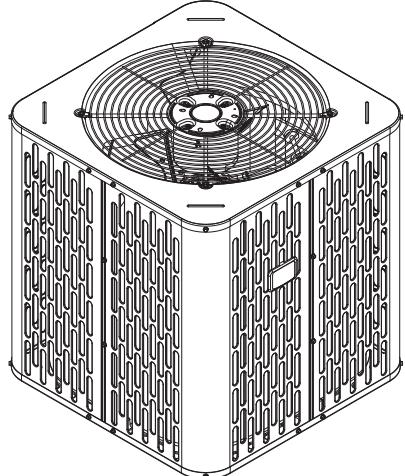


# Product and Submittal Data

## Split System Air Conditioner

A5AC4018B1000A  
A5AC4024B1000A  
A5AC4030B1000A  
A5AC4036B1000A  
A5AC4042B1000A  
A5AC4048B1000A  
A5AC4060B1000A/B



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

# **Introduction**

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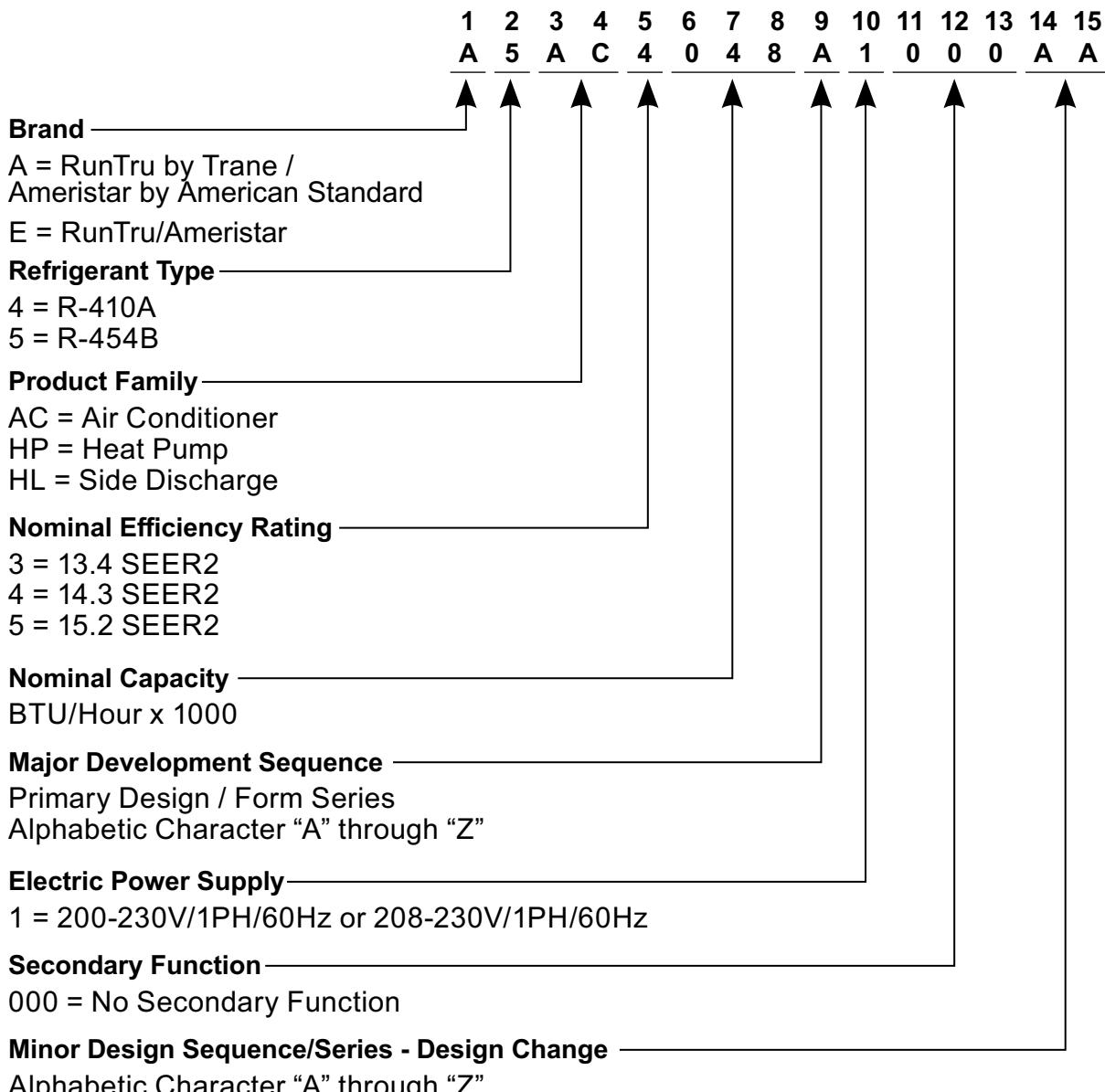
## **Revision History**

- Updated model numbers throughout the document
- Updated Product Specifications tables in the Product Specifications chapter.
- Updated Sound Power Level table in the Sound Power Level chapter.
- Updated Wiring Diagrams in the Wiring Diagrams chapter.
- Updated Unit dimensions table in the Dimensional Data chapter.

