

# HEAT CONTROLLER, INC.

## VARIABLE SPEED HYDRONIC AIR HANDLERS

## AHBV SERIES

The AHBV Series of air handlers is quiet, durable and economical to operate, with a blower motor that operates about 90% more efficiently than a PSC motor. The blower motor adjusts operating speed to deliver the proper airflow needed by the system.

By delivering constant CFM over a wide range of external static pressures in the system, the air handler provides improved air distribution, improved indoor air quality and enhanced comfort through continual dehumidification and reduced temperature stratification.

**AHRI matched to Heat Controller A/C Condensers to Achieve 13 & 14 SEER**

**Line Voltage Terminal Block and Low Voltage Terminal Strip**

Allows fast, simple thermostat connection

**High-Temp Nylon Drain Pans**

Resists corrosion and bacterial growth

**Slide-Out Blower Assembly**

Makes service and maintenance fast

**Freeze Protection for Both Heating & Cooling**

Protects the entire system year 'round

**3/4" Water Connections**

Assures correct water supply lines



**1 1/2 - 5 TONS**

### CABINET FEATURES

- Entire cabinet is pre-painted, galvanized steel for maximum corrosion protection
- Interlocking access panels and gasketed screws to eliminate air leakage

### EVAPORATOR COIL

- Aluminum fin/copper tube, TXV included
- Nylon drain pans
- Primary and secondary drains
- 5 year warranty on coil

### HYDRONIC COIL

- Built-in design
- Aluminum fin/copper tube construction
- Manual air vent and drain valves
- 3/4" sweat water connections

### ELECTRIC / CONTROLS

- 115V, 60 Hz system, 24 volt control circuit with low voltage terminal strip
- High voltage supply at top of cabinet
- Multiple electrical connection inlets

## AHBV Series Hydronic Air Handlers—1½ to 5 Tons

The AHBV Series of variable speed Hydronic Air Handlers offers the most-wanted features in the industry:

- Low voltage terminal strip and 40VA 24 volt transformer included for easy wiring
- Blower time delay of two minutes preheats the hydronic coil
- Freeze protection in both heat and cool modes provides the ultimate in system protection
- Variable speed blower helps eliminate cold and hot spots by operating at a wider range of RPMs than a standard blower
- Constant CFM over variable static pressures helps overcome poor duct design
- Variable speed blower pulls more humidity out of the air than single speed blowers
- Slide-out blower assembly makes service and maintenance fast and easy
- Multi-position design can be installed vertically or horizontally left or right (ships in upflow horizontal left configuration)
- Blower slowly ramps up to speed, eliminating abrupt changes in sound at start-up and shut-down; blower construction effectively reduces noise transmitted through the shaft

### PERFORMANCE

MODEL	TONS COOLING	REFRIGERANT LIQUID	CONN. SIZE (In. OD)	VAPOR	NOM. HEATING @ 180°F (BTUH)	NOMINAL AIRFLOW (CFM)	FILTER SIZE	SHIPPING WEIGHT
AHBV24-0A	1.5	3/8	3/4		41,500	600	16" x 20" x 1"	152
	2.0				52,000	800		
AHBV36-0A	2.5	3/8	3/4		58,500	1,000	16" x 20" x 1"	152
	3.0				64,000	1,200		
AHBV48-0A	3.5	3/8	7/8		88,500	1,400	16" x 20" x 1"	213
	4.0				94,000	1,600		
AHBV60-0A	5.0	3/8	7/8		98,500	1,800	16" x 20" x 1"	213

### BLOWER PERFORMANCE DATA

MODEL	MOTOR @ 115V 60HZ		BLOWER WHEEL DIA.
	HP	FLA	
AHBV24-0A	1/2	7.7	10 x 6
AHBV36-0A	1/2	7.7	10 x 6
AHBV48-0A	1	11.9	12 x 9
AHBV60-0A	1	11.9	12 x 9

BLOWER TAP	1/2 HP / AHBV24/36		1 HP / AHBV48/60	
	Ps	SCFM	Ps	SCFM
A	0.1	1200	0.1	1875
	0.2	1200	0.2	1875
	0.3	1200	0.3	1875
	0.4	1200	0.4	1875
	0.5	1200	0.5	1875
B	0.1	1100	0.1	1700
	0.2	1100	0.2	1700
	0.3	1100	0.3	1700
	0.4	1100	0.4	1700
	0.5	1100	0.5	1700
C	0.1	1000	0.1	1550
	0.2	1000	0.2	1550
	0.3	1000	0.3	1550
	0.4	1000	0.4	1550
	0.5	1000	0.5	1550
D	0.1	800	0.1	1350
	0.2	800	0.2	1350
	0.3	800	0.3	1350
	0.4	800	0.4	1350
	0.5	800	0.5	1350

