



COMMERCIAL HIGH PERFORMANCE 10

Ambient (Unheated) Air Curtain

Data Sheet

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

STANDARD CONSTRUCTION

- 14" high x 15" deep
- 1/2 hp three speed motor(s)
- Factory installed fan speed switch
- White or black aluminum exterior cover (Optional: Custom Color or Stainless)
- Wall & Top Mounting
- Optional: Filter (washable)

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 (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.

Models CHD10-1060A, CHD10-2108A and CHD10-2120A are not licensed to bear the AMCA seal.

5 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	Net Wt. (lbs)
CHD10-1036A	36.00	3,284	2,062	1,804	73%	0.78	1 @ 1/2	50
CHD10-1042A	42.00	3,592	1,748	1,784	54%	0.74	1 @ 1/2	52
CHD10-1048A	48.00	3,614	1,515	1,768	62%	0.75	1 @ 1/2	53
CHD10-1060A	60.00	3,319	1,184	1,726	48%	0.73	1 @ 1/2	54
CHD10-2060A	60.00	3,711	1,801	2,626	74%	1.21	2 @ 1/2	70
CHD10-2072A	72.00	3,284	2,062	3,608	73%	1.56	2 @ 1/2	84
CHD10-2084A	87.00	3,592	1,687	3,568	54%	1.49	2 @ 1/2	104
CHD10-2096A	99.00	3,614	1,470	3,536	62%	1.49	2 @ 1/2	106
CHD10-3096A	99.00	3,284	1,841	4,430	73%	1.99	3 @ 1/2	120
CHD10-2108A	111.00	3,319	1,295	3,494	48%	1.48	2 @ 1/2	107
CHD10-3108A	111.00	3,284	2,006	5,412	73%	2.34	3 @ 1/2	150
CHD10-2120A	116.25	3,319	1,222	3,452	48%	1.47	2 @ 1/2	108
CHD10-3120A	116.25	3,284	1,908	5,392	54%	2.30	3 @ 1/2	152

NOTE: Operation at 50 Hz will generate approximately a 17% reduction in air performance.

Berner does not recommend CHD10-1060A, CHD10-2108A & CHD10-2120A, exists only as an equivalent to competitors' models.

See sheet EP-114 for amp draws/total load requirements.

MODEL NUMBER CONFIGURATION

CHD10-1 036 A A-R-SS

Series	# of Motors	Opening Width	Heat	Voltage	Opt. Switch	Cabinet Finish
CHD10	1, 2, 3	036" - 120"	A=Ambient	*A=120/1/60 B=208/1/60 J=240/1/60 Z=480/3/60 Q=600/3/60 V=220/1/50	Remote Switch	White (leave blank) BK=Black Opt. Cabinet Finish SS=Stainless Steel CC=Custom Color

*Suitable for 50hz

for Standard offering, leave options (Opt.) blank
make sure to specify Cabinet Finish if other than white

VELOCITY PROJECTION: Model CHD10-1036A

Distance from Nozzle (in)	40	80	120	160	200
Core Velocity (fpm)	1270	1100	1000	940	910
Uniformity (%)	92	91	91	88	86

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

1 motor:	Low/Medium/High Speed:	64/65/66 dBA
2 motors 60":	Low/Medium/High Speed:	66/67/68 dBA
2 motors:	Low/Medium/High Speed:	67/68/69 dBA
3 motors:	Low/Medium/High Speed:	69/70/71 dBA

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-114D
June, 2024



COMMERCIAL HIGH PERFORMANCE 10

Ambient (Unheated) Air Curtain

Electrical Performance Sheet

120/1/60 (voltage code A) MOTOR AMP DRAW = 6.5 each				208/1/60 (voltage code B) MOTOR AMP DRAW = 3.5 each			240/1/60 (voltage code J) or 220/1/50 (voltage code V) MOTOR AMP DRAW = 3.5 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
CHD10-1036A CHD10-1042A CHD10-1048A CHD10-1060A	1	6.5	15	1	3.5	15	1	3.5	15
CHD10-2060A CHD10-2072A CHD10-2084A CHD10-2096A CHD10-2108A CHD10-2120A	1	13.0	20	1	7.0	15	1	7.0	15
CHD10-3096A CHD10-3108A CHD10-3120A	1	19.5	25	1	10.5	15	1	10.5	15

