



# ARCHITECTURAL RECESSED 16

## Electric Heated Air Curtain

### Data Sheet

For Mounting Heights To 16' (environmental separation)

#### STANDARD CONSTRUCTION

- 15" high x 26" deep
- 1 hp motor(s) - two speeds
- Factory installed Intelliswitch digital controller
- White aluminum bottom panel
- Top Mounting only
- High efficiency, low noise Pro-V Nozzle
- Patented venturi open helical element with point suspension
- Alternate kW: see sheet EP-252
- Filter (washable)

#### OPTIONS

- Bottom panel finish: Custom Color or Stainless
- Berner AIR™ (smart controller & app, includes BACnet)

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)
ARC16-1036E	36.00	6,250	2,368	2,072	90%	0.91	1 @ 1	14.0	47.8	21°	108
ARC16-1042E	42.00	5,594	2,208	2,254	88%	0.96	1 @ 1	14.0	47.8	20°	115
ARC16-1048E	48.00	5,627	2,015	2,351	77%	1.09	1 @ 1	14.0	47.8	19°	121
ARC16-1060E	66.00	5,401	1,502	2,410	73%	1.12	1 @ 1	14.0	47.8	18°	141
ARC16-2060E	66.00	4,440	2,446	3,924	92%	1.79	2 @ 1	28.0	95.6	22°	185
ARC16-2072E	72.00	6,250	2,368	4,144	90%	1.82	2 @ 1	28.0	95.6	21°	195
ARC16-2084E	84.00	5,594	2,208	4,508	88%	1.92	2 @ 1	28.0	95.6	20°	208
ARC16-2096E	99.00	5,627	1,954	4,702	77%	2.18	2 @ 1	28.0	95.6	19°	219
ARC16-3096E	99.00	6,250	2,492	5,996	90%	2.70	3 @ 1	42.0	143.3	22°	265
ARC16-2108E	108.00	5,401	1,814	4,761	73%	2.21	2 @ 1	28.0	95.6	19°	237
ARC16-3108E	108.00	6,250	2,368	6,216	90%	2.73	3 @ 1	42.0	143.3	21°	293
ARC16-2120E	117.00	5,401	1,695	4,820	73%	2.24	2 @ 1	28.0	95.6	18°	255
ARC16-3120E	117.00	5,594	2,314	6,580	88%	2.83	3 @ 1	42.0	143.3	20°	305
ARC16-3132E	132.00	5,627	2,138	6,859	77%	3.01	3 @ 1	42.0	143.3	19°	317
ARC16-3144E	144.00	5,627	2,015	7,053	77%	3.27	3 @ 1	42.0	143.3	19°	328
ARC16-4144E	144.00	6,250	2,368	8,288	90%	3.64	4 @ 1	56.0	191.1	21°	390

#### NOTES:

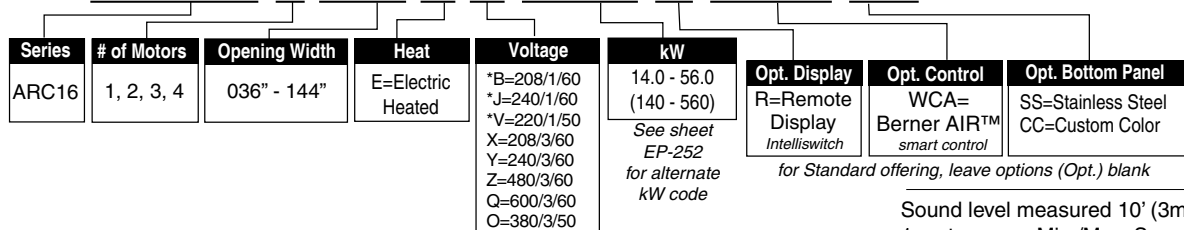
1. Operation at 50 Hz will generate approximately a 17% reduction in air performance.
2. Performance data based on AMCA licensed data from unheated units.
3. Single Point Power Connection – consult factory

Berner does not recommend ARC16-1060E, ARC16-2108E and ARC16-2120E, exists only as an equivalent to competitors' models.

See sheet EP-252 for amp draws/total load requirements and alternate kW.

### MODEL NUMBER CONFIGURATION

## ARC16-1 036 E B-140 -R-WCA-SS



\*Max 16kW  
See sheet EP-252 for available lengths and voltages

See sheet EP-252 for alternate kW code

for Standard offering, leave options (Opt.) blank

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

1 motor:	Min./Max. Speed:	62/65 dBA
2 motors:	Min./Max. Speed:	65/68 dBA
3 motors:	Min./Max. Speed:	67/70 dBA
4 motors:	Min./Max. Speed:	68/71 dBA

Sound data is not AMCA certified.

