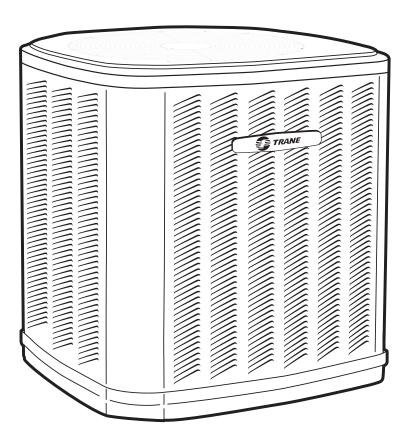


# Split System Cooling Product Data

**XB14** 4TTB4

 $1^{1}/_{2}$  - 5 Tons (018E - 061E)



PUB. NO. 22-1833-09



# **Features and Benefits**

- **CLIMATUFF**® compressor
- Efficiency up to 16.0 SEER
- All aluminum **SPINE FIN™** coil
- WEATHERGUARD™ fasteners
- QUICK-SESS<sup>TM</sup> cabinet, service access and refrigerant connections with full coil protection
- **DURATUFF™** base, fast complete drain, weatherproof
- COMFORT-R™ mode approved
- · Glossy corrosion resistant finish
- Internal compressor high/low pressure & temperature protection
- 018, 024 & 030 ship with start kit
- Liquid line filter/drier

- Polyslate gray cabinet with anthracite gray badge and cap
- High pressure switch
- · Service valve cover
- R-410A refrigerant
- S.E.E.T. design testing
- 100% line run test
- Low ambient cooling to 30°F with AY28X079
- Low ambient cooling to 55°F as shipped
- Extended warranties available



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22-1833-09



# **General Data**

		Product Specification	ons	
Model No. 1)	4TTB4018E1	4TTB4024E1	4TTB4030E1	4TTB4036E1
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	9	9	12	19
Max Fuse Size (Amps)	15	15	20	30
Compressors	CLIMATUFF®	CLIMATUFF®	CLIMATUFF®	CLIMATUFF® - SCROLL
No. Used - No. Stages	1-1	1-1	1-1	1-1
RL AMPS - LR AMPS	6.4 - 38.6	6.8 - 38.6	9.1 - 57.8	14.1 - 77
Outdoor Fan FL Amps	0.74	0.74	0.93	0.93
Fan HP	1/8	1/8	1/5	1/5
Fan Dia (inches)	23	23	27.6	27.6
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-410A	5/2-LB/OZ	6/3-LB/OZ	7/0-LB/OZ	7/4-LB/OZ
Line Size - (in.) O.D. Gas ③	5/8	3/4	3/4	3/4
Line Size - (in.) O.D. Liquid ③	3/8	3/8	3/8	3/8
Dimensions H x W x D (Crated)	34 x 30.1 x 33	34 x 30.1 x 33	38.4 x 35.1 x 38.7	42.4 x 35.1 x 38.7
Weight - Shipping	200	201	234	228
Weight - Net	173	174	201	193
Start Components	YES	YES	YES	NO
Sound Enclosure	YES	YES	YES	NO
Compressor Sump Heat	NO	NO	NO	NO
Optional Accessories: 4				
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control A/C	AY28X079	AY28X079	AY28X079	AY28X079
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Crank Case Heater Kit	BAYCCHT300	BAYCCHT300	BAYCCHT300	BAYCCHT302
Hard Start Kit Scroll				BAYKSKT260
Extreme Condition Mounting Kit	BAYECMT023	BAYECMT023	BAYECMT004	BAYECMT004
Snow Leg - Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001
Refrigerant Lineset 5	TAYREFLN950	TAYREFLN7*	TAYREFLN7*	TAYREFLN7*

Certified in accordance with the Air-Source Unitary Heat Pump Equipment certification program which is based on AHRI Standard 210/240.
 Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.

