

TECHNICAL SPECIFICATIONS

HSH1(B,Q)E Series

High Efficiency Heat Pump 14 SEER Residential System 1.5 – 4 Ton Capacity

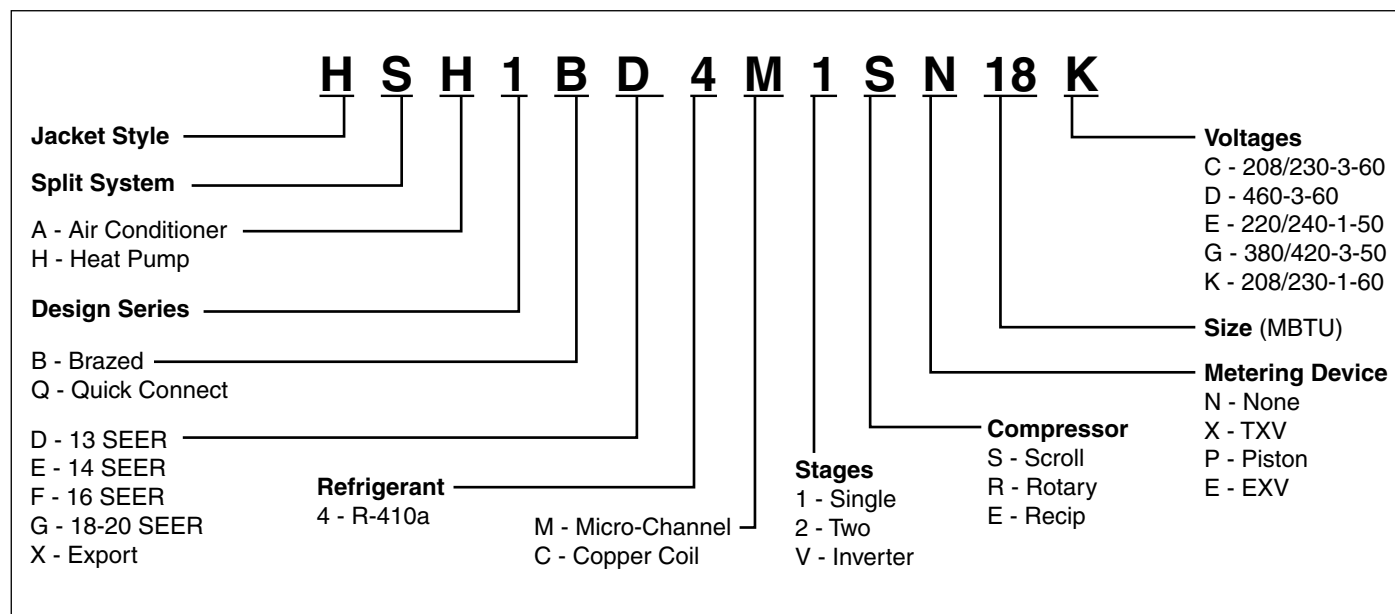
The HSH1(B,Q)E Series of heat pumps offers exceptional performance. The unit, when combined with our engineered coils or air handlers, offers a full line of quality, split system cooling equipment.



FEATURES and BENEFITS

- **Designed Using Galvanized Steel:** With a polyester urethane coat finish, it passes 950 hours of salt spray per ASTM Std. B117.
- **Permanently Lubricated Motor** – A heavy duty PSC motor for long lasting reliability and quiet operation. Requires no maintenance and is completely protected from rain and snow.
- **Composite Base Pan** – Absorbs sound and is corrosion resistant. Composite is also stronger and lighter than steel.
- **Louvered Condenser Guard** – Durable metal guard protects the coil from yard hazards and extreme weather.
- **Removable Top Grille Assembly** – Allows ease of service from the top without disconnecting fan motor leads.
- **High Pressure Switch** – Protects against abnormally high system pressures. Auto-reset feature prevents nuisance service visits.
- **Liquid Line Filter Drier**–HSH1QD-Factory installed; HSH1BD-Field installed
- **One Piece Top/Orifice** – Designed for maximum airflow and quiet operation.
- **Five Minute Restart Time Delay** – When the unit shuts down, a five minute delay keeps the unit from restarting, eliminating the highest cause for compressor failure.
- **Easy Compressor and Control Access** – Designed to make servicing easier for the contractor, access panels are provided to all controls and the compressor from the side of the unit.
- **Fixed Orifice** – Integrated in liquid line service valve for easy change-out.
- **Micro-Channel Coils** – All aluminum coils in all models which provides high corrosion resistance.
- **Service-Friendly Jacket:** Side panels can be easily removed and replaced without removing the top grill.

