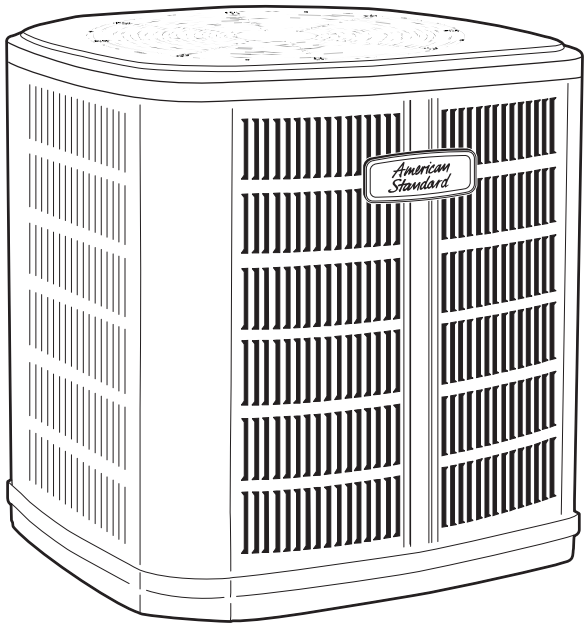
American Standard®
HEATING & AIR CONDITIONING

Product Data

Split System Cooling
2, 3, 4 & 5 Ton

4A7A7024A
4A7A7036A
4A7A7048B
4A7A7060A



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

October 2020

12-1348-2D-EN

American Standard
HEATING & AIR CONDITIONING

Features and Benefits

- **DURATION™** 2-stage scroll compressor
- Efficiency up to **18.0 SEER**
- All Aluminum **SPINE FIN™** coil
- **DURATUFF™** weather proof and rust proof base
- **COMFORT "R"™** mode approved for better comfort indoors
- **QUICK-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

American Standard
HEATING & AIR CONDITIONING

General Data

Product Specifications

Model No. ①	4A7A7024A1000C	4A7A7036A1000C	4A7A7048B1000A	4A7A7060A1000B
Electrical Data V/Ph/Hz ②	230/1/60	230/1/60	230/1/60	230/1/60
Min Cir Ampacity	13.4	18.4	28	41
Max Fuse Size (Amps)	20	30	45	60
Compressor	DURATION® - SCROLL	DURATION® - SCROLL	DURATION® - SCROLL	DURATION® - SCROLL
RL AMPS - LR AMPS	10.2 - 55.2	14.2 - 78.1	21.2 - 104	32.1 - 152.9
Outdoor Fan FL Amps	0.71	0.71	1.00	2.80
Fan HP	1/8	1/8	1/5	1/3
Fan Dia (inches)	27.6	27.6	27.6	27.6
Coil	Spine Fin™	Spine Fin™	Spine Fin™	Spine Fin™
Refrigerant R-410A	9/4-LB/OZ	8/12-LB/OZ	13/3-LB/OZ	12/9-LB/OZ
Line Size - (in.) O.D. Gas ③	3/4	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	51 x 35.1 x 38.7	51 x 35.1 x 38.7	51 x 35.1 x 38.7
Weight - Shipping	280	288	308	312
Weight - Net	244	250	271	275
Start Components	NO	NO	NO	NO
Sound Enclosure	NO	NO	NO	NO
Compressor Sump Heat	NO	NO	NO	NO
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
Crankcase Heater Kit	BAYCCHT301	BAYCCHT301	BAYCCHT301	BAYCCHT301
Extreme Condition Mounting Kit	BAYECMT023	BAYECMT004	BAYECMT004	BAYECMT004
Auto Charge Solenoid Kit	BAYCAKT001	BAYCAKT001	BAYCAKT001	BAYCAKT001
Refrigerant Lineset ⑤				

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 25, 30, 35, and 50 foot linesets available. For a complete listing of lineset options available from equipment or supply stores, refer to the American Standard Quick Reference Guide.