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# Model Number Description



# General Data

## **AHRI standard 210/240 rating conditions:**

- Cooling: 80°F DB; air entering indoor coil: 67°F WB; air entering outdoor coil: 95°F DB
- High temperature heating: 47°F DB; air entering outdoor coil: 43°F WB; entering indoor coil: 70°F DB
- Low temperature heating: 17°F DB; air entering outdoor coil: 15°F WB; air entering indoor coil: 70°F DB
- Rated indoor airflow for heating is the same as for cooling.

## **AHRI standard 270 rating conditions:**

The noise rating numbers are determined with the unit in cooling operation. Standard Noise Rating number is at 95°F outdoor air.

# Product Specifications

Table 1. Models — A5AC4018B1000, A5AC4024B1000, A5AC4030B1000, and A5AC4036B1000

Outdoor Unit <sup>(a)</sup> <sup>(b)</sup>	A5AC4018B1000	A5AC4024B1000	A5AC4030B1000	A5AC4036B1000
14th Digit of the Model Number	A	A	A	A
Power Conns. – V/Ph/Hz <sup>(c)</sup>	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
Min. BRCH. CIR. Ampacity	9	13	14	18
BR. CIR. PROT. RTG. – Max. (Amps)	15	20	20	30
<b>Compressor</b>	Scroll	Scroll	Scroll	Scroll
No. Stages	1	1	1	1
Volts/Ph/Hz	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
R.L. Amps <sup>(d)</sup> - L.R. Amps	6.9 - 45	9.6 - 59	10.7 - 71	13.9 - 75
Factory Installed				
Start Components <sup>(e)</sup>	No	No	No	No
Insulation/Sound Blanket	No	No	No	No
Compressor Heat	No	No	No	No
<b>Outdoor Fan</b>	Propeller	Propeller	Propeller	Propeller
Dia. (in.)	18	18	19	19
Type Drive - No. Speeds	Direct - 1	Direct - 1	Direct - 1	Direct - 1
CFM @ 0.0 (in.) W.G. <sup>(f)</sup>	1878	1878	2684	2726
HP	1/12	1/12	1/8	1/8
Motor Speed – rpm	810	810	1100	1100
Volts/Ph/Hz	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
F.L. Amps	0.54	0.54	0.85	0.85
<b>Outdoor Coil - Type</b>	All Aluminum	All Aluminum	All Aluminum	All Aluminum
Rows - F.P.I.	1 - 24	1 - 24	1 - 24	1 - 24
Face Area (sq. ft.)	12.64	12.64	13.75	13.75
Tube Size (in.)	3/8	3/8	3/8	3/8
<b>Refrigerant</b>				
lb – R-454B (O.D. Unit) <sup>(g)</sup>	3 lb, 13 oz	3 lb, 13 oz	3 lb, 12 oz	3 lb, 14 oz
Factory Supplied	Yes	Yes	Yes	Yes
Valve Connection Size - (in.) O.D. Gas	3/4	3/4	3/4	3/4
Valve Connection Size - (in.) O.D. Liq.	5/16	5/16	5/16	5/16
Line Size - (in.) O.D. Gas <sup>(h)</sup> <sup>(i)</sup>	3/4	3/4	3/4	3/4
Line Size - (in.) O.D. Liq.	5/16	5/16	5/16	5/16
<b>Charging Specifications</b>				
Subcooling	10°F	10°F	10°F	10°F
<b>Dimensions</b>	H x W x D			
Crated (in.)	34.1 x 25.4 x 25.4	34.1 x 25.4 x 25.4	34.1 x 27.4 x 27.4	34.1 x 27.4 x 27.4
<b>Weight</b>				
Shipping (lb)	152	152	158	158
Net (lb)	130	130	134	134
<b>Optional Accessories:</b>				
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101