## A-Weighted Sound Power Level [dB(A)]

MODEL SOUND POWER	A_WEIGHTED FULL OVTAVE SOUND POWER LEVEL dB - [dB(A)]								
	LEVEL [dB(A)]	63	125	250	500	1000	2000	4000	8000
4TTB4018E	79	24.9	44.9	56.7	71.1	74.1	72.7	62.2	49.9
4TTB4024E	79	23	45.4	57	70.9	74.2	70.5	62.9	52.6
4TTB4030E	80	27.9	52.9	62.9	74.3	76.2	73	64.7	52.5
4TTB4036E	78	23.2	51.7	64.2	72.3	74.1	71.3	62.7	49.5
4TTB4042E	80	22.8	52.8	65.6	73.3	75.1	75.1	62.8	50
4TTB4048E	80	22.8	52.8	65.6	73.3	75.1	75.1	62.8	50
4TTB4049E	76	44.3	53.8	56.6	63.6	34.6	59.9	52.7	43.7
4TTB4060E	80	22.8	52.8	65.6	73.3	75.1	71.5	62.8	50
4TTB4061E	76	42.2	53.8	57.8	66	65.7	57.7	58.4	51.7

Note: Rated in accordance with AHRI Stnadard 270-2008

③ Standard line lengths - 80'. Standard lift - 60' Suction and Liquid line. For Greater lengths and lifts refer to refrigerant piping software Pub# 32-3312-0<sup>†</sup>. (†denotes latest revision)

For accessory description and usage, see pages 5 and 6.
 \* = 15, 20, 25, 30, 40 and 50 foot lineset available.



# **General Data**

		Product Spec	cifications		
Model No. 1	4TTB4042E1	4TTB4048E1	4TTB4049E1	4TTB4060E1	4TTB4061E1
Electrical Data V/Ph/Hz ②	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60	230/1/60
Min Cir Ampacity	23	26	26	34	45
Max Fuse Size (Amps)	40	45	45	60	60
Compressors	CLIMATUFF® - SCROLL				
No. Used - No. Stages	1-1	1-1	1-1	1-1	1-2
RL AMPS - LR AMPS	17.9 - 112	19.9 - 109	19.9 - 109	26.4 - 134	32.1 - 152.9
Outdoor Fan FL Amps	0.93	0.93	1.0	0.93	2.80
Fan HP	1/5	1/5	1/5	1/5	1/3
Fan Dia (inches)	27.6	27.6	27.6	27.6	27.6
Coil	Spine Fin™				
Refrigerant R-410A	8/4-LB/OZ	8/5-LB/OZ	11/9-LB/OZ	8/8-LB/OZ	12/9-LB/OZ
Line Size - (in.) O.D. Gas 3	7/8	7/8	7/8	7/8	1-1/8
Line Size - (in.) O.D. Liquid ③	3/8	3/8	3/8	3/8	3/8
Dimensions H x W x D (Crated)	46.4 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	51 x 35.1 x 38.7
Weight - Shipping	272	282	304	285	312
Weight - Net	235	245	267	248	275
Start Components	NO	NO	NO	NO	NO
Sound Enclosure	NO	NO	NO	NO	NO
Compressor Sump Heat	NO	NO	NO	NO	NO
Optional Accessories: 4					
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A
Evaporator Defrost Control A/C	AY28X079	AY28X079	AY28X079	AY28X079	AY28X079
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Crank Case Heater Kit	BAYCCHT301	BAYCCHT301	BAYCCHT301	BAYCCHT301	BAYCCHT301
Hard Start Kit Scroll	BAYKSKT260	BAYKSKT260	BAYKSKT260		
Extreme Condition Mounting Kit	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004
Snow Leg - Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001
Refrigerant Lineset 5	TAYREFLN3*	TAYREFLN3*	TAYREFLN3*	TAYREFLN3*	TAYREFLN*4

Certified in accordance with the Air-Source Unitary Heat Pump Equipment certification program which is based on AHRI Standard 210/240.
 Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.
 Standard line lengths - 60'. Standard lift - 60' Suction and Liquid line. For 061 units, Max. linear length 60 ft.; Max. lift - Suction 25 ft.; Max lift - Liquid 25 ft. For Greater lengths and lifts refer to refrigerant piping software Pub# 32-3312-0¹. (†denotes latest revision)

④ For accessory description and usage, see pages 5 and 6.

