

HERITAGE® 14 MODELS 4A6H4018-060B

2

Features and Benefits

- **♦ Duration**™ compressor
- ◆ Efficiency up to 15 SEER and 9.85 HSPF
- Attractive warm gray cabinet with accent Grill, Badge and Grill Caps
- Corrosion resistant finish and fasteners
- ◆ DuraBase™ base paint won't rust, drains completely
- ◆ Control and service valve cover
- ◆ Multi-use service valves
- ◆ Full coil protection with seacoast shield
- ◆ Liquid line filter-drier
- ◆ All aluminum SpineFin™ coil
- ◆ Easy-Sess™ service access for installation, service and maintenance
- ◆ Comfort "R"™ mode approved
- ◆ Low sound with advanced fan system and compressor sound insulator
- American Standard and Heritage® 14 badge identifier

- ◆ Factory installed start kit on 024 and 060 models
- High pressure switch and internal compressor temperature/pressure protection
- ◆ Vertical air discharge
- Factory supplied charge of R-410A refrigerant
- ◆ 10 year limited warranty on compressor, coil, and 5 years on parts
- ◆ Compressor sump heat
- ◆ Electronic demand defrost control
- ◆ Low ambient cooling to 55°F as shipped
- ◆ Low ambient cooling to 40°F with EDC accessory AY28X084
- ◆ Low ambient cooling to 30°F with EDC accessory AY28X084 and TXV
- **♦** Optional extended warranties

DATA SUBJECT TO CHANGE WITHOUT NOTICE

Contents

Manufacturing Control

American Standard Heating & Air Conditioning's exclusive control over the design and manufacturing of all major components is unique in the industry. This approach assures us total control over both the quality and reliability of these components. It also allows us to custom match components to deliver the best in split system performance.

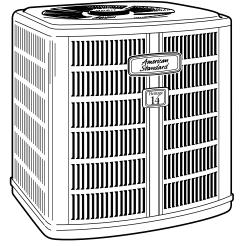
Designing the Details

Careful attention was given to designing the details — from control wiring to the access panels. American Standard Heating & Air Conditioning units feature time-saving color-coded wiring and removable panels which allow complete access to all major components and controls. All outdoor units feature external high and low pressure gauge ports for easy diagnosing and servicing of the unit.

UL Listed

American Standard Heating & Air Conditioning meets or exceeds all nationally recognized agency safety and design standards. Each condensing unit is UL designed, approved, and labeled in accordance to UL Standards, 1995, including approval for use in Canada. Each unit is rated in accordance with ARI Standard 210/240 and 270.

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General Data

Product Specifications

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Model No. 1	4A6H4024B1	4A6H4030B1	4A6H4036B1		
Electrical Data V/Ph/Hz ②	200/230/1/60	208/230/1/60	208/230/1/60		
Min Cir Ampacity	13	20	21		
Max Fuse Size (Amps)	20	30	35		
Compressor	DURATION™	DURATION™ - SCROLL	DURATION™ - SCROLL		
RL Amps - LR Amps	9.4 - 63	14.7 - 73	15.4 - 83		
Outdoor Fan FL Amps	0.9	1.4	1.3		
Fan HP	1/8	1/6	1/6		
Fan Dia (inches)	23	23	27.6		
Coil	Spine Fin™	Spine Fin™	Spine Fin™		
Refrigerant R-410A	6/10-LB/OZ	6/02-LB/OZ	7/01-LB/OZ		
Line Size - (in.) O.D. Gas 3	5/8	3/4	3/4		
Line Size - (in.) O.D. Liquid ③	5/16	5/16	3/8		
Dimensions H x W x D (Crated)	46 x 30.1 x 33	46 x 30.1 x 33	42.4 x 35.1 x 38.7		
Weight - Shipping	250	246	266		
Weight - Net	221	217	232		
Start Components	YES	NO	NO		
Sound Enclosure	YES	YES	YES		
Compressor Sump Heat	YES	YES	YES		
Optional Accessories: 4					
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A		
Evaporator Defrost Control A/C	AY28X084	AY28X084	AY28X084		
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101		
Snow Leg - Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002		
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003		
Hard Start Kit Scroll		BAYKSKT260	BAYKSKT260		
Extreme Condition Mounting Kit	BAYECMT023	BAYECMT023	BAYECMT004		
Refrigerant Lineset 5	TAYREFLN6*	TAYREFLN2*	TAYREFLN7*		

① Certified in accordance with the Air-Source Unitary Heat Pump Equipment certification program which is based on ARI Standard 210/240.