**Table 1. Models — A5AC4018B1000, A5AC4024B1000, A5AC4030B1000, and A5AC4036B1000 (continued)**

Outdoor Unit <sup>(a) (b)</sup>	A5AC4018B1000	A5AC4024B1000	A5AC4030B1000	A5AC4036B1000
Snow Leg — Base and Cap 4 in. High	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg — 4 in. Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Extreme Condition Mounting Kit	BAYECMT023	BAYECMT023	BAYECMT023	BAYECMT023
Evap. Defrost Control Kit	AY28X079	AY28X079	AY28X079	AY28X079
Crankcase Heater Kit (Scroll)	BAYCCHT301RES	BAYCCHT301RES	BAYCCHT301RES	BAYCCHT301RES
External Low Ambient Kit	BAYLOAM108	BAYLOAM108	BAYLOAM108	BAYLOAM108
External Start Kit	BAYKSKT267	BAYKSKT267	BAYKSKT267	BAYKSKT267
Scroll Compressor Enclosure	BAYSDEN004	BAYSDEN004	BAYSDEN004	BAYSDEN004
Refrigerant Lineset <sup>(i)</sup>				

- (a) Certified in accordance with the Air-Source Unitary Air-conditioner Equipment certification program, which is based on AHRI standard 210/240.
- (b) Rated in accordance with AHRI standard 270.
- (c) Calculated in accordance with Natl. Elec. Codes. Use only HACR circuit breakers or fuses.
- (d) This value shown for compressor RLA on the unit nameplate and on this specification sheet is used to compute minimum branch circuit ampacity and maximum fuse size. The value shown is the branch circuit selection current.
- (e) Use start components only when compressor is found to enter locked rotor condition and will not start or when lights dim at compressor start. "No" means no start components. "Yes" means quick start kit components. "PTC" means positive temperature coefficient starter. Optional kit shown.
- (f) Standard Air - Dry Coil - Outdoor.
- (g) This value is approximate. For a more precise value, see unit nameplate.
- (h) 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 Manual for Small Split Cooling and Heat Pump Systems Application Guide* (SS-APG006\*-EN) for long line sets or specialty applications (xx denotes latest revision).
- (i) The outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit, fifteen (15) feet of tested connecting line, and the nominal rated indoor evaporative coil match. Always verify proper system charge via subcooling (TXV/EEV) or superheat (fixed orifice) per the unit nameplate.
- (j) 25, 30, 35 and 50 foot linesets available. For a complete listing of lineset options available from equipment or supply stores, refer to the Trane Residential and Light Commercial Product Handbook.

**Table 2. Models — A5AC4042B1000, A5AC4048B1000, and A5AC4060B1000**

Outdoor Unit <sup>(a) (b)</sup>	A5AC4042B1000	A5AC4048B1000	A5AC4060B1000	
14th Digit of the Model Number	A	A	A	B
Power Conns. – V/Ph/Hz <sup>(c)</sup>	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
Min. BRCH. CIR. Ampacity	21	25	33	33
BR. CIR. PROT. RTG. – Max. (Amps)	35	40	50	50
<b>Compressor</b>	Scroll	Scroll	Scroll	Scroll
No. Stages	1	1	1	1
Volts/Ph/Hz	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
R.L. Amps <sup>(d)</sup> - L.R. Amps	16.1 - 95	19.1 - 95	24 - 125	24 - 125
Factory Installed				
Start Components <sup>(e)</sup>	No	No	No	No
Insulation/Sound Blanket	No	No	No	No
Compressor Heat	No	No	No	No
<b>Outdoor Fan</b>	Propeller	Propeller	Propeller	Propeller
Dia. (in.)	23	23	27.5	27.5
Type Drive - No. Speeds	Direct - 1	Direct - 1	Direct - 1	Direct - 1
CFM @ 0.0 (in.) W.G. <sup>(f)</sup>	3218	3456	5108	5108
HP	1/8	1/5	1/3	1/3
Motor Speed – rpm	1100	850	850	1000
Volts/Ph/Hz	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
F.L. Amps	0.85	1.05	2.8	2.8
<b>Outdoor Coil - Type</b>	All Aluminum	All Aluminum	All Aluminum	All Aluminum
Rows - F.P.I.	1 - 24	1 - 24	1 - 24	1 - 24

