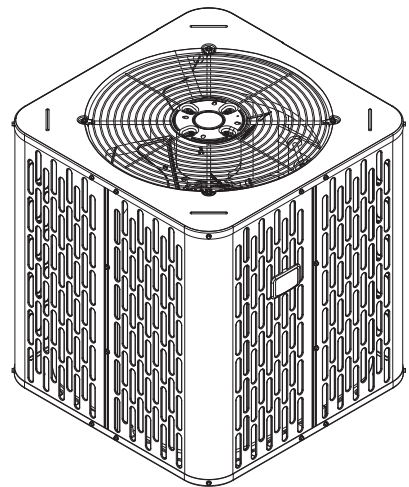


Product and Submittal Data

Split System Heat Pump

A5HP4018A1000A
A5HP4024A1000A
A5HP4030A1000A
A5HP4036B1000A
A5HP4042B1000A
A5HP4048B1000A
A5HP4060A1000A



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

Introduction

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Revision History

- Updated the model numbers (036, 042, and 048) throughout the document.
- Updated the Product Specifications chapter.
- Updated the Sound Data chapter.
- Updated the Wiring Diagrams chapter.
- Updated the Dimensional Data chapter.

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Model Number Description

Digit 1 — Brand

A = RunTru by Trane / Ameristar by American Standard
E = RunTru/Ameristar
N = Trane Advantage

Digit 2 — Refrigerant Type

4 = R-410A
5 = R-454B

Digit 3, 4 — Product Family

AC = Air Conditioner
HP = Heat Pump
HPL = Side Discharge

Digit 5 — Nominal Efficiency Rating

3 = 13.4 SEER2
4 = 14.3 SEER2
5 = 15.2 SEER2

Digit 6, 7, 8 — Nominal Capacity

BTU/Hour x 100

Digit 9 — Major Development Sequence

Primary Design / Form Series
Alphabetic Character "A" through "Z"

Digit 10 — Electric Power Supply

1 = 200-230V/1PH/60Hz or 208-230V/1PH/60Hz

Digit 11, 12, 13 — Secondary Function

000 = No Secondary Function

Digit 14, 15 — Minor Design Sequence/Series - Design Change

Alphabetic Character "A" through "Z"

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 A5HP4018A1000, A5HP4024A1000, A5HP4030A1000, and A5HP4036B1000

Outdoor Unit ^{(a) (b)}	A5HP4018A1000	A5HP4024A1000	A5HP4030A1000	A5HP4036B1000
14th Digit of the Model Number	A	A	A	A
Power Conns. – V/Ph/Hz ^(c)	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
Min. BRCH. CIR. Ampacity	12	13	16	18
BR. CIR. PROT. RTG. – Max. (Amps)	20	20	25	30
Compressor	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 ^(d) - L.R. Amps	7.8 - 47.5	9.1 - 59.0	10.4 - 71.0	13.9 - 75.6
Factory Installed	—			
Start Components ^(e)	No	No	No	No
Insulation/Sound Blanket	No	No	No	No
Compressor Heat	No	No	No	No
Outdoor Fan	Propeller	Propeller	Propeller	Propeller
Dia. (in.)	23	23	23	23
Type Drive - No. Speeds	Direct - 1	Direct - 1	Direct - 1	Direct - 1
CFM @ 0.0 (in.) W.G. ^(f)	2980	2980	2980	2936
HP	1/8	1/8	1/8	1/8
Motor Speed R.P.M.	850	850	850	850
Volts/Ph/Hz	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
F.L. Amps	0.64	0.64	0.64	0.64
Outdoor Coil - Type	All Aluminum	All Aluminum	All Aluminum	All Aluminum
Rows - F.P.I.	1 - 24	1 - 24	1 - 24	1 - 24
Face Area (sq. ft.)	18.75	18.75	18.75	18.75
Tube Size (in.)	3/8	3/8	3/8	3/8
Refrigerant Control	Expansion Valve	Expansion Valve	Expansion Valve	Expansion Valve
Refrigerant				
LBS. – R-454B (O.D. Unit) ^(g)	4 lbs., 12 oz	4 lbs., 10 oz	4 lbs., 10 oz	5 lbs., 1 oz
Factory Supplied	Yes	Yes	Yes	Yes
Line Size – (in.) O.D. Gas ^{(h) (i)}	3/4	3/4	3/4	3/4
Line Size - (in.) O.D. Liq.	5/16	5/16	5/16	5/16
Charging Specifications				
Subcooling	9°F	12°F	12°F	12°F
Dimensions	H × W × D	H × W × D	H × W × D	H × W × D
Crated (in.)	38 X 31.5 X 31.5	38 X 31.5 X 31.5	38 X 31.5 X 31.5	38 X 31.5 X 31.5
Weight				
Shipping (lbs.)	208	208	208	210
Net (lbs.)	174	174	174	176
Optional Accessories:				
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101	BAYISLT101
Heat Pump Snow Legs Kit (4 in.)	BAYLEGS004	BAYLEGS004	BAYLEGS004	BAYLEGS004
Heat Pump Snow Legs Kit (7 in.)	BAYLEGS007	BAYLEGS007	BAYLEGS007	BAYLEGS007

