ENERVEX® MDF MODULATING DAMPER

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Product Information

Use

The MDF is a ruggedly built, motorized, multi-blade damper. It is used for controlling excessive draft in a mechanical draft system serving boilers and water heaters. It is for installation with gasfired or oil-fired equipment only.

Description

The MDF damper is manufactured to connect to chimneys with a standard 1/2" flanged connection. It is equipped with an actuator attached to the damper shaft. It is of an opposed blade design to assure an extremely accurate control of the flow.

The MDF assembly is rated for temperatures up to 1400°F (760°C).

The MDF must be installed with sufficient clearance above the boiler outlet to allow for damper protrusion into the stack when fully open.

The actuator uses a brushless DC motor that operates on 24VAC/VDC, which is controlled by an Application Specific Integrated Circuit (ASIC). The ASIC monitors and controls the actuator's rotation and provides a digital rotation sensing (DRS) function to prevent damage to the actuator in a stall condition. Power consumption is reduced in a holding mode.

The motor delivers 54 in-lbs (or 6 Nm) torque at rated voltage and is custom configured for the damper. The minimum duration through the 95° operating angle is 15 seconds. An integrated safety system monitors the damper position to prevent unsafe operating conditions.

Material

The damper housing is made of 20 GA (4"-36" diameter) or 18 GA (38" - 48" diameter) 316L stainless steel. The damper blades are made of 16 GA 316L stainless steel. The 1/2" damper shaft is 316L stainless steel and has stainless steel bearings.

Standard Equipment

• V-bands

Optional Equipment

· Weather proof enclosure for actuator





Listings

The MDF damper assembly (damper with actuator) is UL listed in the US and certified for Canada under Underwriters Laboratories Inc. file no. E467733:

- UL 378 Standard for Draft Equipment
- UL 17 Standard for Vent or Chimney Connector Dampers for Oil-Fired Appliances
- ANSI Z21.66-1966 Automatic Vent Damper Devices For Use With Gas-fired Appliances
- ULC/ORD-C378 (1975) Draft Equipment

Damper meets AMCA Standard 500.

Warranty

2-Year Factory Warranty. Complete warranty conditions are available from ENERVEX Inc.



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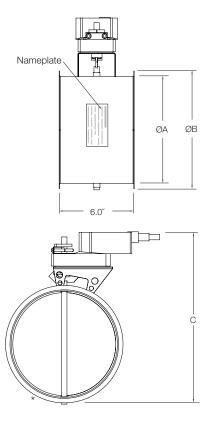
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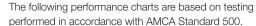
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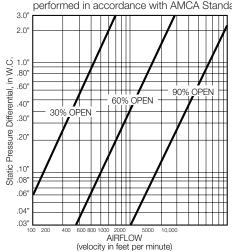
Specifications

Model	Stack ID in / mm	Dim. A in / mm	Dim. B in / mm	Dim. C in / mm	# Blades
MDF 4	4	3.94 / 100	4.88 / 124	8.86 / 225	1
MDF 6	6	5.91 / 150	6.85 / 174	10.83 / 275	1
MDF 8	8	7.87 / 200	8.82 / 224	12.80 / 325	1
MDF 10	10	9.84 / 250	10.79 / 274	14.76 / 375	1
MDF 12	12	11.81 / 300	12.76 / 324	16.73 / 425	2
MDF 14	14	13.78 / 350	14.72 / 374	18.70 / 475	2
MDF 16	16	15.75 / 400	16.69 / 424	20.67 / 525	2
MDF 18	18	18.00 / 457	19.00 / 483	23.00 / 584	3
MDF 20	20	20.00 / 508	21.00 / 533	25.00 / 635	3
MDF 22	22	22.00 / 559	23.00 / 584	27.00 / 686	3
MDF 24	24	24.00 / 610	25.00 / 635	29.00 / 737	3
MDF 26	26	26.00 / 660	27.00 / 686	31.00 / 787	4
MDF 28	28	28.00 / 711	29.00 / 737	33.00 / 838	4
MDF 30	30	30.00 / 762	31.00 / 787	35.00 / 889	4
MDF 32	32	32.00 / 813	33.00 / 838	37.00 / 940	4
MDF 34	34	34.00 / 864	35.00 / 889	39.00 / 991	4
MDF 36	36	36.00 / 914	37.00 / 940	41.00 / 1041	5

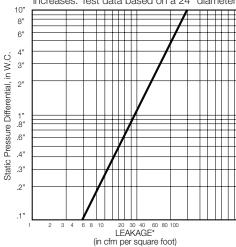
Other sizes available upon request.







*This chart should be used for general reference purposes. Leakage through the damper will increase as the diameter increases. Test data based on a 24" diameter damper.



Specifications are subject to change without notice.

