

MODELS 4A6H7024, 036, 048, & 060

Features and Benefits

- **DURATION** 2-stage scroll compressor
- Efficiency up to **18.0 SEER** and **9.5 HSPF**
- All Aluminum **SPINE FIN**[™] coil
- **DURABASE**[™] weather proof and rust proof base
- **COMFORT "R"**[™] mode approved for better comfort indoors
- **EASY-SESS**[™] cabinet, service access and refrigerant connections with full coil protection
- **WEATHERGUARD**[™] fasteners
- Glossy corrosion resistant finish tarpaulin gray cabinet with anthracite gray top
- Internal compressor high/low pressure & temperature protection
- Liquid line filter/drier
- Low sound with advanced variable speed fan motor
- Service valve cover
- R-410A refrigerant
- From 70 to 100% capacity modulation
- 100% run test in the factory
- Low ambient cooling to 55° as shipped
- **Extended warranties available**

Contents

Features and Benefits	2
General Data	4
Product Specifications	4
A-weighted Sound Power Level [dB(A)]	4
Accessory Description and Usage	5
AHRI Standard Capacity Rating Conditions	5
Model Nomenclature	6
Electrical Data	7
Dimensions	10
Mechanical Specifications	11

General Data

Product Specifications

Model No. ①	4A6H7024B1000AA	4A6H7036B1000DA	4A6H7048A1000A	4A6H7060A1000DB
Electrical Data V/Ph/Hz ②	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
Min Cir Ampacity	15	20	28	41
Max Fuse Size (Amps)	25	35	45	60
Compressor	DURATION™ - SCROLL	DURATION™ - SCROLL	DURATION™ - SCROLL	DURATION™ - SCROLL
No. Used - No. Stages	1-2	1-2	1-2	1-2
RL AMPS - LR AMPS	11.7 - 58.3	15.3 - 83	21.2 - 104	32.1 - 152.9
Outdoor Fan FL Amps	0.71	0.71	1.05	1.30
Fan HP	1/8	1/8	1/5	1/4
Fan Dia (inches)	27.6	27.6	27.6	27.6
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-410A	9/0-LB/OZ	9/4-LB/OZ	12/9-LB/OZ	12/10-LB/OZ
Line Size - (in.) O.D. Gas ③	5/8	3/4	7/8	1-1/8
Line Size - (in.) O.D. Liquid ③	3/8	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	51 x 35.1 x 38.7	51 x 35.1 x 38.7
Weight - Shipping	272	258	329	330
Weight - Net	236	210	292	293
Start Components	NO	NO	NO	NO
Sound Enclosure	NO	NO	NO	NO
Compressor Sump Heat	YES	YES	YES	YES
Optional Accessories: ④				
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Snow Leg - Base & Cap 4" High	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg - 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Hard Start Kit Scroll	BAYKSKT263	BAYKSKT263	BAYKSKT266	BAYKSKT266
Extreme Condition Mounting Kit	BAYECMT004	BAYECMT004	BAYECMT004	BAYECMT004
Vertical Discharge Air Kit Base 4	BAYVDTA003	BAYVDTA004	BAYVDTA004	BAYVDTA004
Auto Charge Solenoid Kit	BAYCAKT001	BAYCAKT001	BAYCAKT001	BAYCAKT001
Refrigerant Lineset ⑤	TAYREFLN9*	TAYREFLN7*	TAYREFLN3*	TAYREFLN4*

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

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

③ Standard line lengths - 60'. Standard lift - 25' Suction and Liquid line.

For Greater lengths and lifts refer to refrigerant piping software Pub# 32-3312-0†. (†denotes latest revision)

④ For accessory description and usage, see page 5.