480/3/60 (voltage code Z) MOTOR AMP DRAW = 1.4 each				600/3/60 (voltage code Q) MOTOR AMP DRAW = 1.0 each		
MODEL	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT	# CKTS	AMPS PER CIRCUIT	BREAKER RATING PER CIRCUIT
CHD10-1036A CHD10-1042A CHD10-1048A CHD10-1060A	1	1.4	15	1	1.0	15
CHD10-2060A CHD10-2072A CHD10-2084A CHD10-2096A CHD10-2108A CHD10-2120A	1	2.8	15	1	2.0	15
CHD10-3096A CHD10-3108A CHD10-3120A	1	4.2	15	1	3.0	15

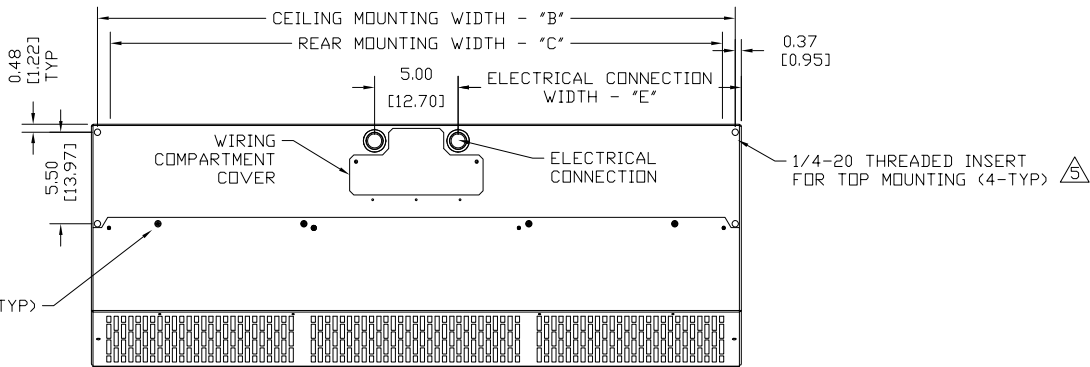
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www.berner.com Berner International 800.245-4455
111 Progress Ave. / New Castle / PA / 16101 / USA

