



ARCHITECTURAL ELITE 10

Hot Water Heated Air Curtain

Data Sheet

Recommended for Mounting Heights to 10' (environmental separation)

STANDARD CONSTRUCTION

- 14 1/2" high x 28 1/4" deep
- 1/2 hp EC motor(s)
- Intelliswitch™ digital controller, includes Berner AIR™ BMS (smart control and BACnet & Modbus)
- Cabinet: Brushed stainless steel, grade 304
- Bottom Panel: Clear satin anodized aluminum
- Wall or Top Mounting
- High efficiency, low noise, articulating Pro-V Nozzle
- Filter (washable)
- Factory installed coil

Options

- Custom Color or Stainless
- Rear cover for top mounting to conceal fasteners

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 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**



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)	Entering / Leaving Water Temp. (°F)	Water Flow (GPM)	Fluid Pressure Drop (FT. WG.)	Air Temp. Rise (°F)	Net Wt. (lbs)
AE10-F-1036W	36.00	3,522	1,916	1,317	80%	0.49	1 @ 1/2	33.2	180°/163°	4.0	0.5	23°	125
AE10-F-1042W	42.00	3,429	1,709	1,371	82%	0.50	1 @ 1/2	36.8	180°/161°	4.0	0.5	25°	140
AE10-F-1048W	48.00	4,040	1,833	1,680	90%	0.63	1 @ 1/2	45.3	180°/161°	5.0	0.8	25°	156
AE10-F-1060W	59.00	4,146	1,541	1,736	85%	0.63	1 @ 1/2	55.1	180°/164°	7.0	1.6	29°	205
AE10-F-2072W	72.00	3,522	1,916	2,634	80%	0.98	2 @ 1/2	74.3	180°/161°	8.0	2.1	26°	246
AE10-F-2078W	78.00	3,522	1,805	2,688	80%	0.99	2 @ 1/2	77.9	180°/160°	8.0	2.2	26°	261
AE10-F-2084W	84.00	3,429	1,709	2,742	82%	1.00	2 @ 1/2	81.4	180°/159°	8.0	2.2	27°	276
AE10-F-2096W	96.00	4,040	1,833	3,360	90%	1.26	2 @ 1/2	98.9	180°/160°	10.0	3.6	27°	308
AE10-F-2108W	108.00	4,146	1,656	3,416	85%	1.26	2 @ 1/2	106.9	180°/160°	11.0	4.5	29°	357
AE10-F-2120W	118.00	4,146	1,541	3,472	85%	1.26	2 @ 1/2	113.7	180°/161°	12.0	5.5	30°	404
AE10-F-3132W	132.00	4,040	1,855	4,677	80%	1.75	3 @ 1/2	140.65	180°/159°	14.0	7.7	27°	429
AE10-F-3144W	144.00	4,040	1,833	5,040	90%	1.89	3 @ 1/2	153.0	180°/159°	15.0	9.1	28°	460

See sheet EP-236E-EC for amp draws/total load requirements.

600/3/60 & 277/1/60 power supplies include extended cabinet, See drawing AE10-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 120°F.
5. Consult factory for alternate entering air & water temperatures or GPM's.

MODEL NUMBER CONFIGURATION

AE10-F-1 036 W A-EC-CM -D-R-LL-SA

Series	Version	# of Motors	Opening Width	Heat	Voltage	Motor Type	Berner AIR	Opt. Interconnect	Opt. Display	Supply/Return	Material / Finish	
AE10	F	1, 2, 3	036" - 144"	W=Hot Water Heated	A=120/1/60* B=208/1/60 J=240/1/60 V=220/1/50 W=277/1/60 A-XI=600/3/60 †	EC Motor	CM=BMS	D=Physical Data Link (daisy chain)	R=Remote Display TB=Tablet	LL=Left Hand RR=Right Hand	Cabinet	Bottom Panel
											S=Stainless (std) A= Anod Alum C=Custom Color	A=Anod Alum (std) S=Stainless C=Custom Color

*Suitable for 50 Hz
† Add 12" to cabinet width for transformer

for Standard offering, leave options (Opt.) blank

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

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

Sound data is not AMCA certified.

