



# ARCHITECTURAL HIGH PERFORMANCE 10

## Hot Water Heated Air Curtain

### Data Sheet

For Door Heights To 10' (environmental separation)

#### STANDARD CONSTRUCTION

- 12 1/4" high x 21 1/4" deep
- 1/2 hp three speed motor(s)
- Factory installed fan speed/heat switch
- Clear satin anodized aluminum exterior (Optional: Custom Color or Stainless)
- Wall & Top Mounting
- High efficiency, low noise Pro-V Nozzle
- Optional: Filter (washable)

- Coil Features:
  - Galvanized steel casing
  - 5/8" copper tube with .035" wall
  - Aluminum fins
  - Leak tested at 450 psi

**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) |
|-------------|-------------------|--------------------------|------------------------|------------------|------------------------|-------------------|---------------|-------------------|-------------------------------------|------------------|-------------------------------|---------------------|---------------|
| AHC10-1036W | 36.75             | 3,977                    | 2,110                  | 1,346            | 91%                    | 0.52              | 1 @ 1/2       | 37.3              | 180° / 165°                         | 5.0              | 0.6                           | 25°                 | 98            |
| AHC10-1042W | 42.75             | 4,095                    | 1,873                  | 1,390            | 86%                    | 0.52              | 1 @ 1/2       | 39.1              | 180° / 160°                         | 4.0              | 0.4                           | 26°                 | 104           |
| AHC10-1048W | 48.75             | 3,838                    | 1,674                  | 1,417            | 71%                    | 0.52              | 1 @ 1/2       | 42.1              | 180° / 158°                         | 4.0              | 0.5                           | 27°                 | 109           |
| AHC10-2048W | 48.75             | 4,166                    | 2,240                  | 1,896            | 92%                    | 0.71              | 2 @ 1/2       | 52.1              | 180° / 162°                         | 6.0              | 1.0                           | 25°                 | 134           |
| AHC10-2060W | 60.75             | 3,950                    | 2,408                  | 2,540            | 92%                    | 1.01              | 2 @ 1/2       | 69.9              | 180° / 162°                         | 8.0              | 1.8                           | 25°                 | 171           |
| AHC10-2072W | 74.50             | 3,977                    | 2,081                  | 2,692            | 91%                    | 1.04              | 2 @ 1/2       | 77.8              | 180° / 159°                         | 7.5              | 1.7                           | 26°                 | 181           |
| AHC10-2084W | 86.50             | 4,095                    | 1,851                  | 2,780            | 86%                    | 1.04              | 2 @ 1/2       | 85.7              | 180° / 158°                         | 8.0              | 2.0                           | 28°                 | 197           |
| AHC10-2096W | 98.50             | 3,838                    | 1,657                  | 2,834            | 71%                    | 1.04              | 2 @ 1/2       | 91.5              | 180° / 157°                         | 8.0              | 2.1                           | 29°                 | 208           |
| AHC10-3096W | 98.50             | 4,166                    | 2,217                  | 3,792            | 92%                    | 1.42              | 3 @ 1/2       | 108.8             | 180° / 158°                         | 10.0             | 3.2                           | 26°                 | 228           |
| AHC10-3108W | 112.25            | 3,977                    | 2,072                  | 4,038            | 91%                    | 1.56              | 3 @ 1/2       | 121.1             | 180° / 157°                         | 11.0             | 4.1                           | 27°                 | 240           |
| AHC10-3120W | 118.25            | 3,977                    | 2,010                  | 4,126            | 91%                    | 1.56              | 3 @ 1/2       | 127.2             | 180° / 158°                         | 12.0             | 4.9                           | 28°                 | 248           |

#### NOTES:

1. Operation at 50 Hz will generate approximately a 17% reduction in performance.
2. Performance data based on AMCA licensed data from unheated units.
3. Coil performance based on 65°F entering air temperature.
4. Standard connection same end supply/return.
5. 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.
6. Maximum leaving air temperature shall not exceed 120°F.
7. Consult factory for alternate entering air & water temperatures, GPM's, or vertically mounted units.

See sheet EP-216 for amp draws/total load requirements.

### MODEL NUMBER CONFIGURATION

## AHC10-1 036 W A-R-SS

| Series | # of Motors | Opening Width | Heat               | Voltage   | Opt. Switch   | Opt. Cabinet Finish                   |
|--------|-------------|---------------|--------------------|---|---------------|---------------------------------------|
| AHC10  | 1, 2, 3     | 036" - 120"   | W=Hot Water Heated | *A=120/1/60<br>B=208/1/60<br>J=240/1/60<br>V=220/1/50 | Remote Switch | SS=Stainless Steel<br>CC=Custom Color |

\*Suitable for 50hz

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

|           |                        |              |
|-----------|------------------------|--------------|
| 1 motor:  | Low/Medium/High Speed: | 54/55/56 dBA |
| 2 motors: | Low/Medium/High Speed: | 57/58/59 dBA |
| 3 motors: | Low/Medium/High Speed: | 60/61/62 dBA |

Berner reserves the right to alter specifications without prior notice.