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

Sound Power Level

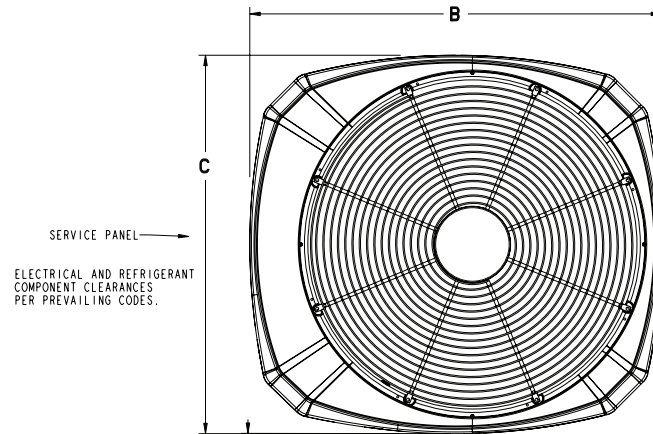
Model	A-Weighted Sound Power Level [dB(A)]	Full Octave Sound Power [dB]							
		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
4A6H7024B1	72	67	67	62	63	62	57	55	50
4A6H7036B1	72	66	66	64	64	63	57	54	48
4A6H7048A1	72	68	73	65	67	63	56	53	47
4A6H7060A1	74	58	75	66	68	66	59	55	52

Note: Rated in accordance with AHRI Standard 270-2008

Dimensions

4A6H7 Outline Drawing

Note: All dimensions are in MM (Inches).



TOP DISCHARGE AREA SHOULD BE UNRESTRICTED FOR AT LEAST 1524 (5 FEET) 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 SHRUBBERY ON TWO SIDES. OTHER TWO SIDES UNRESTRICTED.

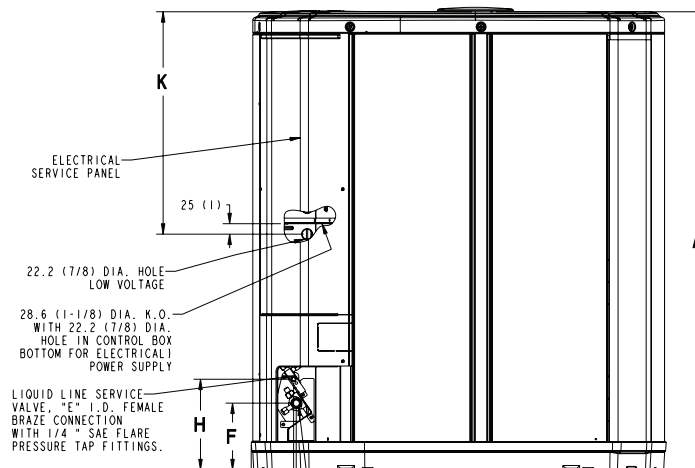


FIG. 1

K.O. FOR ALTERNATE ELECTRICAL ROUTING

GAS LINE 1/4 TURN BALL SERVICE VALVE, "D" I.D. FEMALE BRAZE CONNECTION WITH 1/4 SAE FLARE PRESSURE TAP FITTING.

MODELS	BASE	A	B	C	D	E	F	G	H	J	K
4A6H7024B	4	1045 (41 1/8)	946 (37-1/4)	870 (34-1/4)	5/8	3/8	152 (6)	98 (3-7/8)	219 (8-5/8)	86 (3-3/8)	711 (28)
4A6H7036B	4	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 (3-3/8)	711 (28)
4A6H7048A	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)
4A6H7060A	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)	508 (20)

Model Nomenclature

Outdoor Units

- 4 A A H 7 0 3 6 A 1 0 0 0
- Refrigerant Type**
4 = R-410A
 - American Standard**
 - Product Type**
6 = Split Heat Pump
7 = Split Cooling
 - Product Family**
Z = Leadership - Two Stage
X = Leadership
R = Replacement/Retail
M or B = Basic
A = Light Commercial
 - Family SEER**
3 = 13 6 = 16 0 = 20
4 = 14 8 = 18
5 = 15 9 = 19
 - Split System Connections 1-6 Tons**
0 = Brazed
 - Nominal Capacity in 000s of BTUs**
 - Major Design Modifications**
 - Power Supply**
1 = 200-230/1/60 or 208-230/1/60
3 = 200-230/3/60
4 = 460/3/60
 - Secondary Function**
 - Minor Design Modifications**
 - Unit Parts Identifier**