General Data

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
4A7A7024A1	72	70	69	63	66	60	56	53	48
4A7A7036A1	72	64	67	65	64	60	56	54	50
4A7A7048B1	73	70	67	68	66	63	56	53	49
4A7A7060A1	74	68	70	66	69	66	57	57	53

Note: Rated in accordance with AHRI Standard 270-2008

Accessory Description and Usage

Rubber Isolators — 5 rubber donuts to isolate condensing unit from mounting frame or pad. Use on any application where sound transmission needs to be minimized.

Extreme Conditions Mounting 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 rooftops, etc.

Low Ambient Cooling — For low ambient cooling below 55° see Application Guide APP-APG013-EN.

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.

American Standard
HEATING & AIR CONDITIONING

Model Nomenclature

Outdoor Units

4 A 7 A 7 0 3 6 A 1 0 0 0 A A

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
A U D 1 B 0 8 0 A 9 H 3 1 A A

Furnace Configuration
AU = Upflow/Horizontal
AD = 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
3 = Three 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 2 A 0 A 3 6 S 3 1 S A A

Brand
A,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 Effy.
5 = Better, Entry Level High Effy., Multi-Speed
7 = Best, Retail Replacement High Effy., Variable-Speed
8 = Best, Retail Ultimate High Effy., 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 Effy PSC, 1-5 - nom. Tonnage (cfm/ton)
M = Mid Effy Multi-Speed, 1-5 - nom. Tonnage (cfm/ton)
H = High Effy Multi-Speed, 1-5 - nom. Tonnage (cfm/ton)
V = High Effy 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

