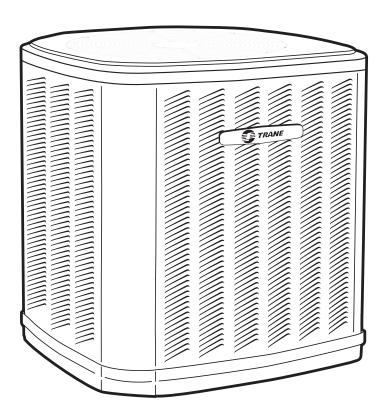


# Split System Cooling Product Data

4TTB3018-060

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





# Features and Benefits

- Efficiency up to 13.25 SEER
- All aluminum **Spine Fin™** coil
- WeatherGuard™ fasteners
- Quick-Sess<sup>™</sup> cabinet, easy service access and refrigerant connections with full coil protection
- Fast complete drain, weather proof base
- Comfort "R"™ mode approved
- · Glossy corrosion resistant finish
- Internal high/low pressure and temperature protection
- 018, 024, 030 ship with start kit
- · Liquid line filter-drier

- Polyslate gray cabinet with anthracite gray badge & cap
- High pressure switch
- R-410A refrigerant
- S.E.E.T. design testing
- 100% line run test
- Low ambient cooling to 55°F as shipped
- Low ambient cooling to 30°F with AY28X079
- Low ambient cooling to 0°F with BAYLOAM103
- Extended warranties available



## **Contents**

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### **General Data**

#### **Product Specifications**

Model No. ①	4TTB3018E1	4TTB3024E1	4TTB3030E1	4TTB3036E1		
Electrical Data V/Ph/Hz 2	208/230/1/60	208/230/1/60	200/230/1/60	208/230/1/60		
Min Branch Cir Ampacity	9	12	15	20		
Br. Cir. Prot. Rtg Max (Amps)	15	20	25	35		
Compressor	SCROLL	SCROLL	SCROLL	SCROLL		
RL Amps - LR Amps	6.4 - 40	8.9 - 48.5	11.5 - 63.5	15.3 - 70		
Outdoor Fan FL Amps	0.74	0.74	0.74	0.74		
Fan HP	1/8	1/8	1/8 1/8			
Fan Dia (inches)	23.0	23.0	23.0	23.0		
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™		
Refrigerant R-410A	4/15-LB/OZ	5/8-LB/OZ	5/2-LB/OZ	5/12-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	8°	10°	10°	10°		
Dimensions H x W x D (Crated)	34 x 30.1 x 33					
Weight - Shipping	191	196	200	186		
Weight - Net	165	169	173	159		
Start Components	YES	YES	YES	NO		
Sound Enclosure	YES	YES	NO	NO		
Compressor Sump Heat	NO	NO	NO	NO		
Optional Accessories: 4						
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A		
Evaporator Defrost Control	AY28X079	AY28X079	AY28X079	AY28X079		
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101		
Extreme Condition Mounting Kit	BAYECMT023	BAYECMT023	BAYECMT023	BAYECMT023		
Start Kit				BAYKSKT263		
Crankcase Heater Kit	BAYCCHT300	BAYCCHT300	BAYCCHT300	BAYCCHT301		
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001		
Low Ambient Kit	BAYLOAM103	BAYLOAM103	BAYLOAM103	BAYLOAM103		
Refrigerant Lineset 5	TAYREFLN950	TAYREFLN950	TAYREFLN7*	TAYREFLN7*		

Certified in accordance with the Unitary Air-Conditioner 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.

MODEL	SOUND POWER LEVEL [dB(A)]	A-WEIGHTED FULL OCTAVE SOUND POWER LEVEL dB [(dB(A)]								
	- , , -	63	125	250	500	1000	2000	4000	5000	
4TTB3018E1	78	45.5	59.6	62.2	69.3	71.1	70.9	62.2	54.3	
4TTB3024E1	78	47.9	60.5	64.1	71.2	71.2	69.0	58.2	51.5	
4TTB3030E1	78	49.0	60.2	66.0	70.3	71.4	69.8	60.4	53.0	
4TTB3036E1	74	47.5	64.5	62.3	69.1	71.2	72.6	59.9	52.1	
4TTB3042D1	79	47.5	64.5	67.0	75.3	74.0	70.7	62.2	52.8	
4TTB3048D1	79	47.4	60.0	66.9	75.3	73.5	70.3	62.0	51.4	
4TTB3060D1	80	47.3	55.7	69.0	72.7	75.8	69.4	62.2	53.3	
Note: Rated in accordance with AHRI Standard 270-2008										