VELOCITY PROJECTION: Model AE10-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 (2.0 m/s; 400 fpm) at 6.0 in (15 cm) above the floor.

Berner reserves the right to alter specifications without prior notice.

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

DS-236E
December, 2024



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Electrical Performance Sheet

120/1/60 (voltage code A) EC MOTOR AMP DRAW = 6.6 each				208/1/60 (voltage code B) EC MOTOR AMP DRAW = 4.1 each			240/1/60 (voltage code J) or 220/1/50 (voltage code V) EC MOTOR AMP DRAW = 4.1 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
AE10-F-1036W AE10-F-1042W AE10-F-1048W AE10-F-1060W	1	6.6	15	1	4.1	15	1	4.1	15
AE10-F-2072W AE10-F-2078W AE10-F-2084W AE10-F-2096W AE10-F-2108W AE10-F-2120W	1	13.2	20	1	8.2	15	1	8.2	15
AE10-F-3132W AE10-F-3144W	1	19.8	25	1	12.3	20	1	12.3	20

600/3/60 (voltage code A-XI) XFMR 600/120 1 kVA per MTR @ 1.7 each EC MOTOR AMP DRAW= 6.6 each @ 120V				277/1/60 (voltage code W) EC MOTOR AMP DRAW = 3.6 each		
MODEL	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT
AE10-F-1036W AE10-F-1042W AE10-F-1048W AE10-F-1060W	1	1.7	15	1	3.6	15
AE10-F-2072W AE10-F-2078W AE10-F-2084W AE10-F-2096W AE10-F-2108W AE10-F-2120W	1	3.3	15	1	7.2	15
AE10-F-3132W AE10-F-3144W	1	5.0	15	1	10.8	15

