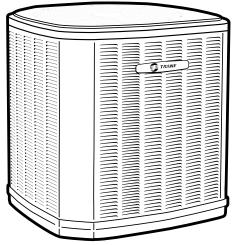


# **Product Data**

# **Split System Heat Pump** 3–Phase

4TWA7036A3000A 4TWA7048A3000A 4TWA7060A3000A 4TWA7036A4000A 4TWA7048A4000A 4TWA7060A4000A



**Note:** "Graphics in this document are for representation only. Actual model may differ in appearance."





### **Table of Contents**

Product Specifications	. 3
Sound Power Level	. 5
Accessory Description and Usage	. 6
Model Nomenclature	. 6
SCHEMATIC	. 7
Outline Drawing	. ç
Mechanical Specification Options	10



# **Product Specifications**

Model No. (a) (b)	4TWA7036A3000A	4TWA7048A3000A	4TWA7060A3000A		
POWER CONNS. — V/PH/HZ (c)	230/3/60	230/3/60	230/3/60		
MIN. BRCH. CIR. AMPACITY	15	18	22		
BR. CIR. PROT. RTG. — MAX. (AMPS)	25	30	35		
COMPRESSOR	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL		
R.L. AMPS (d) — L.R. AMPS	11.6 — 73	14 — 83	16.2 — 110		
Outdoor Fan FL AMPS	0.74	0.93	1.30		
Fan HP	1/8	1/5	1/4		
Fan Dia (inches)	27.6	27.6	27.6		
Coil	SPINE FIN™	SPINE FIN™	SPINE FIN™		
Refrigerant R-410A <sup>(e)</sup>	10 LBS., 8 OZ	12 LBS., 09 OZ	13 LBS., 03 OZ		
LINE SIZE — IN. O.D. GAS (f) (g)	3/4	7/8	1 1/8		
LINE SIZE — IN. O.D. LIQ. (h)	3/8	3/8	3/8		
Charge Spec. Subcooling	9°F	8°F	10°F		
Dimensions H x W X D Crated (IN.)	51.0 x 38.7 x 35.1	51.0 x 38.7 x 35.1	51.0 x 38.7 x 35.1		
Weight — Shipping (lbs.)	307	329	330		
Weight — Net (lbs.)	257	292	293		
Optional Accessories:					
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A		
Evaporator Defrost Control	NA	NA	NA		
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101		
Extreme Condition Mount Kit	BAYECMT023	BAYECMT004	BAYECMT004		
Crankcase Heater Kit	_	_	_		
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001		
Low Ambient Kit	BAYLOAM107	BAYLOAM107	BAYLOAM107		
Refrigerant Lineset (i)	TAYREFLN7*	TAYREFLN3*	TAYREFLN3*		
Sound Enclosure	BAYSDEN003	BAYSDEN004	BAYSDEN004		
Snow Legs — 6"	BAYLEGS002	BAYLEGS002	BAYLEGS002		
Snow Legs Extension — 4"	BAYLEGS003	BAYLEGS003	BAYLEGS003		
Service Valve Panel Cover	TAYSVPANL3343AA	TAYSVPANL0044AA	TAYSVPANL0044AA		

<sup>(</sup>a) Certified in accordance with the Air-Source Unitary Air-conditioner Equipment certification program, which is based on AHRI standard 210/240.

<sup>(</sup>b) Rated in accordance with AHRI standard 270.

<sup>(</sup>c) Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.

<sup>(</sup>d) This value shown for compressor RLA on the unit nameplate and on this specification sheet is used to compute minimum branch circuit ampacity and max. fuse size. The value shown is the branch circuit selection current.

<sup>(</sup>e) This value approximate. For more precise value see unit nameplate.

<sup>(</sup>f) Reference the outdoor unit ship-with literature for refrigerant piping length and lift guidelines. Reference the refrigerant piping software pub # 32-3312-xx or refrigerant piping application guide SS-APG006-xx for long line sets or specialty applications (xx denotes latest revision).

<sup>(9)</sup> Trane outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit and 15 feet of tested connecting lines. If connecting line length exceeds 15 feet, then final refrigerant charge adjustment is necessary. Each additional foot over 15 feet requires 0.6 ozs of refrigerant. See the Installer's Guide for full charging instructions.

