



ARCHITECTURAL ICON 8

Steam Heated Air Curtain

Data Sheet

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

STANDARD CONSTRUCTION

- 8 1/4" high x 16" deep
- 1/5 hp motor(s) - ten speeds
- Factory installed Intelliswitch™ digital controller
- 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

- 1/5 hp EC motor(s) - ten speeds
- Custom Color or Stainless
- Rear cover for top mounting to conceal fasteners
- Berner AIR™ (smart controller & app, includes BACnet)

Energy Codes ASHRAE 90.1-2019, IECC 2018, and ASHRAE 189.1 vestibule exception validated by AMCA certification.

Refer to Velocity Projection Chart below for information.



Berner International certifies that the air curtains shown here-in 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 (steam 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



indoor use



| 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) | Inlet Pressure (PSIG) | Condensate (lbs/hr) | Air Temp. Rise (°F) | Net Wt. (lbs) |
|--------------|-------------------|--------------------------|------------------------|------------------|------------------------|-------------------|---------------|-------------------|-----------------------|---------------------|---------------------|---------------|
| AI08-E-1036S | 36.00 | 2,054 | 1,545 | 869 | 84% | 0.19 | 1 @ 1/5 | 44.5 | 5 | 45.8 | 47° | 68 |
| AI08-E-1042S | 42.00 | 1,985 | 1,547 | 1,015 | 82% | 0.20 | 1 @ 1/5 | 52.4 | 5 | 54.0 | 48° | 76 |
| AI08-E-1048S | 48.00 | 2,013 | 1,585 | 1,189 | 80% | 0.23 | 1 @ 1/5 | 61.1 | 5 | 62.9 | 47° | 83 |
| AI08-E-1060S | 59.00 | 2,040 | 1,552 | 1,431 | 80% | 0.26 | 1 @ 1/5 | 75.6 | 5 | 77.9 | 49° | 99 |
| AI08-E-1072S | 72.00 | 1,928 | 1,394 | 1,568 | 83% | 0.28 | 1 @ 1/5 | 87.1 | 5 | 89.8 | 51° | 117 |
| AI08-E-2084S | 84.00 | 1,985 | 1,547 | 2,030 | 82% | 0.41 | 2 @ 1/5 | 107.7 | 5 | 111.0 | 49° | 149 |
| AI08-E-2096S | 96.00 | 2,013 | 1,585 | 2,378 | 80% | 0.46 | 2 @ 1/5 | 125.1 | 5 | 128.9 | 49° | 164 |
| AI08-E-2108S | 108.00 | 2,040 | 1,553 | 2,620 | 80% | 0.49 | 2 @ 1/5 | 139.6 | 5 | 143.8 | 49° | 180 |
| AI08-E-2120S | 118.00 | 2,040 | 1,552 | 2,862 | 80% | 0.53 | 2 @ 1/5 | 152.1 | 5 | 156.7 | 49° | 196 |

See sheets EP-284E-AC & EP-284E-EC for amp draws/total load requirements.

600/3/60 power supply includes transformer housing, See drawing AI08-E-STM-600

NOTES:

- Standard connection same end supply/return.
- 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.
- Coil performance based on 65°F entering air temperature.
- Maximum leaving air temperature shall not exceed 120°F.
- Consult factory for alternate steam pressures.
- Operation of standard motor (AC) at 50Hz will generate a 17% reduction in performance; no reduction for optional EC motors.

MODEL NUMBER CONFIGURATION

AI08-E-1 036 S A-AC-WCA -SS

| Series | Version | # of Motors | Opening Width | Heat | Voltage | Motor Type | Opt. Control | Opt. Cabinet Finish |
|--------|---------|-------------|---------------|----------------|--|--|--------------------------------|---------------------------------------|
| AI08 | E | 1, 2 | 036" - 120" | S=Steam Heated | AC & EC motors A = 120/1/60* B = 208/1/60 J = 240/1/60 V = 220/1/50 A-XI = 600/3/60 † EC motors only W = 277/1/60 | AC= Standard Motor EC= Optional Motor | WCA= Berner AIR™ smart control | SS=Stainless Steel CC=Custom Color |

for Standard offering, leave options (Opt.) blank

*Suitable for 50 Hz
† Add 5" for transformer housing

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.

| VELOCITY PROJECTION: Model AI08-E-1036S | | | |
|---|-----|-----|-----|
| 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 reserves the right to alter specifications without prior notice.