A-weighted Sound Power Level [dB(A)]

		•			-	` /-			
	SOUND POWER	A-WEIGHTED FULL OCTAVE SOUND POWER LEVEL dB - [dB(A)							A)]
MODEL	LEVEL [dB(A)]	63	125	250	500	1000	2000	4000	8000
4A6H4024B1	74	47.6	54.8	61.1	68.7	67.9	66.5	62.5	59.5
4A6H4030B1	71	51.0	56.9	56.6	64.7	64.5	60.8	54.6	48.3
4A6H4036B1	74	47.8	57.7	64.0	66.4	69.3	61.7	55.0	48.8
4A6H4042B1	74	50.5	57.7	63.1	67.5	67.5	61.1	56.1	50.0
4A6H4048B1	74	50.5	57.7	63.1	67.5	67.5	61.1	56.1	50.0
4A6H4060B1	74	46.1	59.7	60.0	67.5	69.0	62.2	55.9	50.3

Note: Tested in accordance with ARI Standard 270.95. (Not listed with ARI)

② Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.

③ Standard line lengths - 60'. Standard lift - 60' Suction and Liquid line. For Greater lengths and lifts refer to refrigerant piping software Pub# 32-3312-0[†]. (†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	4A6H4042B1	4A6H4048B1	4A6H4060B1			
Electrical Data V/Ph/Hz 2	208/230/1/60	208/230/1/60	208/230/1/60			
Min Cir Ampacity	25	30	36			
Max Fuse Size (Amps)	4 0	50	60			
Compressor	DURATION™ - SCROLL	DURATION™ - SCROLL	DURATION™ - SCROLL			
RL Amps - LR Amps	19.2 - 104	23.1 - 134	27.6 - 158			
Outdoor Fan FL Amps	1.3	1.3	3 1.3			
Fan HP	1/6	1/6	1/6			
Fan Dia (inches)	27.6	27.6	27.6			
Coil	Spine Fin™	Spine Fin™	Spine Fin™			
Refrigerant R-410A	7/04-LB/OZ	9/11-LB/OZ	11/02-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			
Dimensions H x W x D (Crated)	46.4 x 35.1 x 38.7	46.4 x 35.1 x 38.7	46.4 x 35.1 x 38.7			
Weight - Shipping	281	288	326			
Weight - Net	245	252	290			
Start Components	N O	NO	YES			
Sound Enclosure	YES	YES	YES			
Compressor Sump Heat	YES	YES	YES			
Optional Accessories: 4						
Anti-short Cycle Timer	TAYASCT501A	TAYASCT501A	TAYASCT501A			
Evaporator Defrost Control A/C	AY28X084	AY28X084	AY28X084			
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101			
Snow Leg - Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002			
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003			
Hard Start Kit Scroll	BAYKSKT260	BAYKSKT260				
Extreme Condition Mounting Kit	BAYECMT004	BAYECMT004	BAYECMT004			
Refrigerant Lineset ⑤	TAYREFLN7*	TAYREFLN3*	TAYREFLN3*			

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.

ARI Standard Capacity Rating Conditions ARI STANDARD 210/240 RATING CONDITIONS —

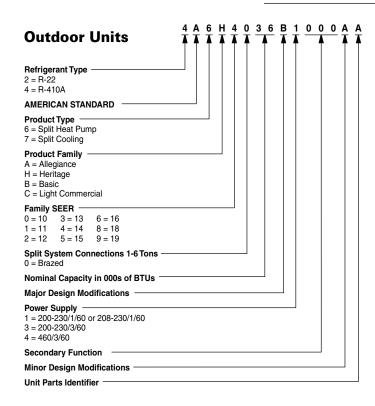
- (A) Cooling 80°F DB, 67°F WB air entering indoor coil, 95°F DB air entering outdoor coil.
- (B) High Temperature Heating 47°F DB, 43°F WB air entering outdoor coil, 70°F DB air entering indoor coil.
- (C) Low Temperature Heating 17°F DB, 15°F WB air entering outdoor coil, 70°F DB air entering indoor coil.
- (D) Rated indoor airflow for heating is the same as for cooling.