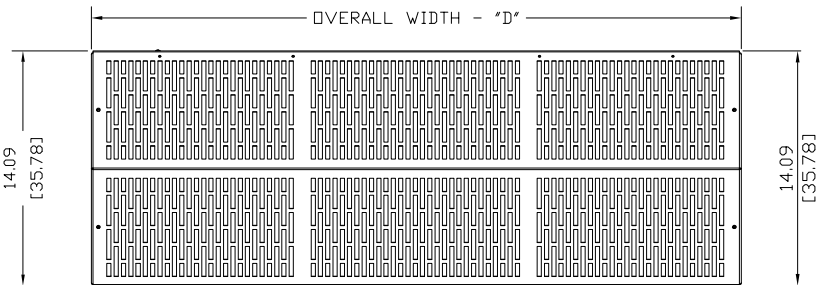
EP-110
October, 2017

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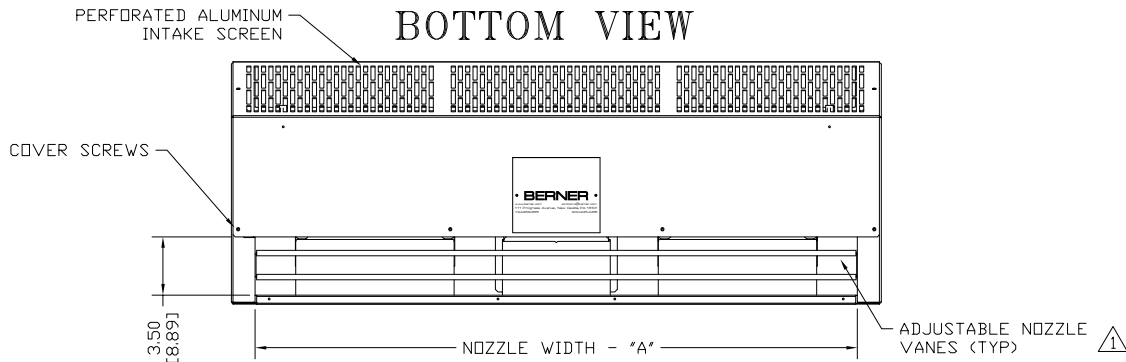
TOP VIEW



FRONT VIEW



BOTTOM VIEW

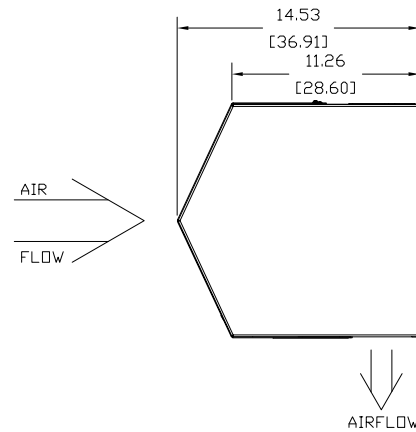


CHD10

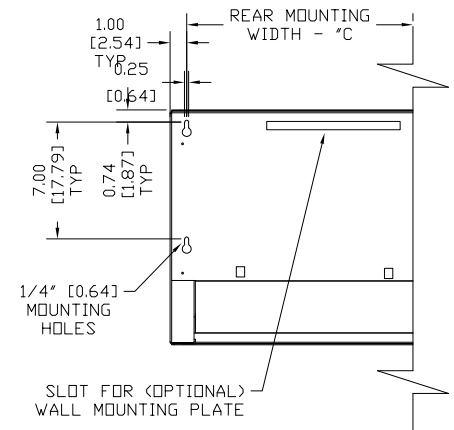
AMBIENT SYSTEM

(without Wall Mounting Plate)
(without Switches)

END VIEW



REAR VIEW



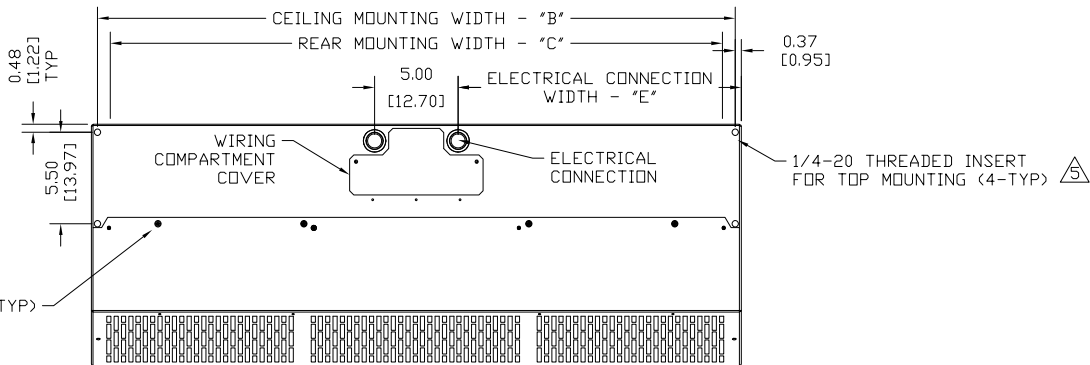
NOTES:

- 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 "A" IN MODEL NUMBER DESIGNATES AMBIENT UNIT.
- 7 DIMENSIONS IN INCHES [CENTIMETERS].