Berner reserves the right to alter specifications without prior notice.



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## Electric Heated Air Curtain

### Electrical Performance Sheet

MODEL	kW (suffix)	Temp Rise °F	208/1/60 (voltage code B) MOTOR AMP DRAW = 6.5 each			240/1/60 (voltage code J) or 220/1/50 (voltage code V) MOTOR AMP DRAW = 6.5 each			208/3/60 (voltage code X) MOTOR AMP DRAW = 6.5 each			240/3/60 (voltage code Y) MOTOR AMP DRAW = 6.5 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	# CKTS	AMPS PER CIRCUIT (including motor)	BREAKER RATING PER CIRCUIT
ARC16-1036E ARC16-1042E ARC16-1048E ARC16-1060E	14 (140)	20	2	29.0/44.9	40/60	2	26.0/38.9	35/50	1	45.4	60	1	40.2	60
	10 (100)	14	2	22.5/32.0	30/40	1	48.2	60	1	34.3	45	1	30.6	40
	8 (080)	11	1	45.0	60	1	39.8	50	1	28.7	40	1	25.7	35
	6 (060)	8	1	35.3	45	1	31.5	40	1	23.2	30	1	20.9	30
ARC16-2060E ARC16-2072E ARC16-2084E ARC16-2096E ARC16-2108E ARC16-2120E	28 (280)	20	-	N/A	N/A	-	N/A	N/A	2	51.9/38.9	60/50	2	46.7/33.7	60/45
	20 (200)	14	-	N/A	N/A	-	N/A	N/A	2	40.8/27.8	50/35	2	37.1/24.1	45/35
	16 (160)	11	2	51.5/38.5	60/50	2	46.3/33.3	60/45	2	35.2/22.2	45/30	1	51.5	60
	12 (120)	8	2	41.8/28.8	60/40	2	38.0/25.0	50/35	1	46.3	60	1	41.9	60
ARC16-3096E ARC16-3108E ARC16-3120E ARC16-3132E ARC16-3144E	42 (420)	20	-	N/A	N/A	-	N/A	N/A	3	45.4/45.4/45.4	60/60/60	3	46.7/40.2/33.7	60/60/45
	30 (300)	14	-	N/A	N/A	-	N/A	N/A	3	47.3/27.8/27.8	60/35/35	2	43.6/48.1	60/60
	24 (240)	11	-	N/A	N/A	-	N/A	N/A	2	41.7/44.4	50/60	2	38.7/38.5	50/50
	18 (180)	8	-	N/A	N/A	-	N/A	N/A	2	36.2/33.3	45/45	2	33.9/28.9	40/40
ARC16-4144E	56 (560)	20	-	N/A	N/A	-	N/A	N/A	4	51.9/38.9/51.9/38.9	60/50/60/50	4	46.7/33.7/46.7/33.7	60/45/60/45
	40 (400)	14	-	N/A	N/A	-	N/A	N/A	4	40.8/27.8/40.8/27.8	50/35/50/35	3	50.1/24.1/48.1	60/35/60
	32 (320)	11	-	N/A	N/A	-	N/A	N/A	3	35.2/35.2/44.4	45/45/60	2	51.5/51.5	60/60
	24 (240)	8	-	N/A	N/A	-	N/A	N/A	2	46.3/46.3	60/60	2	41.9/41.9	60/60

