

TECHNICAL SPECIFICATIONS

HSA1(B,Q)D Series

High Efficiency Air Conditioner

13+ SEER

1.5 - 5 Ton Capacity

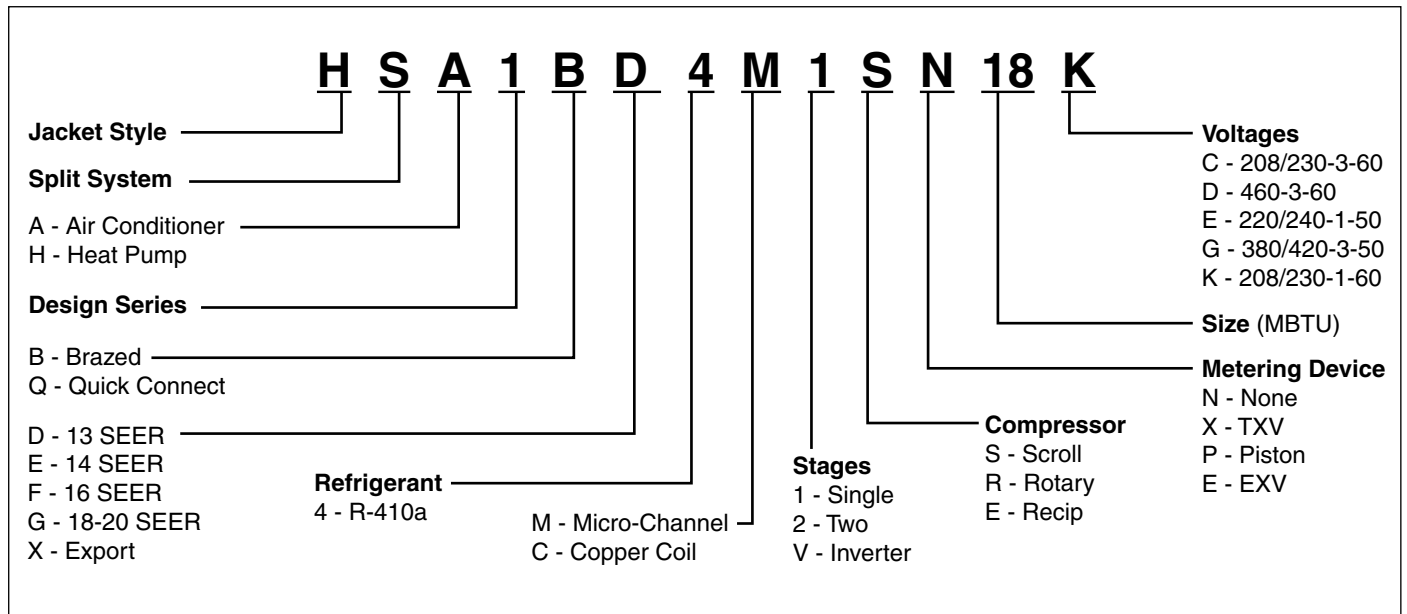
The HSA1(B,Q)D unit, when combined with our matched indoor coils, offers a full line of quality, split-system air conditioning systems. Units are ideally sized for manufactured housing applications.



FEATURES and BENEFITS

- **Designed Using Galvanized Steel:** With a polyester urethane coat finish, it passes 950 hours of salt spray per ASTM Std. B117.
- **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:** HSA1QD-Factory installed; HSA1BD-field installed
- **One Piece Top/Orifice:** Designed for maximum airflow and quiet operation.
- **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.
- **Micro-Channel:** All aluminum coils in 1.5-5 ton models which provides high corrosion resistance.
- **Servicer-Friendly Jacket:** Side panels can be easily removed and replaced without removing the top grill.

