



ARCHITECTURAL ICON 10

Electric Heated Air Curtain

Data Sheet

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

STANDARD CONSTRUCTION

- 12 3/4" high x 22" 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
- Patented single stage venturi electric heater (open element)
- Alternate kW: see sheet EP-292E
- 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 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 (electric 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	Max. Electric Capacity (kW)	Heater Output (MBH)	Air Temp. Rise (°F)	Net Wt. (lbs)
AI10-E-1036E	36.00	3,552	1,968	1,353	80%	0.45	1 @ 1/2	14	47.8	33°	88
AI10-E-1042E	42.00	3,543	1,773	1,422	82%	0.47	1 @ 1/2	14	47.8	31°	97
AI10-E-1048E	48.00	3,919	1,927	1,766	92%	0.63	1 @ 1/2	14	47.8	25°	113
AI10-E-1060E	59.00	4,087	1,594	1,796	86%	0.59	1 @ 1/2	14	47.8	25°	122
AI10-E-2072E	72.00	3,552	1,968	2,706	80%	0.90	2 @ 1/2	28	95.6	33°	176
AI10-E-2084E	84.00	3,543	1,773	2,844	82%	0.94	2 @ 1/2	28	95.6	31°	194
AI10-E-2096E	96.00	3,919	1,927	3,532	92%	1.26	2 @ 1/2	28	95.6	25°	226
AI10-E-2108E	108.00	4,087	1,727	3,562	86%	1.22	2 @ 1/2	28	95.6	25°	235
AI10-E-2120E	118.00	4,087	1,594	3,592	86%	1.18	2 @ 1/2	28	95.6	25°	244
AI10-E-3132E	132.00	3,919	1,938	4,885	80%	1.71	3 @ 1/2	42	143.3	27°	314
AI10-E-3144E	144.00	3,919	1,927	5,298	92%	1.89	3 @ 1/2	42	143.3	25°	339

See sheets EP-292E-AC & EP-292E-EC for amp draws/total load requirements.
600/3/60 power supply includes extended cabinet, See drawing AI10-E-ELE-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

AI10-E-1 036 E B-100-AC -WCA -SS

Series	Version	# of Motors	Opening Width	Heat	Voltage	Standard kW	Motor Type	Opt. Control	Opt. Cabinet Finish
AI10	E	1, 2, 3	036" - 144"	E=Electric Heated	AC & EC motors B = 208/1/60* J = 240/1/60* V = 220/1/50* K = 120/480 L = 120/600 S = 208/480 M = 208/600 U = 240/480 N = 240/600 X = 208/3/60 Y = 240/3/60 O = 380/3/50** L-XI = 600/3/60 † EC motors only W = 277/1/60 WZ = 480/3/60**	14.0 - 42.0 (140 - 420) See sheet EP-292 for alternate kW code	AC= Standard Motor EC= Optional Motor	WCA= Berner AIR™ smart control	SS=Stainless Steel CC=Custom Color

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 AI10-E-1036E				
Distance from Nozzle (in)	40	80	120	160
Core Velocity (fpm)	1180	895	887	760
Uniformity (%)	83%	84%	92%	97%

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.

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

DS-292E
October, 2023



ARCHITECTURAL ICON 10 - AC MOTORS

Electric Heated Air Curtain

Electrical Performance Sheet

MODEL	kW (code)	Temp Rise °F	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			* Consult Factory 277/1/60 (voltage code W) MOTOR AMP DRAW = *.* each		
			# CKTS	AMPS PER CIRCUIT (including motor)	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT (including motor)	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT (including motor)	BREAKER RATING PER CIRCUIT
AI10-E-1036E AI10-E-1042E AI10-E-1048E AI10-E-1060E	14 (140)	30	2	26.8/44.9	35/60	2	23.8/38.9	30/50	*	*	*
	10 (100)	21	2	20.3/32.0	30/40	1	46.0	60	*	*	*
	8 (080)	18	1	42.8	60	1	37.6	50	*	*	*
	6 (060)	13	1	33.1	45	1	29.3	40	*	*	*
AI10-E-2072E AI10-E-2084E AI10-E-2096E AI10-E-2108E AI10-E-2120E	28 (280)	30	-	N/A	N/A	-	N/A	N/A	*	*	*
	20 (200)	21	-	N/A	N/A	-	N/A	N/A	*	*	*
	16 (160)	18	2	47.1/38.5	60/50	2	41.9/33.3	60/45	*	*	*
	12 (120)	13	2	37.4/28.8	50/40	2	33.6/25.0	45/35	*	*	*
AI10-E-3132E AI10-E-3144E	42 (420)	30	-	N/A	N/A	-	N/A	N/A	*	*	*
	30 (300)	21	-	N/A	N/A	-	N/A	N/A	*	*	*
	24 (240)	18	-	N/A	N/A	-	N/A	N/A	*	*	*
	18 (180)	13	-	N/A	N/A	-	N/A	N/A	*	*	*



