



ARCHITECTURAL CONTOUR 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 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
- Patented single stage venturi electric heater (open element)
- Alternate kW: see sheet EP-272E
- 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 Corporation 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 (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.

Model AC10-E-2060E is not licensed to bear the AMCA seal.

2 Year Limited Warranty



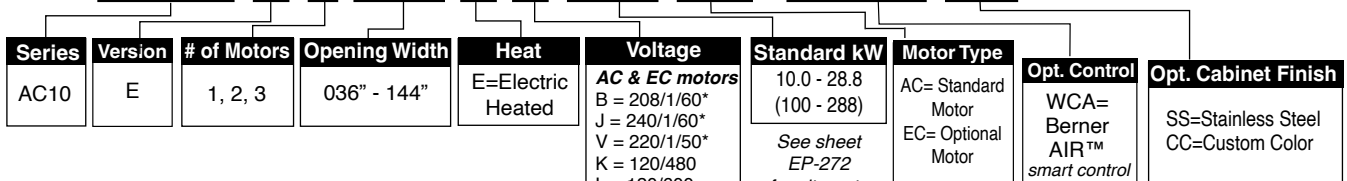
MODEL	Nozzle Width (in)	Max Vel. at Nozzle (fpm)	Avg. Outlet Vel. (fpm)	Air Volume (cfm)	Outlet Vel. Uniformity	Power Rating (kW)	Motor(s) @ hp	Max. Electric Capacity (kW)	Heater Output (MBH)	Air Temp. Rise (°F)	Net Wt. (lbs)
AC10-E-1036E	36.00	3,552	1,968	1,353	80%	0.45	1 @ 1/2	14	47.8	33°	88
AC10-E-1042E	42.00	3,543	1,773	1,422	82%	0.47	1 @ 1/2	14	47.8	31°	97
AC10-E-1048E	48.00	3,336	1,862	1,707	86%	0.59	1 @ 1/2	14	47.8	26°	113
AC10-E-2060E	60.00	3,537	1,855	2,125	80%	0.77	2 @ 1/2	21	71.7	31°	145
AC10-E-2072E	72.00	3,552	1,968	2,706	80%	0.90	2 @ 1/2	28	95.6	33°	176
AC10-E-2084E	84.00	3,543	1,773	2,844	82%	0.94	2 @ 1/2	28	95.6	31°	194
AC10-E-2096E	96.00	3,336	1,862	3,414	86%	1.18	2 @ 1/2	28	95.6	26°	226
AC10-E-3108E	108.00	3,552	1,968	4,059	80%	1.34	3 @ 1/2	42	143.3	33°	264
AC10-E-3120E	118.00	3,552	1,862	4,197	80%	1.39	3 @ 1/2	42	143.3	31°	282
AC10-E-3132E	132.00	3,552	1,692	4,266	82%	1.41	3 @ 1/2	42	143.3	31°	291
AC10-E-3144E	144.00	3,336	1,862	5,121	86%	1.76	3 @ 1/2	42	143.3	26°	339

See sheet EP-272E for amp draws/total load requirements. 600/3/60 power supply includes extended cabinet, See drawing AC10-E-ELE-600

NOTE: AC10-E-2060E - AMCA pending.

MODEL NUMBER CONFIGURATION

AC10-E-1 036 E B-100-AC -WCA -SS



for Standard offering, leave options (Opt.) blank

*B - Max 16.2 kW
*J and V - Max 16.2 kW or 20 kW based on # motors
*W - Max 20 kW
**Power Supply requires 4-wire system (w/ neutral)
† Cabinet width increases for transformer
See sheet EP-272 for available lengths and voltages

Sound level measured 10' (3m) from the unit in free field:
1 motor: Min./Max. Speed: 53/55 dBA
2 motors: Min./Max. Speed: 56/58 dBA
3 motors: Min./Max. Speed: 59/61 dBA
Sound data is not AMCA certified.

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.