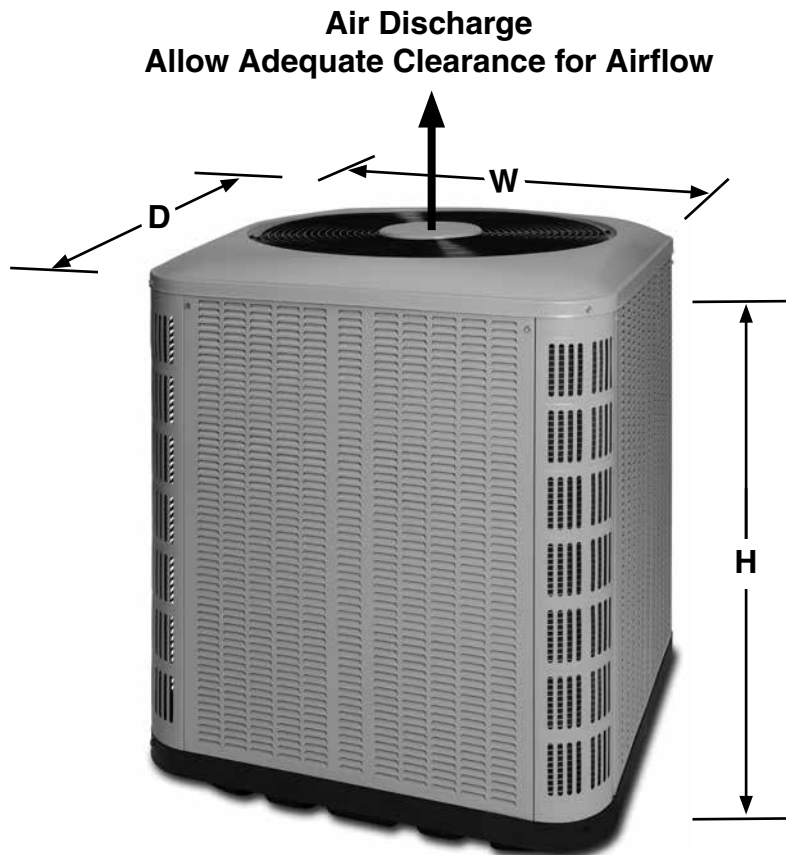
MODEL IDENTIFICATION CODES



DIMENSIONS

AIR CONDITIONER OUTDOOR SECTION

HSA1(B,Q)D	18K	24K	30K	36K	42K	48K	60K
H	24.5	24.5	28.5	28.5	29.25	29.25	33.25
W	23.75	23.75	23.75	23.75	31.75	31.75	31.75
D	23.75	23.75	23.75	23.75	31.75	31.75	31.75



PHYSICAL AND ELECTRICAL SPECIFICATIONS / OUTDOOR UNITS

13 SEER — High Efficiency — Single Phase

Model Number HSA1(BQ)D			18K	24K	30K	36K	42K	48K	60K
Electrical Data	Volts-Cycles-Phase (1)		208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1	208/230-60-1
	Total Amps		9.3	13.5	14.8	18.0	19.4	23.2	27.8
	Delay Fuse Max. (2)		20	25	30	35	40	50	60
	Min. Circuit Ampacity		11.6	16.7	18.3	22.2	23.9	28.7	34.4
	Fan Motor	Type	PSC	PSC	PSC	PSC	PSC	PSC	PSC
		Amps	0.35	0.7	0.7	1.4	1.5	1.5	1.5
		HP	0.05	0.1	0.1	0.25	0.25	0.25	0.25
	Fan Blade	Dia - # Blades	18" - 3	18" - 3	18" - 3	18" - 4	24" - 2	24" - 2	24" - 2
		SCFM	2600	2800	3000	3000	3500	3500	3800
	Compressor Data	RLA	9.0	12.8	14.1	16.6	17.9	21.8	26.4
LRA		48.0	58.3	73.0	79.0	112.0	117.0	134.0	
Refrigerant suction line		0-24 ft.	3/4"	3/4"	3/4"	3/4"	7/8"	7/8"	7/8"
O.D. NOTE: Liquid line is 3/8" O.D. for entire length		25-39 ft.	3/4"	3/4"	3/4"	7/8" (3)	7/8"	7/8"	1-1/8" (4)
		40-75 ft.	3/4"	3/4"	3/4"	7/8" (3)	7/8"	7/8"	1-1/8" (4)
Approximate Weight (lbs.)		Net	129	126	133	140	195	197	217
		Ship	138	135	142	149	205	207	228
Sound Rating db			74	74	74	76	79	78	79

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

(2) HACR Type Circuit Breakers may be used.