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111 Progress Ave. / New Castle / PA / 16101 / USA

DS-284E
October, 2023



ARCHITECTURAL ICON 8 - AC MOTORS

Steam Heated Air Curtain Electrical Performance Sheet

| 120/1/60 (voltage code A) MOTOR AMP DRAW = 3.4 each | | | | 208/1/60 (voltage code B) MOTOR AMP DRAW = 1.7 each | | | 240/1/60 (voltage code J) or 220/1/50 (voltage code V) MOTOR AMP DRAW = 1.7 each | | |
|--|-----------|------------------|-------------------------------|--|------------------|-------------------------------|--|------------------|-------------------------------|
| MODEL | # CKTS | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT | # CKTS | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT | # CKTS | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT |
| AI08-E-1036S AI08-E-1042S AI08-E-1048S AI08-E-1060S AI08-E-1072S | 1 | 3.4 | 15 | 1 | 1.7 | 15 | 1 | 1.7 | 15 |
| AI08-E-2084S AI08-E-2096S AI08-E-2108S AI08-E-2120S | 1 | 6.8 | 15 | 1 | 3.4 | 15 | 1 | 3.4 | 15 |

| 600/3/60 (voltage code A-XI) XFMR 600/120 0.5kVA per MTR @0.8 each MOTOR AMP DRAW = 3.4 each @ 120V | | | | * Consult Factory 277/1/60 (voltage code W) MOTOR AMP DRAW = ?? each | | |
|---|-----------|------------------|-------------------------------|--|------------------|-------------------------------|
| MODEL | # CKTS | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT | # CKTS | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT |
| AI08-E-1036S AI08-E-1042S AI08-E-1048S AI08-E-1060S AI08-E-1072S | 1 | 0.8 | 15 | * | * | * |
| AI08-E-2084S AI08-E-2096S AI08-E-2108S AI08-E-2120S | 1 | 1.6 | 15 | * | * | * |

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June, 2023

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ARCHITECTURAL ICON 8 - EC MOTORS

Steam Heated Air Curtain Electrical Performance Sheet

| 120/1/60 (voltage code A) MOTOR AMP DRAW = 4.4 each | | | | 208/1/60 (voltage code B) MOTOR AMP DRAW = 2.5 each | | | 240/1/60 (voltage code J) or 220/1/50 (voltage code V) MOTOR AMP DRAW = 2.5 each | | |
|--|-----------|------------------|-------------------------------|--|------------------|-------------------------------|--|------------------|-------------------------------|
| MODEL | # CKTS | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT | # CKTS | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT | # CKTS | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT |
| AI08-E-1036S AI08-E-1042S AI08-E-1048S AI08-E-1060S AI08-E-1072S | 1 | 4.4 | 15 | 1 | 2.5 | 15 | 1 | 2.5 | 15 |
| AI08-E-2084S AI08-E-2096S AI08-E-2108S AI08-E-2120S | 1 | 8.8 | 15 | 1 | 5.0 | 15 | 1 | 5.0 | 15 |

| 600/3/60 (voltage code A-XI) XFMR 600/120 0.5kVA per MTR @0.8 each MOTOR AMP DRAW = 4.4 each @ 120V | | | | 277/1/60 (voltage code W) MOTOR AMP DRAW = 2.2 each | | |
|---|-----------|------------------|-------------------------------|--|------------------|-------------------------------|
| MODEL | # CKTS | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT | # CKTS | AMPS PER CIRCUIT | BREAKER RATING PER CIRCUIT |
| AI08-E-1036S AI08-E-1042S AI08-E-1048S AI08-E-1060S AI08-E-1072S | 1 | 0.8 | 15 | 1 | 2.2 | 15 |
| AI08-E-2084S AI08-E-2096S AI08-E-2108S AI08-E-2120S | 1 | 1.7 | 15 | 1 | 4.4 | 15 |

