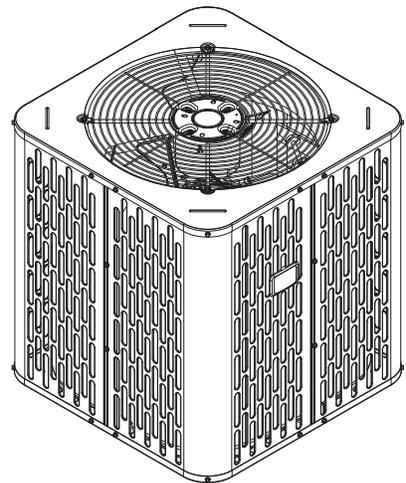


Product and Submittal Data

Split System Air Conditioner

N5AC5018A
N5AC5024A
N5AC5030A
N5AC5036A
N5AC5042A
N5AC5048A
N5AC5060A



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

Introduction

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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 — N5AC5018A1000A, N5AC5024A1000A, N5AC5030A1000A/B, and N5AC5036A1000A/B

Outdoor Unit ^{(a) (b)}	N5AC5018A1000	N5AC5024A1000	N5AC5030A1000		N5AC5036A1000	
14th Digit of the Model Number	A	A	A	B	A	B
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	9	14	15	17	18	
BR. CIR. PROT. RTG. – Max. (Amps)	20	20	25		30	
Compressor	Scroll	Scroll	Scroll		Scroll	
No. Used - No. Stages	1 - 1	1 - 1	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	6.9 - 45	10.9 - 60	12.5 - 67	12.7 - 76	13.5 - 75	13.5 - 83
Factory Installed						
Start Components ^(e)	No	No (Uses BAYKSKT263)	No		No (Uses BAYKSKT263)	
Insulation/Sound Blanket	No	No	No		No	
Compressor Heat	No	No	No		No	
Outdoor Fan	Propeller	Propeller	Propeller		Propeller	
Dia. (in.) - No. Used	23.02 - 1	23 - 1	23.02 - 1		23 - 1	
Type Drive - No. Speeds	Direct - 1	Direct - 1	Direct - 1		Direct - 1	
CFM @ 0.0 (in.) W.G. ^(f)	2992	3068	2992		3124	
No. Motors - HP	1 - 1/8	1 - 1/8	1 - 1/8		1 - 1/8	
Motor Speed – rpm	825	825	825		825	
Volts/Ph/Hz	208/230/1/60	208/230/1/60	208/230/1/60		208/230/1/60	
F.L. Amps	0.77	0.71	0.77		0.77	
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.)	21.25	18.75	21.25		18.75	
Tube Size (in.)	3/8	3/8	3/8		3/8	
Refrigerant						
lb – R-454B (O.D. Unit) ^(g)	3 lb, 12 oz	3 lb, 10 oz	3 lb, 8 oz		3 lb, 8 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 ^{(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	10°F	10°F	10°F		10°F	
Dimensions	H × W × D					
Crated (in.)	42 × 31.1 × 31.1	38.3 × 31.1 × 31.1	42 × 31.1 × 31.1		38.3 × 31.1 × 31.1	
Weight						
Shipping (lb)	220	183	220		183	

Table 1. Models — N5AC5018A1000A, N5AC5024A1000A, N5AC5030A1000A/B, and N5AC5036A1000A/B (continued)

Outdoor Unit ^{(a) (b)}	N5AC5018A1000	N5AC5024A1000	N5AC5030A1000	N5AC5036A1000
Net (lb)	184	161	184	161
Optional Accessories:				
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
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) 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 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, ten (10) feet 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, refer to the Trane Residential and Light Commercial Product Handbook.

