



**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

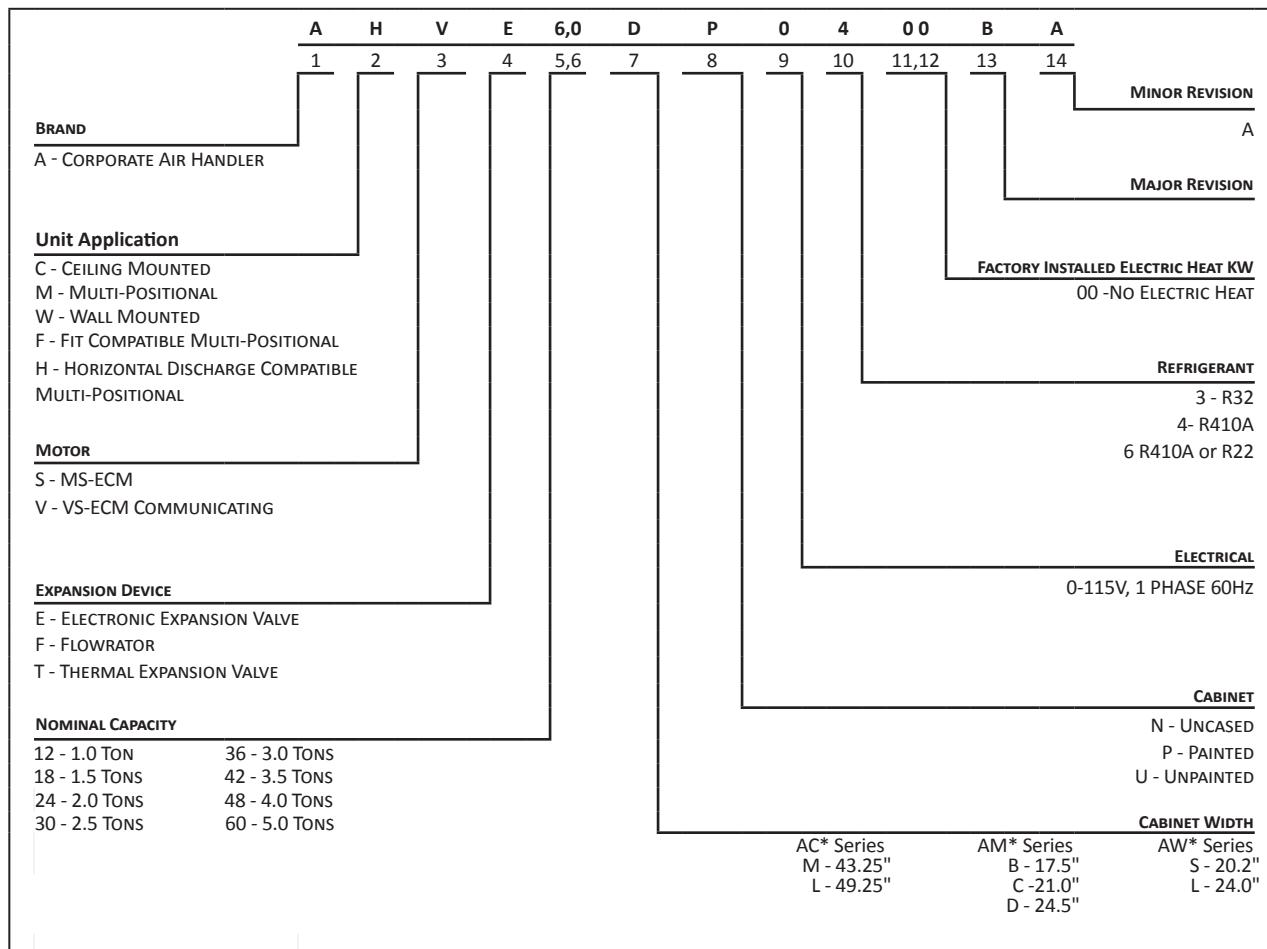


COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =

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.

