



ARCHITECTURAL CONTOUR 10

Hot Water Heated Air Curtain

Data Sheet

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

Vestibule Exception for the ASHRAE 90.1-2019, IECC 2018, and ASHRAE 189.1 Energy Codes, require a velocity projection tested in accordance with AMCA 220 of not less than 6.6 feet per second (400 fpm or 2.0 m/s) at 6.0 in (15 cm) above the floor.

VELOCITY PROJECTION: Model AC10-F-1036W

Distance from Nozzle (in)	40	80	120	160
Core Velocity (fpm)	1259	876	856	742
Uniformity (%)	83%	88%	92%	96%



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.

**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	Coil Output (MBH)	Entering / Leaving Water Temp. (°F)	Water Flow (GPM)	Fluid Pressure Drop (FT. WG.)	Air Temp. Rise (°F)	Net Wt. (lbs)
AC10-F-1036W	36.00	3,522	1,916	1,317	80%	0.49	1 @ ½	33.2	180°/163°	4.0	0.5	23°	107
AC10-F-1042W	42.00	3,429	1,709	1,371	82%	0.50	1 @ ½	36.8	180°/161°	4.0	0.5	25°	119
AC10-F-1048W	48.00	4,040	1,833	1,680	90%	0.63	1 @ ½	45.3	180°/161°	5.0	0.8	25°	138
AC10-F-1060W	59.00	4,146	1,541	1,736	85%	0.63	1 @ ½	55.1	180°/164°	7.0	1.6	29°	153
AC10-F-2072W	72.00	3,522	1,916	2,634	80%	0.98	2 @ ½	74.3	180°/161°	8.0	2.1	26°	210
AC10-F-2078W	78.00	3,522	1,805	2,688	80%	0.99	2 @ ½	77.9	180°/160°	8.0	2.2	26°	213
AC10-F-2084W	84.00	3,429	1,709	2,742	82%	1.00	2 @ ½	81.4	180°/159°	8.0	2.2	27°	234
AC10-F-2096W	96.00	4,040	1,833	3,360	90%	1.26	2 @ ½	98.9	180°/160°	10.0	3.6	27°	272
AC10-F-2108W	108.00	4,146	1,656	3,416	85%	1.26	2 @ ½	106.9	180°/160°	11.0	4.5	29°	287
AC10-F-2120W	118.00	4,146	1,541	3,472	85%	1.26	2 @ ½	113.7	180°/161°	12.0	5.5	30°	300
AC10-F-3132W	132.00	4,040	1,855	4,677	80%	1.75	3 @ ½	140.7	180°/159°	14.0	7.7	27°	375
AC10-F-3144W	144.00	4,040	1,833	5,040	90%	1.89	3 @ ½	153.0	180°/159°	15.0	9.1	28°	406

See sheets EP-276E-AC & EP-276E-EC for amp draws/total load requirements.
600/3/60 power supply includes extended cabinet, See drawing AC10-F-WTR-600

NOTES:

- Standard connection top, same end supply/return.
- 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.
- Coil performance based on 65°F entering air temperature.
- Maximum leaving air temperature shall not exceed 120°F.
- Consult factory for alternate entering air & water temperatures or GPM's.
- Operation of standard motor (AC) at 50Hz will generate a 17% reduction in performance; no reduction for optional EC motors.

MODEL NUMBER CONFIGURATION

AC10-F-1 036 W A-AC-CB-D-R-SS

Series	Version	# of Motors	Opening Width	Heat	Voltage	Motor Type	Berner AIR	Opt. Data Link	Opt. Display	Opt. Cabinet Finish
AC10	F	1, 2, 3	036" - 144"	W=Hot Water Heated	AC & EC motors A = 120/1/60* B = 208/1/60 J = 240/1/60 V = 230/1/50 A-XI = 600/3/60 † W = 277/1/60	AC (Std.) EC (Opt.)	CB=BASIC (Std.) CM=BMS (Opt.)	D=Physical Interconnect (daisy chain)	R=Remote Display TB=Tablet	SS=Stainless Steel CC=Custom Color

