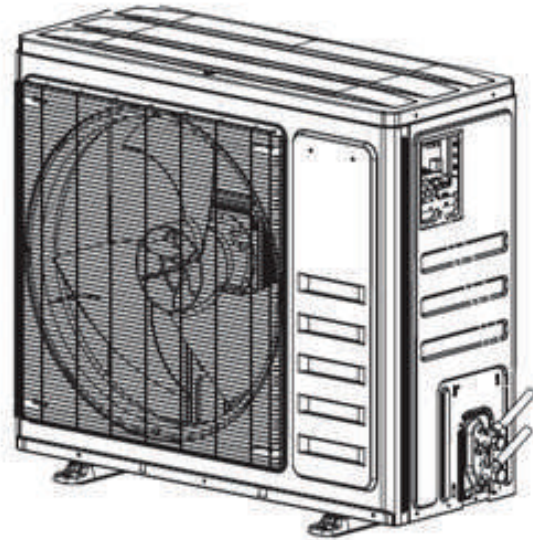


Product and Submittal Data

Split System Heat Pump

5HPL5024A1
5HPL5036A1
5HPL5048A1
5HPL5060A1



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

Copyright

This document and the information in it are the property of Trane, and may not be used or reproduced in whole or in part without written permission. Trane reserves the right to revise this publication at any time, and to make changes to its content without obligation to notify any person of such revision or change.

Trademark

All trademarks referenced in this document are the trademarks of their respective owners.

Data Notes

This document supersedes and includes data from the documents listed below.

Table 1. Data notes

Literature Number	Title
5HPL5024A1-SUB-1*	Submittal - Split System Heat Pump 5HPL5024A1
5HPL5036A1-SUB-1*	Submittal - Split System Heat Pump 5HPL5036A1
5HPL5048A1-SUB-1*	Submittal - Split System Heat Pump 5HPL5048A1
5HPL5060A1-SUB-1*	Submittal - Split System Heat Pump 5HPL5060A1

Table of Contents

- Model Number Description 4
- General Data 5
- Product Specifications 6
- Sound Power Level 7
- Wiring Diagrams 8
- Dimensional Data 10
- Mechanical Specification Options 12

Model Number Description

Digits 1 — Refrigerant Type

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

Digit 2, 3 — System Type

HP = Heat Pump
HC = Cold Climate Heat Pump

Digits 4 — Product Family

L = Side Discharge

Digit 5 — Nominal Rated SEER2

0 = 20 SEER2
3 = 13 SEER2
4 = 14 SEER2
5 = 15 SEER2
6 = 16 SEER2
7 = 17 SEER2
8 = 18 SEER2

Digit 6 — Field Connection

0 = Braze

Digit 7, 8 — Nominal Tonnage

12 = 1.0
18 = 1.5
19 = 1.5
24 = 2.0
25 = 2.0
30 = 2.5
31 = 2.5
36 = 3.0
37 = 3.0
42 = 3.5
43 = 3.5
48 = 4.0
49 = 4.0
60 = 5.0
61 = 5.0

Digit 9 — Major Design Changes

A thru Z Note: No F,I,O

Digit 10 — Power Supply (Voltage/Phz/Hz)

