

## MV-X SERIES ENERGY RECOVERY VENTILATOR INDOOR MINI-VENTILATORS

### STANDARD CONSTRUCTION

#### CABINET

20 (1.0) gage galvanized steel.

#### PANELS

20 (1.0) gage galvanized steel.

#### MOTORS

115V/1ph/60hz ODP.

#### FINISH

Polyester Resin based powder coat.  
Gray color.

#### WHEEL

AHRI rated Internal Enthalpy Wheel.

#### FILTERS

Intake and Exhaust: 2" Pleated MERV 8.

#### LOW AMBIENT KIT

Temperature Adjustable Frost Control.

#### ROTATION SENSOR

Dry Contact Switch for Wheel Rotation Monitoring.

#### START-STOP-JOG

Temperature Adjustable Fan Control for Economizer Cycle compatibility.

#### TEMPERATURE LIMITS

+10°F (-12°C) to. +115°F (+46°C).

### OPTIONS

- Floor or Ceiling Vibration Isolators (FVI/CVI)
- Wall Mount Motion Detector (WMMD)
- Wall Mount 7-day Programmable Timer (WMPT)
- Speed Controller Module (SCM)
- Transformers (TNF)
- Disconnect (Disc)
- Dirty Filter Switch (DFS)
- MERV 13 Filters (M13)

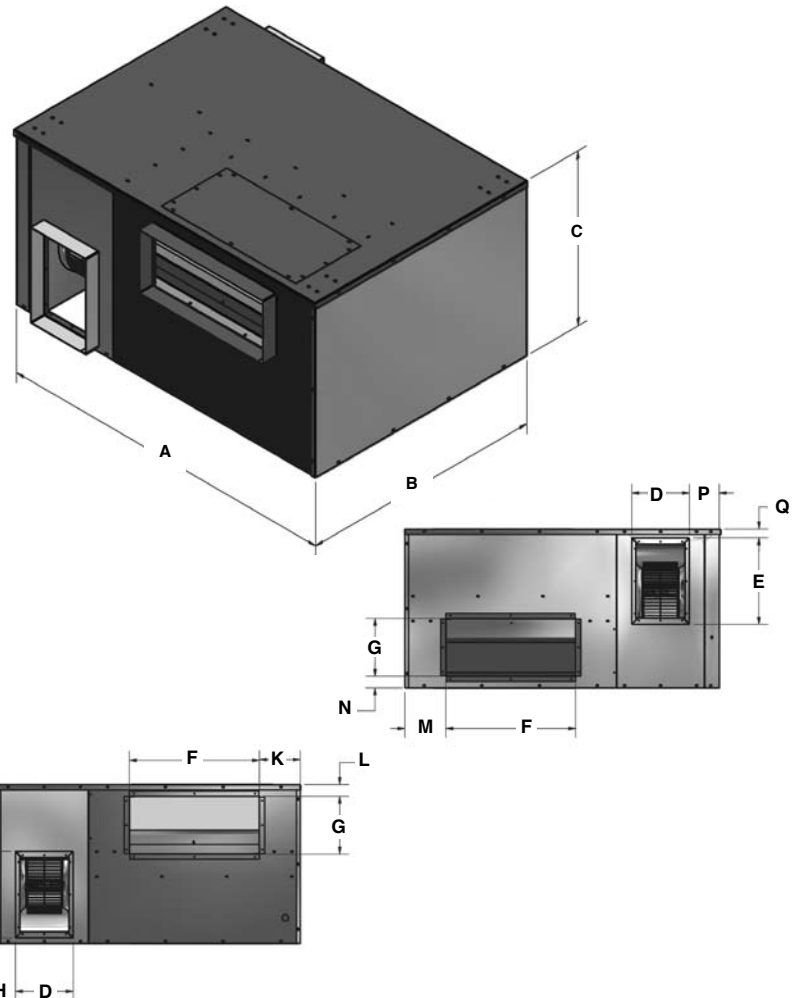
### ACCESSORIES

- Intake/Exhaust Caps with backdraft damper
- Roof Curbs (for above)
- Wall Louver Intake Hood
- Wall Louver Exhaust Hood with backdraft damper
- Motorized Outside Air Damper

Dimensions shown in parentheses ( ) indicate millimeters.

### FEATURES

MV-X Series energy recovery mini-ventilators are designed for use in indoor applications requiring up to 1000 CFM for ventilation with standard frost control, economizer cycle compatibility, and wheel operation sensing. Typical applications include classrooms, meeting rooms, and small retail. Units can be floor or ceiling mounted and include a standard rotating enthalpy wheel.



