

ENERVEX ADM & ADF AUTOMATED DAMPER

3903005 03.22

Installation & Operating Manual



READ AND SAVE THESE INSTRUCTIONS!



UL File E467733

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VENTING DESIGN SOLUTIONS



This symbol shows that the ENERVEX ADM/ADF Automatic Dampers are listed in the US and certified for Canada under Underwriters Laboratories Inc. file no. E467733.

IMPORTANT: READ THESE INSTRUCTIONS CAREFULLY PRIOR TO INSTALLATION.

- **EXAMINE ALL COMPONENTS FOR POSSIBLE SHIPPING DAMAGE PRIOR TO INSTALLATION.**
- **PROPER JOINT ASSEMBLY IS ESSENTIAL FOR A SAFE INSTALLATION. FOLLOW THESE INSTRUCTIONS EXACTLY AS WRITTEN. CHECK SECURENESS OF JOINTS UPON COMPLETION OF ASSEMBLY.**

WARNING

Failure to follow these installation instructions could cause FIRE, CARBON MONOXIDE POISONING, and/or DEATH. If you are unsure of installation requirements, contact ENERVEX.

Symbol Legend

The following terms are used throughout this manual to bring attention to the presence of potential hazards, or to important information concerning the product.



DANGER: Indicates an imminent hazardous situation which, if not avoided, will result in death, serious injury or substantial property damage.



WARNING: Indicates an imminent hazardous situation which, if not avoided, may result in personal injury or property damage.

How to use this manual

This installation manual does not contain any system design documentation. System design documentation is available from any authorized ENERVEX representative. Accessories, fans, and variable frequency drives are not covered by this manual. Please refer to these component's individual manuals.

TO REDUCE THE RISK OF FIRE, ELECTRICAL SHOCK OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

1. Use this unit in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed on the front of the manual.
2. Before servicing or cleaning the unit, switch off at service panel and lock service panel to prevent power from being switched on accidentally.
3. Installation work and electrical wiring must be done by a qualified person(s) in accordance with applicable codes and standards.
4. Follow the appliance manufacturer's guidelines and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
5. This unit must be grounded.

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1. PRODUCT INFORMATION

1.1 FUNCTION

The ENERVEX ADM/ADF Automatic Damper is a single blade, two position damper powered by an actuator. The ADM/ADF is available in standard stack diameters ranging from 4 to 36 inches. The actuator interlocks with a boiler or gas fireplace to open the damper when the appliance is in use, and close it when the appliance is not in use.

The ADM/ADF is powered by a 120 VAC or 24 VAC/VDC actuator. The actuator is equipped with a fail safe system to open the damper in the event of an electrical or mechanical failure. It has an adjustable NO/NC endswitch to provide damper position open/closed.

The ADM damper is manufactured to connect to chimneys w/o flange connections. The ADF damper is manufactured to connect to chimneys with a standard 1/2" flanged connection. The ADM/ADF is rated for temperatures up to 1400°F (760°C).

The ADM/ADF should be installed with sufficient clearance above the boiler outlet to allow for damper protrusion into the stack when fully open. ADM/ADF nameplates located as shown on diagram below.

It is for installation with gas-fired or oil-fired equipment only.

