



Air Conditioning & Heating

AHVE* (115V)

*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

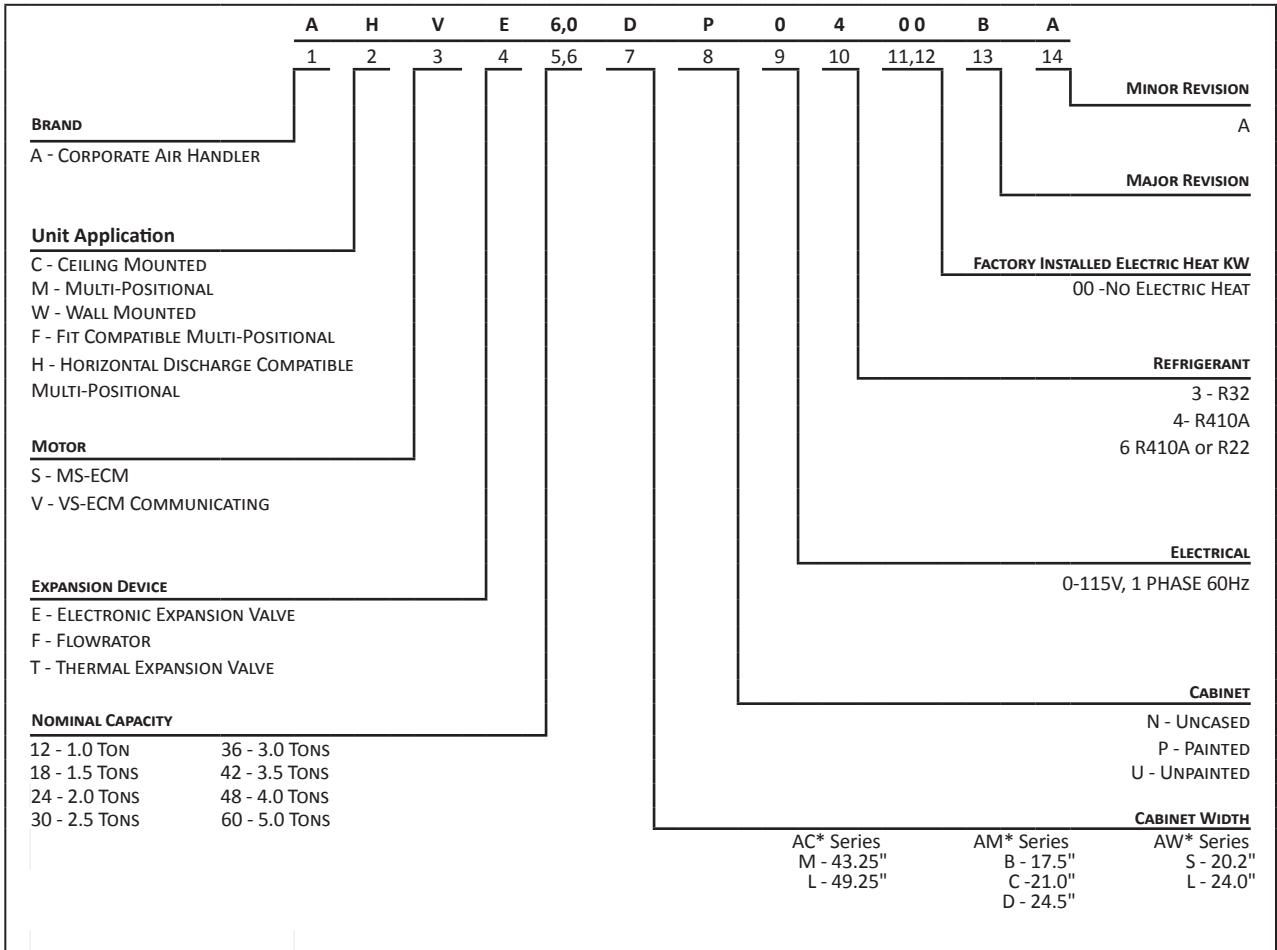


COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =

COMPANY WITH
ENVIRONMENTAL SYSTEM
CERTIFIED BY DNV GL
= ISO 14001 =

* 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.

