

ARCHITECTURAL CONTOUR 10

Hot Water Heated Air Curtain Data Sheet

Recommended for Mounting Heights to 10' (environmental separation) and 8' (insect control)

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

| VELOCITY PROJECTION: Model AC10-F-1036W | | | | | | | | |
|---|------|-----|-----|-----|--|--|--|--|
| Distance from Nozzle (in) | 40 | 80 | 120 | 160 | | | | |
| Core Velocity (fpm) | 1259 | 876 | 856 | 742 | | | | |
| Uniformity (%) | 83% | 88% | 92% | 96% | | | | |

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 Width (in) | Max Vel. at Nozzle (fpm) | Avg. Outlet Vel. (fpm) | Air Volume (cfm) | Outlet Vel. Uniformity | Power Rating (kW) | Motor(s) @ hp | Coil Output (MBH) | Entering / Leaving Water Temp. (°F) | Water Flow (GPM) | Fluid Pressure Drop (FT. WG.) | Air Temp. Rise (°F) | Net Wt. (lbs) |
|--------------|-------------------------|--------------------------------|------------------------------|------------------------|------------------------------|-------------------------|------------------|-------------------------|--|------------------------|--|---------------------------|------------------|
| AC10-F-1036W | 36.00 | 3,522 | 1,916 | 1,317 | 80% | 0.49 | 1 @ ½ | 33.2 | 180°/163° | 4.0 | 0.5 | 23° | 107 |
| AC10-F-1042W | 42.00 | 3,429 | 1,709 | 1,371 | 82% | 0.50 | 1 @ ½ | 36.8 | 180°/161° | 4.0 | 0.5 | 25° | 119 |
| AC10-F-1048W | 48.00 | 4,040 | 1,833 | 1,680 | 90% | 0.63 | 1 @ ½ | 45.3 | 180°/161° | 5.0 | 0.8 | 25° | 138 |
| AC10-F-1060W | 59.00 | 4,146 | 1,541 | 1,736 | 85% | 0.63 | 1 @ ½ | 55.1 | 180°/164° | 7.0 | 1.6 | 29° | 153 |
| AC10-F-2072W | 72.00 | 3,522 | 1,916 | 2,634 | 80% | 0.98 | 2 @ ½ | 74.3 | 180°/161° | 8.0 | 2.1 | 26° | 210 |
| AC10-F-2078W | 78.00 | 3,522 | 1,805 | 2,688 | 80% | 0.99 | 2 @ ½ | 77.9 | 180°/160° | 8.0 | 2.2 | 26° | 213 |
| AC10-F-2084W | 84.00 | 3,429 | 1,709 | 2,742 | 82% | 1.00 | 2 @ ½ | 81.4 | 180°/159° | 8.0 | 2.2 | 27° | 234 |
| AC10-F-2096W | 96.00 | 4,040 | 1,833 | 3,360 | 90% | 1.26 | 2 @ ½ | 98.9 | 180°/160° | 10.0 | 3.6 | 27° | 272 |
| AC10-F-2108W | 108.00 | 4,146 | 1,656 | 3,416 | 85% | 1.26 | 2 @ ½ | 106.9 | 180°/160° | 11.0 | 4.5 | 29° | 287 |
| AC10-F-2120W | 118.00 | 4,146 | 1,541 | 3,472 | 85% | 1.26 | 2 @ ½ | 113.7 | 180°/161° | 12.0 | 5.5 | 30° | 300 |
| AC10-F-3132W | 132.00 | 4,040 | 1,855 | 4,677 | 80% | 1.75 | 3 @ ½ | 140.65 | 180°/159° | 14.0 | 7.7 | 27° | 375 |
| AC10-F-3144W | 144.00 | 4,040 | 1,833 | 5,040 | 90% | 1.89 | 3 @ ½ | 153.0 | 180°/159° | 15.0 | 9.1 | 28° | 406 |

See sheets EP-276E-AC & EP-276E-EC for amp draws/total load requirements. 600/3/60 power supply includes extended cabinet, See drawing AC10-F-WTR-600 NOTES:

- 1. Standard connection top, same end supply/return.
- 2. Coil should be field supplied with a solenoid 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 AC10-F-1 036 W A-AC-CB-D-R-SS

| | | | | <u> </u> | | | | | | | | |
|--|---------|-------------|----------------------|-----------------------|---|------------------------|------------------------------|------------------------------|--------|----------|-------------|------------|
| Series | Version | # of Motors | Opening Width | Heat | Voltage | Motor Type | Berner AIR | | | | | |
| AC10 | F | 1, 2, 3 | 036" - 144" | W=Hot Water Heated | AC & EC motors A = 120/1/60* B = 208/1/60 | AC (Std.) EC (Opt.) | CB=BASIC (Std.) CM=BMS | Opt. Dat D=Phy Interco | /sical | | te SS=Stair | less Steel |
| STANDARD CONSTRUCTION 12 ¾" high x 25 ¾" deep 1/2 hp motor(s) - ten speeds | | | | | J = 240/1/60 V = 220/1/50 A-XI = 600/3/60 † EC motors only | | | (daisy | chain) | TB=Table | IIIUU—Uus | |

† Cabinet width increases for transformer

W = 277/1/60 †

*Suitable for 50 Hz

- Intelliswitch™ digital controller, includes
- Berner AIR® BASIC (smart control)
- Clear satin anodized aluminum exterior
- Wall or Top Mounting
- High efficiency, low noise, articulating, three vane, Pro-V Nozzle
- Factory installed coil
- Filter (washable)

OPTIONS

- 1/2 hp EC motor(s) ten speeds
- **Custom Color or Stainless**
- Rear cover for top mounting to conceal fasteners
- Berner AIR® BMS (smart control with BACnet and Modbus capabilities)

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

53/56 dBA 1 motor: Min./Max. Speed: 2 motors: Min./Max. Speed: 56/59 dBA 59/61 dBA 3 motors: Min./Max. Speed:

Sound data is not AMCA certified.

Berner reserves the right to alter specifications without prior notice.

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