ARCHITECTURAL ICON 10 - AC MOTORS

Electric Heated Air Curtain

Electrical Performance Sheet

			208/3/60 (voltage code X) MOTOR AMP DRAW = 4.3 each			240/3/60 (voltage code Y) MOTOR AMP DRAW = 4.3 each			* Consult Factory 480/3/60 (voltage code WZ) - 4 Wire System MOTOR AMP DRAW = *.* each @ 277V			600/3/60 (voltage code L-XI) XFMR 600/120 1.0kVA per MTR @ 1.7 each MOTOR AMP DRAW = 4.4 each @ 120V		
MODEL	kW (code)	Temp Rise °F	# CKTS	AMPS PER CIRCUIT (including motor)	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT (including motor)	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT (including motor)	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT (including motor)	BREAKER RATING PER CIRCUIT
AI10-E-1036E AI10-E-1042E AI10-E-1048E AI10-E-1060E	14 (140)	30	1	43.2	60	1	38.0	50	*	*	*	1	15.2	20
	10 (100)	21	1	32.1	45	1	28.4	40	*	*	*	1	11.3	15
	8 (080)	18	1	26.5	35	1	23.5	30	*	*	*	1	9.4	15
	6 (060)	13	1	21.0	30	1	18.7	25	*	*	*	1	7.5	15
AI10-E-2072E AI10-E-2084E AI10-E-2096E AI10-E-2108E AI10-E-2120E	28 (280)	30	2	47.5/38.9	60/50	2	42.3/33.7	60/45	*	*	*	1	30.3	40
	20 (200)	21	2	36.4/27.8	45/35	2	32.7/24.1	40/35	*	*	*	1	22.6	30
	16 (160)	18	2	30.8/22.2	40/30	1	47.1	60	*	*	*	1	18.8	25
	12 (120)	13	1	41.9	60	1	37.5	50	*	*	*	1	14.9	20
AI10-E-3132E AI10-E-3144E	42 (420)	30	3	51.8/38.9/38.9	60/50/50	3	46.6/33.7/33.7	60/45/45	*	*	*	1	45.5	60
	30 (300)	21	3	40.7/27.8/27.8	50/35/35	2	37.0/48.1	45/60	*	*	*	1	34.0	45
	24 (240)	18	2	35.1/44.4	45/60	2	32.1/38.5	40/50	*	*	*	1	28.2	35
	18 (180)	13	2	29.6/33.3	35/45	2	27.3/28.9	35/40	*	*	*	1	22.4	30



