

MULTI-POSITION, VARIABLE-SPEED, ECM-BASED AIR HANDLER WITH IN- TERNAL EEV, COMMUNICATING FOR S-SERIES MATCHUPS 1½ TO 5 TONS



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Product Features

- Electronic Expansion Valve (EEV) for cooling and heat pump applications.
- 7mm evaporator coil tube size
- Variable-speed ECM blower motor
- Compatible with Amana® brand smart thermostat
- Provides constant CFM over a wide range of static pressure conditions independent of duct system
- CFM indicator
- Thermostat provides adjustable low-CFM for efficient fan-only operation
- All-aluminum evaporator coil
- Fault recall of six most recent faults
- Improved humidity and comfort control
- AHRI certified; ETL listed
- Coil mounting track for quick repositioning
- Rigid SmartFrame™ cabinet
- UL 60335 2-40 Compliant

Cabinet Features

- Cabinet air leakage less than 2.0% at 1.0 inch H₂O when tested in accordance with ASHRAE standard 193
- Cabinet air leakage less than 1.4% at 0.5 inch H₂O when tested in accordance with ASHRAE standard 193
- Horizontal or vertical configuration capabilities
- 21" depth for easier attic access
- DecaBDE-free thermoplastic drain pan with secondary drain connections
- Screw-less sides and back helps to reduce condensation when installed in humid locations
- Foil-faced insulation covers the internal casing to reduce cabinet condensation
- Galvanized, leather grain-embossed finish
- Glue-less cabinet insulation retention
- Tool-less filter access



* Complete warranty details available from your local dealer or at www.amana-hac.com. To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec. The duration of warranty coverage in Texas and Florida differs in some cases.

	A	H	V	E	60	D	P	1	4	00	B	A	
	1	2	3	4	5,6	7	8	9	10	11,12	13	14	
BRAND													MINOR REVISION
D - DAIKIN AIR HANDLER A - CORPORATE AIR HANDLER													MAJOR REVISION
APPLICATION													
C - CEILING MOUNTED M - MULTI-POSITIONAL W - WALL MOUNTED F - FIT COMPATIBLE MULTI-POSITIONAL H - HORIZONTAL DISCHARGE COMPATIBLE MULTI-POSITIONAL													FACTORY INSTALLED ELECTRIC HEAT KW 00 - NO ELECTRIC HEAT
MOTOR													REFRIGERANT
S - MS-ECM V - VS-ECM COMMUNICATING													3 - R32 4 - R4 10A 6 R410A or R22
EXPANSION DEVICE													ELECTRICAL
E - ELECTRONIC EXPANSION VALVE F - FLOWRATOR T - THERMAL EXPANSION VALVE													1 208/230 V, 1 PHASE, 60 Hz
NOMINAL CAPACITY													CABINET
12 - 1.0 TON 36 - 3.0 TONS 18 - 1.5 TONS 42 - 3.5 TONS 24 - 2.0 TONS 48 - 4.0 TONS 30 - 2.5 TONS 60 - 5.0 TONS													N - UNCASED P - PAINTED U - UNPAINTED
													CABINET WIDTH
													AC* Series AM* Series AW* Series M - 43.25" B - 17.5" S - 20.2" L - 49.25" C - 21.0" L - 36.05" D - 24.5"

	H	K	T	S	D	2	5	D	1	
	1	2	3	4	5	6	7	8	9	
Unit Type										Electrical
HKTS - Electric heater Kit for air handlers										
Service Disconnect										Cabinet Size
D - Service disconnect N - No service disconnect										
										Heating Capacity @ 240 V
									A - Single phase 208 V B - Single phase 240 V 1 - Single phase 208/240 V 3 - Three phase 208/240 V	
									X - All Cabinets C - C Cabinet D - D Cabinet	
									3 3.0 kW 10 9.6 kW 5 4.8 kW 15 14.4 kW 6 6.0 kW 19 19.2 kW with 170°F limit 8 8.0 kW 20 19.2 kW with 160°F limit 25 24.0 kW	