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



### General Data

#### **Product Specifications**

Model No. ①	4TTB3042D1	4TTB3048D1	4TTB3060D1
Electrical Data V/Ph/Hz 2	208/230/1/60	208/230/1/60	208/230/1/60
Min Cir Ampacity	26	28	35
Max Fuse Size (Amps)	45	50	60
Compressor	SCROLL	SCROLL	SCROLL
RL Amps - LR Amps	19.9 - 105	21.8 - 117	26.8 - 134
Outdoor Fan FL Amps	0.93	0.93	0.93
Fan HP	1/5	1/5	1/5
Fan Dia (inches)	27.5	27.5	27.5
Coil	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-410A	9/2-LB/OZ	6/13-LB/OZ	8/0-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	10°	10°	10°
Dimensions H x W x D (Crated)	34.4 x 35.1 x 38.7	34.4 x 35.1 x 38.7	42.4 x 35.1 x 38.7
Weight - Shipping	228	235	261
Weight - Net	196	203	226
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	AY28X079	AY28X079	AY28X079
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101
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.

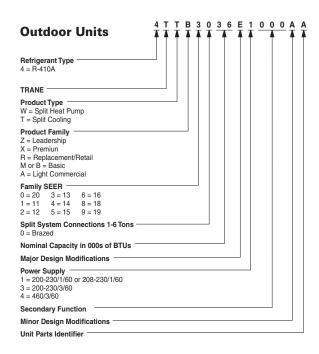


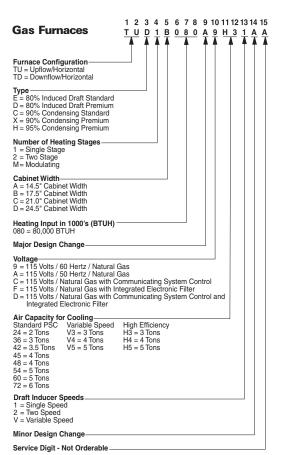


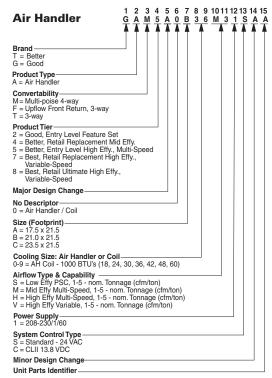


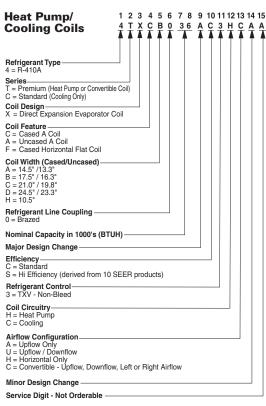
### Model Nomenclature

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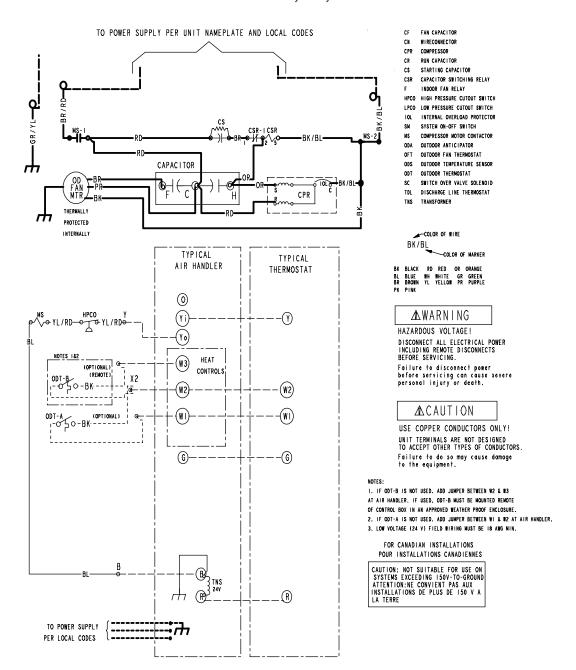


# Electrical Data

#### **SCHEMATIC DIAGRAMS**

(SEE LEGEND)