## Product Specifications

**Table 2. Models — A5AC4042B1000, A5AC4048B1000, and A5AC4060B1000 (continued)**

Outdoor Unit <sup>(a) (b)</sup>	A5AC4042B1000	A5AC4048B1000	A5AC4060B1000	
Face Area (sq. ft.)	18.75	18.75	19.07	19.07
Tube Size (in.)	3/8	3/8	3/8	3/8
<b>Refrigerant</b>				
lb – R-454B (O.D. Unit) <sup>(g)</sup>	4 lb, 14 oz	5 lb, 6 oz	5 lb, 3 oz	5 lb, 3 oz
Factory Supplied	Yes	Yes	Yes	Yes
Valve Connection Size - (in.) O.D. Gas	7/8	7/8	7/8	7/8
Valve Connection Size - (in.) O.D. Liq.	5/16	5/16	3/8	3/8
Line Size - (in.) O.D. Gas <sup>(h) (i)</sup>	7/8	7/8	1-1/8	1-1/8
Line Size - (in.) O.D. Liq.	5/16	5/16	3/8	3/8
<b>Charging Specifications</b>				
Subcooling	8°F	10°F	8°F	8°F
<b>Dimensions</b>				
Crated (in.)	38 x 31.5 x 31.5	38 x 31.5 x 31.5	34.1 x 36 x 36	34.1 x 36 x 36
<b>Weight</b>				
Shipping (lb)	174	191	189	189
Net (lb)	146	163	161	161
<b>Optional Accessories:</b>				
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Snow Leg — Base and Cap 4 in. High	BAYLEGS002	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg — 4 in. Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003	BAYLEGS003
Extreme Condition Mounting Kit	BAYECMT023	BAYECMT023	BAYECMT023	BAYECMT023
Evap. Defrost Control Kit	AY28X079	AY28X079	AY28X079	AY28X079
Crankcase Heater Kit (Scroll)	BAYCCHT301RES	BAYCCHT301RES	BAYCCHT301RES	BAYCCHT301RES
External Low Ambient Kit	BAYLOAM108	BAYLOAM108	BAYLOAM108	BAYLOAM108
External Start Kit	BAYKSKT267	BAYKSKT267	BAYKSKT267	BAYKSKT267
Small Scroll Compressor Enclosure	BAYSDEN004	BAYSDEN004	BAYSDEN004	BAYSDEN004
Refrigerant Lineset <sup>(j)</sup>				

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

(b) Rated in accordance with AHRI standard 270.

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

(d) This value shown for compressor RLA on the unit nameplate and on this specification sheet is used to compute minimum branch circuit ampacity and maximum fuse size. The value shown is the branch circuit selection current.

(e) Use start components only when compressor is found to enter locked rotor condition and will not start or when lights dim at compressor start. "No" means no start components. "Yes" means quick start kit components. "PTC" means positive temperature coefficient starter. Optional kit shown.

(f) Standard Air - Dry Coil - Outdoor.

(g) This value is approximate. For a more precise value, see unit nameplate.

(h) 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 Manual for Small Split Cooling and Heat Pump Systems Application Guide* (SS-APG006\*-EN) for long line sets or specialty applications (xx denotes latest revision).

(i) The outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit, fifteen (15) feet of tested connecting line, and the nominal rated indoor evaporative coil match. Always verify proper system charge via subcooling (TXV/EEV) or superheat (fixed orifice) per the unit nameplate.

(j) 25, 30, 35 and 50 foot linesets available. For a complete listing of lineset options available from equipment or supply stores, refer to the Trane Residential and Light Commercial Product Handbook.

# Sound Power Level

Table 3. Models — A5AC4018B, A5AC4024B, A5AC4030B, A5AC4036B, A5AC4042B, A5AC4048B, and A5AC4060B