# ARCHITECTURAL HIGH PERFORMANCE 10

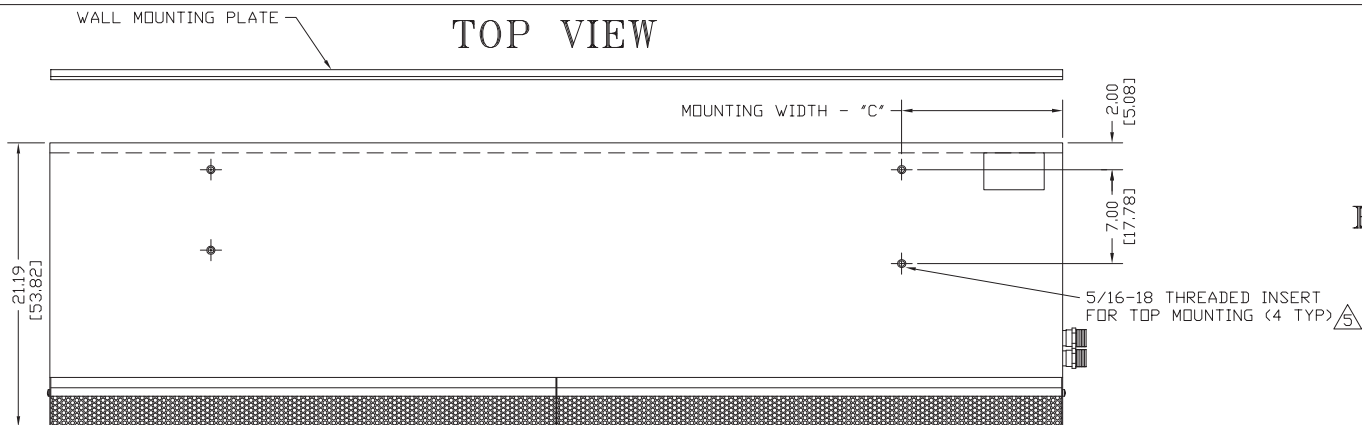
## Hot Water Heated Air Curtain Electrical Performance Sheet

| MODEL   | # CKTS | 120/1/60 (voltage code A)<br>MOTOR AMP DRAW = 7.2 each |                            | # CKTS | 208/1/60 (voltage code B) or<br>220/1/50 (voltage code V)<br>MOTOR AMP DRAW = 4.0 each |                            | # CKTS | 240/1/60 (voltage code J)<br>MOTOR AMP DRAW = 4.0 each |                            |
|---|--------|--|----------------------------|--------|--|----------------------------|--------|--|----------------------------|
|   |        | AMPS PER CIRCUIT                                       | BREAKER RATING PER CIRCUIT |        | AMPS PER CIRCUIT   | BREAKER RATING PER CIRCUIT |        | AMPS PER CIRCUIT                                       | BREAKER RATING PER CIRCUIT |
| AHC10-1036W<br>AHC10-1042W<br>AHC10-1048W                               | 1      | 7.2  | 15                         | 1      | 4.0  | 15                         | 1      | 4.0  | 15                         |
| AHC10-2048W<br>AHC10-2060W<br>AHC10-2072W<br>AHC10-2084W<br>AHC10-2096W | 1      | 14.4   | 20                         | 1      | 8.0  | 15                         | 1      | 8.0  | 15                         |
| AHC10-3096W<br>AHC10-3108W<br>AHC10-3120W                               | 1      | 21.6   | 30                         | 1      | 12.0   | 15                         | 1      | 12.0   | 15                         |

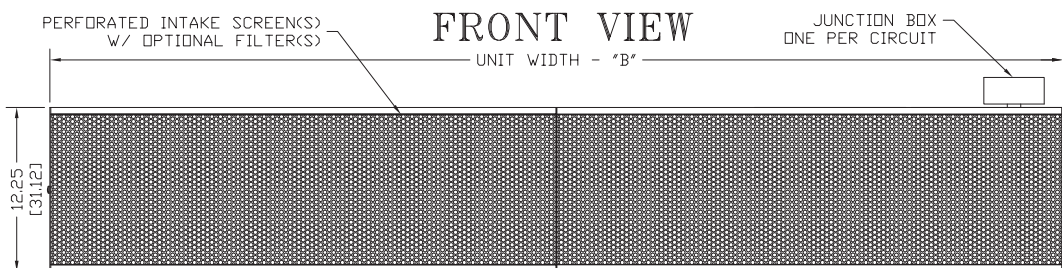
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# AHC10 HOT WATER HEATED