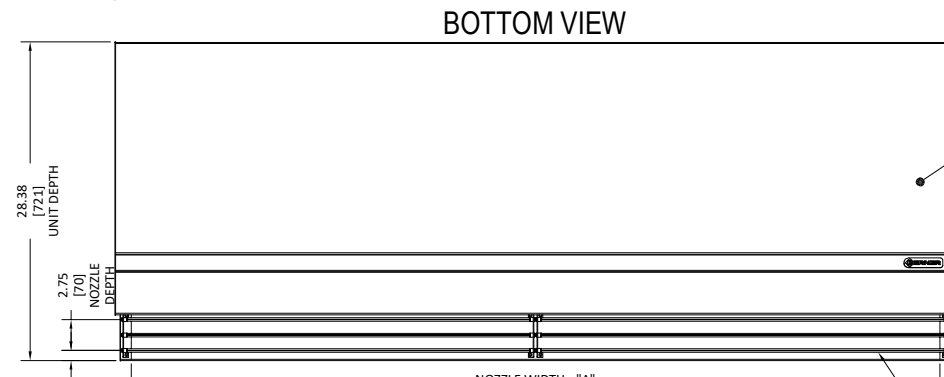
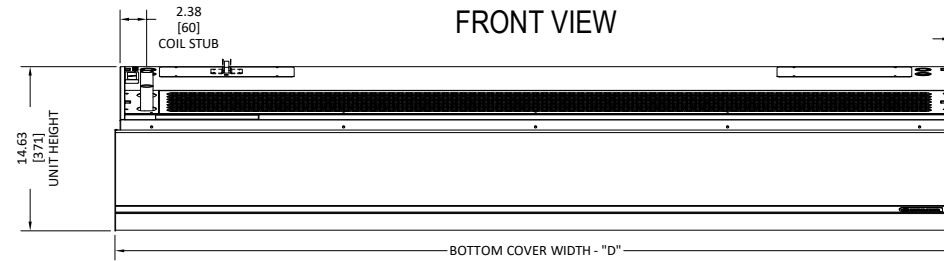
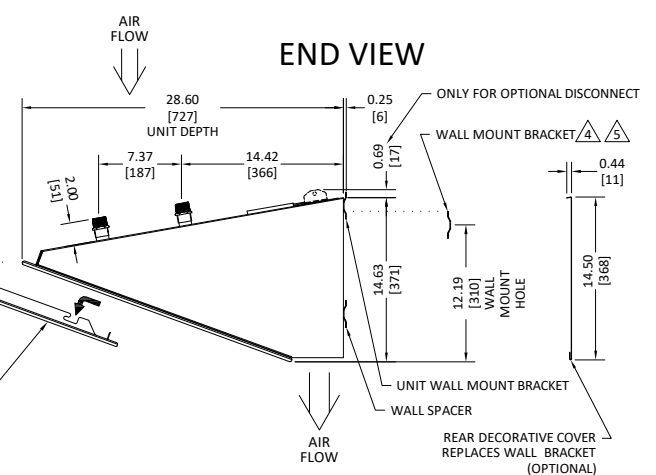
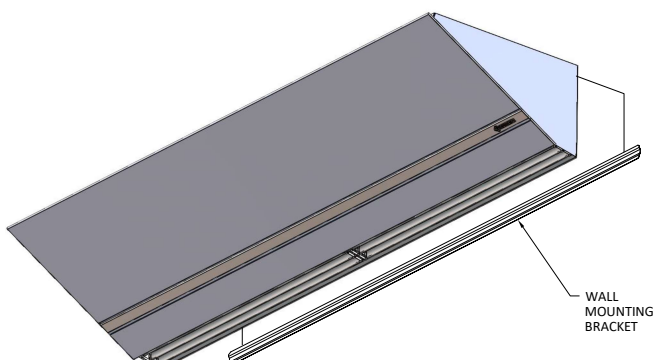
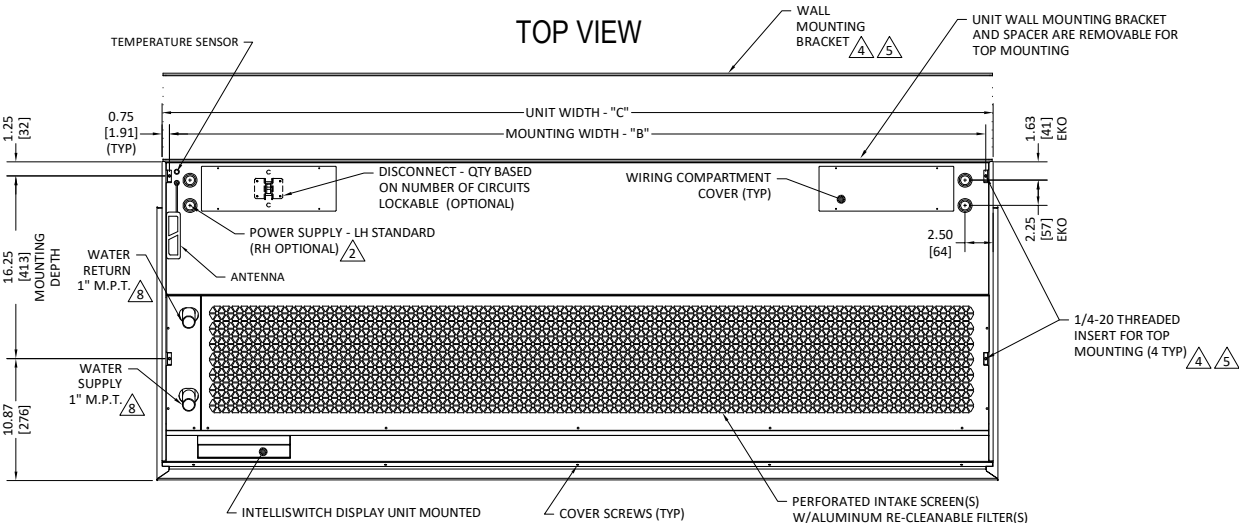
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EP-236E-EC
December, 2024

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AE10-F WATER HEATED SYSTEM: 120 - 277V