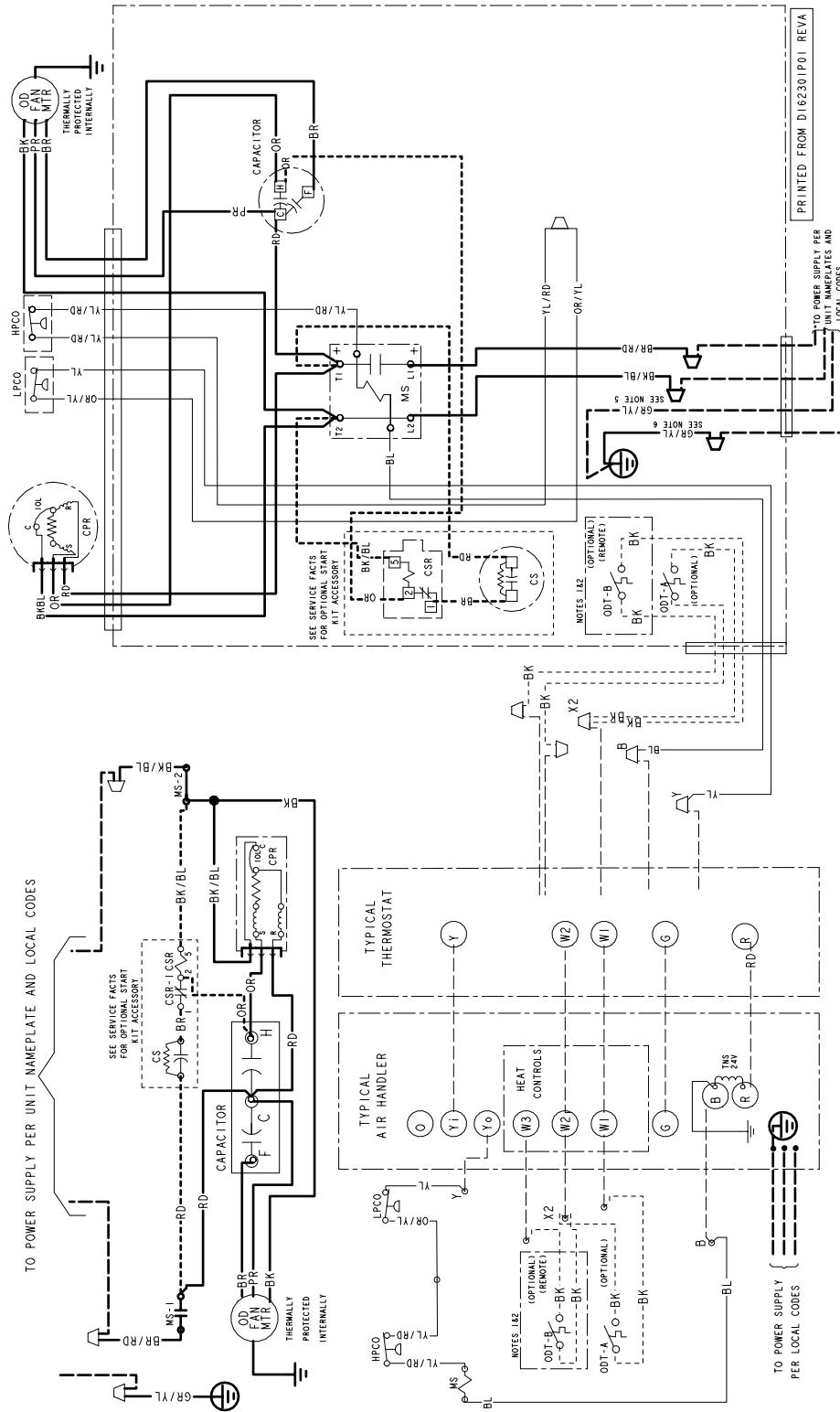
Model	A-Weighted Sound Power Level [dB(A)]	Full Octave Sound Power(dB)						
		63 Hz <sup>(a)</sup>	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
A5AC4018B	75	84	71	70	73	73	66	58
A5AC4024B	75	79	72	72	73	72	67	60
A5AC4030B	75	79	72	72	73	72	67	60
A5AC4036B	73	70	69	69	67	70	65	63
A5AC4042B	73	74	71	71	68	68	64	62
A5AC4048B	73	74	71	71	68	68	64	62
A5AC4060B	76	76	77	76	73	72	67	64

