



ARCHITECTURAL CONTOUR 10

Ambient (Unheated) Air Curtain

Data Sheet

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

STANDARD CONSTRUCTION

- 12 3/4" high x 25 3/4" deep
- 1/2 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
- 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™ (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 (unheated) 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.

5 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	Net Wt. (lbs)
AC10-E-1036A	36.00	3,440	2,071	1,424	80%	0.51	1 @ 1/2	82
AC10-E-1042A	42.00	3,711	1,849	1,483	82%	0.52	1 @ 1/2	91
AC10-E-1048A	48.00	3,975	1,973	1,809	92%	0.63	1 @ 1/2	107
AC10-E-1060A	59.00	3,803	1,619	1,824	82%	0.61	1 @ 1/2	116
AC10-E-2072A	72.00	3,440	2,071	2,848	80%	1.02	2 @ 1/2	164
AC10-E-2084A	84.00	3,711	1,849	2,966	82%	1.04	2 @ 1/2	182
AC10-E-2096A	96.00	3,975	1,973	3,618	92%	1.26	2 @ 1/2	214
AC10-E-2108A	108.00	3,975	1,761	3,633	82%	1.24	2 @ 1/2	223
AC10-E-2120A	118.00	3,803	1,619	3,648	82%	1.22	2 @ 1/2	232
AC10-E-3132A	132.00	3,975	2,000	5,042	80%	1.77	3 @ 1/2	296
AC10-E-3144A	144.00	3,975	1,973	5,427	92%	1.89	3 @ 1/2	321

See sheets EP-270E-AC & EP-270E-EC for amp draws/total load requirements.

600/3/60 power supply includes extended cabinet, See drawing AC10-E-AMB-600

NOTE: Operation of standard motor (AC) at 50Hz will generate a 17% reduction in performance; no reduction for optional EC motors.

MODEL NUMBER CONFIGURATION

AC10-E-1 036 A A-AC-WCA -SS

Series	Version	# of Motors	Opening Width	Heat	Voltage	Motor Type	Opt. Control	Opt. Cabinet Finish
AC10	E	1, 2, 3	036" - 144"	A=Ambient	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
† Cabinet width increases for transformer

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 AC10-E-1036A				
Distance from Nozzle (in)	40	80	120	160
Core Velocity (fpm)	1454	971	918	748
Uniformity (%)	88%	91%	92%	95%

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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DS-270E
September, 2023



ARCHITECTURAL CONTOUR 10 - AC MOTORS

**Ambient (Unheated) Air Curtain
Electrical Performance Sheet**

120/1/60 (voltage code A) MOTOR AMP DRAW = 8.5 each				208/1/60 (voltage code B) MOTOR AMP DRAW = 4.3 each			240/1/60 (voltage code J) or 220/1/50 (voltage code V) MOTOR AMP DRAW = 4.3 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
AC10-E-1036A AC10-E-1042A AC10-E-1048A AC10-E-1060A	1	8.5	15	1	4.3	15	1	4.3	15
AC10-E-2072A AC10-E-2084A AC10-E-2096A AC10-E-2108A AC10-E-2120A	1	17.0	25	1	8.6	15	1	8.6	15
AC10-E-3132A AC10-E-3144A	1	25.5	35	1	12.9	20	1	12.9	20

600/3/60 (voltage code A-XI) XFMR 600/120 1 kVA per MTR @ 1.7 each MOTOR AMP DRAW= 6.6 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
AC10-E-1036A AC10-E-1042A AC10-E-1048A AC10-E-1060A	1	1.7	15	*	*	*
AC10-E-2072A AC10-E-2084A AC10-E-2096A AC10-E-2108A AC10-E-2120A	1	3.3	15	*	*	*
AC10-E-3132A AC10-E-3144A	1	5.0	15	*	*	*

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EP-270E-AC
June, 2023

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ARCHITECTURAL CONTOUR 10 - EC MOTORS