MODEL	NOZZLE WIDTH "A"	MOUNTING WIDTH "B"	UNIT WIDTH "C"	BOTTOM CVR WIDTH "D"
AE10-F-1036W	36.00 [914]	36.50 [927]	38.00 [965]	38.88 [987]
AE10-F-1042W	42.00 [1067]	42.50 [1080]	44.00 [1118]	44.88 [1140]
AE10-F-1048W	48.00 [1219]	48.50 [1232]	50.00 [1270]	50.88 [1292]
AE10-F-1060W	59.00 [1499]	59.50 [1511]	61.00 [1549]	61.88 [1572]
AE10-F-2072W	72.00 [1829]	72.50 [1842]	74.00 [1880]	74.88 [1902]
AE10-F-2078W	78.00 [1981]	78.50 [1994]	80.00 [2032]	80.88 [2054]
AE10-F-2084W	84.00 [2134]	84.50 [2146]	86.00 [2184]	86.88 [2207]
AE10-F-2096W	96.00 [2438]	96.50 [2451]	98.00 [2489]	98.88 [2511]
AE10-F-2108W	108.00 [2743]	108.50 [2756]	110.00 [2794]	110.88 [2816]
AE10-F-2120W	118.00 [2997]	118.50 [3010]	120.00 [3048]	120.88 [3070]
AE10-F-3132W	132.00 [3353]	132.50 [3365]	134.00 [3404]	134.88 [3426]
AE10-F-3144W	144.00 [3658]	144.50 [3670]	146.00 [3708]	146.88 [3731]

ADJUSTABLE NOZZLE VANES

NOTES:

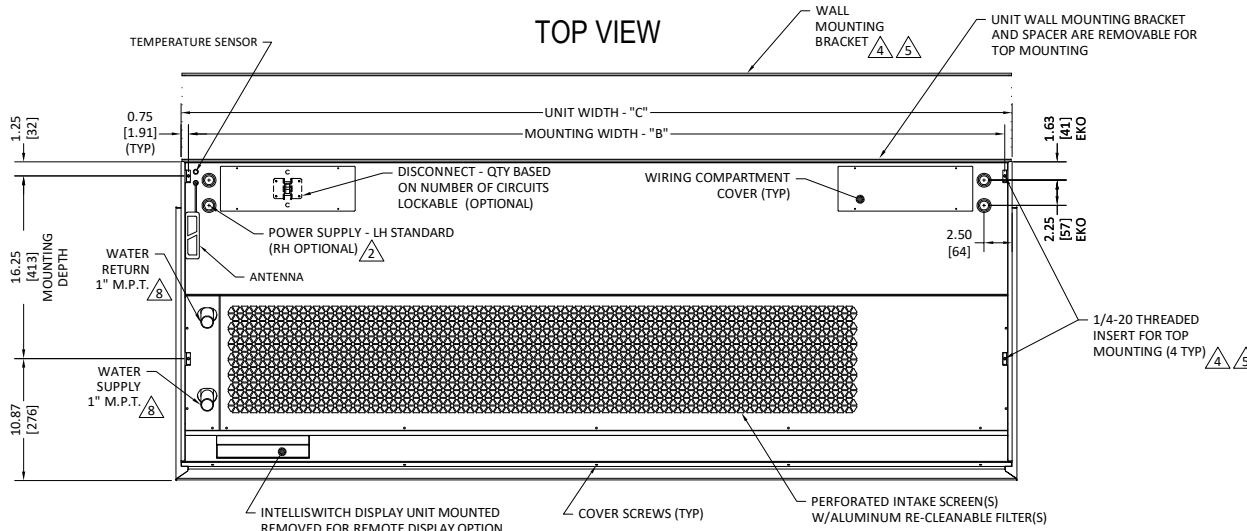
- AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF C.
- ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
- FIELD VERIFY DIMENSIONS.
- ANCHORS TO SUPPORTING STRUCTURE BY OTHERS.
- ADEQUACY OF SUPPORTING STRUCTURE IS TO BE VERIFIED BY A PROFESSIONAL STRUCTURAL ENGINEER.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

