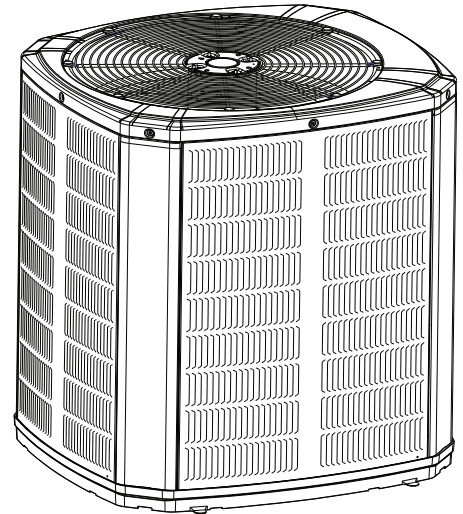


# Product Data

## Variable Speed AccuLink™ Air Conditioners

4A7V8024A1000B  
4A7V8036A1000B  
4A7V8037A1000B  
4A7V8048A1000B  
4A7V8060A1000B



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

## Mechanical Specification Options

### General

This unit is designed to operate at outdoor ambient temperatures from 55° F to 120° F in cooling. From -10° F to 66° F in heating (heat pumps only). Only AHRI approved indoor matches are approved for use with these models.

### AccuLink™ Air Conditioners

This outdoor unit contains the AccuLink™ Air Conditioners digital communication with 2 wire connection to outdoor and Plug-n-Play set up.

### Casing

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

### Refrigerant Controls

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

### Compressor

Inverter driven scroll compressor with 25 to 100% output capacity on heat pumps and 30 to 100% output capacity on air conditioners. Noise enclosure minimizes sound levels and built in compressor protection protects compressor will reduce operating speed and current draw to maintain operation while protecting the compressor.

### Condenser Coil

The Spine Fin™ 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 built in freeze protection that will allow cooling operation below 55°F but will reduce capacity or shut down completely to prevent operation under adverse conditions.

### Comfort Control

The 1050/950/850 Control is required and provides Plug-n-Play setup and 3 wire connection.

# Product Specifications

## Air Conditioner Models

<b>OUTDOOR UNIT</b> <sup>(a) (b)</sup>	4A7V8024A1000B	4A7V8036A1000B	4A7V8037A1000B
POWER CONNS. — V/PH/HZ <sup>(c)</sup>	208/230/1/60	208/230/1/60	208/230/1/60
MIN. BRCH. CIR. AMPACITY	17.0	18.0	18.0
BR. CIR. PROT. RTG. — MAX. (AMPS)	25	25	25
<b>COMPRESSOR</b>	SCROLL	SCROLL	SCROLL
NO. USED — NO. SPEEDS	1-VARIABLE	1-VARIABLE	1-VARIABLE
R.L. AMPS <sup>(d)</sup> — L.R. AMPS	11.5 — 10.2	12.4 — 10.2	12.4 — 10.2
<b>FACTORY INSTALLED</b>			
START COMPONENTS <sup>(e)</sup>	NA	NA	NA
INSULATION/SOUND BLANKET	YES	YES	YES
COMPRESSOR HEAT	YES	YES	YES
<b>OUTDOOR FAN</b>			
DIA. (IN.) — NO. USED	23 — 1	23 — 1	27.5 — 1
TYPE DRIVE — NO. SPEEDS	DIRECT — VARIABLE	DIRECT — VARIABLE	DIRECT — VARIABLE
CFM @ 0.0 IN. W.G. <sup>(f)</sup>	2680	2850	3670
NO. MOTORS — HP	1 — 1/3	1 — 1/3	1 — 1/3
MOTOR SPEED R.P.M.	200 — 1200	200 — 1200	200 — 1200
VOLTS/PH/HZ	208/230/1/60	208/230/1/60	208/230/1/60
F.L. AMPS	2.8	2.8	2.8
<b>OUTDOOR COIL — TYPE</b>	SPINE FIN™	SPINE FIN™	SPINE FIN™
ROWS — F.P.I.	1 — 24	1 — 24	1 — 24
FACE AREA (SQ. FT.)	19.77	23.75	27.87
TUBE SIZE (IN.)	3/8	3/8	3/8
<b>REFRIGERANT</b>	R410-A	R410-A	R410-A
LBS. — R-410A (O.D. UNIT) <sup>(g)</sup>	7 lb — 6 oz	7 lb — 14 oz	10 lb — 0 oz
FACTORY SUPPLIED	YES	YES	YES
LINE SIZE — IN. O.D. GAS	5/8 <sup>(h)</sup>	3/4 <sup>(h)</sup>	3/4 <sup>(h)</sup>
LINE SIZE — IN. O.D. LIQ. <sup>(h)</sup>	3/8	3/8	3/8
<b>CHARGING SPECIFICATIONS</b>			
SUBCOOLING	10°	10°	10°
<b>DIMENSIONS</b>	H X W X D	H X W X D	H X W X D
CRATED (IN.)	46 X 30.1 X 33	46 X 30.1 X 33	46.4 X 35.1 X 38.7
<b>WEIGHT</b>			
SHIPPING (LBS.)	217	228	248
NET (LBS.)	196	207	225

