



## Hi-Performance Vertical Closet Fan Coils

400 - 2,200 CFM

- Ideal for high-static (max 0.50" ESP) environments
- Models to fit a variety of applications
- Easy service access
- Clean and quiet operation

# Whalen Hi-Performance Vertical Closet Fan Coils

## Front Return - VCFS Series

The Whalen VCFS hi-performance series is a high static (max 0.50" ESP) ducted vertical closet fan coil with front return. The front panel is removable for easy service access to the slide-out blower assembly, with quick-connect plug. Vertical front return with return-air grille option allows unit to be furred-in. Grille mounts to drywall for easy access without the expense of a closet door. Vertical front return painted (VCFP) is also available.



## Rear Return - VCRS Series

The Whalen VCRS hi-performance series is a high-static (max 0.50" ESP) ducted vertical closet fan coil with rear return. Primarily used in floor-mounted or hideaway applications, the VCRS is furred into partition walls, hidden closets, or utility rooms with a ducted discharge. Removable access panels facilitate easy servicing. A one-inch duct flange on return- and supply-air openings is standard. A painted version of the vertical rear return model is also available (VCRP).



## Bottom Return - VCBS Series

The Whalen hi-performance vertical closet fan coil bottom return (VCBS) is a high static (max 0.50" ESP) fan coil primarily used in vertical floor mounted or hideaway applications. The VCBS is furred into partition walls or hidden in closets, utility rooms and other concealed locations with a ducted discharge. A removable front access panel facilitates easy servicing. A one-inch discharge duct flange is standard on the top panel of each unit.



## Hi-Performance Vertical Closet Fan Coil Unit Sizes

Model	Nominal CFM	Width (in.)	Depth (in.)	Height (in.)	
VCFS	006	600	21.0	20.0	42.0
	008	800	25.0	20.0	42.0
	010	1,000	25.0	20.0	45.0
	012	1,200	30.0	20.0	45.0
	015	1,500	37.0	20.0	48.0
	018	1,800	37.0	20.0	48.0
	022	2,200	41.0	20.0	48.0

Model	Nominal CFM	Width (in.)	Depth (in.)	Height (in.)	
VCRS	004	400	24.1	27.1	46.0
	006	600	24.1	27.1	46.0
	008	800	24.1	27.1	46.0
	010	1,000	30.1	27.1	46.0
	012	1,200	30.1	27.1	46.0
	015	1,500	38.1	27.1	46.0
	018	1,800	38.1	27.1	54.0
	022	2,200	46.1	27.3	60.0

Model	Nominal CFM	Width (in.)	Depth (in.)	Height (in.)	
VCBS	004	400	20.3	14.3	57.6
	006	600	20.3	14.3	57.6
	008	800	20.3	14.3	57.6
	010	1,000	20.4	20.3	57.8
	012	1,200	20.4	20.3	57.8
	015	1,500	36.0	24.6	62.8
	018	1,800	36.0	24.6	62.8
	022	2,200	36.0	24.6	62.8

# 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 3.35 PCF density.
- Coils are made of 1/2" OD copper tube with aluminum fins (12 FPI) 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.
- Galvanized drain pan is powder-coated epoxy and subjected to a 650-hour salt spray test in accordance with ASTM-B117. Also comes with 1/8" thick closed-cell insulation and primary and secondary drain connections.
- Three-speed, 115/1/60 PSC motor with quick-connect plug or three-speed, 208-230/1/50-60 or 277/1/60 PSC motor with quick-connect plug.
- Controls and motors are factory-wired and terminated in a junction box for single-point power supply.
- One-inch, reinforced duct collar on return- and supply-air openings.
- One-inch fiberglass, throwaway filter.
- Individually tagged, crated and shipped as scheduled for installation.
- UL and C-UL approved, ARI certified and 100% factory tested.

