

AMVE



Air Conditioning & Heating



MULTI-POSITION, VARIABLE-SPEED, ECM-BASED AIR HANDLER WITH INTERNAL EEV, COMFORTBRIDGE™ AND INVERTER COMPATIBLE 2 TO 5 TONS

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Product Features

- Electronic Expansion Valve (EEV) for cooling and heat pump applications.
- Variable-speed ECM blower motor
- Suitable for operation with inverter-driven products
- Integrated communicating ComfortBridge[™] Technology
- Commissioning and diagnostics via on board Bluetooth with the CoolCloud™ phone and tablet application
- Provides constant CFM over a wide range of static pressure conditions independent of duct system
- · CFM indicator
- 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
- 3 kW 25 kW electric heater kits
- · AHRI certified; ETL listed
- 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

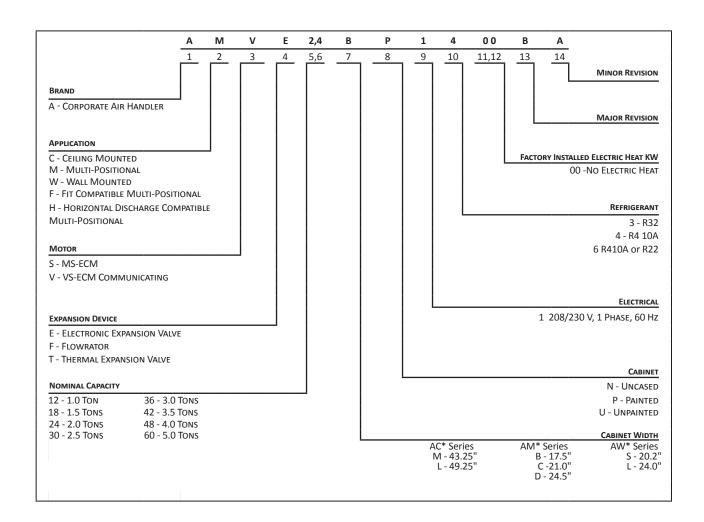


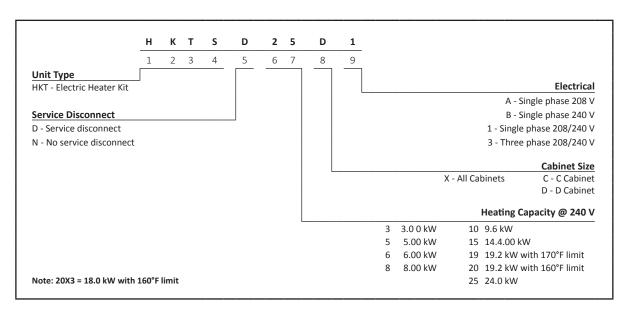






^{*} Complete warranty details available from your local dealer or at www.goodmanmfg.com. To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec. The duration of warranty coverage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

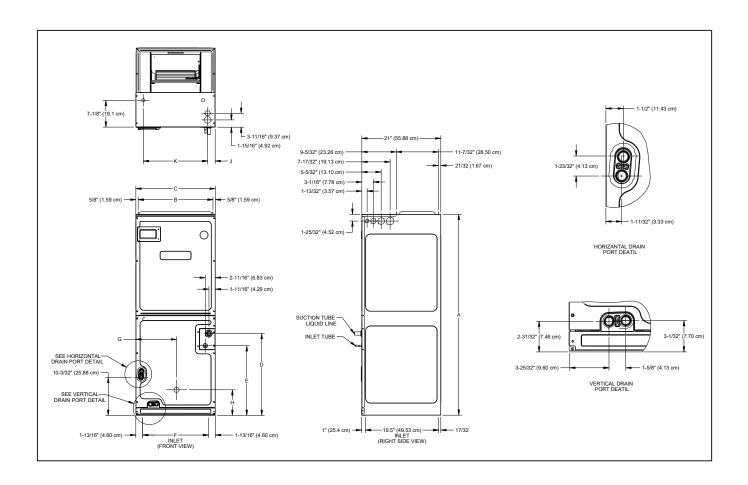




*Refer S&R Plate

	AMVE24 BP1400	AMVE36 CP1400	AMVE48 DP1400	AMVE60 DP1400
NOMINAL RATINGS				
Cooling (BTU/h)	24,000	36,000	48,000	60,000
CFM (High range)	1200/600	1700/800	1800/1350	2000/1600
BLOWER				
Diameter	10%"	10%"	11%"	11%"
Width	6"	10%"	10%"	10%"
COIL CONNECTION				
Liquid	3/8"	3/8"	3/8"	3/8"
Suction	3/4"	7/8"	7 ₈ "	7/8"
Coil Drain Connection FPT	3/4"	3/4"	3/4"	3/4"
ELECTRICAL DATA				
Voltage	208/240	208/240	208/240	208/240
Electric Heat Capacity (kW)	3, 5, 6, 8, 10	5, 6, 8, 10, 15, 19	5, 6, 8, 10, 15, 20	5, 6, 8, 10, 15, 20, 25
Min Circuit Ampacity	4.9/4.9	6.5/6.5	8.6/8.6	8.6/8.6
Max. Overcurrent Device (Amps)	15/15	15/15	15/15	15/15
Minimum VAC	197	197	197	197
Maximum VAC	253	253	253	253
BLOWER MOTOR				
Full Load Amps (FLA)	3.9	5.2	6.9	6.9
Horsepower (HP)	1/2	3/4	1	1
SHIP WEIGHT (LBS.)	128	150	160	177

Note: Minimum Circuit Ampacity (MCA) and Maximum Overcurrent Protection (MOP) for blower without supplemental heat installed. Refer to unit nameplate and/or Heat Kit Data for specification with approved accessory heaters installed.



