

M SERIES VERTICAL RETURN PLENUM MODULE

Model Number Key

M 2430 V 1 -
 ① ② ③ ④ ⑤

- | | |
|---|--|
| ① Unit Type
M=Modular | ③ Module Type
V=Vertical Return Plenum |
| ② Nominal Capacity
2430=24000 to 30000 Btu/hr
(7.0 to 8.8 kW)
3036=30000 to 36000 Btu/h
(8.8 to 10.5 kW)
3642=36000 to 42000 Btu/hr
(10.5 to 12.3 kW)
4860=48000 to 60000 Btu/hr
(14.0 to 17.5 kW) | ④ Revision Number
1, 2, 3, etc.
⑤ Paint Color
(blank) = None
1 = White |

* A cross-reference chart listing current and past model numbers is available at the end of this bulletin.

General

All Unico System modular air handlers are shipped from the factory configured for horizontal airflow. They may also be configured for vertical up-flow with the addition of a vertical conversion kit. Most applications designed for vertical configuration use a base plenum to elevate the unit for proper condensate drainage. The Unico System vertical plenum module eliminates the need for the installer to build a base.

Features and Scope

The vertical plenum module features a built in secondary drain pan with a 3/4" PVC socket connection, pleated filter, and room for an optional hot water coil. There are access panels on both sides so that the heating coil may be inserted from either side.

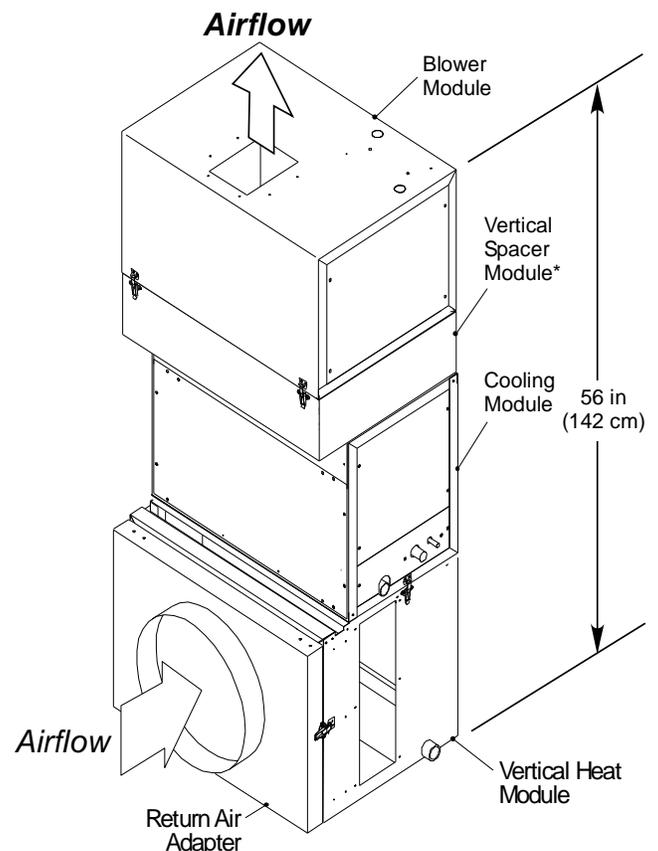
The plenum module may be connected to a heating module return adapter, p/n: UPC-104, or operated as a free or "wild" return. If the air is filtered elsewhere, such as at a filter grille, then the central filter in the module may be removed.

Cabinet Construction

The cabinet is constructed of 22 gauge (0.030 in, 0.76 mm) galvanized steel with removable access panels on both sides for ease of service. All access panels are secured with slotted hex head washer screws and hardened steel U-clip nuts to prevent stripping. The cabinet is fully lined with closed cell insulation and does not contain fiberglass insulation. Easy snap latches are included for quick field assembly with the matching modules. See dimensional drawing for additional information



Figure 1. Typical Vertical Plenum Module. Hot water coil available separately.



Typical Vertical Installation with Vertical Heat Module

Optional Hot Water Coil

Refer to Bulletin 20-020.4, “M Series Heating Module”, for hot water coil specifications and performance. The following table indicates the proper size hot water coil to use.