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

<sup>(b)</sup> Rated in accordance with AHRI standard 270/275.

<sup>(c)</sup> Calculated in accordance with Natl. Elec. Codes. Use only HACR circuit breakers or fuses.

<sup>(d)</sup> 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>(e)</sup> No means no start components. Yes means quick start kit components. PTC means positive temperature coefficient starter.

<sup>(f)</sup> Standard Air — Dry Coil — Outdoor

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

<sup>(h)</sup> Max. linear length 150 ft.; Max. lift — Suction 50 ft.; Max. lift — Liquid 50 ft.

## Product Specifications

### Air Conditioner Models

<b>OUTDOOR UNIT</b> <sup>(a) (b)</sup>	4A7V8048A1000B	4A7V8060A1000B
POWER CONNS. — V/PH/HZ <sup>(c)</sup>	208/230/1/60	208/230/1/60
MIN. BRCH. CIR. AMPACITY	23.0	27.0
BR. CIR. PROT. RTG. — MAX. (AMPS)	35	40
<b>COMPRESSOR</b>	SCROLL	SCROLL
NO. USED — NO. SPEEDS	1-VARIABLE	1-VARIABLE
R.L. AMPS <sup>(d)</sup> — L.R. AMPS	16.0 — 12.0	19.3 — 12.0
<b>FACTORY INSTALLED</b>		
START COMPONENTS <sup>(e)</sup>	NA	NA
INSULATION/SOUND BLANKET	YES	YES
COMPRESSOR HEAT	YES	YES
<b>OUTDOOR FAN</b>		
DIA. (IN.) — NO. USED	27.5 — 1	27.5 — 1
TYPE DRIVE — NO. SPEEDS	DIRECT — VARIABLE	DIRECT — VARIABLE
CFM @ 0.0 IN. W.G. <sup>(f)</sup>	4560	4787
NO. MOTORS — HP	1 — 1/3	1 — 1/3
MOTOR SPEED R.P.M.	200 — 1200	200 — 1200
VOLTS/PH/HZ	208/230/1/60	208/230/1/60
F.L. AMPS	2.8	2.8
<b>OUTDOOR COIL — TYPE</b>	SPINE FIN™	SPINE FIN™
ROWS — F.P.I.	1 — 24	1 — 24
FACE AREA (SQ. FT.)	27.87	30.80
TUBE SIZE (IN.)	3/8	3/8
<b>REFRIGERANT</b>	R410-A	R410-A
LBS. — R-410A (O.D. UNIT) <sup>(g)</sup>	11 lb — 9 oz	12 lb — 12 oz
FACTORY SUPPLIED	YES	YES
LINE SIZE — IN. O.D. GAS	7/8 <sup>(h)</sup>	1 — 1/8 <sup>(h)</sup>
LINE SIZE — IN. O.D. LIQ. <sup>(h)</sup>	3/8	3/8
<b>CHARGING SPECIFICATIONS</b>		
SUBCOOLING	10°	10°
<b>DIMENSIONS</b>	H X W X D	H X W X D
CRATED (IN.)	46.4 X 35.1 X 38.7	51 X 35.1 X 38.7
<b>WEIGHT</b>		
SHIPPING (LBS.)	270	284
NET (LBS.)	245	258

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

<sup>(b)</sup> Rated in accordance with AHRI standard 270/275.