STANDARD CONSTRUCTION

- 12 ¾" high x 25 ¾" deep
- 1/2 hp AC motor(s) - ten speeds
- Touchscreen interface with Intelliswitch™ digital controller, includes Berner AIR® BASIC (smart control)
- Clear satin anodized aluminum exterior
- Wall or Top Mounting
- High efficiency, low noise, articulating, three vane, Pro-V Nozzle
- Factory installed coil
- Filter (washable)

OPTIONS

- 1/2 hp EC motor(s) - ten speeds
- Berner AIR® BMS (smart control with BACnet and Modbus capabilities)
- Custom Color or Stainless
- Rear cover for top mounting to conceal fasteners

*Suitable for 50 Hz
† Add 12" to cabinet width for transformer

for Standard offering, leave options (Opt.) blank

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.

Berner reserves the right to alter specifications without prior notice.

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111 Progress Ave. / New Castle / PA / 16101 / USA

DS-276E
July, 2025



ARCHITECTURAL CONTOUR 10 - AC MOTORS

Hot Water Heated Air Curtain Electrical Performance Sheet

120/1/60 (voltage code A) AC MOTOR AMP DRAW = 8.5 each				208/1/60 (voltage code B) AC MOTOR AMP DRAW = 4.3 each			240/1/60 (voltage code J) or 230/1/50 (voltage code V) AC 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-F-1036W AC10-F-1042W AC10-F-1048W AC10-F-1060W	1	8.5	15	1	4.3	15	1	4.3	15
AC10-F-2072W AC10-F-2078W AC10-F-2084W AC10-F-2096W AC10-F-2108W AC10-F-2120W	1	17.0	25	1	8.6	15	1	8.6	15
AC10-F-3132W AC10-F-3144W	1	25.5	35	1	12.9	20	1	12.9	20

277/1/60 (voltage code W) AC MOTOR AMP DRAW = 2.6 each				600/3/60 (voltage code A-XI) XFMR 600/120 1 kVA per MTR @ 1.7 each AC MOTOR AMP DRAW= 6.6 each @ 120V		
MODEL	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT
AC10-F-1036W AC10-F-1042W AC10-F-1048W AC10-F-1060W	1	2.6	15	1	1.7	15
AC10-F-2072W AC10-F-2078W AC10-F-2084W AC10-F-2096W AC10-F-2108W AC10-F-2120W	1	5.2	15	1	3.3	15
AC10-F-3132W AC10-F-3144W	1	7.8	15	1	5.0	15

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ARCHITECTURAL CONTOUR 10 - EC MOTORS

Hot Water Heated Air Curtain Electrical Performance Sheet

120/1/60 (voltage code A) EC MOTOR AMP DRAW = 6.6 each				208/1/60 (voltage code B) EC MOTOR AMP DRAW = 4.1 each			240/1/60 (voltage code J) or 230/1/50 (voltage code V) EC 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-F-1036W AC10-F-1042W AC10-F-1048W AC10-F-1060W	1	6.6	15	1	4.1	15	1	4.1	15
AC10-F-2072W AC10-F-2078W AC10-F-2084W AC10-F-2096W AC10-F-2108W AC10-F-2120W	1	13.2	20	1	8.2	15	1	8.2	15
AC10-F-3132W AC10-F-3144W	1	19.8	25	1	12.3	20	1	12.3	20

277/1/60 (voltage code W) EC MOTOR AMP DRAW = 3.6 each				600/3/60 (voltage code A-XI) XFMR 600/120 1 kVA per MTR @ 1.7 each EC MOTOR AMP DRAW= 6.6 each @ 120V		
MODEL	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT
AC10-F-1036W AC10-F-1042W AC10-F-1048W AC10-F-1060W	1	3.6	15	1	1.7	15
AC10-F-2072W AC10-F-2078W AC10-F-2084W AC10-F-2096W AC10-F-2108W AC10-F-2120W	1	7.2	15	1	3.3	15
AC10-F-3132W AC10-F-3144W	1	10.8	15	1	5.0	15

