

ADDISON™

ADF-SERIES DIRECT-FIRED HEATING, COOLING AND PRESSURIZATION SYSTEMS

- **Can assist in improving indoor air quality-** Pressurization can help exhaust systems operate more efficiently.
- **Augment existing ventilation system-** Air handler can be designed to automatically modulate outdoor air volume from 20% to 100% to help meet ventilation requirements in cold weather and decrease heat buildup in warm weather.
- **Operation flexibility-** Fan only operation allows free ventilation cooling, reducing indoor air temperatures to help keep people and processes productive.
- **Flexibility and convenience-** Heating systems require little to no ductwork and can be installed indoors or outdoors.



www.addison-hvac.com
Telephone: +1.407.292.4400



CANADA: 100% OUTSIDE AIR ONLY

ADF-SERIES

ADDISON™ ADF-SERIES AIR HANDLERS HELP IMPROVE INDOOR AIR QUALITY AND PROVIDE AIR COMFORT.

ADDISON™ ADF-Series air handlers can be designed to efficiently establish and maintain a slightly pressurized condition in your facility as outdoor air is gently tempered and, as required, mixed with existing indoor air.

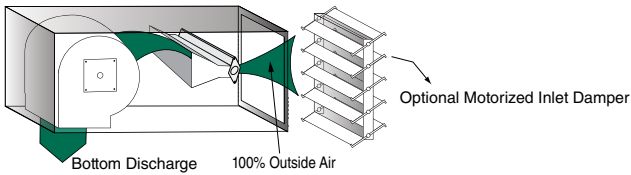
NOTE: Models, useable indoors or outdoors, are available in upright or horizontal configurations with top, bottom or end discharges.

MODEL	AIRFLOW (CFM)	OUTPUT (BTU/H) X (1000)*	
		NG	LPG
ADF-40	1,000 - 4,000	97 - 389	76 - 302
ADF-75	4,000 - 10,000	432 - 800	346 - 800
ADF-150	7,000 - 14,000	456 - 1,404	605 - 1210
ADF-270	12,000 - 25,000	1,296 - 2,700	1,037 - 2,160
ADF-410	25,000 - 40,000	2,700 - 4,320	2,160 - 3,456
ADF-700A	35,000 - 47,500	3,780 - 5,130	N/A
ADF-700B	45,000 - 60,000	4,860 - 6,480	N/A

* 1 MBH=1,000 Btu/h. Output range indicates range at maximum temperature rise.

CONFIGURATIONS

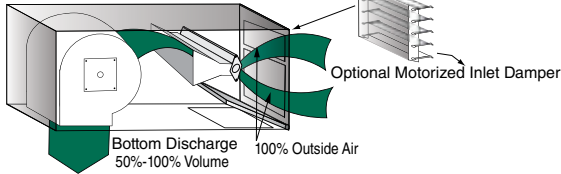
MAKE-UP AIR (MUA)



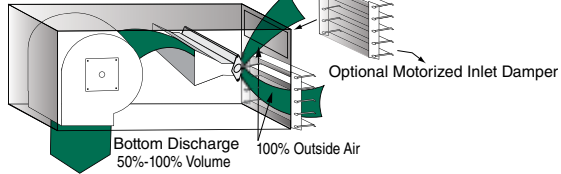
Design: 100% outdoor air with a fixed discharge air volume.
Function: Supplies direct replacement air for building mechanical exhaust.
Application: Used as make-up air for industrial processes which incorporate mechanical exhaust.

VARIABLE AIR VOLUME (VAV)

ADF75-ADF150



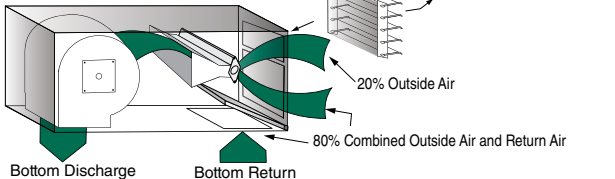
ADF270-ADF700B



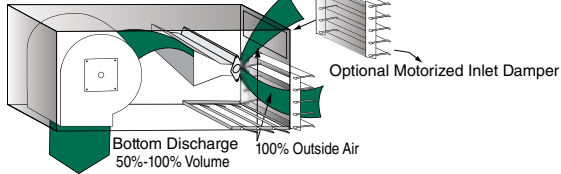
Design: 100% outdoor air with variable discharge air volume from 50% to 100% of total capacity.
Function: Automatically responds to building pressure and temperature needs.
Application: Used in industrial and commercial buildings that have air quality and specific air management requirements.