SHEET 1 OF 1

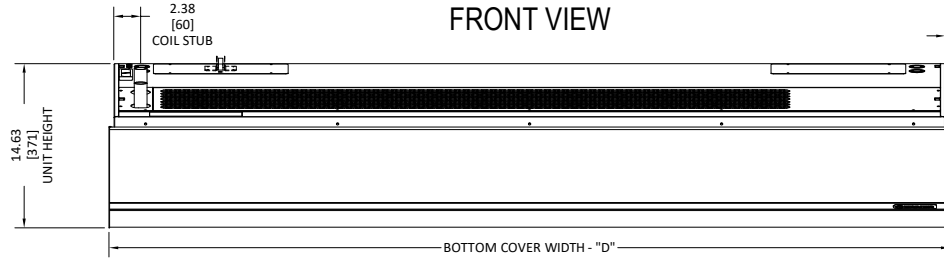
PROJECT		REV	0
LOCATION			
ARCHITECT			
ENGINEER			
DWG. NO.	AE10-F-WTR-120	TITLE:	BERNER
DATE	12NOV2024		MODEL AE10-F AIR CURTAIN 120 - 277V WATER HEATED SYSTEM
BY	D. Johnson		
REPLACES	-		
BY	-		BERNER INTERNATIONAL CORP. NEW CASTLE, PA.