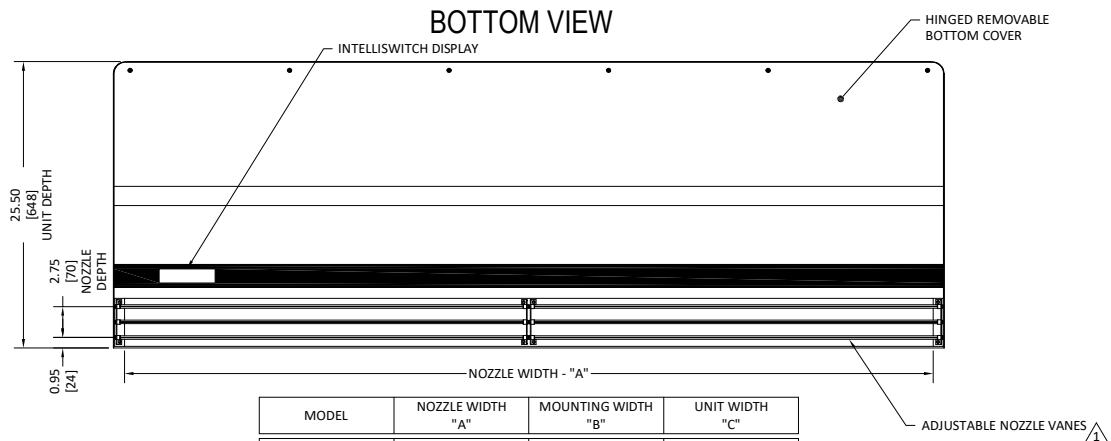
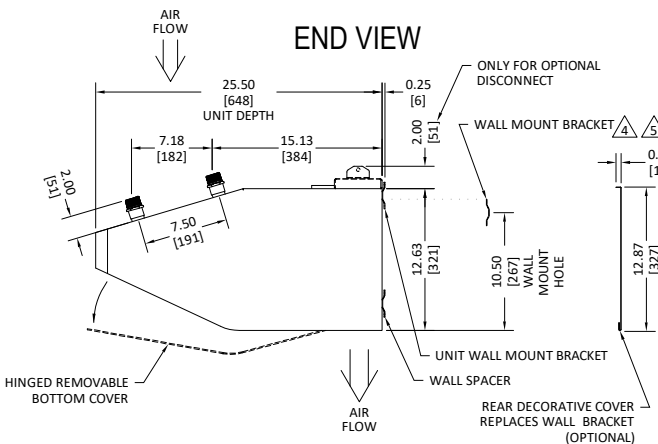
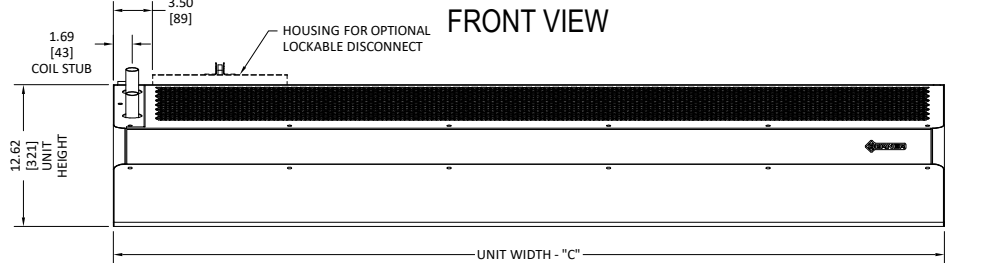
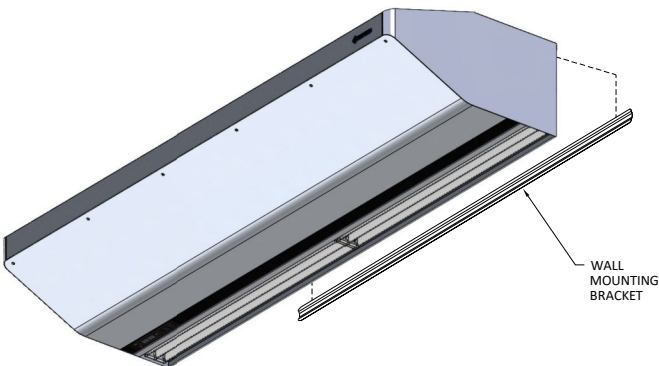
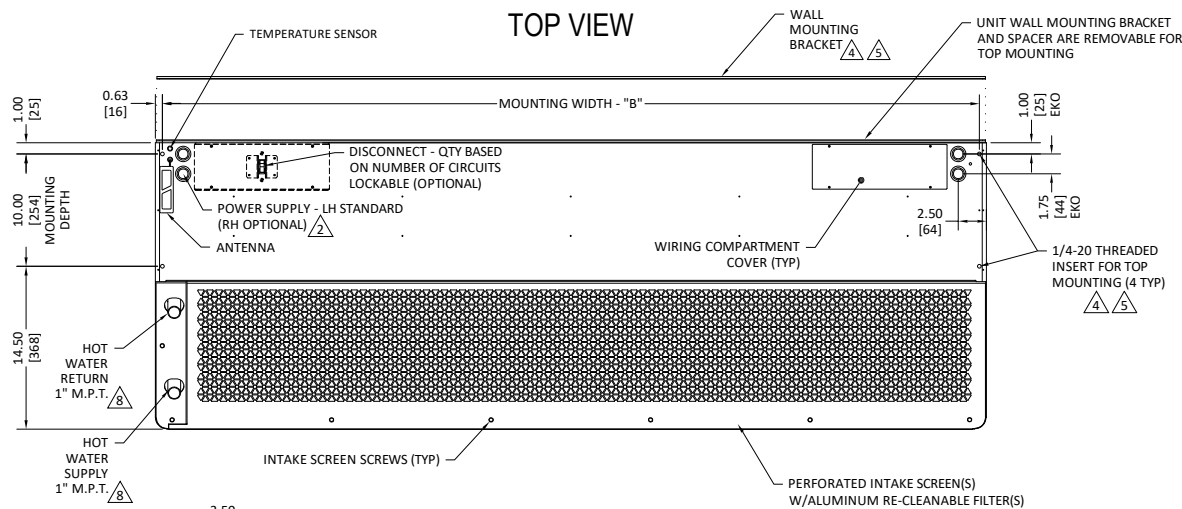
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EP-276E-EC
July, 2025