#### 4TTB3018,024,030E1



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TO POWER SUPPLY

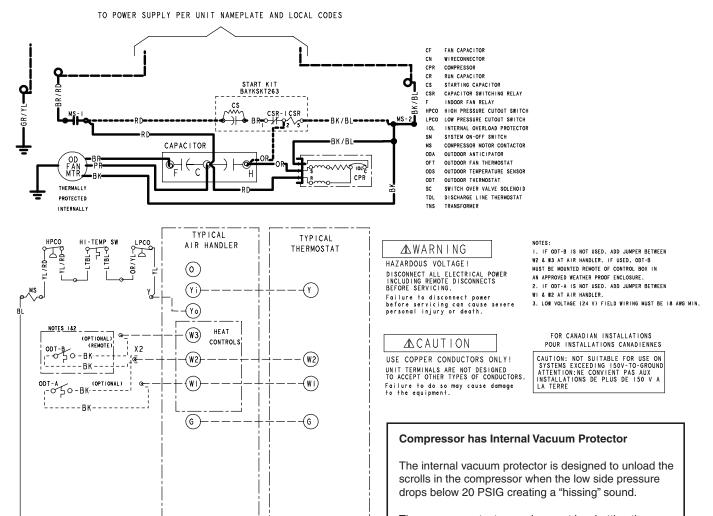
PER LOCAL CODES

# Electrical Data

#### **SCHEMATIC DIAGRAMS**

(SEE LEGEND)

#### 4TTB3036E1



-RD-(R)

The vacuum protector can be reset by shutting the compressor "off" and allowing the low side pressure to raise above 40 PSIG.

DO NOT REMOVE COMPRESSOR. (System should be checked for restriction or low refrigerant charge.)

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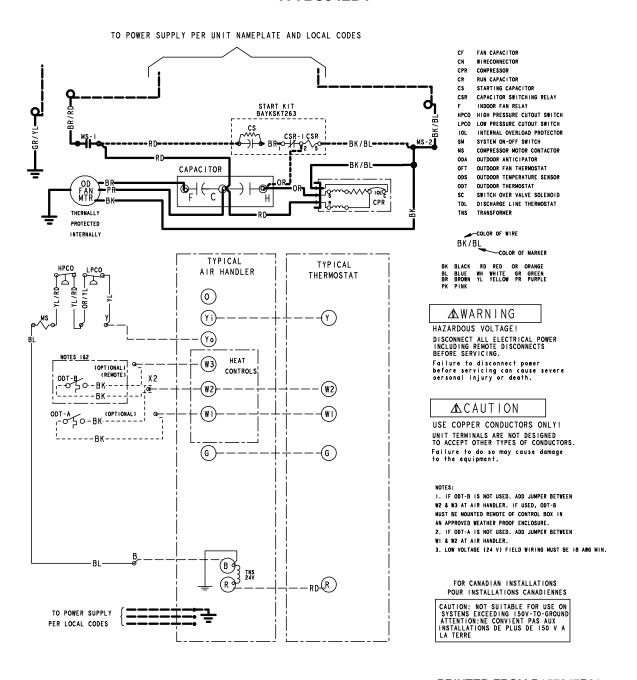


# Electrical Data

#### **SCHEMATIC DIAGRAMS**

(SEE LEGEND)

#### 4TTB3042D1



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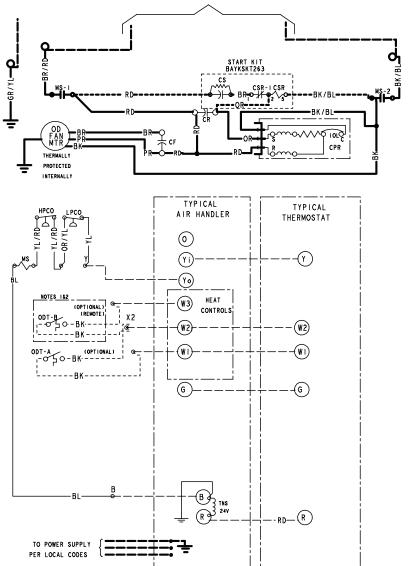


# Electrical Data

#### SCHEMATIC DIAGRAMS

(SEE LEGEND)

#### 4TTB3048 and 060D1



TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES

CF FAN CAPACITOR

W HEECONHECTOR

CP COMPRESSOR

CR RUN CAPACITOR

CS STARTING CAPACITOR

CS STARTING CAPACITOR

CS CAPACITOR SHITCHING RELAY

F INDOOR FAN RELAY

HPCO HIGH PRESSURE CUTOUT SWITCH

LPCO LOW PRESSURE CUTOUT SWITCH

LOUNDOOR FAN HERIOSTAT

ONE OUTDOOR TAN THERMOSTAT

SC SWITCH OVER VALVE SOLENOID

DID DISCHARGE LINE THERMOSTAT

TOS SWITCH OVER VALVE SOLENOID

DISCHARGE LINE THERMOSTAT

THE TRANSFORMER



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

#### **∆**LWARNING

HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRICAL POWER
INCLUDING REMOTE DISCONNECTS
BEFORE SERVICING.
Failure to disconnect power
before servicing can cause severe
personal injury or death.