<sup>(</sup>h) This value approximate. For more precise value see unit nameplate.

<sup>(</sup>i) \* = 15, 20, 25, 30, 40 and 50 foot lineset available.



#### **Product Specifications**

Model No. (a) (b)	4TWA7036A4000A	4TWA7048A4000A	4TWA7060A4000A		
POWER CONNS. — V/PH/HZ (c)	460/3/60	460/3/60	460/3/60		
MIN. BRCH. CIR. AMPACITY	8	9	10		
BR. CIR. PROT. RTG. — MAX. (AMPS)	15	15	15		
COMPRESSOR	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL	CLIMATUFF®- SCROLL		
R.L. AMPS (d) — L.R. AMPS	5.7-38	6.4-41	7.6-52		
Outdoor Fan FL AMPS	0.4	0.6	0.72		
Fan HP	1/8	1/5	1/4		
Fan Dia (inches)	27.6	27.6	27.6		
Coil	SPINE FIN™	SPINE FIN™	SPINE FIN™		
Refrigerant R-410A <sup>(e)</sup>	10 LBS., 8 OZ	12 LBS., 09 OZ	13 LBS., 03 OZ		
LINE SIZE — IN. O.D. GAS (f) (g)	3/4	7/8	1 1/8		
LINE SIZE — IN. O.D. LIQ. (h)	3/8	3/8	3/8		
Charge Spec. Subcooling	9°F	8°F	10°F		
Dimensions H x W X D Crated (IN.)	51.0 x 38.7 x 35.1	51.0 x 38.7 x 35.1	51.0 x 38.7 x 35.1		
Weight — Shipping (lbs.)	307	323	326		
Weight — Net (lbs.)	257	286	289		
Optional Accessories:					
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A		
Evaporator Defrost Control	NA	NA	NA		
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101		
Extreme Condition Mount Kit	BAYECMT023	BAYECMT004	BAYECMT004		
Crankcase Heater Kit	_	_	_		
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001		
Low Ambient Kit	BAYLOAM107	BAYLOAM107	BAYLOAM107		
Refrigerant Lineset (i)	TAYREFLN7*	TAYREFLN3*	TAYREFLN3*		
Sound Enclosure	BAYSDEN003	BAYSDEN004	BAYSDEN004		
Snow Legs — 6"	BAYLEGS002	BAYLEGS002	BAYLEGS002		
Snow Legs Extension — 4"	BAYLEGS003	BAYLEGS003	BAYLEGS003		
Service Valve Panel Cover	TAYSVPANL3343AA	TAYSVPANL0044AA	TAYSVPANL0044AA		

<sup>(</sup>a) Certified in accordance with the Air-Source Unitary Air-conditioner Equipment certification program, which is based on AHRI standard 210/240.

<sup>(</sup>b) Rated in accordance with AHRI standard 270.

 $<sup>^{\</sup>rm (c)}$  Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.

<sup>(</sup>d) This value shown for compressor RLA on the unit nameplate and on this specification sheet is used to compute minimum branch circuit ampacity and max. fuse size. The value shown is the branch circuit selection current.

<sup>(</sup>e) This value approximate. For more precise value see unit nameplate.

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<sup>(9)</sup> Trane outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit and 15 feet of tested connecting lines. If connecting line length exceeds 15 feet, then final refrigerant charge adjustment is necessary. Each additional foot over 15 feet requires 0.6 ozs of refrigerant. See the Installer's Guide for full charging instructions.

<sup>(</sup>h) This value approximate. For more precise value see unit nameplate.

<sup>(</sup>i) \* = 15, 20, 25, 30, 40 and 50 foot lineset available.