<sup>(c)</sup> Calculated in accordance with Natl. Elec. Codes. Use only HACR circuit breakers or fuses.

<sup>(d)</sup> 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>(e)</sup> No means no start components. Yes means quick start kit components. PTC means positive temperature coefficient starter.

<sup>(f)</sup> Standard Air — Dry Coil — Outdoor

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

<sup>(h)</sup> Max length of refrigerant lines from outdoor to indoor unit MUST NOT exceed 80 feet. The max vertical change MUST NOT exceed 25 feet. See footnote (h) if 7/8" suction line is used.

## Sound Data

Model	Mode	Speed	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
4A7V8024A	Cool	Min	57	71.2	49.8	51.4	58.3	51.6	44.2	37.4	41.2
	Cool	Max	66	74.8	64.1	61.3	66.2	61.2	56.3	49.4	46.5
4A7V8036A	Cool	Min	55	71.0	53.4	51.2	53.5	51.5	44.6	40.3	41.0
	Cool	Max	70	73.1	70.5	65.8	67.3	66.0	60.9	54.1	50.0
4A7V8037A	Cool	Min	59	69.3	56.0	54.8	54.5	56.8	46.6	38.0	39.0
	Cool	Max	70	79.7	70.2	68.5	66.3	65.8	63.2	56.9	51.4
4A7V8048A	Cool	Min	57	70.7	52.5	51.7	55.3	53.4	43.6	35.1	41.6
	Cool	Max	74	75.5	73.6	72.0	72.8	68.7	63.9	58.3	52.1
4A7V8060A	Cool	Min	62	71.7	55.8	56.8	56.7	60.1	44.7	42.3	41.0
	Cool	Max	75	87.8	77.6	75.2	72.2	70.2	64.7	59.0	51.1

NOTE: Rated in accordance with AHRI Standard 270

Model	Mode	Speed	Sound Pressure in dBA			
			at 3'	at 5'	at 10'	at 15'
4A7V8024A	Cool	Min	50	45	39	36
	Cool	Max	59	54	48	45
4A7V8036A	Cool	Min	48	43	37	34
	Cool	Max	63	58	52	49
4A7V8037A	Cool	Min	52	47	41	38
	Cool	Max	63	58	52	49
4A7V8048A	Cool	Min	50	45	39	36
	Cool	Max	67	62	56	53
4A7V8060A	Cool	Min	55	50	44	41
	Cool	Max	68	63	57	54

NOTE: Rated in accordance with AHRI Standard 275

## Optional Accessories:

Model	4A7V8024A	4A7V8036A	4A7V8037A	4A7V8048A	4A7V8060A
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Snow Leg — Base & Cap 4" High	BAYLEGS002	BAYLEG2002	BAYLEG2002	BAYLEGS002	BAYLEGS002
Snow Leg — 4" Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Extreme Condition Mounting Kit	BAYECMT023	BAYECMT023	BAYECMT04	BAYECMT004	BAYECMT004
Refrigerant Lineset	TAYREFLN9 <sup>(a)</sup>	TAYREFLN7 <sup>(a)</sup>	TAYREFLN7 <sup>(a)</sup>	TAYREFLN3 <sup>(a)</sup>	TAYREFLN3 <sup>(a)</sup>

<sup>(a)</sup> Consult handbook for available length options.

## General Data

### AHRI STANDARD 210/240 RATING CONDITIONS

- 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 entering indoor coil.
- Low Temperature Heating 17°F DB, 15°F WB air entering outdoor coil, 70°F DB air entering indoor coil.
- 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.