#### **∆**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.

#### 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 YOUTAGE (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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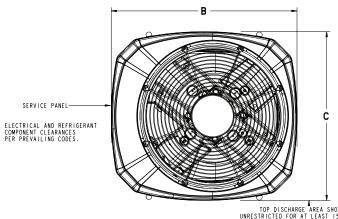
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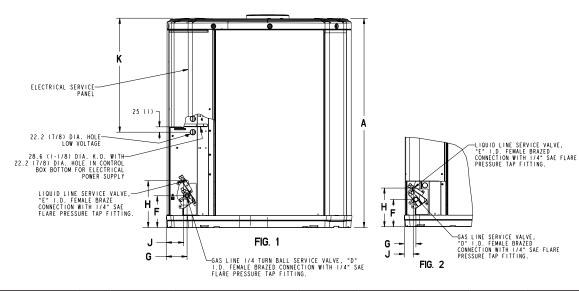
### **Dimensions**

#### **4TTB3 OUTLINE DRAWING**

NOTE: ALL DIMENSIONS ARE IN MM (INCHES)



TOP DISCHARGE AREA SHOULD BE UNRESTRICTED FOR AT LEAST 1524 (5 FEET) ABOVE UNIT IN WIT SHOULD BE PLACED SO ROOF RUN-OFF WATER DOES NOT POUR DIRECTLY ON UNIT. AND SHOULD BE AT LEAST 10.2 (2) FROM WALL AND ALL SURROUNDING SHRUBBERT ON TWO SIDES OTHER TWO SIDES UNKESTRICTED.



MODELS	BASE	FIG.	Α	В	С	D	Е	F	G	Н	J	К
4TTB3018E1	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)
4TTB3024E1	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)
4TTB3030E1	3	1	730 (28-3/4)	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)
4TTB3036E1	3	1	730 (28-3/4)	829 (32-5/8)	756 (29-3/4)	3/4	3/8	137 (5-3/8)	79 (3-1/8)	197 (7-3/4)	60 (2-3/8)	508 (20)
4TTB3042D1	4	1	741 (29-1/8)	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)
4TTB3048D1	4	1	741 (29-1/8)	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)
4TTB3060D1	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)

From Dwg. D153074

### Mechanical Specification Options

#### General

The 4TTB3 models shall be fully charged from the factory for matched indoor section and up to 15 feet of piping. This unit must be designed to operate at outdoor ambient temperatures as high as 115°F. Cooling capacities shall be matched with a wide selection of air handlers and furnace coils that are AHRI certified. The unit is certified to UL 1995. Exterior must be designed for outdoor application.

#### Casing

Unit casing is constructed of heavy gauge, galvanized steel and painted with a weather-resistant powder paint. Corrosion and weatherproof CMBP-G30 base.

#### **Refrigerant Controls**

Refrigeration system controls include condenser fan and compressor contactor. High and low pressure controls are inherent to the compressor. Another standard feature is the liquid line dryer.

#### Compressor

The compressor features internal over temperature and pressure protector, total dipped hermetic motor and thermostatically controlled sump heater. Other features include: Centrifugal oil pump, and low vibration and noise.

#### **Condenser Coil**

The Spine Fin™ coil shall be continuously wrapped, corrosion resistant all aluminum with minimum brazed joints. This coil is 3/8 inch O.D. seamless aluminum glued to a continuous aluminum fin. Coils are lab tested to withstand 2,000 pounds of pressure per square inch. 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 30°F. The addition of a low ambient kit with TXV permits low ambient cooling to 0°F.

#### Accessories

**Thermostats** — Heating/Cooling (manual and automatic changeover). Sub-base to match thermostat and locking thermostat cover.

**Evaporator Defrost Control** — See Low Ambient Cooling.

**Outdoor Thermostat** — Supplemental heat outdoor ambient lockout from 46 to  $-10^{\circ}$ F.