(3) Requires 7/8" to 3/4" reducer from line to unit.

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

(5) 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.

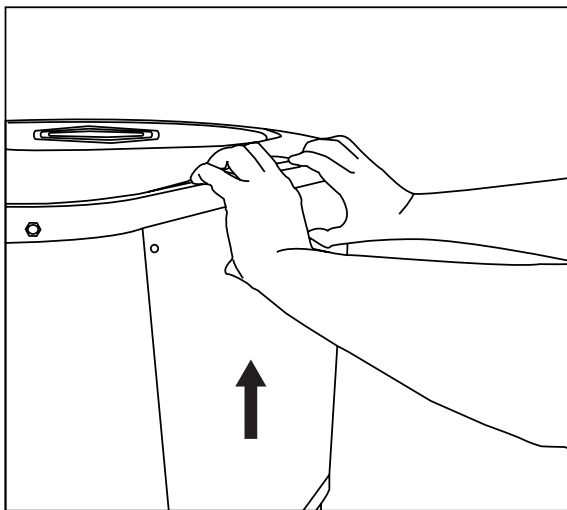
b) 7/8" = 0.7 oz. per additional foot.

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

HSA1(B,Q)D ACCESSORIES

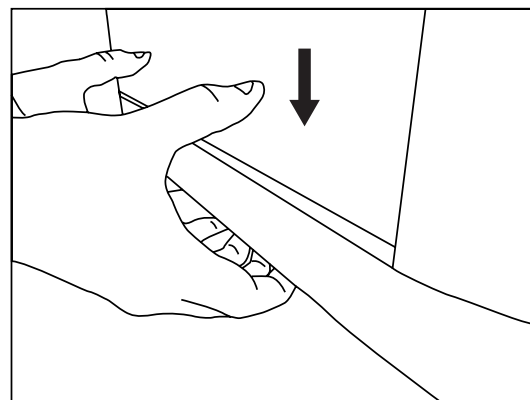
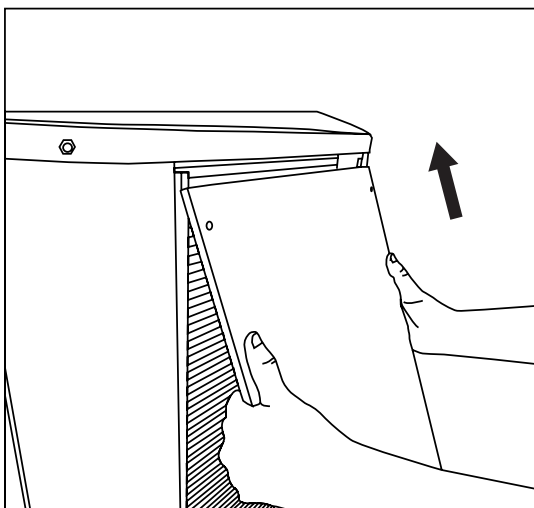
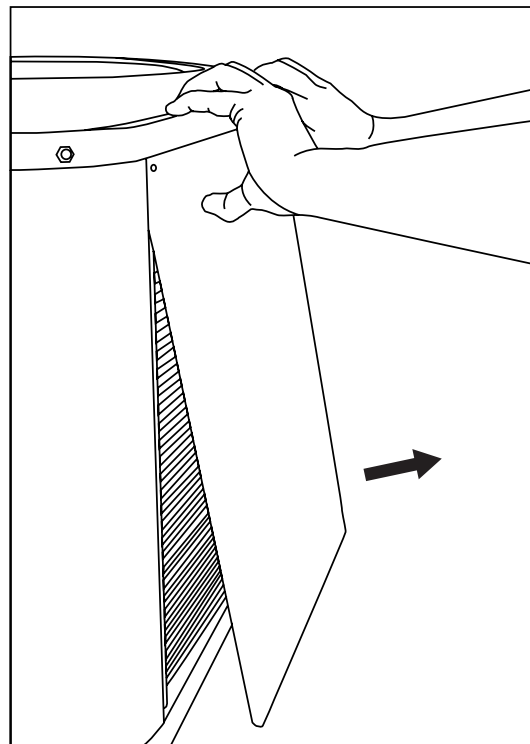
Description	Part Number
Start Assist Kit - Provides additional starting torque for the compressor motor when operating with low line voltage or high operating temperatures.	912933
Fan Delay Kit (TDR) - 80-second fan delay.	918476
Insulated Pre-Charged Line Sets - A line set consists of a liquid line, 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
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 & COOLING CAPACITIES