Table 1. Models A5HP4018A1000, A5HP4024A1000, A5HP4030A1000, and A5HP4036B1000 (continued)

Outdoor Unit ^{(a) (b)}	A5HP4018A1000	A5HP4024A1000	A5HP4030A1000	A5HP4036B1000
Low Temperature Cooling Kit	AY28X084/KIT02134	AY28X084/KIT02134	AY28X084/KIT02134	AY28X084/KIT02134
Crankcase Heater Kit (Scroll)	BAYCCHT302RES	BAYCCHT302RES	BAYCCHT302RES	BAYCCHT302RES
External Low Ambient Kit	BAYLOAM108	BAYLOAM108	BAYLOAM108	BAYLOAM108
Compressor Sound Enclosure Kit	BAYSDEN004	BAYSDEN004	BAYSDEN004	BAYSDEN004
Defrost Coil Sensor Kit	KIT19795	KIT19795	KIT19795	KIT19795
External Start Kit	BAYKSKT267	BAYKSKT267	BAYKSKT267	BAYKSKT267
Refrigerant Lineset ⁽ⁱ⁾	—			

^(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 max. fuse size. The value shown is the branch circuit selection current.

^(e) No means no start components. Yes means quick start kit components. Optional authorized kits include KIT07689 for RunTru or BAYKSKT267.

^(f) Standard Air - Dry Coil - Outdoor

^(g) This value approximate. For 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, 10 ft. of tested connecting line, and the smallest 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, see the Trane Residential and Light Commercial Product Handbook.

Table 2. Models A5HP4042B1000, A5HP4048B1000, and A5HP4060A1000

Outdoor Unit ^{(a) (b)}	A5HP4042B1000	A5HP4048B1000	A5HP4060A1000
14th Digit of the Model Number	A	A	A
APower Conns. – V/Ph/Hz ^(c)	208/230/1/60	208/230/1/60	208/230/1/60
Min. BRCH. CIR. Ampacity	24	26	33
BR. CIR. PROT. RTG. – Max. (Amps)	40	45	50
Compressor	Scroll	Scroll	Scroll
No. Stages	1	1	1
Volts/Ph/Hz	208/230/1/60	208/230/1/60	208/230/1/60
R.L. Amps ^(d) - L.R. Amps	18.2 - 95.0	20.2 - 95.0	22.3 - 136.6
Factory Installed	—		
Start Components ^(e)	No	No	No
Insulation/Sound Blanket	No	No	No
Compressor Heat	No	No	No
Outdoor Fan	Propeller	Propeller	Propeller
Dia. (in.)	27.5	27.5	27.5
Type Drive - No. Speeds	Direct - 1	Direct - 1	Direct - 1
CFM @ 0.0 (in.) W.G. ^(f)	3464	3668	4992
HP	1/8	1/5	1/3
Motor Speed R.P.M.	850	825	850
Volts/Ph/Hz	208/230/1/60	208/230/1/60	208/230/1/60
F.L. Amps	0.64	1.05	2.80
Outdoor Coil - Type	All Aluminum	All Aluminum	All Aluminum
Rows - F.P.I.	1 - 24	1 - 24	2 - 24
Face Area (sq. ft.)	22.0	22.0	30.8
Tube Size (in.)	3/8	3/8	3/8
Refrigerant Control	Expansion Valve	Expansion Valve	Expansion Valve

