The Whalen Company

VI Series Heat Pump Chassis - Version 1, 2, 3, 4

OEM Replacement Chassis

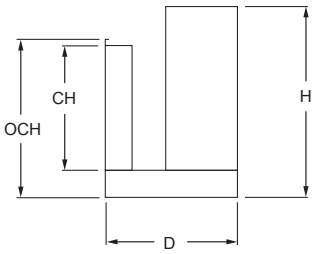
- OEM Replacement
- Cooling only
- Heating only
- Low sound level
- Fast and easy replacement
- Damage protection

VI Series Chassis - Version 1, 2, 3, 4

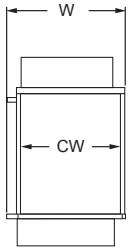
The Whalen VI series Version 1,2,3,4 replacement chassis is designed for Whalen VI units produced between 1993 to present. They are available in 200, 300, 400, 500, 600, 800, 1000 and 1200 capacities. As part of a complete system, the Whalen VI Series Version 1,2,3,4 unit is engineered to fit into the existing cabinet space with matching electrical/water connections as the original unit.

Each unit utilizes energy efficient quality components and tested in our psychrometric room to confirm safety, reliability and performance at multiple operating conditions. The extensive list of unit features includes:

- Sizes 1/2 ton through 3 tons
- Low pressure drop water coils
- Stainless steel drain pan
- Compressor protection
- Low temperature protection
- High pressure protection
- Environmentally friendly refrigerant
- ETL listed for safety and construction



Right Side View



Front View

Unit Sizes

Model	H	W	D	CW	CH	OCH	Unit Packaging Dimensions w x d x h (in)	Filter Size (in)	Unit Weight (lbs)
	Inches								
200	21.1	13.8	15.0	11.4	12.0	16.0	14.3 x 16.3 x 28.0	13 x 24 x 1	79
300	21.1	13.8	15.0	11.4	14.0	18.0	14.3 x 16.3 x 28.0	13 x 24 x 1	81
200/300	21.1	13.8	15.0	11.4	18.0	22.0	14.3 x 16.3 x 28.0	13 x 24 x 1	81
300/400	21.1	13.8	15.0	11.4	20.0	24.0	14.3 x 16.3 x 28.0	13 x 24 x 1	83
600	23.1	15.8	18.0	13.4	20.0	24.0	16.5 x 19.3 x 32.0	15 x 28 x 1	123
500/600/800	23.1	15.8	18.0	13.4	24.0	28.0	16.5 x 19.3 x 32.0	15 x 28 x 1	132
1000/1200	25.0	17.8	20.3	15.4	28.0	33.4	20.0 x 21.0 x 42.8	17 x 32 x 1 17 x 40 x 1	165
810/1000/1200	25.0	17.8	20.3	15.4	36.0	41.8	20.0 x 21.0 x 42.8	17 x 40 x 1	175

Unit Shipping

Model	Single Unit		Multiple Units		
	Skid Size W x D x H (in)	Total Skid Weight (lbs)	Skid Size* w x h x d (in)	Skid Weight** (lbs)	Max Units (#)
200	24 x 24 x 34	95	48 x 48 x 34	40	6
300	24 x 24 x 34	97	48 x 48 x 34	40	6
200/300	24 x 24 x 34	97	48 x 48 x 34	40	6
300/400	24 x 24 x 34	99	48 x 48 x 34	40	4
600	24 x 24 x 38	139	48 x 40 x 38	40	4
500/600/800	24 x 24 x 38	148	48 x 40 x 38	40	4
1000/1200	24 x 24 x 48	181	48 x 40 x 48	40	4
810/1000/1200	24 x 24 x 48	191	48 x 40 x 48	40	4

**Maximum skid size **Total skid weight = (Number of units x unit weight) plus skid weight*

Electrical Data

Size (Tons)	Compressor Type	Voltage Volt-Hz-Ph	Voltage Limitations		Compressor		Total Amps	Minimum Circuit Ampacity	MOPD
			Min	Max	RLA	LRA			
20x (0.5)	Rotary T	208-230/60/1	197	252	2.5	17.7	See Calculation Note Below		
	Rotary T	265/60/1	239	292	2.6	13.5			
30x (0.75)	Rotary L	208-230/60/1	197	252	5.1	22.0			
	Rotary L	265/60/1	239	292	4.5	22.0			
40x (1.0)	Rotary L	208-230/60/1	197	252	6.4	25.0			
	Rotary L	265/60/1	239	292	5.1	22.0			
50x (1.25)	Rotary L	208-230/60/1	197	252	4.8	26.0			
	Rotary L	265/60/1	239	292	4.2	25.0			
60x (1.5)	Rotary L	208-230/60/1	197	252	7.7	38.0			
	Scroll C	208-230/60/1	197	252	7.0	38.0			
	Rotary L	265/60/1	239	292	7.1	30.0			
	Scroll C	265/60/1	239	292	6.0	30.0			
80x (2.0)	Rotary L	208-230/60/1	197	252	10.3	43.0			
	Scroll C	208-230/60/1	197	252	13.5	58.0			
	Scroll C	265/60/1	239	292	8.3	54.0			
81x (2.0)	Recipricating B	208-230/60/1	197	252	7.4	43.0			
	Recipricating B	265/60/1	239	292	6.7	46.0			
100X (2.5)	Recipricating B	208-230/60/1	197	252	10.6	54.0			
	Scroll C	208-230/60/1	197	252	14.1	73.0			
	Scroll C	265/60/1	239	292	11.2	60.0			
	Recipricating B	265/60/1	239	292	9.2	46.0			
120x (3.0)	Recipricating B	208-230/60/1	197	252	14.7	74.0			
	Scroll C	208-230/60/1	197	252	14.1	77.0			
	Scroll C	265/60/1	239	292	12.2	72.0			
	Recipricating B	265/60/1	239	292	11.5	67.0			

Use this value to calculate minimum power supply circuit ampacity (Clause 3.14 of UL19954th Ed) and maximum current rating of overcurrent protection (Clause 37.15 of UL 1995 4th Ed).
Note: Chassis Only - Does not include Fan/Motor or Electric Heat loads.