Table 2. Models — N5AC5042A1000A/B, N5AC5048A1000A/B, and N5AC5060A1000A/B

Outdoor Unit ^{(a) (b)}	N5AC5042A1000		N5AC5048A1000		N5AC5060A1000	
14th Digit of the Model Number	A	B	A	B	A	B
Power Conns. – V/Ph/Hz ^(c)	208/230/1/60		208/230/1/60		208/230/1/60	
Min. BRCH. CIR. Ampacity	21	23	23	25	28	30
BR. CIR. PROT. RTG. – Max. (Amps)	30	40	35	45	50	
Compressor	Scroll		Scroll		Scroll	
No. Used - No. Stages	1 - 1		1 - 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	14.7 - 109	17.9 - 95.9	17.3 - 126	19.6 - 118	21.8 - 143	23.4 - 134
Factory Installed						
Start Components ^(e)	No		No (Uses BAYKSKT263)		No (Uses BAYKSKT263)	
Insulation/Sound Blanket	No		No		No	
Compressor Heat	No		No		No	
Outdoor Fan	Propeller		Propeller		Propeller	
Dia. (in.) - No. Used	27.5 - 1		27.5 - 1		27.5 - 1	
Type Drive - No. Speeds	Direct - 1		Direct - 1		Direct - 1	
CFM @ 0.0 (in.) W.G. ^(f)	4841		5165		5255	
No. Motors - HP	1 - 1/5		1 - 1/5		1 - 1/5	
Motor Speed – rpm	850		850		850	
Volts/Ph/Hz	208/230/1/60		208/230/1/60		208/230/1/60	
F.L. Amps	1.05		1.05		0.93	
Outdoor Coil - Type	All Aluminum		All Aluminum		All Aluminum	
Rows - F.P.I.	1 - 24		1 - 24		1 - 24	

Product Specifications

Table 2. Models — N5AC5042A1000A/B, N5AC5048A1000A/B, and N5AC5060A1000A/B (continued)

Outdoor Unit ^(a) ^(b)	N5AC5042A1000	N5AC5048A1000	N5AC5060A1000
Face Area (sq. ft.)	24.93	30.80	30.80
Tube Size (in.)	3/8	3/8	3/8
Refrigerant			
lb – R-454B (O.D. Unit) ^(g)	5 lb, 1 oz	6 lb, 10 oz	5 lb, 15 oz
Factory Supplied	Yes	Yes	Yes
Valve Connection Size - (in.) O.D. Gas	7/8	7/8	7/8
Valve Connection Size - (in.) O.D. Liq.	5/16	5/16	5/16
Line Size – (in.) O.D. Gas ^(h) ⁽ⁱ⁾	7/8	7/8	1-1/8
Line Size - (in.) O.D. Liq.	5/16	5/16	5/16
Charging Specifications			
Subcooling	10°F	10°F	10°F
Dimensions			
	H × W × D		
Crated (in.)	42 × 35.6 × 35.6	50 × 35.6 × 35.6	50 × 35.6 × 35.6
Weight			
Shipping (lb)	246	307	302
Net (lb)	212	257	252
Optional Accessories:			
Rubber Isolator Kit	BAYISLT101	BAYISLT101	BAYISLT101
Snow Leg — Base and Cap 4 in. High	BAYLEGS002	BAYLEGS002	BAYLEGS002
Snow Leg — 4 in. Extension	BAYLEGS003	BAYLEGS003	BAYLEGS003
Extreme Condition Mounting Kit	BAYECMT023	BAYECMT023	BAYECMT023
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) 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 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, ten (10) feet 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, refer to the Trane Residential and Light Commercial Product Handbook.

Sound Power Level

Table 3. Models — N5AC5018A, N5AC5024A, N5AC5030A, N5AC5036A, N5AC5042A, N5AC5048A, and N5AC5060A

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
N5AC5018A	73	79	69	67	70	70	64	59	53
N5AC5024A	71	78	72	69	68	66	61	58	53
N5AC5030A	73	79	69	67	70	70	64	59	53
N5AC5036A	71	78	72	69	68	66	61	58	53
N5AC5042A	71	78	72	69	68	66	61	58	53
N5AC5048A	71	81	75	71	70	68	63	58	53
N5AC5060A	71	81	75	71	70	68	63	58	53

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

^(a) For reference only.