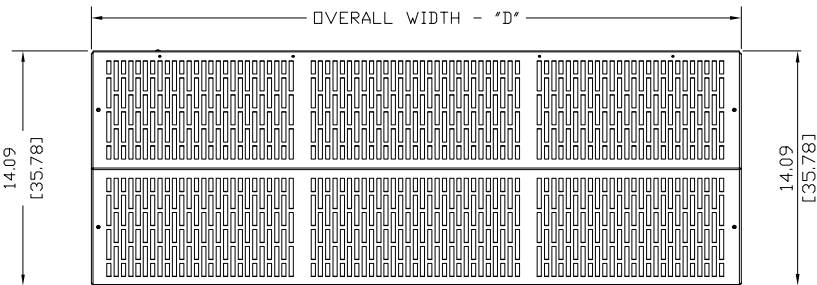
MODEL	NOZZLE WIDTH "A"	CEILING MOUNTING WIDTH "B"	REAR MOUNTING WIDTH "C"	UNIT WIDTH "D"	ELECTRIC WIDTH "E"
CHD10-1036A	36.00 [91.44]	38.25 [97.16]	37.00 [93.98]	39.00 [99.06]	17.00 [43.18]
CHD10-1042A	42.00 [106.68]	44.25 [112.40]	43.00 [109.22]	45.00 [114.30]	20.00 [50.80]
CHD10-1048A	48.00 [121.92]	50.25 [127.64]	49.00 [124.46]	51.00 [129.54]	23.00 [58.42]
CHD10-1060A	60.00 [152.40]	62.25 [158.12]	61.00 [154.94]	63.00 [160.02]	29.00 [73.66]
CHD10-2060A	60.00 [152.40]	62.25 [158.12]	61.00 [154.94]	63.00 [160.02]	19.00 [48.26]
CHD10-2072A	72.00 [182.88]	74.25 [188.60]	73.00 [185.42]	75.00 [190.50]	17.00 [43.18]
CHD10-2084A	86.88 [220.66]	89.13 [226.38]	87.88 [223.22]	89.88 [228.28]	20.75 [52.71]
CHD10-2096A	98.88 [251.14]	101.13 [257.18]	99.88 [253.70]	101.88 [258.76]	23.75 [60.33]
CHD10-3096A	98.88 [251.14]	101.13 [257.18]	99.88 [253.70]	101.88 [258.76]	15.50 [39.37]
CHD10-2108A	110.88 [281.62]	113.13 [287.38]	111.88 [284.18]	113.88 [289.24]	26.75 [67.95]
CHD10-3108A	110.88 [281.62]	113.13 [287.38]	111.88 [284.18]	113.88 [289.24]	17.50 [44.45]
CHD10-2120A	116.25 [295.28]	118.50 [300.99]	117.25 [297.82]	119.25 [302.90]	28.06 [71.28]
CHD10-3120A	116.25 [295.28]	118.50 [300.99]	117.25 [297.82]	119.25 [302.90]	18.38 [46.67]

PROJECT		
LOCATION		
ARCHITECT		
ENGINEER		REV. B
DWG. NO.	CHD10-AMB-NONE	TITLE: BERNER
DATE	29JAN2020	MODEL CHD10 AIR CURTAIN
BY	S. BEIL	AMBIENT SYSTEM
REPLACES	17MAY2019	
BY	S. BEIL	BERNER INTERNATIONAL CORP. NEW CASTLE, PA.