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AC10-F WATER HEATED SYSTEM: 120 - 277V



MODEL	NOZZLE WIDTH "A"	MOUNTING WIDTH "B"	UNIT WIDTH "C"
AC10-F-1036W	36.00 [914]	36.75 [934]	38.00 [965]
AC10-F-1042W	42.00 [1067]	42.75 [1086]	44.00 [1118]
AC10-F-1048W	48.00 [1219]	48.75 [1238]	50.00 [1270]
AC10-F-1060W	59.00 [1499]	59.75 [1518]	61.00 [1549]
AC10-F-2072W	72.00 [1829]	72.75 [1848]	74.00 [1880]
AC10-F-2078W	78.00 [1981]	78.75 [2000]	80.00 [2032]
AC10-F-2084W	84.00 [2134]	84.75 [2153]	86.00 [2184]
AC10-F-2096W	96.00 [2438]	96.75 [2458]	98.00 [2489]
AC10-F-2108W	108.00 [2743]	108.75 [2762]	110.00 [2794]
AC10-F-2120W	118.00 [2997]	118.75 [3016]	120.00 [3048]
AC10-F-3132W	132.00 [3353]	132.75 [3372]	134.00 [3404]
AC10-F-3144W	144.00 [3658]	144.75 [3677]	146.00 [3708]

