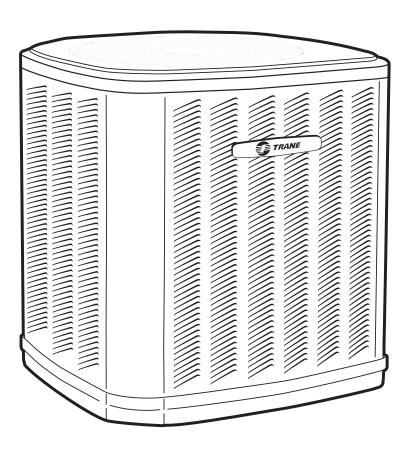


# Split System Cooling Product Data

**XB16** 4TTB6

 $1^{1}/_{2} - 5$  Tons





## **Features and Benefits**

- 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**<sup>™</sup> base, fast complete drain, weatherproof
- COMFORT-R<sup>™</sup> 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
- 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



Features and Benefits	2
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Product Specifications	4
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# **General Data**

Product Specifications					
Model No. ①	4TTB6018A1000A	4TTB6024A1000A	4TTB6030A1000A	4TTB6036A1000A	
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	15	19	
Max Fuse Size (Amps)	15	15	25	30	
Compressors	RECIP	RECIP	RECIP	SCROLL	
No. Used - No. Stages	1-1	1-1	1-1	1-1	
RL AMPS - LR AMPS	6.4 - 39	6.8 - 38.6	11.5 - 63.5	14.1 - 77	
Outdoor Fan FL Amps	0.74	0.74	1.2	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.

#### **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
4TTB6018A1	79	51	61	65	74	74	72	61	51
4TTB6024A1	79	49	62	66	74	74	69	62	54
4TTB6030A1	80	54	69	72	78	76	72	64	54
4TTB6036A1	78	49	68	73	76	74	70	62	51
4TTB6042A1	80	49	69	74	77	75	70	62	51
4TTB6048A1	80	49	69	74	77	75	70	62	51
4TTB6049A1	76	71	70	65	67	35	59	52	45
4TTB6060A1	80	49	69	74	77	75	70	62	51
4TTB6061A1	76	68	70	66	69	66	57	57	53

Note: Rated in accordance with AHRI Standard 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	4TTB6042A1000A	4TTB6048A1000A	4TTB6049A1000A	4TTB6060A1000A	4TTB6061A1000A
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	37
Max Fuse Size (Amps)	40	45	45	60	60
Compressors	SCROLL	SCROLL	SCROLL	SCROLL	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	28.8 - 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™	Spine Fin™	Spine Fin™	Spine Fin™	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			
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		BAYKSKT263
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)

For accessory description and usage, see pages 5 and 6.
 \* = 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



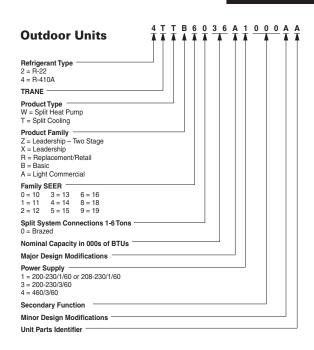


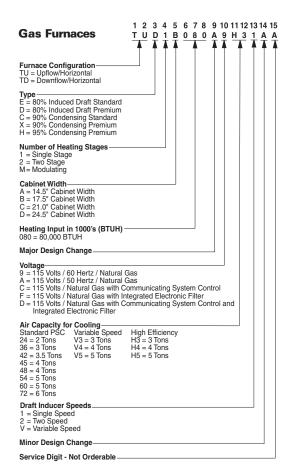
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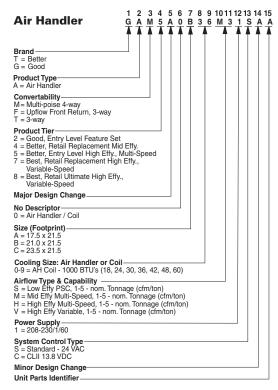
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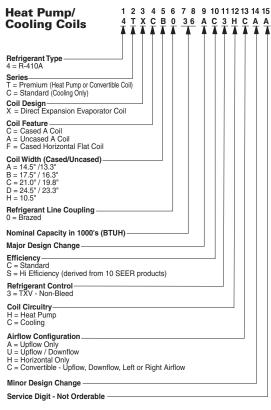


