



Belt Drive Air Handlers

800 - 12,000 CFM

- Available in horizontal and vertical options
- Can be used for both hydronic and direct expansion applications
- Standard and double-wall units, with or without perforation
- Clean and quiet operation

Whalen Belt Drive Air Handlers

Vertical Single Wall - AHVS Series

The Whalen vertical single wall belt drive air handler (AHVS) draw-through designs are available for either indoor or outdoor applications and are equipped with a blower that can handle up to 3.75 ESP. The AHVS is housed in heavy-gauge galvanized cabinet and insulated with ½-inch thick, over three pound, neoprene-coated fiberglass. The AHVS comes with a ½-inch OD copper tube coil, forward-curved, dynamically balanced belt-driven blowers, motor, and a galvanized steel, powder-coated epoxy drain pan insulated with 1/8-inch thick insulation. A flat filter section, with a two-inch, 30% pleated efficiency filter is included. Access doors are located on both sides of the unit for easy maintenance. Supply and return-air openings have a one-inch duct collar. This model is also available with a painted cabinet (AHVP).



Horizontal Single Wall - AHHS Series

The Whalen horizontal single wall belt drive air handler (AHHS) draw-through designs are available for either indoor or outdoor applications and are equipped with blowers that can handle up to 3.75 ESP. The AHHS is housed in heavy-gauge galvanized cabinet and insulated with ½-inch thick, over three pound, neoprene-coated fiberglass. The AHHS comes with a ½-inch OD copper tube coil, forward-curved, dynamically balanced belt-driven blowers, motor, and a galvanized steel, powder-coated epoxy drain pan insulated with 1/8-inch thick insulation. A flat filter section, with a two-inch, 30% pleated efficiency filter is included. Access doors are located on both sides of the unit for easy maintenance. Supply and return-air openings have a one-inch duct collar. This model is also available with a painted cabinet (AHHP).



Belt Drive Air Handler Unit Sizes

Model	Nominal CFM	Width (in.)	Depth (in.)	Height (in.)	
AHVS	008	800	24.1	27.1	46.0
	012	1,200	30.1	27.1	46.0
	016	1,600	38.1	27.1	46.0
	020	2,000	38.1	27.1	54.0
	030	3,000	46.1	27.1	60.0
	040	4,000	58.3	27.1	54.0
	050	5,000	71.3	27.1	54.0
	060	6,000	85.3	27.1	60.0
	080	8,000	85.3	27.1	67.0
	100	10,000	105.3	27.1	67.0
	120	12,000	116.3	34.1	83.0

Model	Nominal CFM	Width (in.)	Depth (in.)	Height (in.)	
AHHS	008	800	24.1	39.1	20.3
	012	1,200	30.1	39.1	20.3
	016	1,600	38.1	39.1	20.3
	020	2,000	38.1	39.1	23.5
	030	3,000	46.1	45.1	28.0
	040	4,000	58.1	45.3	27.9
	050	5,000	71.1	45.3	27.9
	060	6,000	85.1	45.3	27.9
	080	8,000	85.1	45.3	35.3
	100	10,000	105.4	45.3	35.3
	120	12,000	116.4	45.3	35.3

Benefits that Make a Big Difference

When you consider all of the features of Whalen units, it's easy to see why they deliver so many benefits to contractors and users alike.

Features and Benefits

- Heavy-gauge galvanized steel cabinet with neoprene-coated 1/2" thick fiberglass insulation with 1.5 PCF density on models 008-040. 1/2" thick fiberglass insulation with 3.35 PCF density on models 050-120.
- Coils are made of 1/2" OD copper tube with aluminum fins (10 FPI) and equipped with manual-air vent. DX and steam coils do not include manual-air vent. Coils are 100% underwater pressure tested at 350 PSI with a 300 PSI working pressure at 180° maximum water temperature.
- Galvanized drain pan is powder-coated epoxy with a 1/8" thick closed-cell insulation and has primary and secondary drain connections.
- Belt-driven, draw-through design with forward-curved and dynamically balanced blowers.
- Adjustable, variable-pitch drive sheave and cast-iron pulley keyed to motor shaft (order separately).
- Controls and motors are factory-wired and terminated in a junction box for single-point power supply.
- Size 008-040 units are equipped with vibration isolators that minimize noise levels and equipment reverberation.
- Two-inch thick, 30/30 pleated filter, flatly mounted with spring-loaded clips on the side access door for easy maintenance without the use of tools.
- Individually tagged, crated and shipped as scheduled for installation.
- ETL approved, AHRI certified and 100% factory tested.