## Equipment Options

- EC Constant Volume Motors
- EC Variable Volume (0-10 VDC) Motors
- Soft-white, powder-coated epoxy cabinet that's subjected to a 1500-hour salt spray test in accordance with ASTM-B117.
- Drain pans - stainless steel.
- Insulation - fiberglass, foil-face, elastomeric 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-to six-rows.
- Systems - two- or four-pipe, hydronic cooling/ heating, steam, direct-expansion (DX) and/or electric heat.
- Cabinet - bottom return painted (VCBP), front return painted (VCFP), rear return painted (VCRP).
- Controls - wide selection of factory-mounted valves and controls.
- Filters - two-inch thick throwaway, washable and metallic.
- Flow-control circulator for water heating applications.
- Electric strip heat from 0.5 to 9 kW.

## Hi-Performance Vertical Closet Fan Coil System Capacities

VCFS, VCFP				
Model - Rows	Cooling		Heating	
	Total Capacity BTUH**	Sensible Capacity BTUH**	Rows	Total Capacity BTUH***
006 - 3	23,857	18,943	2	39,315
008 - 3	27,833	23,175	2	45,620
010 - 3	29,251	24,380	2	46,178
012 - 3	35,675	29,762	2	58,701
015 - 3	53,354	41,351	2	83,483
018 - 3	58,483	46,959	2	98,432
022 - 3	66,760	52,475	2	107,023
006 - 4	27,066	20,138	1	25,920
008 - 4	32,491	25,079	1	29,165
010 - 4	34,629	27,020	1	28,864
012 - 4	45,036	34,133	1	31,883
015 - 4	62,440	45,059	1	51,819
018 - 4	72,063	52,405	1	61,796
022 - 4	81,429	58,364	1	56,951

VCBS, VCBP				
Model - Rows	Cooling		Heating	
	Total Capacity BTUH**	Sensible Capacity BTUH**	Rows	Total Capacity BTUH***
004 - 3	19,955	14,531	2	33,446
006 - 3	22,808	16,734	2	37,760
008 - 3	23,870	19,224	2	39,639
010 - 3	25,791	21,206	2	41,232
012 - 3	28,192	24,015	2	44,434
015 - 3	52,316	40,981	2	82,248
018 - 3	63,989	49,175	2	102,565
022 - 3	67,900	52,937	2	108,685
004 - 4	22,112	15,381	1	24,003
006 - 4	25,352	17,724	1	26,813
008 - 4	27,488	20,660	1	25,987
010 - 4	30,347	23,382	1	26,075
012 - 4	33,638	26,859	1	27,341
015 - 4	57,544	43,125	1	53,840
018 - 4	73,510	53,015	1	68,665
022 - 4	78,391	57,153	1	72,006

VCRS, VCRP				
Model - Rows	Cooling		Heating	
	Total Capacity BTUH**	Sensible Capacity BTUH**	Rows	Total Capacity BTUH***
004 - 3	19,380	14,303	2	43,654
006 - 3	22,093	16,451	2	45,686
008 - 3	25,780	22,316	2	40,840
010 - 3	31,442	25,414	2	49,326
012 - 3	33,697	28,006	2	52,383
015 - 3	53,632	41,219	2	72,586
018 - 3	63,096	48,168	2	86,551
022 - 3	70,542	54,082	2	105,835
004 - 4	27,133	20,266	1	23,463
006 - 4	29,214	21,963	1	26,222
008 - 4	26,168	21,556	1	26,758
010 - 4	34,917	27,243	1	31,349
012 - 4	37,946	30,486	1	32,515
015 - 4	62,214	44,780	1	48,844
018 - 4	70,965	51,526	1	58,157
022 - 4	85,031	5,988	1	72,284

For detailed capacities please visit our website at [www.whalencompany.com](http://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, 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, and high speed. 2-row coils rated at 150° F EWT and 70° F EAT with 30° F water temperature drop, 115/1/60, 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](http://whalencompany.com/relocator)



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