

## CENTRAL EXHAUST VENTILATORS SINGLE FAMILY APPLICATIONS

MPV 200/4 & MPV 300/4

**PRODUCT** SPECIFICATIONS AND TECHNICAL DATA

238-6/19/95

These multi-port ventilators are highly versatile fan units for residential and light commercial applications. The most popular use is central exhaust ventilation of bathrooms, kitchens, laundry, exercise rooms, etc. with one exhaust discharge duct to the outdoors. The most obvious benefit of the centralized exhaust system is quiet operation, eliminating noisy bath fans. In addition, with the increased tightness of construction for energy efficient buildings, there is a growing need for mechanical ventilation for indoor air quality. These fans are designed to serve this dual purpose, providing effective bathroom ventilation, with the provision to run the fan from several hours a day to continuously, as needed. Quiet, energy efficient permanent split capacitor motors with permanently sealed bearings, provide many years of trouble-free performance.

The motors draw less power than many single bath fans, yet can replace up to six such units.



Controls: The fans can be operated manually, automatically by a programmable time of day timer, dehumidistat or continuously. They may also be operated with a variable speed control.

Airflow Balancing: The flow rates can be set with either manually adjustable grilles, like the ALGRILLES in the standard kit of accessories, or with preset ALDES Constant Airflow Regulators, used with fixed grilles with large free area as in the Deluxe kit. (See the general description brochure for kit contents and ordering information.)

Locating & Installing the Fan: The fan is insulated so it may be installed in unheated spaces, such

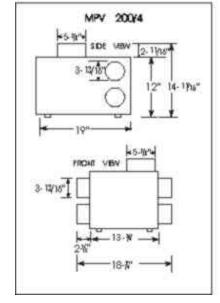


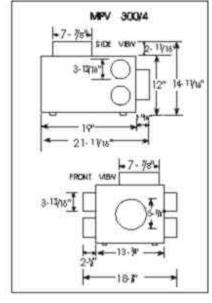
as an attic. All ducting through unheated spaces must be insulated. However, cyclical operation, with long off periods may still cause water to condense in the

ducting and fan housing due to slow exfiltration of warm moist air. For this reason, the accessory kits include sleeves with backdraft dampers to block air flow during the off-cycle. With continuous operation, the risk of condensation is dramatically reduced. Whenever possible, it is advisable to locate the fan within a heated space.

TABLE OF AIRFLOWS AND DUCT LENGTHS					
	Intake Duct to fan  Maximum Duct Length from grille to fan (FT)		Fan Discharge Duct (Flexible) Assumes Low pressure drop venthood		
AIRFLOW					
CFM	4" Smooth Duct	4" Flexible Duct	TOTAL EXHAUST RATE	MAXIMUM LENGTH	
10	900	640	(CFM)	(FT)	
15	400	300	MPV 200 Models	W/6" duct:	
20	260	180	75 to 150	25'	
25	175	120	150 to 250	10'	
30	130	85	MPV 300 Models	W/8" duct:	
35	95	65	150 to 300	10'	
40	75	50	FOR EACH ELBOW DEDUCT:		
45	60	40	3" DIAM - 3'	4" DIAM - 4'	
50	50	30	6" DIAM - 7'	8" DIAM - 9'	
MPV 300 ONLY					
	6" Smooth Duct	6" Flexible Duct		0	
50	400	250			
75	200	125		0)	
100	110	70	MPV 200	MPV 300	
125	70	40	#25 891	#25 895	
150	50	30	(FAN ONLY)	(FAN ONLY)	
				-	

NOTE: 3" Ducting may be substituted to permit installation in partition walls. Smaller diameter ducting has increased resistance to airflow. For each foot of 3" ducting substituted for 4" diameter duct, reduce the allowable duct length by 3 feet. If longer duct runs are required than permitted in the table above, use smooth ducting and/or increase the diameter.





For general indoor air quality, the fan may be run continuously or with a time of day cycle timer to meet the ventilation requirements of the entire home. For assistance in designing a whole house ventilation system taking into consideration the house size, number of occupants, etc., refer to the IAQ supplement to the MPV brochure. Lower flow Constant airflow regulators permit use of the continuous low-airflow multi-point ventilation system without overventilating the home. Alternatively, the fan may be operated continuously with a speed control at a low level, and on high for intermittent operation.

Deluxe Option: Constant Airflow Regulators--the key to balancing airflows— assure balanced airflows at all exhaust points independent of duct length, guaranteed good installations with no need to prove airflows. A passively controlled silicone bulb in each duct run inflates or deflates automatically in response to system pressure to maintain constant airflow independent of duct length.

Multi-Port Exhaust Fan: American

## **Typical Specification**

ALDES Ventilation Corporation, Sarasota, FL (1-800-255-7749) ALDES model MPV 200/4 (or MPV 300/4). The fan shall be a centrifugal blower housed in a multi-port enclosure specifically designed for moderate size residential and light commercial ventilation use. The fan shall be UL listed and labeled, and approved for use over cooking areas.

Construction. The housing shall be of painted or galvanized steel. The motor shall be out of the airstream. The blower shall be of galvanized steel, forward curved. The motor and blower shall be factory balanced for minimal vibration and noise. The motor blower shall be mounted on the housing cover to permit removal from the housing without disassembly of the ducting connections or removal of the housing. The cover shall be secured with screws for easy disassembly. The housing shall be insulated with interior vapor barrier for operation in unheated spaces with reduced risk of condensation. Mounting supports shall be provided to permit hanging by support chains, rods, or other approved means. Resilient rubber feet to permit placement on a flat surface also shall be provided. 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 4" (four ports provided). An additional 6" intake port shall be provided on the model MPV 300/4.

**Motor.** The motor shall be of Class A insulation, with permanent split capacitor, permanently lubricated ball sleeve bearings, and equipped with automatic reset thermal overload protection. The motor shall operate with the axis horizontal.

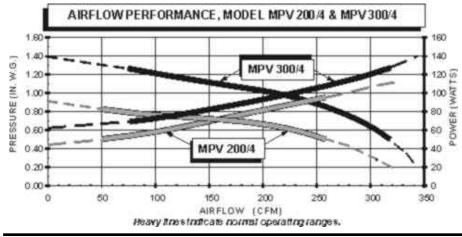
**Electrical.** The fan shall operate on 115 V. 60 Hz, single phase current. The motor shall be listed for use with a solid-state motor speed control.

Constant Airflow Regulators (Deluxe Option) shall be installed in the duct connections with the following airflow rates (select as appropriate):

**4" Diam.** 10, 15, 20, 25, 30, 35, 45 and 50 CFM:

6" Diam.(MPV300/4 when the 6" diameter fitting is not attached to multiple duct runs) 75, 100, 125 and 150 CFM.

Refer to the MPV system specifications for compatible controls, wall/roof caps, etc.



ELECTRICAL DATA				
MPV 200/4	MPV 300/4			
120V. 60 Hz.	120 V. 60 Hz.			
1.2 amp. 125 W.	1.5 amp. 145 W.			
1600 RPM Above ratings are in	1500 RPM			
electrical wiring only. Actual consumtion will be lower. See power curve data.				

## WARRANTY

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 limited to the repair or replacement of the material upon its return freight paid to our factory. *This warranty is not transferable and is limited to the original end user.* 



SARASOTA, FL 34234-2124 Tel: 941 • 351-3441 Fax: 941 • 351-3442 www.americanaldes.com e-mail: inf@aldes-us.com

