

## THERMO-ELECTRIC COOLERS

### Classic Model 8210

Perma Pure's Baldwin™ Classic Series Model 8210 Thermo-Electric Coolers is specifically designed for high ambient temperature & high water volume applications and can be used in single stream or dual stream applications. The Model 8210 features an oversized heat sink and high performance thermoelectric devices for high heat removal capacity. Heat sinks used in the Baldwin-Series Thermo-Electric Coolers are made out of high heat transfer extruded aluminum with large 3/4" thick end plates. The Model 8210 incorporates a special controller specifically designed to run at high ambient temperatures up to 110°F (43°C).

#### Physical Description

Single (Series) / Dual (Parallel) Channel System  
 2 x 10" Heat Exchangers connected in series or parallel  
 2 Active (cooled to 4°C) Heat Exchangers  
 LCD temperature display

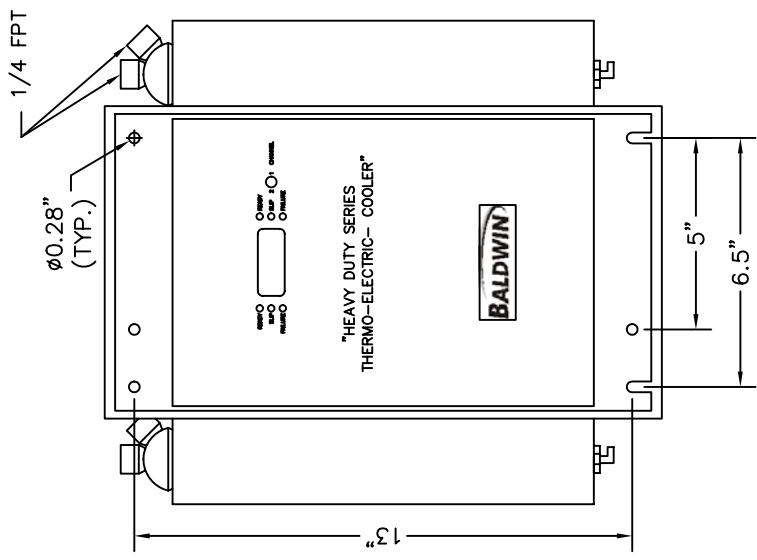
#### Operating Specifications

Sample Gas Flow Range	3-10 LPM (Series configuration) 6.4-21.2 SCFH
Average Inlet Dew Point at Rated Flow	142°F @ 20% H <sub>2</sub> O 61°C
Dimensions	14.55 x 12.62 x 11.82 in. HWD 37.0 x 32.0 x 30.0 cm
Weight	35 lbs 16.0 kg
Maximum Inlet Sample Temperature	400°F (205°C) SS, Glass Impingers 280°F (138°C) Kynar Impinger
Maximum Inlet Pressure	45 psig 3 bar / 2250 mmHg
Maximum Heat Exchanger Pressure Drop	<+1 in. H <sub>2</sub> O
Ambient Temperature Range	33-104°F 0.56-40°C
Outlet Sample Gas Dew Point	41°F 5°C
Inlet Tubing Connection	3/8 in. FNPT
Outlet Tubing Connection	1/4 in. FNPT
Drain Tubing Connection	3/8 in. FNPT
Voltage	110 (220 optional) VAC 50/60 Hz
Thermoelectric Elements	40 mm
Power Supply	500W
Cooling Down Time	Less than 3 minutes

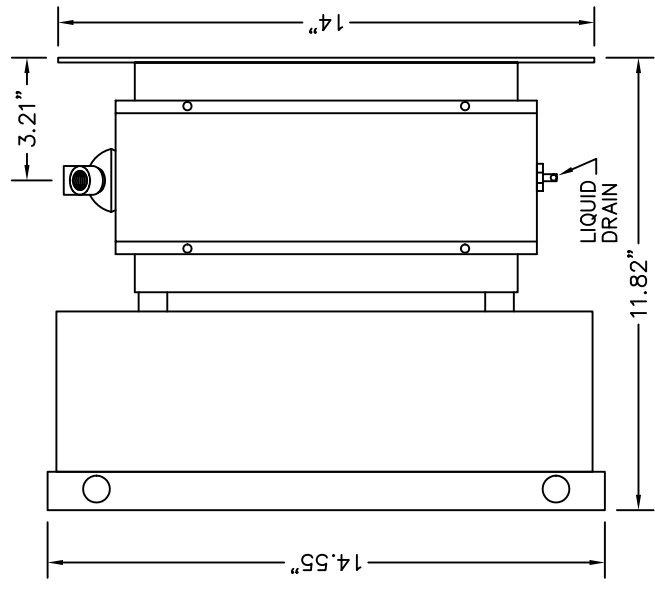
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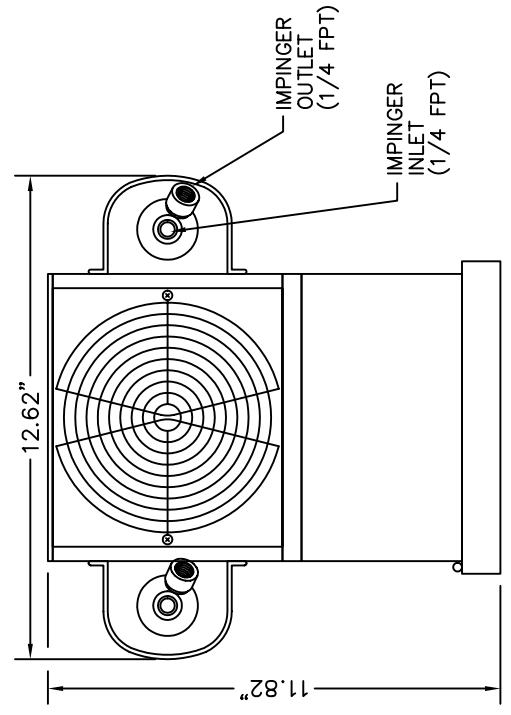
REV#	DATE	DESCRIPTION	DRAWN	APPROVED
0	00/00/00	INITIAL DRAWING	JO	



**FRONT VIEW**



**RIGHT SIDE VIEW**



**TOP VIEW**

UNLESS OTHERWISE SPECIFIED	
TOLERANCE DECIMALS	FINISH
1 PLACE = ±.02	AS NOTED
2 PLACE = ±.02	AS NOTED
3 PLACE = ±.010	
ANGLES = ±5°	
HOLES = +.003/-001	
www.baldwinUSA.com	

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 BALDWIN, INC.

MATERIAL	AS NOTED
FINISH	AS NOTED
DESIGN DIMENSIONS	ARE IN INCHES
( ) DENOTES MILLIMETER EQUIVALENTS WHEN USED	

DATE	05/12/02
DATE	
<b>BALDWIN, INC.</b> MODEL 8210 SAMPLE COOLER ARRANGEMENT DRAWING SCALE: A NTS MODEL 8210 DRAWING/PART NO.: A NTS MODEL 8210 CAD DIR: S:\\$B&W\DWGS\T.E. COOL-HEAVY SERIES SHEET 1 OF 1	

ITEM	QTY	DESCRIPTION	MANUF.
USED FOR:	MODEL NUMBER:		
DESCRIPTION:			