# **Model Nomenclature**









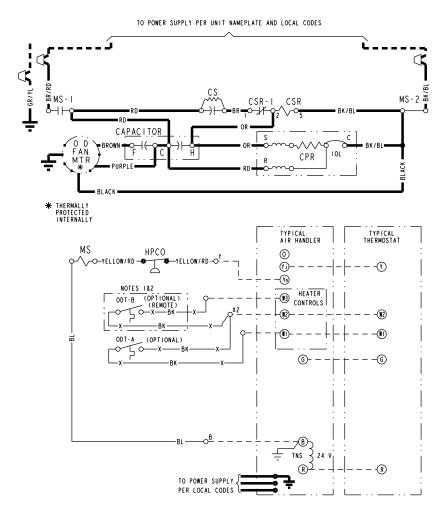
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#### **Schematic Diagrams**

#### 4TTB6018, 4TTB6024, 4TTB6030

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```
CA COOLING ANTICIPATOR
CBS COIL BOTTOM SENSOR
CF FAN CAPACITOR
ON WIRE CONNECTOR
CPR COMPRESSOR
CR RUN CAPACITOR
CS STARTING CAPACITOR
CS CAPACITOR
STARTING CAPACITOR
DEFROST CONTROL
F INDOOR FAN RELAY
HA HEATING ANTICIPATOR
HEATING ANTICIPATOR
IOL INTERNAL OVERLOAD PROTECTOR
                                                                                                                                                                                                                                                                                                                         LPCO LOW PRESSURE CUTOUT 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 SOLEMOID
SM SYSTEM "ON-OFF" SWITCH
TIDL DISCHARGE LINE THERMOSTAT
TNS TRANSFORMER
TRANSFORMER
TSH HEATING TORROWSTAT
TSH HEATING THERMOSTAT
```

- COLOR OF WIRE BK/BL BLACK WIRE WI 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.

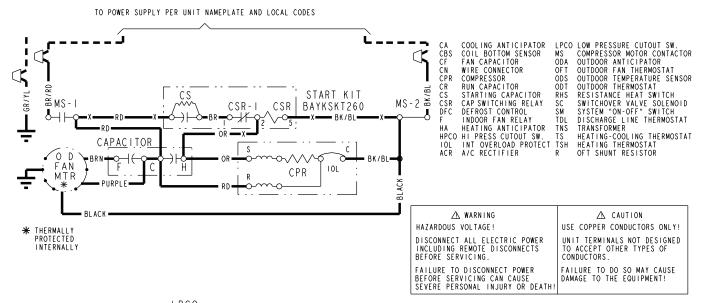
ATTENTION: NE CONVIENT PAS AUX
INSTALLATIONS DE PLUS DE 150 V A
LA TERRE.

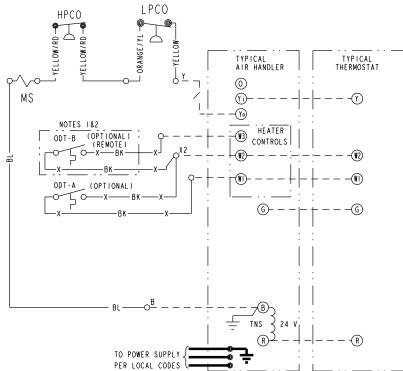
From Drawing D157123P01REV0



#### **Schematic Diagrams**

#### 4TTB6036, 4TTB6042





- COLOR OF WIRE BK/BL BLACK WILL .

COLOR OF MARKER BLACK WIRE WITH BLUE MARKER

BK BLACK OR ORANGE YL YELLOW ВL BLUE RD RED GR GREEN BROWN 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 I8 AWG MIN.

#### FOR CANADIAN INSTALLATIONS POUR INSTALLATIONS CANADIENNES

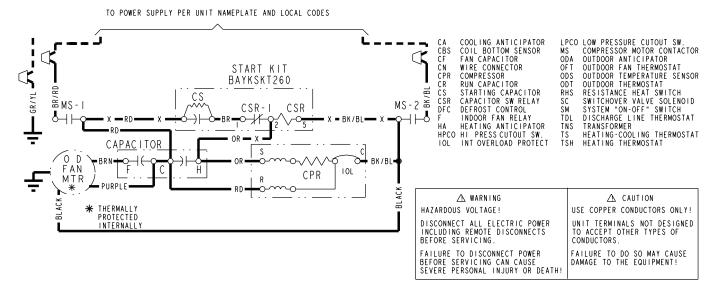