MODEL	Α	В	С	D	E	F	G	н
AMVE24BP1400	537/16	16%	17½	20	21½	141/8	91/8	75/8
AMVE36CP1400	537/16	19%	21	21 ¹³ / ₁₆	18%	17 ¹¹ / ₁₆	10 ¹³ / ₁₆	6 ¹³ / ₁₆
AMVE48DP1400	537/16	235/16	24½	21½	185/16	213/16	125/8	6%
AMVE60DP1400	58	235/16	24½	261/8	22%	213/16	125/16	251/8

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MODEL	Stage	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
AAAVE24DD1400 D*	High	700	690	690	685	680	670	665	660	655
AMVE24BP1400-B*	Low	520	505	495	490	470	455	445	435	425
AAAVE2CCD1400.D*	High	1190	1170	1165	1160	1145	1130	1120	1105	1100
AMVE36CP1400-B*	Low	820	810	795	785	765	740	730	720	710
AAAVE40DD1400.D*	High	1445	1440	1430	1415	1405	1390	1380	1375	1370
AMVE48DP1400-B*	Low	880	875	870	870	860	845	840	835	830
AA AVECODD4 400 D*	High	1645	1640	1640	1635	1630	1625	1620	1620	1615
AMVE60DP1400-B*	Low	1080	1075	1070	1070	1060	1055	1050	1050	1045

Note: During cooling operation outdoor will determine the indoor airflow

COOLING/HEAT PUMP AIRFLOW TABLE

MODEL	AIRFLOW LEVEL	CFM
AMVF24BP1400-B*	High	690
AIVIVE24BP1400-B"	Low	495
AMVF36CP1400-B*	High	1165
AIVIVE36CP1400-B"	Low	795
ANAVE 40001 400 0*	High	1430
AMVE48DP1400-B*	Low	870
ANAVECODD1400 A*	High	1640
AMVE60DP1400-A*	Low	1070

MODELC	SERVICE	CIRCUI	г 1 (208V/2	40V)	Circui	т 2 (208V/	′240V)	SINGLE-POINT K	іт (208V/240V)
MODELS	DISCONNECT	AMPS	MCA ¹	MOP ²	AMPS	MCA ¹	MOP ²	MCA ¹	MOP ²
AMVE24BP1400BA		0.0/0.0	4.9/4.9	15/15					
HKTSN03X1		10.8/12.5	18.4/20.5	20/25					
HKTSN05X1		17.3/20.0	26.5/29.9	30/30					
HKTSN06X1	No Breaker	21.7/25.0	32.0/36.1	35/40					
HKTSN08X1		28.9/33.3	41.0/46.5	45/50					
HKTSN10X1		34.7/40.0	48.2/54.9	50/60					
HKTSD05X1		17.3/20.0	26.5/29.9	30/30					
HKTSD08X1	Breaker	28.9/33.3	41.0/46.5	45/50					
HKTSD10X1		34.7/40.0	48.2/54.9	50/60					
AMVE36CP1400BA		0.0/0.0	6.5/6.5	15/15					
HKTSN05X1		17.3/20.0	28.0/31.5	30/35					
HKTSN06X1		21.7/25.0	34.0/37.8	35/40					
HKTSN08X1	N- Dl	28.9/33.3	42.6/48.2	45/50					
HKTSN10X1	No Breaker	34.7/40.0	49.8/56.5	50/60					
HKTSN15X3^		0.0/0.0	6.5/6.5	15/15	30/34.6	37.5/43	40/45		
HKTSN15XA/B		34.7/40.0	49.8/56.5	50/60	17.3/20.0	21.7/25.0	25/25	71.5/81.5	80/90
HKTSD05X1		17.3/20.0	28.0/31.5	30/35					
HKTSD08X1	D 1	28.9/33.3	42.6/48.2	45/50					
HKTSD10X1	Breaker	34.7/40.0	49.8/56.5	50/60					
HKTSD19CA/B		34.7/40.0	49.8/56.5	50/60	34.7/40	43.4/50.0	45/50	93.2/106.5	100/110
AMVE48DP1400BA		0.0/0.0	8.6/8.6	15/15					
HKTSN05X1		17.3	30.3	35					
HKTSN06X1	No Breaker	21.7	36	40					
HKTSN08X1		28.9	45	45					
HKTSN10X1		34.7	52	60					
HKTSD05X1		17.3	30.3	35					
HKTSD08X1		28.9	45	45					
HKTSD10X1	Dun alican	34.7	52	60					
HKTSD15X3^	Breaker	34.7	52	60	17.3	21.7	25	73.6	80
HKTSD15XA/B		34.7	52	60	34.7	43.3	45	95.3	100
HKTSD20DA/B		0.0	8.6	15	30	38	40		
AMVE60DP1400BA		0.0/0.0	8.6/8.6	15/15					
HKTSN05X1		17.3	30.3	35					
HKTSN06X1	No Propker	21.7	36	40					
HKTSN08X1	No Breaker	28.9	45	45					
HKTSN10X1		34.7	52	60					
HKTSD05X1		17.3	30.3	35					
HKTSD08X1		28.9	45	45					
HKTSD10X1		34.7	52	60					
HKTSN15X3^	Progless	34.7	52	60	17.3	21.7	25	73.6	80
HKTSN20X3^	Breaker	34.7	52	60	34.7	43.3	45	95.3	100
HKTSN15XA/B		52	73.6	80	35	43.3	45	117	125
HKTSD20DA/B		0.0	8.6	15	30	38	40		
HKTSD25DA/B		0.0	8.6	15	38	47	50		