1 = 200:208-230/1/60
3 = 200-230/3/60
4 = 460/3/60

Digit 11, 12, 13 — Other Function

000 = Typical-no meaning
COT = Coated Plate Fin

Digit 14 — Major Design Changes

A thru Z Note: No F,I,O

Digit 15 — Service Digit - Not Orderable

A thru Z Note: No F,I,O

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 2. 5HPL5 models

OUTDOOR UNIT ^(a) ^(b)	5HPL5024A1	5HPL5036A1	5HPL5048A1	5HPL5060A1
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	20	25	35	35
MAX. OVER CURRENT PROTECTION	30	40	55	55
COMPRESSOR	ROTARY-INVERTER	ROTARY-INVERTER	ROTARY-INVERTER	ROTARY-INVERTER
NO. USED — NO. STAGES	1-MULTI	1-MULTI	1-MULTI	1-MULTI
VOLTS/PH/HZ	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60
R.L. AMPS ^(d)	9.4	10.5	16.5	16.5
FACTORY INSTALLED	—			
START COMPONENTS ^(e)	NA	NA	NA	NA
INSULATION/SOUND BLANKET	YES	YES	YES	YES
COMPRESSOR HEAT	YES	YES	YES	YES
OUTDOOR FAN	PROPELLER	PROPELLER	PROPELLER	PROPELLER
DIA. (IN.) – NO. USED	21-5/8-1	23-5/8-1	20-7/8-2	20-7/8-2
TYPE DRIVE – NO. SPEEDS	DIRECT - MULTI	DIRECT - MULTI	DIRECT - MULTI	DIRECT - MULTI
NO. MOTORS – HP	1-1/8	1-1/4	2-1/8	2-1/8
CFM @ 0.0 IN. W.G. ^(f)	2350	3000	4200	4200
MOTOR SPEED R.P.M.	200 — 1200	200 — 1200	200 — 1200	200 — 1200
VOLTS/PH/HZ	245–385/3/60	245–385/3/60	245–385/3/60	245–385/3/60
F.L. AMPS	1.1	2.1	1.45	1.45
OUTDOOR COIL – TYPE	PLATE FIN™	PLATE FIN™	PLATE FIN™	PLATE FIN™
ROWS – F.P.I.	2-18	3-17	3-17	3-17
FACE AREA (SQ. FT.)	8.09	9.72	12.56	12.56
TUBE SIZE (IN.)	0.275	0.275	0.275	0.275
REFRIGERANT CONTROL	ELEC. EXPANSION VALVE	ELEC. EXPANSION VALVE	ELEC. EXPANSION VALVE	ELEC. EXPANSION VALVE
REFRIGERANT	—			
LBS. – R-454B (O.D. UNIT) ^(g)	5 lb – 5 oz	7 lb – 10 oz	8 lb — 13 oz	8 lb — 13 oz
FACTORY SUPPLIED	YES	YES	YES	YES
LINE SIZE – IN. O.D. GAS ^(h)	3/4	3/4	7/8	7/8
LINE SIZE — IN. O.D. LIQ.	3/8	3/8	3/8	3/8
DIMENSIONS	H X W X D	H X W X D	H X W X D	H X W X D
CRATED (IN.)	36-11/16 x 40-1/4 x 18-15/16	38-3/16 x 44-11/16 x 20-7/8	57-3/8 x 42-17/32 x 16-15/16	57-3/8 x 42-17/32 x 16-15/16
UNCRATED (IN.)	31-11/32 x 38-1/2 x 16-9/16	33-25/32 x 42-1/2 x 19-15/32	52-11/16 x 40-23/32 x 16-1/8	52-11/16 x 40-23/32 x 16-1/8
WEIGHT	—			
SHIPPING (LBS.)	146	192	260	260
NET (LBS.)	135	181	247	247

^(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 270/275.

^(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) NA means no start components. Yes means quick start kit components. PTC means positive temperature coefficient starter.

^(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).