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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 = 3.6 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
AC10-E-1036E AC10-E-1042E AC10-E-1048E	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	*	*	*
AC10-E-2060E	21 (210)	30	-	N/A	N/A	-	N/A	N/A	*	*	*
	15 (150)	21	2	32.6/48.1	40/60	2	29.4/41.7	40/60	*	*	*
	12 (120)	18	2	27.8/38.5	35/50	2	25.3/33.3	35/45	*	*	*
	9 (090)	13	2	23.0/28.8	30/40	1	46.1	60	*	*	*
AC10-E-2072E AC10-E-2084E AC10-E-2096E	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	*	*	*
AC10-E-3108E AC10-E-3120E AC10-E-3132E AC10-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 CONTOUR 10

Electric Heated Air Curtain

Electrical Performance Sheet

MODEL	kW (code)	Temp Rise °F	# CKTS	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 = 2.2 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			
				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
AC10-E-1036E AC10-E-1042E AC10-E-1048E	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
AC10-E-2060E	21 (210)	30	2	28.0/38.9	35/50	2	25.4/33.7	35/45	*	*	*	-	23.6	30
	15 (150)	21	1	50.2	60	1	44.7	60	*	*	*	-	17.8	25
	12 (120)	18	1	41.9	60	1	37.5	50	*	*	*	-	14.9	20
	9 (090)	13	1	33.6	45	1	30.3	40	*	*	*	-	12.1	15
AC10-E-2072E AC10-E-2084E AC10-E-2096E	28 (280)	30	2	47.5/38.9	60/50	2	42.3/33.7	60/45	*	*	*	-	30.3	40
	20 (200)	21	2	36.4/27.8	45/35	2	32.7/24.1	40/35	*	*	*	-	22.6	30
	16 (160)	18	2	30.8/22.2	40/30	1	47.1	60	*	*	*	-	18.8	25
	12 (120)	13	1	41.9	60	1	37.5	50	*	*	*	-	14.9	20
AC10-E-3108E AC10-E-3120E AC10-E-3132E AC10-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	*	*	*	-	45.5	60
	30 (300)	21	3	40.7/27.8/27.8	50/35/35	2	37.0/48.1	45/60	*	*	*	-	34.0	45
	24 (240)	18	2	35.1/44.4	45/60	2	32.1/38.5	40/50	*	*	*	-	28.2	35
	18 (180)	13	2	29.6/33.3	35/45	2	27.3/28.9	35/40	*	*	*	-	22.4	30



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Electrical Performance Sheet

MODEL	kW (code)	Temp Rise °F	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					
			# 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			
AC10-E-1036E AC10-E-1042E AC10-E-1048E	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
AC10-E-2060E	21 (210)	30	2	17.0	25.3	25	35	2	8.6	25.3	15	35	2	8.6	25.3	15	35	1	40.5	50
	15 (150)	21	2	17.0	18.0	25	25	2	8.6	18.0	15	25	2	8.6	18.0	15	25	1	31.4	40
	12 (120)	18	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
	9 (090)	13	2	17.0	10.8	25	15	2	8.6	10.8	15	15	2	8.6	10.8	15	15	1	22.3	30
AC10-E-2072E AC10-E-2084E AC10-E-2096E	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
AC10-E-3108E AC10-E-3120E AC10-E-3132E AC10-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	43.3/15.2	60/20
	24 (240)	18	2	25.5	28.9	35	40	2	12.9	28.9	20	40	2	12.9	28.9	20	40	2	37.2/12.2	45/20
	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