 $^{^{\}rm 1}$ Minimum Circuit Ampacity (Heater Amps + Motor Amps) X 1.25

HEATING KW CORRECTION FACTOR

SUPPLY VOLTAGE	240	230	220	210	208
CORRECTION FACTOR	1.00	0.92	0.84	0.77	0.75

Multiply the 240-volt heating capacity by correction factors.

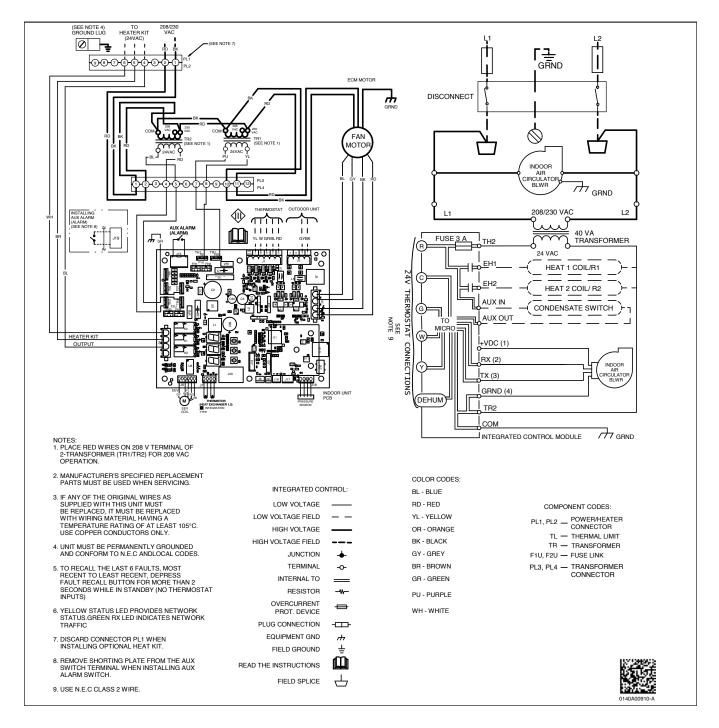
² Maximum Overcurrent Protection = 2.25 X Motor Amps + Heater Amps

³ Notation is correct as XB because technically the 240V heater kit application can be used here without any issues.

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

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

⁻⁻⁻ indicates Not Required



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



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

DFK-B	DFK-C	DFK-D
AMVE 24BP1400	AMVE36CP1400	AMVE48DP1400
		AMVE60DP1400

DRAIN PORT PLUG

Kit Number	Description	Application
DPK1	Side Drain Port Plug	All Models

CONDENSATE MANAGEMENT KITS*

СМК0008	СМК0009	СМК0010	CMK0011
AMVE 24BP1400	AMVE36CP1400	AMVE 48DP1400	AMVE60DP1400

^{*}For Horizontal application only.

MERV 15 AIR CLEANERS

CHASSIS	DAIKIN PREMIUM AIR CLEANER	FILTER SIZE	REPLACEMENT FILTER PART #
В	DV15-2117-AB	21"x17"	0160M00013
С	DV15-2121-AC	21"x21"	0160M00014
D	DV15-2124-AD	21"x24"	0160M00015

PERMANENT 1" FILTERS

CHASSIS	Part#	Size
В	ALFH16201E	16.0" x 20.0"
С	ALFH1912201E	19.5" x 20.0"
D	ALFH20231E	23.0" x 20.0"

SINGLE POINT WIRING KITS (SPW-01)

MODEL	SPWK-B	SPWK-C	SPWK-D
HKTSD15XA	- AMVE 24BP1400B*	AMVE36CP1400B*	AMVE48DP1400B* AMVE60DP1400B*
HKTSD15XB			
HKTSD19CA		AMVE36CP1400B*	
HKTSD19CB			
HKTSD20DA			AMVE48DP1400B*
HKTSD20DB			AMVE60DP1400B*
HKTSD25DA			AMVE60DP1400B*
HKTSD25DB			