**Note:** Rated in accordance with AHRI Standard 270–2008.

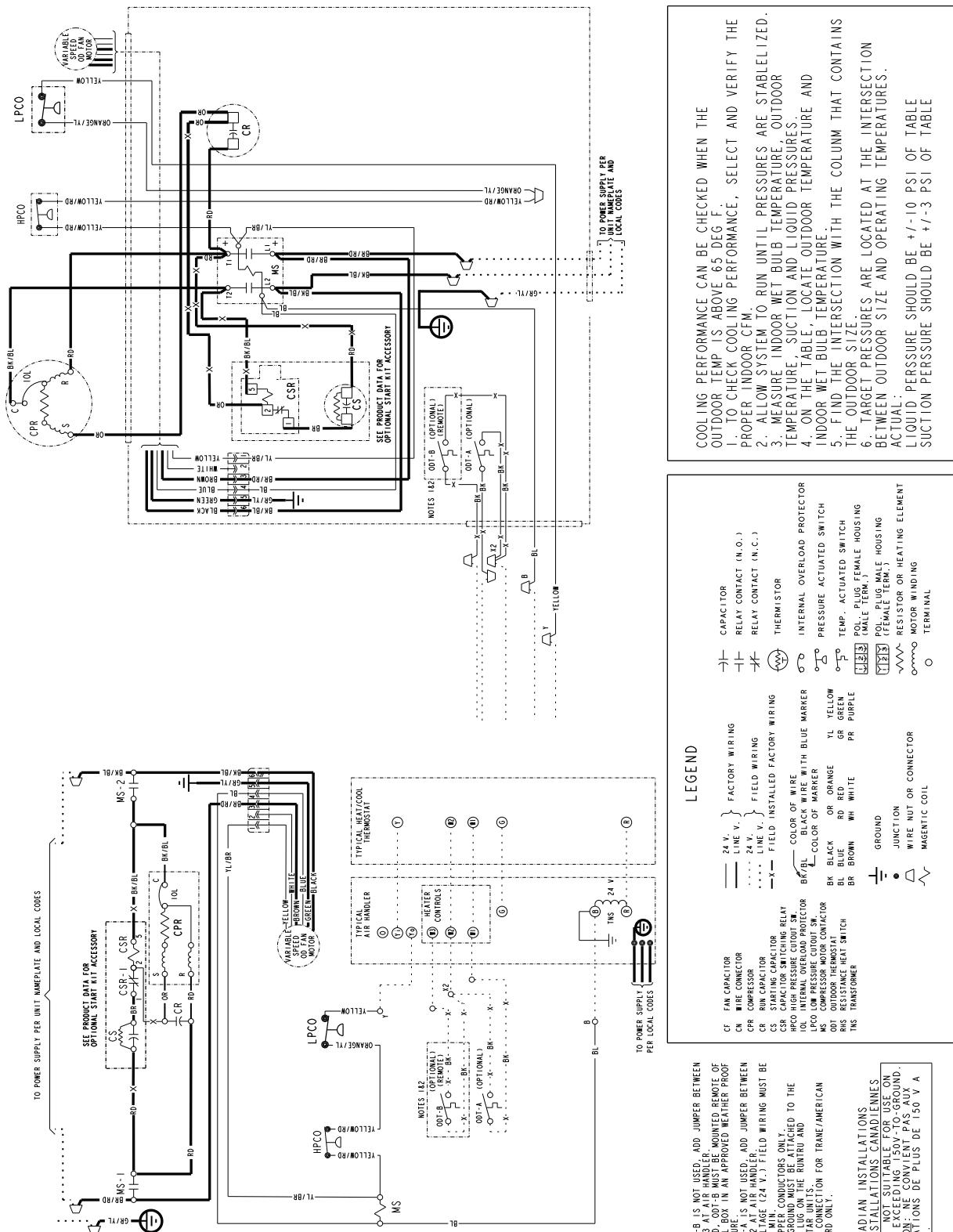
(a) For reference only.