ARCHITECTURAL ICON 10 - AC MOTORS

Electric Heated Air Curtain

Electrical Performance Sheet

			120/1/60 - 480/3/60 (voltage code K) 120V MOTOR AMP DRAW = 8.5 each				208/1/60 - 480/3/60 (voltage code S) 208V MOTOR AMP DRAW = 4.3 each				240/1/60 - 480/3/60 (voltage code U) 240V MOTOR AMP DRAW = 4.3 each				380/3/50 (voltage code O) MOTOR AMP DRAW = 4.3 each					
MODEL	kW (code)	Temp Rise °F	# CKTS	AMPS PER CIRCUIT		BREAKER RATING PER CIRCUIT		# CKTS	AMPS PER CIRCUIT		BREAKER RATING PER CIRCUIT		# CKTS	AMPS PER CIRCUIT		BREAKER RATING PER CIRCUIT		# CKTS	AMPS PER CIRCUIT (including motor)	BREAKER RATING PER CIRCUIT
				120V/1	480V/3	120V/1	480V/3		208V/1	480V/3	208V/1	480V/3		240V/1	480V/3	240V/1	480V/3			
AI10-E-1036E AI10-E-1042E AI10-E-1048E AI10-E-1060E	14 (140)	30	2	8.5	16.8	15	25	2	4.3	16.8	15	25	2	4.3	16.8	15	25	1	25.6	35
	10 (100)	21	2	8.5	12.0	15	15	2	4.3	12.0	15	15	2	4.3	12.0	15	15	1	19.5	25
	8 (080)	18	2	8.5	9.6	15	15	2	4.3	9.6	15	15	2	4.3	9.6	15	15	1	16.5	25
	6 (060)	13	2	8.5	7.2	15	15	2	4.3	7.2	15	15	2	4.3	7.2	15	15	1	13.4	20
AI10-E-2072E AI10-E-2084E AI10-E-2096E AI10-E-2108E AI10-E-2120E	28 (280)	30	2	17.0	33.7	25	45	2	8.6	33.7	15	45	2	8.6	33.7	15	45	2	29.9/21.3	40/30
	20 (200)	21	2	17.0	24.1	25	35	2	8.6	24.1	15	35	2	8.6	24.1	15	35	1	39.0	50
	16 (160)	18	2	17.0	19.2	25	25	2	8.6	19.2	15	25	2	8.6	19.2	15	25	1	32.9	45
	12 (120)	13	2	17.0	14.4	25	20	2	8.6	14.4	15	20	2	8.6	14.4	15	20	1	26.8	35
AI10-E-3132E AI10-E-3144E	42 (420)	30	3	25.5	33.7/16.8	35	45/25	3	12.9	33.7/16.8	20	45/25	3	12.9	33.7/16.8	20	45/25	2	34.2/42.5	45/60
	30 (300)	21	2	25.5	36.1	35	50	2	12.9	36.1	20	50	2	12.9	36.1	20	50	2	28.1/30.4	35/40
	24 (240)	18	2	25.5	28.9	35	40	2	12.9	28.9	20	40	2	12.9	28.9	20	40	1	49.4	60
	18 (180)	13	2	25.5	21.7	35	30	2	12.9	21.7	20	30	2	12.9	21.7	20	30	1	40.2	50