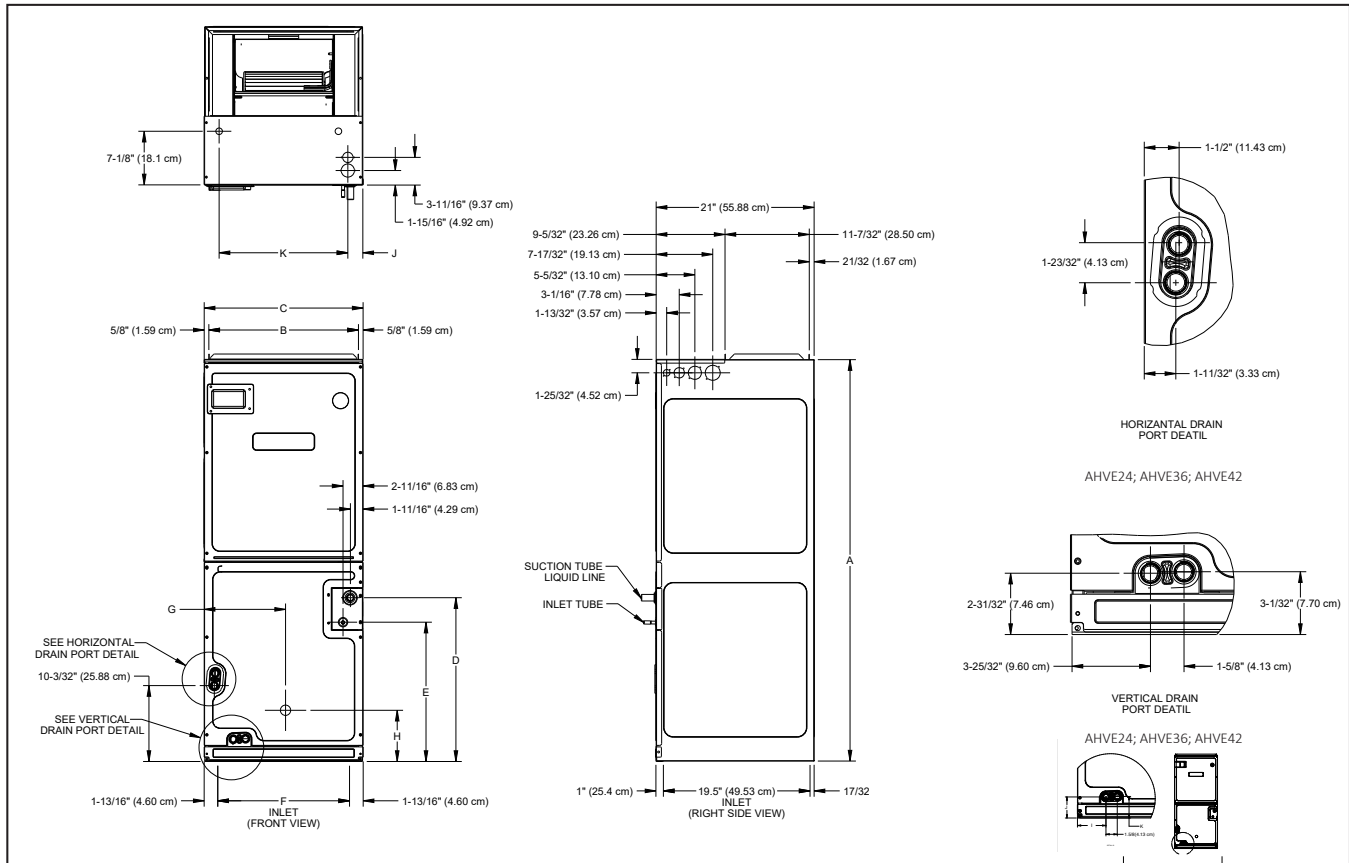
NOMENCLATURE



*Refer S&R Plate

	AHVE24 BP0400	AHVE36 CP4000	AHVE42 CP0400	AHVE48 DP0400	AHVE60 DP0400
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	115-1	115-1	115-1	115-1	115-1
Min Circuit Ampacity	7.1	10.4	10.4	10.4	10.4
Max. Overcurrent Device (amps)	15	15	15	15	15
Minimum VAC	103	103	103	103	103
Maximum VAC	126	126	126	126	126
BLOWER MOTOR					
FLA	5.7	8.3	8.3	8.3	8.3
HP	½	¾	¾	¾	¾
SHIP WEIGHT (LBS)	115	140	140	150	167