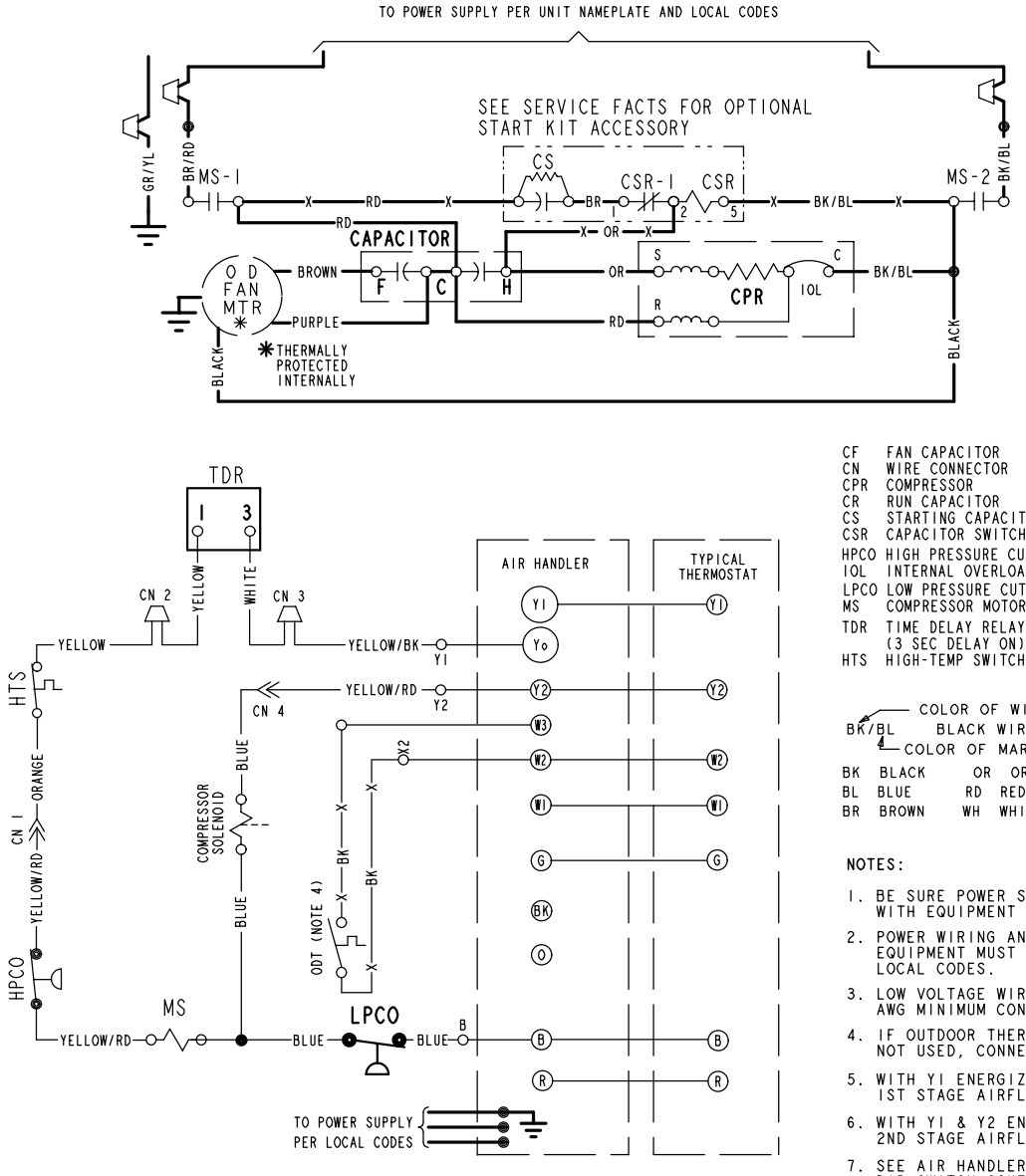
Service Digit - Not Orderable

Electrical Data

Schematic Diagrams

(SEE LEGEND)

4A7A7024A, 036



CF FAN CAPACITOR
CN WIRE CONNECTOR
CPR COMPRESSOR
CR RUN CAPACITOR
CS STARTING CAPACITOR
CSR CAPACITOR SWITCHING RELAY
HPCO HIGH PRESSURE CUTOUT SW.
IOL INTERNAL OVERLOAD PROTECTOR
LPCO LOW PRESSURE CUTOUT SW.
MS COMPRESSOR MOTOR CONTACTOR
TDR TIME DELAY RELAY (3 SEC DELAY ON)
HTS HIGH-TEMP SWITCH

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

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. IF OUTDOOR THERMOSTAT (ODT) IS NOT USED, CONNECT W2 TO W3.
5. WITH Y1 ENERGIZED, INDOOR FAN IS 1ST STAGE AIRFLOW.
6. WITH Y1 & Y2 ENERGIZED, INDOOR FAN IS 2ND STAGE AIRFLOW.
7. SEE AIR HANDLER INSTALLER GUIDE FOR DIP SWITCH CONFIGURATIONS.

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

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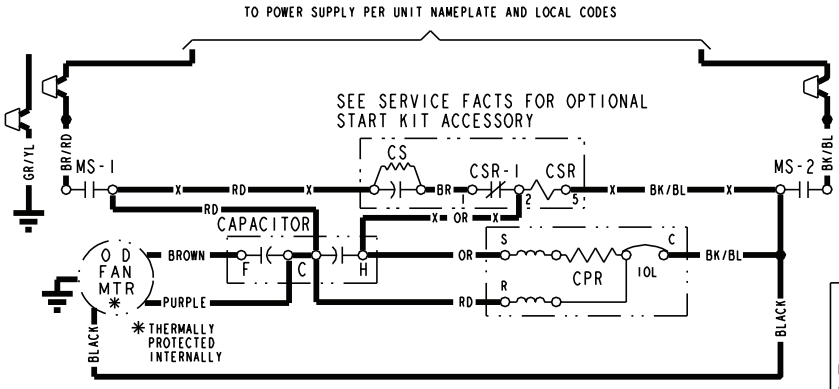
American Standard
HEATING & AIR CONDITIONING

Electrical Data

Schematic Diagrams

(SEE LEGEND)