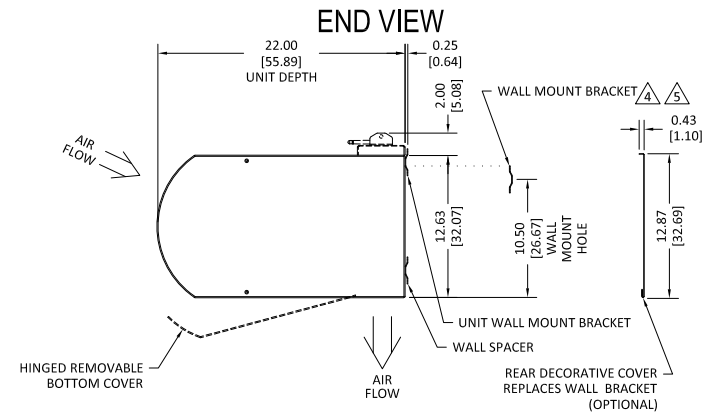
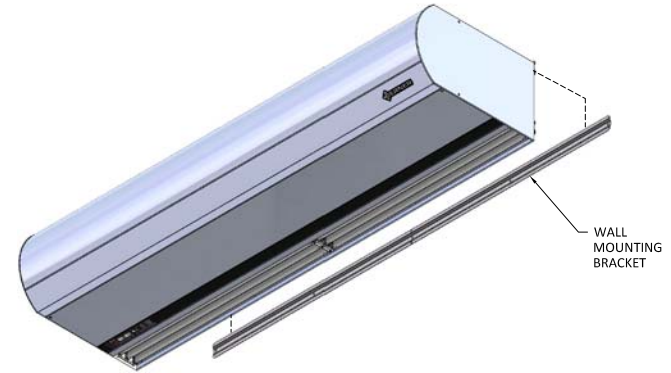
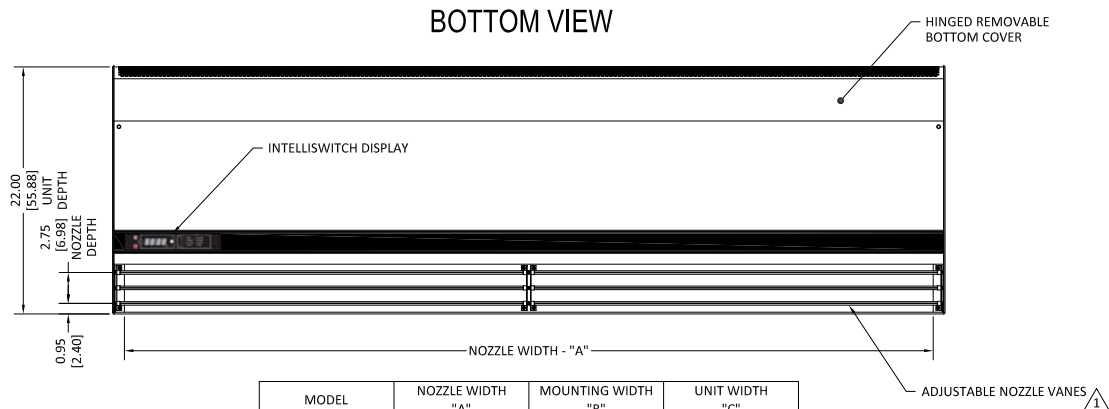
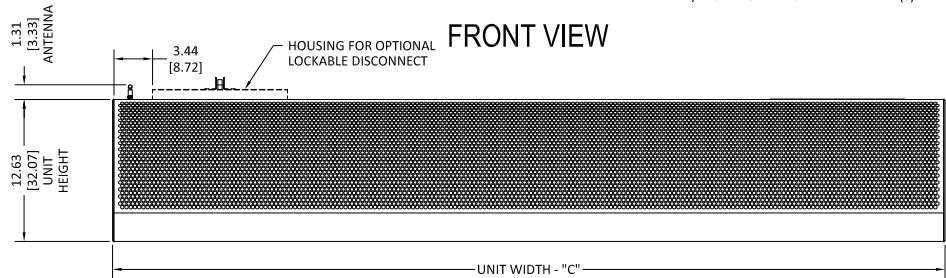
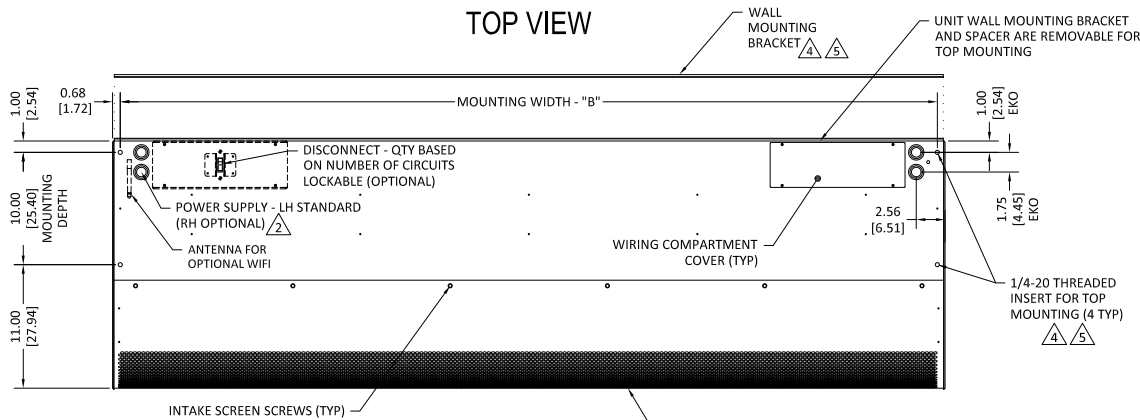
ARCHITECTURAL ICON 10 - AC MOTORS

