

M SERIES BLOWER MODULE

Model Number

M 2430 B L 1 - ST2 1
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① **Unit Type**
M=Modular
- ② **Nominal Capacity**
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)
- ③ **Module Type**
B=Blower Module
- ④ **Configuration**
L=Left-hand connection
- ⑤ **Revision**
1, 2, 3, etc.
- ⑥ **Power Supply, Motor Type**
ST2=1/60/208-240, single-speed
EC1=1/60/120, variable-speed
EC2=1/50-60/240, variable-speed
- ⑦ **Paint Option**
(Blank)=None
1=White

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



Figure 1. Typical Blower Module with cutaway revealing motor (-ST2 Model)

General Information

The Unico System patented† modular blowers are designed for use with the Unico System small-duct high-velocity (SDHV) system. The blowers exceed the U.S. Department of Energy requirements for SDHV systems requiring a minimum external static pressure of 1.2 inches of water (0.3 kPa) at the rated airflow when installed with the compatible Unico cooling module. All cooling modules are available in Heat Pump, Chilled Water and refrigerant configurations.

Blower Module	Matching Heating/Cooling Coil Module
M2430BL1	M2430CL1-*
M3036BL1	M3036CL1-*
M3642BL1	M3642CL1-*
M4860BL1	M4860CL1-*

Standard Modules Note: Model numbers listed above may not include the latest revision code.

Typical Application

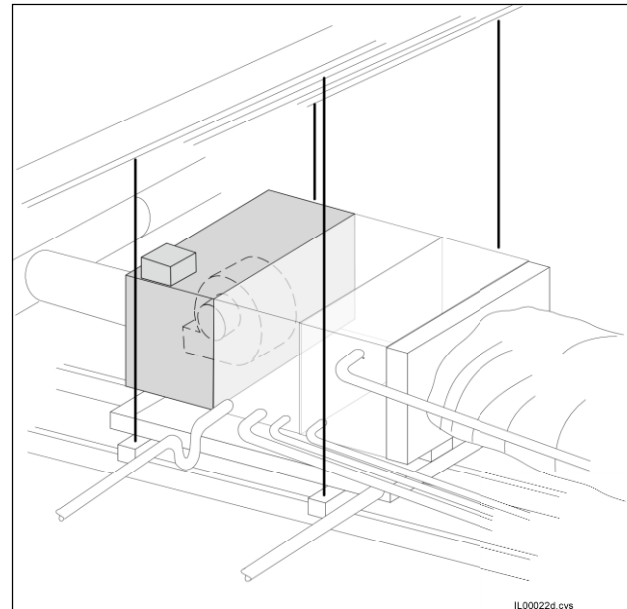


Figure 2. Attic Installation with Unico System Cooling Module, Heating

Applications

For air-conditioning, the rated airflow is 250 CFM per nominal* ton (34 L/kW-s) and for heat pumps it is 275 CFM per nominal ton (37 L/kW-s). For proper operation, we do not recommend flow rates less than 200 CFM per nominal ton (27 L/kW-s). Refer to the *Blower Capacity Data* tables and graphs later in this bulletin for blower performance data showing static pressure and amperage versus air flow.



CERTIFIED TO UL STD 1995
 CONFORMS TO CAN/CSA STD C22.2
 NO. 236

† U.S. Patent No. 5,277,036

* "Nominal" refers to the nameplate size of the condensing unit or heat pump.
 Note — Dimensions and specifications are subject to change without notice.

