



ARCHITECTURAL ICON 8

Hot Water 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 (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)
AI08-E-1036W	36.00	2,054	1,545	869	84%	0.19	1 @ 1/5	27.1	180° / 166°	4.0	1.3	29°	68
AI08-E-1042W	42.00	1,985	1,547	1,015	82%	0.20	1 @ 1/5	32.9	180° / 166°	5.0	2.1	30°	75
AI08-E-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
AI08-E-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-E-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-E-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
AI08-E-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
AI08-E-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-E-2120W	118.00	2,040	1,552	2,862	80%	0.53	2 @ 1/5	97.4	180° / 160°	10.0	10.1	31°	196

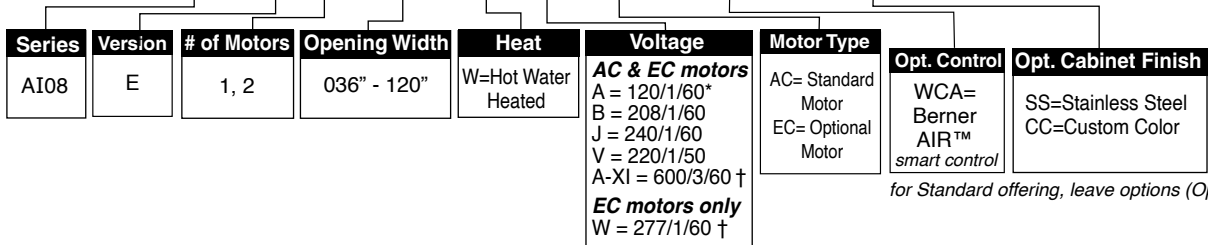
See sheets EP-286E-AC & EP-286E-EC for amp draws/total load requirements. 600/3/60 power supply includes transformer housing, See drawing AI08-E-WTR-600

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 120F.
- Consult factory for alternate entering air & water temperatures or GPM's.
- 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 W A-AC-WCA -SS



for Standard offering, leave options (Opt.) blank

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

VELOCITY PROJECTION: Model AI08-E-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."

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.



ARCHITECTURAL ICON 8 - AC MOTORS

Hot Water 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-1036W AI08-E-1042W AI08-E-1048W AI08-E-1060W AI08-E-1072W	1	3.4	15	1	1.7	15	1	1.7	15
AI08-E-2084W AI08-E-2096W AI08-E-2108W AI08-E-2120W	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-1036W AI08-E-1042W AI08-E-1048W AI08-E-1060W AI08-E-1072W	1	0.8	15	*	*	*
AI08-E-2084W AI08-E-2096W AI08-E-2108W AI08-E-2120W	1	1.6	15	*	*	*

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www.berner.com **Berner International** 800.245.4455
111 Progress Ave. / New Castle / PA / 16101 / USA