## Model Nomenclature

### Outdoor Units

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15  
4 A 6 V 0 0 3 6 A 1 0 0 0 A A

Refrigerant Type  
2 = R-22  
4 = R-410A  
A, T = American Standard

Product Type  
6, W = Split Heat Pump  
7, T = Split Cooling

Product Family  
V = Variable Speed M or B = Basic  
Z = Leadership - Two Stage A = Light Commercial  
X = Leadership  
R = Replacement/Retail

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 1000s 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

### Air Handler

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15  
T A M 8 C 0 B 3 6 Y 3 1 C A A

Brand  
T = American Standard  
G = Good (American Standard Branded)

Product Type  
A = Air Handler

Convertibility  
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 BTUs (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

### Gas Furnaces

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15  
A U H 1 B 0 8 0 A C V 3 V 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

### 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)  
N = Premium (Convertible to HP)  
C = Standard

Coil Design  
X = Direct Expansion Evaporator Coil

Coil Feature  
C = Case 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 Upflow

Minor Design Change

Service Digit - Not Orderable

# Wiring — D157619P04

## LEGEND

	24 V FACTORY WIRING
	24 V FIELD INSTALLED WIRING
	MAGNETIC COIL
	EARTH GROUND
	CHASSIS EARTH GROUND
	JUNCTION
	WIRE NUT OR TERMINAL
	THERMISTOR
	INTERNAL OVERLOAD PROTECTION
	PRESSURE ACTUATED SWITCH
	RESISTOR OR HEATING ELEMENT
	MOTOR WINDING
	SHIELDED CABLE
	POLE PLUG MALE NOISING (FEMALE TERMINALS)
	POLE PLUG FEMALE NOISING (MALE TERMINALS)
	COLOR OF WIRE
	BK - BLACK
	RD - RED
	OR - ORANGE
	WH - WHITE
	GR - GREEN
	BL - BLUE
	PK - PINK
	DR - DRAIN
	TR - TERMINAL BLOCK
	DTS - DOOR TEMPERATURE SENSOR
	PSC - PERMANENT SPLIT CAPACITOR MOTOR COIL
	CS - CHANGE SOLENOID
	LS - LOAD JED
	CBS - COIL BOTTOM SENSOR
	CDA - COIN DISPLAY ASSEMBLY
	VSC - VARIABLE SPEED COMPRESSOR
	EVS - ELECTRONIC EXP VALVE
	OOS - OUTDOOR TEMPERATURE SENSOR
	SP-TRD - SUCTON PRESSURE TRANSDUCER
	SC/LSOY - SWITCH OVER VALVE SOLENOID
	STS - SUCTON TEMPERATURE SENSOR
	IS - INSULATED COIN
	P - PRESSURE
	CL - COMMUNICATION LINK
	PSC - PERMANENT SPLIT CAPACITOR MOTOR COIL
	CS - CHANGE SOLENOID
	LS - LOAD JED

