

M Series Vertical Return Plenum Module

Model Number Key

M	2430	V	1	-
Unit Type	Matching Outdoor Unit (ODU) Nominal Capacity	Module Type	Revision Number	Paint Color
M = Modular	2430 = 24000 to 30000 BTU/hr (7.0 to 8.8 kW) 3036 = 30000 to 36000 BTU/hr (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)	V = Vertical Return Plenum	1, 2, etc.	(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.

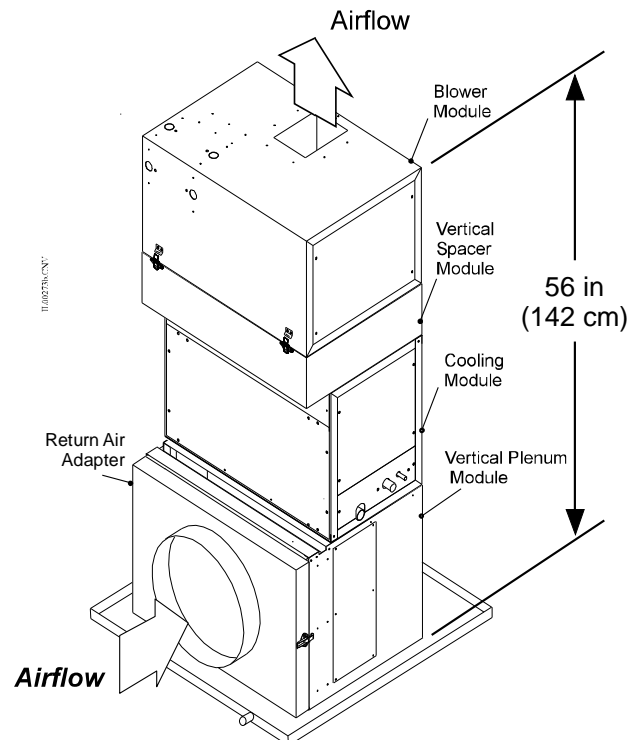
FEATURES AND SCOPE

The vertical plenum module features a 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.



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



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.

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.

Table 1. Vertical Plenum Module Hot Water Coil Capacity

Vertical Plenum Model	Matching Hot Water Coil Model	Maximum Capacity [Btu/hr, (kW)]
M2430V2	HW2430	62,400 (18.3)
M3036V2	HW3036	81,600 (23.9)
M3642V2	HW3642	120,000 (35.2)
M4860V2	HW4860	120,000 (35.2)

EXTERNAL SECONDARY DRAIN PAN

Included with every Vertical Plenum Module is an external secondary drain pan constructed of 22 gauge (0.030 in, 0.76 mm) galvanized steel. Table 2 indicates the dimensions of each drain pan. Installed on every drain pan is a 3/4-in Socket x 3/4-in MPT, SCH 40 PVC drain fitting. When using metal return duct with the Vertical Plenum Module, the unit should be raised such that the return opening of the Module is above the edge of the drain pan.

Table 2. External Secondary Drain Pan Dimensions

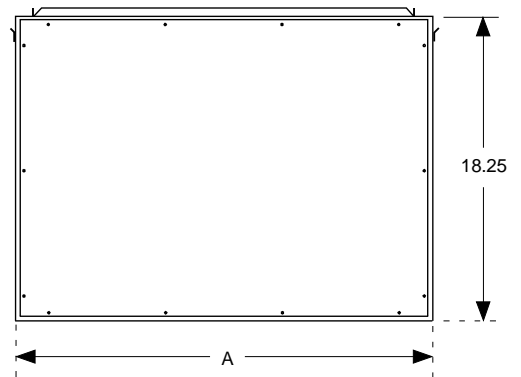
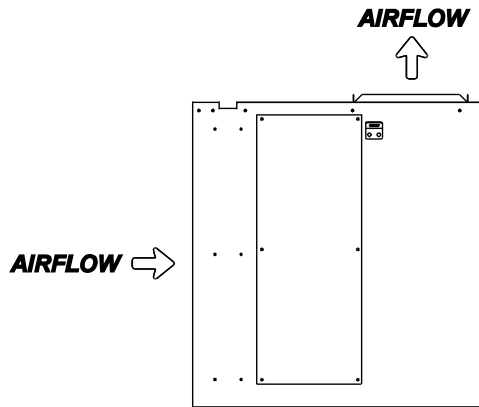
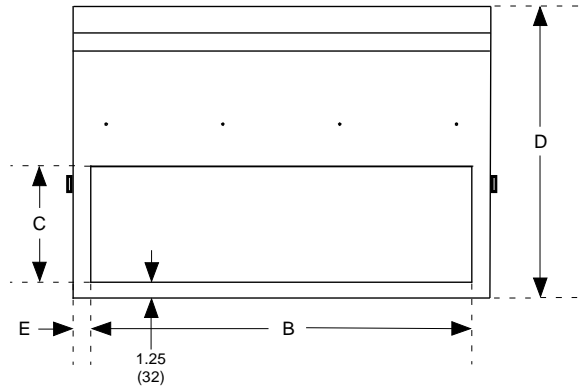
Vertical Plenum Model	Drain Pan Part Number	Dimensions, in (mm)
M2430V2	UPC-106-2430	23.63 x 28.13 x 1.5 (600 x 715 x 38)
M3036V2	UPC-106-3036	23.63 x 33.13 x 1.5 (600 x 842 x 38)
M3642V2	UPC-106-3642	23.63 x 41.13 x 1.5 (600 x 1045 x 38)
M4860V2	UPC-106-4860	29.13 x 41.13 x 1.5 (740 x 1045 x 38)