13 SEER — High Efficiency — Single Phase

M1, M7	M1 / M7 GAS FURNACE					
Outdoor Unit	Indoor Coil	Coil Height	Cooling Capacity	SEER	EER	SCFM
HSA1QD4M1SN24K	C8QAM024U-B	20"	23,400	13.0	10.5	705
HSA1QD4M1SN30K	C8QAM030U-B	20"	28,800	13.0	10.5	960
HSA1QD4M1SN36K	C8QAM036U-B	20"	35,600	13.0	10.5	1190
HSA1QD4M1SN42K	CM4Q-53U	18.5"	39,500	13.0	10.2	1200
HSA1QD4M1SN48K	CM4Q-54U	18.5"	44,000	13.0	10.2	1415
HSA1QD4M1SN60K*	CM4Q-54U**	18.5"	50,000	13.0	10.2	1450

HSA1BD4M1SN18K	C8(B,D)AM01830U-B	20"	18,000	13.0	10.5	535
HSA1BD4M1SN24K	C8(B,D)AM01830U-B	20"	23,400	13.0	10.5	705
HSA1BD4M1SN30K	C8(B,D)AM01830U-B	20"	28,800	13.0	10.5	960
HSA1BD4M1SN36K	C8(B,D)AM036U-B	20"	35,600	13.0	10.5	1190
HSA1BD4M1SN42K	CM4B-53U	18.5"	40,000	13.0	10.2	1250
HSA1BD4M1SN48K	CM4B-54U	18.5"	44,500	13.0	10.2	1450
HSA1BD4M1SN60K*	CM4B-54U**	18.5"	50,000	13.0	10.2	1450

* 5 ton condenser is not a valid match with the M7

** Requires 5 ton blower on high speed

E3	E3 / E4					
Outdoor Unit	Indoor Coil	Coil Height	Cooling Capacity	SEER	EER	SCFM
HSA1QD4M1SN24K	C8QAM024U-B	20"	23,400	13.0	10.5	705
HSA1QD4M1SN30K	C8QAM030U-B	20"	28,800	13.0	10.5	960
HSA1QD4M1SN36K	C8QAM036U-B	20"	35,600	13.0	10.5	1190
HSA1QD4M1SN42K	CM4Q-53U	18.5"	39,500	13.0	10.2	1200
HSA1QD4M1SN48K	CM4Q-54U	18.5"	44,000	13.0	10.2	1415
HSA1QD4M1SN48K	CM4Q-55U	24.5"	45,000	13.0	10.2	1415
HSA1QD4M1SN60K	CM4Q-56U**	24.5"	53,000	13.0	10.2	1600

HSA1BD4M1SN18K	C8(B,D)AM01830U-B	20"	18,000	13.0	10.5	535
HSA1BD4M1SN24K	C8(B,D)AM01830U-B	20"	23,400	13.0	10.5	705
HSA1BD4M1SN30K	C8(B,D)AM01830U-B	20"	28,800	13.0	10.5	960
HSA1BD4M1SN36K	C8(B,D)AM036U-B	20"	35,600	13.0	10.5	1190
HSA1BD4M1SN42K	CM4B-53U	18.5"	40,000	13.0	10.2	1250
HSA1BD4M1SN48K	CM4B-54U	18.5"	44,500	13.0	10.2	1450
HSA1BD4M1SN48K	CM4B-56U	24.5"	46,500	13.0	10.2	1500
HSA1BD4M1SN60K	CM4B-56U**	24.5"	53,000	13.0	10.2	1600

** Requires 5 ton blower on high speed

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)