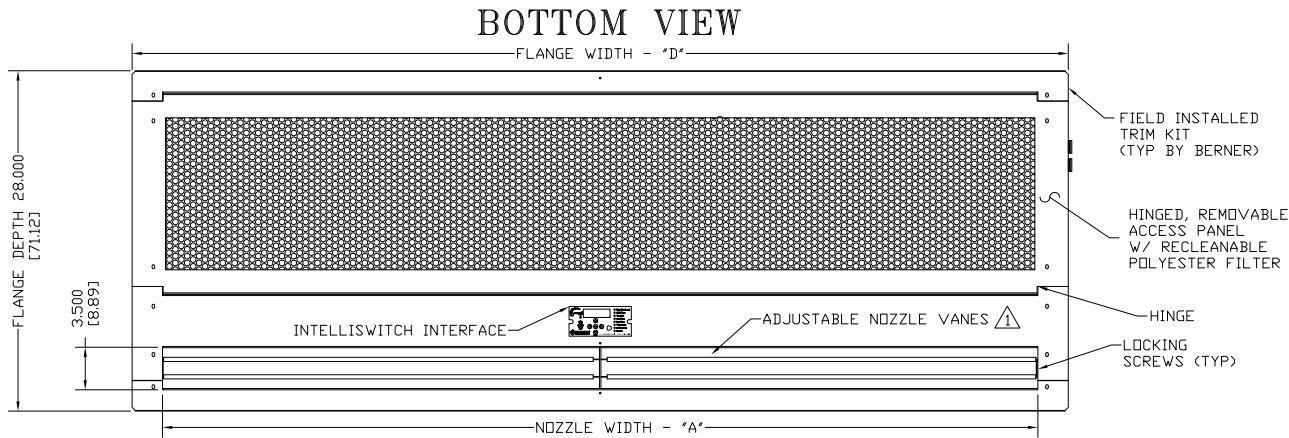
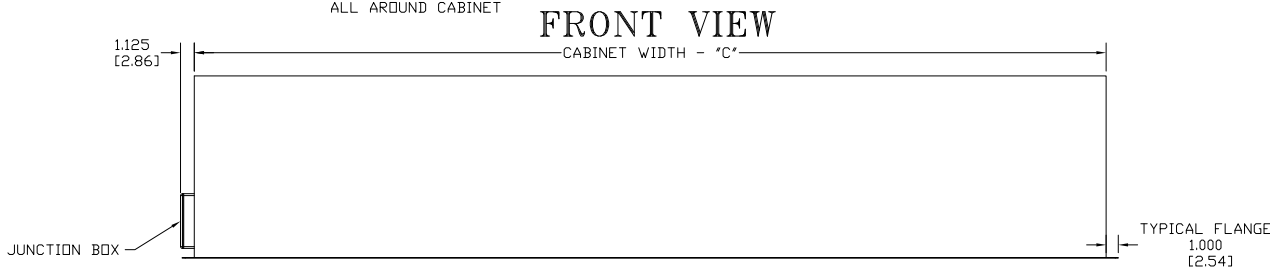
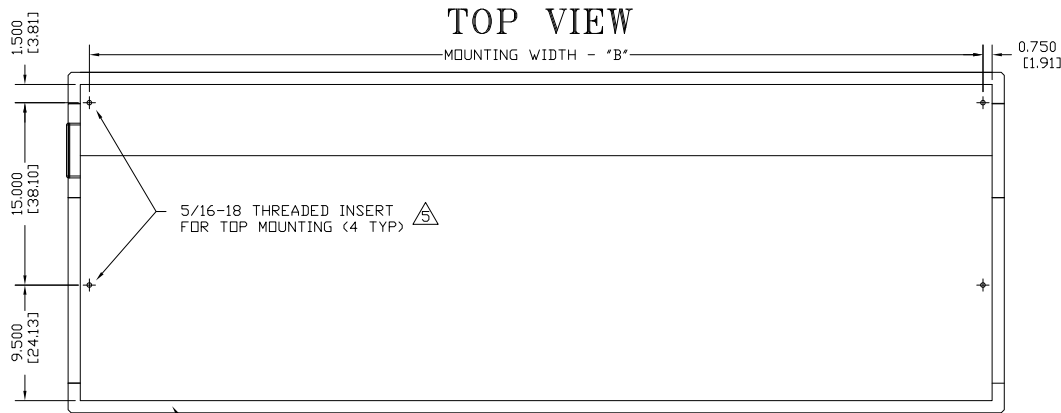


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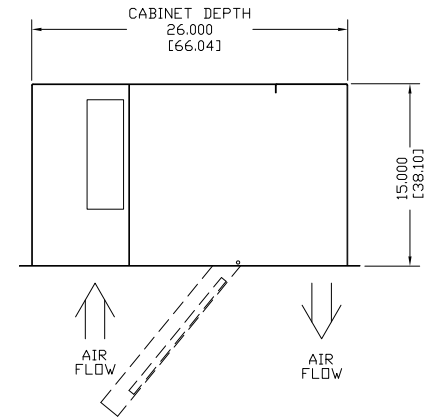
**Electric Heated Air Curtain  
Electrical Performance Sheet**