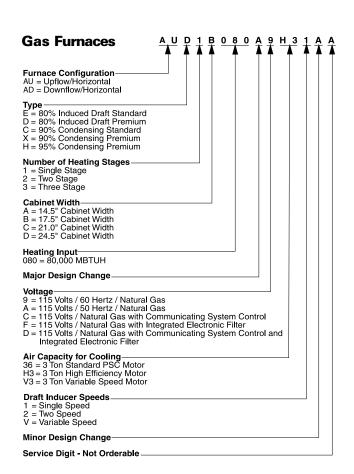
ARI STANDARD 270 RATING CONDITIONS — (Noise rating numbers are determined with the unit in cooling operation.) Standard Noise Rating number is at 95°F outdoor air.

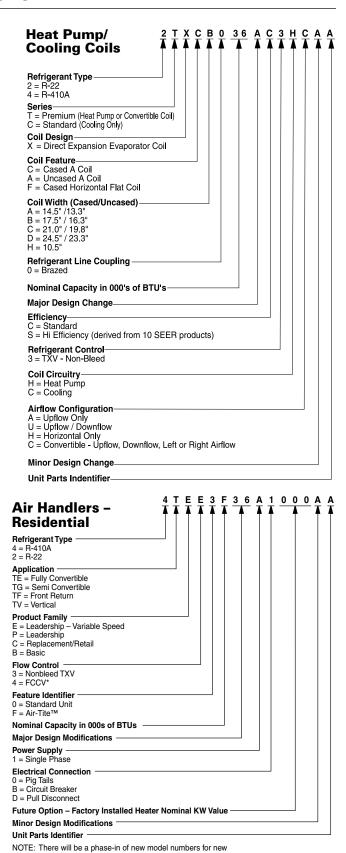




Model Nomenclature







air handlers over next 2 years

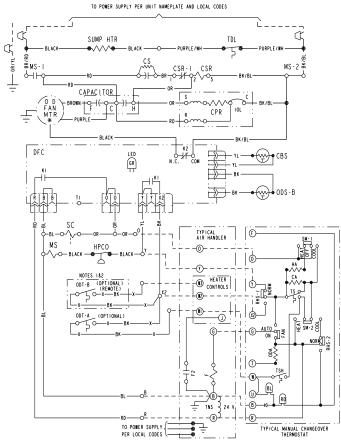
*Shipped with R-22 FCCV

Typical Wiring

SCHEMATIC DIAGRAMS

(SEE LEGEND)

4A6H4024B



- 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.
 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.

 WARNING HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH!

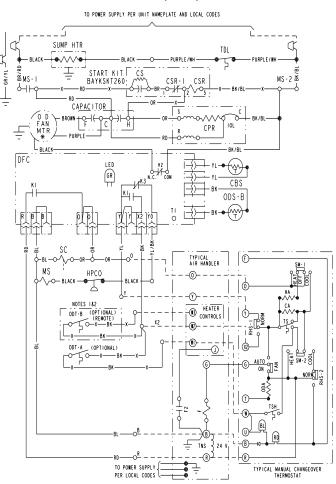
△ CAUTION USE COPPER CONDUCTORS ONLY! UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT OTHER TYPES OF CONDUCTORS. FAILURE TO DO SO MAY CAUSE DAMAGE TO THE EQUIPMENT!

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.