1.2 SHIPPING

- Standard Packing List
- ADM/ADF is shipped completely assembled

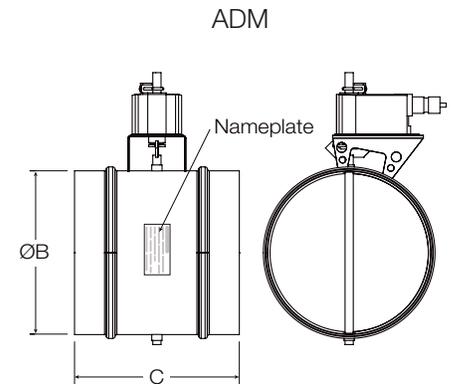
1.3 WARRANTY

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

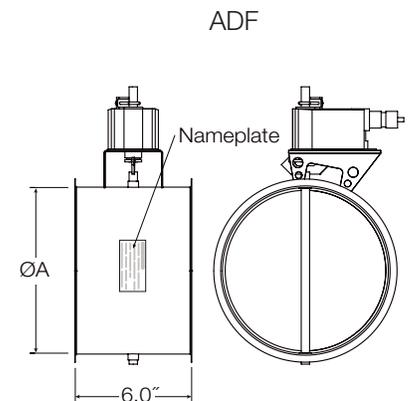
2. SPECIFICATIONS AND DIMENSIONS

2.1 DIMENSIONS AND CAPACITIES

Model	Stack ID (in)	Dia. A in / mm	Dim. B in / mm	Dim. C in / mm	Dim. D in / mm
ADM 6	6	5.85 / 146	8.0 / 203	7.85 / 199	10.85 / 276
ADM 8	8	7.85 / 197	8.0 / 203	9.85 / 250	12.85 / 326
ADM 10	10	9.85 / 248	10.0 / 254	11.85 / 301	14.85 / 377
ADM 12	12	11.85 / 298	10.0 / 254	13.85 / 352	16.85 / 428
ADM 14	14	13.85 / 349	10.0 / 254	15.85 / 403	18.85 / 479
ADM 16	16	15.85 / 400	10.0 / 254	17.85 / 453	20.85 / 530
ADM 18	18	17.85 / 451	12.0 / 305	19.85 / 504	22.85 / 580
ADM 20	20	19.85 / 502	12.0 / 305	21.85 / 555	24.85 / 631
ADM 22	22	21.85 / 552	14.0 / 356	23.85 / 606	26.85 / 682
ADM 24	24	23.85 / 603	14.0 / 356	25.85 / 657	28.85 / 733
ADM 26	26	25.85 / 654	16.0 / 406	27.85 / 707	30.85 / 784
ADM 28	28	27.85 / 705	16.0 / 406	29.85 / 758	32.85 / 834
ADM 30	30	29.85 / 756	16.0 / 406	31.85 / 809	34.85 / 885
ADM 32	32	31.85 / 806	16.0 / 406	33.85 / 860	36.85 / 936
ADM 34	34	33.85 / 857	18.0 / 457	35.85 / 911	38.85 / 987
ADM 36	36	35.85 / 908	18.0 / 457	37.85 / 961	40.85 / 1038



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



Other sizes available upon request.

3. MECHANICAL INSTALLATION

3.1 GENERAL

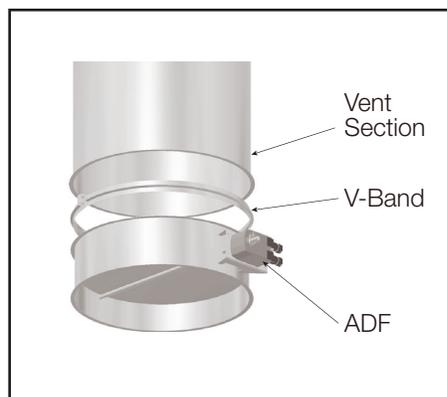
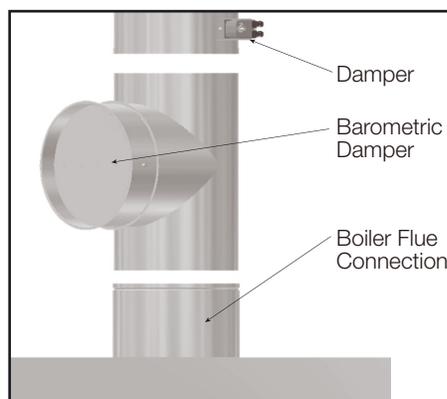
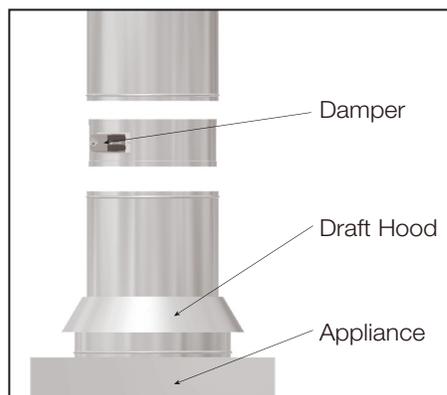
The ADM has male-male slip connections. Install the ADM in the vent system at least one vent diameter (B) plus one foot above an appliance outlet and at least three vent diameters away from any tee or elbow.

