

Tabular Data Sheet

HH8 Series - Horizontal Discharge Variable Speed Heat Pump 18 SEER2 - R-454B - 1 Phase - 2 nominal ton to 5 nominal ton Models: HH824E2S11 to HH860E2S11

Physical and electrical data

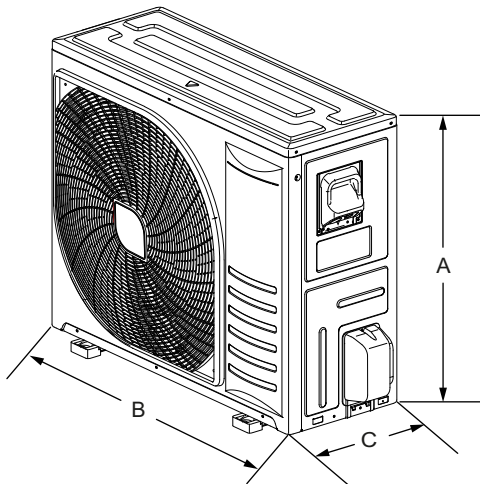
Model		HH824E2S11	HH836E2S11	HH860E2S11
Unit supply voltage		208-230 V, 1 phase, 60 Hz		
Normal voltage range ¹		187 to 252		
Minimum circuit ampacity		24	28	37
Maximum overcurrent device (A) ²		35	35	45
Compressor	Type	Twin rotary	Twin rotary	Twin rotary
	Rated load (A)	16.8	19	27
Crankcase heater (base heater)		Yes	Yes	Yes
Base pan heater		Yes	Yes	Yes
Fan diameter (in.)		21.89	24.4	21.85
Fan motor	Rated HP	1/7	1/3	1/5
	FLA (A)	0.8	1.5	1
	Nominal RPM	870	850	880
	Nominal CFM	2235	3350	4820
Coil	Face area (ft ²)	7.49	10.76	14.87
	Rows deep	2	2	2.6
	Fins per inch	17	18	18
Liquid refrigerant piping outdoor (field installed)		3/8	3/8	3/8
Vapor refrigerant piping outdoor (field installed) ^{3,4}		5/8	3/4	7/8
Unit charge (lb-oz)		5 - 01	7 - 07	11 - 00
Charge (oz/ft)		0.54	0.57	0.6
Operating weight (lb)		116.8	185.2	244.7

1. Rated in accordance with AHRI Standard 110-2016, utilization range A.

2. Dual element fuses or HACR circuit breaker. Maximum allowable overcurrent protection.

3. For applications with non-standard vapor line sizes, refer to the *Accessories* section in the *Technical Guide*.

4. The unit charge provided is correct for the outdoor unit, smallest matched indoor unit, and 15 ft of refrigerant piping. For refrigerant piping lengths other than 15 ft, add or subtract the amount of refrigerant, using the difference in actual refrigerant piping length (not the equivalent length) multiplied by the per foot value.



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Dimensions

Unit model	Dimensions (in.)			Refrigerant connection service valve size (in.)	
	A	B	C	Liquid	Vapor
HH824E2S11	29 1/2	35 3/7	13 2/5	3/8	5/8
HH836E2S11	34 4/9	43 1/3	17 5/7		3/4
HH860E2S11	57 1/2	38 2/5	13		7/8

Notes:

- All dimensions are in inches and are subject to change without notice.
- The overall height is from the bottom of the base pan to the top of the fan guard.
- The overall length and width include screw heads.

System charge for various matched systems

Outdoor unit	HH824E2S11	HH836E2S11	HH860E2S11
Indoor metering device ^{1,2}	5A	5C	5C
Indoor unit ^{3,4,5}	Additional charge (oz)		
JHC24*C	0	—	—
JHC36*D	11.2	0	—
JHC42*F	—	1.6	—
JHC48*G	—	—	-4.8
JHC60*H	—	—	0
JHC60*J	—	—	3.04
JHE24*C	0	—	—
JHE30*D	11.2	0	—
JHE36*D	11.2	0	—
JHE42*F	—	1.6	—
JHE48*G	—	—	-4.8
JHE60*H	—	—	0
JHE60*J	—	—	3.04
CT(F,M,U)30*C	0	—	—
CT(F,M,U)30*D	11.2	0	—
CT(F,M,U)36*D	11.2	0	—
CT(F,M,U)48*F	—	1.6	—
CT(F,M,U)60*G	—	—	-4.8
CT(F,M,U)60*H	—	—	0
CT(F,M,U)60*J	—	—	3.04

- For applications that require a TXV, use S1-1TVM5A1 or S1-1TVM5C1 per this table.
 - Use a TXV kit with these indoor units to obtain system performance.
 - Systems matched with furnaces or air handlers that are not equipped with blower-off delays may require blower time delay.
 - Do not use CTF or CTU coils in horizontal applications.
 - The charge adders shown in the table do not indicate that coils are rated for every application. Refer to the performance data tables in the *Technical Guide* for actual performance for specified system matches. Obtain certified system ratings from www.ahridirectory.org.
- Note:** All of the combinations shown in the table require advanced main air circulating fan indoor product.

Charging

- Check the unit factory charge listed on the unit nameplate to verify the refrigerant charge for the outdoor unit, the smallest matched indoor unit, and 15 ft of interconnecting refrigerant piping.
- Verify the indoor metering device and additional charge required for the specific matched indoor unit in the system using the table above.
- Add additional charge for the amount of interconnecting line tubing greater than 15 ft at the rate specified in the *Physical and electrical data* table.
- For installations requiring additional charge, weigh in refrigerant for the specific matching indoor unit and actual refrigeration piping length.
- After weighing in the charge adders for the matched indoor unit and refrigeration piping, verify the system operation against the temperatures and pressures in the charging chart for the outdoor unit. Locate the charging charts on the outdoor unit and also in the *Service Data Application Guide* on www.simplygettingthejobdone.com. Follow the charging procedure in the *Installation Manual* according to the type of indoor metering device in the system, and allow 10 min after each charge adjustment for the system operation to stabilize. Record the charge adjustment made to match the charging chart.
- For downflow installations and horizontal right installations, some indoor units require additional charging adjustments to ensure correct equipment operation. Refer to the *Installation Manual* for the outdoor unit.
- Permanently stamp the unit nameplate with the total system charge, which is defined as follows: total system charge = base charge (as shipped) + charge adder for matched indoor unit + charge adder for actual refrigeration piping length.