### **Sound Power Level**

#### **Sound Power Level**

MODEL	A-Weighted Sound Power Level [dB(A)]	Full Octave Sound Power(dB)								
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	
4TWA7036A	72	74	71	72	70	69	62	59	55	
4TWA7048A	73	85	74	68	69	69	63	58	54	
4TWA7060A	74	75	71	71	71	70	65	58	52	



### **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.

**Evaporation 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.

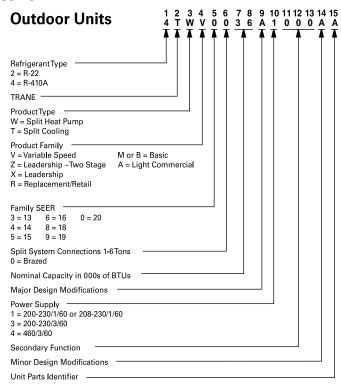
#### **AHRI Standard Capacity Rating Conditions**

AHRI Standard 210/240 Rating Conditions

- 1. Cooling 80°F DB, 67°F WB air entering indoor coil, 95°F DB air entering outdoor coil.
- 2. High Temperature Heating 47°F DB, 43°F WB air entering outdoor coil, 70°F DB air entering indoor coil
- 3. Low Temperature Heating 17°F DB air entering indoor coil.
- 4. Rated indoor airflow for heating is the same as for cooling.

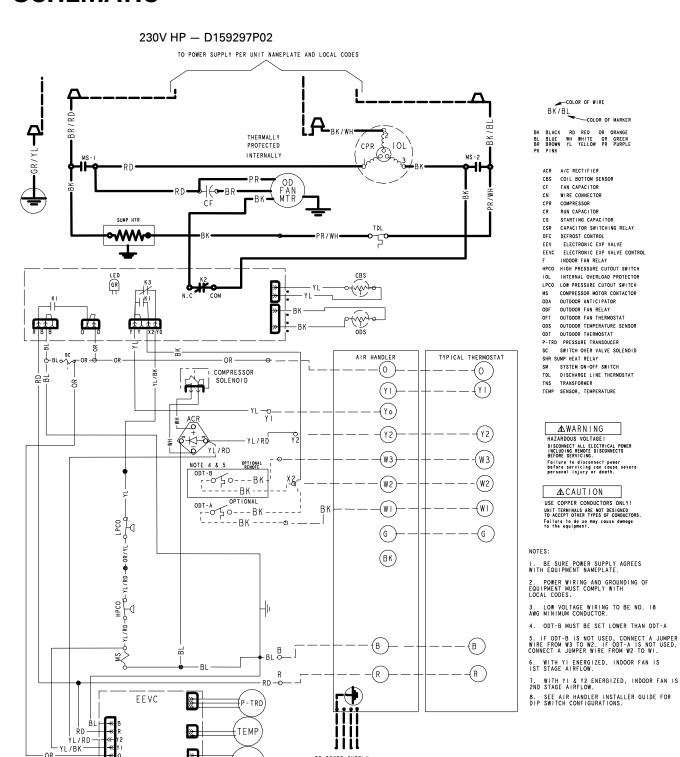
**AHRI Standard 270 Rating Conditions** — (Noise rating numbers are determiend with the unit in cooling operations.) Standard Noise Rating number is at 95°F outdoor air.

#### **Model Nomenclature**





### **SCHEMATIC**



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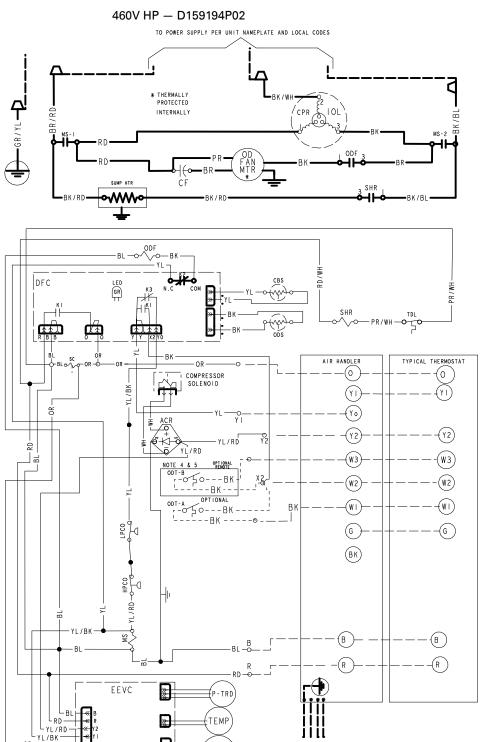
TO POWER SUPPLY