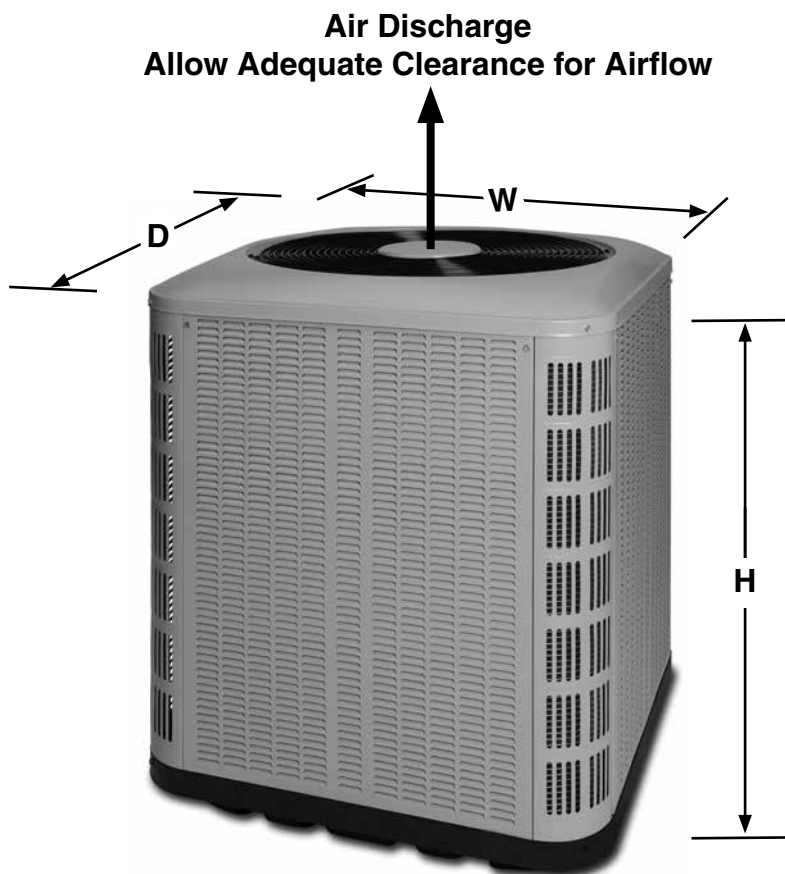
MODEL IDENTIFICATION CODES



DIMENSIONS

AIR CONDITIONER OUTDOOR SECTION

HS1(B,Q)E	18K	24K	30K	36K	42K	48K
H	33.25	33.25	41.25	45.25	45.25	45.25
W	31.75	31.75	31.75	31.75	31.75	31.75
D	31.75	31.75	31.75	31.75	31.75	31.75



PHYSICAL AND ELECTRICAL SPECIFICATIONS / OUTDOOR UNITS

14 SEER — High Efficiency — Single Phase

Model Number HSH1(B,Q)E			18K	24K	30K	36K	42K	48K
Electrical Data	Volts-Cycles-Phase (1)		208/230-60-1					
	Total Amps		9.9	14.4	13.7	15.1	19.4	21.3
	Delay Fuse Max. (2)		20	30	25	30	40	45
	Min. Circuit Ampacity		12.1	17.7	16.9	18.6	23.9	26.3
	Fan Motor	Type	PSC					
		Amps	0.9	0.9	0.9	1.0	1.5	1.5
		HP	0.13	0.13	0.13	0.20	0.25	0.25
	Compressor Data	RLA	9.0	13.4	12.8	14.1	17.9	19.8
		LRA	46.0	58.3	64.0	77.0	112.0	109.0
Refrigerant suction line O.D. NOTE: Liquid line is 3/8" O.D. for entire length."		0-24 ft.	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"
		25-39 ft.	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"
		40-75 ft.	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"
Approximate Weight (lbs.)		Net	185	192	208	212	252	234
		Ship	196	203	220	225	245	247
Sound Rating db			75	75	75	76	79	79

(1) Operating Voltage Range: 187v min. - 253v max.

(2) HACR Type Circuit Breakers may be used.

(3) Requires 7/8" to 1-1/8" reducer from line to unit.

Notes:

Additional charge for line sets above 15 feet.

Values based on suction line as follows with 3/8" liquid line.

a) 3/4" = 0.6 oz. per additional foot.