DIMENSIONS



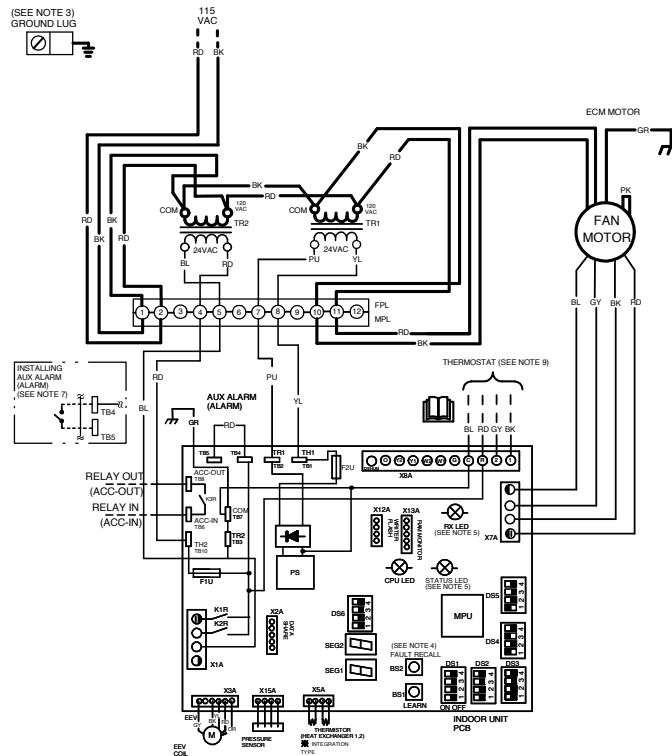
MODEL	A	B	C	D	E	F	G	H	I	J	K
AHVE24BP0400	45	16 ³ / ₈	17 ¹ / ₂	15 ⁵ / ₈	12	14 ¹ / ₈	9	12 ³ / ₄	3 ¹³ / ₁₆	2 ⁷ / ₈	2 15/16
AHVE36CP0400	53 ⁷ / ₁₆	19 ⁷ / ₈	21	21 ¹³ / ₁₆	18 ⁵ / ₈	17 ¹¹ / ₁₆	10 ¹³ / ₁₆	6 ¹³ / ₁₆	3 ¹³ / ₁₆	2 ⁷ / ₈	2 15/16
AHVE42CP0400	53 ⁷ / ₁₆	19 ⁷ / ₈	21	21 ¹³ / ₁₆	18 ⁵ / ₈	17 ¹¹ / ₁₆	10 ¹³ / ₁₆	6 ¹³ / ₁₆	3 ¹³ / ₁₆	2 ⁷ / ₈	2 15/16
AHVE48DP0400	53 ⁷ / ₁₆	23 ³ / ₁₆	24 ¹ / ₂	21 ¹ / ₂	18 ⁵ / ₁₆	21 ³ / ₁₆	12 ⁵ / ₈	6 ⁵ / ₈	4	3	3 3/32
AHVE60DP0400	58	23 ³ / ₁₆	24 ¹ / ₂	26 ¹ / ₈	22 ¹ / ₈	21 ³ / ₁₆	12 ⁵ / ₁₆	13 ¹ / ₄	4	3	3 3/32

RATED INDOOR AIRFLOW RATE [SCFM]

