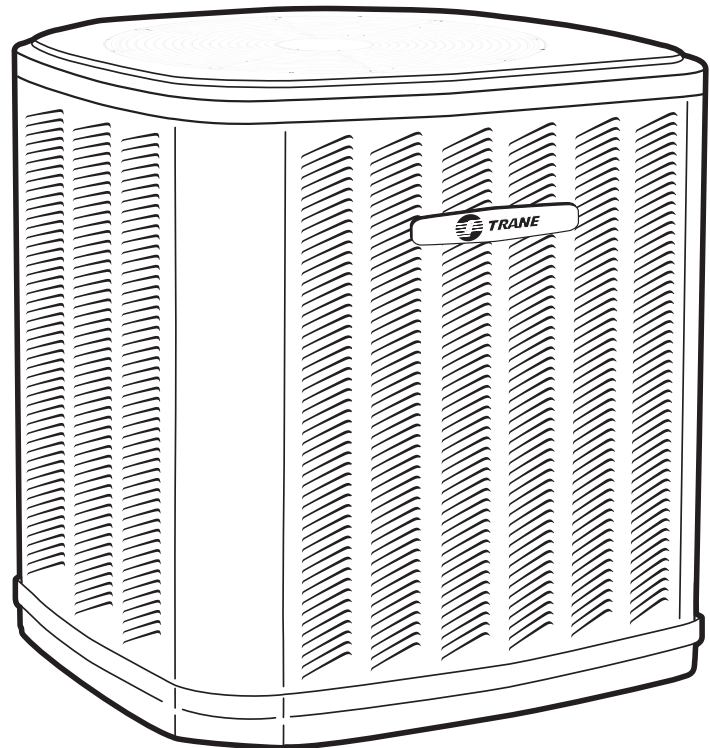




Split System Heat Pump Product Data

XB 13
4TWB3018-060

1½ – 5 Tons



PUB. NO. 22-1793-11



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
- 018, 024, and 030 ship with Start Kit
- Liquid line filter-drier
- Polyslate gray cabinet
- Low Pressure Switch (042, 048, 060)
- 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**

Contents

Features and Benefits	2
General Data	4
Product Specifications	4
A-weighted Sound Power Level [dB(A)]	4
Accessory Description and Usage	5
AHRI Standard Capacity Rating Conditions	5
Model Nomenclature	6
Electrical Data	7
Dimensions	10
Mechanical Specification Options	11



General Data

Product Specifications

Model No. ①	4TWB3018C1	4TWB3024C1	4TWB3030B1	4TWB3036B1
Electrical Data V/Ph/Hz ②	208/230/1/60	208/230/1/60	200/230/1/60	208/230/1/60
Min Cir Ampacity	9	12	15	18
Max Fuse Size (Amps)	15	20	25	30
Compressor	CLIMATUFF®	CLIMATUFF®	CLIMATUFF®	CLIMATUFF®
RL Amps - LR Amps	6.4 - 40	8.9 - 48.5	11.3 - 68.2	13.2 - 63
Outdoor Fan FL Amps	0.7	0.74	0.74	1.0
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	5/9-LB/OZ	5/12-LB/OZ	6/05-LB/OZ	7/6-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	10°	10°	8°	8°
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	189	191	221	261
Weight - Net	161	163	193	227
Start Components	YES	YES	YES	YES
Sound Enclosure	NO	NO	NO	YES
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				
Crankcase Heater Kit	BAYCCHT300	BAYCCHT300	BAYCCHT300	BAYCCHT300
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.

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

④ For accessory description and usage, see page 5.

⑤ * = 15, 20, 25, 30, 40 and 50 foot lineset available.