Gas Furnaces

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
T U D 1 B 0 8 0 A 9 H 3 1 A A
- Furnace Configuration**
TU = Upflow/Horizontal
TD = Downflow/Horizontal
 - Type**
E = 80% Induced Draft Standard
D = 80% Induced Draft Premium
C = 90% Condensing Standard
X = 90% Condensing Premium
H = 95% Condensing Premium
 - Number of Heating Stages**
1 = Single Stage
2 = Two Stage
M = Modulating
 - Cabinet Width**
A = 14.5" Cabinet Width
B = 17.5" Cabinet Width
C = 21.0" Cabinet Width
D = 24.5" Cabinet Width
 - Heating Input in 1000's (BTUH)**
080 = 80,000 BTUH
 - Major Design Change**
 - Voltage**
9 = 115 Volts / 60 Hertz / Natural Gas
A = 115 Volts / 50 Hertz / Natural Gas
C = 115 Volts / Natural Gas with Communicating System Control
F = 115 Volts / Natural Gas with Integrated Electronic Filter
D = 115 Volts / Natural Gas with Communicating System Control and Integrated Electronic Filter
 - Air Capacity for Cooling**

Standard PSC	Variable Speed	High Efficiency
24 = 2 Tons	V3 = 3 Tons	H3 = 3 Tons
36 = 3 Tons	V4 = 4 Tons	H4 = 4 Tons
42 = 3.5 Tons	V5 = 5 Tons	H5 = 5 Tons
45 = 4 Tons		
48 = 4 Tons		
54 = 5 Tons		
60 = 5 Tons		
72 = 6 Tons		
 - Draft Inducer Speeds**
1 = Single Speed
2 = Two Speed
V = Variable Speed
 - Minor Design Change**
 - Service Digit - Not Orderable**

Air Handler

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
G A M 5 A 0 B 3 6 M 3 1 S A A
- Brand**
T = Better
G = Good
 - Product Type**
A = Air Handler
 - Convertability**
M = Multi-poise 4-way
F = Upflow Front Return, 3-way
T = 3-way
 - Product Tier**
2 = Good, Entry Level Feature Set
4 = Better, Retail Replacement Mid Effic.
5 = Better, Entry Level High Effic., Multi-Speed
7 = Best, Retail Replacement High Effic., Variable-Speed
8 = Best, Retail Ultimate High Effic., Variable-Speed
 - Major Design Change**
 - No Descriptor**
0 = Air Handler / Coil
 - Size (Footprint)**
A = 17.5 x 21.5
B = 21.0 x 21.5
C = 23.5 x 21.5
 - Cooling Size: Air Handler or Coil**
0-9 = AH Coil - 1000 BTU's (18, 24, 30, 36, 42, 48, 60)
 - Airflow Type & Capability**
S = Low Effic PSC, 1-5 - nom. Tonnage (cfm/ton)
M = Mid Effic Multi-Speed, 1-5 - nom. Tonnage (cfm/ton)
H = High Effic Multi-Speed, 1-5 - nom. Tonnage (cfm/ton)
V = High Effic Variable, 1-5 - nom. Tonnage (cfm/ton)
 - Power Supply**
1 = 208-230/1/60
 - System Control Type**
S = Standard - 24 VAC
C = CLII 13.8 VDC
 - Minor Design Change**
 - Unit Parts Identifier**