**Ambient (Unheated) Air Curtain
Electrical Performance Sheet**

120/1/60 (voltage code A) MOTOR AMP DRAW = 6.6 each				208/1/60 (voltage code B) MOTOR AMP DRAW = 4.1 each			240/1/60 (voltage code J) or 220/1/50 (voltage code V) 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
AC10-E-1036A AC10-E-1042A AC10-E-1048A AC10-E-1060A	1	6.6	15	1	4.1	15	1	4.1	15
AC10-E-2072A AC10-E-2084A AC10-E-2096A AC10-E-2108A AC10-E-2120A	1	13.2	20	1	8.2	15	1	8.2	15
AC10-E-3132A AC10-E-3144A	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 MOTOR AMP DRAW= 6.6 each @ 120V				277/1/60 (voltage code W) MOTOR AMP DRAW = 3.6 each		
MODEL	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT
AC10-E-1036A AC10-E-1042A AC10-E-1048A AC10-E-1060A	1	1.7	15	1	3.6	15
AC10-E-2072A AC10-E-2084A AC10-E-2096A AC10-E-2108A AC10-E-2120A	1	3.3	15	1	7.2	15
AC10-E-3132A AC10-E-3144A	1	5.0	15	1	10.8	15

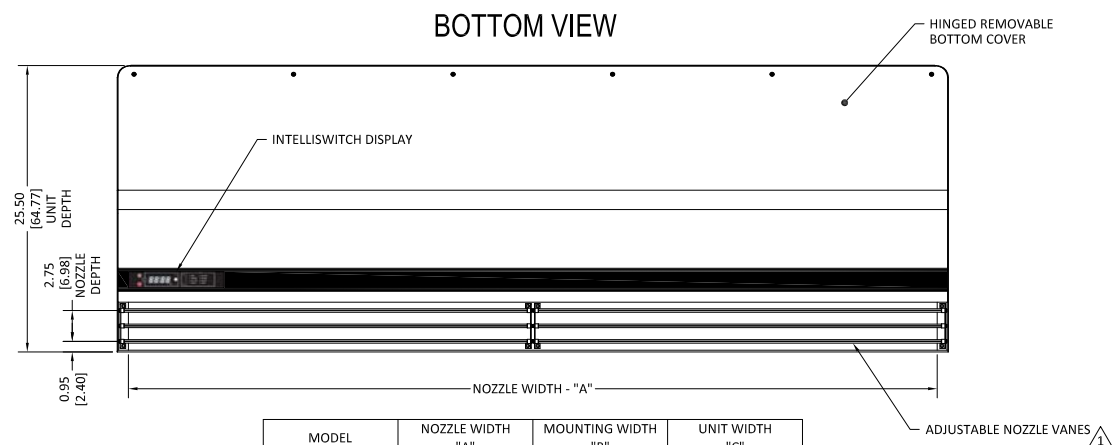
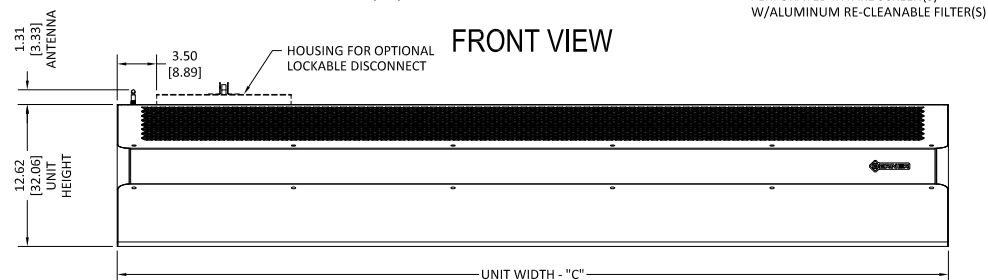