MODEL	SOUND POWER LEVEL [dB(A)]	A-WEIGHTED FULL OCTAVE SOUND POWER LEVEL dB [(dB(A))]							
		63	125	250	500	1000	2000	4000	5000
4TWB3018C1	79	47.3	60.7	65.8	71.2	72.8	72.1	62.2	52.8
4TWB3024C1	79	45.3	58.8	70.5	70.5	75.4	75.3	66.8	61.3
4TWB3030B1	79	46.6	58.2	65.9	69.2	73.5	73.1	62.3	56.5
4TWB3036B1	79	46.4	59.6	67.4	74.8	73.8	68.9	61.2	53.4
4TWB3042B1	79	47.6	58.3	67.3	74.9	74.9	70.4	62.3	53.0
4TWB3048B1	78	47.0	56.5	66.7	73.0	72.8	69.3	62.0	51.4
4TWB3060B1	78	45.3	55.1	66.6	73.0	73.5	69.7	63.1	53.9

Note: Rated in accordance with AHRI Standard 270-2008



General Data

Product Specifications

Model No. ①	4TWB3042B1	4TWB3048B1	4TWB3060B1
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	.97	1.01	.94
Fan HP	1/5	1/5	1/5
Fan Dia (inches)	27.5	27.5	27.86
Coil	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-410A	7/07-LB/OZ	8/9-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°	8°	8°
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	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.
- (D) Rated indoor airflow for heating is the same as for cooling.

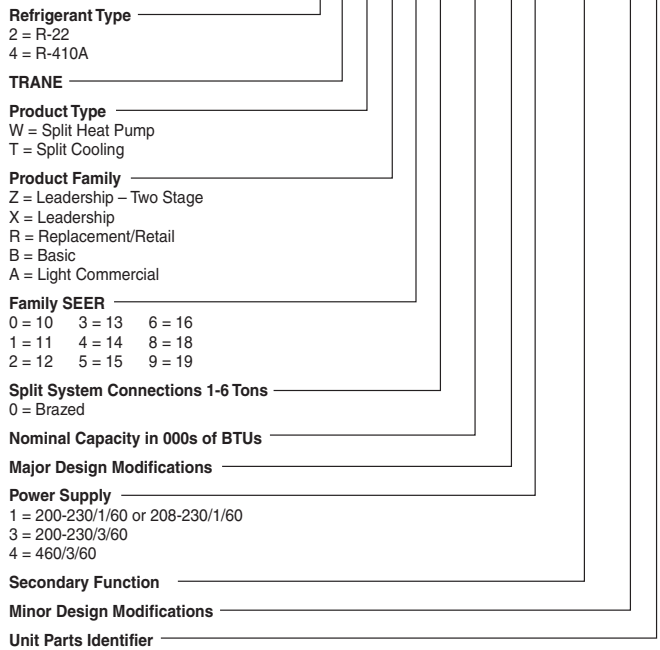
AHRI STANDARD 270 RATING CONDITIONS — (Noise rating numbers are determined with the unit in cooling operation.) Standard Noise Rating number is at 95°F outdoor air.