EP-286E-AC
June, 2023



ARCHITECTURAL ICON 8 - EC MOTORS

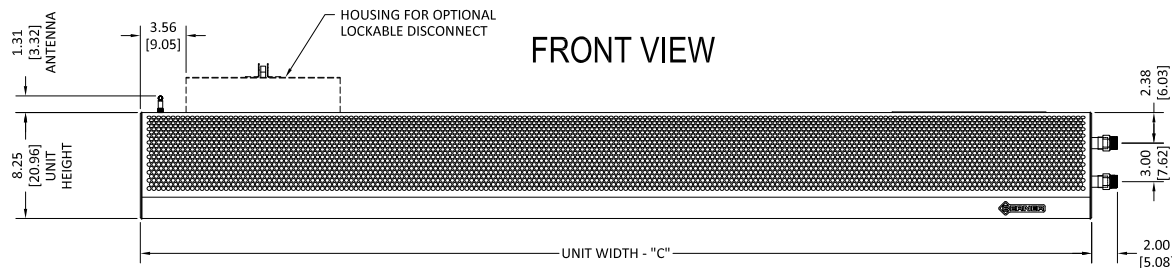
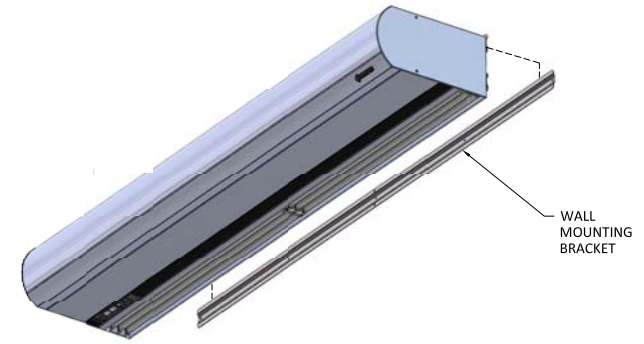
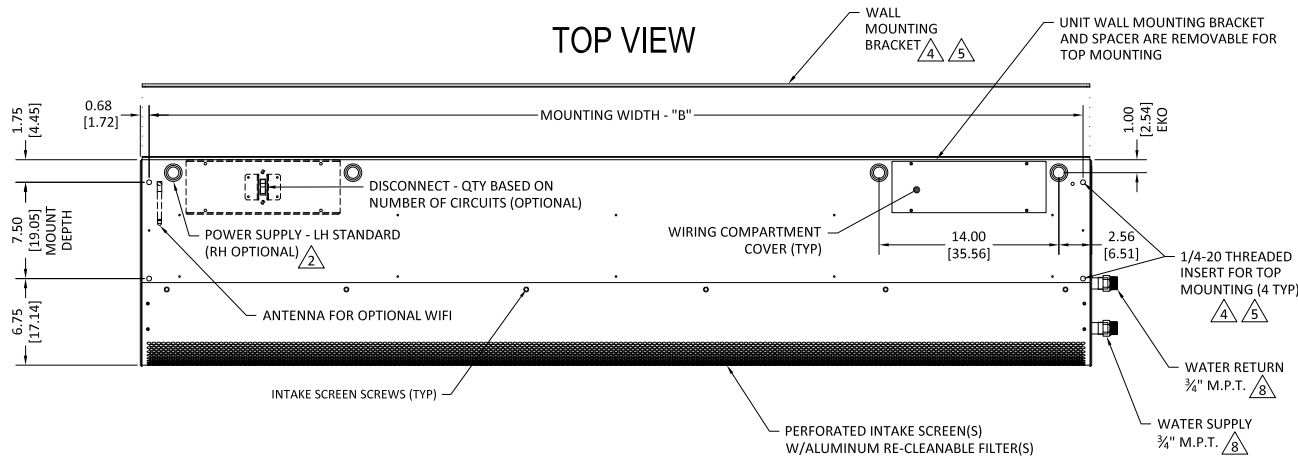
Hot Water Heated Air Curtain Electrical Performance Sheet

		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-1036W AI08-E-1042W AI08-E-1048W AI08-E-1060W AI08-E-1072W	1	4.4	15	1	2.5	15	1	2.5	15
AI08-E-2084W AI08-E-2096W AI08-E-2108W AI08-E-2120W	1	8.8	15	1	5.0	15	1	5.0	15

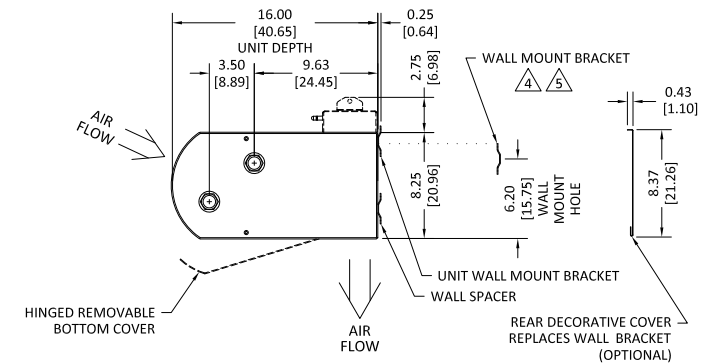
		600/3/60 (voltage code A-XI) XFMR 600/120 0.5kVA per MTR @0.8 each MOTOR AMP DRAW = 4.4 each @ 120V		277/1/60 (voltage code W) MOTOR AMP DRAW = 2.2 each		
MODEL	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT
AI08-E-1036W AI08-E-1042W AI08-E-1048W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

Berner reserves the right to alter specifications without prior notice.

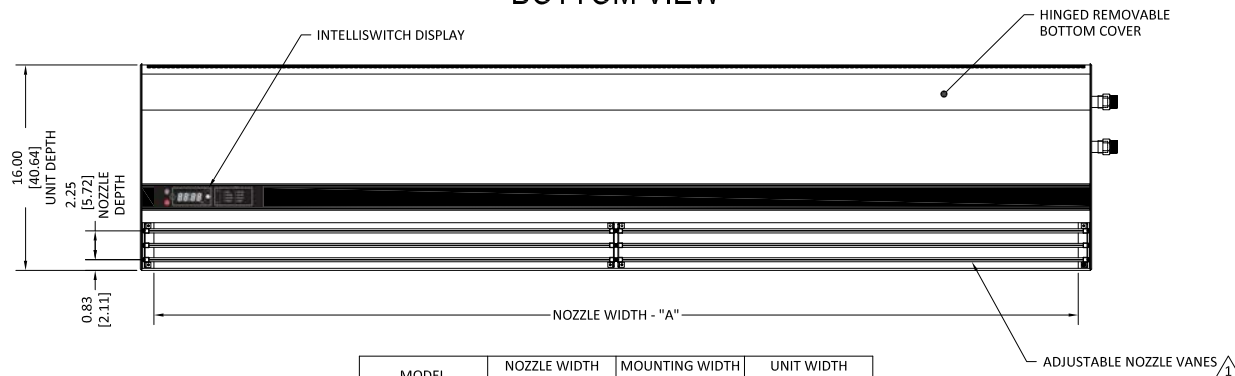
AI08-E WATER HEATED SYSTEM: 120 - 277V



END VIEW



BOTTOM VIEW



NOTES:

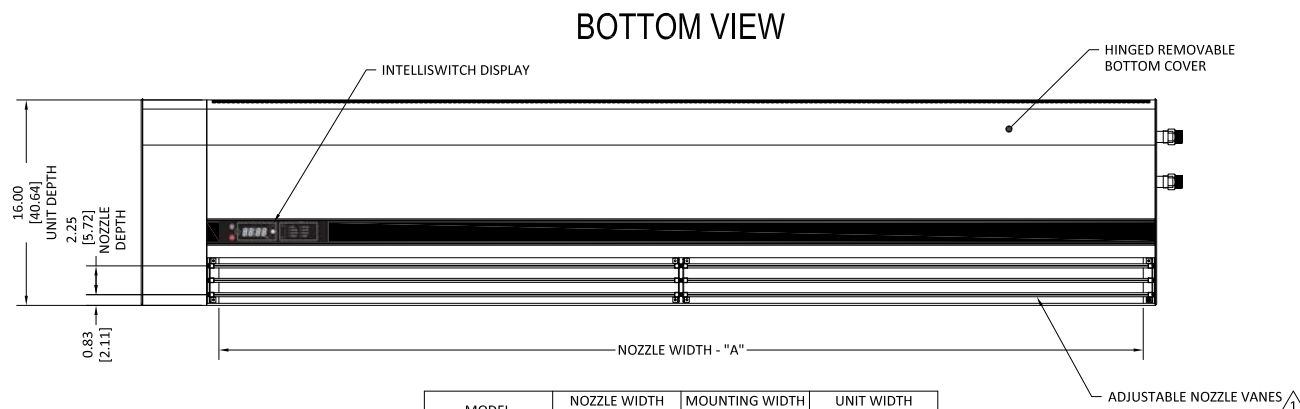
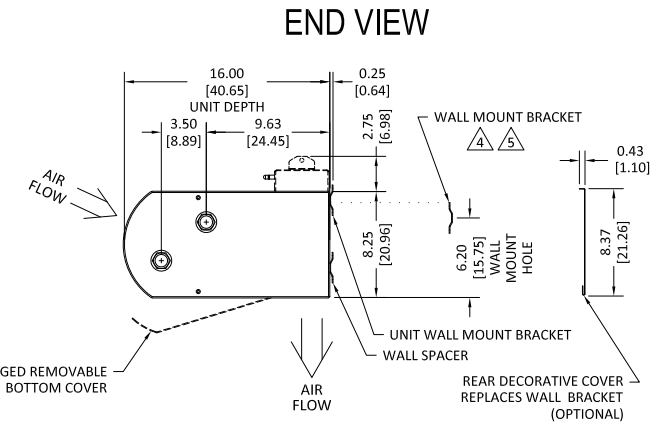
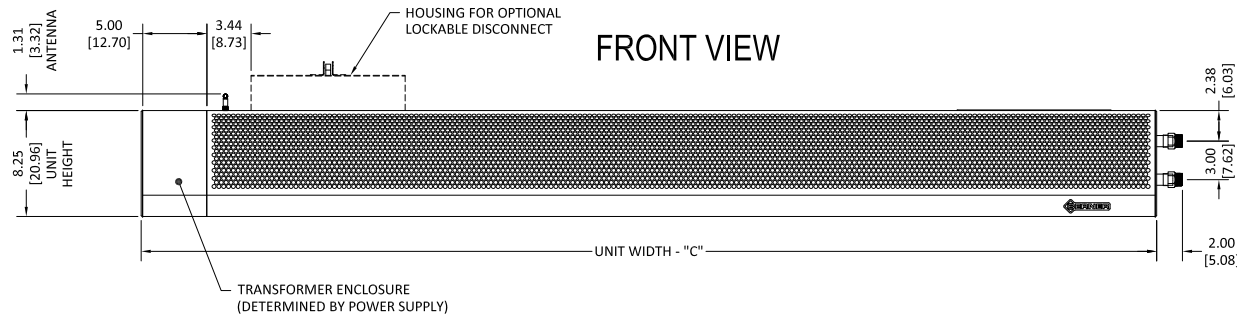
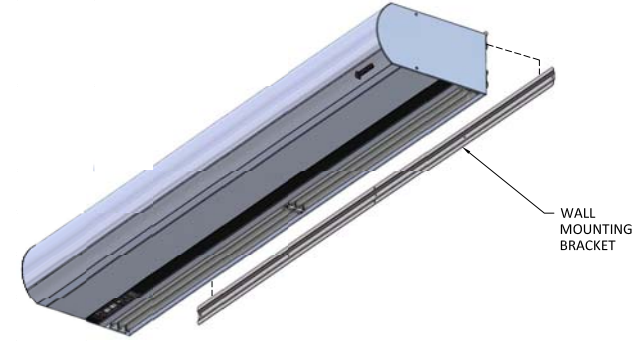
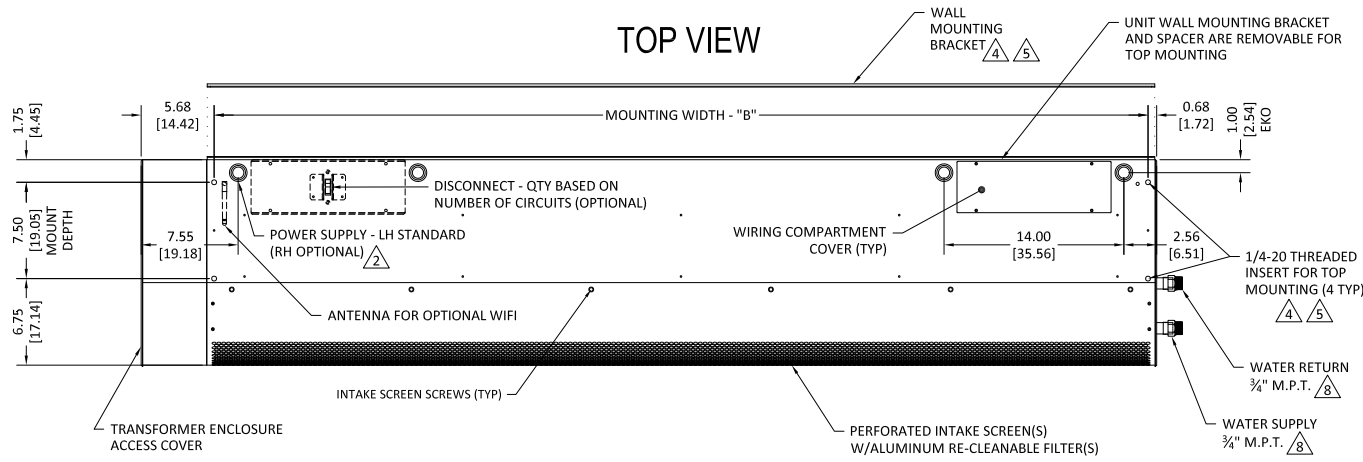
- 1 AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF Q.
- 2 ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
- 3 FIELD VERIFY DIMENSIONS.
- 4 ANCHORS TO SUPPORTING STRUCTURE BY OTHERS.
- 5 ADEQUACY OF SUPPORTING STRUCTURE IS TO BE VERIFIED BY A PROFESSIONAL STRUCTURAL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