MODEL	kW (suffix)	Temp Rise °F	480/3/60 (voltage code Z) MOTOR AMP DRAW = 3.2 each			600/3/60 (voltage code Q) MOTOR AMP DRAW = 2.0 each			380/3/50 (voltage code O) MOTOR AMP DRAW = 6.5 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
ARC16-1036E ARC16-1042E ARC16-1048E ARC16-1060E	14 (140)	20	1	20.0	25	1	15.5	20	1	27.8	35
	10 (100)	14	1	15.2	20	1	11.6	15	1	21.7	30
	8 (080)	11	1	12.8	20	1	9.7	15	1	18.7	25
	6 (060)	8	1	10.4	15	1	7.8	15	1	15.6	20
ARC16-2060E ARC16-2072E ARC16-2084E ARC16-2096E ARC16-2108E ARC16-2120E	28 (280)	20	1	40.1	50	1	30.9	40	2	34.3/21.3	45/30
	20 (200)	14	1	30.5	40	1	23.2	30	1	43.4	60
	16 (160)	11	1	25.6	35	1	19.4	25	1	37.3	50
	12 (120)	8	1	20.8	30	1	15.5	20	1	31.2	40
ARC16-3096E ARC16-3108E ARC16-3120E ARC16-3132E ARC16-3144E	42 (420)	20	2	26.4/33.7	35/45	1	46.4	60	2	40.8/42.5	50/60
	30 (300)	14	1	45.7	60	1	34.9	45	2	34.7/30.4	45/40
	24 (240)	11	1	38.5	50	1	29.1	40	2	43.8/12.2	60/20
	18 (180)	8	1	31.3	40	1	23.3	30	1	46.8	60
ARC16-4144E	56 (560)	20	2	46.5/33.7	60/45	2	34.9/26.9	45/40	3	47.3/42.5/21.3	60/60/30
	40 (400)	14	2	36.9/24.1	45/35	1	46.5	60	2	41.2/45.6	50/60
	32 (320)	11	1	51.3	60	1	38.8	50	2	38.2/36.5	45/50
	24 (240)	8	1	41.7	50	1	31.1	40	2	44.2/18.2	60/25

# ARC16 IN-CEILING MOUNT ELECTRIC HEATED



## 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 LETTER "E" IN MODEL NUMBER DESIGNATES ELECTRIC HEATED UNIT.
- ⚠ DIMENSIONS IN INCHES [CENTIMETERS].

MODEL	NOZZLE WIDTH "A"	MOUNTING WIDTH "B"	CABINET WIDTH "C"	FLANGE WIDTH "D"	RECOMMENDED ROUGH OPENING DEPTH x WIDTH
ARC16-1036E	36.00 [91.44]	37.50 [95.25]	39.00 [99.06]	41.00 [104.14]	27.00 x 40.00 [68.58 x 101.60]
ARC16-1042E	42.00 [106.68]	43.50 [110.49]	45.00 [114.30]	47.00 [119.38]	27.00 x 46.00 [68.58 x 116.84]
ARC16-1048E	48.00 [121.92]	49.50 [125.73]	51.00 [129.54]	53.00 [134.62]	27.00 x 52.00 [68.58 x 132.08]
ARC16-1060E/2060E	66.00 [167.64]	67.50 [171.45]	69.00 [175.26]	71.00 [180.34]	27.00 x 70.00 [68.58 x 177.80]
ARC16-2072E	72.00 [182.88]	73.50 [186.69]	75.00 [190.50]	77.00 [195.58]	27.00 x 76.00 [68.58 x 193.04]
ARC16-2084E	84.00 [213.36]	85.50 [217.17]	87.00 [220.98]	89.00 [226.06]	27.00 x 88.00 [68.58 x 223.52]
ARC16-2096E/3096E	99.00 [251.46]	100.50 [255.27]	102.00 [259.08]	104.00 [264.16]	27.00 x 103.00 [68.58 x 261.62]
ARC16-2108E/3108E	108.00 [274.32]	109.50 [278.13]	111.00 [281.94]	113.00 [287.02]	27.00 x 112.00 [68.58 x 284.48]
ARC16-2120E/3120E	117.00 [297.18]	118.50 [300.99]	120.00 [304.80]	122.00 [309.88]	27.00 x 121.00 [68.58 x 307.34]
ARC16-3132E	132.00 [335.28]	133.50 [339.09]	135.00 [342.90]	137.00 [347.98]	27.00 x 136.00 [68.58 x 345.44]
ARC16-3144E/4144E	144.00 [365.76]	145.50 [369.57]	147.00 [373.38]	149.00 [378.46]	27.00 x 148.00 [68.58 x 375.92]

PROJECT			
LOCATION			
ARCHITECT			
ENGINEER			REV. --
DWG. NO.	ARC16-ELE	TITLE:	<b>BERNER</b>
DATE	22SEPT14	MODEL ARC16 AIR CURTAIN	
BY	S. Beil	ELECTRIC HEATED SYSTEM	
REPLACES	-	BERNER INTERNATIONAL CORP. NEW CASTLE, PA.	
BY	-		