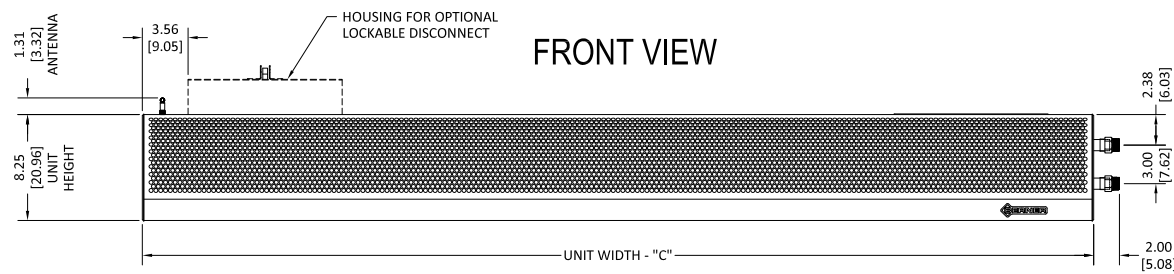
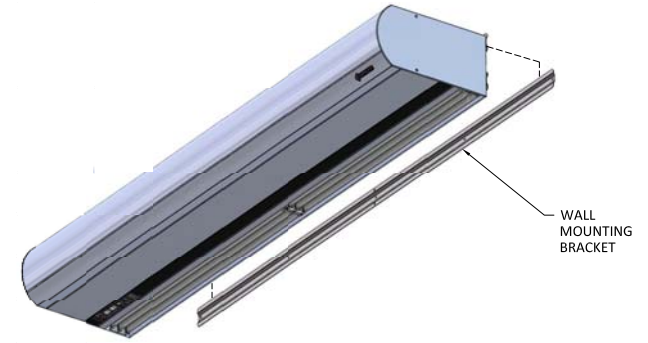
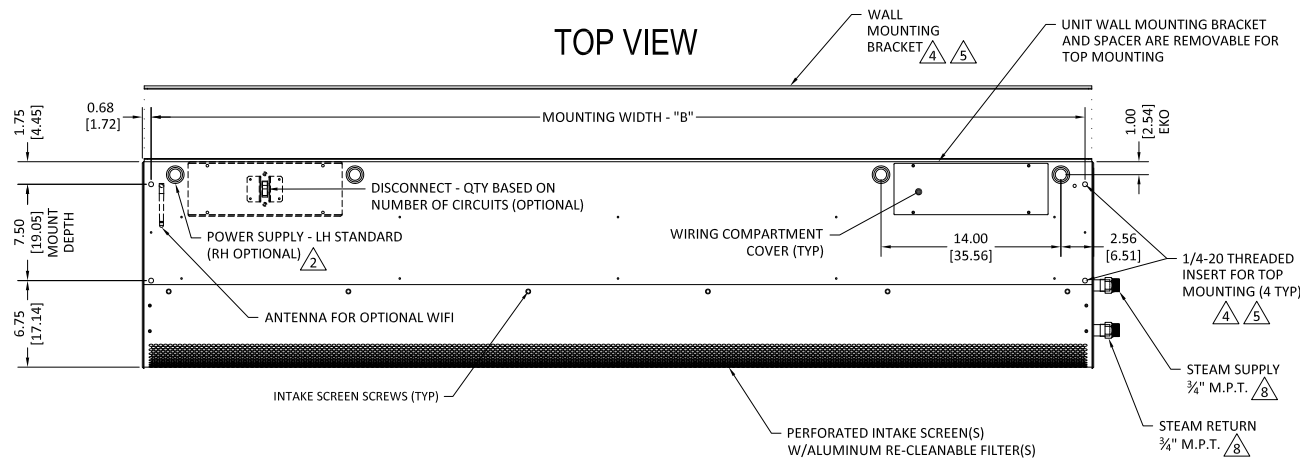
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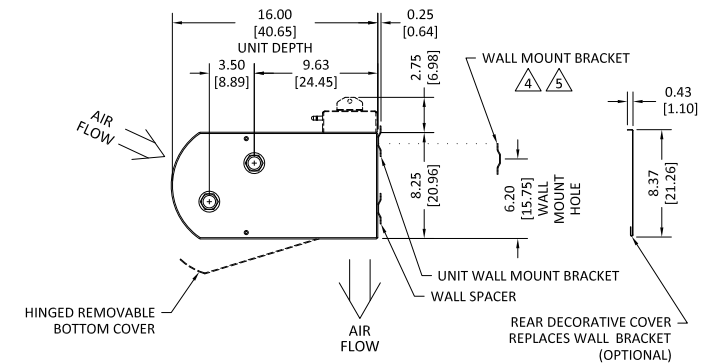
EP-284E-EC
June, 2023