ID unit	OD unit	STATIC PRESSURE [WC]									
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	
AHVE24BP0400	ASZS601810A*/GSZS601810A*	610	610	610	610	610	610	610	610	610	610
	ASZS602410A*/GSZS602410A*	800	800	800	800	800	800	800	800	800	800
AHVE36CP0400	ASZS60241EA*	800	800	800	800	800	800	800	800	800	800
	ASZS603010A*/GSZS603010A*	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010
AHVE42CP0400	ASZS603610A*/GSZS603610A*	1260	1260	1260	1260	1260	1260	1260	1260	1260	1260
	ASZS60361EA*	1260	1260	1260	1260	1260	1260	1260	1260	1260	1260
AHVE48DP0400	ASZS604210A*/GSZS604210A*	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320
	ASZS604810A*/GSZS604810A*	1380	1380	1380	1380	1380	1380	1380	1380	1380	1380
AHVE60DP0400	ASZS60361EA*	1260	1260	1260	1260	1260	1260	1260	1260	1260	1260
	ASZS604210A*/ASZS60421EA*/GSZS604210A*	1320	1320	1320	1320	1320	1320	1320	1320	1320	1320
	ASZS604810A*/ASZS60481EA*/GSZS604810A*	1380	1380	1380	1380	1380	1380	1380	1380	1380	1380
	ASZS606010A*/GSZS606010A*	1640	1640	1640	1640	1640	1640	1640	1640	1640	1640

*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.

WIRING DIAGRAM



NOTES:

1. MANUFACTURER'S SPECIFIED REPLACEMENT PARTS MUST BE USED WHEN SERVICING.
2. IF ANY OF THE ORIGINAL WIRES AS SUPPLIED WITH THIS UNIT MUST BE REPLACED, IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 105°C. USE COPPER CONDUCTORS ONLY.
3. UNIT MUST BE PERMANENTLY GROUNDING AND CONFORMED TO N.E.C AND LOCAL CODES.
4. TO RECALL THE LAST 6 FAULTS, MOST RECENT TO LEAST RECENT, DEPRESS FAULT RECALL BUTTON FOR MORE THAN 2 SECONDS WHILE IN STANDBY (NO THERMOSTAT INPUTS).
5. RED STATUS LED PROVIDES NETWORK STATUS. GREEN RX LED INDICATES NETWORK TRAFFIC. USE LEARN BUTTON TO RESET NETWORK.
6. THE POSITION OF SELECTOR SWITCHES (DS1 - DS6) INDICATE FACTORY SETTING.
7. REMOVE SHORT RED WIRE AND PUT AUX ALARM SWITCH WHEN INSTALLING AUX ALARM SWITCH.
8. HEATER KIT IS NOT COMPATIBLE WITH THIS MODEL.
9. USE N.E.C CLASS 2 WIRE.

INTEGRATED CONTROL:

- LOW VOLTAGE FIELD ———
- LOW VOLTAGE FIELD — — —
- HIGH VOLTAGE FIELD ———
- HIGH VOLTAGE FIELD — — —
- JUNCTION —●—
- TERMINAL —○—
- INTERNAL TO ———
- RESISTOR —□—
- OVERCURRENT PROT. DEVICE —■—
- PLUG CONNECTION —□—
- EQUIPMENT GROUND —■—
- FIELD GROUND —■—
- DIP SWITCH (OFF) —■—
- ON OFF —■—
- READ THE INSTRUCTIONS —■—

COLOR CODES:

- BL - BLUE
- RD - RED
- YL - YELLOW
- OR - ORANGE
- BK - BLACK
- GY - GREY
- BR - BROWN
- GR - GREEN
- PU - PURPLE
- WH - WHITE
- PK - PINK

COMPONENT CODES:

- DS1 - DS6 — SELECTOR SWITCH
- TL — THERMAL LIMIT
- TR — TRANSFORMER
- F1U, F2U — FUSE LINK
- FPL — FEMALE PLUG
- MPL — MALE PLUG



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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
AHVE24BP0400
AHVE36CP0400
AHVE42CP0400
AHVE48DP0400
AHVE60DP0400

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

15" SINGLE LAMP UV COIL PURIFIER

MODEL	LAMP	POWER MOD	REM CORD
UC18S15-24	UCP-16013	UCP-16015	UCP-16016
UC18S15-24B	UCP-16012	UCP-16014	UCP-16016

CONDENSATE MANAGEMENT KITS*

CMK0015	CMK0016	CMK0017
AHVE24BP0400	AHVE36CP0400	AHVE60DP0400
	AHVE42CP0400	
	AHVE48DP0400	

*For Horizontal application only.

HIGH HUMIDITY KITS

HHK0001	HHK0002	HHK0003
AHVE24BP0400	AHVE36CP0400	AHVE60DP0400
	AHVE42CP0400	AHVE48DP0400