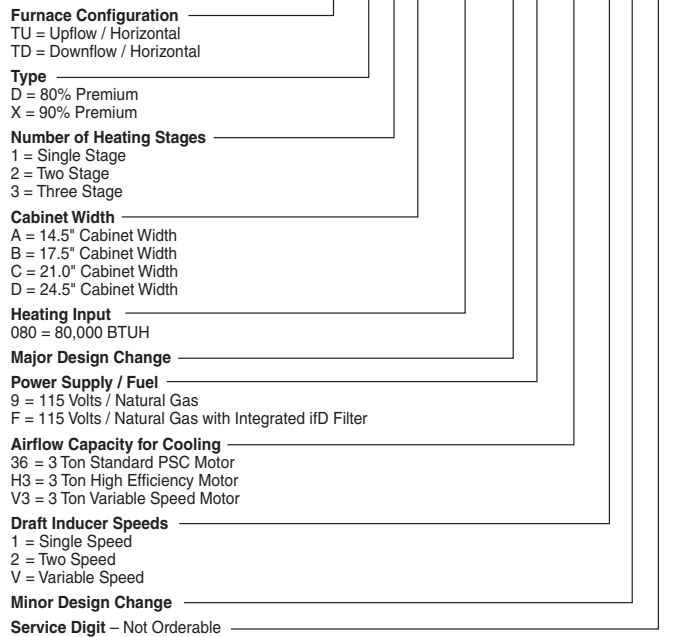


Model Nomenclature

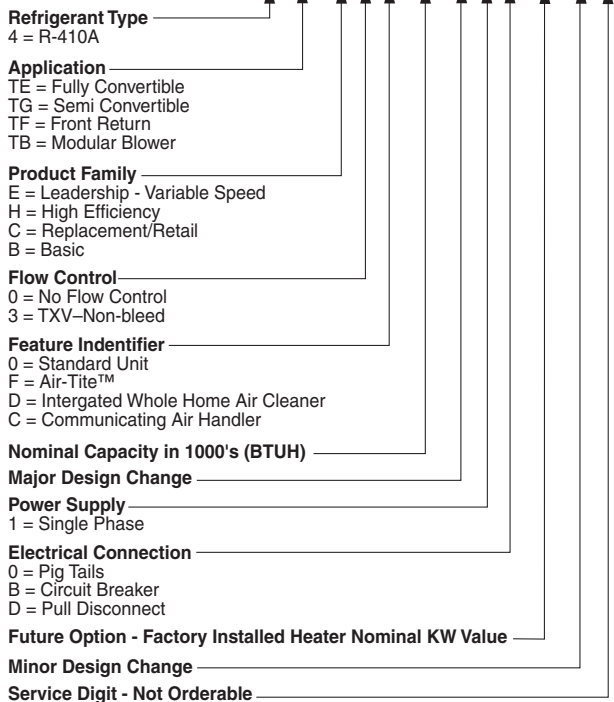
Outdoor Units



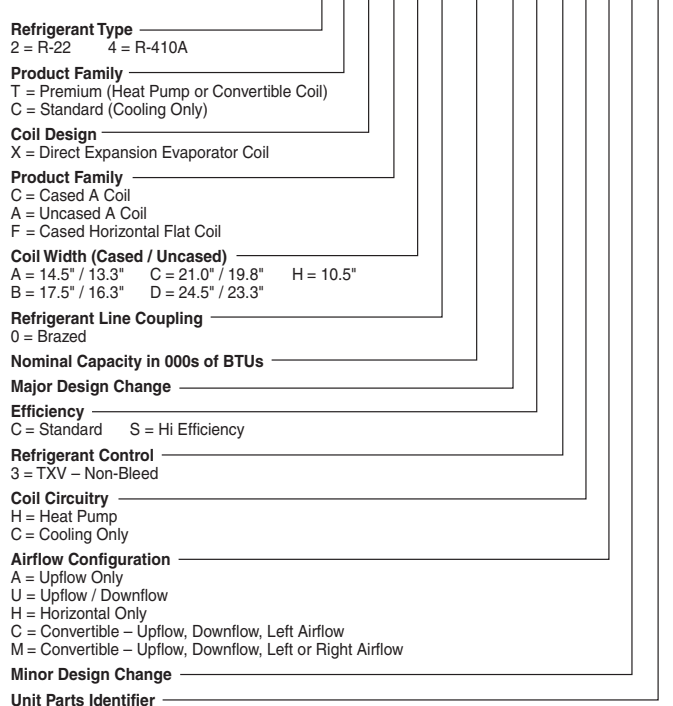
High Efficiency Furnaces



Air Handlers- Residential



Heat Pump / Cooling Coils

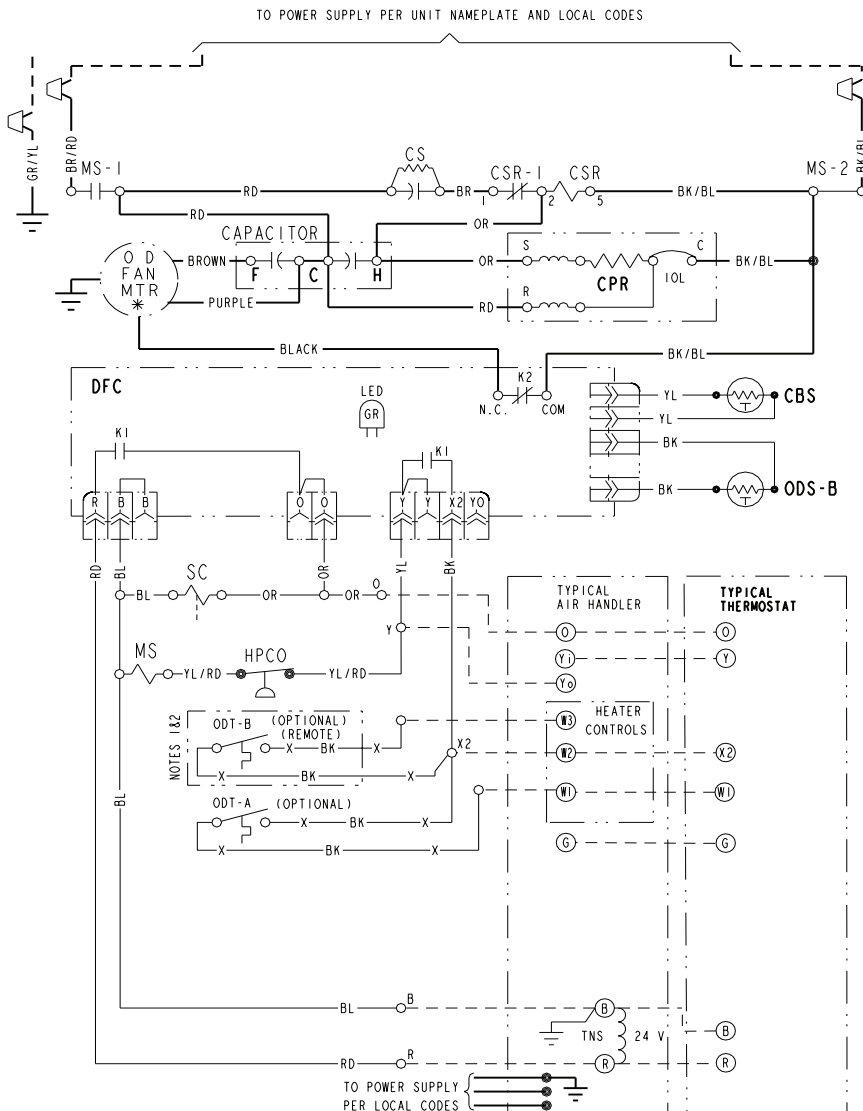


Electrical Data

SCHEMATIC DIAGRAMS

(SEE LEGEND)

4TWB3018-036



- 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
- HA HEATING ANTICIPATOR
- HPCO HIGH PRESSURE CUTOFF SW.
- IOL INTERNAL OVERLOAD PROTECTOR
- LPCO LOW PRESSURE CUTOFF SW.
- MS COMPRESSOR MOTOR CONTACTOR
- ODA OUTDOOR ANTICIPATOR
- OFT OUTDOOR FAN THERMOSTAT
- ODS OUTDOOR TEMPERATURE SENSOR
- ODT OUTDOOR THERMOSTAT
- RHS RESISTANCE HEAT SWITCH
- SC SWITCHOVER VALVE SOLENOID
- SM SYSTEM "ON-OFF" SWITCH
- TDL DISCHARGE LINE THERMOSTAT
- TNS TRANSFORMER
- TS HEATING-COOLING THERMOSTAT
- TSH HEATING THERMOSTAT

- COLOR OF WIRE
 BK/BL BLACK WIRE WITH BLUE MARKER
 COLOR OF MARKER
 BK BLACK OR ORANGE YL YELLOW
 BL BLUE RD RED GR GREEN
 BR BROWN WH WHITE PR PURPLE

<p>⚠ 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!</p>	<p>⚠ 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!</p>
---	--

NOTES:

1. 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.
2. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
3. LOW VOLTAGE (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.