Model	Overall Cabinet			Duct Openings				Other Dimensions								Approximate Weight (lbs)
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	
<b>MV 750X</b>	43.6	30.6	22	8	12	18	8	4.130	0.772	5.674	1.625	5.674	1.625	4.130	1.202	225
<b>MV 450X</b>	40	29	18	8	12	12	8	5.676	0.772	5.340	1.589	5.340	1.339	5.676	1.202	195

Qty.	Model	Options										ACCESSORIES	TAG
		FVI	CVI	SCM	WMMD	WMPT	DISC.	DFS	TNF		M13		
									240V P/ 110V S	460V P/ 110V S			

## PERFORMANCE

### MV450X

External Static Pressure		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
CFM*	Low	656	640	625	609	590	570	552	538	511	477	440
	Medium	729	708	690	671	649	627	605	582	560	530	495
	High	783	765	740	721	700	678	650	622	598	580	560

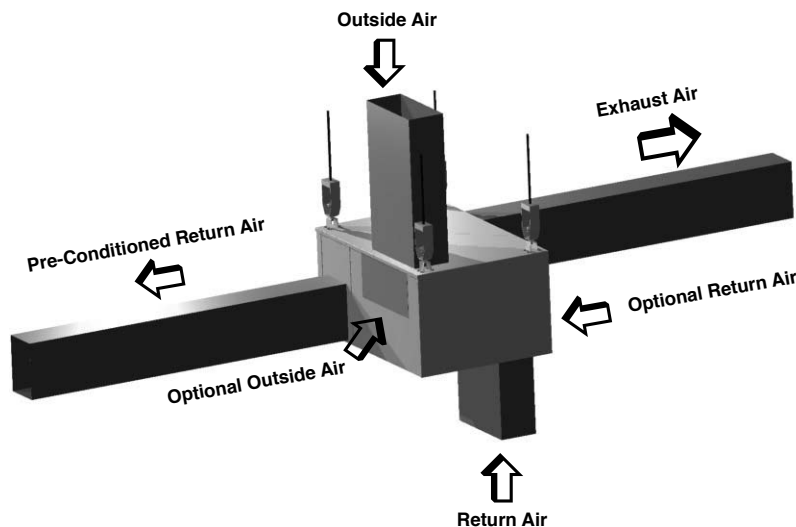
\*Variable speed controller is available for lower flow.

### MV750X

External Static Pressure		0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
CFM*	Low	823	822	821	819	808	790	778	762	755	738	718
	Medium	997	992	985	975	960	940	928	905	884	872	850
	High	1162	1145	1130	1104	1095	1090	1068	1047	1020	998	967

\*Variable speed controller is available for lower flow.

## TYPICAL INSTALLATIONS



## SUGGESTED SPECIFICATION

Furnish and install, at locations shown on plans or in accordance with schedules, mechanical cooling system complete with an Energy Recovery Ventilator (ERV). The Energy Recovery Ventilator will contain an energy recovery component rated in accordance with AHRI Standard 1060-2000 with ratings certified by AHRI. ERV shall have movable duct flanges for OA and RA intake. All other airstreams shall be horizontal as standard. Cabinet shall be galvanized steel construction with a powder coat paint finish electrostatically bonded to the metal. Where conditioned air is handled, cabinet panels shall be fully insulated to prevent sweating and minimize sound. Knockouts shall be provided for power connections. Hanging or pad mount installation capability shall be standard. Test ports shall be provided so airflow can be measured across the energy recovery wheel. Intake and exhaust air blowers of the ERV shall contain a centrifugal forward curved blower. They shall have ball bearings with direct drive motors. ERV's shall be complete with low ambient kit for frost control, start-stop-jog for use with economizer cycle, and rotation sensor utilizing dry contact switch that closes upon failure.

The energy recovery device shall be a rotary heat exchanger per AHRI Standard 1060 description. The device will be an enthalpy wheel coated with a silica gel desiccant by a patented process without the use of binders or adhesives which may plug the desiccant aperture. The substrate shall be a lightweight polymer. Desiccant shall not dissolve or deliquesce in the presence of water or high humidity. The wheel shall be easily cleanable with standard coil cleaning solution or mild soap and water solution. On ERV's with wheels larger than 25" (635) diameter, it shall have removable segments for cleaning and maintenance. All diameter and perimeter seals shall be provided. The energy recovery cassette shall be an Underwriters Laboratories Recognized Component for electrical and fire safety.

ERV unit to have minimum 2" (51) pleated MERV 8 filters in intake and exhaust airstreams. Unit shall be provided with a single point power connection.

Energy Recovery Ventilators shall be in all respects equal to Ruskin Model (specifier select) MV-450X or MV-750X mini-ventilators.

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