



DESIGNED TO SIMPLIFY INSTALLATION AND REDUCE MAINTENANCE COSTS

Direct Fired Make-Up Air Unit (MCV/MVV)

Modine Direct Fired Make-Up Air Units are ideal for applications that require 100% outside air. Direct fired units provide the best efficiency (100% thermal efficiency, 92% sensible). The make-up air is heated directly by the gas flame, eliminating the need for a heat exchanger and its associated efficiency losses. These units provide maximum application flexibility with input ratings up to 2,100,000 Btu/Hr and a wide range of airflow capability from as low as 800 CFM up to 14,000 CFM.

Models include

- MCV: Direct Fired, 100% outside air, constant speed fan
- MVV: Direct Fired, 100% outside air, variable speed fan (provides reduction from rated speed down to 35%)



DIRECT FIRED MAKE-UP AIR UNIT (MCV/MVV)

The MCV/MVV Series has been designed to provide value through best-in-class features to simplify installation and reduce maintenance costs.

Standard Features

- Standard neoprene vibration isolated blower and motor for quiet operation
- Auto-Velocity™ profile system constantly and automatically adjusts a burner profile bypass damper to maintain proper burner air velocity for optimal combustion
- Prewired 10 foot long power and control wiring harnesses provided in flexible conduit simplifies electrical connection
- Floor chase for wire routing to the space without having to drill holes in the unit floor

Optional Features (Factory Installed)

- Motorized inlet damper (standard or low leak, power or spring return)
- Galvanized interior double wall liners for ease of cleaning
- Side access filter options to ensure delivery of clean air
- Timed freeze protection
- Non-recirculating evaporative cooler with moisture sensor and water flow controller
- Rubber-in-shear or spring isolated blower and motor
- Mild temperature inlet thermostat
- LonWorks or BACnet MS/TP compatible controls for maximum centralized unit control
- Hinged access doors for easy service access
- Inlet and/or burner pressure gauges to quickly identify pressure without a manometer

Accessory Features (Field Installed)

- Motorized discharge damper (standard or low leak, power or spring return)
- Vibration isolation hangers (for suspended units) or feet (for base mounted units)
- Full unit perimeter roof curb with nailer for flat roof installation (insulated or non-insulated)
- Smoke detector
- Mechanical or digital timeclocks (7-day programmable)
- Remote monitoring panels
- Discharge diffusers (3-way or 4-way)

PERFORMANCE CAPABILITIES

Casing Size (Digit 4)	Blower Size (Digits 5,6)	Airflow Range (CFM)		Max Air Temp Rise (°F)		Maximum MBH		Max Supply Air Temp (°F)
		Min.	Max.	Natural Gas	Propane Gas	Natural Gas	Propane Gas	
1	08	800	2,200	130	95	239	185	120
2	10	1,400	3,500	130	95	346	270	120
	12	2,400	3,500	130	95	375	375	120
3	15	3,200	8,000	130	95	938	907	120
4	18	5,000	9,500	130	95	1,428	1,077	120
5	20	5,500	14,000	130	95	2,100	1,587	120

Maximum Btu/Hr based on Max CFM and temp rise (where possible) with -30°F entering air. Actual capability may vary with different job conditions. Please refer to our online Breeze® AccuSpec selection program with specific conditions.



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