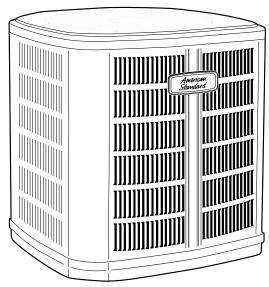


# **Product Data**

## **Split System Heat Pump**

4A6H4018G1000A 4A6H4024G1000A 4A6H4030G1000A 4A6H4036G1000A 4A6H4042G1000A 4A6H4048G1000A 4A6H4060G1000A



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





## **Product Specifications**

Model No. (a)	4A6H4018G1000A	4A6H4024G1000A	4A6H4030G1000A	4A6H4036G1000A	
POWER CONNS. — V/PH/HZ (b)	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60	
MIN. BRCH. CIR. AMPACITY	12	14	17	19	
BR. CIR. PROT. RTG. — MAX. (AMPS)	20	25	25	30	
COMPRESSOR	DURATION™- SCROLL	DURATION™- SCROLL	DURATION™- SCROLL	DURATION™- SCROLL	
RL AMPS — LR AMPS	9 — 56	10.9 — 62.9	12.8 — 67.8	14.7 — 72.2	
Outdoor Fan FL AMPS	0.54	0.64	0.77	0.64	
Fan HP	1/12	1/8	1/8	1/8	
Fan Dia (inches)	23	23	27.5	27.5	
Coil	SPINE FIN™	SPINE FIN™	SPINE FIN™	SPINE FIN™	
Refrigerant R-410A	6 LBS., 1 OZ	6 LBS., 2 OZ	6 LBS., 13 OZ	7 LBS., 1 OZ	
LINE SIZE — IN. O.D. GAS (c) (d)	3/4	3/4	3/4	3/4	
LINE SIZE — IN. O.D. LIQ.	3/8	3/8	3/8	3/8	
Charge Spec. Subcooling	10°F	10°F	8°F	10°F	
Dimensions H x W X D Crated (IN.)	30.1 x 30 x 26.7	34 x 33 x 30.1	34.4 x 35.1 x 38.7	34.4 x 38.7x 35.1	
Weight — Shipping (lbs.)	161	191	248	248	
Weight — Net (lbs.)	141	163	216	216	
Optional Accessories:					
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A	TAYASCT501A	
Evaporator Defrost Control	NA	NA	NA	AY28X084	
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101	
Extreme Condition Mount Kit	BAYECMT023	BAYECMT023	BAYECMT004	BAYECMT004	
Start Kit	_	_	BAYKSKT263	BAYKSKT263	
Crankcase Heater Kit	ase Heater Kit BAYCCHT302		BAYCCHT302	BAYCCHT302	
Seacoast Kit	st Kit BAYSEAC001		BAYSEAC001	BAYSEAC001	
Low Ambient Kit	bient Kit BAYLOAM107		BAYLOAM107	BAYLOAM103	
Refrigerant Lineset (e)	TAYREFLN7*	TAYREFLN7*	TAYREFLN7*	TAYREFLN7*	
Sound Enclosure	BAYSDEN003	BAYSDEN003	BAYSDEN003	BAYSDEN003	
Service Valve Panel Cover	AAYSVPANL0022AA	AAYSVPANL0032AA	AAYSVPANL0032AA	AAYSVPANL3343AA	
	•	•	•		