Wiring Diagrams

Figure 1. Models – N5AC5018, 024, 030, 036, 042, and 048

TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES

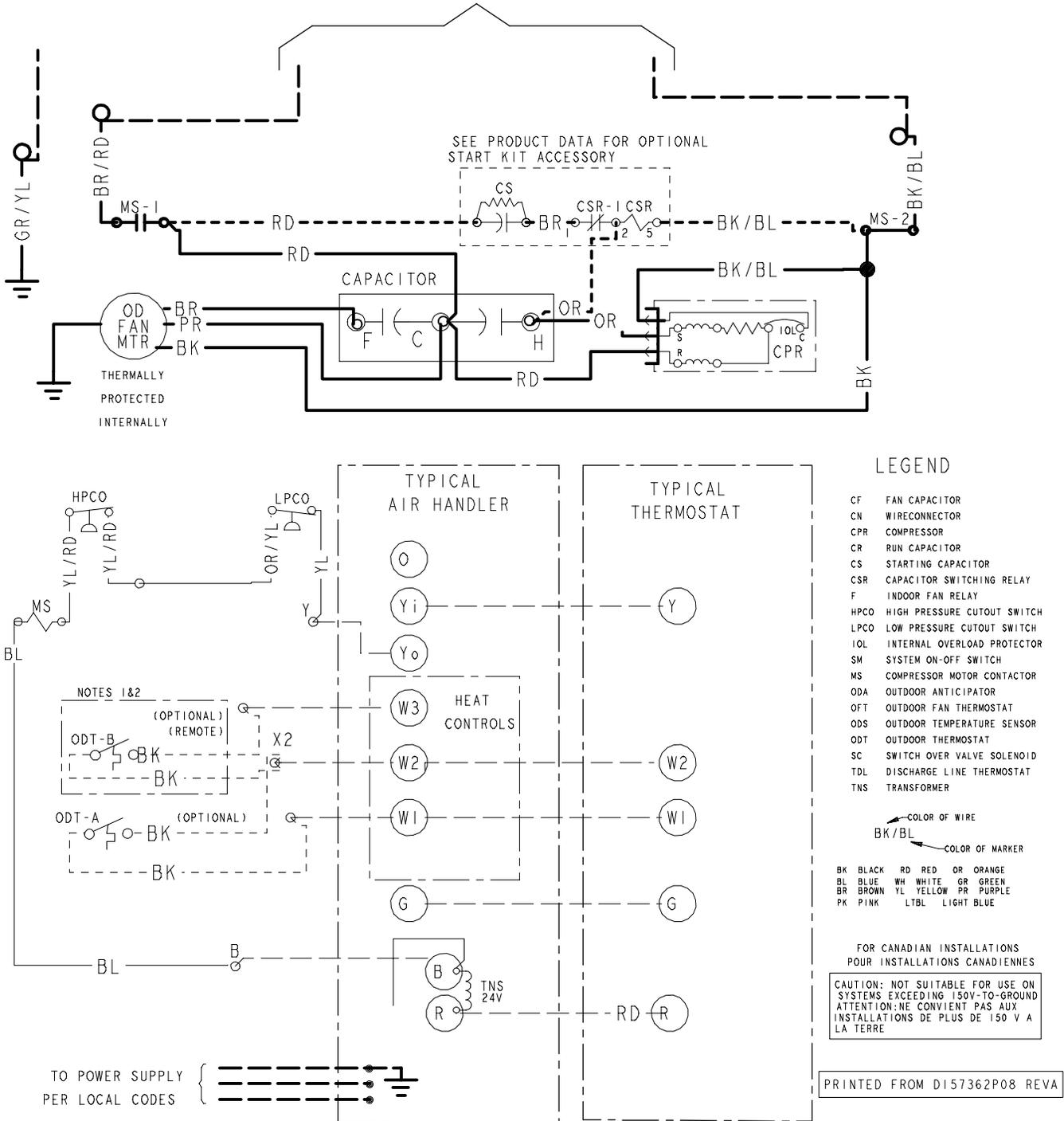


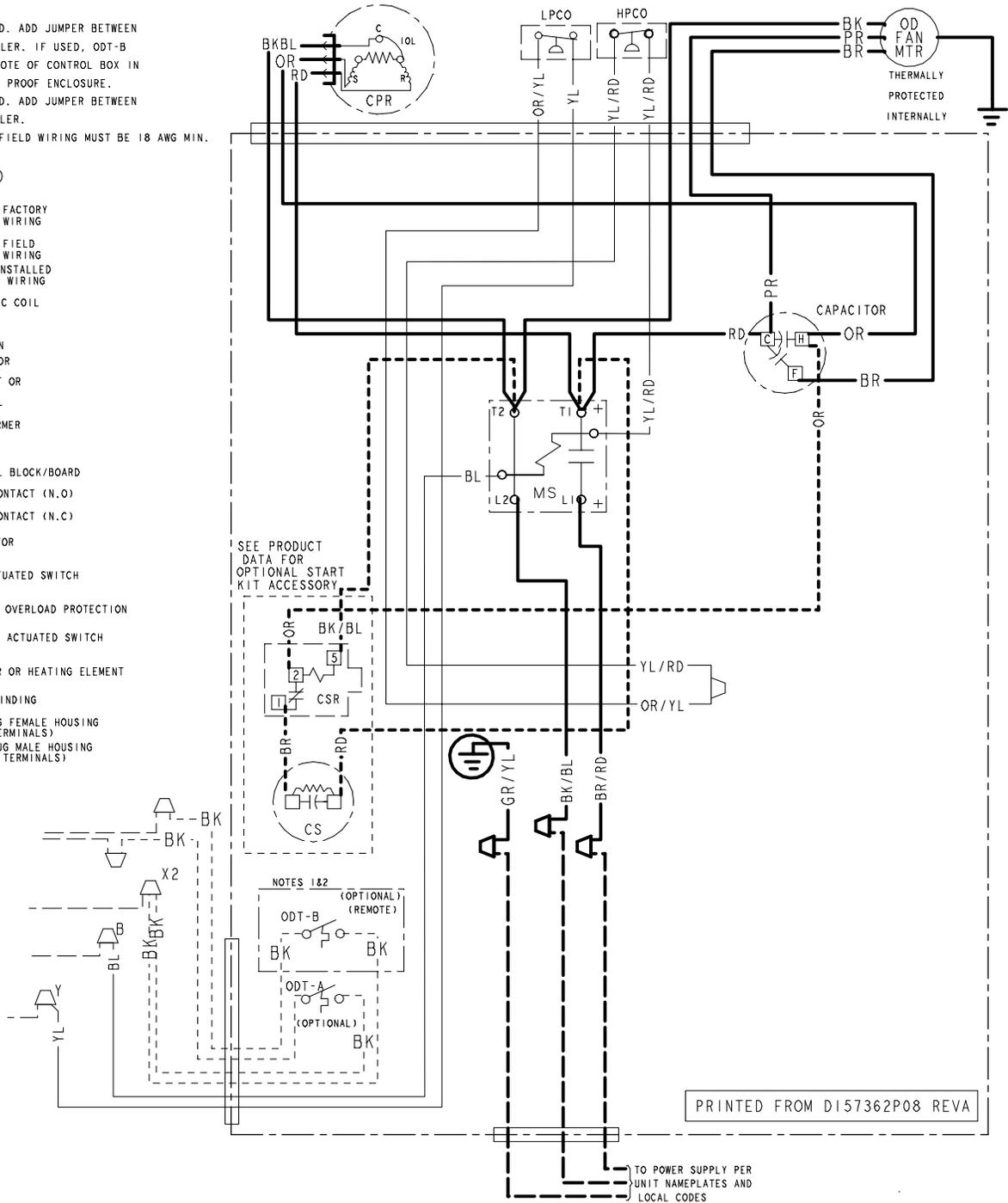
Figure 2. Models – N5AC5018, 024, 030, 036, 042, and 048

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 MIN.

LEGEND

- 24 V } FACTORY LINE WIRING
- 24 V } FIELD WIRING
- FIELD INSTALLED FACTORY WIRING
- MAGNETIC COIL
- GROUND
- JUNCTION
- CAPACITOR
- WIRE NUT OR
- TERMINAL
- TRANSFORMER
- FUSE
- TERMINAL BLOCK/BOARD
- RELAY CONTACT (N.O.)
- RELAY CONTACT (N.C.)
- THERMISTOR
- TEMP ACTUATED SWITCH
- INTERNAL OVERLOAD PROTECTION
- PRESSURE ACTUATED SWITCH
- RESISTOR OR HEATING ELEMENT
- MOTOR WINDING
- POL. PLUG FEMALE HOUSING (MALE TERMINALS)
- POL. PLUG MALE HOUSING (FEMALE TERMINALS)