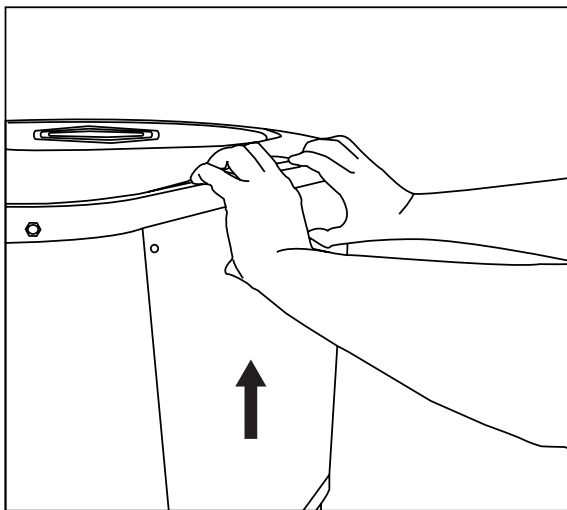
b) 7/8" = 0.7 oz. per additional foot.

c) 1 1/8" = 0.8 oz. per additional foot.

HSH1(B,Q)E ACCESSORIES

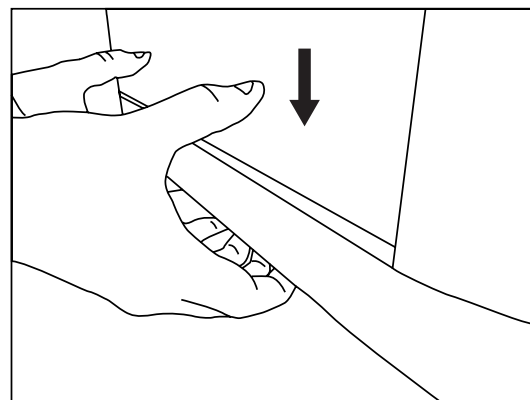
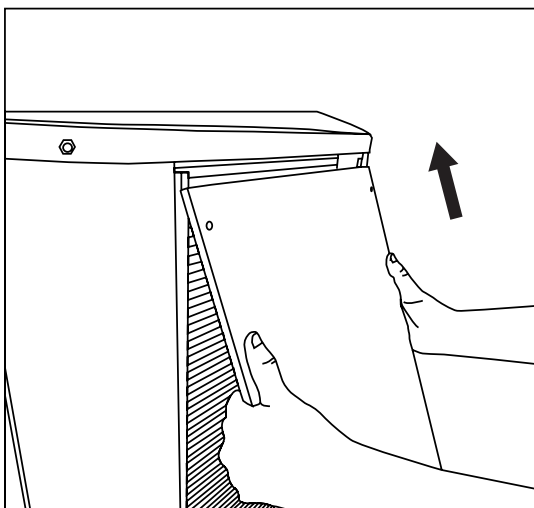
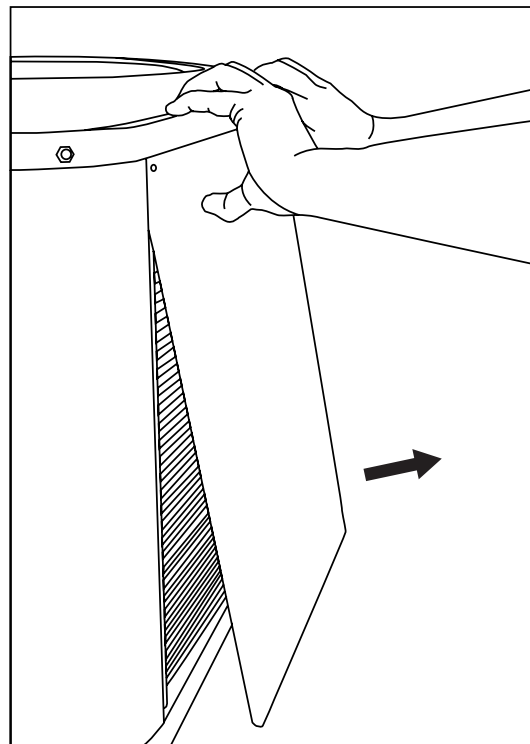
Description	Part Number
Start Assist Kit - Provides additional starting torque for the compressor motor when operating with low line voltage or high operating temperatures.	912933
Fan Delay Kit (TDR) - 80-second fan delay.	918476
Insulated Pre-Charged Line Sets - A line set consists of a liquid line, an insulated suction line, service gaugeports, and the quick-connect coupling. 15, 20, 25, 30, 40, and 50 ft. lengths are available. Lines are factory pre-charged such that no additional refrigerant charge is required on matched systems.	
Outdoor Thermostat - Two-stage logic provides ability to lock out electric strips down to balance point and bring on in stages.	913852
Filter Kit, 18"	921784
Filter Kit, 24"	921785
Filter Kit, 28"	1006697
Coil Box, M1/M7	922594
Coil Box, E3/E4, Upflow	902976
Coil Box, E3/E4, Front Return	904067