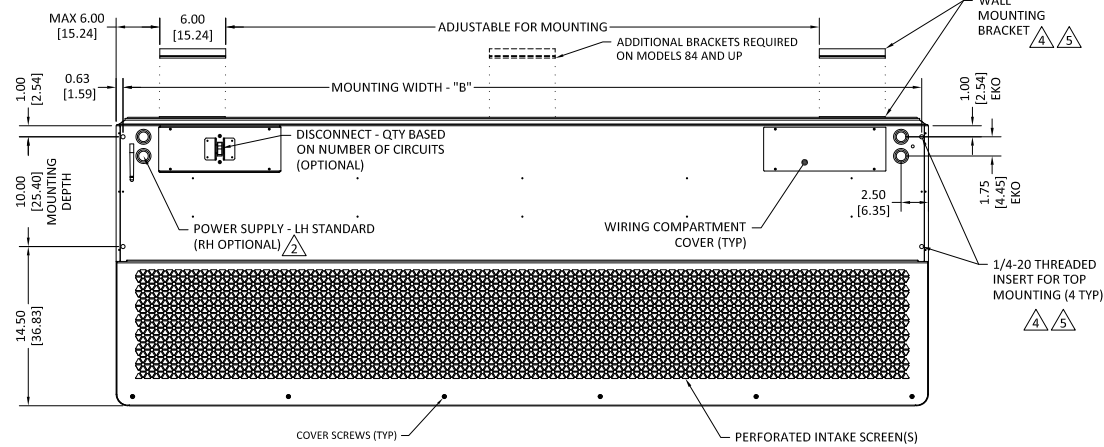
ARCHITECTURAL CONTOUR 10

Electric Heated Air Curtain
Electrical Performance Sheet

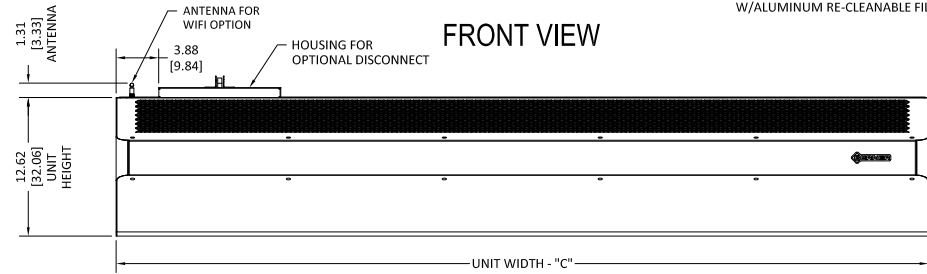
MODEL	kW (code)	Temp Rise °F	# CKTS	120V/160 - 600V/3/60 (voltage code L) 120V MOTOR AMP DRAW = 8.5 each				208V/160 - 600V/3/60 (voltage code M) 208V MOTOR AMP DRAW = 4.3 each				240V/160 - 600V/3/60 (voltage code N) 240V MOTOR AMP DRAW = 4.3 each					
				AMPS PER CIRCUIT		BREAKER RATING PER CIRCUIT		AMPS PER CIRCUIT		BREAKER RATING PER CIRCUIT		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		
AC10-E-1036E AC10-E-1042E AC10-E-1048E	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
AC10-E-2060E	21 (210)	30	2	17.0	20.2	25	30	2	8.6	20.2	15	30	2	8.6	20.2	15	30
	15 (150)	21	2	17.0	14.4	25	20	2	8.6	14.4	15	20	2	8.6	14.4	15	20
	12 (120)	18	2	17.0	11.5	25	15	2	8.6	11.5	15	15	2	8.6	11.5	15	15
	9 (090)	13	2	17.0	8.7	25	15	2	8.6	8.7	15	15	2	8.6	8.7	15	15
AC10-E-2072E AC10-E-2084E AC10-E-2096E	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
AC10-E-3108E AC10-E-3120E AC10-E-3132E AC10-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