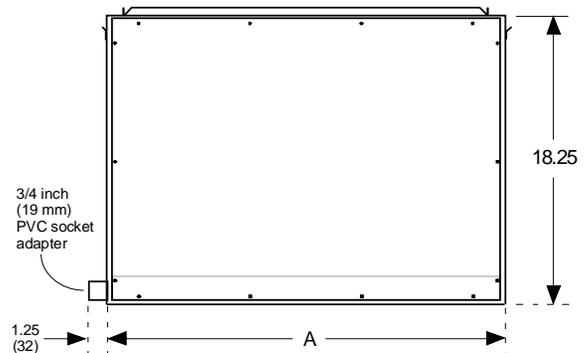
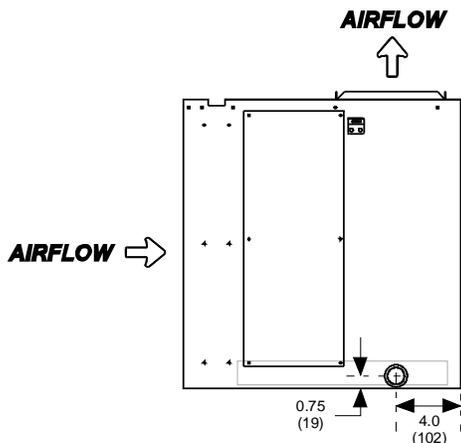
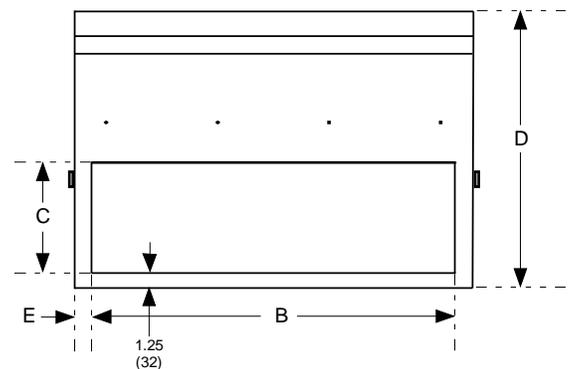
Vertical Plenum Model	Matching Hot Water Coil Model	Maximum Capacity [Btu/hr, (kW)]
M2430V1	HW2430	62,400 (18.3)
M3036V1	HW3036	81,600 (23.9)
M3642V1	HW3642*	120,000 (35.2)
M4860V1	HW4860*	120,000 (35.2)

Filter and Airflow Specifications

Model	Filter Size (Pleated filter recommended)		Filter Qty	Maximum Airflow [CFM, (L/s)]	Initial Filter Resistance
	inches	mm			
M2430V1	1 x 25 x 18	25 x 457 x 635	1	750 (354)	0.22 in. w.c. at 375 FPM (0.054 kPa at 1.9 m/s)
M3036V1	1 x 30 x 18	25 x 762 x 431	1	900 (425)	
M3642V1	1 x 20 x 18	25 x 508 x 457	1	1000 (472)	0.40 in. w.c. at 500 FPM (0.100 kPa at 2.5 m/s)
	1 x 18 x 18	25 x 457 x 457	1		
M4860V1	1 x 20 x 18	25 x 508 x 457	1	1250 (590)	
	1 x 18 x 18	25 x 457 x 457	1		

Cabinet Dimensions

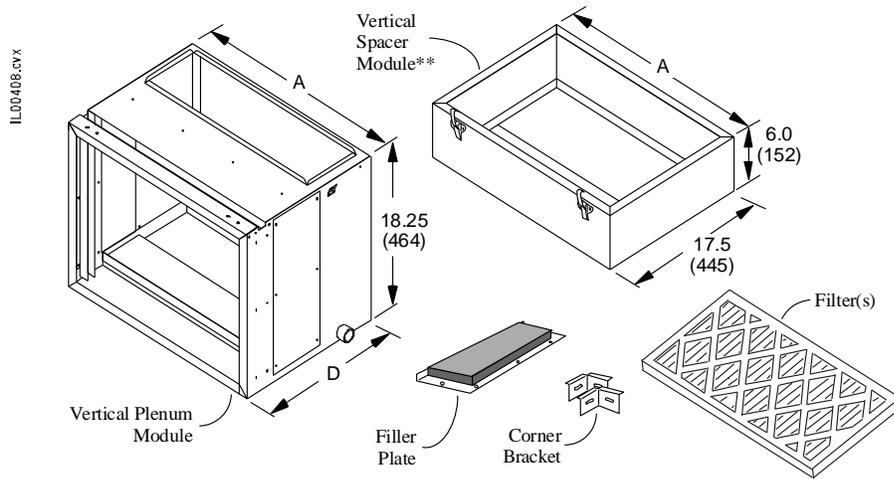
Model	M2430V1	M3036V1	M3642V1	M4860V1	
Dimensions [in., (mm)]	A	25.00 (635)	30.00 (762)	38.00 (965)	
	B	22.76 (578)	27.76 (705)	35.76 (816)	
	C	6.82 (173)	6.82 (173)	6.82 (173)	9.35 (237)
	D	17.50 (445)	17.50 (445)	17.50 (445)	23.00 (584)
	E	1.00 (25)	0.96 (24)	4.00 (102)	4.08 (104)



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* HW3642 and HW4860 are identical and interchangeable. They replace model number HW3660.

Parts List



Vertical Plenum Kit

Kit Includes:

- Vertical Plenum Module
- Vertical Spacer Module**
- Pleated Filter(s)
- 1 Insulated Filler Plate
- 2 Corner Brackets
- Screws
- Latches
- Latch Keepers
- Insulation strips

Features:

- Horizontal to vertical system conversion kit included
- Easy to install.

**Vertical Spacer Module is not required or included with the MV4860.

Model Number Cross-Reference Chart

Current Model Number	Past Model Number
M2430V1	MV2430
M3036V1	None
M3642V1	MV3642
M4860V1	MV4860