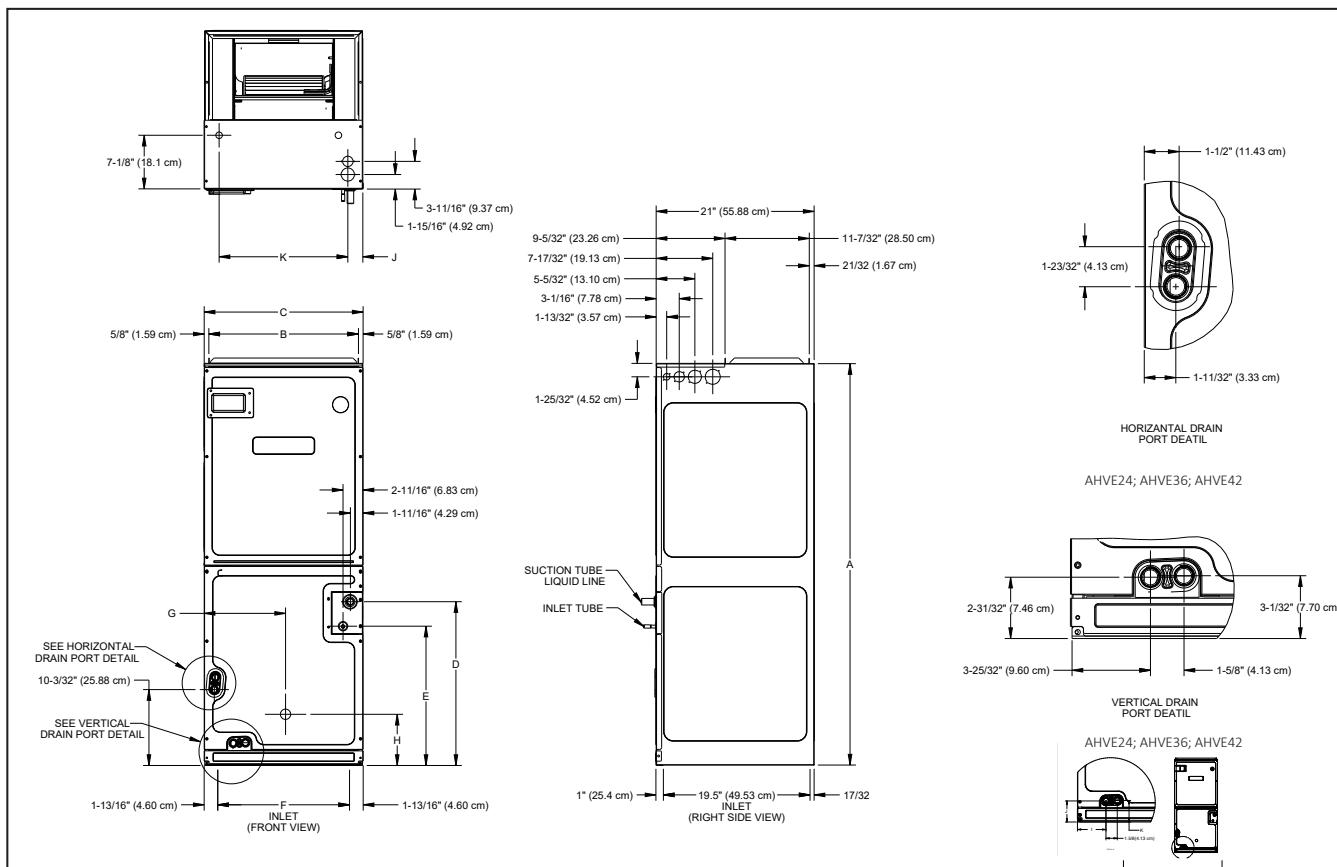
NOMENCLATURE



*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" | 10⁵/₈" | 10⁵/₈" | 12" | 12" |
| Width | 6" | 10⁵/₈" | 10⁵/₈" | 10⁵/₈" | 10⁵/₈" |
| TUBING CONNECTION | | | | | |
| Liquid - Refrigerant | ¾" | ¾" | ¾" | ¾" | ¾" |
| Suction - Refrigerant | ¾" | ¾" | ¾" | ¾" | ¾" |
| 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 $\frac{1}{8}$ | 17 $\frac{1}{2}$ | 15 $\frac{1}{8}$ | 12 | 14 $\frac{1}{8}$ | 9 | 12 $\frac{3}{4}$ | 3 $\frac{13}{16}$ | 2 $\frac{7}{8}$ | 2 15/16 |
| AHVE36CP0400 | 53 $\frac{7}{16}$ | 19 $\frac{1}{8}$ | 21 | 21 $\frac{13}{16}$ | 18 $\frac{5}{8}$ | 17 $\frac{11}{16}$ | 10 $\frac{13}{16}$ | 6 $\frac{13}{16}$ | 3 $\frac{13}{16}$ | 2 $\frac{7}{8}$ | 2 15/16 |