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

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

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

## **Product Specifications**

Model No. (a)	4A6H4042G1000A	4A6H4048G1000A	4A6H4060G1000A		
POWER CONNS. — V/PH/HZ (b)	280/230/1/60	280/230/1/60	280/230/1/60		
MIN. BRCH. CIR. AMPACITY	25	26	32		
BR. CIR. PROT. RTG. — MAX. (AMPS)	40	45	50		
COMPRESSOR	DURATION™- SCROLL	DURATION™- SCROLL	DURATION™- SCROLL		
RL AMPS — LR AMPS	19.2 — 124	19.6 — 130	24.4 — 144		
Outdoor Fan FL AMPS	1.05	1.05	1.05		
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	7 LBS., 8 OZ	8 LBS., 2 OZ	9 LBS., 14 OZ		
LINE SIZE — IN. O.D. GAS (c) (d)	7/8	7/8	1 1/8		
LINE SIZE — IN. O.D. LIQ.	3/8	3/8	3/8		
Charge Spec. Subcooling	10°F	10°F	10°F		
Dimensions H x W X D Crated (IN.)	34.4 x 38.7x 35.1	38.4 x 38.7 x 35.1	51 x 38.7 x 35.1		
Weight — Shipping (lbs.)	248	256	315		
Weight — Net (lbs.)	216	222	278		
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	BAYECMT004	BAYECMT004	BAYECMT004		
Start Kit	BAYKSKT263	BAYKSKT263	BAYKSKT263		
Crankcase Heater Kit	BAYCCHT301	BAYCCHT301	BAYCCHT301		
Seacoast Kit	BAYSEAC001	BAYSEAC001	BAYSEAC001		
Low Ambient Kit	BAYLOAM107	BAYLOAM107	BAYLOAM107		
Refrigerant Lineset (e)	TAYREFLN3*	TAYREFLN3*	TAYREFLN3*		
Sound Enclosure	BAYSDEN004	BAYSDEN004	BAYSDEN004		
Service Valve Panel Cover	AAYSVPANL0032AA	AAYSVPANL3343AA	AAYSVPANL0046AA		

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

### **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
4A6H4018G1	73	72	66	64	66	71	64	56	47
4A6H4024G1	71	77	72	68	68	69	60	53	47
4A6H4030G1	72	77	72	69	68	65	60	57	52
4A6H4036G1	75	84	75	70	72	67	62	57	50
4A6H4042G1	72	79	70	68	67	64	59	56	51
4A6H4048G1	72	81	73	68	72	67	62	57	51
4A6H4060G1	72	81	72	68	71	68	64	59	54

Note: Rated in accordance with AHRI Standard 270–2008 \*For Reference Only

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

 <sup>(</sup>c) 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).
 (d) Trane outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit and 15 feet of tested connecting

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



## **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.

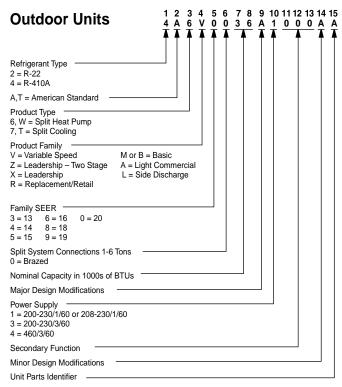
### **AHRI Standard Capacity Rating Conditions**

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.
- 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 Diagrams**

LEGEND ACR A/C RECTIFIER

CSS COIL BOTTON SERSOR

CF FAN CAPACITOR

CF BIRL CAMBELTOR

CF BIRL CAMBELTOR

CR BIRL CAMBELTOR

CS CONTROL

LELCTRONIC EAP VALVE

LELCTRONIC EAP VALVE

LELCTRONIC EAP VALVE

CALCETORIC EAP VALVE

CALCETORIC EAP VALVE

CONTROL

TETRANIC OVERLOAD PROTECTOR

COMPRESSOR MOTOR CONTACTOR

COMPRESSOR

COMPRES CPR 24 V LINE V FACTORY WIRING 24 V FIELD LINE V WIRING FIELD INSTALLED FACTORY WIRING MAGNETIC COIL GROUND JUNCTION CAPACITOR WIRE NUT OR TERMINAL TRANSFORMER CAPACITOR FUSE TERMINAL BLOCK/BOARD RELAY CONTACT (N.O)  $\dashv\vdash$ RELAY CONTACT (N.C) # THERMISTOR (A) TEMP ACTUATED SWITCH INTERNAL OVERLOAD PROTECTION 00 -COLOR OF WIRE BK/BL COLOR OF MARKER PRESSURE ACTUATED SWITCH SEE SERVICE FACTS
FOR OPTIONAL START
KIT ACCESSORY BK BLACK RD RED OR ORANGE BL BLUE WH WHITE GR GREEN BR BROWN YL YELLOW PR PURPLE PK PINK OTTO MOTOR WINDING POL. PLUG FEMALE HOUSING (MALE TERMINALS)

POL. PLUG MALE HOUSING (FEMALE TERMINALS) ВK BK7 DFC BOARD 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. GR/YL 4. ODT-B MUST BE SET LOWER THAN ODT-A cs d. d. OPTIONAL REMOTE ODT-B (NOTE-485) BK- FOBK-1 **∆**LWARNING ODT-A OPTIONAL BK SOBK HAZARDOUS VOLTAGE!

