

EMERALD SERIES

Residential Steel Boilers



- Available in 7 sizes 85 MBH to 150 MBH
- AFUE up to 86 %
- 2012 Compliant Aquastat with Low Water Cutoff
- Becket, Carlin, Riello Burners with quick disconnect
- Optional Tankless Coil
- Limited Lifetime Warranty



Welcome home!



- Made in the U.S.A.
- Designed, constructed, and hydrostatically tested to ASME standards
- Textured Powder Coat Jacket
- Large Cast Peep Site
- One-piece Ceramic Combustion Chamber
- Completely packaged with the burner of your choice



Manufacturing Boilers Since 1936

COLUMBIA

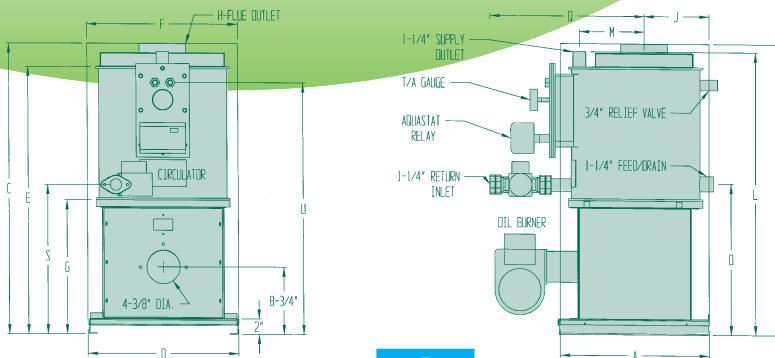
COLUMBIA BOILER COMPANY

610-473-8457

www.columbiaboiler.com

EMERALD SERIES

BOILER SPECIFICATIONS



General Information

- **Clearances:** (Required distances measured from boiler) Top: 24", Sides: 6", Front: 24", Back: 6", Flue Connector: 18"
- **Connections:** (All models) Supply Tapping: 1-1/4", Return Tapping: 1-1/4" NPT, Oil Line: 3/8" O.D., Copper tubing for runs of 50' or less and 1/2" O.D. for longer runs.
- **Electrical:** 120 Volts AC, 60 Hertz, 1-phase, less than 12 amps (15-amp circuit recommended)



DOE RATINGS AND DATA

Boiler Model No.	EM-85EE	EM-100EE	EM-110EE	EM-3100EE	EM-125EE	EM-135EE	EM-150EE
Input - GPH	.85	1.00	1.10	1.00	1.25	1.35	1.50
Input - MBTU/Hr.	119	140	154	140	175	189	210
Heating Capacity	102	117	130	117	147	159	179
Net Output	88	102	113	102	128	138	155
Nozzle @140 psi (Beckett)	.65 80°B	.75 80°B	.85 80°B	.85 80°B	1.00 80°B	1.10 80°A	1.25 80°A
Nozzle @150 psi (Riello)	.65 60°A	.75 60°A	.85 60°A	NA	1.00 60°A	1.10 80°A	1.25 80°A
Nozzle @140 psi (Carlin)	.65 70°A	.75 70°A	.85 70°A	NA	1.00 60°B	1.10 60°B	1.25 60°B
AFUE Ratings	85.12	84.00	84.58	86.03	84.77	84.00	84.56
GPM Tankless Coil (GPM)	3	5	5	5	5	5	5
Number of Fire Tubes	12	12	14	8	8	10	14
Water Capacity (gallons)	13	13	12.5	22	22	20	16
Approx. Shipping Weight (lbs)	295	295	300	355	355	370	390

DIMENSIONS

		EM-85EE	EM-100EE	EM-110EE	EM-3100EE	EM-125EE	EM-135EE	EM-150EE
Casing	A Length	20"	20"	20"	21"	21"	21"	21"
	C Height	37-1/4"	37-1/4"	37-1/4"	46"	46"	46"	46"
	D Width	19-1/2"	19-1/2"	19-1/2"	21"	21"	21"	21"
Boiler	E Height	34-3/8"	34-3/8"	34-3/8"	43-3/8"	43-3/8"	43-3/8"	43-3/8"
	F Diameter	16-3/4"	16-3/4"	16-3/4"	18-3/4"	18-3/4"	18-3/4"	18-3/4"
	G Base Height	17"	17"	17"	20-1/2"	20-1/2"	20-1/2"	20-1/2"
Flue Outlet	H Size	6"	6"	6"	8"	8"	8"	8"
	I Height	37-1/2"	37-1/2"	37-1/2"	47"	47"	47"	47"
	J C.L. to Rear	9"	9"	9"	10-1/2"	10-1/2"	10-1/2"	10-1/2"
Supply Outlet	Size	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"
	L Height	35-1/4"	35-1/4"	35-1/4"	45"	45"	45"	45"
	M C.L. to Outlet	8-1/2"	8-1/2"	8-1/2"	8-3/8"	8-3/8"	8-3/8"	8-3/8"
Feed/ Drain	Size	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"
	O Height	19-1/2"	19-1/2"	19-1/2"	22-3/4"	22-3/4"	22-3/4"	22-3/4"
Return Inlet	Size	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"
	Q C.L. to Inlet	19-1/2"	19-1/2"	19-1/2"	20"	20"	20"	20"
	S Height	19"	19"	19"	22-1/2"	22-1/2"	22-1/2"	22-1/2"
Coil Connect.	Nominal Size	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
	U Height	32-1/4"	32-1/4"	32-1/4"	42"	42"	42"	42"

2.5m-6/08-BP

Standard Equipment

- **Boiler Control:** Beckett Aquasmart Primary Control includes LWCO
- **ASME:** Boiler, Flush Jacket, Ceramic Fiber Combustion Chamber
- Taco 007 Circulator, Theraltimeter Gauge, ASME Relief Valve, Brass Drain Valve, Dip Tube Assembly
- **Burners:** Beckett, Riello, or Carlin Oil or Carlin EZ Gas. All burners with Quick Disconnects.
- Boilers may be ordered with or less Tankless Coil



Constructed and hydrostatically-tested in accordance with ASME Boiler Code, Section IV.

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