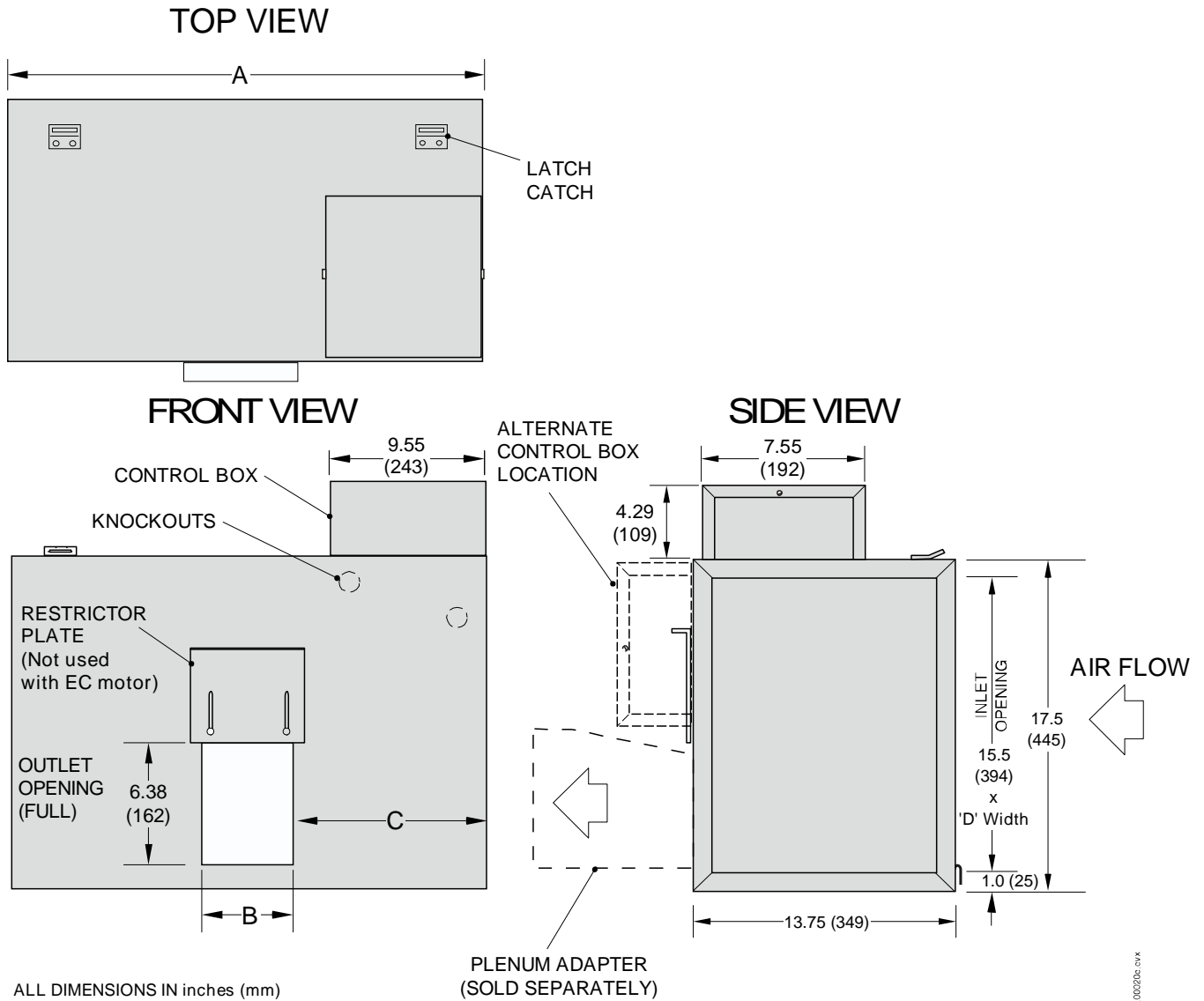
Cabinet Construction

The cabinet is constructed of 22 gauge (0.7mm) galvanized steel with removable access panels installed 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 insulated with closed cell insulation. There is no exposed fiberglass inside the cabinet. See dimension drawing.

All blower modules feature electrical connections and service access panels on the left-hand side of the unit when viewing the return with the airflow at your back.

Right hand blowers are available upon request. In this case, the blower discharge opening is near the top of the cabinet.

Dimensional Data



IL0020E.svx

Model No.	M2430BL1	M3036BL1	M3642BL1	M4860BL1
Dimensions [in. (mm)]	A	25.00 (635)	30.00 (762)	38.00 (965)
	B	6.00 (152)	7.24 (184)	7.16 (182)
	C	9.50 (242)	11.38 (289)	15.40 (392)
	D	23.00 (584)	28.00 (711)	36.00 (915)

Blower Performance Data for –ST2 models(with cooling module installed) at 60Hz/230V.

Model	External Static Pressure [in. w.c. (kPa)]									
	1.0 (0.25)		1.25 (0.31)		1.5 (0.37)		1.75 (0.44)		2.0 (0.50)	
	CFM (L/s)	Amps	CFM (L/s)	Amps	CFM (L/s)	Amps	CFM (L/s)	Amps	CFM (L/s)	Amps
-STD Models										
M2430BL1	870 (410)	3.1	810 (383)	2.9	740 (351)	2.7	660 (310)	2.4	510 (240)	2.0
M3036BL1	1170 (552)	4.6	1150 (543)	4.4	1070 (505)	4.1	965 (455)	3.8	825 (389)	3.2
M3642BL1	1240 (585)	4.8	1170 (552)	4.5	1070 (505)	4.1	925 (437)	3.6	745 (352)	3.1
M4860BL1	1472 (695)	4.7	1400 (660)	4.5	1300 (610)	4.2	1162 (548)	3.9	953 (450)	3.4