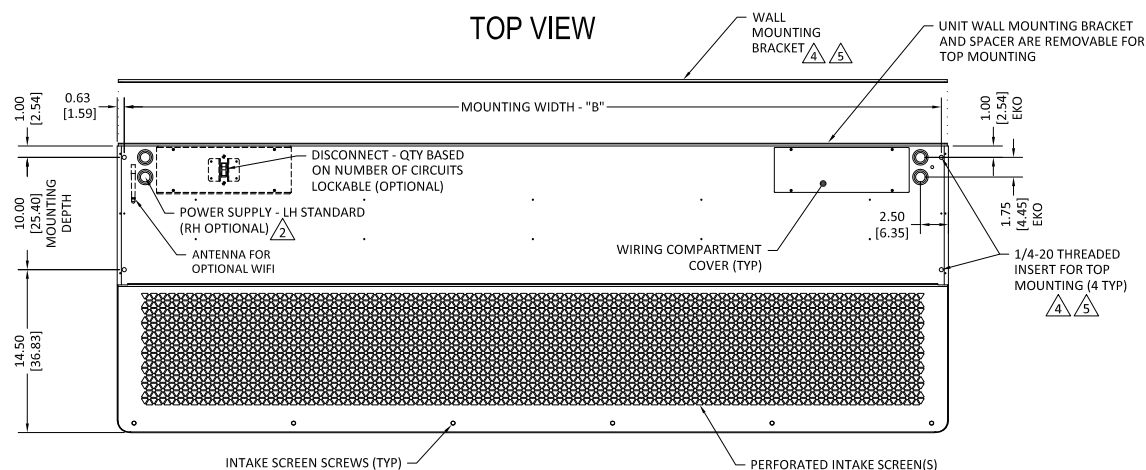
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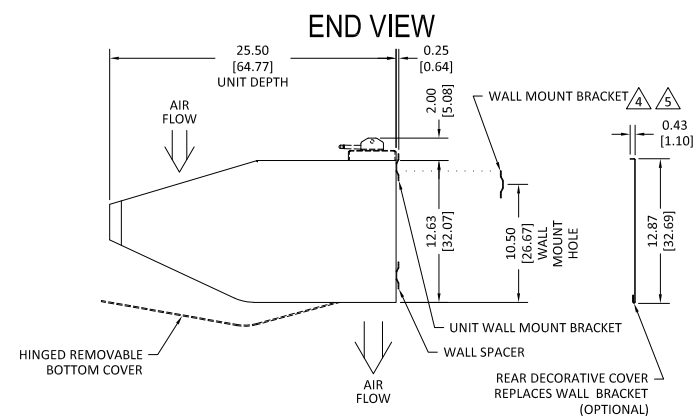
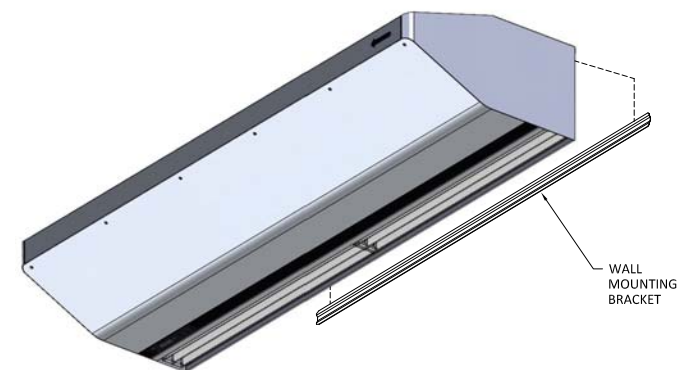
EP-270E-EC
June, 2023

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AC10-E AMBIENT (UNHEATED) SYSTEM: 120 - 277V



MODEL	NOZZLE WIDTH "A"	MOUNTING WIDTH "B"	UNIT WIDTH "C"
AC10-E-1036A	36.00 [91.44]	36.75 [93.35]	38.00 [96.52]
AC10-E-1042A	42.00 [106.68]	42.75 [108.59]	44.00 [111.76]
AC10-E-1048A	48.00 [121.92]	48.75 [123.83]	50.00 [127.00]
AC10-E-1060A	59.00 [149.86]	59.75 [151.77]	61.00 [154.94]
AC10-E-2072A	72.00 [182.88]	72.75 [184.79]	74.00 [187.96]
AC10-E-2084A	84.00 [213.36]	84.75 [215.27]	86.00 [218.44]
AC10-E-2096A	96.00 [243.84]	96.75 [245.75]	98.00 [248.92]
AC10-E-2108A	108.00 [274.32]	108.75 [276.23]	110.00 [279.40]
AC10-E-2120A	118.00 [299.72]	118.75 [301.63]	120.00 [304.80]
AC10-E-3132A	132.00 [335.28]	132.75 [337.19]	134.00 [340.36]
AC10-E-3144A	144.00 [365.76]	144.75 [367.67]	146.00 [370.84]