 $<sup>^{5}</sup>$  \* = 15, 20, 25, 30, 40 and 50 foot lineset available.



# **General Data**

#### Accessory Description and Usage

**Anti-Short Cycle Timer** — Solid state timing device that prevents compressor recycling until 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** — 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.

#### AHRI STANDARD 270 RATING CONDITIONS —

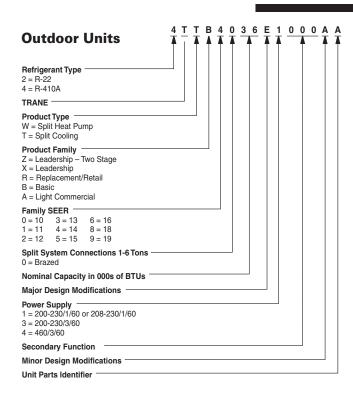
(Noise rating numbers are determined with the unit in cooling operation.) Standard Noise Rating number is at 95°F outdoor air.

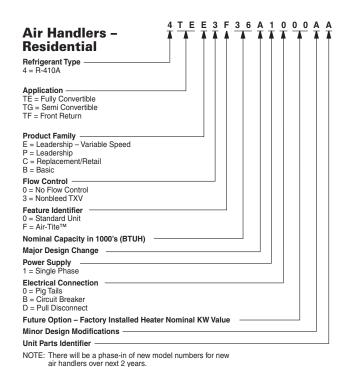


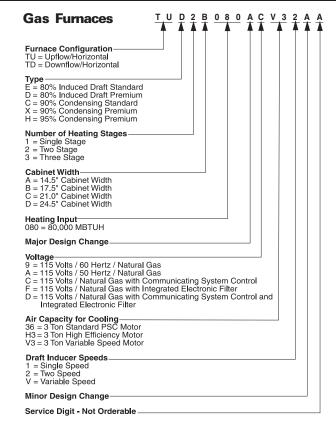


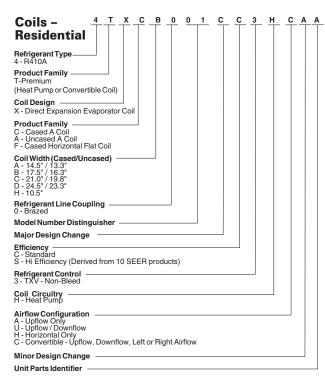


# **Model Nomenclature**





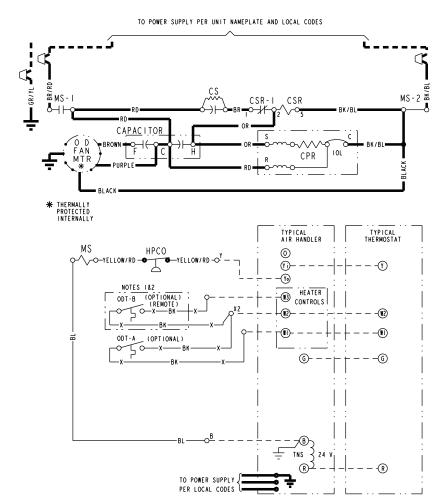






#### **Schematic Diagrams**

#### 4TTB4018, 4TTB4024, 4TTB4030



```
LPCO LOW PRESSURE CUTOUT SW.

MS COMPRESSOR MOTOR CONTACTOR
ODA OUTDOOR ANTICIPATOR
OFT OUTDOOR FAN THERMOSTAT
ODS OUTDOOR FAN THERMOSTAT
ODS OUTDOOR THERMOSTAT
RHS RESISTANCE HEAT SWITCH
SC SWITCHOVER VALVE SOLEMOID
SM SYSTEM "ON -OFF" SWITCH
DLD DISCHARGE LINE THERMOSTAT
TNS TRANSFORMER
TRANSFORMER
SHEATING THERMOSTAT
TSH HEATING COOL ING THERMOSTAT
CA COOLING ANTICIPATOR
CBS COIL BOTTOM SENSOR
CF FAN CAPACITOR
CN WIRE CONNECTOR