# Wiring Diagrams

Figure 1. Models A5AC4018, 024, 030, 036, 042, and 048

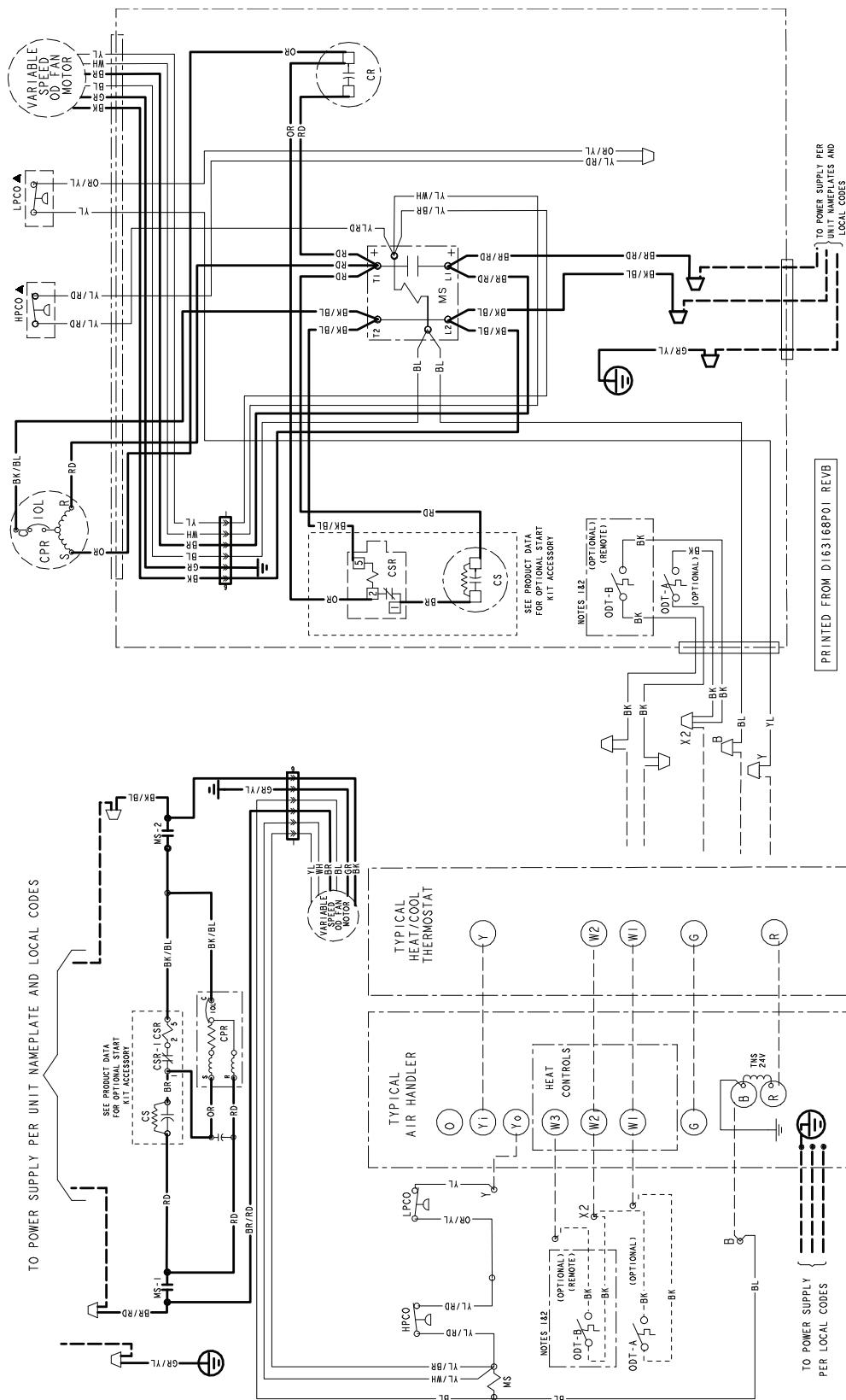


**Figure 2. Model A5AC4060B1000A**



## Wiring Diagrams

Figure 3. Model A5AC4060B1000B



### Figure 4. Wiring diagrams - notes and legend

NOTES:

1. 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.
2. IF ODT-A IS NOT USED, ADD JUMPER BETWEEN W1 & W2 AT AIR HANDLER.
3. LOW VOLTAGE {24 V} FIELD WIRING MUST BE 18 AWG MINIMUM.
4. USE COPPER CONDUCTORS ONLY!
5. FIELD GROUND MUST BE ATTACHED TO THE GROUND LUG ON THE RUNTRU AND AMERISTAR UNITS.
6. GROUND CONNECTION FOR TRANE/ AMERICAN STANDARD ONLY.

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

### LEGEND ADDED NOTES AND TABLE FOR PAPER DETAILS.

CF	FAN CAPACITOR		MAGNETIC COIL				
CN	WIRE CONNECTOR		GROUND				
CPR	COMPRESSOR		JUNCTION				
CR	RUN CAPACITOR		CAPACITOR				
CS	STARTING CAPACITOR		WIRE NUT OR				
CSR	CAPACITOR SWITCHING RELAY		TERMINAL				
ODT	OUTDOOR THERMOSTAT		TRANSFORMER				
HPCO	HIGH PRESSURE CUTOUT SWITCH						
LPCO	LOW PRESSURE CUTOUT SWITCH						
MS	COMPRESSOR MOTOR CONTACTOR		POL. PLUG FEMALE HOUSING (MALE TERMINALS)				
TNS	TRANSFORMER		POL. PLUG MALE HOUSING (FEMALE TERMINALS)				
IOL	INTERNAL OVERLOAD PROTECTOR		TERMINAL BLOCK/BOARD				
—	24 V } FACTORY		RELAY CONTACT (N.O)				
—	LINE V } WIRING		RELAY CONTACT (N.C)				
—	24 V } FIELD		THERMISTOR				
—	LINE V } WIRING		TEMP ACTUATED SWITCH				
-----	FIELD INSTALLED		INTERNAL OVERLOAD PROTECTION				
	FACTORY WIRING		PRESSURE ACTUATED SWITCH				
COLOR OF WIRE			RESISTER OR HEATING ELEMENT				
BK / BL			MOTOR WINDING				
BK	BLACK	RD	RED	OR	ORANGE		
BL	BLUE	WH	WHITE	GR	GREEN		
BR	BROWN	YL	YELLOW	PR	PURPLE		
PK	PINK						