AC10-E ELECTRIC HEATED SYSTEM: 208 - 480V

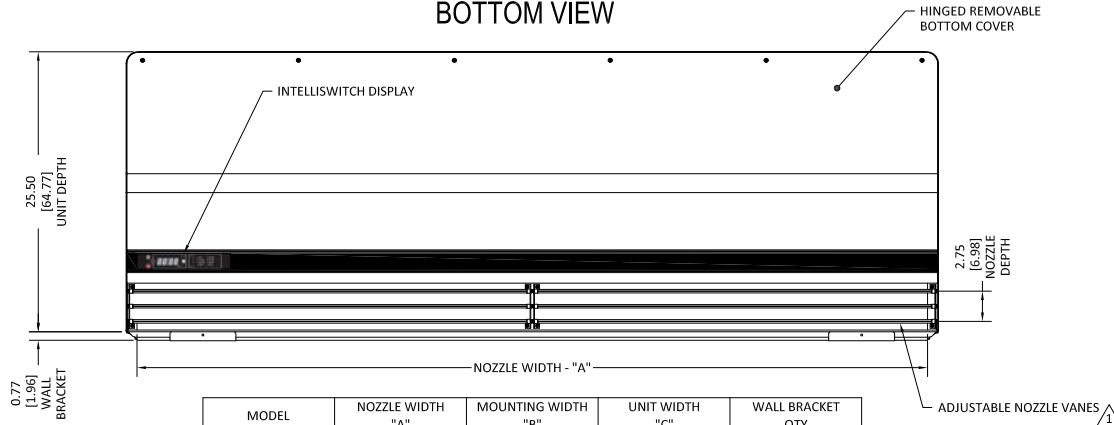
TOP VIEW



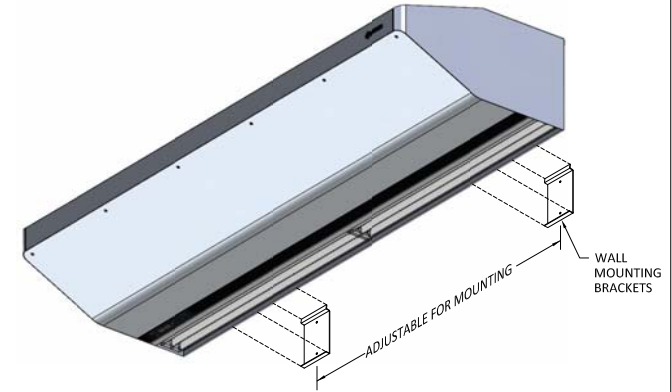
FRONT VIEW



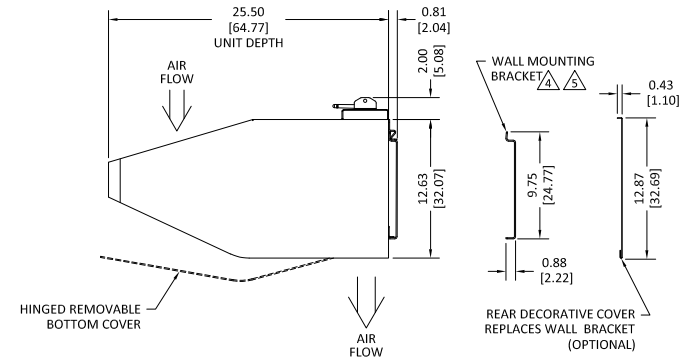
BOTTOM VIEW



MODEL	NOZZLE WIDTH "A"	MOUNTING WIDTH "B"	UNIT WIDTH "C"	WALL BRACKET QTY
AC10-E-1036E	36.00 [91.44]	36.75 [93.35]	38.00 [96.52]	2
AC10-E-1042E	42.00 [106.68]	42.75 [108.59]	44.00 [111.76]	2
AC10-E-1048E	48.00 [121.92]	48.75 [123.83]	50.00 [127.00]	2
AC10-E-2060E	60.00 [152.40]	60.75 [154.31]	62.00 [157.48]	2
AC10-E-2072E	72.00 [182.88]	72.75 [184.79]	74.00 [187.96]	2
AC10-E-2084E	84.00 [213.36]	84.75 [215.27]	86.00 [218.44]	3
AC10-E-2096E	96.00 [243.84]	96.75 [245.75]	98.00 [248.92]	3
AC10-E-3108E	108.00 [274.32]	108.75 [276.23]	110.00 [279.40]	3
AC10-E-3120E	118.00 [299.72]	118.75 [301.63]	120.00 [304.80]	3
AC10-E-3132E	132.00 [335.28]	132.75 [337.19]	134.00 [340.36]	3
AC10-E-3144E	144.00 [365.76]	144.75 [367.67]	146.00 [370.84]	4



END VIEW



NOTES:

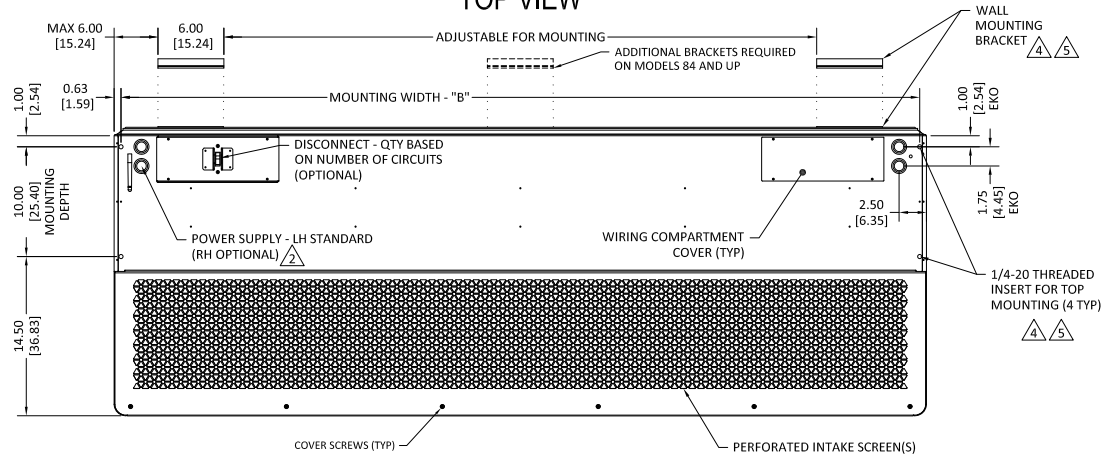
- 1 AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF C.
- 2 ELECTRICAL CONNECTIONS TO BE FLEXIBLE.
- 3 FIELD VERIFY DIMENSIONS.
- 4 ANCHORS TO SUPPORTING STRUCTURE BY OTHERS.
- 5 ADEQUACY OF SUPPORTING STRUCTURE IS TO BE VERIFIED BY A PROFESSIONAL STRUCTURAL ENGINEER.
- 6 THE LAST CHARACTER IN THE MODEL NUMBER - "E" DESIGNATES ELECTRIC HEATED UNIT.
- 7 DIMENSIONS IN INCHES [CENTIMETERS].

SHEET 1 OF 1

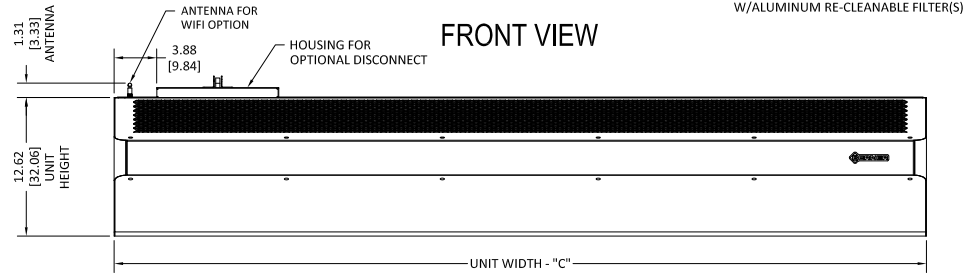
PROJECT	REV	TITLE:
LOCATION		BERNER MODEL AC10-E AIR CURTAIN 208 - 480V ELECTRIC HEATED SYSTEM
ARCHITECT		
ENGINEER		BERNER INTERNATIONAL CORP. NEW CASTLE, PA.
DWG. NO.	AC10-E-ELE	
DATE	02FEB2022	
BY	D. Johnson	
REPLACES	21JAN2022	
BY	D. Johnson	