FILTER AND AIRFLOW SPECIFICATIONS

Model	Filter Size (Pleated filter recommended)		Filter Qty.	Maximum Airflow [CFM, (L/s)]	Initial Filter Resistance
	inches	mm			
M2430V2	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)
M3036V2	1 x 30 x 18	25 x 762 x 431	1	900 (425)	
M3642V2	1 x 20 x 18 1 x 18 x 18	25 x 508 x 457 25 x 457 x 457	1 1	1000 (472)	
M4860V2	1 x 20 x 18 1 x 18 x 18	25 x 508 x 457 25 x 457 x 457	1 1	1250 (590)	0.40 in. w.c. at 500 FPM (0.100 kPa at 2.5 m/s)

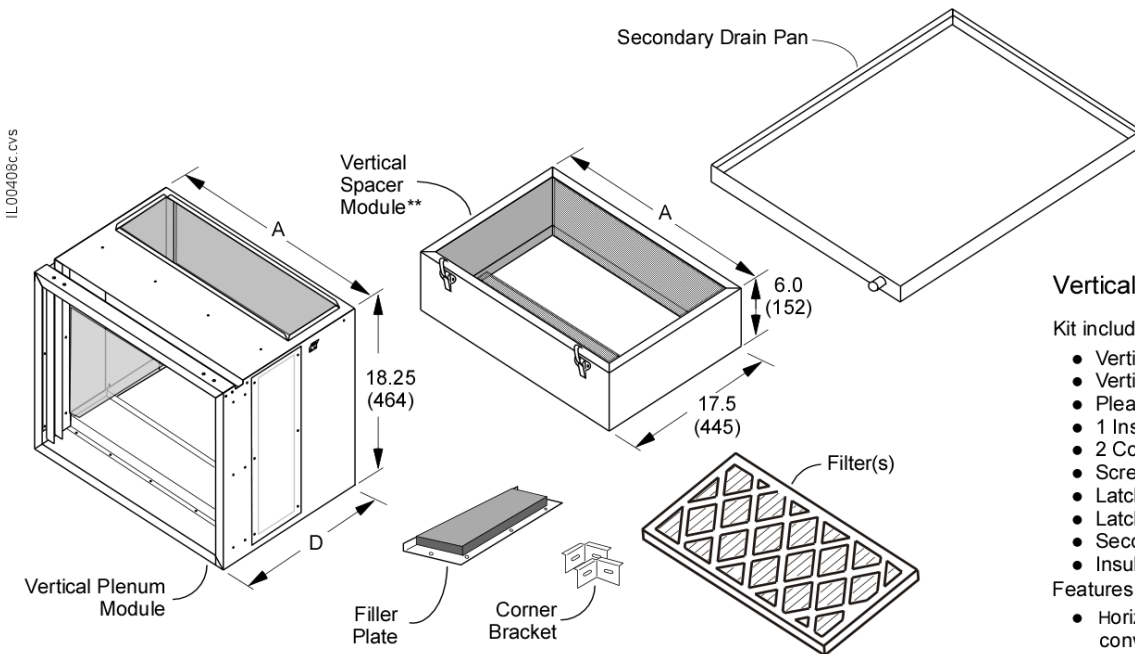
CABINET DIMENSIONS

Model	M2430V2	M3036V2	M3642V2	M4860V2	
Dimensions [in., (mm)]	A	25.00 (635)	30.00 (762)	38.00 (965)	38.00 (965)
	B	22.76 (578)	27.76 (705)	35.76 (816)	32.08 (815)
	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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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
- Secondary Drain Pan**
- Insulation Strips