Sound Power Level

Table 3. Sound power level

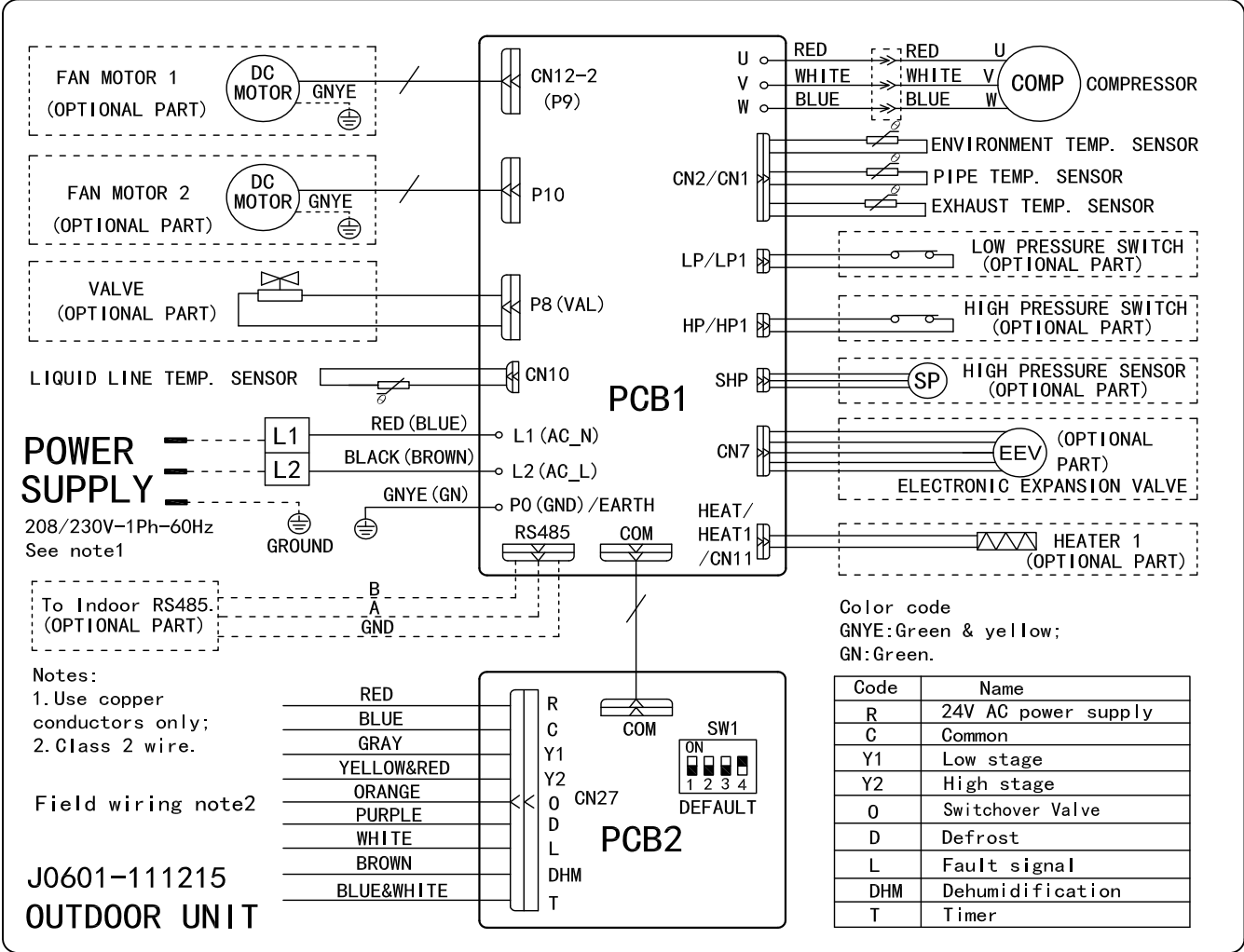
Model ^(a)	A-Weighted Sound Power Level [dB (A)]	Full Octave Sound Power [dB]							
		63Hz ^(b)	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz
5HPL5024A1	58	55	47	44	43	52	49	37	29
5HPL5036A1	60	57	40	47	51	56	45	32	30
5HPL5048A1	66	60	59	58	60	58	52	42	35
5HPL5060A1	68	63	61	56	62	60	57	46	39

^(a) Rated in accordance with AHRI Standard 270–2015.

^(b) For reference only.