Note: 20X3 = 18.0 kW with 160°F limit

*Refer S&R Plate

	AHVE24BP1400	AHVE36CP1400	AHVE42CP1400	AHVE48DP1400	AHVE60DP1400
NOMINAL TONS	2.0Ton	3.0Ton	3.5Ton	4.0Ton	5.0Ton
Blower					
Diameter	9½"	10⅝"	10⅝"	12"	12"
Width	6"	10⅝"	10⅝"	10⅝"	10⅝"
TUBING CONNECTION					
Liquid - Refrigerant	⅜"	⅜"	⅜"	⅜"	⅜"
Suction - Refrigerant	¾"	⅞"	⅞"	⅞"	⅞"
Coil Drain Connection (NPT)	¾"	¾"	¾"	¾"	¾"
ELECTRICAL DATA					
Voltage - Phase	208/230-1	208/230-1	208/230-1	208/230-1	208/230-1
Min Circuit Ampacity	4.9/4.9	6.5/6.5	6.5/6.5	6.5/6.5	6.5/6.5
Max. Overcurrent Device (amps)	15/15	15/15	15/15	15/15	15/15
Minimum VAC	197	197	197	197	197
Maximum VAC	253	253	253	253	253
BLOWER MOTOR					
FLA	3.9	5.2	5.2	5.2	5.2
HP	½	¾	¾	¾	¾
SHIP WEIGHT (LBS)	115	140	140	150	167



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*The chart is for information only. For satisfactory operation, external static pressure must not exceed 0.5 wc.
*Unit may provide different SCFM during electrical heater operation. See IO manual for the airflow rate.

MODEL	CIRCUIT 1			CIRCUIT 2			SINGLE-POINT KIT	
	AMPS	MCA ¹	MOP ²	AMPS	MCA ¹	MOP ²	MCA ¹	MOP ²
AHVE24BP1400BA	0.0/0.0	4.9/4.9	15/15	---	---	---	---	---
HKTSN03X1	10.8/12.5	18/21	20/25	---	---	---	---	---
HKTS*05X1	17.3/20.0	27/29.9	30/30	---	---	---	---	---
HKTSN06X1	21.7/25	32/36.1	35/40	---	---	---	---	---
HKTS*08X1	28.9/33.3	41/46.5	45/50	---	---	---	---	---
HKTS*10X1	34.7/40.0	48/54.9	50/60	---	---	---	---	---
AHVE36CP1400BA	0.0/0.0	6.5/6.5	15/15	---	---	---	---	---
HKTS*05X1	17.3/20.0	28/32	30/35	---	---	---	---	---
HKTSN06X1	21.7/25.0	34/38	35/40	---	---	---	---	---
HKTS*08X1	28.9/33.3	43/48	45/50	---	---	---	---	---
HKTS*10X1	34.7/40.0	50/57	50/60	---	---	---	---	---
HKTS*15X3 ^	0/0	6.5/6.5	15/15	30/34.6	37.5/43	40/45	---	---
HKTSN15XA/B	34.7/40	49.8/56.5	50/60	17.3/20	21.7/25	25/25	71.5/81.5	80/90
HKTSN19CA/B	34.7/40	49.8/56.5	50/60	34.7/40	43.3/50	45/50	93.2/107	100/110
AHVE42CP1400BA	0.0/0.0	6.5/6.5	15/15	---	---	---	---	---
HKTS*05X1	17.3/20.0	28/32	30/35	---	---	---	---	---
HKTSN06X1	21.7/25.0	34/38	35/40	---	---	---	---	---
HKTS*08X1	28.9/33.3	43/48	45/50	---	---	---	---	---
HKTS*10X1	34.7/40.0	50/57	50/60	---	---	---	---	---
HKTS*15X3 ^	0/0	6.5/6.5	15/15	30/34.6	37.5/43	40/45	---	---
HKTSN15XA/B	34.7/40	49.8/56.5	50/60	17.3/20	21.7/25	25/25	71.5/81.5	80/90
HKTSN19CA/B	34.7/40	49.8/56.5	50/60	34.7/40	43.3/50	45/50	93.2/107	100/110
AHVE48DP1400BA	0.0/0.0	6.5/6.5	15/15	---	---	---	---	---
HKTS*05X1	17.3/20.0	28/32	30/35	---	---	---	---	---
HKTSN06X1	21.7/25.0	34/38	35/40	---	---	---	---	---
HKTS*08X1	28.9/33.3	43/48	45/50	---	---	---	---	---
HKTS*10X1	34.7/40.0	50/57	50/60	---	---	---	---	---
HKTS*15X3 ^	0/0	6.5/6.5	15/15	30/34.6	37.5/43	40/45	---	---
HKTSN15XA/B	34.7/40	49.8/56.5	50/60	17.3/20	21.7/25	25/25	71.5/81.5	80/90
HKTS*20X3 ^	0/0	6.5/6.5	15/15	37.5/43.3	47/54	50/60	---	---
HKTSN20DA/B	34.7/40	49.8/56.5	50/60	34.7/40	43.3/50	45/50	93.2/107	100/110
AHVE60DP1400BA	0.0/0.0	6.5/6.5	15/15	---	---	---	---	---
HKTS*05X1	17.3/20.0	28/31.5	30/35	---	---	---	---	---
HKTSN06X1	21.7/25.0	34/37.8	35/40	---	---	---	---	---
HKTS*08X1	28.9/33.4	43/48.2	45/50	---	---	---	---	---
HKTS*10X1	34.7/40.0	49.8/57	50/60	---	---	---	---	---
HKTSN15XA/B	34.7/40	49.8/57	50/60	17.4/20	21.7/25	25/25	71.5/81.5	80/90
HKTSN20DA/B	34.7/40	49.8/57	50/60	34.7/40	43.3/50	45/50	93.2/107	100/110
HKTSN25DA/B	52/60	72/81.5	80/90	35/40	43.3/50	45/50	115/132	125/150