Printed from D155585REV00

4A6H4030,036,042B



NOTES:

- I. IF ODT-B IS NOT USED, ADD JUMPER BETWEEN W2 & W3 AT AIR HANDLER, IF USED, ODT-B WUST BE MOUNTED REMOTE OF CONTROL BOX IN AN APPROVED WEATHER PROOF EXCLOSURE, IF ODT-A IS NOT USED, ADD JUMPER BETWEEN WI & W2 AT AIR HANDLER, 3. TOW VOLTAGE CEV W. FIELD WIRTING MUST BE IS ANG MIN

<u>∧</u> WARNING HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. FAILURE TO DISCONNECT POWER BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH! △ CAUTION
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POUR INSTALLATIONS CANADIENNES
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INSTALLATIONS DE PLUS DE 150 V A
LA TERRE.

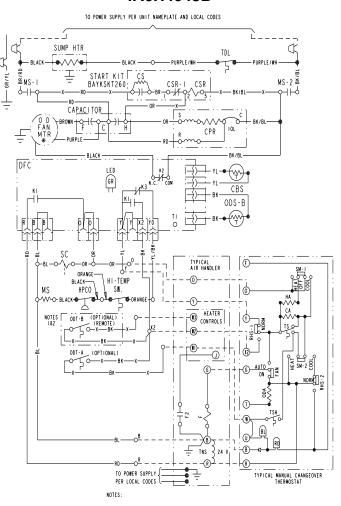
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Typical Wiring

SCHEMATIC DIAGRAMS

(SEE LEGEND)

4A6H4048B



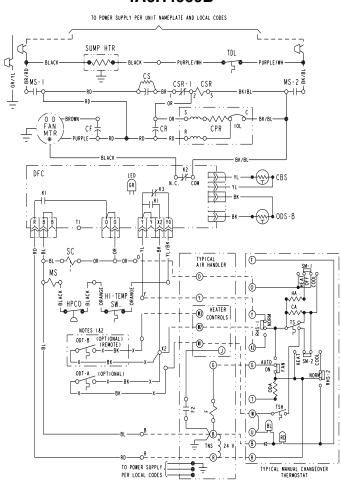
- 1. IF ODT-B IS NOT USED, ADD JUMPER BETBEEN W2 & W3 AT AIR HANDLER. IF USED, OOT-B MUST BE MOUNTED REMOTE OF CONTROL BOX IN AM APPROVED WEATHER PROOF ENCLOSUME. 2. IF OOT-AIR IS NOT USED, ADD JUMPER BETBEETER W1 & W2 AT AIR MANDLER. 3. COM YOUT ABOUT 124 V.) FIELD WIRING MUST BE IS AME MIN.

DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. ⚠ 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!

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

Printed from D155587REV00

4A6H4060B



NOTES:

- 1. IF ODT-B IS NOT USED, ADD JUMPER BETWEEN WZ & W3
 AT AIR HANDLER.
 IF USED, OOT-B MUST BE MOUNTED REMOTE OF CONTROL
 BOX IN AM APPROVED WEATHER PROOF ENCLOSUME.
 IF OOT-A IS NOT USED, ADD JUMPER BETWEEN WI & W2
 AT AIR HANDLER.
 3. LOW YOLTER (24 V.) FIELD WIRING MUST BE IS AWG MIN.

<u>∧</u> WARNING HAZARDOUS VOLTAGE! DISCONNECT ALL ELECTRIC POWER INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. ⚠ 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!

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.