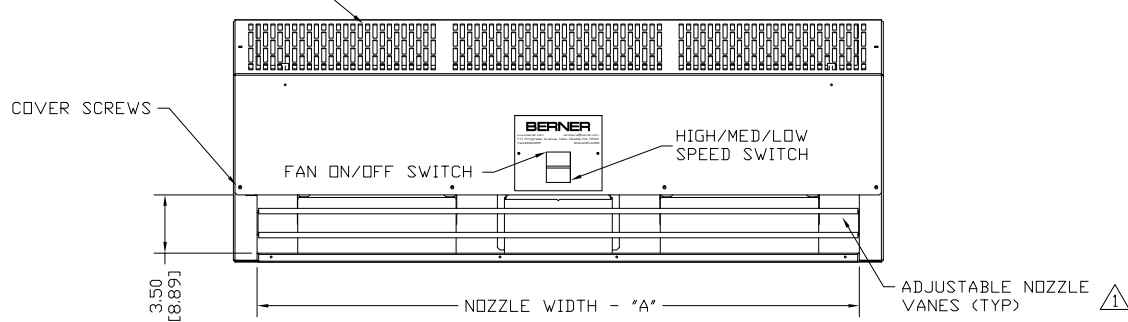
TOP VIEW



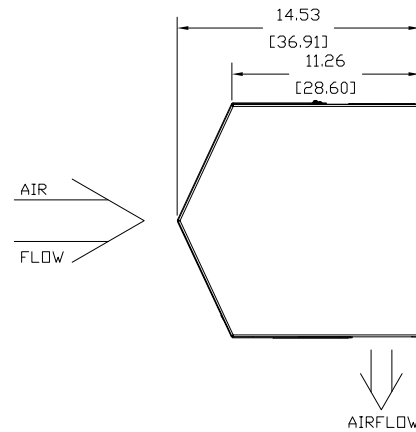
FRONT VIEW



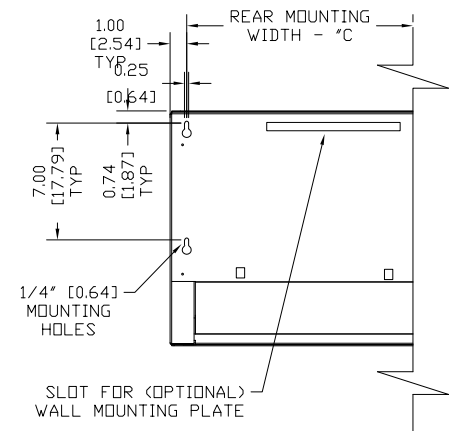
BOTTOM VIEW



END VIEW



REAR VIEW



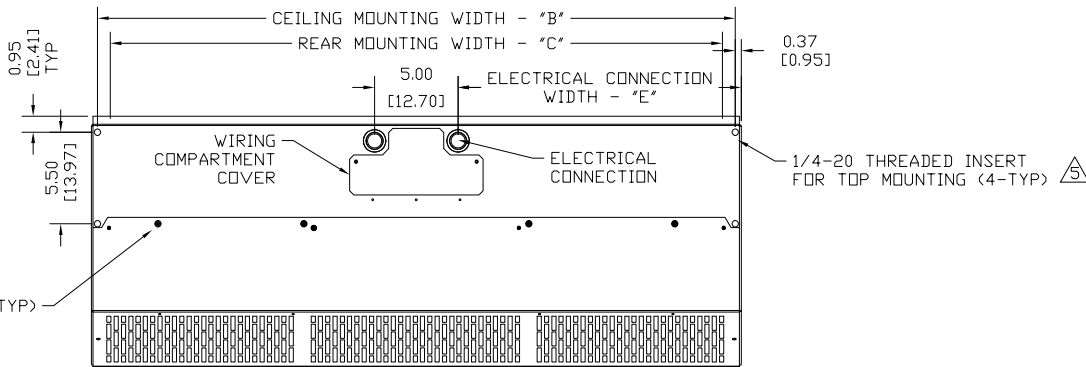
NOTES:

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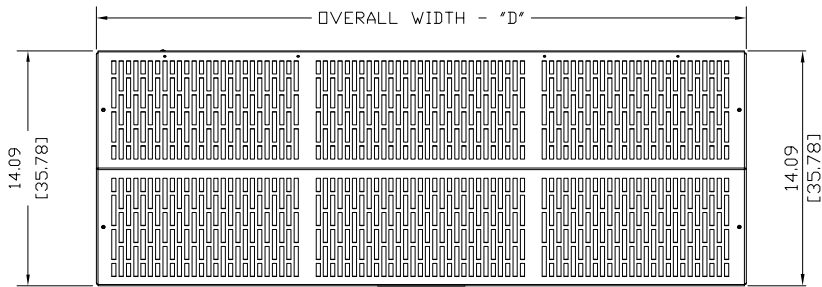
MODEL 	NOZZLE WIDTH "A"	CEILING MOUNTING WIDTH "B"	REAR MOUNTING WIDTH "C"	UNIT WIDTH "D"	ELECTRIC WIDTH "E"
CHD10-1036A	36.00 [91.44]	38.25 [97.16]	37.00 [93.98]	39.00 [99.06]	17.00 [43.18]
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CHD10-1048A	48.00 [121.92]	50.25 [127.64]	49.00 [124.46]	51.00 [129.54]	23.00 [58.42]
CHD10-1060A	60.00 [152.40]	62.25 [158.12]	61.00 [154.94]	63.00 [160.02]	29.00 [73.66]
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CHD10-2120A	116.25 [295.28]	118.50 [300.99]	117.25 [297.82]	119.25 [302.90]	28.06 [71.28]
CHD10-3120A	116.25 [295.28]	118.50 [300.99]	117.25 [297.82]	119.25 [302.90]	18.38 [46.67]

PROJECT		
LOCATION		
ARCHITECT		
ENGINEER		REV. B
DWG. NO.	CHD10-AMB-SWITCHES	TITLE: BERNER
DATE	29JAN2020	MODEL CHD10 AIR CURTAIN
BY	S. BEIL	AMBIENT SYSTEM
REPLACES	17MAY2019	
BY	S. BEIL	BERNER INTERNATIONAL CORP. NEW CASTLE, PA.