CPR COMPRESSOR
CR RUN CAPACITOR
CS STARTING CAPACITOR
CS CAPACITOR
CS CAPACITOR
DFC DEFROST CONTROL
F INDOOR FAN RELAY
HA HEATING ANTICIPATOR
HOCO HIGH PRESSURE CUTOUT SW.
IOL INTERNAL OVERLOAD PROTECTOR
```

- COLOR OF WIRE BK/BL BLACK WIRE WI COLOR OF MARKER BLACK WIRE WITH BLUE MARKER OR ORANGE BK BLACK YL YELLOW RD RED GR GREEN ВL BLUE

△ CAUTION 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 DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH! FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT!

#### NOTES:

- I. 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 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.

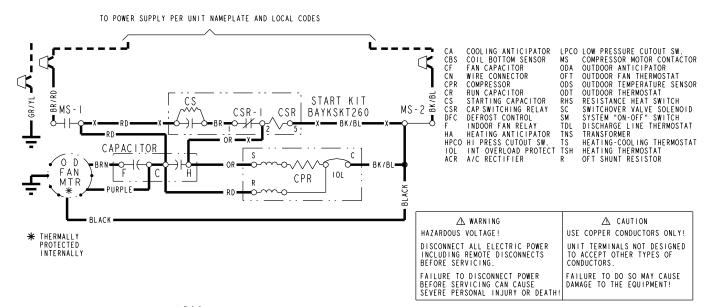
ATTENTION: NE CONVIENT PAS AUX
INSTALLATIONS DE PLUS DE 150 V A
LA TERRE.

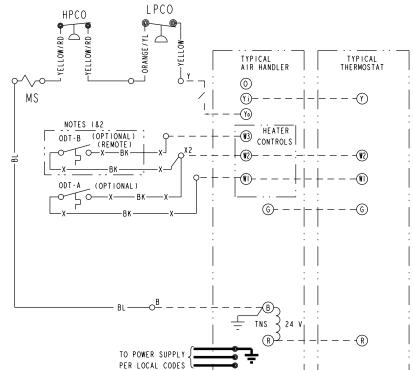
From Drawing D157123P01REV0



#### **Schematic Diagrams**

#### 4TTB4036, 4TTB4042





COLOR OF WIRE BK/BL BLACK WILL .

COLOR OF MARKER BLACK WIRE WITH BLUE MARKER

BLACK OR ORANGE YL YELLOW ВL BLUE RD RED GR GREEN BROWN WHITE PURPLE WH

#### 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

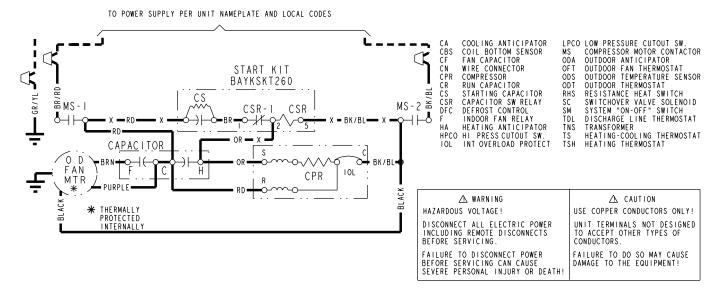
CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND. ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A