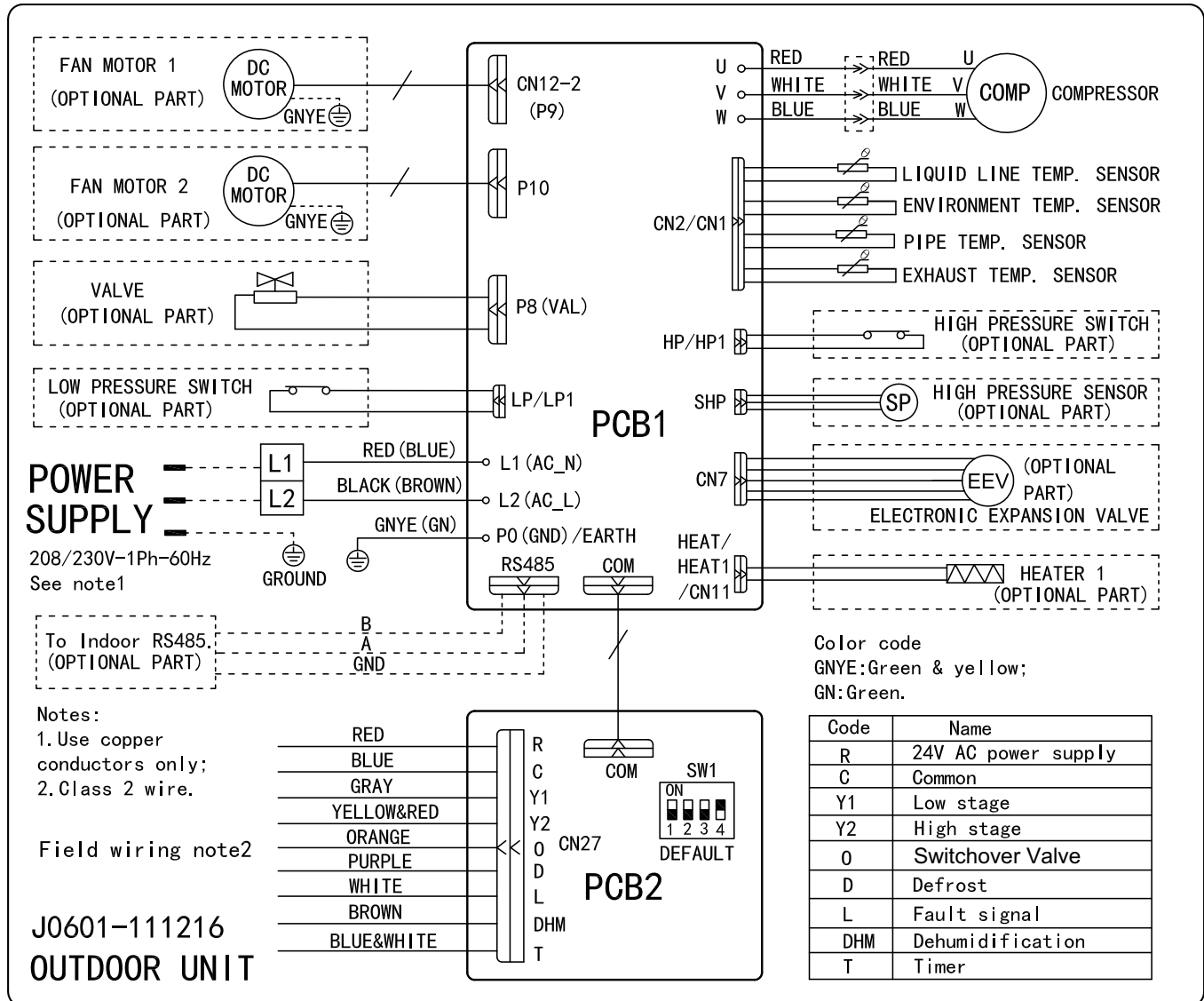
Wiring Diagrams

Figure 1. Wiring diagram – 2-ton and 3-ton



Note: Class 2 low voltage control wiring should not be run in conduit with main power wiring and should be separated.

Figure 2. Wiring diagram – 4-ton and 5-ton



Note: Class 2 low voltage control wiring should not be run in conduit with main power wiring and should be separated.