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

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 WATER HEATED SYSTEM
BY	D.Johnson	
REPLACES	-	
BY	-	BERNER INTERNATIONAL CORP. NEW CASTLE, PA.

AI08-E WATER HEATED SYSTEM: 600V



MODEL	NOZZLE WIDTH "A"	MOUNTING WIDTH "B"	UNIT WIDTH "C"
AI08-E-1036W	36.00 [91.44]	36.75 [93.35]	43.125 [109.54]
AI08-E-1042W	42.00 [106.68]	42.75 [108.59]	49.125 [124.78]
AI08-E-1048W	48.00 [121.92]	48.75 [123.83]	55.13 [140.02]
AI08-E-1060W	59.00 [149.86]	59.75 [151.76]	66.13 [167.96]
AI08-E-1072W	72.00 [182.88]	72.75 [184.79]	79.13 [200.98]
AI08-E-2084W	84.00 [213.36]	84.75 [215.27]	91.13 [231.46]
AI08-E-2096W	96.00 [243.84]	96.75 [245.75]	103.13 [261.94]
AI08-E-2108W	108.00 [274.32]	108.75 [276.23]	115.13 [292.42]
AI08-E-2120W	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 – "W" DESIGNATES WATER 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-600	TITLE:	BERNER MODEL AI08-E AIR CURTAIN 600V WATER HEATED SYSTEM
DATE	24FEB2023		
BY	D.Johnson		
REPLACES	-		
BY	-		BERNER INTERNATIONAL CORP. NEW CASTLE, PA.