



ARCHITECTURAL RECESSED 12

Hot Water Heated Air Curtain

Data Sheet

For Mounting Heights To 12' (environmental separation)

Energy Codes ASHRAE 90.1-2019, IECC 2018, and ASHRAE 189.1

STANDARD CONSTRUCTION

- 15" high x 26" deep
- ½ hp motor(s) - ten speeds
- Factory installed Intelliswitch digital controller
- White aluminum bottom panel
- Top Mounting only
- High efficiency, low noise Pro-V Nozzle
- Factory installed coil
- Filter (washable)

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.

Models ARD12-1060W, ARD12-2108W and ARD12-2120W are not licensed to bear the AMCA seal.

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	Coil Output (MBH)	Entering / Leaving Water Temp. (°F)	Water Flow (GPM)	Fluid Pressure Drop (FT. WG.)	Air Temp. Rise (°F)	Net Wt. (lbs)
ARD12-1036W	36.00	4,830	1,439	1,259	75%	0.54	1 @ 1/2	32.0	180° / 165°	4.5	0.6	23°	134
ARD12-1042W	42.00	5,773	1,233	1,259	66%	0.62	1 @ 1/2	36.1	180° / 167°	5.5	0.9	26°	144
ARD12-1048W	48.00	7,300	1,079	1,259	77%	0.59	1 @ 1/2	39.3	180° / 167°	6.0	1.1	28°	153
ARD12-1060W	66.00	4,828	1,027	1,647	83%	0.52	1 @ 1/2	51.8	180° / 162°	6.0	1.2	29°	182
ARD12-2060W	66.00	3,982	1,408	2,258	76%	0.89	2 @ 1/2	62.8	180° / 164°	8.0	2.1	25°	219
ARD12-2072W	72.00	4,830	1,439	2,518	75%	1.08	2 @ 1/2	70.6	180° / 164°	9.0	2.7	26°	234
ARD12-2084W	84.00	5,773	1,233	2,518	66%	1.24	2 @ 1/2	78.2	180° / 165°	11.0	4.2	28°	252
ARD12-2096W	99.00	7,300	1,046	2,518	77%	1.18	2 @ 1/2	83.1	180° / 165°	11.0	4.4	30°	269
ARD12-3096W	99.00	3,982	1,462	3,517	75%	1.43	3 @ 1/2	100.0	180° / 165°	13.5	6.5	26°	309
ARD12-2108W	108.00	4,828	1,107	2,906	83%	1.03	2 @ 1/2	94.1	180° / 164°	12.0	5.3	30°	292
ARD12-3108W	108.00	4,830	1,439	3,777	75%	1.62	3 @ 1/2	108.8	180° / 164°	14.0	7.2	26°	342
ARD12-2120W	117.00	4,828	1,158	3,294	83%	1.04	2 @ 1/2	103.9	180° / 162°	12.0	5.5	29°	315
ARD12-3120W	117.00	4,830	1,328	3,777	66%	1.78	3 @ 1/2	114.5	180° / 164°	15.0	8.4	28°	359
ARD12-3132W	132.00	5,773	1,177	3,777	66%	1.83	3 @ 1/2	120.8	180° / 163°	15.0	8.8	29°	380
ARD12-3144W	144.00	7,300	1,079	3,777	77%	1.77	3 @ 1/2	124.1	180° / 162°	14.0	8.0	30°	397
ARD12-4144W	144.00	4,830	1,439	5,036	75%	2.16	4 @ 1/2	148.5	180° / 164°	19.0	14.4	27°	453

NOTES:

1. Operation at 50 Hz will generate approximately a 17% reduction in performance.
2. Coil performance based on 65°F entering air temperature.
3. Standard connection same end supply/return (Optional: opposite end supply/return).
4. 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.
5. Maximum leaving air temperature shall not exceed 120°F.
6. Consult factory for alternate entering air & water temperatures, GPM's, and opposite end supply/return connections performance data.