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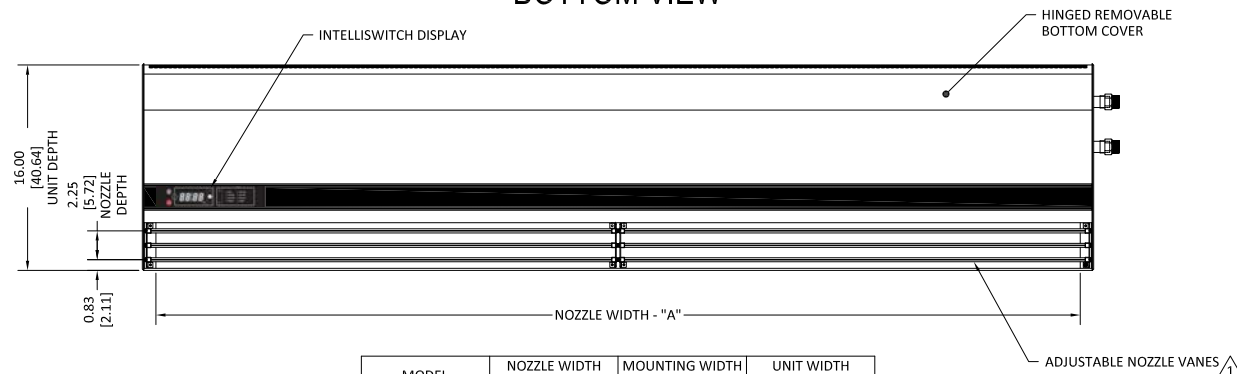
AI08-E STEAM HEATED SYSTEM: 120 - 277V



END VIEW



BOTTOM VIEW



| MODEL | NOZZLE WIDTH "A" | MOUNTING WIDTH "B" | UNIT WIDTH "C" |
|--------------|------------------|--------------------|-----------------|
| AI08-E-1036S | 36.00 [91.44] | 36.75 [93.35] | 38.13 [96.84] |
| AI08-E-1042S | 42.00 [106.68] | 42.75 [108.59] | 44.13 [112.08] |
| AI08-E-1048S | 48.00 [121.92] | 48.75 [123.83] | 50.13 [127.32] |
| AI08-E-1060S | 59.00 [149.86] | 59.75 [151.76] | 61.13 [155.26] |
| AI08-E-1072S | 72.00 [182.88] | 72.75 [184.79] | 74.13 [188.28] |
| AI08-E-2084S | 84.00 [213.36] | 84.75 [215.27] | 86.13 [218.76] |
| AI08-E-2096S | 96.00 [243.84] | 96.75 [245.75] | 98.13 [249.24] |
| AI08-E-2108S | 108.00 [274.32] | 108.75 [276.23] | 110.13 [279.72] |
| AI08-E-2120S | 118.00 [299.72] | 118.75 [301.63] | 120.13 [305.12] |