Dimensional Data

Figure 5. Dimensional drawing

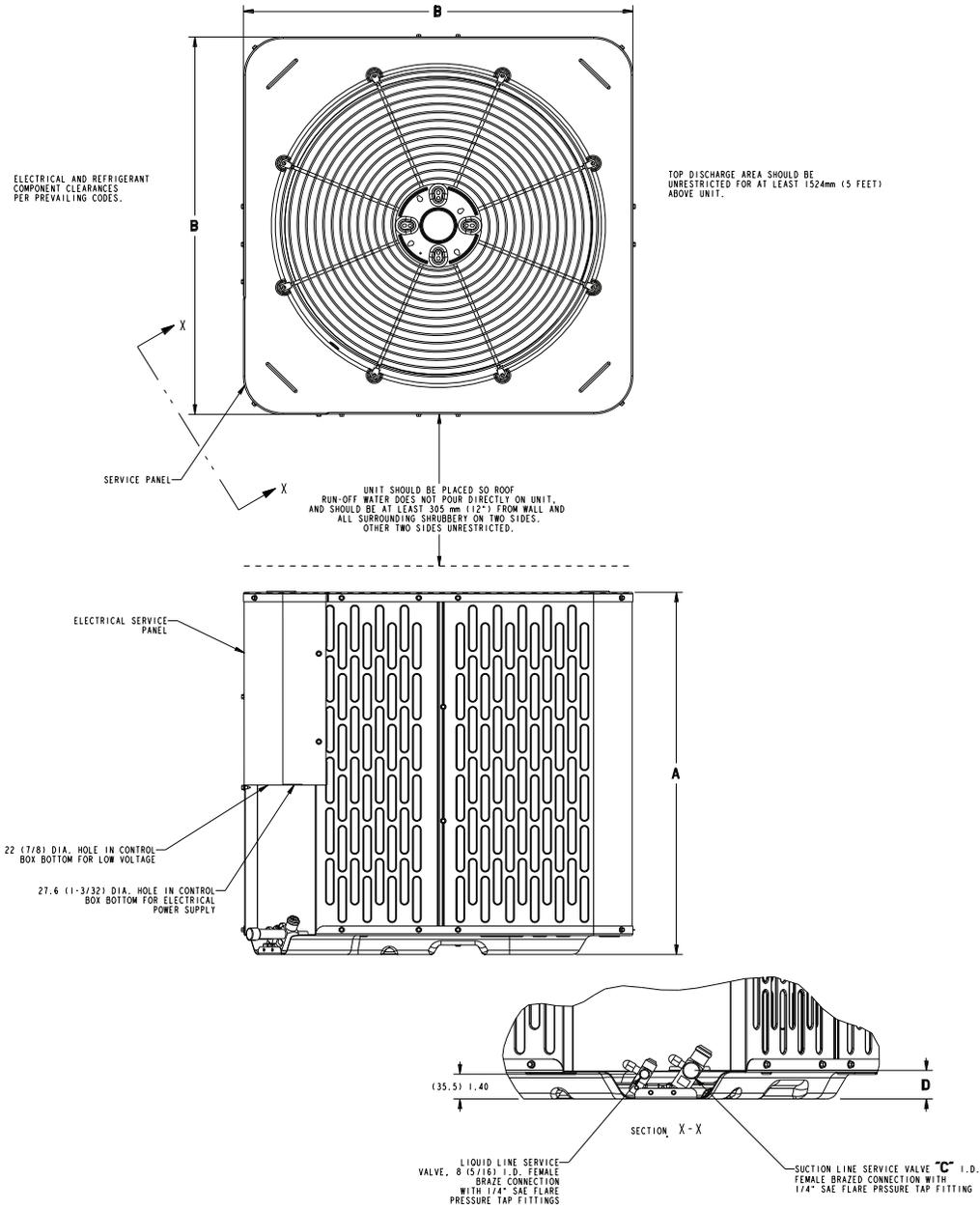


Table 4. Unit dimensions (mm (inch))

Model	Base	A	B	C	D
N5AC5018A	3.4	930 (36-5/8)	756 (29-3/4)	19 (3/4)	41 (1-5/8)
N5AC5024A	3.3	828 (32-5/8)	756 (29-3/4)	19 (3/4)	41 (1-5/8)
N5AC5030A	3.4	930 (36-5/8)	756 (29-3/4)	19 (3/4)	41 (1-5/8)
N5AC5036A	3.3	828 (32-5/8)	756 (29-3/4)	19 (3/4)	41 (1-5/8)
N5AC5042A	4.4	930 (36-5/8)	870 (34-1/4)	19 (3/4)	41 (1-5/8)
N5AC5048A	4.6	1133 (44-5/8)	870 (34-1/4)	22 (7/8)	43 (1-3/4)
N5AC5060A	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, ten (10) 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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