ISCONNECT ALL ELECTRICAL POWER
INCLUDING SENVICE IN SCONNECTS

BEFORE SERVICING.

Failure to disconnect power
before servicing can cause sever
personal injury or death.  $\forall$ ∆L 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. в⊖ FOR CANADIAN INSTALLATIONS São - B POUR INSTALLATIONS CANADIENNES
CAUTION: NOT SUITABLE FOR USE ON
SYSTEMS EXCEEDING 150Y-TO-GROUND \_Y<u>1</u>\_\_YL .RA ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE PRINTED FROM DI58595P01 

Figure 1. 1.5, 2.0, 2.5, 3.5 Ton Models

12-1175-11C-EN

## **Schematic Diagrams**

Figure 2. 3.0 Ton LEGEND-EQUIPMENT DIAGRAM 24 V. LINE V. } FACTORY WIRING - - - 24 V. - - LINE V. FIELD WIRING GROUND JUNCTION -√ coir → ⊢ CAPACITOR → H RELAY CONTACT (N.O.) CAPACITOR RELAY CONTACT (N.C.) SERVICE FACTS FOR OPTIONAL
START KIT ACCESSORY 5 THERMISTOR DFC MS OO INTERNAL OVERLOAD PROTECTOR TO PRESSURE ACTUATED SWITCH 7L /BK7 / VL /BK7 / BK / OR / BL -CSR F TEMP. ACTUATED SWITCH K2 COM BR/RD POL. PLUG FEMALE HOUSING (MALE TERM.) ΚI (GR POL. PLUG MALE HOUSING (FEMALE TERM.) ₹cs. 7 √V RESISTOR OR HEATING ELEMENT NOTES 182 OMO MOTOR WINDING ODT-B (OPTIONAL)
ODT-A (OPTIONAL) YELLOW -O TERMINAL OR/11 -<u>~</u>5°7 ODS-B TO POWER SUPPLY PER > UNIT NAMEPLATE AND LOCAL CODES PRINTED FROM DI57061P02

THERMALLY PROTECTED INTERNALLY LPCO TI 6vm9 LEGEND L/RD-ACC RECTIFIER

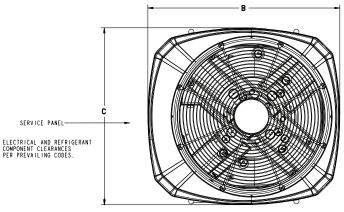
COLL BOTTON SENSOR
FAR CAPACTION
WHISE CONNECTION
STARTING CAPACTOR
LECTRONIC CAP VALVE
LECTRONIC CAP VALVE
LECTRONIC CAP VALVE
CONTROL
STARTING CAPACTOR
OWNERS
STARTING CAPACTOR
OUTDOOR TATCHEROSTAT
OUTDOOR TATCHEROSTAT
OUTDOOR THEMOSTAT
DIFFESSIVE TRANSDUCT
STATED ON OFF STATED
STANDON OFF STATED
STANDON ON OFF STATED
STANDON OFF STANDON
STANDON CPR 24 V LINE V FACTORY WIRING 24 V FIELD LINE V WIRING FIELD INSTALLED FACTORY WIRING MAGNETIC COIL GROUND JUNCTION CAPACITOR • → □ ○ TRANSFORMER
FUSE
TERMINAL BL TERMINAL BLOCK/BOARD RELAY CONTACT (N.O) CR  $\dashv\vdash$ CF RELAY CONTACT (N.C) **₩** ₩ мѕ⊏ 050 TEMP ACTUATED SWITCH INTERNAL OVERLOAD PROTECTION L2Q COLOR OF WIRE **‡** ≥ PRESSURE ACTUATED SWITCH SEE SERVICE FACTS FOR OPTIONAL START KIT ACCESSORY BK BLACK RD RED OR ORANGE BL BLUE WH WHITE GR GREEN BR BROWN YL YELLOW PR PURPLE PK PINK КЗ OMO MOTOR WINDING POL.PLUG FEMALE HOUSING (MALE TERMINALS) BK/L  $\triangle$ POL. PLUG MALE HOUSING (FEMALE TERMINALS) DFC BOARD S2 <del>\*</del> NOTES: I. BE SURE POWER SUPPLY AGREES WITH EQUIPMENT NAMEPLATE. 2. POWER WIRING AND GROUNDING OF EQUIPMENT MUST COMPLY WITH 3. LOW VOLTAGE WIRING TO BE NO. 18 AWG MINIMUM CONDUCTOR. 4. ODT-B MUST BE SET LOWER THAN ODT-A CS OPTIONAL REMOTE ODT-B (NOTE-485) BK020BK-**∆**WARNING ODT-A OPTIONAL BK ZOBK HAZARDOUS VOLTAGE DISCONMECT ALL ELECTRICAL POWER
INCLUDING REMOTE DISCONMECTS
BEFORE SERVICING.
Failure to disconnect power
before servicing can cause severe
personal injury or death.  $\triangle$  $\neg$ **∆**CAUTION X2 ======= USE COPPER CONDUCTORS ONLY!
UNIT TERMINALS ARE NOT DESIGNED
TO ACCEPT OTHER TYPES OF CONDUCTOR:
Failure to do so may cause damage
to the equipment. ------ВД O - OR Sé Sé \_ <u>Y\_I</u>A\_ <sub>YL</sub>. POUR INSTALLATIONS CANADIENNES
CAUTION: NOT SUITABLE FOR USE ON
SYSTEMS EXCEEDING 150V-TO-GROUND TO POWER SUPPLY PER UNIT NAMEPLATES AND LOCAL CODES ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE PRINTED FROM DI58595P04