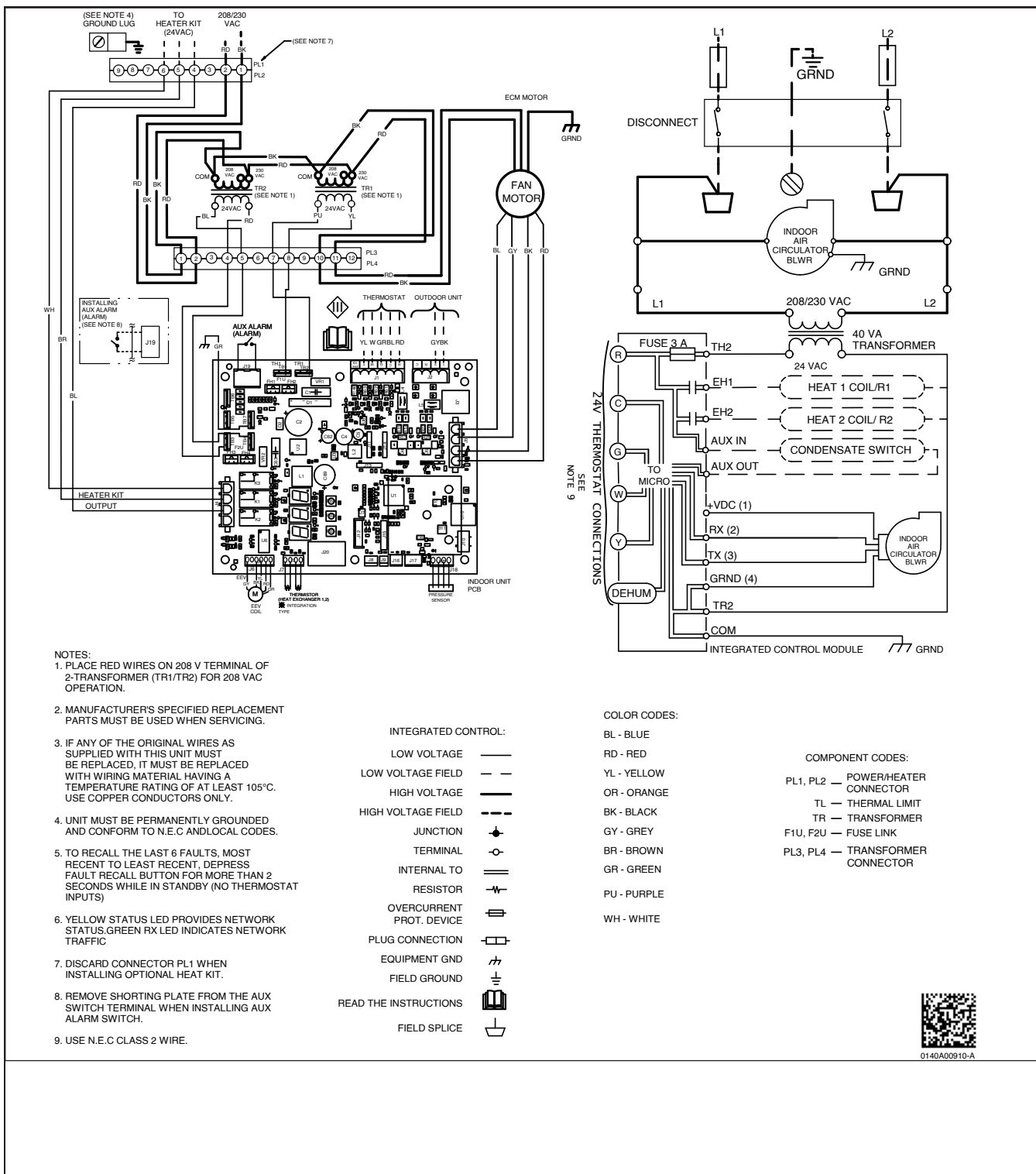
¹ Minimum Circuit Ampacity (Heater Amps + Motor Amps) X 1.25² Maximum Overcurrent Protection = 2.25 X Motor Amps + Heater Amps