Electric Heated Air Curtain

Electrical Performance Sheet

			120/1/60 - 600/3/60 (voltage code L) 120V MOTOR AMP DRAW = 8.5 each				208/1/60 - 600/3/60 (voltage code M) 208V MOTOR AMP DRAW = 4.3 each				240/1/60 - 600/3/60 (voltage code N) 240V MOTOR AMP DRAW = 4.3 each						
MODEL	kW (code)	Temp Rise °F	# CKTS	AMPS PER CIRCUIT		BREAKER RATING PER CIRCUIT		# CKTS	AMPS PER CIRCUIT		BREAKER RATING PER CIRCUIT		# CKTS	AMPS PER CIRCUIT		BREAKER RATING PER CIRCUIT	
				120V/1	600V/3	120V/1	600V/3		208V/1	600V/3	208V/1	600V/3		240V/1	600V/3	240V/1	600V/3
AI10-E-1036E AI10-E-1042E AI10-E-1048E AI10-E-1060E	14 (140)	30	2	8.5	13.5	15	20	2	4.3	13.5	15	20	2	4.3	13.5	15	20
	10 (100)	21	2	8.5	9.6	15	15	2	4.3	9.6	15	15	2	4.3	9.6	15	15
	8 (080)	18	2	8.5	7.7	15	15	2	4.3	7.7	15	15	2	4.3	7.7	15	15
	6 (060)	13	2	8.5	5.8	15	15	2	4.3	5.8	15	15	2	4.3	5.8	15	15
AI10-E-2072E AI10-E-2084E AI10-E-2096E AI10-E-2108E AI10-E-2120E	28 (280)	30	2	17.0	26.9	25	35	2	8.6	26.9	15	35	2	8.6	26.9	15	35
	20 (200)	21	2	17.0	19.2	25	25	2	8.6	19.2	15	25	2	8.6	19.2	15	25
	16 (160)	18	2	17.0	15.4	25	20	2	8.6	15.4	15	20	2	8.6	15.4	15	20
	12 (120)	13	2	17.0	11.5	25	15	2	8.6	11.5	15	15	2	8.6	11.5	15	15
AI10-E-3132E AI10-E-3144E	42 (420)	30	2	25.5	40.4	35	60	2	12.9	40.4	20	60	2	12.9	40.4	20	60
	30 (300)	21	2	25.5	28.9	35	40	2	12.9	28.9	20	40	2	12.9	28.9	20	40
	24 (240)	18	2	25.5	23.1	35	30	2	12.9	23.1	20	30	2	12.9	23.1	20	30
	18 (180)	13	2	25.5	17.3	35	25	2	12.9	17.3	20	25	2	12.9	17.3	20	25

AI10-E ELECTRIC HEATED SYSTEM: 208 - 480V



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 - "E" DESIGNATES ELECTRIC HEATED UNIT.
- 7 DIMENSIONS IN INCHES [CENTIMETERS].

SHEET 1 OF 1

PROJECT	REV -	
LOCATION		
ARCHITECT		
ENGINEER		
DWG. NO.	AI10-E-ELE-208	TITLE: BERNER MODEL AI10-E AIR CURTAIN 208-480V ELECTRIC HEATED SYSTEM
DATE	24FEB2023	
BY	D. Johnson	BERNER INTERNATIONAL CORP. NEW CASTLE, PA
REPLACES	-	
BY	-	

MODEL	NOZZLE WIDTH "A"	MOUNTING WIDTH "B"	UNIT WIDTH "C"
AI10-E-1036E	36.00 [91.44]	36.75 [93.35]	38.13 [96.84]
AI10-E-1042E	42.00 [106.68]	42.75 [108.59]	44.13 [112.08]
AI10-E-1048E	48.00 [121.92]	59.75 [151.77]	61.13 [155.26]
AI10-E-1060E	59.00 [149.86]	60.75 [154.31]	62.13 [157.80]
AI10-E-2072E	72.00 [182.88]	72.75 [184.79]	74.13 [188.28]
AI10-E-2084E	84.00 [213.36]	84.75 [215.27]	86.13 [218.76]
AI10-E-2096E	96.00 [243.84]	96.75 [245.75]	98.13 [249.24]
AI10-E-2108E	108.00 [274.32]	108.75 [276.23]	110.13 [279.72]
AI10-E-2120E	118.00 [299.72]	118.75 [301.63]	120.13 [305.12]
AI10-E-3132E	132.00 [335.28]	132.75 [337.19]	134.13 [340.68]
AI10-E-3144E	144.00 [365.76]	144.75 [367.67]	146.13 [371.16]