| AHVE42CP0400 | 53 $\frac{7}{16}$ | 19 $\frac{1}{8}$ | 21 | 21 $\frac{13}{16}$ | 18 $\frac{5}{8}$ | 17 $\frac{11}{16}$ | 10 $\frac{13}{16}$ | 6 $\frac{13}{16}$ | 3 $\frac{13}{16}$ | 2 $\frac{7}{8}$ | 2 15/16 |
| AHVE48DP0400 | 53 $\frac{7}{16}$ | 23 $\frac{5}{16}$ | 24 $\frac{1}{2}$ | 21 $\frac{1}{2}$ | 18 $\frac{5}{16}$ | 21 $\frac{3}{16}$ | 12 $\frac{5}{8}$ | 6 $\frac{7}{8}$ | 4 | 3 | 3 3/32 |
| AHVE60DP0400 | 58 | 23 $\frac{5}{16}$ | 24 $\frac{1}{2}$ | 26 $\frac{1}{8}$ | 22 $\frac{1}{8}$ | 21 $\frac{3}{16}$ | 12 $\frac{5}{16}$ | 13 $\frac{1}{4}$ | 4 | 3 | 3 3/32 |

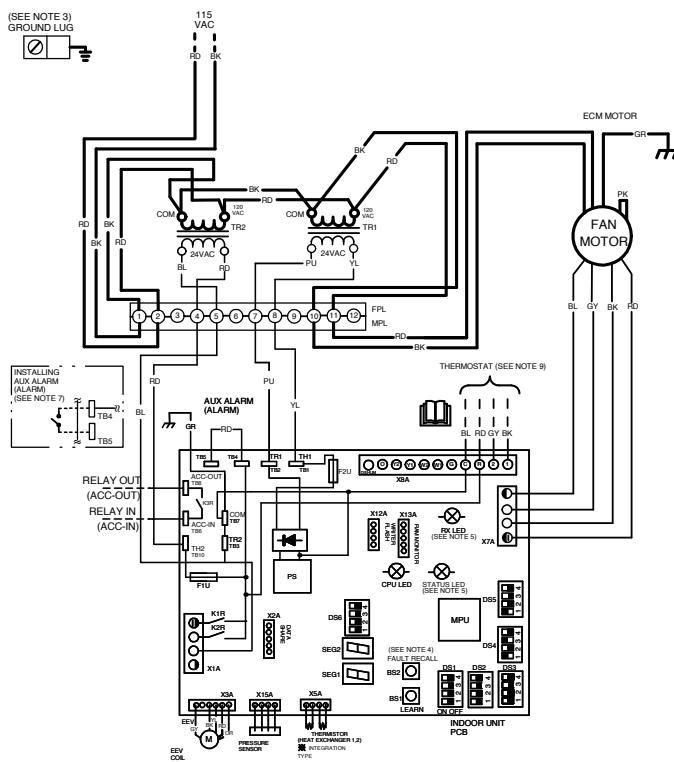
RATED INDOOR AIRFLOW RATE [SCFM]