AC10-E ELECTRIC HEATED SYSTEM: 600V

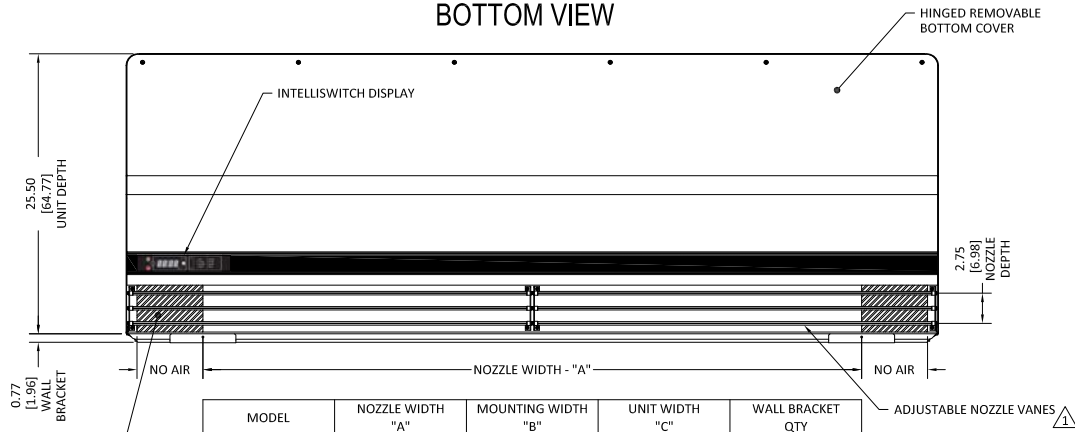
TOP VIEW



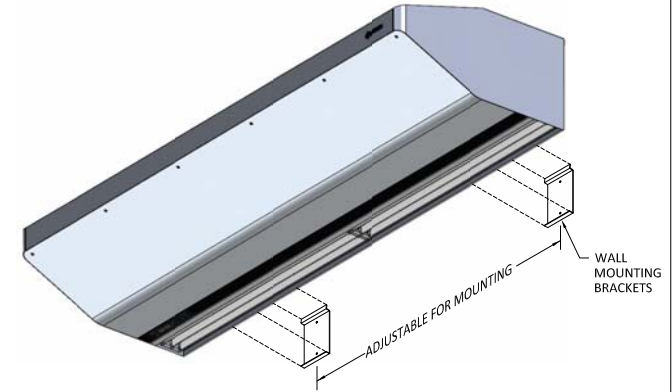
FRONT VIEW



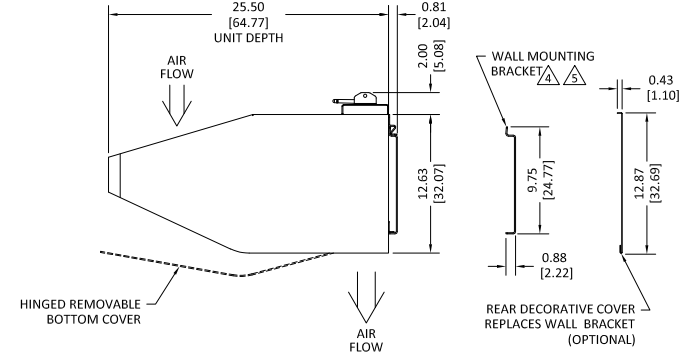
BOTTOM VIEW



MODEL	NOZZLE WIDTH "A"	MOUNTING WIDTH "B"	UNIT WIDTH "C"	WALL BRACKET QTY
AC10-E-1036E	36.00 [121.92]	48.75 [123.83]	50.00 [127.00]	2
AC10-E-1042E	42.00 [106.68]	48.75 [123.83]	50.00 [127.00]	2
AC10-E-1048E	48.00 [121.92]	60.75 [154.31]	62.00 [157.48]	2
AC10-E-2060E	60.00 [152.40]	72.75 [184.79]	74.00 [187.96]	2
AC10-E-2072E	72.00 [182.88]	84.75 [215.27]	86.00 [218.44]	2
AC10-E-2084E	84.00 [213.36]	96.75 [245.75]	98.00 [248.92]	3
AC10-E-2096E	96.00 [243.84]	108.75 [276.23]	110.00 [279.40]	3
AC10-E-3108E	108.00 [274.32]	118.75 [301.63]	120.00 [304.80]	3
AC10-E-3120E	118.00 [299.72]	132.75 [337.19]	134.00 [340.36]	3
AC10-E-3132E	132.00 [335.28]	144.75 [367.67]	146.00 [370.84]	3
AC10-E-3144E	144.00 [365.76]	156.75 [398.15]	158.00 [401.32]	4



END VIEW



NOTES:

- ⚠️ AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF ϕ .
- ⚠️ 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 - "E" DESIGNATES ELECTRIC HEATED UNIT.
- ⚠️ DIMENSIONS IN INCHES [CENTIMETERS].
- ⚠️ NO AIR FLOW, AREA HOUSES TRANSFORMER. CENTER ACTIVE NOZZLE WIDTH DIMENSION "A" OVER THE OPENING.

SHEET 1 OF 1

PROJECT	REV	
LOCATION		
ARCHITECT		
ENGINEER		
DWG. NO.	AC10-E-ELE-600	TITLE: BERNER MODEL AC10-E AIR CURTAIN 600V ELECTRIC HEATED SYSTEM
DATE	02FEB2022	
BY	D. Johnson	
REPLACES	28JAN2022	
BY	D. Johnson	BERNER INTERNATIONAL CORP. NEW CASTLE, PA.

INACTIVE NOZZLE AREA FOR TRANSFORMER ENCLOSURE. CENTER ACTIVE NOZZLE WIDTH DIMENSION "A" OVER THE OPENING