Figure 3. 4 and 5 Ton Models

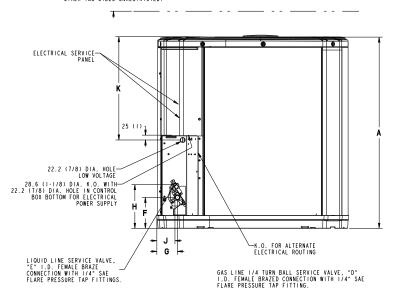
12-1175-11C-EN



# **Outline Drawing**



TOP DISCHARGE AREA SHOULD BE
UNRESTRICTED FOR AT LEAST 1524 (5 FET)
ABOVE UNIT, UNIT SHOULD BE PLACED SO ROOF
RUN-OFF WATER DOES NOT POUR DIRECTLY ON UNIT,
AND SHOULD BE AT LEAST 305 (12") FROM WALL AND
ALL SURROUNDING MEMBEREY ON TWO SIDES.
OTHER TWO SIDES UNRESTRICTED.



Model	Base	Α	В	С	D	Е	F	G	Н	J	K
4A6H4018G	2	730 (28-3/4)	724 28-1/2)	651 (25-5/8)	3/4	3/8	127 (5)	57 (2-1/4)	194 (7-5/8)	38 (1-1/2)	457 (18)
4A6H4024G	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)	60 (2-3/8)	508 (20)
4A6H4030G	4	741 (29-1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	143 (5-5/8)	83 (3-1/4)	206 (8-1/8)	70 (2-3/4)	508 (20)
4A6H4036G	4	741 (29-1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	156 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4A6H4042G	4	741 (29-1/8)	946 (37-1/4)	870 (34-1/4)	7/8	3/8	143 (5-5/8)	83 (3-1/4)	206 (8-1/8)	70 (2-3/4)	508 (20)
4A6H4048G	4	841 (33-1/8)	946 (37-1/4)	870 (34-1/4)	7/8	3/8	143 (5-5/8)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	508 (20)
4A6H4060G	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)



## **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. The corner panels are prepainted. All panels are subjected to our 1,000 hour salt spray test.

### **Refrigerant Controls**

Refrigeration system controls include condenser fan, compressor contactor and low and high pressure switches. A factory supplied, field installed liquid line drier is standard.

### Compressor

The compressor features internal over temperature and pressure protection. Other features include: Centrifugal oil pump and low vibration and noise.

#### Condenser Coil

The aluminum plate fin, copper tube outdoor coil provides low airflow resistance and efficient heat transfer. The coil is protected with a corrosion resistant mesh coil guard.

### **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.

The addition of the BAYLOAM107A low ambient kit permits ambient cooling to 20°F.

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



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