Features:

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

*Vertical Spacer Module is not required or included with the M4860V

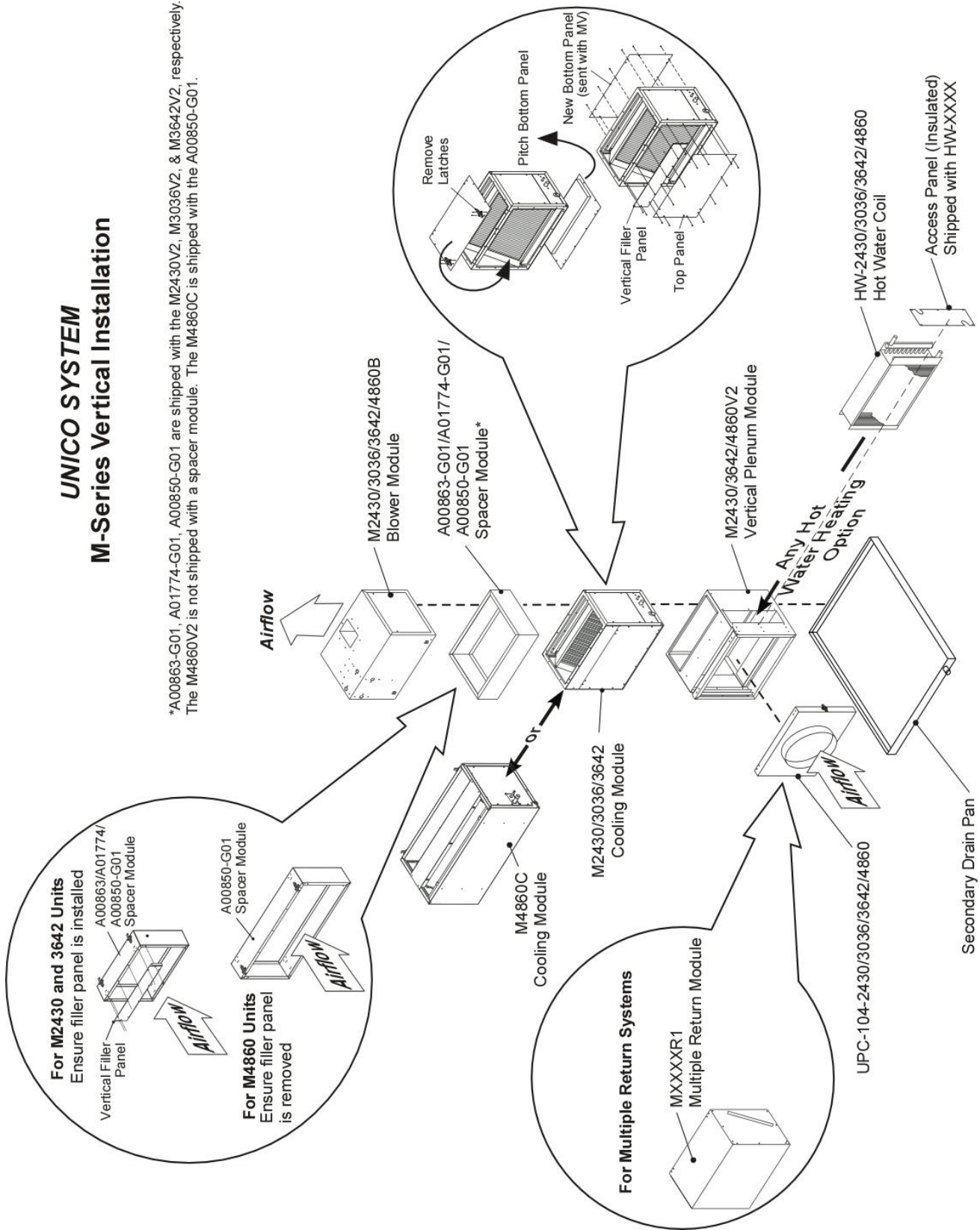
**Secondary Drain Pan dimensions dependent on module size. See Table 2

**MODEL NUMBER CROSS-REFERENCE
CHART**

Current Model Number	Past Model Number
M2430V2	MV2430
M3036V2	None
M3642V2	MV3642
M4860V2	MV4860

UNICO SYSTEM M-Series Vertical Installation

*A00863-G01, A01774-G01, A00850-G01 are shipped with the M2430V2, M3036V2, & M3642V2, respectively. The M4860V2 is not shipped with a spacer module. The M4860C is shipped with the A00850-G01.



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