Dimensional Data

Figure 3. Dimensional drawing – 024 and 036 models

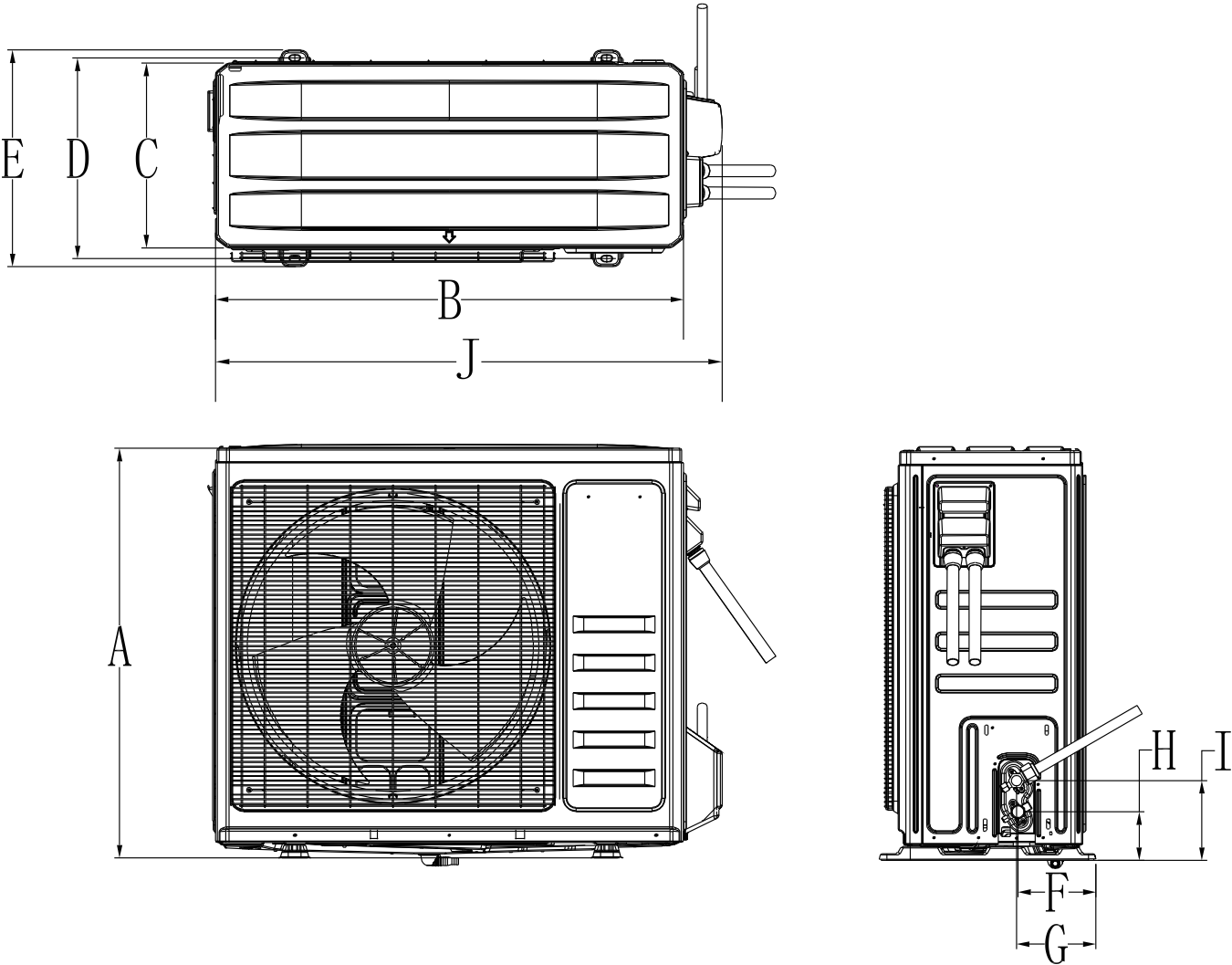


Table 4. Unit dimensions – 024 and 036 models

Model	A	B	C	D	E	F	G	H	I	J
5HPL5024A1	31.35	35.83	14.13	15.36	16.59	5.97	6.07	3.71	6.09	38.54
5HPL5036A1	33.77	39.54	15.89	18.19	19.45	8.30	9.67	3.70	6.10	42.28

Note: All dimensions are in inches.