PANEL REMOVAL AND REPLACEMENT INSTRUCTIONS



Removing Panels:

1. Remove screws.
2. Pull up on panel.
3. Rotate bottom of panel out.
4. Pull panel off.



Reinstalling Panels:

1. Place panel back in towards top of unit.
2. Rotate bottom of panel inwards.
3. Push panel down until it fills gap at bottom of unit.
4. Replace screws.

SYSTEM HEATING AND COOLING CAPACITIES

14+ SEER — High Efficiency — Single Phase

With M1 & M7 GAS FURNACE								
Outdoor Unit	Indoor Unit	Coil Height	BTUH	SEER	EER	Heating Capacity BTUH @ 47° F	HSPF	CFM
HSH1BE4M1SP18K	C8(B,D)AMX24U-B	18"	17900	14	11.5	17000	7.7	660
HSH1BE4M1SP24K	C8(B,D)AMX24U-B	18"	23600	14	11.5	22600	8.2	980
HSH1BE4M1SP30K	C8(B,D)AMX30U-B	18"	28000	14	11.5	28000	8.5	1200
HSH1BE4M1SP36K	C8(B,D)AMX36U-B	18"	34000	14	11.5	34000	8.5	1200
HSH1BE4M1SP42K	C8(B,D)AMX42U-B	24" *	40500	14	11.5	42500	8.5	1355

HSH1QE4M1SP24K	C8QAMX24U-B	18"	23600	14	11.5	22600	8.2	810
HSH1QE4M1SP30K	C8QAMX30U-B	18"	28000	14	11.5	28000	8.5	980
HSH1QE4M1SP36K	C8QAMX36U-B	18"	34000	14	11.5	34000	8.5	1200
HSH1QE4M1SP42K	C8QAMX42U-B	24" *	40500	14	11.5	42500	8.5	1355

*Requires 922594 M1/M7 24" Coil Box

With E3/E4 Furnace								
Outdoor Unit	Indoor Unit	Coil Height	BTUH	SEER	EER	Heating Capacity BTUH @ 47° F	HSPF	CFM
HSH1BE4M1SP18K	C8(B,D)AMX24U-B	18"	17900	14	11.5	17000	7.7	660
HSH1BE4M1SP24K	C8(B,D)AMX24U-B	18"	23600	14	11.5	22600	8.2	980
HSH1BE4M1SP30K	C8(B,D)AMX30U-B	18"	28000	14	11.5	28000	8.5	1200
HSH1BE4M1SP36K	C8(B,D)AMX36U-B	18"	34000	14	11.5	34000	8.5	1200
HSH1BE4M1SP42K	C8(B,D)AMX42U-B	24"	40500	14	11.5	42500	8.5	1355
HSH1BE4M1SP48K	C8(B,D)AMX49U-B	28" **	46000	14	11.5	47000	8.5	1460

HSH1QE4M1SP24K	C8QAMX24U-B	18"	23600	14	11.5	22600	8.2	810
HSH1QE4M1SP30K	C8QAMX30U-B	18"	28000	14	11.5	28000	8.5	980
HSH1QE4M1SP36K	C8QAMX36U-B	18"	34000	14	11.5	34000	8.5	1200
HSH1QE4M1SP42K	C8QAMX42U-B	24"	40500	14	11.5	42500	8.5	1355
HSH1QE4M1SP48K	C8QAMX49U-B	28" **	46000	14	11.5	47000	8.5	1460

**Can only be used with grille and frame door

All ratings are with time delay relay.

See current AHRI Directory for certified combinations and ratings.

www.ahridirectory.org



GENERAL TERMS OF LIMITED WARRANTY

Nortek Global HVAC LLC will furnish a replacement for any part of this product which fails in normal use and service within the terms and conditions of the warranty.

For complete details of the Limited Warranty, including applicable terms and conditions, see your local installer or contact the Nortek Global HVAC LLC warranty department for a copy.

Before purchasing this appliance, read important energy cost and efficiency information available from your retailer. Specifications and illustrations subject to change without notice and without incurring obligations. Printed in U.S.A (09/2017)