AE10-F WATER HEATED SYSTEM: 600V

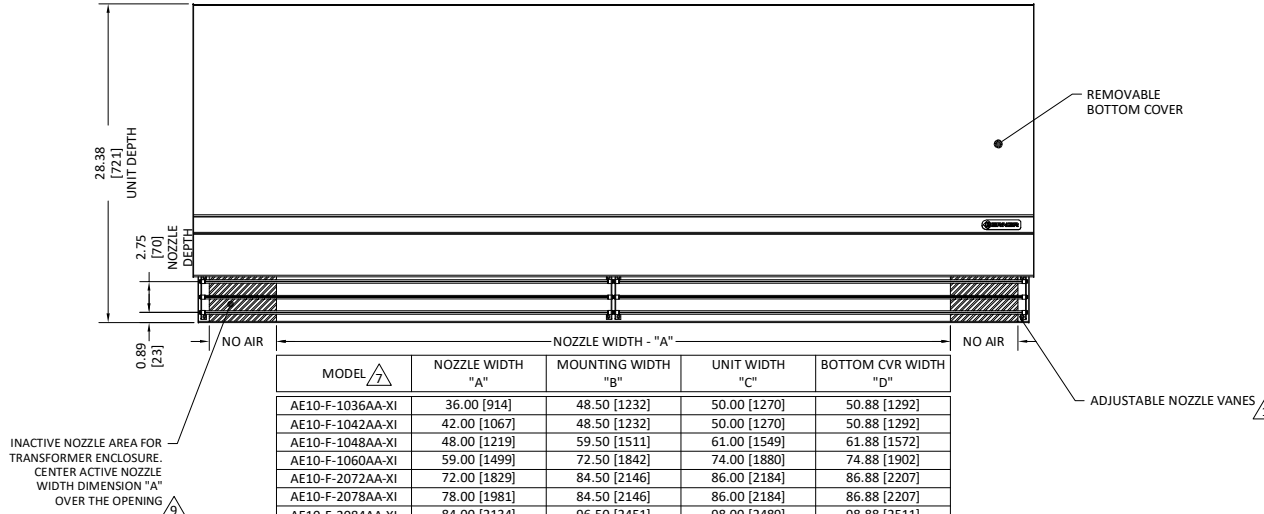
TOP VIEW



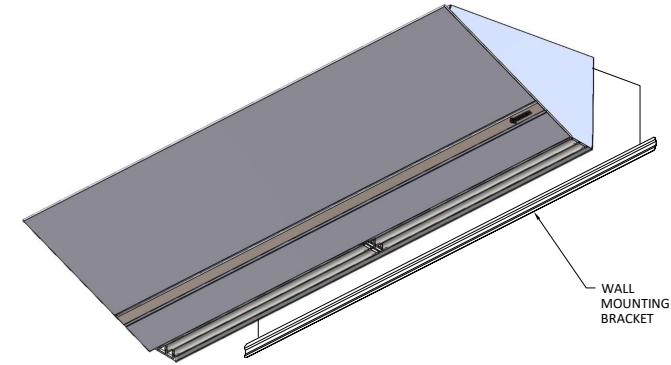
FRONT VIEW



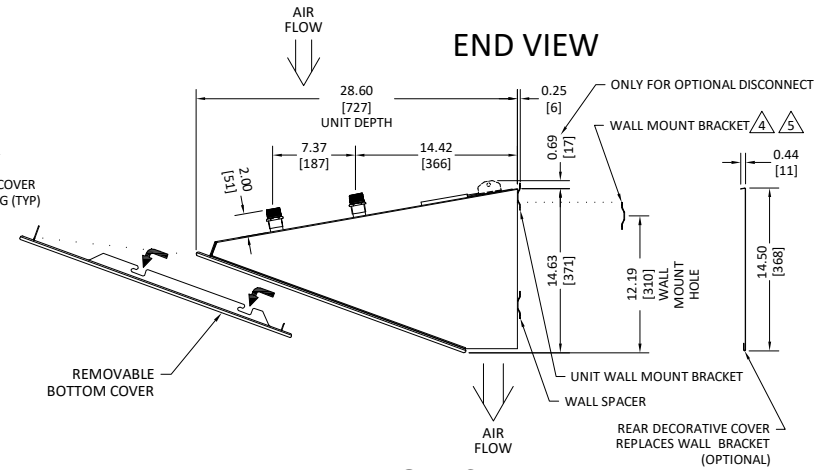
BOTTOM VIEW



MODEL	NOZZLE WIDTH "A"	MOUNTING WIDTH "B"	UNIT WIDTH "C"	BOTTOM CVR WIDTH "D"
AE10-F-1036AA-XI	36.00 [914]	48.50 [1232]	50.00 [1270]	50.88 [1292]
AE10-F-1042AA-XI	42.00 [1067]	48.50 [1232]	50.00 [1270]	50.88 [1292]
AE10-F-1048AA-XI	48.00 [1219]	59.50 [1511]	61.00 [1549]	61.88 [1572]
AE10-F-1060AA-XI	59.00 [1499]	72.50 [1842]	74.00 [1880]	74.88 [1902]
AE10-F-2072AA-XI	72.00 [1829]	84.50 [2146]	86.00 [2184]	86.88 [2207]
AE10-F-2078AA-XI	78.00 [1981]	84.50 [2146]	86.00 [2184]	86.88 [2207]
AE10-F-2084AA-XI	84.00 [2134]	96.50 [2451]	98.00 [2489]	98.88 [2511]
AE10-F-2096AA-XI	96.00 [2438]	108.50 [2756]	110.00 [2794]	110.88 [2816]
AE10-F-2108AA-XI	108.00 [2743]	118.50 [3010]	120.00 [3048]	120.88 [3070]
AE10-F-2120AA-XI	118.00 [2997]	132.50 [3365]	134.00 [3404]	134.88 [3426]
AE10-F-3132AA-XI	132.00 [3353]	144.50 [3670]	146.00 [3708]	146.88 [3731]
AE10-F-3144AA-XI	144.00 [3658]	156.50 [3975]	158.00 [4013]	158.88 [4035]



END VIEW



NOTES:

- AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF C.
- ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
- FIELD VERIFY DIMENSIONS.
- ANCHORS TO SUPPORTING STRUCTURE BY OTHERS.
- ADEQUACY OF SUPPORTING STRUCTURE IS TO BE VERIFIED BY A PROFESSIONAL STRUCTURAL ENGINEER.
- THE 12th CHARACTER IN THE MODEL NUMBER - "W" DESIGNATES WATER HEATED UNIT.
- DIMENSIONS IN INCHES [MILLIMETERS].
- COIL CONNECTIONS LH STANDARD (AS SHOWN), OPTIONAL RH.
- NO AIR FLOW AREA HOUSES TRANSFORMER. CENTER ACTIVE NOZZLE WIDTH DIMENSION "A" OVER THE OPENING.

SHEET 1 OF 1

PROJECT		REV	0
LOCATION			
ARCHITECT			
ENGINEER			
DWG. NO.	AE10-F-WTR-600	TITLE:	BERNER
DATE	12NOV2024		MODEL AE10-F AIR CURTAIN 600V WATER HEATED SYSTEM
BY	D. Johnson		
REPLACES	-		
BY	-		BERNER INTERNATIONAL CORP. NEW CASTLE, PA.