Product Specifications

Table 2. Models A5HP4042B1000, A5HP4048B1000, and A5HP4060A1000 (continued)

Outdoor Unit ^(a) ^(b)	A5HP4042B1000	A5HP4048B1000	A5HP4060A1000
Refrigerant			
LBS. – R-454B (O.D. Unit) ^(g)	5 lbs., 11 oz	7 lbs., 1 oz	8 lbs., 6 oz
Factory Supplied	Yes	Yes	Yes
Line Size – (in.) O.D. Gas ^(h) ⁽ⁱ⁾	3/4	3/4	7/8
Line Size – (in.) O.D. Liq.	5/16	5/16	5/16
Charging Specifications			
Subcooling	12°F	10°F	10°F
Dimensions	H × W × D	H × W × D	H × W × D
Crated (in.)	37.8 X 36 X 36	37.8 X 36 X 36	49.8 X 36 X 36
Weight			
Shipping (lbs.)	256	274	300
Net (lbs.)	222	240	250
Optional Accessories:			
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101
Heat Pump Snow Legs Kit (4 in.)	BAYLEGS004	BAYLEGS004	BAYLEGS004
Heat Pump Snow Legs Kit (7 in.)	BAYLEGS007	BAYLEGS007	BAYLEGS007
Low Temperature Cooling Kit	AY28X084/KIT02134	AY28X084/KIT02134	AY28X084/KIT02134
Crankcase Heater Kit (Scroll)	BAYCCHT302RES	BAYCCHT301RES	BAYCCHT301RES
External Low Ambient Kit	BAYLOAM108	BAYLOAM108	—
Compressor Sound Enclosure Kit	BAYSDEN004	BAYSDEN004	BAYSDEN004
Defrost Coil Sensor Kit	KIT19795	KIT19795	KIT19795
External Start Kit	BAYKSKT267	BAYKSKT267	BAYKSKT267
Refrigerant Lineset ^(j)	—		

^(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 max. fuse size. The value shown is the branch circuit selection current.

^(e) No means no start components. Yes means quick start kit components. Optional authorized kits include KIT07689 for RunTru or BAYKSKT267.

^(f) Standard Air - Dry Coil - Outdoor

^(g) This value approximate. For 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, 10 ft. of tested connecting line, and the smallest 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, see the Trane Residential and Light Commercial Product Handbook.

Sound Data

Table 3. Sound data – models A5HP4018A, A5HP4024A, A5HP4030A, A5HP4036B, A5HP4042B, A5HP4048B, and A5HP4060A

Model	A-Weighted Sound Power Level [dB (A)]	Full Octave Sound Power(dB)							
		63 Hz ^(a)	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
A5HP4018A	75	77	72	68	68	69	60	53	47
A5HP4024A	75	77	72	68	68	69	60	53	47
A5HP4030A	75	77	72	68	68	69	60	53	47
A5HP4036B	71	73	73	72	66	67	62	55	50
A5HP4042B	73	69	74	68	68	69	65	61	57
A5HP4048B	73	69	74	68	68	69	65	61	57
A5HP4060A	72	77	75	72	70	67	62	59	52

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

^(a) For reference only.