PRINTED FROM D157099P01

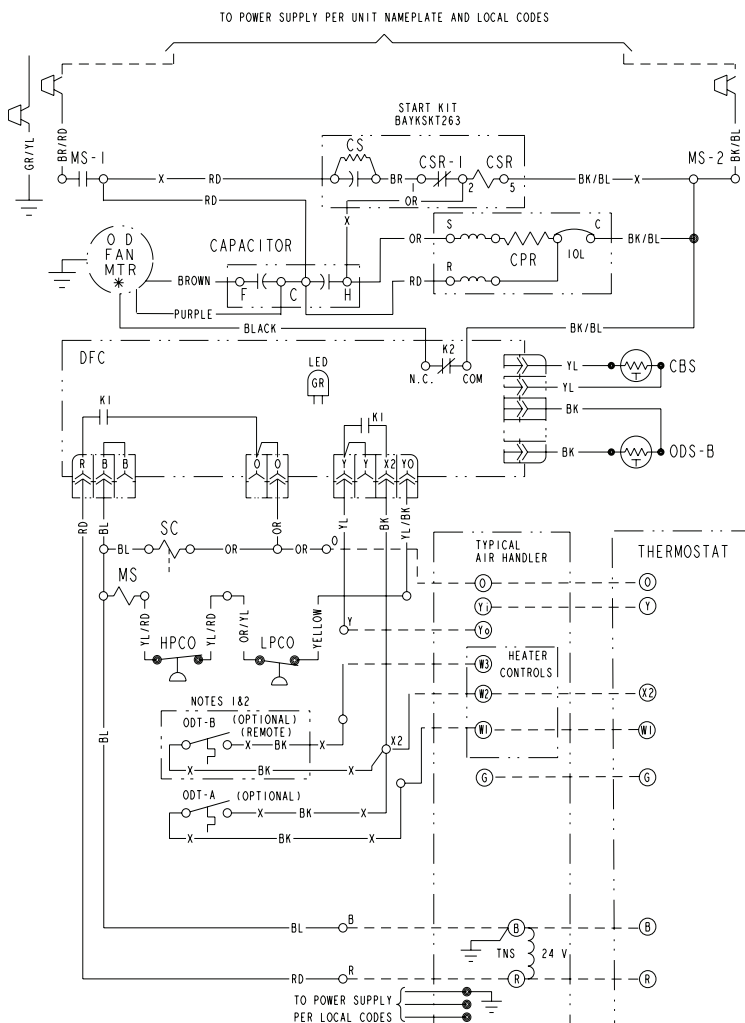


Electrical Data

SCHEMATIC DIAGRAMS

(SEE LEGEND)

4TWB3042



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

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

COLOR OF WIRE		BLACK WIRE WITH BLUE MARKER	
BK/BL			
COLOR OF MARKER			
BK BLACK	OR ORANGE	YL YELLOW	
BL BLUE	RD RED	GR GREEN	
BR BROWN	WH WHITE	PR PURPLE	

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 W1 & W2 AT AIR HANDLER.
- LOW VOLTAGE (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.