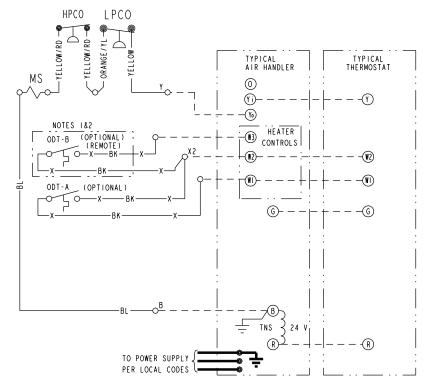
From Drawing D157124P01



#### Schematic Diagrams

#### 4TTB4048, 4TTB4049





- COLOR OF WIRE BK/BL BLACK WIRE WITH BLUE MARKER 4\_ COLOR OF MARKER

OR ORANGE BK BLACK YL YELLOW BL BLUE RD RED GR GREEN BROWN WH WHITE PR PURPLE

#### NOTES:

LA TERRE

- 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 18 AWG MIN.

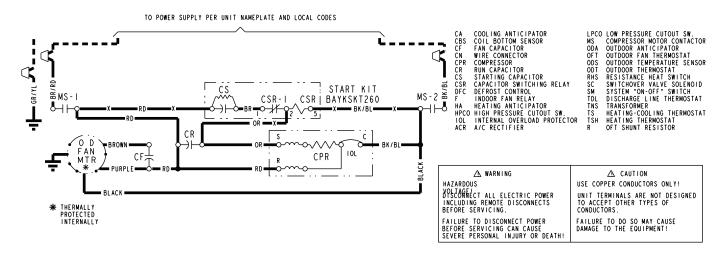
FOR CANADIAN INSTALLATIONS POUR INSTALLATIONS CANADIENNES
CAUTION: NOT SUITABLE FOR USE ON
SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX
INSTALLATIONS DE PLUS DE 150 V A

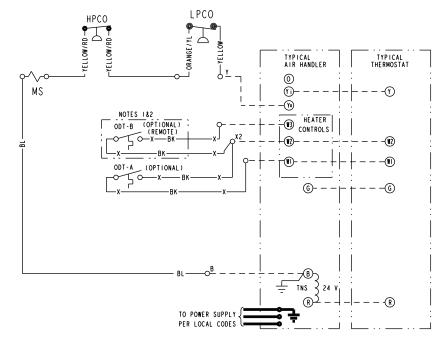
From Drawing D157125P01



#### **Schematic Diagrams**

#### 4TTB4060





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

BLACK OR ORANGE YL YELLOW GR GREEN BLUE RD RED ВL BROWN WH WHITE PURPLE

#### NOTES:

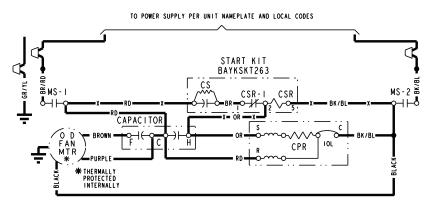
- IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3
  AT AIR HANDLER.
  IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL
  BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.
  IF ODT-A IS NOT USED, ADD JUMPER BETWEEN WI & W2
  AT AIR HANDLER.
  LOW VOLTAGE (24 V.) FIELD WIRING MUST BE 18 AWG MIN.