Wiring Diagrams

Figure 1. Wiring diagram – 018A, 024A, 030A, and 036B models

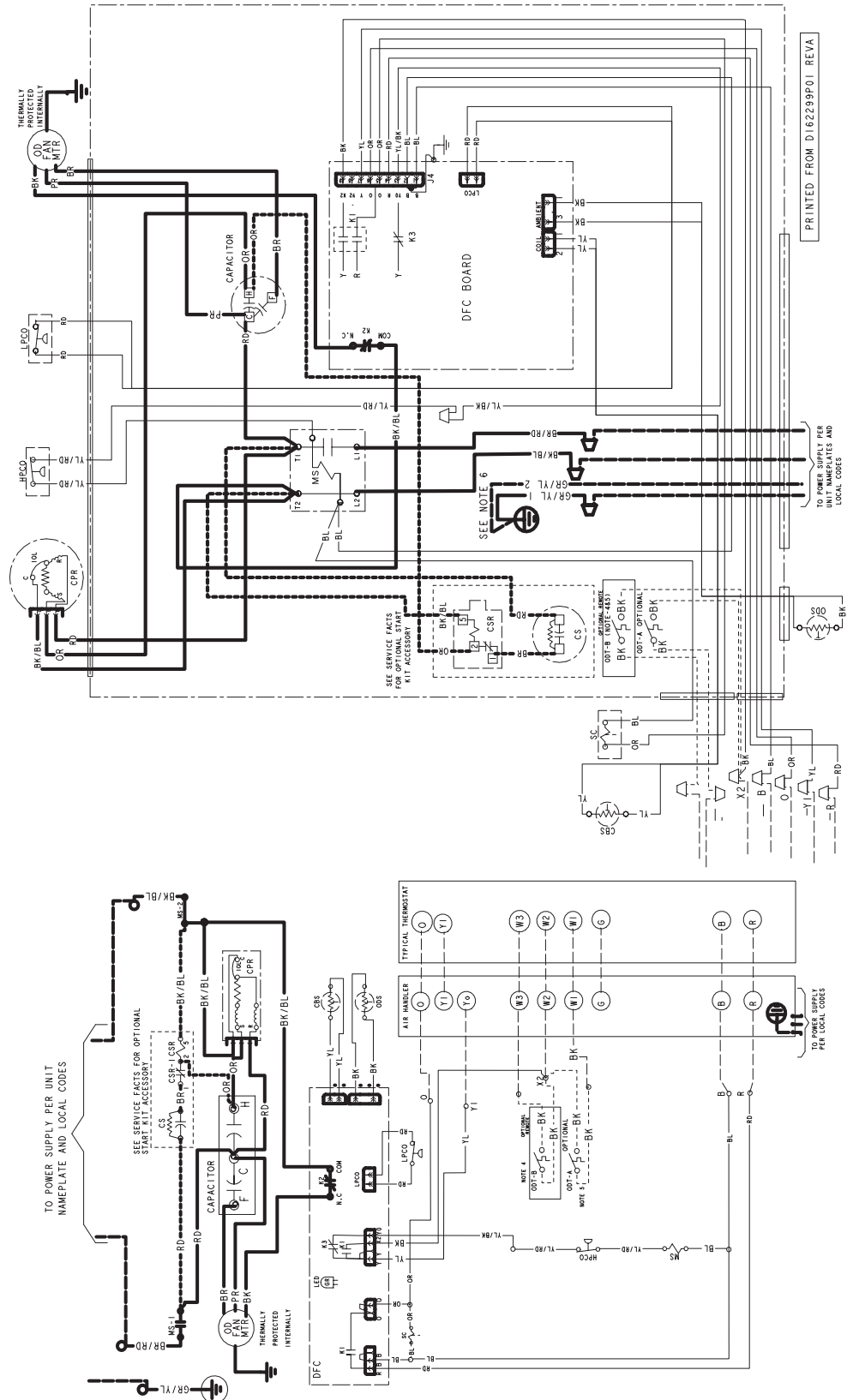


Figure 3. Wiring diagram – 060A model