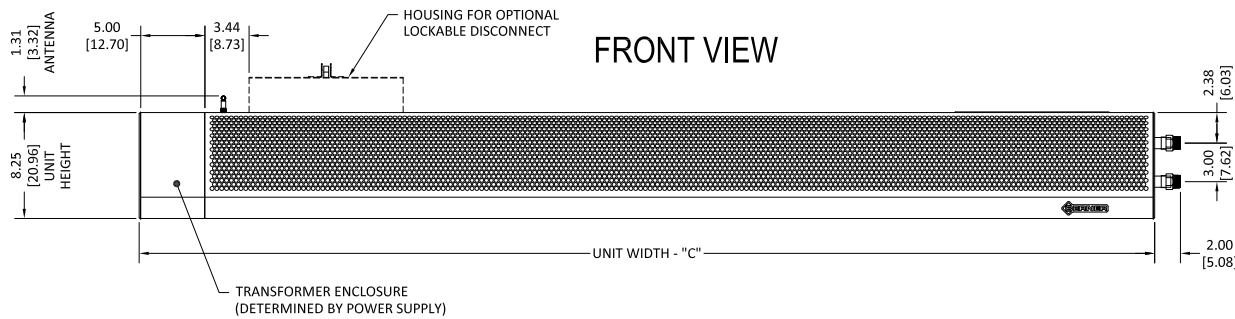
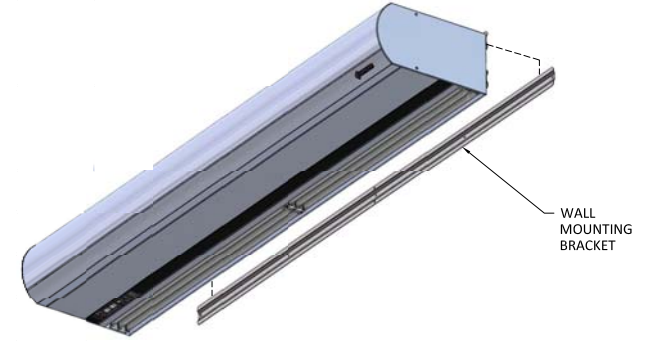
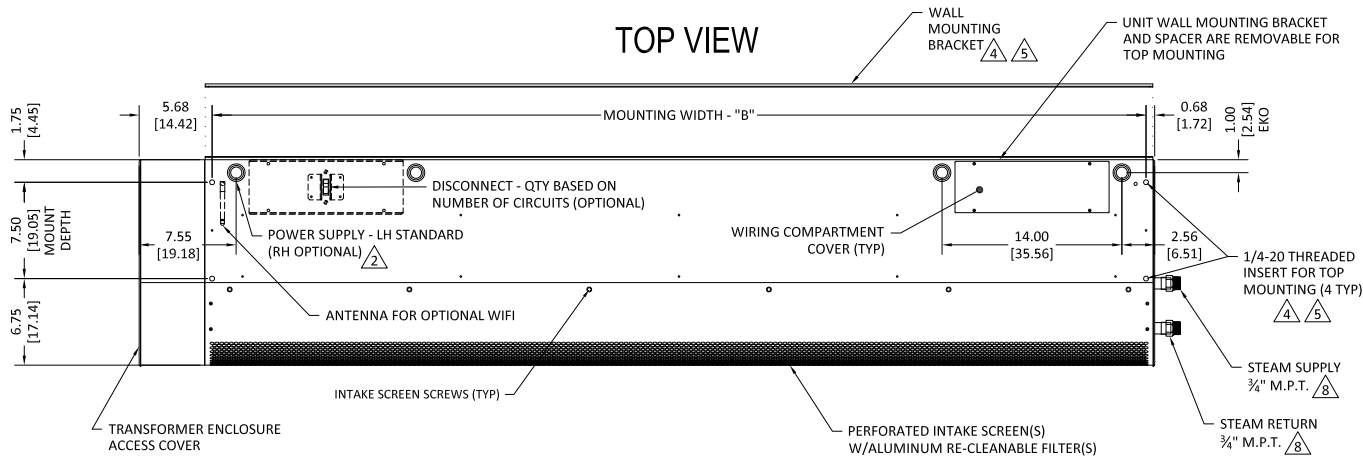
NOTES:

- ¹ AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF Q.
- ² ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
- ³ FIELD VERIFY DIMENSIONS.
- ⁴ ANCHORS TO SUPPORTING STRUCTURE BY OTHERS.
- ⁵ ADEQUACY OF SUPPORTING STRUCTURE IS TO BE VERIFIED BY A PROFESSIONAL STRUCTURAL ENGINEER.
- ⁶ THE LAST CHARACTER IN THE MODEL NUMBER - "S" DESIGNATES STEAM HEATED UNIT.
- ⁷ DIMENSIONS IN INCHES [CENTIMETERS].
- ⁸ COIL CONNECTIONS RH STANDARD (AS SHOWN), OPTIONAL LH.