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.

The Whalen VI series Version 1,2,3,4 is the only replacement chassis approved by the manufacturer to work with the existing blower section and control box wiring without modification. As an OEM replacement, each unit is built with equal or superior components as the original without the need to supply additional information.

Low Sound Level

The refrigeration chassis includes a compressor that incorporates engineered vibration isolators installed on a heavy gauge mounting base with a mounting system to maximize vibration dampening. A sound dampening enclosure constructed of heavy gauge metal lined with acoustical insulation encases the refrigeration circuit.

Fast and Easy Replacement

The refrigeration chassis consist of the compressor, air coil, water coil, reversing valve, expansion device, receiver, filter-dryer and safety controls designed for easy removal after disconnecting hoses and a polarized electrical power plug.

Damage Protection

Units are provided with high pressure and low temperature safety controls configured in a lockout circuit to prevent damage to the compressor. The compressors are wired with either internal or external overload protective devices.

Common Options Accessories*

- Heat Pump, Cool Only, Heat Only and Boilerless
- Sizes ½ ton through 3 tons
- Geothermal Construction
- Automatic flow Control Valve
- Electric Two-Way Valve
- Electro-Mechanical & Solid State Controls
- Fan/Motor/Blower Assemblies
- Return Air Panels
- Hose Kits
- Unit Power Voltage

* varies by project

Warranty

All units are provided with a 12-month warranty (from date of ship) for all components.

Note: The replacement chassis performance is based on providing the proper airflow through the new chassis. Existing fan assemblies affect airflow due to corrosion and caked-on dirt. Fan motors affect airflow due to age or improper specifications. Cleaning/Repair/Replacement of blowers is required prior to installation of new chassis. New fan/motor assemblies allow your new replacement chassis to perform properly for years to come.

Performance Ratings

Model	Nominal Tonnage	Rated CFM	Min CFM	GPM	Water Loop Heat Pump				Ground Loop Heat Pump				Refrigerant Control	Valve Flow Coefficient - Cv
					Cooling 86°F		Heating 68°F		Cooling 77°F		Heating 32°F			
					Capacity Btuh	EER Btuh / W	Capacity Btuh	COP	Capacity Btuh	EER Btuh / W	Capacity Btuh	COP		
Nu - R-22														
601	1.50	630	420	4.5	18,200	15.2	21,600	5.1	19,000	16.2	13,000	3.2	Capillary Tube NU-22	3.5
801	2.00	830	580	6.0	23,000	13.1	30,000	5.0	25,000	14.5	19,000	3.2		
1001	2.50	970	650	7.5	29,200	14.2	35,900	5.0	29,700	15.5	22,000	3.2		5.0
Version 1,2,3,4 - R410A														
203/204	0.50	280	170	1.5	6,500	13.0	8300	5.1	6900	14.2	5200	3.2	Capillary Tube R-410A	3.5
303/304	0.75	340	220	2.5	9,300	14.4	11,500	5.4	9,650	15.4	6,850	3.3		
403/404	1.00	420	280	3.3	12,000	14.0	14,500	5.2	12,700	16.0	9,400	3.3		
503/504	1.25	540	380	3.9	14,600	16.7	18,400	6.0	15,200	17.7	11,000	3.5		
603/604	1.50	630	420	4.5	18,200	15.2	21,600	5.1	19,000	16.2	13,000	3.2		
803804	2.00	830	580	6.0	23,000	13.1	30,000	5.0	25,000	14.5	19,000	3.2		
813/814	2.00	830	580	6.0	25,000	14.8	30,000	5.0	26,000	15.7	19,000	3.2		5.0
1003/1004	2.50	970	650	7.5	29,200	14.2	35,900	5.0	29,700	15.5	22,000	3.2		
1203/1204	3.00	1170	750	9.0	33,100	14.2	42,000	5.2	33,600	15.3	25,400	3.3		

Cooling based upon 80.6°F DB, 66.2°F WB entering air temperature. Heating based upon 70°F DB, 59°F WB entering air temperature. Includes 475 Btu/1000 CFM fan heat and 140 watts/1000 CFM fan power, plus water pumping power. 208V data shown. 265V ratings may vary.

Continuous Operating Limits

Mode	Ambient Air °F		Entering Air °F				Entering Fluid °F			
	Min	Max	Min		Max		Standard Range (Capillary Tube & TXV)		Extended/Geo Range (TXV Only)	
	DB	DB	DB	WB	DB	WB	Min	Max	Min	Max
Cooling	60	100	75	63	100	83	60	120	30	120
Heating	60	80	60	–	80	–	60	90	20	90

Note: Extended/Geothermal Range require insulated components, correct control/jumper settings, and design condition antifreeze solution.

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/replocator

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