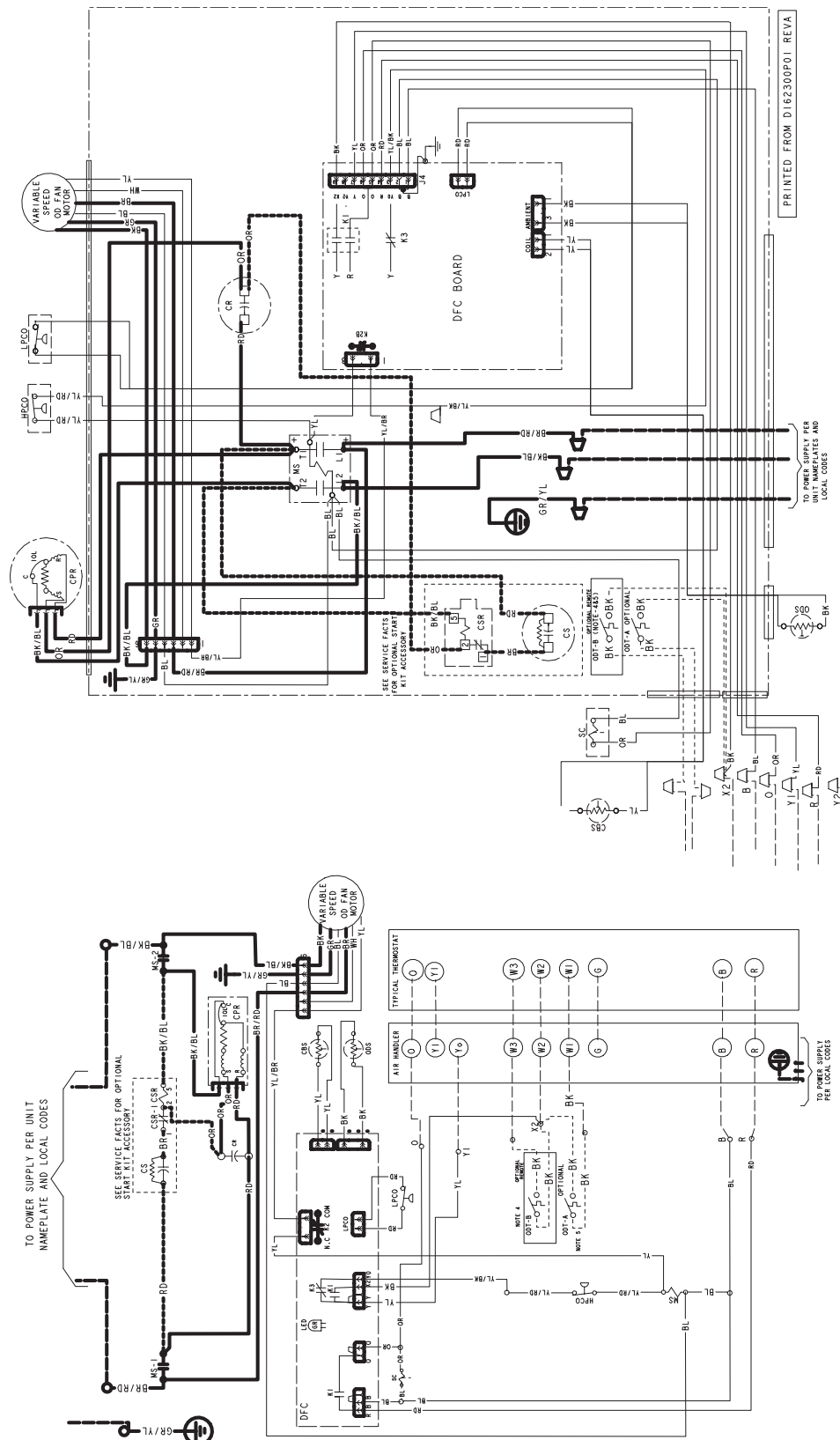
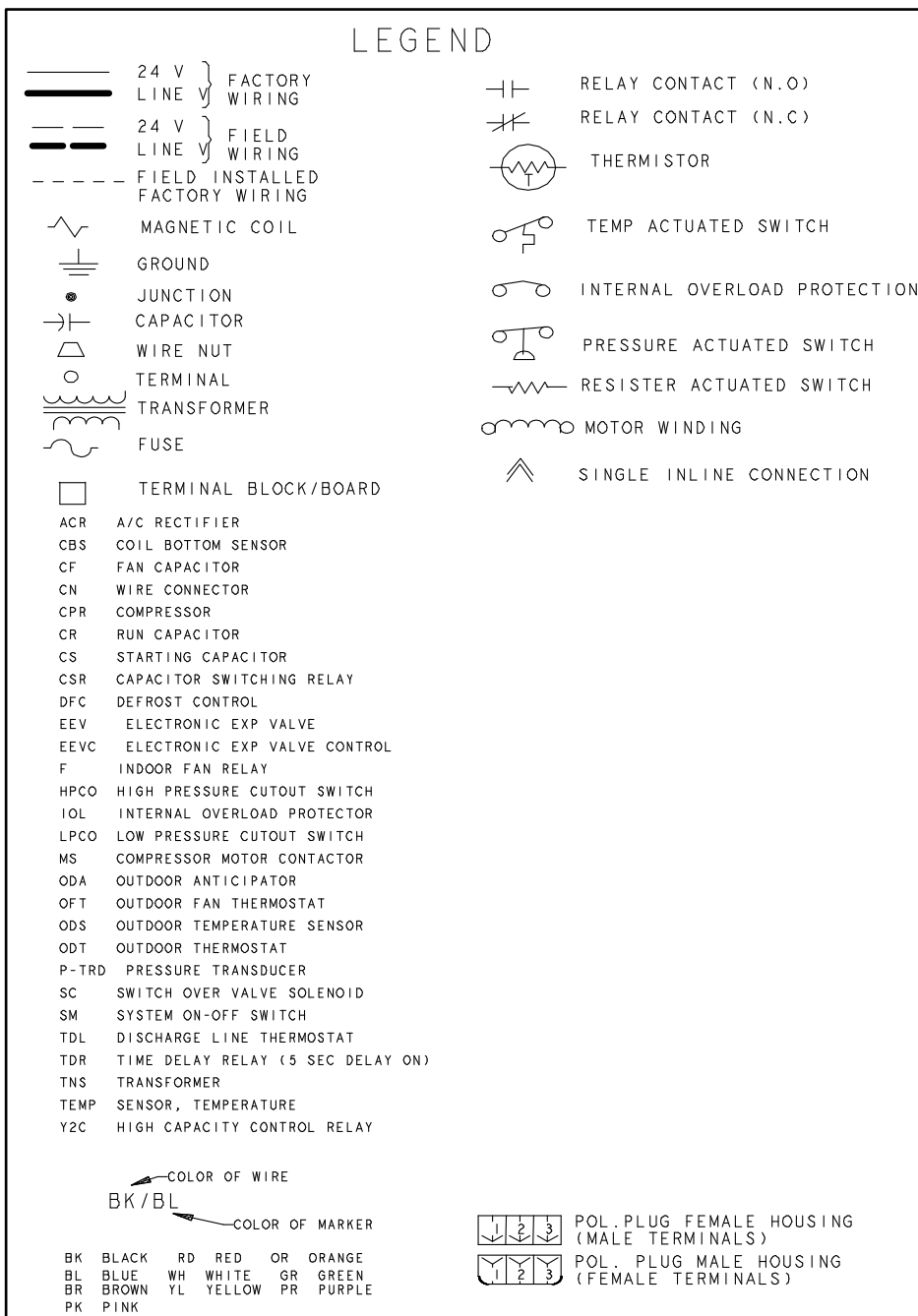