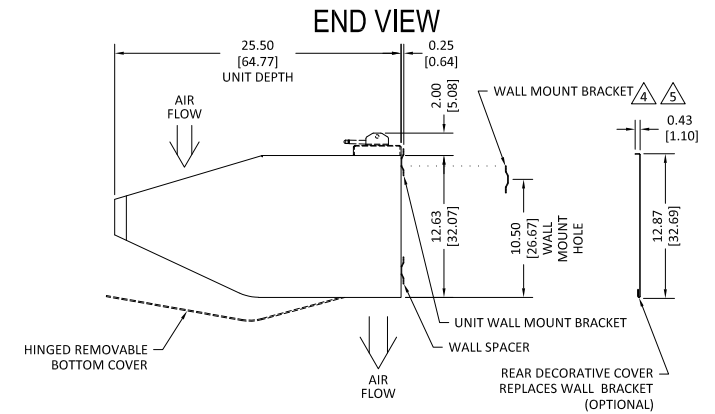
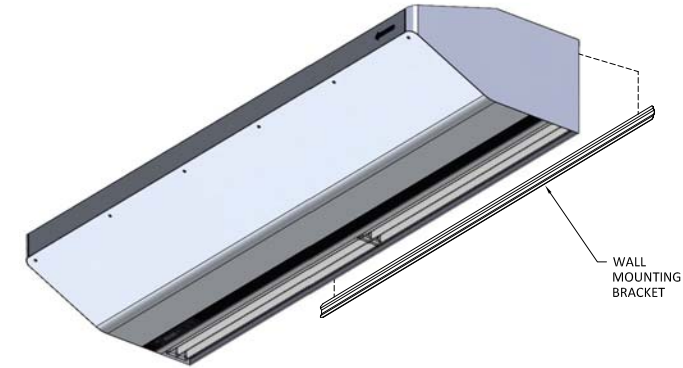
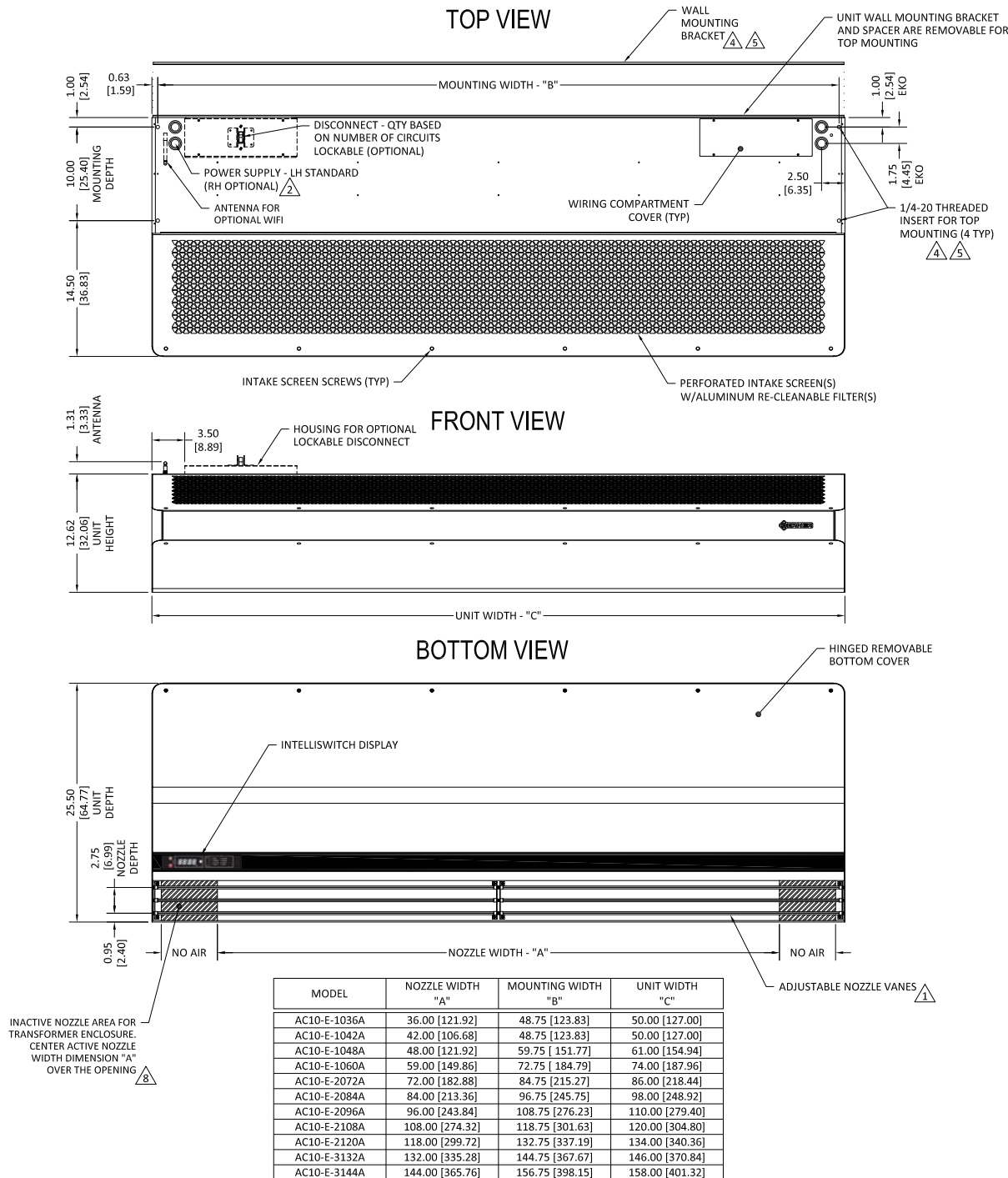
NOTES:

- 1 AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF C.
- 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 – "A" DESIGNATES AMBIENT (UNHEATED) UNIT.
- 7 DIMENSIONS IN INCHES [CENTIMETERS].

SHEET 1 OF 1

PROJECT		REV	A
LOCATION			
ARCHITECT			
ENGINEER			
DWG. NO.	AC10-E-AMB-120	TITLE:	BERNER
DATE	28FEB2023		MODEL AC10-E AIR CURTAIN 120 - 277V AMBIENT (UNHEATED) SYSTEM
BY	D. Johnson		
REPLACES	20FEB2022		
BY	D. Johnson		BERNER INTERNATIONAL CORP. NEW CASTLE, PA

AC10-E AMBIENT (UNHEATED) SYSTEM: 600V



NOTES:

- 1 AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF C.
- 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 - "A" DESIGNATES AMBIENT (UNHEATED) UNIT.
- 7 DIMENSIONS IN INCHES [CENTIMETERS].
- 8 NO AIR FLOW, AREA HOUSES TRANSFORMER. CENTER ACTIVE NOZZLE WIDTH DIMENSION "A" OVER THE OPENING.

SHEET 1 OF 1

PROJECT	REV A	
LOCATION		
ARCHITECT		
ENGINEER		
DWG. NO.	AC10-E-AMB-600	TITLE: BERNER
DATE	28FEB2023	MODEL AC10-E AIR CURTAIN 600V AMBIENT (UNHEATED) SYSTEM
BY	D. Johnson	BERNER INTERNATIONAL CORP. NEW CASTLE, PA
REPLACES	02FEB2022	
BY	D. Johnson	