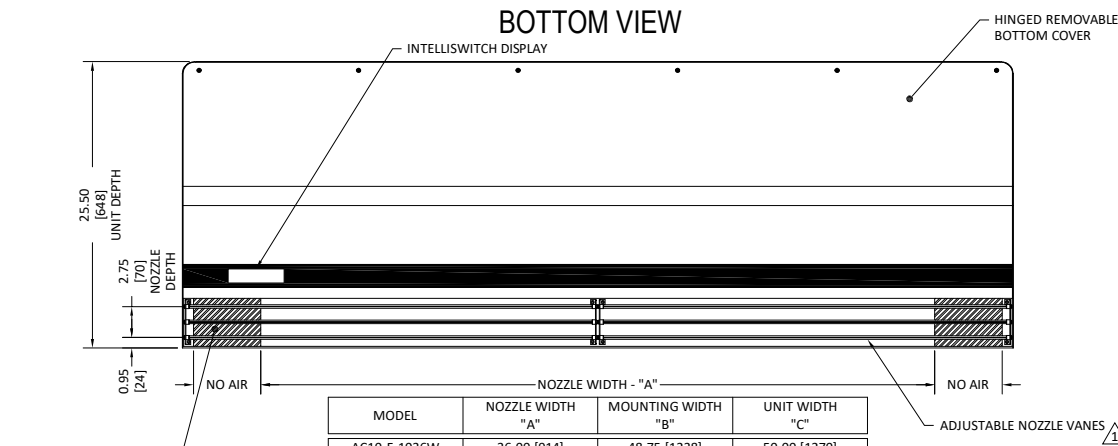
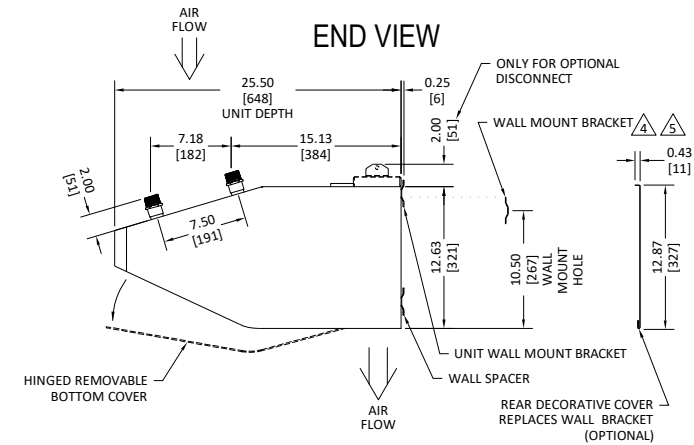
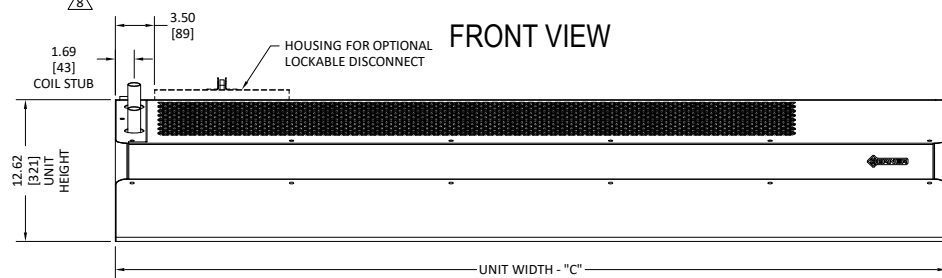
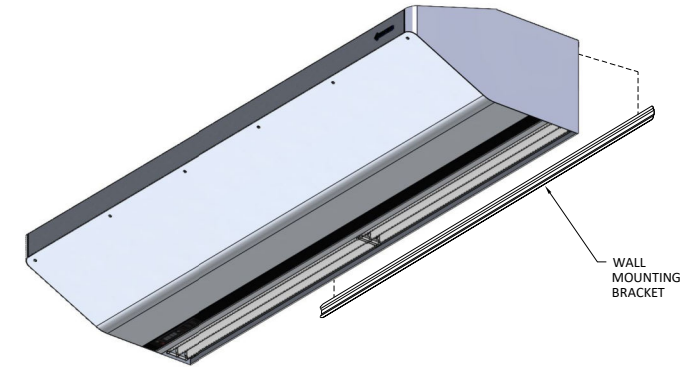
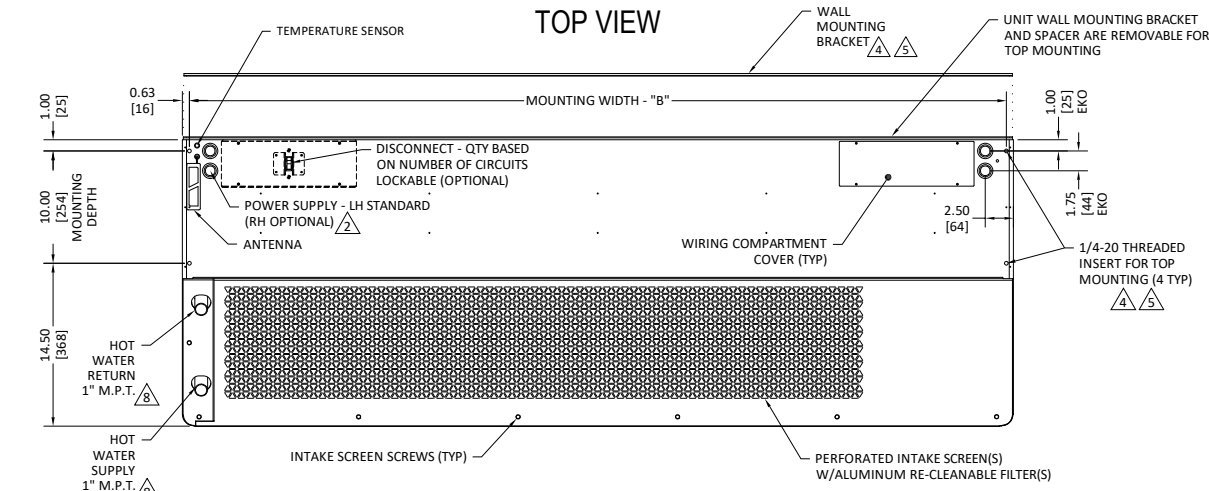
NOTES:

- AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF C.
- 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 - "W" DESIGNATES WATER HEATED UNIT.
- DIMENSIONS IN INCHES [MILLIMETERS].
- COIL CONNECTIONS LH STANDARD (AS SHOWN), OPTIONAL RH.

SHEET 1 OF 1

PROJECT	REV 0	
LOCATION		
ARCHITECT		
ENGINEER		
DWG. NO.	AC10-F-WTR-120	TITLE: BERNER MODEL AC10-F AIR CURTAIN 120 - 277V & 380V WATER HEATED SYSTEM
DATE	22JAN2025	
BY	S. Bell	BERNER INTERNATIONAL CORP. NEW CASTLE, PA.
REPLACES	28FEB2023	
BY	D. Johnson	

AC10-E WATER HEATED SYSTEM: 600V



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

MODEL	NOZZLE WIDTH "A"	MOUNTING WIDTH "B"	UNIT WIDTH "C"
AC10-F-1036W	36.00 [914]	48.75 [1238]	50.00 [1270]
AC10-F-1042W	42.00 [1067]	48.75 [1238]	50.00 [1270]
AC10-F-1048W	48.00 [1219]	59.75 [1518]	61.00 [1549]
AC10-F-1060W	59.00 [1499]	72.75 [1848]	74.00 [1880]
AC10-F-2072W	72.00 [1829]	84.75 [2153]	86.00 [2184]
AC10-F-2078W	78.00 [1981]	84.75 [2153]	86.00 [2184]
AC10-F-2084W	84.00 [2134]	96.75 [2458]	98.00 [2489]
AC10-F-2096W	96.00 [2438]	108.75 [2762]	110.00 [2794]
AC10-F-2108W	108.00 [2743]	118.75 [3016]	120.00 [3048]
AC10-F-2120W	118.00 [2997]	132.75 [3372]	134.00 [3404]
AC10-F-3132W	132.00 [3353]	144.75 [3677]	146.00 [3708]
AC10-F-3144W	144.00 [3658]	156.75 [3982]	158.00 [4013]

NOTES:

- AIR CURTAIN MUST BE INSTALLED SO AIR STREAM IS NOT OBSTRUCTED WHEN DEFLECTED 20° TO EITHER SIDE OF C.
- 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 - "W" DESIGNATES WATER HEATED UNIT.
- DIMENSIONS IN INCHES [CENTIMETERS].
- COIL CONNECTIONS LH STANDARD (AS SHOWN), OPTIONAL RH.
- NO AIR FLOW, AREA HOUSES TRANSFORMER. CENTER ACTIVE NOZZLE WIDTH DIMENSION "A" OVER THE OPENING.

SHEET 1 OF 1

PROJECT	REV 0	
LOCATION		
ARCHITECT		
ENGINEER		
DWG. NO.	AC10-F-WTR-600	TITLE: BERNER
DATE	22JAN2025	MODEL AC10-F AIR CURTAIN 600V WATER HEATED SYSTEM
BY	S. Bell	
REPLACES	28FEB2023	
BY	D. Johnson	BERNER INTERNATIONAL CORP. NEW CASTLE, PA