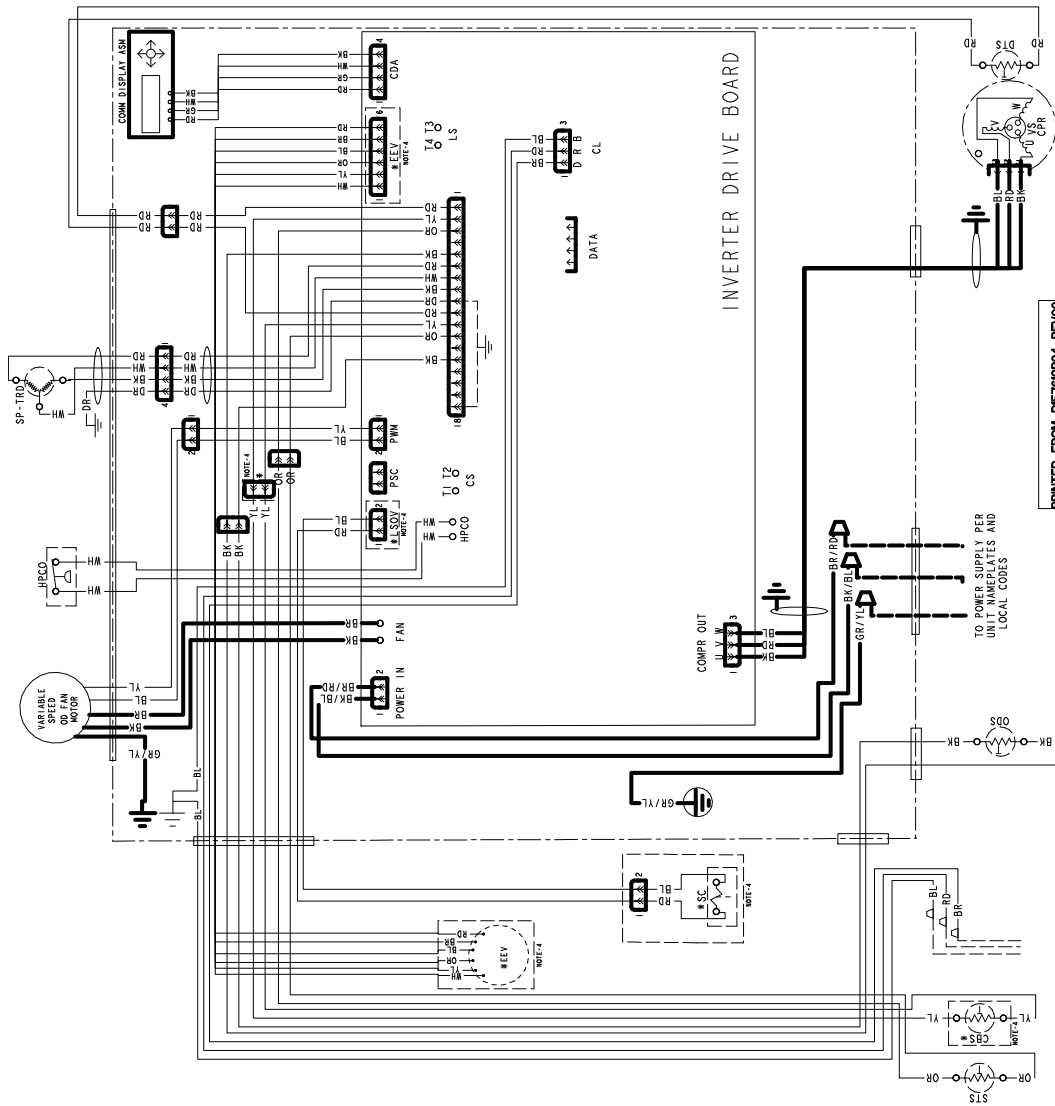
### NOTES:

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. \* ONLY USED ON HEAT PUMP MODELS AND NOT ON AC UNITS

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

**WARNING**  
HAZARDOUS VOLTAGE!  
DISCONNECT ALL ELECTRICAL POWER BEFORE SERVICING THIS EQUIPMENT. FAILURE TO DISCONNECT POWER BEFORE SERVICING MAY RESULT IN PERSONAL INJURY OR DEATH.

**CAUTION**  
USE COPPER CONDUCTORS ONLY!  
UNIT TERMINALS ARE NOT DESIGNED FOR ALUMINUM WIRE CONNECTIONS. FAILURE TO USE THE PROPER CONDUCTOR TO THE EQUIPMENT.



PRINTED FROM D157619P04 REV/00











Ingersoll Rand (NYSE: IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands — including Club Car®, Ingersoll Rand®, Thermo King® and Trane® — work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a global business committed to a world of sustainable progress and enduring results.



[ingersollrand.com](http://ingersollrand.com)



The AHRI Certified mark indicates Ingersoll Rand participation in the AHRI Certification program. For verification of individual certified products, go to [www.ahridirectory.org](http://www.ahridirectory.org).

Ingersoll Rand has a policy of continuous product and product data improvements and reserves the right to change design and specifications without notice.

We are committed to using environmentally conscious print practices.

12-1355-1D-EN 21 Jun 2019

Supersedes 12-1355-1C-EN (November 2017)

©2019 Ingersoll Rand