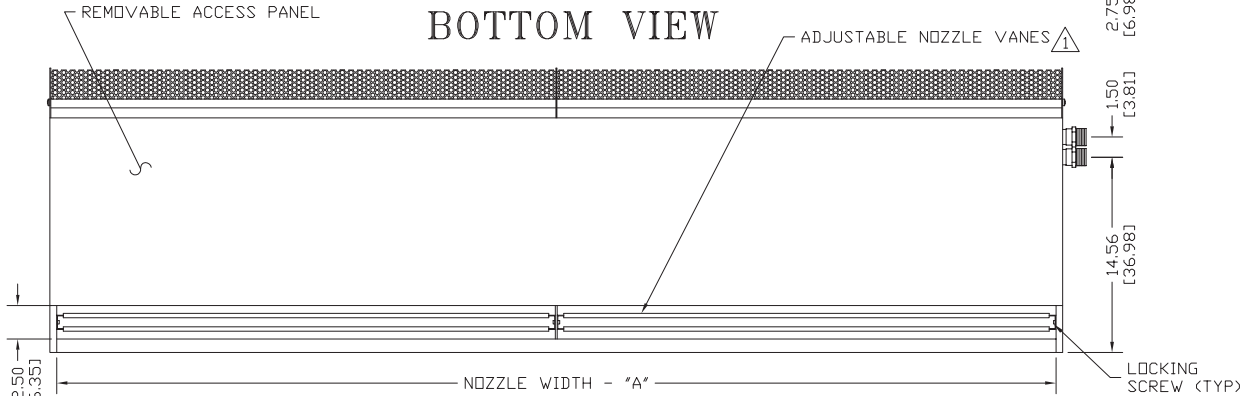
## TOP VIEW



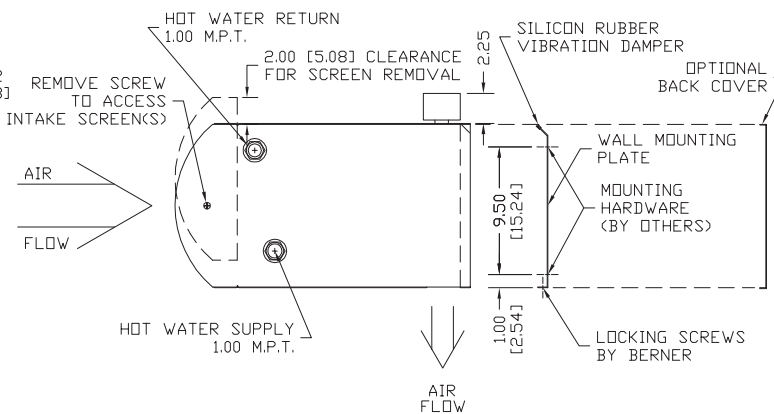
## FRONT VIEW



## BOTTOM VIEW



## END VIEW



## NOTES:

- <sup>1</sup> AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF  $\phi$ .
- <sup>2</sup> ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
- <sup>3</sup> FIELD VERIFY DIMENSIONS.
- <sup>4</sup> ANCHORS TO SUPPORTING STRUCTURE BY OTHERS.
- <sup>5</sup> ADEQUACY OF SUPPORTING STRUCTURE IS TO BE VERIFIED BY A PROFESSIONAL STRUCTURAL ENGINEER.
- <sup>6</sup> LETTER "W" IN MODEL NUMBER DESIGNATES HOT WATER HEATED UNIT.
- <sup>7</sup> DIMENSIONS IN INCHES [CENTIMETERS].

| MODEL <sup>6</sup> | NOZZLE WIDTH "A" | UNIT WIDTH "B"  | MOUNTING WIDTH "C" |
|--------------------|------------------|-----------------|--------------------|
| AHC10-1036W        | 36.75 [93.35]    | 37.75 [95.89]   | 8.00 [20.32]       |
| AHC10-1042W        | 42.75 [108.59]   | 43.75 [111.13]  | 8.00 [20.32]       |
| AHC10-1048W        | 48.75 [123.83]   | 49.75 [126.37]  | 10.00 [25.40]      |
| AHC10-2048W        | 48.75 [123.83]   | 49.75 [126.37]  | 8.00 [20.32]       |
| AHC10-2060W        | 60.75 [153.31]   | 61.75 [156.85]  | 8.00 [20.32]       |
| AHC10-2072W        | 74.50 [189.23]   | 75.50 [191.77]  | 12.00 [30.48]      |
| AHC10-2084W        | 86.50 [219.71]   | 87.50 [222.25]  | 12.00 [30.48]      |
| AHC10-2096W        | 98.50 [250.19]   | 99.50 [252.73]  | 27.00 [68.58]      |
| AHC10-3096W        | 98.50 [250.19]   | 99.50 [252.73]  | 27.00 [68.58]      |
| AHC10-3108W        | 112.25 [285.12]  | 113.25 [287.66] | 27.00 [68.58]      |
| AHC10-3120W        | 118.25 [300.36]  | 119.25 [302.90] | 27.00 [68.58]      |

|           |           |   |
|-----------|-----------|---|
| PROJECT   |           | TITLE: <b>BERNER</b>                          |
| LOCATION  |           | MODEL AHC10 AIR CURTAIN                       |
| ARCHITECT |           | HOT WATER HEATED SYSTEM                       |
| ENGINEER  |           |   |
| DWG. NO.  | AHC10-WTR |   |
| DATE      | 21MAY14   |   |
| BY        | S. Beil   |   |
| REPLACES  | -         |   |
| BY        | -         | BERNER INTERNATIONAL CORP.<br>NEW CASTLE, PA. |