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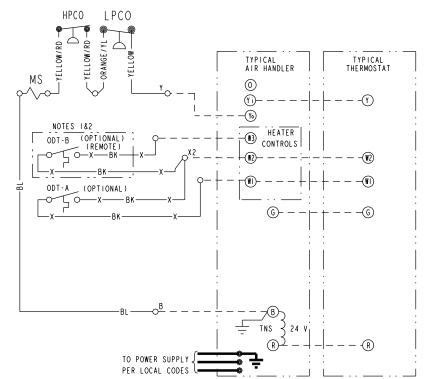
From Drawing D157124P01



#### Schematic Diagrams

#### 4TTB6048, 4TTB6049





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

BK BLACK OR ORANGE YL YELLOW BL BLUE RD RED GR GREEN 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 WI & W2 AT AIR HANDLER.
- LOW VOLTAGE (24 V.) FIELD WIRING MUST BE 18 AWG MIN.

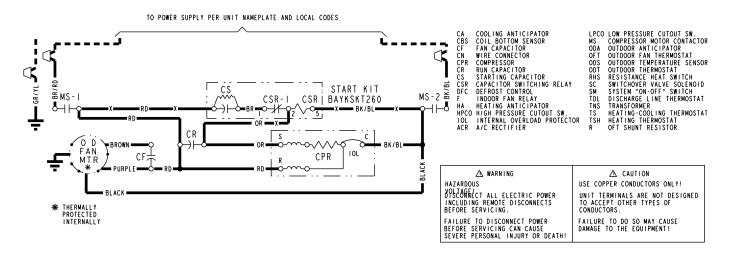
FOR CANADIAN INSTALLATIONS POUR INSTALLATIONS CANADIENNES
CAUTION: NOT SUITABLE FOR USE ON
SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX
INSTALLATIONS DE PLUS DE 150 V A LA TERRE

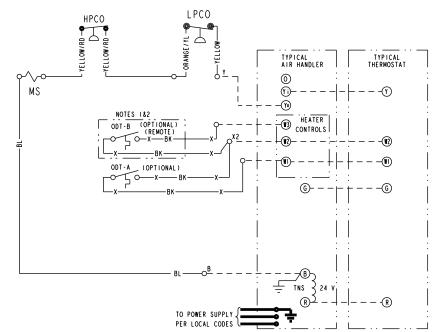
From Drawing D157125P01



#### **Schematic Diagrams**

#### 4TTB6060





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

RD RED GR GREEN BLUE ВL BROWN WH WHITE PURPLE

#### NOTES:

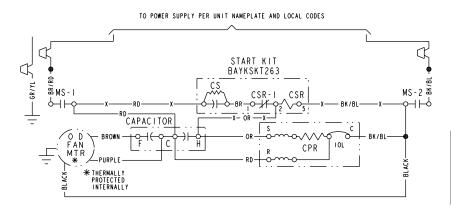
- IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3
  AT AIR HANDLER.
  IF USED, ODT-B MUST BE MOUNTED REMOTE OF CONTROL
  BOX IN AN APPROVED WEATHER PROOF ENCLOSURE.
  IF ODT-A IS NOT USED, ADD JUMPER BETWEEN WI & W2
  AT AIR HANDLER.
  LOW VOLTAGE (24 V.) FIELD WIRING MUST BE 18 AWG MIN.

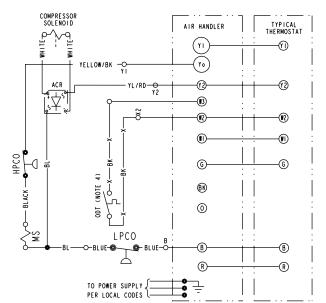
FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND. ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE

From Drawing D157126P01



# Schematic Diagrams 4TTB6061





	COOLING ANTICIPATOR COLI BOTTOM SENSOR FAN CAPACITOR WIRE CONNECTOR COMPRESSOR RUN CAPACITOR STARTING CAPACITOR CAPACITOR SWITCHING RELAY DEFROST CONTROL INDOOR FAN RELAY HEATING ANTICIPATOR HIGH PRESSURE CUTOUT SW.	MS ODA OFT ODS ODT RHS SC SM TDL TDR TNS	SYSTEM "ON-OFF" SWITCH DISCHARGE LINE THERMOSTAT TIME DELAY RELAY (5 SEC DELAY ON TRANSFORMER	1)