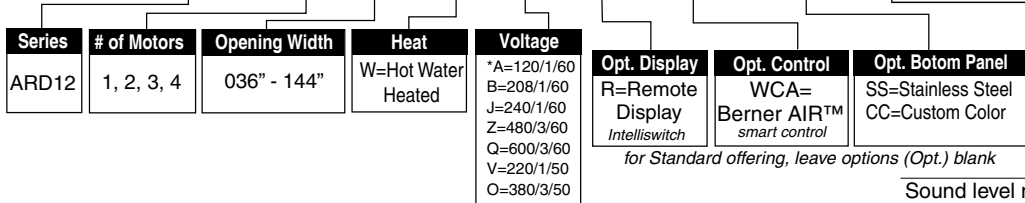
Berner does not recommend ARD12-1060W, ARD12-2108W and ARD12-2120W, exists only as an equivalent to competitors' models.

See sheet EP-246 for amp draws/total load requirements

Distance from Nozzle (in)	40	80	120	160	200
Core Velocity (fpm)	1400	1090	920	770	670
Uniformity (%)	81	92	93	91	90

MODEL NUMBER CONFIGURATION

ARD12-1 036 W A -R-WCA-SS



*Suitable for 50hz

for Standard offering, leave options (Opt.) blank

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

1 motor:	Min./Max. Speed:	59/62 dBA
2 motors:	Min./Max. Speed:	62/65 dBA
3 motors:	Min./Max. Speed:	64/67 dBA
4 motors:	Min./Max. Speed:	65/68 dBA

Sound data is not AMCA certified.

Berner reserves the right to alter specifications without prior notice.D



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Hot Water Heated Air Curtain Electrical Performance Sheet

MODEL	# CKTS	120/1/60 (voltage code A) MOTOR AMP DRAW = 8.5 each		# CKTS	208/1/60 (voltage code B) MOTOR AMP DRAW = 4.3 each		# CKTS	240/1/60 (voltage code J) or 220/1/50 (voltage code V) 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
ARD12-1036W ARD12-1042W ARD12-1048W ARD12-1060W	1	8.5	15	1	4.3	15	1	4.3	15
ARD12-2060W ARD12-2072W ARD12-2084W ARD12-2096W ARD12-2108W ARD12-2120W	1	17.0	25	1	8.6	15	1	8.6	15
ARD12-3096W ARD12-3108W ARD12-3120W ARD12-3132W ARD12-3144W	1	25.5	35	1	12.9	20	1	12.9	20
ARD12-4144W	1	34.0	45	1	17.2	25	1	17.2	25



