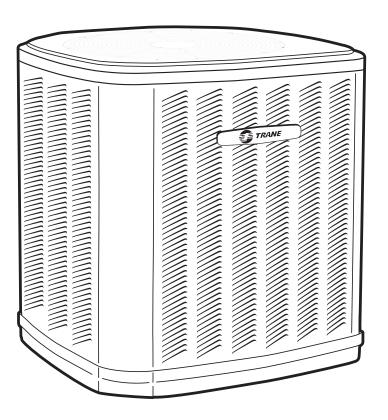


# Split System Cooling Product Data

XB 13 4TTB3018-060

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





## Features and Benefits

- Climatuff® compressor
- 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
- **DuraTuff™** base, fast complete drain, weather proof
- Comfort "R"™ mode approved
- · Glossy corrosion resistant finish
- Internal high/low pressure and temperature protection
- 018, 024, 030 and 036 ship with start kit
- Liquid line filter-drier

- Tarpaulin 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**

Features and Benefits			
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### **General Data**

### **Product Specifications**

Model No. ①	4TTB3018E1	4TTB3024E1	4TTB3030D1	4TTB3036D1	
Electrical Data V/Ph/Hz 2	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60	
Min Branch Cir Ampacity	9	12	15	18	
Br. Cir. Prot. Rtg Max (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	14.0 - 63	
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	6/9-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	34 x 30.1 x 33	34 x 30.1 x 33	38 x 30.1 x 33	
Weight - Shipping	191	196	200	217	
Weight - Net	165	169	173	190	
Start Components	YES	YES	YES	YES	
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					
Crankcase Heater Kit	BAYCCHT300	BAYCCHT300	BAYCCHT300	BAYCCHT300	
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001	BAYSEAC001	
Low Ambient Kit	BAYLOAM103	BAYLOAM103 BAYLOAM103 BAYLOAI			
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-WEIC	HTED FUL	L OCTAVE S	OUND POWE	R LEVEL dB	[(dB(A)]	
	/ 3	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
4TTB3030D1	78	49.0	60.2	66.0	70.3	71.4	69.8	60.4	53.0
4TTB3036D1	79	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 ad	Note: Rated in accordance with AHRI Standard 270-2008								

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	CLIMATUFF® - SCROLL	CLIMATUFF® - SCROLL	CLIMATUFF® - 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	6/2-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	ion Mounting Kit 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.

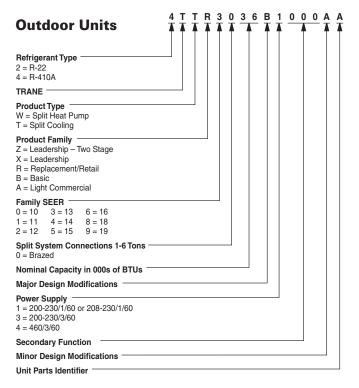
**AHRI STANDARD 270 RATING CONDITIONS** — (Noise rating numbers are determined with the unit in cooling operation.) Standard Noise Rating number is at 95°F outdoor air.

