

VENTERGY SERIES® MULTI-PORT EXHAUST VENTILATORS MODEL MPVS 100 AND 120

PRODUCT SPECIFICATIONS AND TECHNICAL DATA 11/08

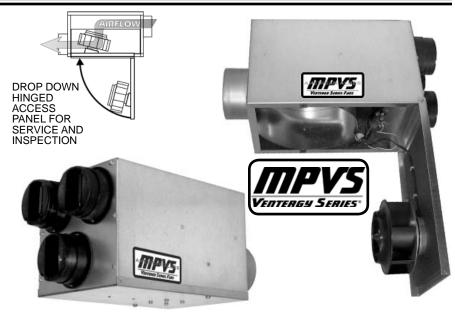
General: MPVS Series multi-port ventilators are highly versatile continuous duty rated fan units for residential and light commercial applications, and meet ENERGY STAR efficiency criteria for low energy consumption. The most popular use is central continuous exhaust ventilation of bathrooms, kitchens, laundry rooms, and other rooms where humidity is a controlling factor, since the fan has a single exhaust discharge duct directly to the outdoors.

The principle advantage of the MPVS central exhaust system is the assurance of controlled indoor air quality ventilation and the elimination of standard noisy bath fans, with the obvious benefits of reduced penetrations to the exterior of the building. With the increased tightness of construction for energy efficient buildings, there is a growing need of mechanical ventilation for indoor air quality. These fans are designed to serve this purpose as well, by providing effective bathroom ventilation, with the ability to run intermittently or continuously as needed. The quiet, energy efficient permanent split capacitor external rotor motor has permanently sealed bearings that provide many years of maintenancefree performance.

Construction: The MPVS fan is constructed of heavy gauge galvanized steel to prevent corrosion caused by moisture. The cabinet is internally lined with UL rated, acoustic closed-cell foam vapor barrier insulation. This allows installation directly above living spaces, or in unheated plenum spaces without concern for noise or condensation.

Fan and Motor: The fan motor is an energy efficient permanent split capacitor type, of external rotor design. Totally sealed to protect against moisture and contaminants, it is approved for use to remove steam and moisture in kitchen and bath areas. The motor incorporates permanently lubricated sealed bearings and automatic reset thermal overload protection. It is designed and certified for continuous duty or intermittent operation.

The fan uses a backward inclined impeller design that minimizes dust from collecting on the blades and affecting airflow performance. Each fan is statically and dynamically balanced in the factory to eliminate vibration and ensure quiet



DIMENSIONS: MPVS 100 and 120 Duct Configuration(s) 313, 323, and 333 TOP VIEW FRONT VIEW- (313) 8 8 3/4' 1 3/4" 8 ▰ 12" FRONT VIEW- (323) FRONT VIEW- (333) 3 3 3' 3 8' 8" 3' 3 3' 8' **ELECTRICAL AND AIRFLOW PERFORMANCE** Т

	N			10/	84.637	CFIM VS. Static Pressure				
Model	Nominal RPM	HP	Volts	Watts at .2" Ps	Max. Amps	0"	.2"	.4"	.6"	.8"
MPVS-100	2980	0.03	120	22	0.19	108	88	68	48	25
MPVS-120	3135	0.05	120	38	0.29	143	128	112	9 5	74

*Certified airflow rating at 0.2" w.g. is derated from actual test results per HVI Certification procedure 920.

operation. The entire motor and fan assembly is mounted on a drop-down hinged access panel for service and inspection, and can be removed from the fan without disassembly of the ducting connections.

Controls: The fans can be operated manually, or automatically by a programmable timer or dehumidistat and may also be operated in conjunction with a variable speed control.

Locating and Installing the Fan: The compact dimensions and versatile mounting options permit installation above drop ceilings, between ceiling joists, or within a small soffit location. The fan can

be installed either horizontally or vertically.

Airflow Balancing: The flow rates are automatically set with preset ALDES Constant Airflow Regulators.

A passively controlled element in each duct run inflates or deflates automatically in response to system pressure to maintain constant airflow.

ELECTRICAL DATA

MPVS 100 / 120

120 V, 60 Hz., .19/.29 amp 22/38 W Max., 2980 / 3135 RPM Above ratings are intended for sizing electrical wring only. Actual consumption will be lower.

TABLE OF AIRFLOWS AND DUCT LENGTHS*

AIRFLOW	3" INTAKE DUCT TO FAN Recommended Max. Duct Length from Grille to Fan (ft.)					
CFM	SMOOTH	FLEXIBLE				
10	225	180				
20	65	50				
30	30	25				
40**	20	15				
50**	10	10				

TOTAL EXHAUST	Assumes low	ARGE DUCT pressure drop : cap	FOR EACH ELBOW DEDUCT		
RATE CFM	4" SMOOTH	4" FLEXIBLE			
60	40 ft	20 ft			
75	25 ft	15 ft			
90	18 ft	12 ft	3" Diameter = 3 Feet		
100	15 ft	9 ft	3 Diameter = 3 Feet		
120	11 ft	8 ft			
135	8 ft	6 ft			

*This table should only be used as a general guide. Actual duct length allowances may be longer on some models. Contact the factory for assistance. **CAR Flow Regulators not available over 35 cfm. NOTE: If longer duct runs are required than permitted in the table above, use smooth ducting and/or increase the diameter.

Typical Specification

Multi-Port Exhaust Fan: American ALDES Ventilation Corporation, Florida (1-800-255-7749). ALDES model MPVS 100 or MPVS 120.

General: The fan shall be continuous duty type with a backward inclined centrifugal blower housed in a multi-port enclosure specifically designed residential and commercial use. The fan shall be safety tested per UL standards and bear the agency listing certified mark, and be approved for use over cooking areas and tub/ shower enclosures when used with GFCI branch circuiting. The fan must meet the ENERGY STAR performance criteria for energy efficiency and bear the ENERGY STAR mark.

Construction: The housing shall be of a minimum 20 gauge steel with a G90 galvanized coating or baked enamel paint finish. All interior surfaces of the housing shall be lined with a UL recognized non-porous closed cell foam insulation to allow installation above ceilings and in unheated spaces without concern for condensation or absorption of water. The unit shall not exceed 8 " in total height and 8" in width to allow mounting within ceiling/floor joist spaces. The blower shall be external rotor motor centrifugal type with backward inclined impeller blades. The motor and blower assembly shall be mounted on a drop-down hinged access panel so as to permit removal from the housing without disassembly of the ducting connections. The intake duct connections shall be dimensioned so as to accept constant airflow regulators with a secure fit. The intake duct dimensions shall be nominal 3" round. The discharge duct dimension shall be nominal 4" round. The fan housing and intake duct collar(s) shall be designed to allow removal and repositioning in the field to accommodate different installation requirements. Mounting brackets shall be provided for attachment to the fan housing allowing vertical or horizontal installations.

Motor: The motor shall be direct drive external rotor, high efficiency PSC type with permanently lubricated sealed ball bearings. The motor shall have automatic thermal overload protection and must be totally sealed to protect against contaminants and moisture. Naturally vented airover motors are not acceptable.

Electrical: The fan will operate on 115V, 50/60Hz, and single-phase current. The motor will be listed for use with a solid-state speed control.

Constant Airflow Regulators shall be installed in

uld only be used as a general guide. Actual upon the second structure in the table on the duct runs are required than permitted in the table on the ducting and/or increase the diameter. The entire unit is guaranteed for 3 years, from date of shipment, against all manufacturing defects provided the material has been installed and operated per manufacturer's instructions and under normal conditions. Warranty is This warranty is not transferable and is limited to the original end user.

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