| | | STATIC PRESSURE [WC] | | | | | | | | | |
|--------------|--|----------------------|------|------|------|------|------|------|------|------|--|
| ID unit | OD unit | 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 | |
| | ASZS602410A*/GSZS602410A* | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| AHVE36CP0400 | ASZS60241EA* | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 | |
| | ASZS603010A*/GSZS603010A* | 1010 | 1010 | 1010 | 1010 | 1010 | 1010 | 1010 | 1010 | 1010 | |
| AHVE42CP0400 | ASZS603610A*/GSZS603610A*/ ASZS60361EA* | 1260 | 1260 | 1260 | 1260 | 1260 | 1260 | 1260 | 1260 | 1260 | |
| | ASZS604210A*/GSZS604210A* | 1320 | 1320 | 1320 | 1320 | 1320 | 1320 | 1320 | 1320 | 1320 | |
| AHVE48DP0400 | ASZS60361EA* | 1260 | 1260 | 1260 | 1260 | 1260 | 1260 | 1260 | 1260 | 1260 | |
| | ASZS604210A*/GSZS604210A* | 1320 | 1320 | 1320 | 1320 | 1320 | 1320 | 1320 | 1320 | 1320 | |
| AHVE60DP0400 | ASZS604810A*/GSZS604810A* | 1380 | 1380 | 1380 | 1380 | 1380 | 1380 | 1380 | 1380 | 1380 | |
| | ASZS60361EA* | 1260 | 1260 | 1260 | 1260 | 1260 | 1260 | 1260 | 1260 | 1260 | |
| AHVE60DP0400 | ASZS604210A*/ASZS60421EA*/ GSZS604210A* | 1320 | 1320 | 1320 | 1320 | 1320 | 1320 | 1320 | 1320 | 1320 | |
| | ASZS604810A*/ASZS60481EA*/ GSZS604810A* | 1380 | 1380 | 1380 | 1380 | 1380 | 1380 | 1380 | 1380 | 1380 | |
| AHVE60DP0400 | ASZS606010A*/GSZS606010A* | 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:

- MANUFACTURER'S SPECIFIED REPLACEMENT PARTS MUST BE USED WHEN SERVICING.
- 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.
- UNIT MUST BE PERMANENTLY GROUNDED AND CONFORMED TO N.E.C AND LOCAL CODES.
- 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).
- RED STATUS LED PROVIDES NETWORK STATUS. GREEN RX LED INDICATES NETWORK TRAFFIC. USE LEARN BUTTON TO RESET NETWORK.
- THE POSITION OF SELECTOR SWITCHES (DS1 - DS6) INDICATE FACTORY SETTING.
- REMOVE SHORT RED WIRE AND PUT AUX ALARM SWITCH WHEN INSTALLING AUX ALARM SWITCH.
- HEATER KIT IS NOT COMPATIBLE WITH THIS MODEL.
- USE N.E.C CLASS 2 WIRE.

INTEGRATED CONTROL:

| | |
|--------------------------|-----|
| LOW VOLTAGE | — |
| LOW VOLTAGE FIELD | — — |
| HIGH VOLTAGE | — — |
| HIGH VOLTAGE FIELD | — — |
| JUNCTION | ● |
| TERMINAL | ○ |
| INTERNAL TO | — — |
| RESISTOR | — — |
| OVERCURRENT PROT. DEVICE | — — |
| PLUG CONNECTION | — — |
| EQUIPMENT GROUND | — — |
| FIELD GROUND | — — |
| DIP SWITCH (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 |



0140A00896-A

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.



ACCESSORIES

DOWNFLOW KITS

| DFKE-02 |
|--------------|
| AHVE24BP0400 |
| AHVE36CP0400 |
| AHVE42CP0400 |
| AHVE48DP0400 |
| AHVE60DP0400 |

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 |

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 |

NOTES

Our continuing commitment to quality products may mean a change in specifications without notice.
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