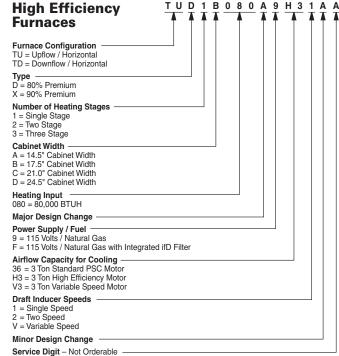


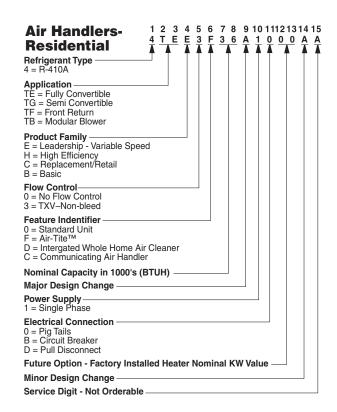


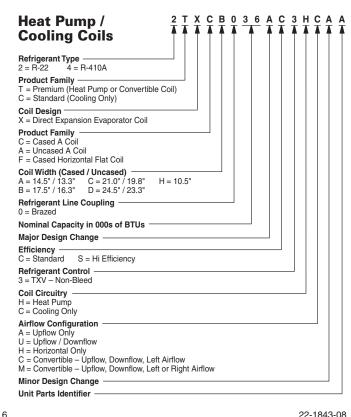


### Model **Nomenclature**









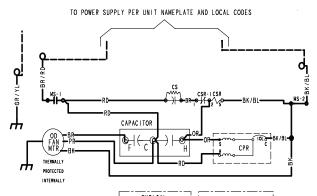


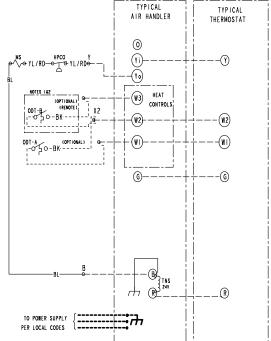
### **Electrical Data**

### **SCHEMATIC DIAGRAMS**

(SEE LEGEND)

### 4TTB3018E1,024E1,030, and 036D1





- NOILS:

  I. IF GOT-8 IS NOT USED. AND JUWEER BETWEEN W2 & W3
  AT AIR MANDLER. IF USED. ODT-8 MUST BE MOUNTED REMOTE
  OF CONTROL BOX IN AN APPROVED MEATHER PROFO ENCLOSURE.

  Z. IF GOT-A IS ON ISED. AND JUMEER RETWEEN W1 A 224 AIR MANDLER.

  3. LOW VOLTAGE (24 V) FIELD WIRING MUST BE IR AND MIN.

### **∆**WARNING

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

### POUR INSTALLATIONS CANADIENNES

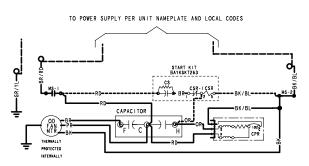
CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150Y-TO-GROUND ATTENTION:NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE

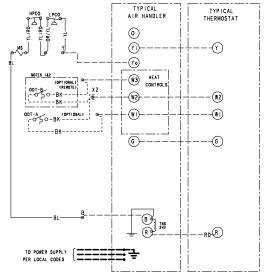
### **∆**CAUTION

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.

### PRINTED FROM D157097P01

### 4TTB3042D1





# NOTES: 1. IF OFT—B IS NOT USED, ADD JUMPER BETWEEN BY E #33 AT AIR HANDLER, IF USED, OOT—B HISTS BE NOWNTED WINDER OF CONTROL BOX IN AN APPROVED BEATIFE PROMO TENCIOSED. 2. IF OOT—A IS NOT USED, ADD JUMPER BETWEEN BY A BEZ AT AIR HANDLER. 3. LOW YOUTHOSE ZER VI FIELD BIRING MUST BE IS AMO NIN.

#### ∆ WARNING

AT WAT IN ING

HAZARDOUS VOLTAGE!

DISCONNECT ALL ELECTRICAL POWER
INCLUDING REMOTE DISCONNECTS

BEFORE SERVICING.

Failure to disconnect power
before servicing con course severe
personal injury or death.

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

### **∆**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.

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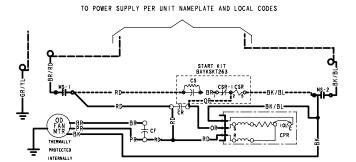


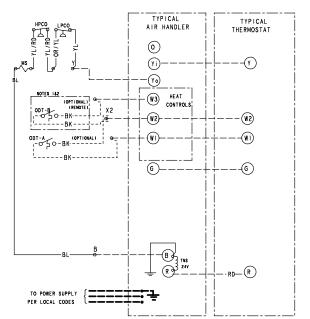
### **Electrical Data**

### SCHEMATIC DIAGRAMS

(SEE LEGEND)

### 4TTB3048 and 060D1





- MOTES:

  1. IF OOT-B IS NOT USED. ADD JUMPER BETREEN

  82 & 83 AT A IR HANDLER. IF USED. OOT-B

  NUUST BE MOUNTED REMOTE OF CONTROL BOX IN

  AN APPROVED WEATHER PROOF ENCLOSURE.