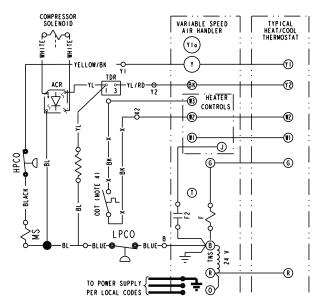
FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND. ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE

From Drawing D157126P01



# Schematic Diagrams 4TTB4061





CA COOLING ANTICIPATOR
CBS COIL BOTTOM SENSOR
CF FAN CAPACITOR
ON WIRE CONNECTOR
OF COMPRESSOR
OF COMPRESSOR
ON CAPACITOR
ON OUTDOOR FAN TELEMOSTAT
OF COMPRESSOR
ON OUTDOOR FAN TELEMOSTAT
OF COMPRESSOR
ON OUTDOOR THERMOSTAT
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
ACR A/C RECTIFIER

A WARNING
HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRIC POWER
INCLUDING RESVICING.
DISCONNECT ALL ELECTRIC POWER
INCLUDING RESVICING.
FAILURE TO DISCONNECT POWER
BEFORE SERVICING CAN CAUSE
STYRE PERSONAL INJURY OR DEATH!

COLOR OF WIRE

BK/BL BLACK WIRE WITH BLUE MARKER

COLOR OF MARKER

COLOR OF MARKER

BK BLACK OR ORANGE YL YELLOW BL BLUE RD RED GR GREEN BR BROWN WH WHITE PR PURPLE

#### 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. IF OUTDOOR THERMOSTAT (ODT) IS NOT USED, CONNECT W2 TO W3.
- 5. BE SURE THE JUMPER BETWEEN R AND BK IS CUT OR REMOVED.
- 6. WITH O AND Y/Y2 ENERGIZED, INDOOR FAN IS AT 80% AIRFLOW.
- 7. WITH O, Y/Y2 AND BK ENERGIZED, INDOOR FAN IS AT 100% AIRFLOW.

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.

From Drawing D156975p01

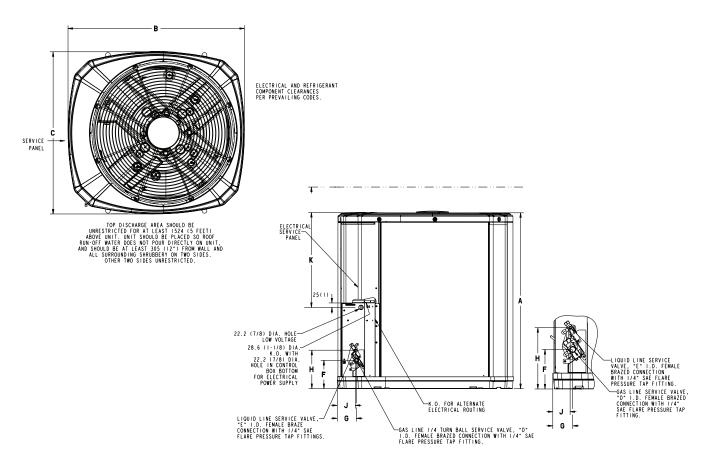
12



# **Dimensions**

## **4TTB4 Outline Drawing**

Note: All dimensions are in MM (Inches).



MODELS	BASE	Α	В	С	D	E	F	G	н	J	К
4TTB4018E	3	730 (28-3/4)	829 (32-5/8)	756 (29-3/4)	5/8	3/8	127 (5)	76 (3)	197 (7-3/4)	57 (2-1/4)	508 (20)
4TTB4024E	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)	57 (2-1/4)	508 (20)
4TTB4030E	4	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)
4TTB4036E	4	943 (37-1/8)	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)
4TTB4042E	4	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)
4TTB4048E	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)	508 (20)
4TTB4049E	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)	508 (20)
4TTB4060E	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)	508 (20)
4TTB4061E	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)	508 (20)

From Dwg. D156010



# **Notes**



# **Notes**

# **Mechanical Specification Options**

#### General

The 4TTB4 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 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 weatherproof CMBP-G30 DuraTuff™ base.

#### **Refrigerant Controls**

Refrigeration system controls include condenser fan and compressor contactor. 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: roto lock suction and discharge refrigerant connections, 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 with TXV permits low ambient cooling to 30° F.

#### **Accessories**

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







Irane www.trane.com 01/12

The manufacturer 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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