4A7A7048B, 060A



CA	COOLING ANTICIPATOR	LPCO	LOW PRESSURE CUTOUT SW.
CBS	COIL BOTTOM SENSOR	MS	COMPRESSOR MOTOR CONTACTOR
CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
CN	WIRE CONNECTOR	OFT	OUTDOOR FAN THERMOSTAT
CPR	COMPRESSOR	ODS	OUTDOOR TEMPERATURE SENSOR
CR	RUN CAPACITOR	ODT	OUTDOOR THERMOSTAT
CS	STARTING CAPACITOR	RHS	RESISTANCE HEAT SWITCH
CSR	CAPACITOR SWITCHING RELAY	SC	SWITCHOVER VALVE SOLENOID
DFC	DEFROST CONTROL	SM	SYSTEM "ON-OFF" SWITCH
F	INDOOR FAN RELAY	TDL	DISCHARGE LINE THERMOSTAT
HA	HEATING ANTICIPATOR	TDR	TIME DELAY RELAY (5 SEC DELAY ON)
HPCO	HIGH PRESSURE CUTOUT SW.	TNS	TRANSFORMER
IOL	INTERNAL OVERLOAD PROTECTOR	TS	HEATING-COOLING THERMOSTAT
ACR	A/C RECTIFIER	TSH	HEATING THERMOSTAT

⚠ WARNING	⚠ CAUTION
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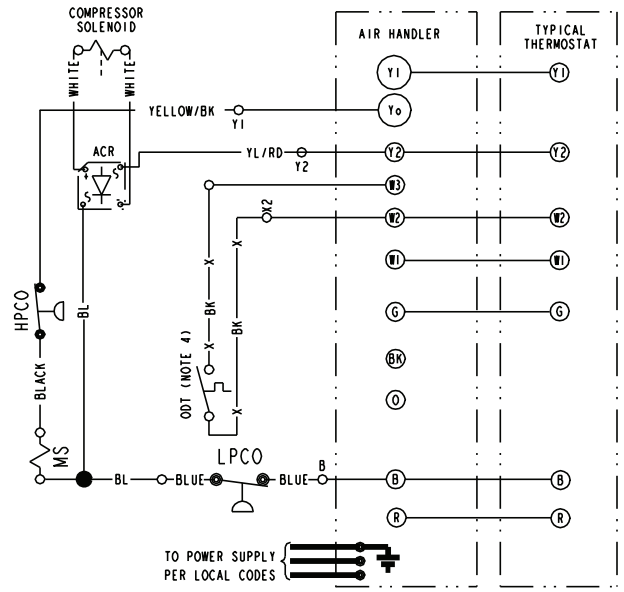

COLOR OF WIRE
BK/BL BLACK WIRE WITH BLUE MARKER
COLOR OF MARKER

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

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FOR CANADIAN INSTALLATIONS
POUR INSTALLATIONS CANADIENNES

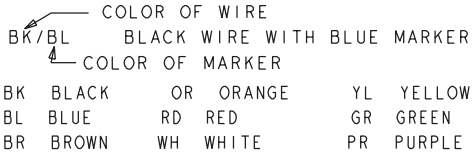
CAUTION: NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150V-TO-GROUND.
ATTENTION: NE CONVIENT PAS AUX INSTALLATIONS DE PLUS DE 150 V A LA TERRE.

Printed from D1567615P03

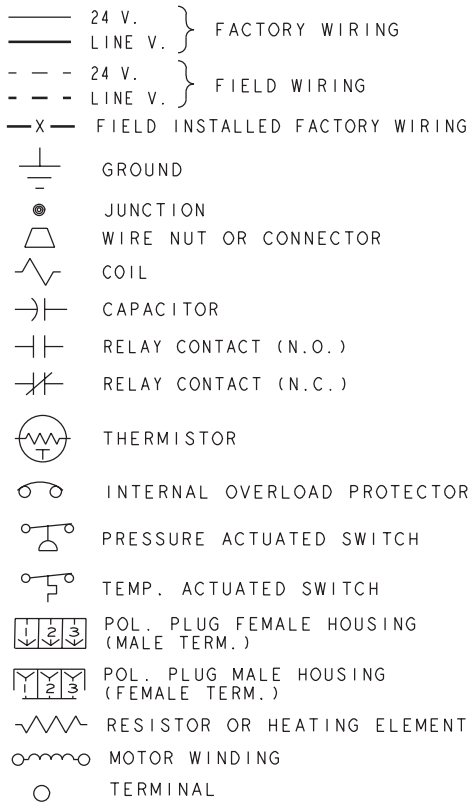
Electrical Data

Schematic Diagrams

LEGEND



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



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CF	FAN CAPACITOR	ODA	OUTDOOR ANTICIPATOR
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HPCO	HIGH PRESSURE CUTOUT SW.	TS	HEATING-COOLING THERMOSTAT
IOL	INTERNAL OVERLOAD PROTECTOR	TSH	HEATING THERMOSTAT

Dimensions

4A7A7 Outline Drawing

Note: All dimensions are in MM (Inches).