  2. IF OOT-A IS NOT USED. ADD JUMPER BETREEN

  81 & 82 AT AT HANDLER.

  3. LOW YOLTAGE 124 VI FIELD WIRING MUST BE IS AND MIN.

### **∆**MARNING

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

### 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

### **∆**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.



# Electrical Data

### **SCHEMATIC DIAGRAMS**

### LEGEND

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

### **SYMBOLS**

FACTORY WIRING LINE V. - - - 24 V. - - LINE V. FIELD WIRING — X — FIELD INSTALLED FACTORY WIRING GROUND 0 JUNCTION WIRE NUT OR CONNECTOR COIL  $\rightarrow$  $\vdash$ CAPACITOR  $\dashv$   $\vdash$ RELAY CONTACT (N.O.) 1 RELAY CONTACT (N.C.) THERMISTOR INTERNAL OVERLOAD PROTECTOR PRESSURE ACTUATED SWITCH TEMP. ACTUATED SWITCH POL. PLUG FEMALE HOUSING (MALE TERM.) POL. PLUG MALE HOUSING (FEMALE TERM.) √✓✓ RESISTOR OR HEATING ELEMENT OMOTOR WINDING TERMINAL  $\circ$ 

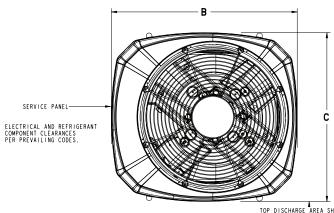
LPCO LOW PRESSURE CUTOUT SW COOLING ANTICIPATOR COOLING ANTICIPATOR
COIL BOTTOM SENSOR
FAN CAPACITOR
WIRE CONNECTOR
COMPRESSOR
RUN CAPACITOR
STARTING CAPACITOR
CAPACITOR SWITCHING RELAY
DEFROST CONTROL
INDOOR FAN RELAY
HEATING ANTICIPATOR LOW PRESSURE CUTOUT SW.
COMPRESSOR MOTOR CONTACTOR
OUTDOOR ANTICIPATOR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



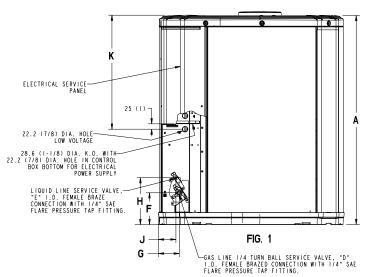
### **Dimensions**

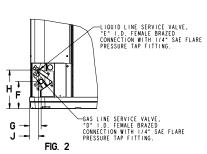
### **4TTB3 OUTLINE DRAWING**

NOTE: ALL DIMENSIONS ARE IN MM (INCHES)



UNRESTRICTED FOR AT LEAST 1524 (5 FEET)
ABOVE UNIT SHOULD BE PLACED SO ROOF
RUN-OFF MATER DOES NOT POUR DIRECTLY ON UNIT.
AND SHOULD BE AT LEAST 152 (2) FROM WALL AND
ALL SURROUNDING SHRUBBERY ON MO SIDES.
OTHER TWO SIDES UNRESTRICTED.





MODELS	BASE	FIG.	Α	В	С	D	Е	F	G	Н	J	K	
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)	1
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)	1
4TTB3030D1	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)	1
4TTB3036D1	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)	1
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)	74
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)	1530
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)	9. D
													_ W
													-rom



# 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 DuraTuff<sup>TM</sup> 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 Climatuff® 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.








09/11