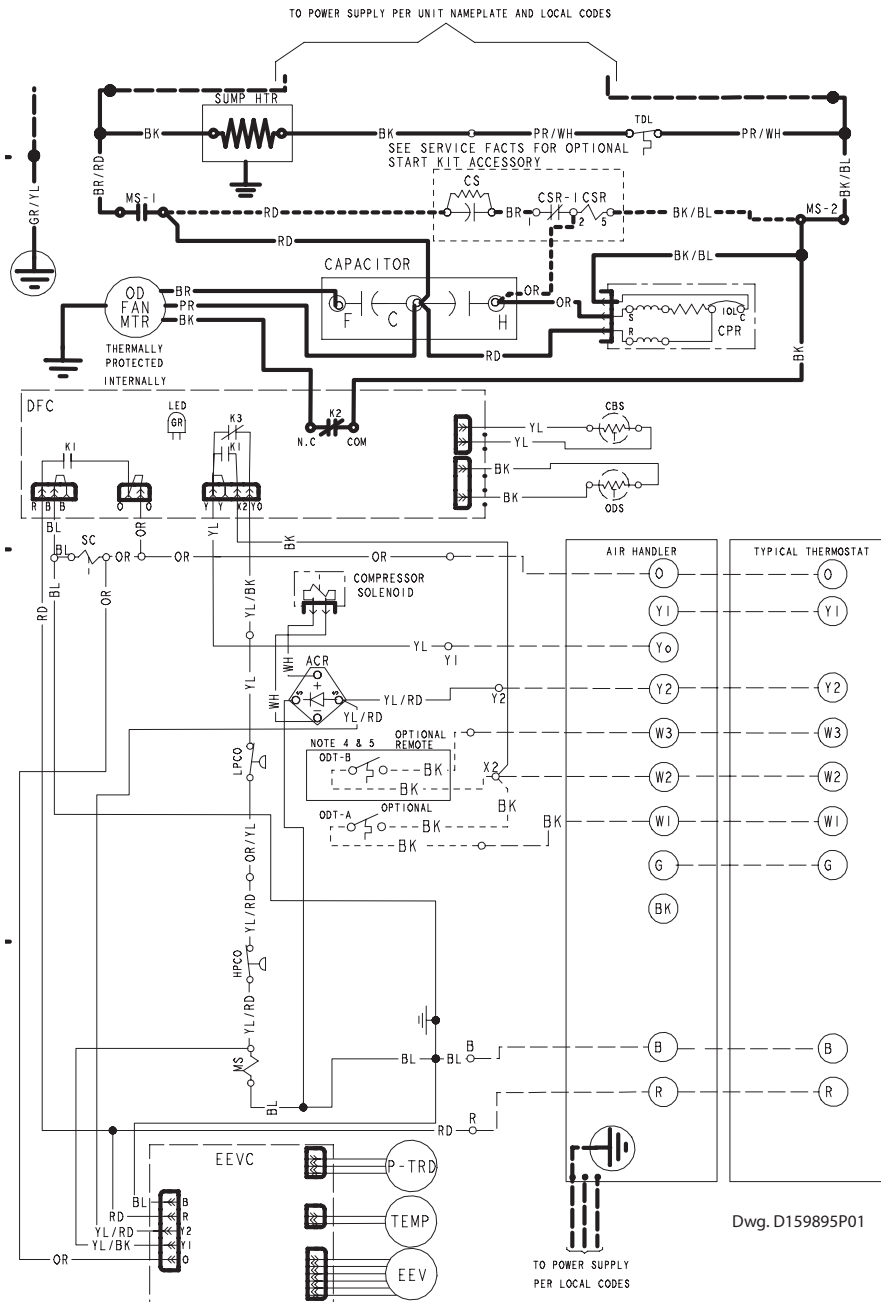
Heat Pump/ Cooling Coils

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
4 T X C B 0 3 6 A C 3 H C A A
- Refrigerant Type**
4 = R-410A
 - Series**
T = Premium (Heat Pump or Convertible Coil)
C = Standard (Cooling Only)
 - Coil Design**
X = Direct Expansion Evaporator Coil
 - Coil Feature**
C = Cased A Coil
A = Uncased A Coil
F = Cased Horizontal Flat Coil
 - Coil Width (Cased/Uncased)**
A = 14.5" / 13.3"
B = 17.5" / 16.3"
C = 21.0" / 19.8"
D = 24.5" / 23.3"
H = 10.5"
 - Refrigerant Line Coupling**
0 = Brazed
 - Nominal Capacity in 1000's (BTUH)**
 - Major Design Change**
 - Efficiency**
C = Standard
S = Hi Efficiency (derived from 10 SEER products)
 - Refrigerant Control**
3 = TXV - Non-Bleed
 - Coil Circuitry**
H = Heat Pump
C = Cooling
 - Airflow Configuration**
A = Upflow Only
U = Upflow / Downflow
H = Horizontal Only
C = Convertible - Upflow, Downflow, Left or Right Airflow
 - Minor Design Change**
 - Service Digit - Not Orderable**