The ADF has standard flanged connections. Install using the accompanying V-Band and a gasket seal. Install the ADF in the vent system at least one vent diameter (A) plus one foot above an appliance outlet and at least three vent diameters away from any tee or elbow as shown in the figures on the right.

DO NOT COVER ACTUATOR WITH INSULATION.

THE ADM AND ADF ARE FOR INSTALLATION WITH GAS-FIRED OR OIL-FIRED EQUIPMENT ONLY.

MINIMUM CLEARANCE TO COMBUSTIBLE IS 18".



4. ELECTRICAL INSTALLATION

4.1 WIRING

DANGER

 Turn off electrical power before servicing. Contact with live electric components can cause shock or death.

Éteignez l'alimentation électrique avant de procéder à l'entretien. Le contact avec des composants électriques sous tension peut provoquer un choc ou la mort.

 Verify voltage of actuator before connecting to a power supply. Actuator will run on either 120VAC or 24VAC/VDC.

Vérifiez la tension de l'actionneur avant de le connecter à une source d'alimentation. Actuator fonctionnera sur 120VAC ou 24VAC / VDC.

Wire that actuator for 2 wire/ 2 position operation as shown in Figure 1 (120 VAC) and Figure 2 (24 VAC) on the right.

The actuator should be set for clockwise (CW) rotation and should fail to the ADM/ADF open position. Verify settings of the actuator before installation.

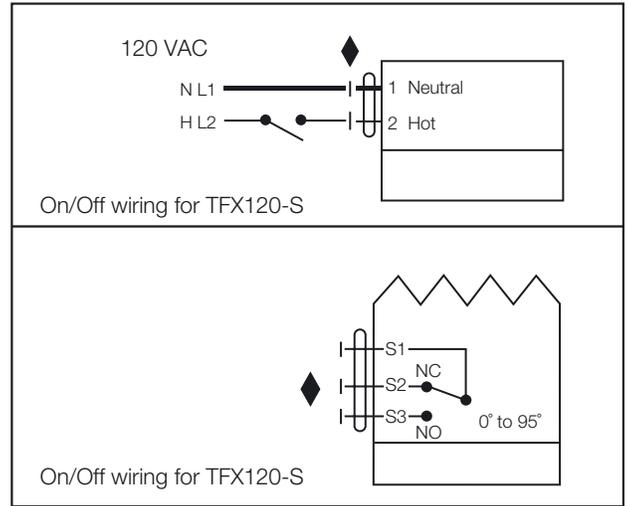


Fig. 1 120 VAC Actuator

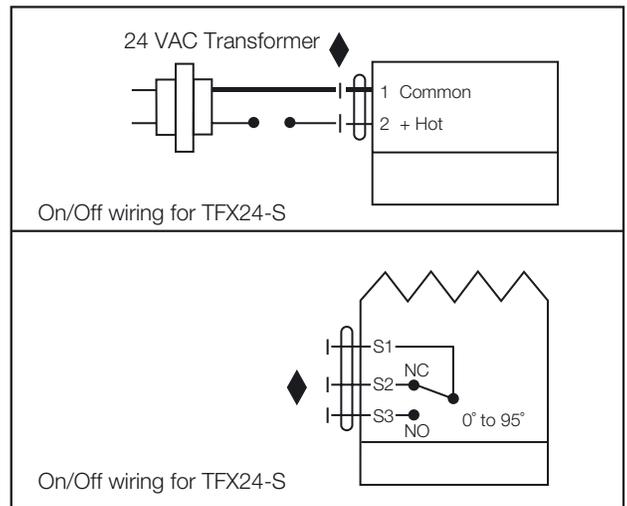


Fig. 2 24 VAC/VDC Actuator

5. MAINTENANCE

5.1 GENERAL

Annual maintenance is recommended. During the maintenance check, verify the damper blade is in the correct position (the indicator on the damper rod will show the position of the damper blade). Check that the damper rod is firmly secured by the actuator and tighten fasteners if necessary.

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