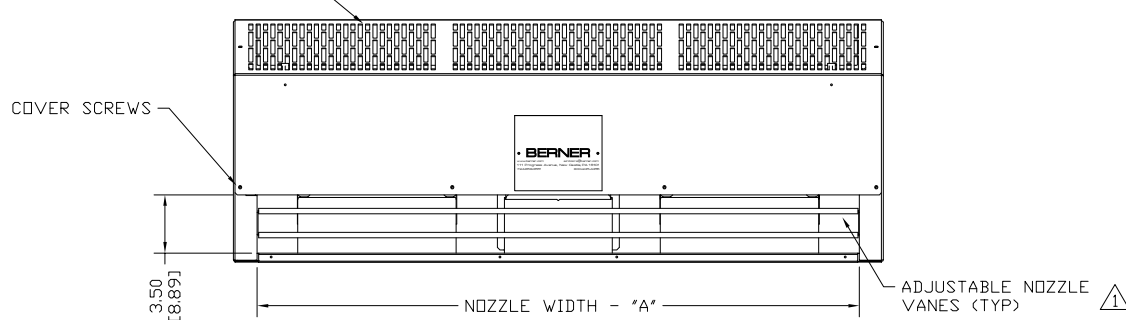
TOP VIEW



FRONT VIEW



BOTTOM VIEW



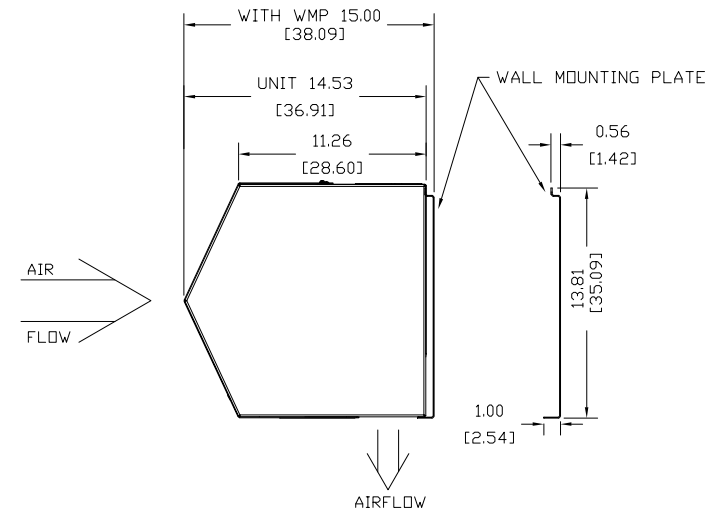
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CHD10

AMBIENT SYSTEM

(with Wall Mounting Plate)
(without Switches)

END VIEW

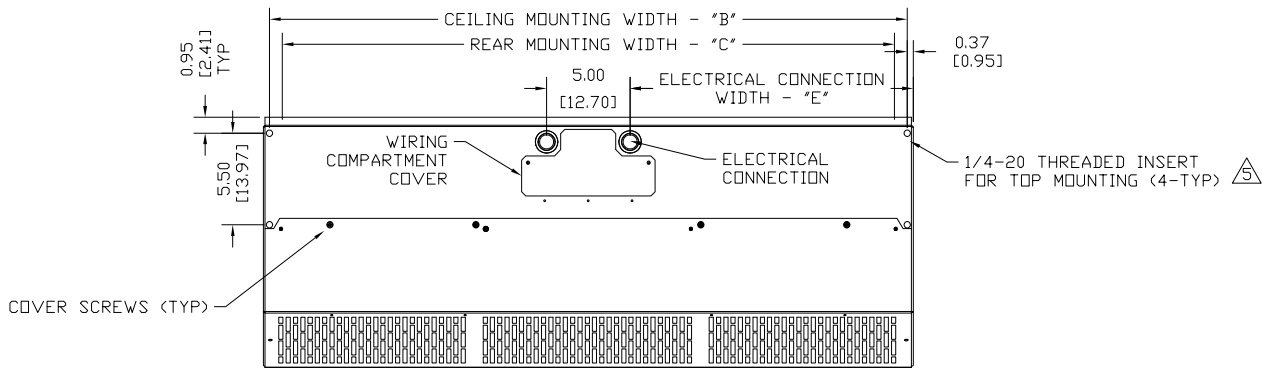


NOTES:

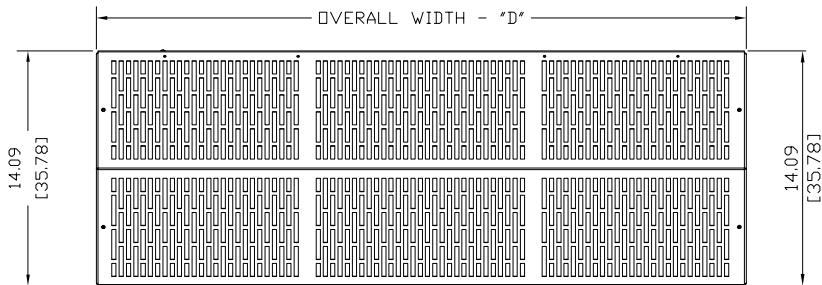
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PROJECT		
LOCATION		
ARCHITECT		
ENGINEER		REV. B
DWG. NO.	CHD10-AMB-WMP	TITLE: BERNER
DATE	29JAN2020	MODEL CHD10 AIR CURTAIN
BY	S. Beil	AMBIENT SYSTEM
REPLACES	17MAY2019	
BY	S. Beil	BERNER INTERNATIONAL CORP. NEW CASTLE, PA.