Electrical Data

Schematic Diagrams (SEE LEGEND)

4A6H7024B, 036B



- ACR A/C RECTIFIER
- CBS COIL BOTTOM SENSOR
- CF FAN CAPACITOR
- CN WIRE CONNECTOR
- CPR COMPRESSOR
- CR RUN CAPACITOR
- CS STARTING CAPACITOR
- CSR CAPACITOR SWITCHING RELAY
- DFC DEFROST CONTROL
- EEV ELECTRONIC EXP VALVE
- EEVC ELECTRONIC EXP VALVE CONTROL
- F INDOOR FAN RELAY
- HPCO HIGH PRESSURE CUTOFF SWITCH
- IOL INTERNAL OVERLOAD PROTECTOR
- LPKO LOW PRESSURE CUTOFF SWITCH
- MS COMPRESSOR MOTOR CONTACTOR
- ODA OUTDOOR ANTICIPATOR
- ODT OUTDOOR FAN THERMOSTAT
- ODS OUTDOOR TEMPERATURE SENSOR
- ODT OUTDOOR THERMOSTAT
- P-TRD PRESSURE TRANSDUCER
- SC SWITCH OVER VALVE SOLENOID
- SM SYSTEM ON-OFF SWITCH
- TDL DISCHARGE LINE THERMOSTAT
- TDR TIME DELAY RELAY (5 SEC DELAY ON)
- TNS TRANSFORMER
- TEMP SENSOR, TEMPERATURE
- Y2C HIGH CAPACITY CONTROL RELAY

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.

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:

1. 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 W1.
6. IF ELECTRIC HEATER DOES NOT HAVE A 3RD CONTACTOR (CH), CONNECT A JUMPER WIRE FROM W3 TO W2. IF ELECTRIC HEATER DOES NOT HAVE A 2ND CONTACTOR (BH), CONNECT A JUMPER WIRE FROM W2 TO W1.
7. WITH Y1 ENERGIZED, INDOOR FAN IS 1ST STAGE AIRFLOW.
8. WITH Y1 & Y2 ENERGIZED, INDOOR FAN IS 2ND STAGE AIRFLOW.
9. SEE AIR HANDLER INSTALLER GUIDE FOR DIP SWITCH CONFIGURATIONS.

FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES

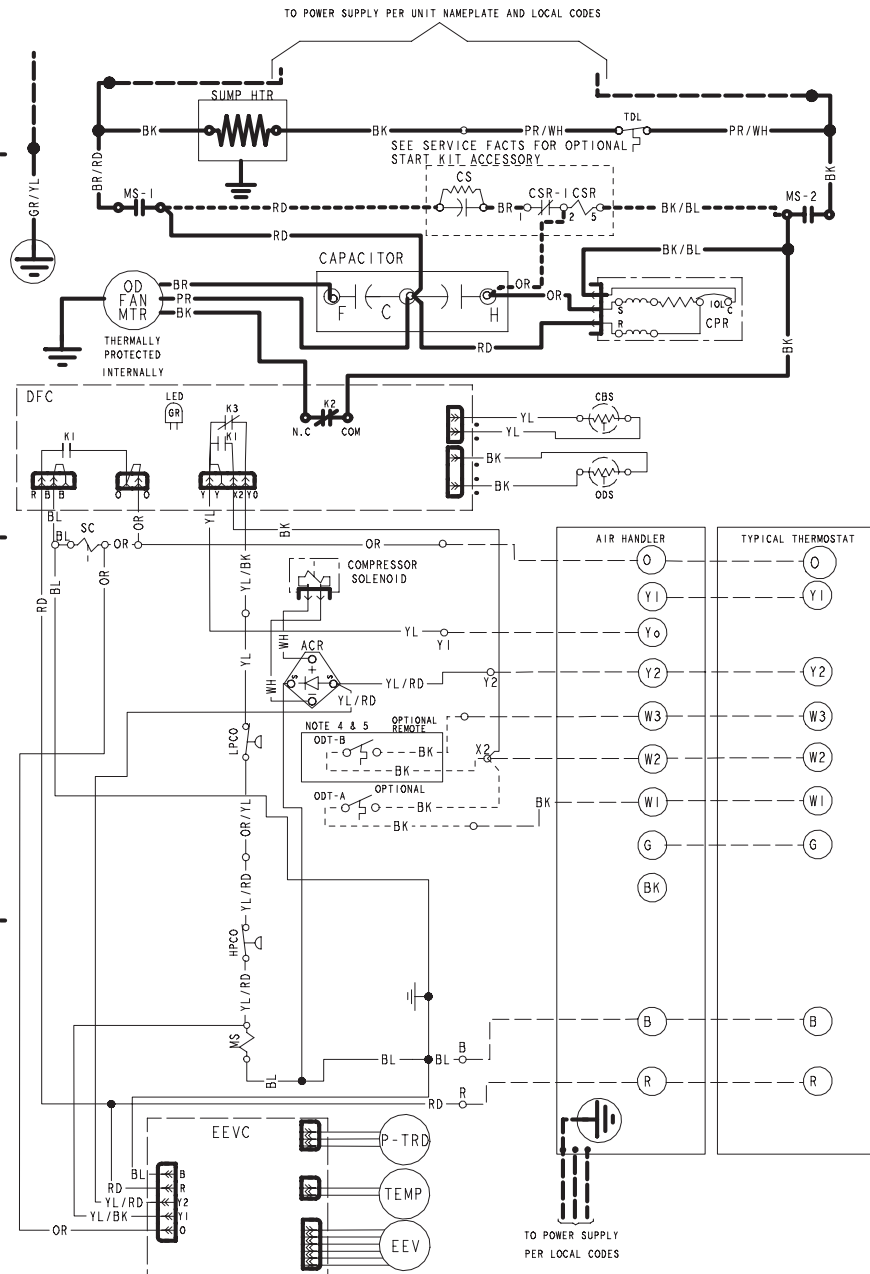
CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND
ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE

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Electrical Data

Schematic Diagrams (SEE LEGEND)

4A6H7048A, 060A



- ACR A/C RECTIFIER
- CBS COIL BOTTOM SENSOR
- CF FAN CAPACITOR
- CH WIRE CONNECTOR
- CPR COMPRESSOR
- CR RUN CAPACITOR
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- CSR CAPACITOR SWITCHING RELAY
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- SM SYSTEM ON-OFF SWITCH
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- TNS TRANSFORMER

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 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 W1.
 6. IF ELECTRIC HEATER DOES NOT HAVE A 3RD CONTACTOR (CH), CONNECT A JUMPER WIRE FROM W3 TO W2. IF ELECTRIC HEATER DOES NOT HAVE A 2ND CONTACTOR (BH), CONNECT A JUMPER WIRE FROM W2 TO W1.
 7. WITH Y1 ENERGIZED, INDOOR FAN IS 1ST STAGE AIRFLOW.
 8. WITH Y1 & Y2 ENERGIZED, INDOOR FAN IS 2ND STAGE AIRFLOW.
 9. SEE AIR HANDLER INSTALLER GUIDE FOR DIP SWITCH CONFIGURATIONS.

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**

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Mechanical Specifications

General

The 4A6H7 is fully charged from the factory for matched indoor section and 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 shall be certified to UL 1995. Exterior is designed for outdoor application.

Casing

Unit casing is constructed of heavy gauge, G60 galvanized steel and painted with a weather-resistant powder paint on all louvers and panels. Corrosion and weatherproof CMBP-G30 DuraBase™ base.

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 installed liquid line drier is standard.

Compressor

The Duration™ 2-stage compressor features internal over temperature and pressure protection and hermetic motor. Other features include centrifugal oil pump and modular plugs for electrical connections.

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 unit has a cooling capability to 55°F. For low ambient cooling below 55° see Application Guide APP-APG014-EN.

