

## ARCHITECTURAL ICON

**Hot Water Heated Air Curtain Data Sheet** 

Recommended for Mounting Heights to 8' (environmental separation) and 7' (insect control)

Vestibule Exception for Energy Codes ASHRAE 90.1-2019, IECC 2018, and ASHRAE 189.1, validated by AMCA certification.

| VELOCITY PROJECTION: Model Al08-F-1036W |     |     |     |  |  |  |  |  |  |  |
|---|-----|-----|-----|--|--|--|--|--|--|--|
| Distance from Nozzle (in)               | 40  | 80  | 120 |  |  |  |  |  |  |  |
| Core Velocity (fpm)                     | 859 | 588 | 547 |  |  |  |  |  |  |  |
| Uniformity (%)                          | 89% | 87% | 91% |  |  |  |  |  |  |  |

ASHRAE 90.1-2019 vestibule exception requires, "a jet velocity of not less than 6.6 feet per second (400 fpm; 2.0 m/s) at 6.0 in (15 cm) above the floor."



Berner International certifies that the air curtains shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program. Rated data shown is for base (hot water heated) units. The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only.

2 Year Limited Warranty









| MODEL        | Nozzle<br>Width<br>(in) | Max Vel.<br>at Nozzle<br>(fpm) | Avg.<br>Outlet Vel.<br>(fpm) | Air<br>Volume<br>(cfm) | Outlet<br>Vel.<br>Uniformity | Power<br>Rating<br>(kW) | Motor(s)<br>@ hp | Coil<br>Output<br>(MBH) | Entering<br>/ Leaving<br>Water Temp.<br>(°F) | Water<br>Flow<br>(GPM) | Fluid<br>Pressure<br>Drop<br>(FT. WG.) | Air Temp.<br>Rise<br>(°F) | Net Wt.<br>(lbs) |
|--------------|-------------------------|--------------------------------|------------------------------|------------------------|------------------------------|-------------------------|------------------|-------------------------|--|------------------------|--|---------------------------|------------------|
| AI08-F-1036W | 36.00                   | 2,054                          | 1,545                        | 869                    | 84%                          | 0.19                    | 1 @ 1/5          | 27.1                    | 180° / 166°                                  | 4.0                    | 1.3                                    | 29°                       | 68               |
| Al08-F-1042W | 42.00                   | 1,985                          | 1,547                        | 1,015                  | 82%                          | 0.20                    | 1 @ 1/5          | 32.9                    | 180° / 166°                                  | 5.0                    | 2.1                                    | 30°                       | 76               |
| AI08-F-1048W | 48.00                   | 2,013                          | 1,585                        | 1,189                  | 80%                          | 0.23                    | 1 @ 1/5          | 37.9                    | 180° / 164°                                  | 5.0                    | 2.1                                    | 29°                       | 83               |
| Al08-F-1060W | 59.00                   | 2,040                          | 1,552                        | 1,431                  | 80%                          | 0.26                    | 1 @ 1/5          | 46.0                    | 180° / 161°                                  | 5.0                    | 2.2                                    | 29°                       | 99               |
| AI08-F-1072W | 72.00                   | 1,928                          | 1,394                        | 1,568                  | 83%                          | 0.28                    | 1 @ 1/5          | 55.8                    | 180° / 164°                                  | 7.0                    | 4.4                                    | 32°                       | 117              |
| AI08-F-2078W | 78.00                   | 2,054                          | 1,546                        | 1,884                  | 82%                          | 0.39                    | 2 @ 1/5          | 62.8                    | 180° / 162°                                  | 7.0                    | 4.5                                    | 30°                       | 136              |
| AI08-F-2084W | 84.00                   | 1,985                          | 1,547                        | 2,030                  | 82%                          | 0.41                    | 2 @ 1/5          | 67.3                    | 180° / 160°                                  | 7.0                    | 4.6                                    | 30°                       | 149              |
| Al08-F-2096W | 96.00                   | 2,013                          | 1,585                        | 2,378                  | 80%                          | 0.46                    | 2 @ 1/5          | 80.4                    | 180° / 162°                                  | 9.0                    | 7.8                                    | 31°                       | 164              |
| Al08-F-2108W | 108.00                  | 2,040                          | 1,553                        | 2,620                  | 80%                          | 0.49                    | 2 @ 1/5          | 88.6                    | 180° / 160°                                  | 9.0                    | 8.0                                    | 31°                       | 180              |
| AI08-F-2120W | 118.00                  | 2,040                          | 1,552                        | 2,862                  | 80%                          | 0.53                    | 2 @ 1/5          | 97.8                    | 180° / 160°                                  | 10.0                   | 10.1                                   | 31°                       | 195              |

See sheets EP-286E-AC & EP-286E-EC for amp draws/total load requirements. 600/3/60 power supply includes transformer housing, See drawing Al08-F-WTR-600 NOTES:

- 1. Standard connection same end supply/return.
- 2. Coil should be field supplied with a solenoid/control valve that energizes only when air curtain is energized. Consideration must be taken for freeze protection when necessary.
- 3. Coil performance based on 65°F entering air temperature.
- 4. Maximum leaving air temperature shall not exceed 120F.
- 5. Consult factory for alternate entering air & water temperatures or GPM's.
- 6. Operation of standard motor (AC) at 50Hz will generate a 17% reduction in performance; no reduction for optional EC motors.

## MODEL NUMBER CONFIGURATION AI08-F-1 036 W A-AC-CB-D-R-Series Version # of Motors **Opening Width** Berner AIR Opt. Data Link Opt. Display Opt. Cabinet Finish AC & EC motors AC (Std.) CB=BASIC W=Hot Water 036" - 120" AI08 1, 2 A = 120/1/60\*D=Physical R=Remote (Std.) EC (Opt.) Heated SS=Stainless Steel B = 208/1/60CM=BMS Interconnect Display CC=Custom Color J = 240/1/60TB=Tablet (daisy chain) V = 220/1/50for Standard offering, leave options (Opt.) blank A-XI = 600/3/60 †STANDARD CONSTRUCTION EC motors only 8 1/4" high x 16" deep W = 277/1/601/5 hp motor(s) - ten speeds \*Suitable for 50 Hz Intelliswitch™ digital controller, † Add 5" for transformer housing includes Berner AIR® BASIC (smart control)

## **OPTIONS**

- 1/5 hp EC motor(s) ten speeds
- Custom Color or Stainless

Wall or Top Mounting

Factory installed coil Filter (washable)

Rear cover for top mounting to conceal fasteners

Clear satin anodized aluminum exterior

Berner AIR® BMS (smart control with BACnet and Modbus capabilities)

High efficiency, low noise, articulating, three vane, Pro-V Nozzle

Sound level measured 10' (3m) from the unit in free field:

1 motor: Min./Max. Speed: 50/55 dBA 2 motors: Min./Max. Speed: 53/58 dBA

Sound data is not AMCA certified.

Berner reserves the right to alter specifications without prior notice.