

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.

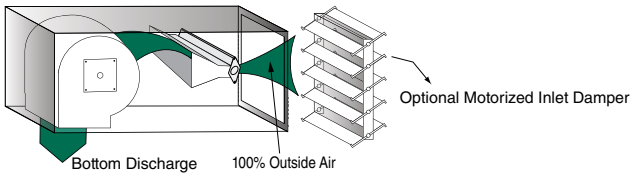
NOTE: Models, useable indoors or outdoors, are available in upright or horizontal configurations with top, bottom or end discharges.

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 - 1,210
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

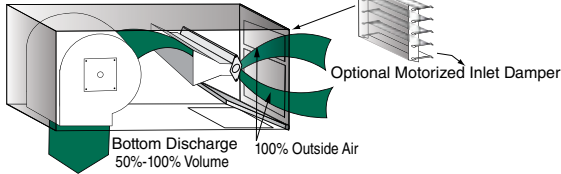
MAKE-UP AIR (MUA)



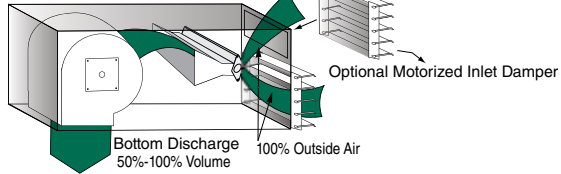
Design: 100% outdoor air with a fixed discharge air volume.
Function: Supplies direct replacement air for building mechanical exhaust.
Application: Used as make-up air for industrial processes which incorporate mechanical exhaust.

VARIABLE AIR VOLUME (VAV)

ADF75-ADF150



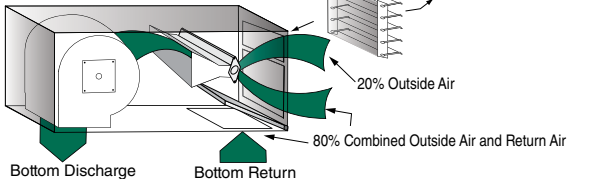
ADF270-ADF700B



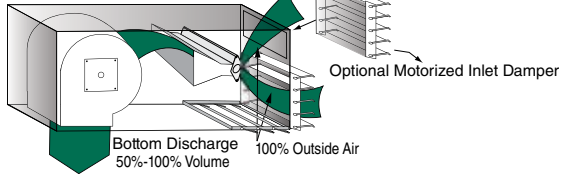
Design: 100% outdoor air with variable discharge air volume from 50% to 100% of total capacity.
Function: Automatically responds to building pressure and temperature needs.
Application: Used in industrial and commercial buildings that have air quality and specific air management requirements.

AIR MANAGEMENT (AM)

ADF75-ADF150

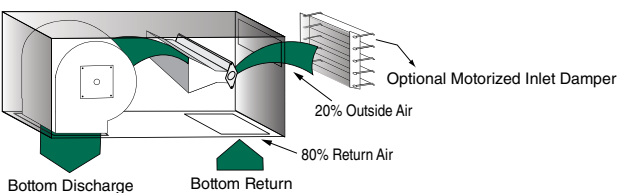


ADF270-ADF700B



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.

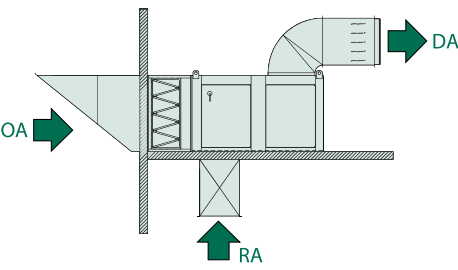
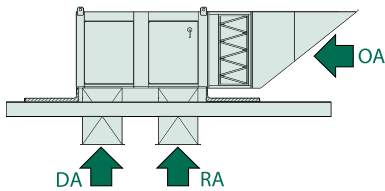
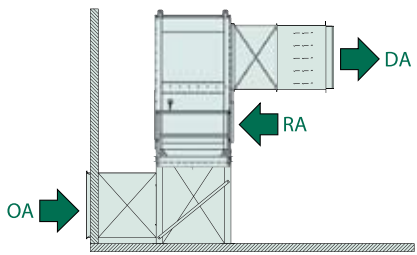
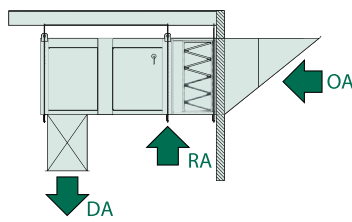
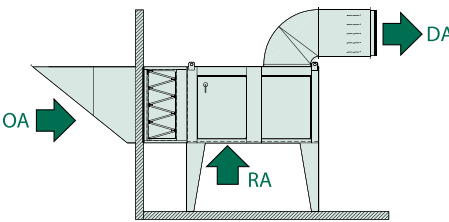
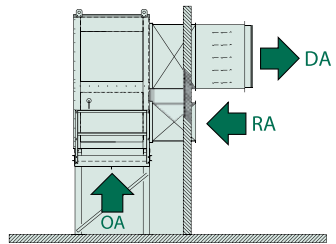
Other ADF-Series Options:

- 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.



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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.

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