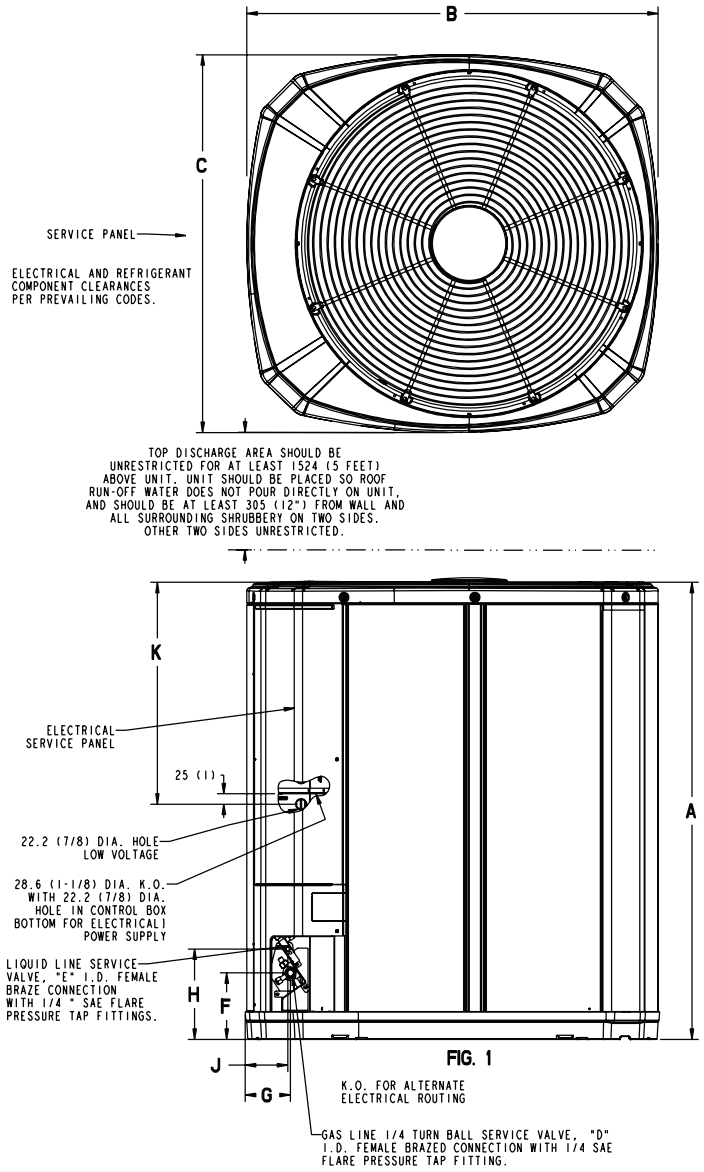

FIG. 1

MODELS	BASE	A	B	C	D	E	F	G	H	J	K
4A7A7024A	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)
4A7A7036A	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)
4A7A7048B	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)
4A7A7060A	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)

From Dwg. D152862 Rev. 26

Mechanical Specifications

General
The outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit, ten (10) feet of tested connecting line, and the smallest rated indoor evaporative coil match. 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: roto lock suction and discharge refrigerant connections, 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.

American Standard
HEATING & AIR CONDITIONING

About American Standard Heating and Air Conditioning
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For more information, please visit www.americanstandardair.com.

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Unitary Small AC
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

c UL us LISTED

The AHRI Certified mark indicates company participation in the AHRI Certification program. For verification of individual certified products, go to ahridirectory.org.

The manufacturer has a policy of continuous data improvement and it reserves the right to change design and specifications without notice. We are committed to using environmentally conscious print practices.

12-1348-2D-EN 14 Oct 2020
Supersedes 12-1348-2C-EN (May 2020)