*Blowers are factory pre-set at highest tap speed and can be field adjusted.*

## EXTENDED RANGE DATA

(Based on entering water temperature and 65° F entering air temperature)

MODEL	HEATING NOM. SCFM*	120°F	140°F	160°F	180°F	GPM	PRESSURE DROP
AHBV24	800	23,550	32,940	42,470	52,080	4	3.4
AHBV36	1200	28,900	40,530	52,340	64,310	4	3.5
AHBV48	1600	42,570	59,580	76,820	94,230	4	3.5
AHBV60	1800	52,790	73,740	94,920	116,270	7	5.1

## AHBV EXTENDED RANGE DATA (based on water flow)

MODEL	180° F ENTERING WATER AND 65° F ENTERING AIR TEMP		
	2.0 GPM	4.0 GPM	7.0 GPM
AHBV24	43,320	52,080	N/A
AHBV36	50,730	64,310	N/A
AHBV48	N/A	94,230	109,040
AHBV60	N/A	99,180	116,270

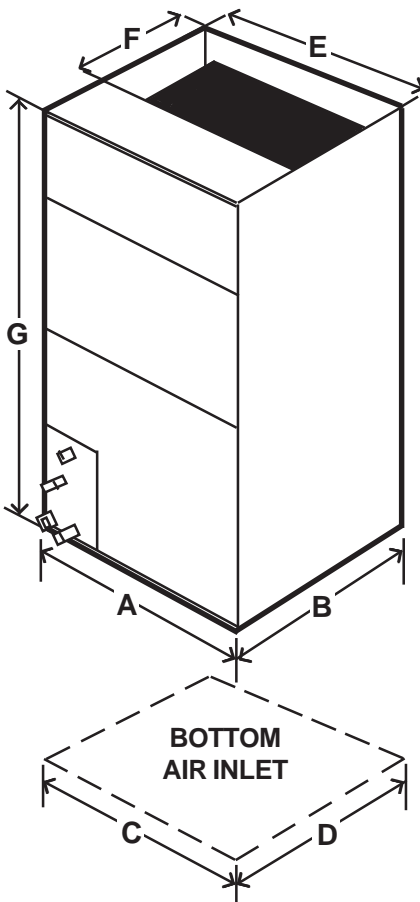


ARI certification applies only when the complete system is listed with ARI



## AHBV CONDENSER MATCH-UPS

MODEL	Condensing Unit	Cooling BTUH	SEER
AHBV24	RSE1318-1A	18,000	14.0
	RSE1324-1A	24,000	14.0
AHBV36	RSE1330-1A	30,000	14.0
	RSE1336-1A	36,000	14.0
AHBV48	RSE1342-1A	42,000	14.0
	RSE1348-1A	48,000	14.0
AHBV60	RSE1360-1A	53,000	13.0



## DIMENSIONS (inches)

MODEL	A	B	C	D	E	F	G
AHBV24, AHBV36	21 <sup>1</sup> / <sub>8</sub>	21	19 <sup>3</sup> / <sub>4</sub>	20	20	14 <sup>3</sup> / <sub>4</sub>	48 <sup>3</sup> / <sub>4</sub>
AHBV48, AHBV60	24 <sup>5</sup> / <sub>8</sub>	22	23 <sup>1</sup> / <sub>4</sub>	20 <sup>1</sup> / <sub>2</sub>	23	17 <sup>1</sup> / <sub>2</sub>	59 <sup>1</sup> / <sub>4</sub>

Heat Controller has been in the business of keeping homes comfortable in all seasons since 1933. We offer a full line of energy efficient, quality constructed products including furnaces, heat pumps, air conditioners, dehumidifiers, duct-less mini-split systems, and systems designed specifically for mobile homes. Our commercial/industrial line provides comfort solutions with capacities up to 30 tons. Each of the products is backed by outstanding warranty coverage and after-sales support.

Your contractor or local dealer can help you select the equipment that is best suited to your needs and lifestyle.

**Specifications and performance data subject to change without notice.**

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**THE QUALITY LEADER IN CONDITIONING AIR**