PER LOCAL CODES

EEV



OR



BK/BL COLOR OF MARKER

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

A/C RECTIFIER COIL BOTTOM SENSOR

FAN CAPACITOR

WIRE CONNECTOR COMPRESSOR RUN CAPACITOR

STARTING CAPACITOR

ACR
CBS
CF
CN
CPR
CR
CS
CSR
DFC CAPACITOR SWITCHING RELAY DEFROST CONTROL

EEV ELECTRONIC EXP VALVE
EEVC ELECTRONIC EXP VALVE CONTROL
F INDOR FAN RELAY
HPCO HIGH PRESSURE CUTOUT SWITCH

HPCO HIGH PRESSURE CUTOUT SWITCH
LOL INTERNAL OVERLOAD PROTECTOR
LPCO LOW PRESSURE CUTOUT SWITCH
MS COMPRESSOR MOTOR CONTACTOR
OPF OUTDOOR FAN RELAY
OFT OUTDOOR TAN THERMOSTAT
ODS OUTDOOR TEMPOSTATURE SENSOR

ODT OUTDOOR THERMOSTAT

ODT OUTDOOR THERMOSTAT

P-TRD PRESSURE TRANSDUCR
SC SWITCH OVER VALVE SOLENOID

SHR SUMP HEAT RELAY
SM SISTEM ON-OFF SWITCH

TOL DISCHARGE LINE THERMOSTAT
THS TRANSFORMER

TEMP SENSOR, TEMPERATURE

#### **∆**WARNING

HAZARDOUS VOLTAGE!

HAZARDOUS VOLIAGE:
DISCONNECT ALL ELECTRICAL POWER
INCLUDING REWOTE 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. 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. ODT-B MUST BE SET LOWER THAN ODT-A

5. IF ODT-B IS NOT USED, CONNECT A JUMPER WIRE FROM W3 TO W2. IF ODT-A IS NOT USED, CONNECT A JUMPER WIRE FROM W2 TO WI.

6. WITH YI ENERGIZED, INDOOR FAN IS IST STAGE AIRFLOW.

7. WITH YI & Y2 ENERGIZED, INDOOR FAN IS 2ND STAGE AIRFLOW.

8. SEE AIR HANDLER INSTALLER GUIDE FOR DIP SWITCH CONFIGURATIONS.

8 22-1925-1A-EN

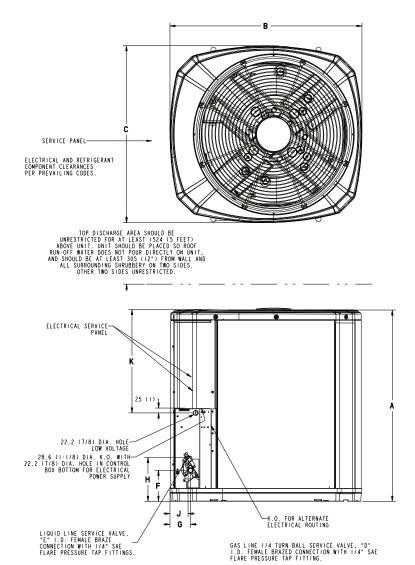
TO POWER SUPPLY

PER LOCAL CODES

EEV



## **Outline Drawing**



Model	Base	Α	В	С	D	Е	F	G	Н	J	K
4TWA7036A	4	1147 (45-1/8)	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)	813 (32)
4TWA7048A	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)	813 (32)
4TWA7060A	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)	813 (32)



### **Mechanical Specification Options**

#### General

The Outdoor Units are 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, galvanized steel and painted with a weather-resistant powder paint finish on all louvered panels and the fan top panel. The corner panels are prepainted. All panels are subjected to our 1,000 hour salt spray test. The base is made of a CMBP-G30 weatherproof material to resist corrosion.

#### **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 supplied liquid line drier is standard. Some models may require field installation.

#### Compressor

The compressor features internal over temperature, 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 system has a cooling capacity 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.

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.









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