## **DIRECT FIRED MAKE-UP AIR UNIT MCV/MVV**



# DESIGNED TO SIMPLIFY INSTALLATION AND REDUCE MAINTENANCE COSTS

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

- Model MCV: 100% outside air, constant speed fan
- Model MVV: 100% outside air, variable speed fan (provides reduction from rated speed down to 35%)
- 100% thermal efficiency and 92% sensible heating
- Maximum application flexibility with input ratings up to 2,100,000 Btu/hr
- Airflow capability from as low as 800 CFM up to 14.000 CFM
- Best-in-class features to simplify installation and reduce maintenance costs
- Auto-Velocity<sup>™</sup> profile system monitors burner profile pressure drop and automatically adjusts burner air velocity for optimum combustion
- Direct Spark Ignition (DSI) to simplify operation and minimize cost on units rated 1125 MBH and smaller
- Neoprene blower/motor vibration isolation for quiet operation





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

Modine offers a complete line of both indoor and outdoor heating and ventilating equipment.

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.

Direct Fired Make-Up Air units are configurable with an evaporative cooler, CELdek or GLASdek media, with the option of side access prefilters. With these configurations, the unit can satisfy a building's heating, make-up air, cooling, or ventilating requirements. With these configurations, the units can satisfy a building's heating, make-up air, cooling, or ventilating requirements.

#### PERFORMANCE CAPABILITIES

Casing Size (Digit 4)	Blower Size (Digits 5,6)	Airflow Range (CFM)		Max Air Temp Rise (°F)		Maximum MBH		Max Supply Air
		Min.	Max.	Natural Gas	Propane Gas	Natural Gas	Propane Gas	Temp (°F)
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

<sup>1.</sup> 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.

#### **OPTIONAL FEATURES**

- 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
- Neoprene, Rubber-in-shear, or spring isolated blower/motor vibration isolation
- Mild temperature inlet thermostat
- 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
- Variety of discharge diffusers (3 Way and 4 Way)





<sup>2.</sup> Please refer to our online Breeze® AccuSpec selection program with specific conditions.