TOP VIEW

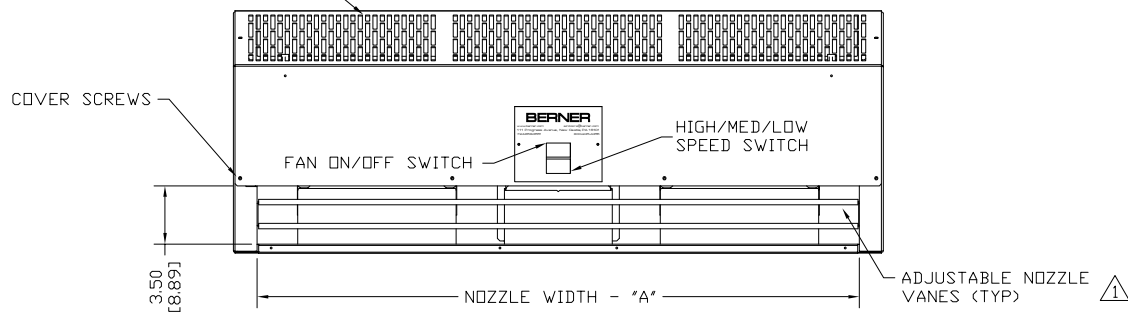


FRONT VIEW



PERFORATED ALUMINUM INTAKE SCREEN

BOTTOM VIEW



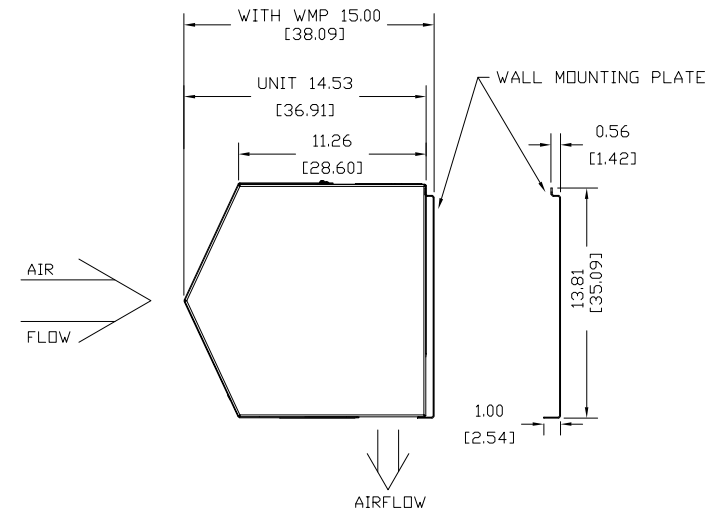
CHD10

AMBIENT SYSTEM

(with Wall Mounting Plate)

(with Switches)

END VIEW



NOTES:

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CHD10-3096A	98.88 [251.14]	101.13 [257.18]	99.88 [253.70]	101.88 [258.76]	15.50 [39.37]
CHD10-2108A	110.88 [281.62]	113.13 [287.38]	111.88 [284.18]	113.88 [289.24]	26.75 [67.95]
CHD10-3108A	110.88 [281.62]	113.13 [287.38]	111.88 [284.18]	113.88 [289.24]	17.50 [44.45]
CHD10-2120A	116.25 [295.28]	118.50 [300.99]	117.25 [297.82]	119.25 [302.90]	28.06 [71.28]
CHD10-3120A	116.25 [295.28]	118.50 [300.99]	117.25 [297.82]	119.25 [302.90]	18.38 [46.67]

PROJECT		
LOCATION		
ARCHITECT		
ENGINEER		REV. B
DWG. NO.	CHD10-AMB-WMP-SWITCHES	TITLE: BERNER
DATE	29JAN2020	MODEL CHD10 AIR CURTAIN
BY	S. Beil	AMBIENT SYSTEM
REPLACES	17MAY2019	
BY	S. Beil	BERNER INTERNATIONAL CORP. NEW CASTLE, PA.