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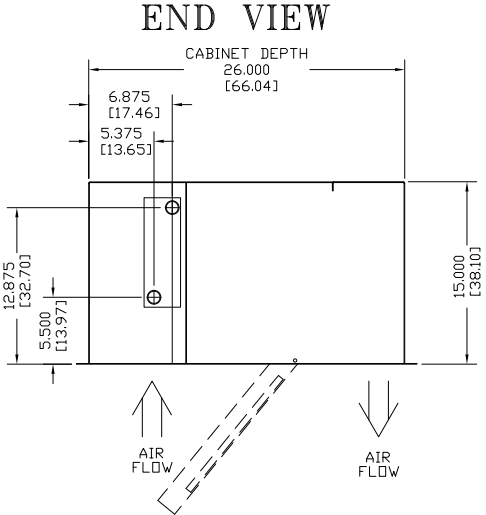
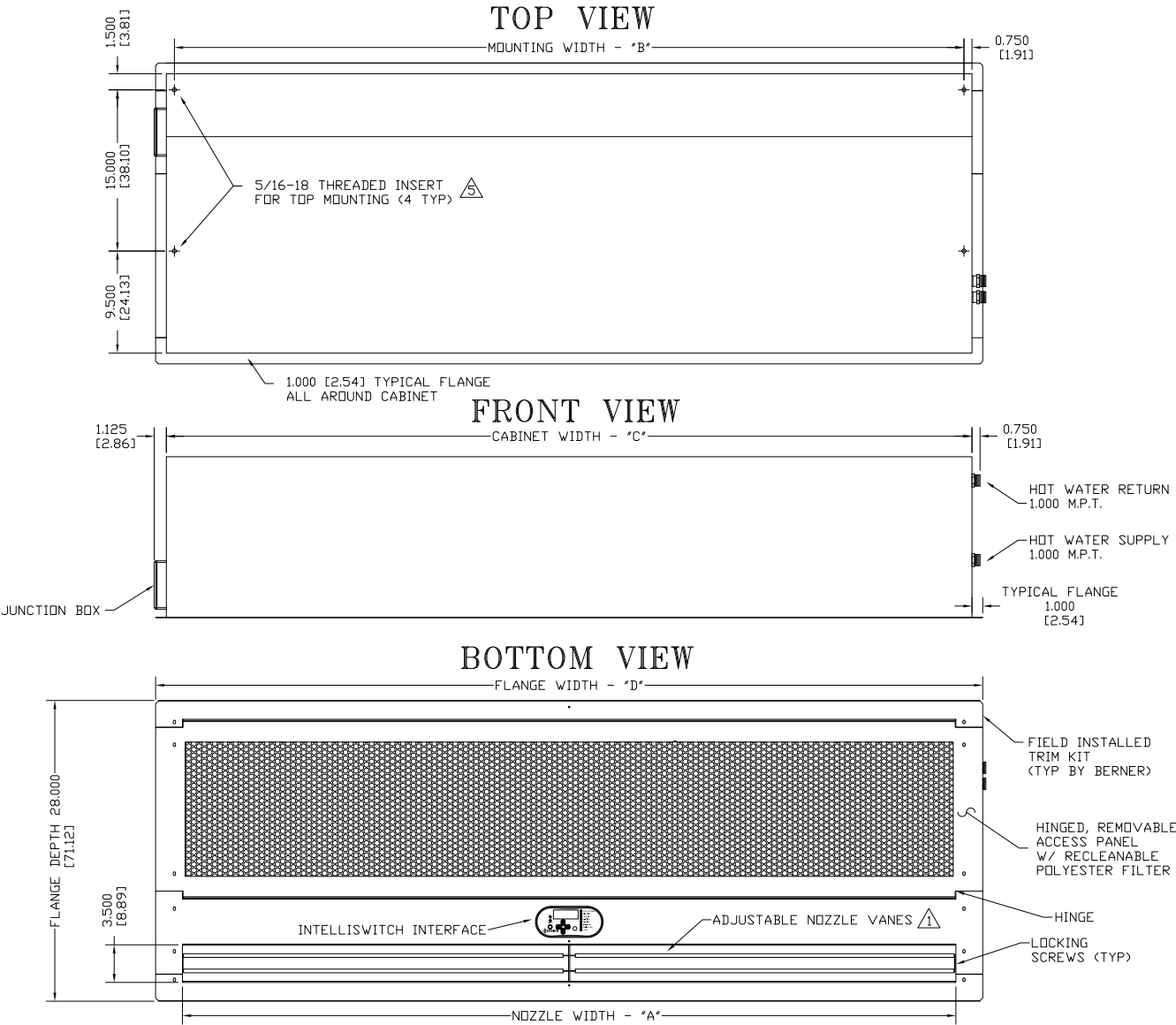
Hot Water Heated Air Curtain

Electrical Performance Sheet

MODEL	# CKTS	480/3/60 (voltage code Z) MOTOR XFMR AMP DRAW = 2.1 per kva		600/3/60 (voltage code Q) MOTOR XFMR AMP DRAW = 1.7 per kva		380/3/50 (voltage code O) 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		
ARD12-1036W ARD12-1042W ARD12-1048W ARD12-1060W	1	2.1	15	1	1.7	15	1	4.3	15
ARD12-2060W ARD12-2072W ARD12-2084W ARD12-2096W ARD12-2108W ARD12-2120W	1	4.2	15	1	3.4	15	1	8.6	15
ARD12-3096W ARD12-3108W ARD12-3120W ARD12-3132W ARD12-3144W	1	6.3	15	1	5.1	15	1	12.9	20
ARD12-4144W	1	10.5	15	1	8.5	15	1	17.2	25

ARD12

ARCHITECTURAL RECESSED HOT WATER HEATED



- 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 "W" IN MODEL NUMBER DESIGNATES HOT WATER 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
ARD12-1036W	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]
ARD12-1042W	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]
ARD12-1048W	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]
ARD12-1060W/2060W	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]
ARD12-2072W	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]
ARD12-2084W	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]
ARD12-2096W/3096W	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]
ARD12-2108W/3108W	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]
ARD12-2120W/3120W	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]
ARD12-3132W	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]
ARD12-3144W/4144W	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.	ARD12-WTR	TITLE: BERNER
DATE	31MAR2017	MODEL ARD12 AIR CURTAIN
BY	S. Beil	HOT WATER HEATED SYSTEM
REPLACES	-	
BY	-	BERNER INTERNATIONAL CORP. NEW CASTLE, PA.