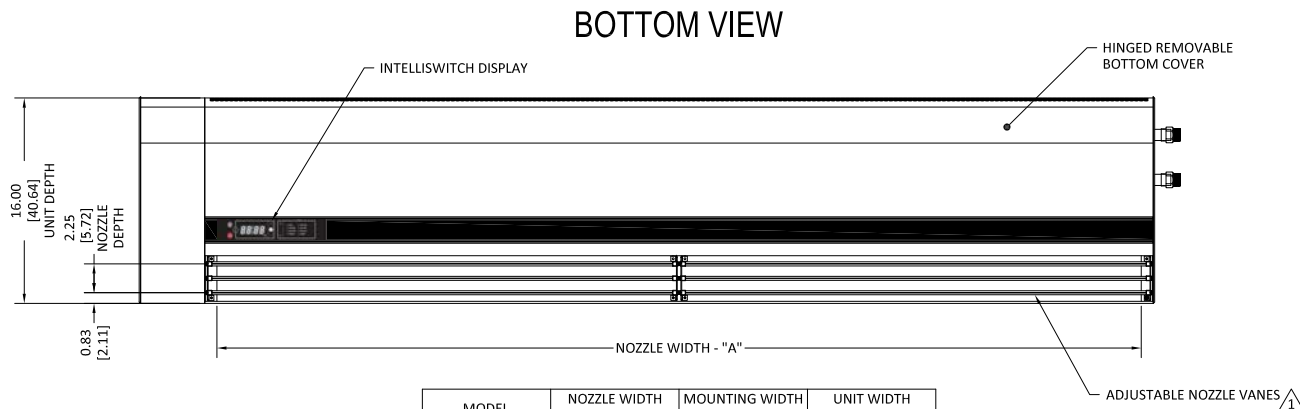
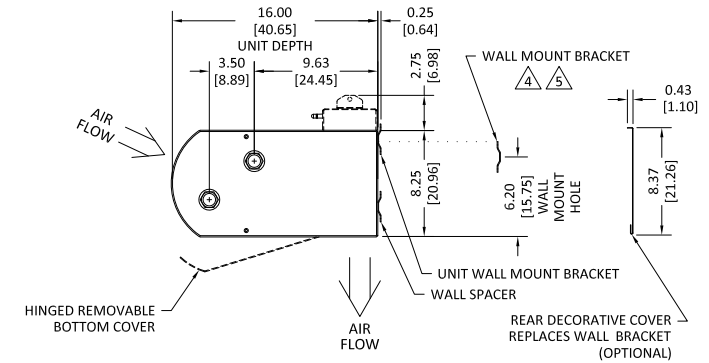
SHEET 1 OF 1

| | | | |
|-----------|----------------|--------|--|
| PROJECT | | REV | - |
| LOCATION | | | |
| ARCHITECT | | | |
| ENGINEER | | | |
| DWG. NO. | AI08-E-WTR-120 | TITLE: | BERNER |
| DATE | 23FEB2023 | | MODEL AI08-E AIR CURTAIN 120 - 277V STEAM HEATED SYSTEM |
| BY | D.Johnson | | |
| REPLACES | - | | |
| BY | - | | BERNER INTERNATIONAL CORP. NEW CASTLE, PA. |

AI08-E STEAM HEATED SYSTEM: 600V



END VIEW



| MODEL | NOZZLE WIDTH "A" | MOUNTING WIDTH "B" | UNIT WIDTH "C" |
|--------------|------------------|--------------------|-----------------|
| AI08-E-1036S | 36.00 [91.44] | 36.75 [93.35] | 43.125 [109.54] |
| AI08-E-1042S | 42.00 [106.68] | 42.75 [108.59] | 49.125 [124.78] |
| AI08-E-1048S | 48.00 [121.92] | 48.75 [123.83] | 55.13 [140.02] |
| AI08-E-1060S | 59.00 [149.86] | 59.75 [151.76] | 66.13 [167.96] |
| AI08-E-1072S | 72.00 [182.88] | 72.75 [184.79] | 79.13 [200.98] |
| AI08-E-2084S | 84.00 [213.36] | 84.75 [215.27] | 91.13 [231.46] |
| AI08-E-2096S | 96.00 [243.84] | 96.75 [245.75] | 103.13 [261.94] |
| AI08-E-2108S | 108.00 [274.32] | 108.75 [276.23] | 115.13 [292.42] |
| AI08-E-2120S | 118.00 [299.72] | 118.75 [301.63] | 125.13 [317.82] |

NOTES:

- 1 AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF Q.
- 2 ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
- 3 FIELD VERIFY DIMENSIONS.
- 4 ANCHORS TO SUPPORTING STRUCTURE BY OTHERS.
- 5 ADEQUACY OF SUPPORTING STRUCTURE IS TO BE VERIFIED BY A PROFESSIONAL STRUCTURAL ENGINEER.
- 6 THE LAST CHARACTER IN THE MODEL NUMBER - "S" DESIGNATES STEAM HEATED UNIT.
- 7 DIMENSIONS IN INCHES [CENTIMETERS].
- 8 COIL CONNECTIONS RH STANDARD (AS SHOWN), OPTIONAL LH.

SHEET 1 OF 1

| | | | |
|-----------|----------------|--------|--|
| PROJECT | | REV | - |
| LOCATION | | | |
| ARCHITECT | | | |
| ENGINEER | | | |
| DWG. NO. | AI08-E-STM-600 | TITLE: | BERNER |
| DATE | 24FEB2023 | | MODEL AI08-E AIR CURTAIN 600V STEAM HEATED SYSTEM |
| BY | D.Johnson | | |
| REPLACES | - | | |
| BY | - | | BERNER INTERNATIONAL CORP. NEW CASTLE, PA. |