AIR MANAGEMENT (AM)

ADF75-ADF150

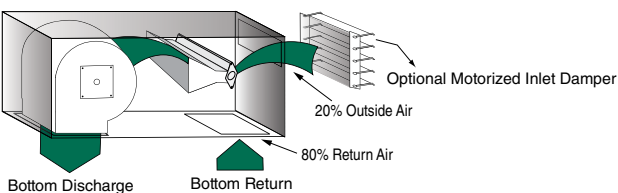


ADF270-ADF700B



Design: Variable outdoor air/return air ratio within the range of 100% outdoor air/ 0% return air to 20% outdoor air/ 80% return air. Discharge air volume is fixed.
Function: Automatically responds to building pressure and temperature needs.
Application: Used in industrial and commercial buildings that have air quality and specific air management requirements.

FIXED RECIRCULATION (FR)



Design: Fixed 80% return air and 20% outdoor air. Discharge air volume is fixed.
Function: Provides efficient, low-cost heating where minimum ventilation rates are required.
Application: Used in warehouses, distribution centers, retail outlets, etc.

ADF-SERIES FEATURES

Reliable, Efficient System Operation Provided by:

- 30:1 fully modulating burner that maintains 100% combustion efficiency.
- Double-width, double-inlet (DWDI), forward-curved centrifugal fan built for long life.
- Energy-saving ignition system.
- Electronic fuel modulation providing immediate response.
- UV scanner for excellent reliability and durability (Not available on ADF 40)
- Operation of fan only in warm weather to enjoy free ventilation cooling.
- Compliance to ETL per ANSI Z83.18 or Z83.4 standards.

Long Lasting Construction Provided by:

- Heavy-duty, corrosion-resistant, galvanized steel construction.
- Sturdy, integral frame that is screwed and bolted together for durability and longer service life.
- Unpainted galvanized steel or white finishes available.
- Heavy-duty, factory-installed motor and drive package designed for long-lasting performance.
- Heavy-duty, pre-lubricated bearings provide up to 30,000 hours of ABMA L-10 performance.

Ease of Maintenance Provided by:

- Large access panel for easy maintenance of blower, motor, drives and burner.
- Blower installed downstream of burner for convenient access.

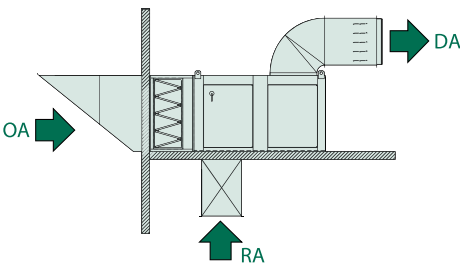
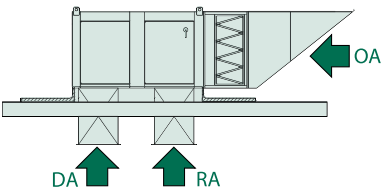
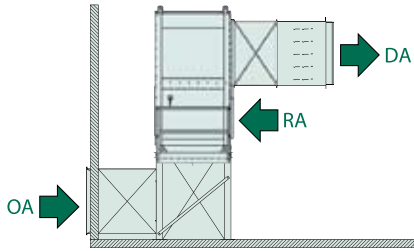
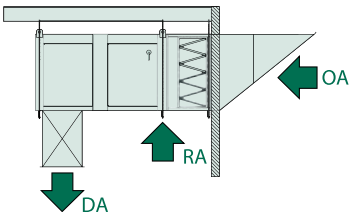
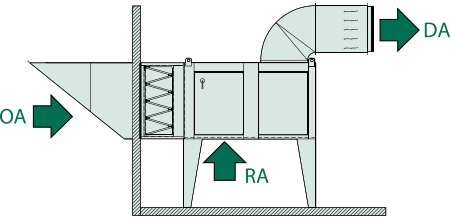
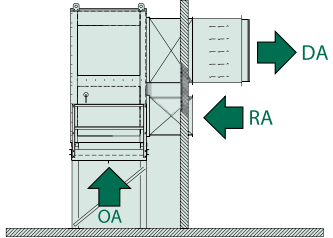
Other ADF-Series Options:

- 19" (48 cm) roof curb simplifies rooftop mounting.
- Inlet hood protects against water entrainment.
- Filter section with disposable or permanent filters for longer equipment life of internal components.
- Motorized inlet damper for exfiltration control.
- FM/XL Insurance compliant gas trains.
- Upright heater stand or legs of varying heights.