Figure 4. Wiring diagrams – notes and legend

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-A IS NOT USED, ADD JUMPER BETWEEN W1 AND W2 AT AIR HANDLER
6. THE GROUND CONNECTIONS SHOWN HERE ARE 2 SEPARATE WIRES, DO NOT CRIMP TOGETHER
"GR/YL 1" WIRE IS FOR GROUND LUG AND " GR/YL 2" IS FOR GROUND WIRE/WIRE NUT OP



Dimensional Data

Figure 5. Dimensional drawing

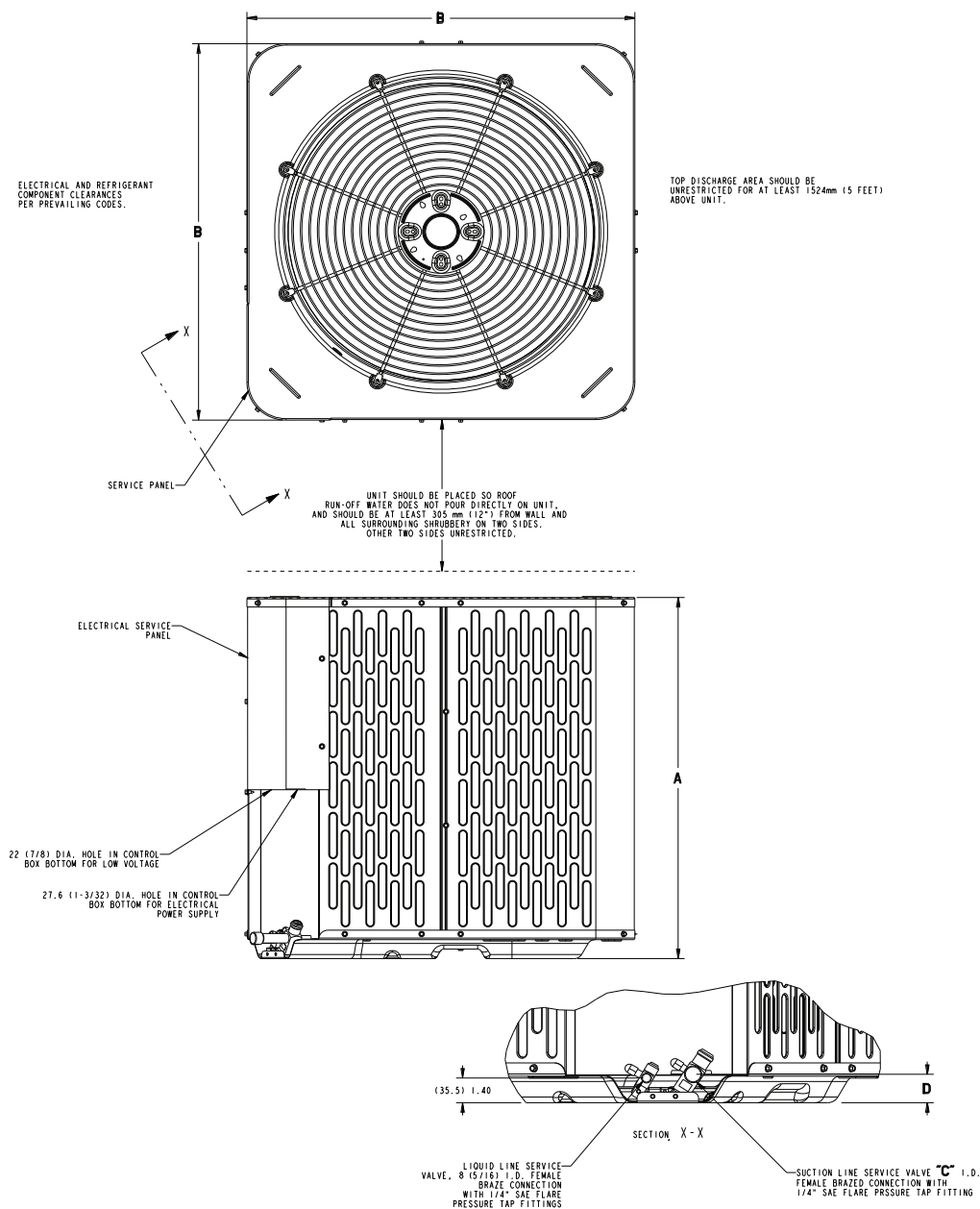


Table 4. Dimensions – mm (inches)

Model	Base	A	B	C	D
A5HP4018A	3.3	829 (32-5/8)	756 (29-3/4)	19 (3/4)	41 (1-5/8)
A5HP4024A	3.3	829 (32-5/8)	756 (29-3/4)	19 (3/4)	41 (1-5/8)
A5HP4030A	3.3	829 (32-5/8)	756 (29-3/4)	19 (3/4)	41 (1-5/8)
A5HP4036B	3.3	829 (32-5/8)	756 (29-3/4)	19 (3/4)	41 (1-5/8)
A5HP4042B	4.3	829 (32-5/8)	870 (34-1/4)	19 (3/4)	41 (1-5/8)
A5HP4048B	4.3	829 (32-5/8)	870 (34-1/4)	19 (3/4)	41 (1-5/8)
A5HP4060A	4.6	1133 (44-5/8)	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, 10 ft. 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 120°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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