Printed from D155588REV00

Typical Wiring

SCHEMATIC DIAGRAMS

LEGEND

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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
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SYMBOLS

```
24 V.
                 FACTORY WIRING
      LINE V.
      24 V.
                 FIELD WIRING
      LINE V.
      FIELD INSTALLED FACTORY WIRING
 - x —
        GROUND
        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.)

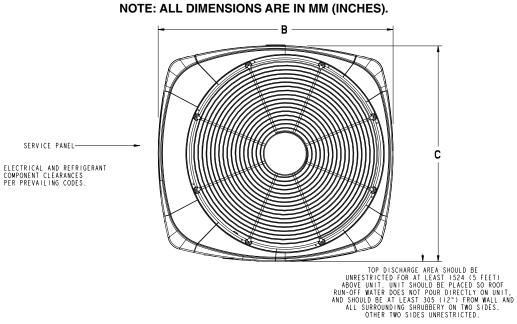
√V RESISTOR OR HEATING ELEMENT

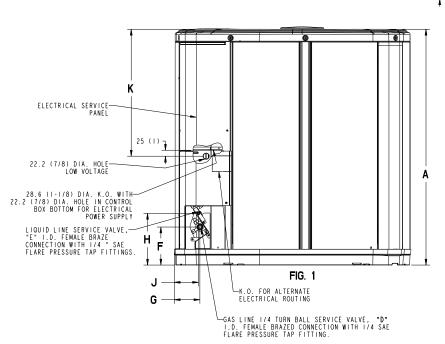
OMOTOR WINDING
 0
        TERMINAL
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LPCO LOW PRESSURE CUTOUT SW.
MS COMPRESSOR MOTOR CONTACTOR
ODA OUTDOOR ANTICIPATOR
OFT OUTDOOR FAN THERMOSTAT
          COOLING ANTICIPATOR
COIL BOTTOM SENSOR
FAN CAPACITOR
WIRE CONNECTOR
CBS
CN
          COMPRESSOR
RUN CAPACITOR
STARTING CAPACITOR
CAPACITOR SWITCHING RELAY
DEFROST CONTROL
                                                                                        OUTDOOR TEMPERATURE SENSOR
OUTDOOR THERMOSTAT
                                                                                        RESISTANCE HEAT SWITCH
SWITCHOVER VALVE SOLENOID
SYSTEM "ON-OFF" SWITCH
DISCHARGE LINE THERMOSTAT
                                                                             RHS
ĎFC
                                                                             SM
           INDOOR FAN RELAY
                                                                              TDL
HAA HEATING ANTICIPATOR
HPCO HIGH PRESSURE CUTOUT SW.
IOL INTERNAL OVERLOAD PROTECTOR
                                                                                         TRANSFORMER
                                                                             TNS
                                                                                        HEATING-COOLING THERMOSTAT
                                                                            TSH HEATING THERMOSTAT
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Dimensional Data

4A6H4 OUTLINE DRAWING





MODELS	BASE	FIG.	Α	В	С	D	E	F	G	Н	J	К
4A6H4024B	3	1	1035 (40-3/4)	829 (32-5/8)	756 (29-3/4)	5/8	5/16	143 (5-5/8)	92 (3-5/8)	210 (8-1/4)	79 (3-1/8)	508 (20)
4A6H4030B	4	1	1035 (40-3/4)	829 (32-5/8)	756 (29-3/4)	3/4	5/16	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3/8)	508 (20)
4A6H4036B	4	1	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 (3/8)	508 (20)
4A6H4042B	4	1	1045 (41-1/8)	946 (37-1/4)	870 (34-1/4)	3/4	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3/8)	508 (20)
4A6H4048B	4	1	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 (3/8)	508 (20)
4A6H4060B	4	1	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 (3/8)	508 (20)

From Dwg. D152862 Rev. 17

Mechanical Specifications

General

These 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 ARI certified. The unit shall be UL listed. 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 finish on all louvered panels. Corrosion and weatherproof CMBP-G30 DuraBase™ base.

Refrigerant Controls

Refrigeration system controls include condenser fan and compressor contactor. High and low pressure controls are inherent to the compressor. Unit also has high pressure switch. Another standard feature is the liquid line drier.

Compressor

The Duration™ compressor features internal over temperature and pressure protector, dipped hermetic motor and sump heater. Other features include: roto lock suction and discharge refrigerant connections, centrifugal oil pump, and low vibration and noise. The Duration™ compressor features a 10-year limited warranty.

Condenser Coil

The Spine Fin™ coil shall be continuously wrapped, corrosion resistant all aluminum with minimum brazed joints. This coil is seamless aluminum glued to a continuous aluminum fin. Coils are lab tested to withstand 2,000 pounds of pressure per square inch.

Low Ambient Cooling

As shipped, this unit has a cooling capability 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.

Accessories

Thermostats — Heat/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°F.

Since the manufacturer has a policy of continuous product and product data improvement, it reserves the right to change design and specifications without notice.

Technical Literature - Printed in U.S.A.

American Standard Heating & Air Conditioning Troup Highway Tyler, TX 75711-9010