^ Three-phase Heater Kits (Circuit 1: Single-phase for Air Handlers Circuit 2: Three-phase for Heater Kits)

* D - Service disconnect, N - No service disconnect

--- indicates Not Required

Note: The 208 or 240 in the heat kit part number field is for clarification of the nominal voltage for this model.



Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

WARNING

High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

DOWNFLOW KITS

DFKE-02
AHVE24BP1400
AHVE36CP1400
AHVE42CP1400
AHVE48DP1400
AHVE60DP1400

PERMANENT 1" FILTERS

CHASSIS	PART#	SIZE
B	ALFH16201E	16.0" x 20.0"
C	ALFH1912201E	19.5" x 20.0"
D	ALFH20231E	23.0" x 20.0"

DRAIN PORT PLUG

KIT NUMBER	DESCRIPTION	APPLICATION
DPK1	Side Drain Port Plug	All Models

SINGLE POINT KIT **

HEATER KIT MODEL	SPWK-B	SPWK-C	SPWK-D
HKTSD15XA		AHVE36CP1400** AHVE42CP1400**	AHVE48DP1400** AHVE60DP1400**
HKTSD15XB			
HKTSD19CA			
HKTSD19CB			
HKTSD20DA			AHVE48DP1400** AHVE60DP1400**
HKTSD20DB			
HKTSD25DA			AHVE60DP1400**
HKTSD25DB			

** Must be installed along with any of the above compatible heat kits. This kit will fit any AHVE air handler as long as a compatible heat kit is installed in the unit.

CONDENSATE MANAGEMENT KITS*

CMK0015	CMK0016	CMK0017
AHVE24BP1400	AHVE36CP1400	AHVE60DP1400
	AHVE42CP1400	
	AHVE48DP1400	

*For Horizontal application only.

HIGH HUMIDITY KITS

HHK0001	HHK0002	HHK0003
AHVE24BP1400	AHVE36CP1400	AHVE60DP1400
	AHVE42CP1400	AHVE48DP1400

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