Equipment Options


- Deluxe enclosure painted with soft-white, powder-coated epoxy cabinet that's subjected to a 1,500-hour salt spray test in accordance with ASTM B117.
- Drain pans - stainless steel and double-wall.
- Insulation - fiberglass, foil-face, elastomeric and double-wall (solid or perforated) in 1/2" and 1" thicknesses.
- Coils - copper fins/tubes, stainless steel fins/tubes, phenolic coated, stainless steel end plates. All options are available on one through 12 rows for AHHS/P 008-040 and one through 10 rows for AHHS/P 050-120.
- Systems - two- or four-pipe, hydronic cooling/heating, steam, direct-expansion (DX) and/or electric heat.
- Controls - wide selection of factory-mounted valves, controls and enclosures.
- Motors - heavy-duty, high temperature, ODP, TEFC; 115, 208, 230, 277, 460 and 575 voltages.
- Filters - two-inch thick throwaway, washable, metallic and v-bank.
- Electric resistance heat from 1.0 to 25 kW on sizes 008-040; 7.0 to 65 kW on sizes 050-120.
- Mixing boxes - with dampers, modulating and three-position economizers.

Belt Drive Air Handler Nominal Capacities

AHVS, AHHS

Model	Rows	Total Capacity BTUH**	Sensible Capacity BTUH**	Rows	Total Capacity BTUH**	Sensible Capacity BTUH**	Rows	Total Capacity BTUH**	Sensible Capacity BTUH**	Model	Rows	Total Capacity BTUH**	Rows	Total Capacity BTUH**
Cooling										Heating				
008	3	28,290	21,270	4	29,868	21,924	6	38,018	25,287	008	1	28,321	2	42,631
012	3	39,757	30,889	4	44,227	32,662	6	56,748	37,812	012	1	38,320	2	66,536
016	3	51,134	40,466	4	63,276	45,270	6	75,527	50,358	016	1	55,088	2	83,726
020	3	64,591	50,824	4	79,519	56,757	6	91,520	61,722	020	1	67,648	2	103,091
030	3	98,800	76,965	4	115,950	83,795	6	138,249	92,992	030	1	92,661	2	153,013
040	3	123,881	98,940	4	143,573	107,170	6	183,328	123,554	040	1	123,307	2	192,023
050	3	150,782	121,967	4	181,547	134,728	6	226,878	153,475	050	1	153,355	2	231,087
060	3	188,329	149,367	4	221,714	163,263	6	276,671	186,041	060	1	184,066	2	294,746
080	3	245,188	196,668	4	292,211	216,260	6	359,495	244,087	080	1	248,704	2	385,875
100	3	314,488	248,936	4	370,265	272,323	6	444,145	302,924	100	1	322,626	2	480,440
120	3	354,322	289,265	4	424,053	318,553	6	531,257	362,765	120	1	357,812	2	560,057

For detailed capacities please visit our website at www.whalencompany.com or contact your local representative. ** Cooling ratings based on 80° F DB and 67° F WB EAT, 45° F EWT with 10° F water temperature rise, 115/1/60 VAC for sizes 008-050, 208/3/60 VAC for sizes 060-120, and high speed. ***Heating ratings based on nominal CFM. 1-row coils rated at 160° F EWT and 70° F EAT with 40° F water temperature drop, 115/1/60 VAC for sizes 008-050, 208/3/60 VAC for sizes 060-120, and high speed. 2-row coils rated at 150° F EWT and 70° F EAT with 30° F water temperature drop, 115/1/60 VAC for sizes 008-050, 208/3/60 VAC for sizes 060-120, and high speed.



Behind every unit that carries the Whalen name is a singularity of purpose: the engineering and manufacturing of products that improve the quality of life for our customers.

Our long-term commitment to this endeavor assures you of systems that are distinctive in **concept, performance, reliability** and **value**.

The number of industry “firsts” from Whalen is impressive. They include:

- The industry’s first vertical stack valveless fan coils
- The first vertical stack heat pump offering
- The first removable chassis closet-type heat pumps
- The first AHRI-listed water-cooled air conditioning units with hydronic heat

Let us put Whalen innovation to work for you, too. Find out how our approach to your project will deliver a “perfect fit” solution – and make your life easier.

Need to locate a sales representative? Whalen’s sales rep locator tool was designed to help you easily find a Whalen sales representative within the United States and Canada.

whalencompany.com/relocator



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WL051 rev. 11-19