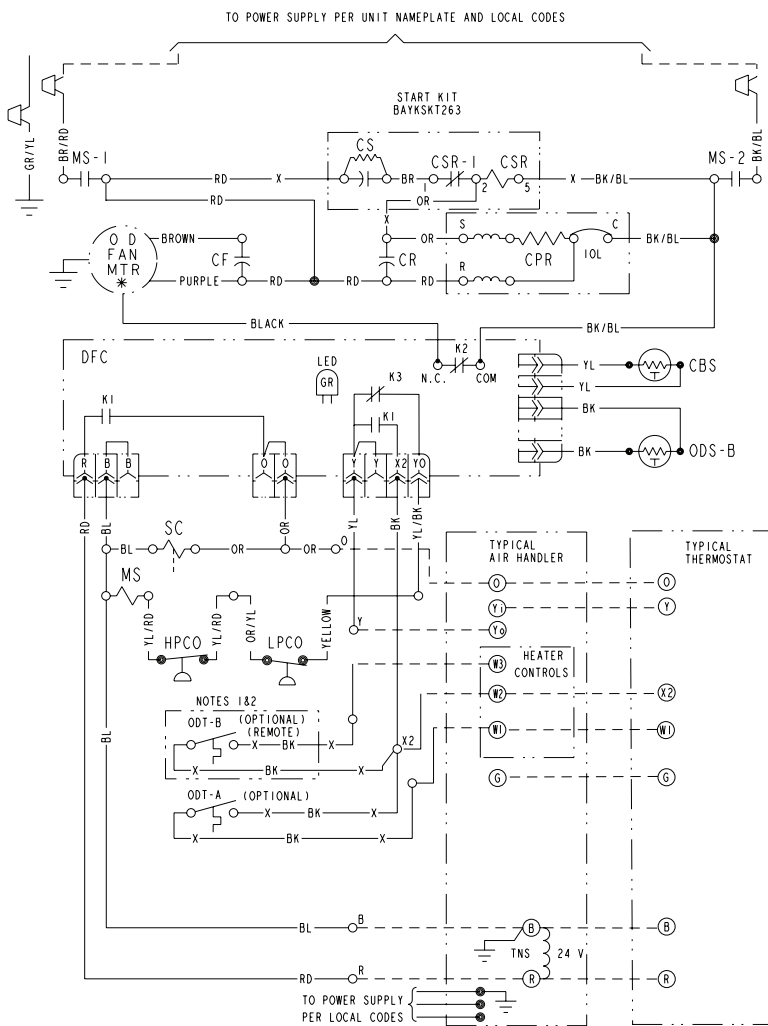
PRINTED FROM D157061P01

Electrical Data

SCHEMATIC DIAGRAMS

(SEE LEGEND)

4TWB3048-060



CA COOLING ANTICIPATOR	LPCO LOW PRESSURE CUTOFF SW.
CBS COIL BOTTOM SENSOR	MS COMPRESSOR MOTOR CONTACTOR
CF FAN CAPACITOR	ODA OUTDOOR ANTICIPATOR
CN WIRE CONNECTOR	OFT OUTDOOR FAN THERMOSTAT
CPR COMPRESSOR	ODS OUTDOOR TEMPERATURE SENSOR
CR RUN CAPACITOR	ODT OUTDOOR THERMOSTAT
CS STARTING CAPACITOR	RHS RESISTANCE HEAT SWITCH
CSR CAPACITOR SWITCHING RELAY	SC SWITCHOVER VALVE SOLENOID
DFC DEFROST CONTROL	SM SYSTEM "ON-OFF" SWITCH
F INDOOR FAN RELAY	TDL DISCHARGE LINE THERMOSTAT
HA HEATING ANTICIPATOR	TNS TRANSFORMER
HPCO HIGH PRESSURE CUTOFF SW.	TS HEATING-COOLING THERMOSTAT
IOI INTERNAL OVERLOAD PROTECTOR	TSH HEATING THERMOSTAT

<p>⚠ 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!</p>	<p>⚠ 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!</p>
---	--

COLOR OF WIRE	
BK/BL	BLACK WIRE WITH BLUE MARKER
COLOR OF MARKER	
BK	BLACK OR ORANGE
BL	BLUE
RD	RED
GR	GREEN
YL	YELLOW
BR	BROWN
WH	WHITE
PR	PURPLE

- 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 W1 & W2 AT AIR HANDLER.
 - LOW VOLTAGE (24 V.) FIELD WIRING MUST BE 18 AWG MIN.

FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES

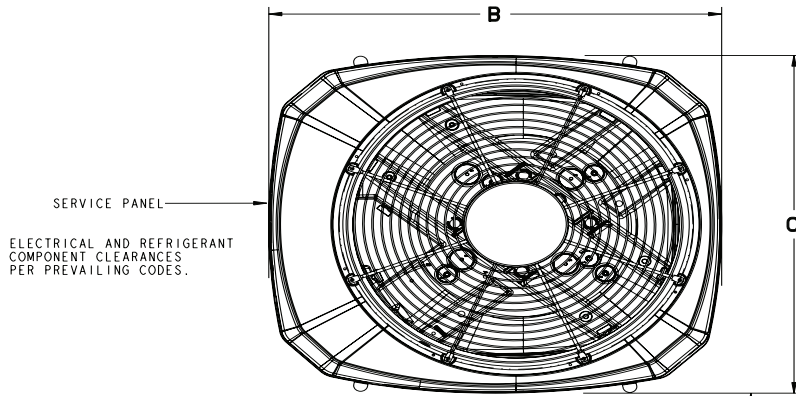
**CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE.**



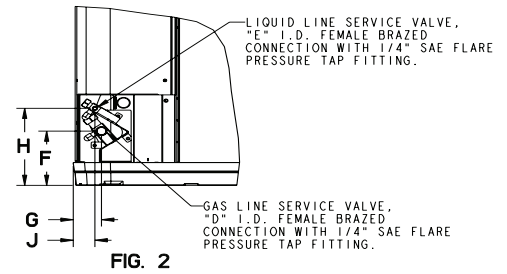
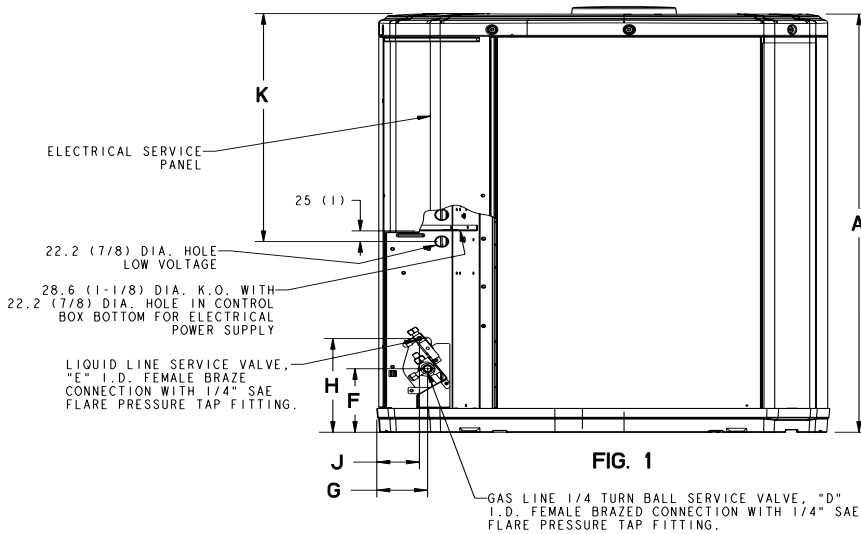
Dimensions

4TWB3 OUTLINE DRAWING

NOTE: ALL DIMENSIONS ARE IN MM (INCHES)



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.



From Dwg. D153074

MODELS	BASE	FIG.	A	B	C	D	E	F	G	H	J	K
4TWB3018C1	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)
4TWB3024C1	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)
4TWB3030B1	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)
4TWB3036B1	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)
4TWB3042B1	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)
4TWB3048B1	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)
4TWB3060B1	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 4TWB3 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 certified to UL 1995. 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
www.trane.com

09/11

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