Direct-Fired Make-Up Air Heater

XT-Series

Space Heating, Make-Up Air, Ventilation and Process Heating

1.800.589.3691
www.weather-rite.com
Weather-Rite™ XT-Series - Direct Fired Make-Up Air Heater

XT-Series air handlers improve indoor air quality and provide air comfort.
Our equipment 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.

Capacities

<table>
<thead>
<tr>
<th>Model</th>
<th>XT-112</th>
<th>XT-115</th>
<th>XT-118</th>
<th>XT-125</th>
<th>XT-130</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFM</td>
<td>1,000 - 5,000</td>
<td>5,000 - 10,000</td>
<td>11,000 - 18,000</td>
<td>16,000 - 30,000</td>
<td>27,500 - 40,000</td>
</tr>
<tr>
<td>Output [MBH]*</td>
<td>NG</td>
<td>119 - 594</td>
<td>594 - 1,188</td>
<td>1,307 - 2,138</td>
<td>1,901 - 3,564</td>
</tr>
<tr>
<td></td>
<td>LPG</td>
<td>97 - 486</td>
<td>486 - 972</td>
<td>1,069 - 1,750</td>
<td>1,555 - 2,916</td>
</tr>
</tbody>
</table>

*1 MBH = 1,000 Btu/h. Output range indicated at maximum temperature.
All Models XT-115 to XT-130 NG/LPG=110/90 Degree F.

Model Styles

Make-Up Air (MUA)
Design: 100% outdoor air with a fixed discharge air volume.
Function: Supplies direct replacement air for building mechanical exhaust.
Application: Make up air for all locations and processes that have mechanical exhaust.

Fixed Recirculation (FR)
Design: Fixed 80% return air and 20% outdoor air.
Function: Provides efficient, low-cost heating where minimum ventilation rates are required.
Application: Used in buildings that need make-up air and maximum energy conservation.

Variable Air Volume (VAV)
Design: 100% outdoor air with a 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 require varying amount of make-up air.

Air Management (AM)
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 locations where both the building pressure and temperature requirements vary.
## Typical Installations

<table>
<thead>
<tr>
<th>Roof-Mounted</th>
<th>Upright Indoor</th>
<th>Mezzanine-Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Diagram" /></td>
<td><img src="image2.png" alt="Diagram" /></td>
<td><img src="image3.png" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>Horizontal on Legs (Indoor or Outdoor)</strong></td>
<td><strong>Upright Outdoor</strong></td>
<td><strong>Suspended (Wall or Roof Inlet)</strong></td>
</tr>
<tr>
<td><img src="image4.png" alt="Diagram" /></td>
<td><img src="image5.png" alt="Diagram" /></td>
<td><img src="image6.png" alt="Diagram" /></td>
</tr>
</tbody>
</table>

**LEGEND**
- **OA** = Outside Air
- **DA** = Discharge Air
- **RA** = Return Air

**NOTE:** All models are available in upright or horizontal, as well as indoor or outdoor configurations.

## Weather-Rite™

### XT-Series Features

**Reliable, Efficient System Operation Provided by:**
- 30:1 fully modulating burner that maintains 100% combustion efficiency.
- Double-width, double-inlet, forward curved centrifugal fan built for long life.
- Energy-saving ignition system.
- Electronic fuel modulation providing immediate response.
- Flame rod sensor for excellent reliability and durability.
- Operation of fan only in warm weather to enjoy free ventilation cooling.
- Compliance to ETL per ANSI Z83.25, Z83.18 or Z83.4 standards.

**Long Lasting Construction Provided by:**
- Heavy-duty, corrosion-resistant, galvanized steel construction.
- Sturdy, cabinet that is screwed and bolted together for durability and longer service life.
- Unpainted galvanized steel or white painted cabinet finishes available.
- Heavy-duty, factory-installed motor and drive package designed for long-lasting performance.
- Heavy-duty, pre-lubricated ABMA L-10 30,000 hour minimum rated bearings for long life and reliable operation.

### XT-Series Controls Options:
- DDC controls and conventional discharge temperature or room temperature controls available.
- Interlock to existing building management system or other remote devices.
- Mild weather stat.
  - (included with DDC - optional for conventional controls)
- Low-temperature stat with bypass timer.
  - (included with DDC - optional for conventional controls)

### Ease of Maintenance Provided by:
- Hinged access door for easy maintenance of blower, motor, drives and burner.
- Strategically located, removable panels, provide easy access to internally mounted actuators and sensors.

### Other XT-Series Options:
- 19" (48 cm) roof curb simplifies rooftop mounting.
- Inlet hood protects against water entrainment and is available with poly filters, bird screen or moisture limiter media.
- Outdoor air filter section or combination outdoor air / return air filter section (filters both air streams through a common filter bank) with disposable or permanent filters for longer life of internal components.
- Motorized inlet or discharge dampers for exfiltration control.
- FM and XL-GAP (formerly IRI) compliant gas trains.
- Support legs for both horizontal and vertical mounted air handlers.
- Extended grease lines for ease of lubrication/maintenance of fan bearings. (Not available for model XT-112)
- 120VAC powered convenience outlet with control panel light.
**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.

**DELUXE TEMPERATURE CONTROL REMOTE (DTC)**
This control is used for make-up air and total automatic “day/night” heating of the building. A solid-state modulating room Selectrastat fully 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, fully modulating Btu/h 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, fully modulating Btu/h output to maintain space temperature as selected on the Selectrastat.

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

**DDC INTELLIGENT CONTROLS**
Intelligent Controls are key to keeping HVAC and productivity costs in line. Each air handler can be controlled by a DDC module to monitor, control, diagnose, log and report on a variety of functions. Time-saving benefits of Intelligent Controls include:

**Greater control:**
Temperature, humidity and building pressure can be precisely monitored. Automatic tracking and recording of heating energy use and test operating parameters also available.

**Early detection of problems:**
System can proactively detect and notify of potential problems.

**Data collection and trending:**
Hourly logs of each air handler available. Information can be downloaded into a spreadsheet program for in-depth analysis.

**Compatibility:**
Via modem, Internet or local network; controls communicate via the leading protocols including BACnet®, N2Bus and LonWorks systems.

**Easy to use and Service:**
Helps simplify set up and allows for quick and efficient programming changes.

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