		TDR	TIME DELAY RELAY (5 SEC DELAY ON	)
I OL ACR	INTERNAL OVERLOAD PROTECTOR A/C RECTIFIER	TS TSH	HEATING-COOLING THERMOSTAT HEATING THERMOSTAT	

	△ 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!

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

#### 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. WITH YI ENERGIZED, INDOOR FAN IS IST STAGE AIRFLOW.
- 6. WITH YI & Y2 ENERGIZED, INDOOR FAN IS 2ND STAGE AIRFLOW.
- 7. SEE AIR HANDLER INSTALLER GUIDE FOR DIP SWITCH CONFIGURATIONS.

DIP SWITCH CONFIGURATIONS.

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 D157615p01

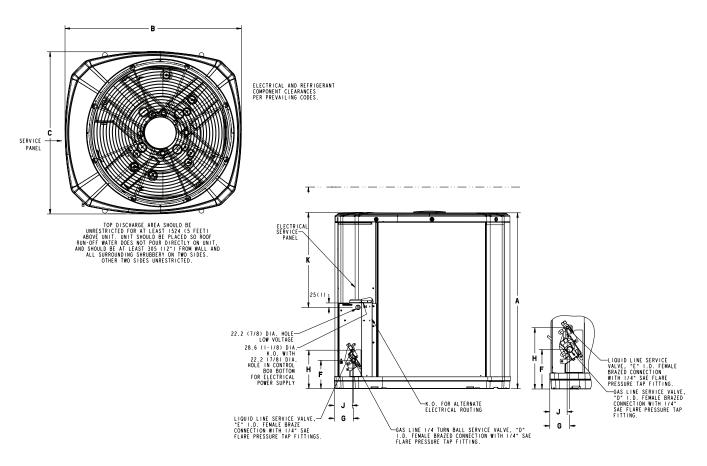
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# **Dimensions**

### **4TTB6 Outline Drawing**

Note: All dimensions are in MM (Inches).



MODELS	BASE	Α	В	С	D	E	F	G	н	J	К
4TTB6018A	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)
4TTB6024A	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)
4TTB6030A	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)
4TTB6036A	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)
4TTB6042A	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)
4TTB6048A	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)
4TTB6049A	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)
4TTB6060A	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)
4TTB6061A	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**

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# **Notes**

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# **Mechanical Specification Options**

#### General

The 4TTB6 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 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.





