

Thermo-Electric Cooler

A Solid History of Reliable Performance

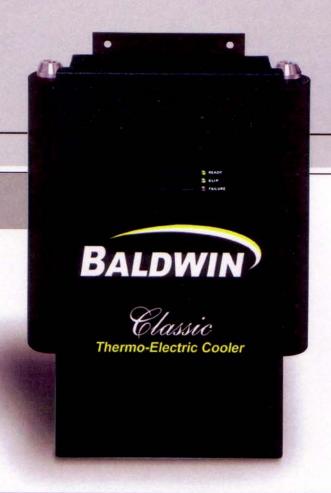
- → Dependable water removal with minimal maintenance.
- → An entire line of coolers for flow rates from 0-20 LPM (0-40 SCFH).
- → EZ-CleanTM twist-apart heat exchangers.
- → Can be assembled as a complete sample conditioning system.



Thousands of Successful Installations

- Gas Turbines
- · Coal-Fired Boilers
- · Stack Testing Trailers
- · Glass Kilns

- · Refinery Furnaces
- · Waste Incinerators
- · Cement Kilns
- · Many, many, more...



Key Features

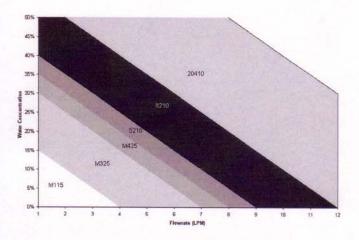
- LCD heat exchanger temperature display.
- Multi-colored LEDs provide easy local monitoring and control.
- High capacity coolers specifically designed for high flow rate, high ambient temperature, and high water volume applications.
- Alarm relay protects analyzers from water slip.
- Durinert® + treated heat exchangers for low NOx and acidic applications.
- "New Jersey" thermocouple temperature sensor with 4-20mA relay board available.
- Available for use with dual sample streams.
- 110 or 220 VAC power supply.
- · Backed by our 1-year limited warranty.

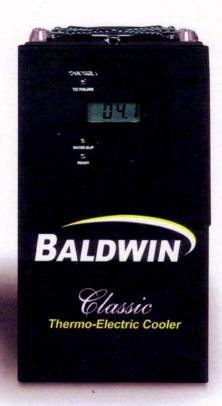




Thermo-Electric Cooler

Model Selection







MODEL	Heat Exc Passive	hangers Active	Dimensions	Weight
610 Precooler	1x10 in.		11 x 10 x 10 in. HWD 28 x 25 x 25 cm HWD	15 lbs 7 kg
M115		1x5 in.	13 x 7 x 11 in. HWD 33 x 18 x 29 cm HWD	15 lbs 7 kg
M325	1x5 in.	1x5 in.	13 x 7 x 11 in. HWD 33 x 18 x 29 cm HWD	17 lbs 8 kg
M425		2x5 in.	13 x 7 x 11 in. HWD 33 x 18 x 29 cm HWD	17 lbs 8 kg
5210	1x10 in.	1x10 in.	15 x 11 x 11 in. HWD 38 x 28 x 28 cm HWD	27 lbs 12 kg
8210		2x10 in.	15 x 13 x 12 in. HWD 38 x 33 x 30 cm HWD	39 lbs 18 kg
20410	2x10 in.	2x10 in.	15 x 13 x 12 in. HWD 38 x 33 x 30 cm HWD	39 lbs 18 kg

General Specifications

Boards	Main control board Water slip alarm relay board Heat exchanger thermocouple temperature transmitter
Display	LCD temperature display* LED heat exchanger status indicators
Alarm Relays	Cooler over temperature Cooler thermocouple failure Water slip (moisture carryover)
Heat Exchanger Type	EZ-Clean™ twist apart
Heat Exchanger Material	Stainless steel (standard) Durinert® treated stainless steel, Kynar® , Glass (optional)
Heat Exchanger Conections	1/4" FNTP Inlet (first heat exchanger) 1/8" FNTP Outlet 3/8" FNTP Drain
Heat Sink	High heat transfer aluminum
Voltage	110VAC (220 VAC optional) 50/60Hz

^{*}LCD display is an optional upgrade on Model M115 and is not available on the Model 610 pre-cooler.

Operating Specifications

Maximum Inlet	ADDRE (DOERO) CC During to Class Impires
Sample Temperature	400°F (205°C) SS, Durinert®, Glass Impingers 280°F (138°C) Kynar® Impingers
SECTION OF SOME SE	
Maximum Inlet	45 psig
Pressure	3 bar/2250 mmHg
Maximum Heat	<+1 in. H20
Exchanger Pressure Drop	
Бтор	
Ambient Temperature	33-104°F
Range	0.6-40°C
Outlet Sample Gas	41°F
Dew Point	5°C