ADF-Series Conventional Controls' Options:

- Discharge temperature or room temperature control available
- Interlock to existing building management system or other remote devices.
- Mild weather stat
- Low temperature stat with bypass timer.

TYPICAL INSTALLATIONS

MEZZANINE-SUPPORTED (INDOOR)	HORIZONTAL ON ROOF CURB (OUTDOOR)	UPRIGHT ON ENCLOSED STAND (INDOOR)
		
SUSPENDED (INDOOR)	HORIZONTAL ON LEGS (INDOOR OR OUTDOOR)	UPRIGHT ON STAND (OUTDOOR)
		
LEGEND		
OA = Outside Air	DA = Discharge Air	RA = Return Air

REMOTE PANELS

BASIC REMOTE



This control is used for make-up air and space heating. The discharge temperature of the heater remains constant as selected on the selection dial. The burner flame is modulated by a discharge temperature control, which is governed by the remote temperature selector.

FAN ON/BURNER ON MODE: Heater can operate continuously for building exhaust air replacement and space heating by maintaining a constant discharge temperature.

FAN ON/BURNER OFF MODE: The blower can operate without the burner for summer ventilation.

DIMENSIONS: 10" L x 10" W x 4" D (25 cm L x 25 cm W x 10 cm D) NEMA 1 enclosure.

STANDARD DISCHARGE CONTROL REMOTE (SDC)



This control is used for make-up air and day/night heating of the building. The discharge temperature of the heater remains constant as selected on the selection dial. The burner flame is modulated by a discharge temperature control, which is governed by the remote temperature selector.

AUTO/WINTER MODE: Heater cycles on/off to maintain space temperature as selected on the thermostat.

ON/WINTER Mode: Heater can operate continuously for building exhaust air replacement and space heating by maintaining a constant discharge temperature.

ON/SUMMER MODE: The blower can operate without the burner for summer ventilation.

DIMENSIONS: 10" L x 10" W x 4" D (25 cm L x 25 cm W x 10 cm D) NEMA 1 enclosure.

DELUXE TEMPERATURE CONTROL REMOTE (DTC)



This control is used for make-up air and automatic day/night heating of the building. A solid-state modulating room Selectrastat modulates the burner flame to maintain space temperature and compensate for changing building heat losses or gains.

AUTO/WINTER MODE: Occupied time: Heater can operate continuously, modulating heat output to maintain space temperature as selected on the Selectrastat.

Unoccupied time: Heater cycles on/off to maintain space temperature as selected on the programmable thermostat (night setback).

ON/WINTER MODE: Heater can operate continuously, modulating heat output to maintain space temperature as selected on the Selectrastat.

ON/SUMMER MODE: The blower can operate without the burner for summer ventilation.

DIMENSIONS: 10" L x 10" W x 4" D (25 cm L x 25 cm W x 10 cm D) NEMA 1 enclosure.



**7050 Overland Road
Orlando, FL 32810 U.S.A.
Telephone: +1.407.292.4400
Fax: +1.407.290.1329
www.addison-hvac.com**

Installation Code and Quarterly Inspections: All installation and service of ADDISON™ equipment must be performed by a contractor qualified in the installation and service of equipment sold and supplied by Addison and conform to all requirements set forth in the ADDISON™ manuals and all applicable governmental authorities pertaining to the installation, service and operation of the equipment. To help facilitate optimum performance and safety, Addison recommends that a qualified contractor conduct quarterly inspections of your ADDISON™ equipment and perform service where necessary, using only replacement parts sold and supplied by Addison.

Further Information: Applications, engineering and detailed guidance on systems design, installation and equipment performance is available through ADDISON™ representatives. Please contact us for any further information you may require, including the Installation, Operation and Service Manual.

These products are not for residential use.

This document is intended to assist licensed professionals in the exercise of their professional judgment.

© 2009 Addison All rights reserved. No part of this work covered by the copyrights herein may be reproduced or copied in any form or by any means - graphic, electronic, or mechanical, including photocopying, recording, taping or information storage and retrieval systems - without the written permission of Addison.