Figure 4. Dimensional drawing – 048 and 060 models

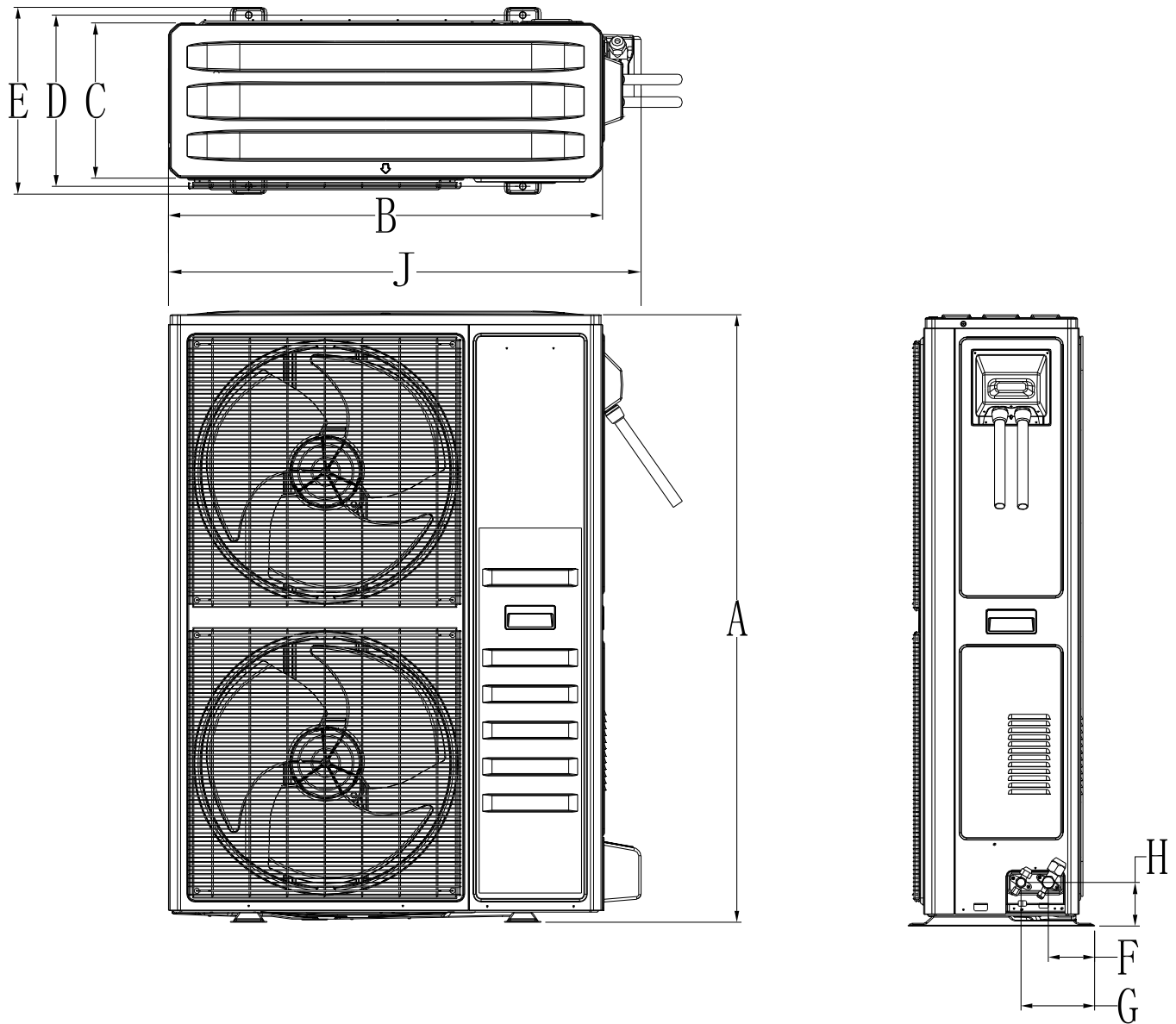


Table 5. Unit dimensions – 048 and 060 models

Model	A	B	C	D	E	F	G	H	J
5HPL5048A1	52.40	37.40	13.39	14.76	16.10	4.00	6.37	3.75	40.71
5HPL5060A1	52.40	37.40	13.39	14.76	16.10	4.00	6.37	3.75	40.71

Note: All dimensions are in inches.

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 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 is certified to UL 60335-2-40. Exterior is designed for outdoor application.

Casing

Unit is painted with a glossy corrosion resistant finish on all panels. Unit casing is constructed of heavy gauge, galvanized steel and painted with a weather-resistant powder paint finish. All panels are subjected to our 1000 hours salt spray test.

Refrigerant Controls

Refrigeration system controls include condenser fan, compressor drive and low and high pressure switches.

Compressor

The compressor features external 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 grilles and panels.

Low Ambient Cooling

As manufactured, this system has a cooling capacity to 5°F.

About Trane and American Standard Heating and Air Conditioning

Trane and American Standard create comfortable, energy efficient indoor environments for residential applications. For more information, please visit www.trane.com or www.americanstandardair.com.



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.