# Dimensional Data

Figure 5. Dimensional drawing

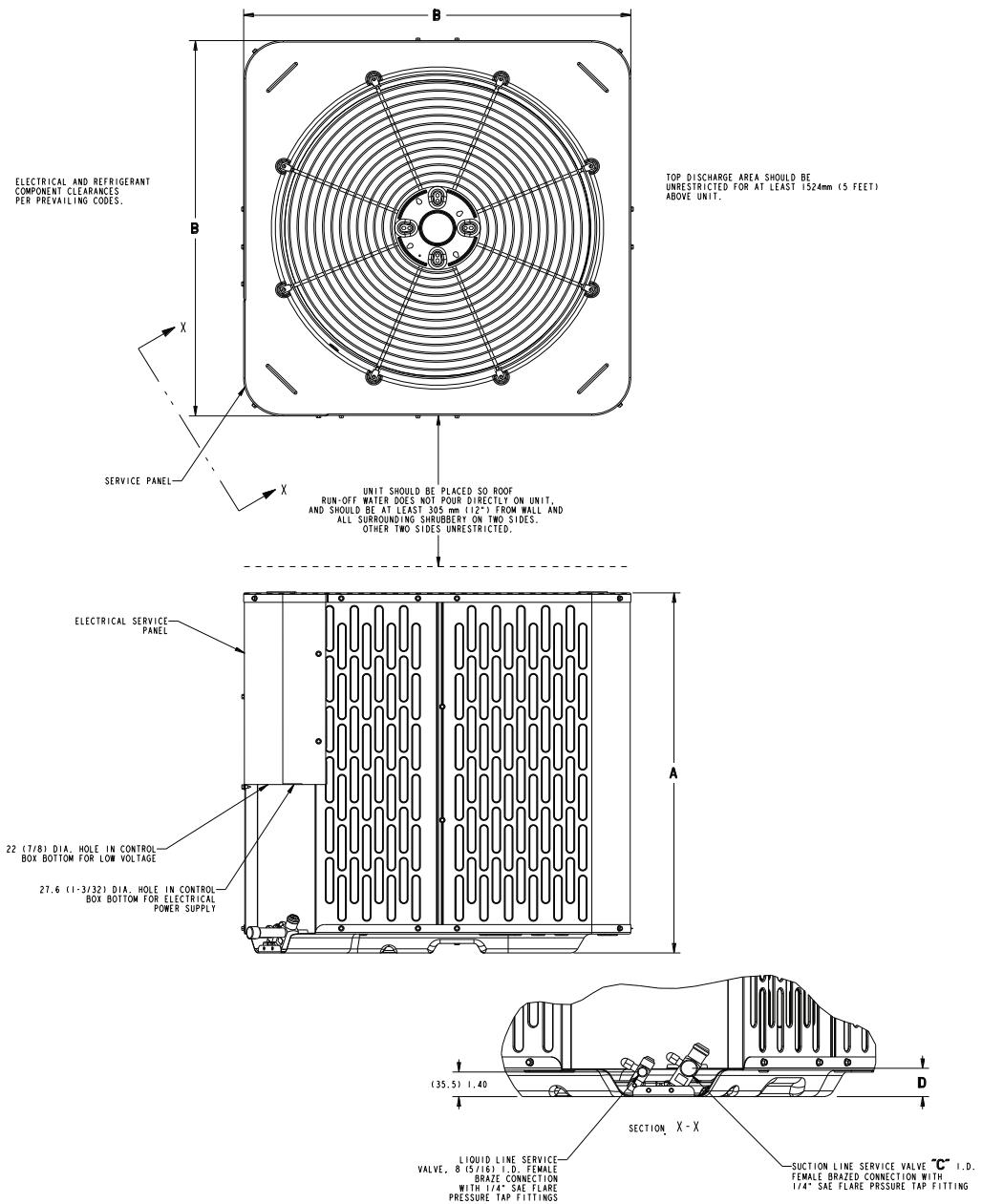


Table 4. Unit dimensions (mm (inch))

Model	Base	A	B	C	D
A5AC4018B	1A.2	727 (28-5/8)	600 (23-5/8)	19 (3/4)	41 (1-5/8)
A5AC4024B	1A.2	727 (28-5/8)	600 (23-5/8)	19 (3/4)	41 (1-5/8)
A5AC4030B	2.2	727 (28-5/8)	651 (25-5/8)	19 (3/4)	41 (1-5/8)
A5AC4036B	2.2	727 (28-5/8)	651 (25-5/8)	19 (3/4)	41 (1-5/8)
A5AC4042B	3.3	828 (32-5/8)	756 (29-3/4)	22 (7/8)	43 (1-3/4)
A5AC4048B	3.3	828 (32-5/8)	756 (29-3/4)	22 (7/8)	43 (1-3/4)
A5AC4060B	4.2	727 (28-5/8)	870 (34-1/4)	22 (7/8)	43 (1-3/4)

# Mechanical Specification Options

## **General**

The outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit, fifteen (15) feet of tested connecting line, and the nominal 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 is certified to UL 60335-2-40. 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.

## **Compressor**

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

## **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 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 BAYLOAM108 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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