

Castrads®

Declaration of Performance

No. 202201-1083-US

Emmeline I 34in

Unique product code:	CI-EML1-865
Type, batch or serial number:	CI-EML1-865
Intended use of the construction product:	In heating systems in buildings
Manufacturer:	Castrads Ltd 1 Kenwood Road North Reddish SK5 6PH, Manchester, United Kingdom
Test standard:	EN 442-1:2014
Test laboratory:	BSRIA
Test report number:	104331/2

Declared performance

Essential characteristics	Performance	Reference standard
Reaction to fire	A1 — non-combustible	EN 442-1:2014
Release of dangerous substances	None	
Pressure tightness	No leakage at 1.3 × maximum working pressure (psi)	
Surface temperature	Maximum 248 °F	
Resistance to pressure	No breakage at 1.69 × maximum working pressure (psi) Maximum working pressure: 145 psi	
Rated thermal outputs	See appendix 1	
Thermal output in different operating conditions (characteristic curve)	$\phi = K_m \cdot \Delta T^n$. See appendix for factor K_m and exponent n .	
Resistance against corrosion	No corrosion after 100h humidity	
Resistance against minor impact	Class 0	

Performance values are derived from testing to EN 442-1:2014 and are presented here in US customary units for the North American market. This document is a statement of manufacturer performance data; it is not issued under, and does not imply conformity with, any US regulatory or certification scheme.

Signed for and on behalf of the manufacturer by:

Nick Baylis
CEO
Syosset, England
27th August 2026





Appendix to DoP No. 202201-1083-US: Dimensions and thermal outputs

Panel dimensions: 34.1 in (865 mm) high when floor standing, 4.3 in (110 mm) deep, for all numbers of sections. See table for length.

SKU	Num of sec.	Length, in	Output (Hydronic, 170°F)	Output (Steam, 215°F)	EDR	Factor, Km	Exponent, n
CI-EML1-865-03	3	9.1	950	1,512	6.2	1.627	1.2737
CI-EML1-865-04	4	11.7	1,266	2,016	8.3	2.169	1.2737
CI-EML1-865-05	5	14.3	1,583	2,521	10.3	2.711	1.2737
CI-EML1-865-06	6	16.9	1,899	3,025	12.4	3.253	1.2737
CI-EML1-865-07	7	19.5	2,216	3,529	14.4	3.795	1.2737
CI-EML1-865-08	8	22.1	2,532	4,033	16.5	4.337	1.2737
CI-EML1-865-09	9	24.8	2,849	4,537	18.6	4.880	1.2737
CI-EML1-865-10	10	27.4	3,165	5,041	20.6	5.422	1.2737
CI-EML1-865-11	11	30	3,482	5,545	22.7	5.964	1.2737
CI-EML1-865-12	12	32.6	3,798	6,049	24.8	6.506	1.2737
CI-EML1-865-13	13	35.2	4,115	6,554	26.8	7.048	1.2737
CI-EML1-865-14	14	37.8	4,431	7,058	28.9	7.590	1.2737
CI-EML1-865-15	15	40.5	4,748	7,562	31.0	8.133	1.2737
CI-EML1-865-16	16	43.1	5,064	8,066	33.0	8.675	1.2737
CI-EML1-865-17	17	45.7	5,381	8,570	35.1	9.217	1.2737
CI-EML1-865-18	18	48.3	5,697	9,074	37.2	9.759	1.2737
CI-EML1-865-19	19	50.9	6,014	9,578	39.2	10.301	1.2737
CI-EML1-865-20	20	53.5	6,330	10,082	41.3	10.843	1.2737
CI-EML1-865-21	21	56.2	6,647	10,587	43.3	11.386	1.2737
CI-EML1-865-22	22	58.8	6,963	11,091	45.4	11.928	1.2737
CI-EML1-865-23	23	61.4	7,280	11,595	47.5	12.470	1.2737
CI-EML1-865-24	24	64	7,596	12,099	49.5	13.012	1.2737
CI-EML1-865-25	25	66.7	7,913	12,603	51.6	13.554	1.2737
CI-EML1-865-26	26	69.3	8,229	13,107	53.7	14.096	1.2737
CI-EML1-865-27	27	71.9	8,546	13,611	55.7	14.639	1.2737
CI-EML1-865-28	28	74.5	8,862	14,115	57.8	15.181	1.2737
CI-EML1-865-29	29	77.1	9,179	14,619	59.9	15.723	1.2737
CI-EML1-865-30	30	79.7	9,495	15,124	61.9	16.265	1.2737
CI-EML1-865-31	31	82.4	9,812	15,628	64.0	16.807	1.2737
CI-EML1-865-32	32	85	10,128	16,132	66.1	17.349	1.2737
CI-EML1-865-33	33	87.6	10,445	16,636	68.1	17.892	1.2737
CI-EML1-865-34	34	90.2	10,761	17,140	70.2	18.434	1.2737
CI-EML1-865-35	35	92.8	11,078	17,644	72.2	18.976	1.2737
CI-EML1-865-36	36	95.4	11,394	18,148	74.3	19.518	1.2737
CI-EML1-865-37	37	98.1	11,711	18,652	76.4	20.060	1.2737
CI-EML1-865-38	38	100.7	12,027	19,157	78.4	20.602	1.2737
CI-EML1-865-39	39	103.3	12,344	19,661	80.5	21.145	1.2737
CI-EML1-865-40	40	105.9	12,660	20,165	82.6	21.687	1.2737

Output (Hydronic, 170°F): BTU/h at 170°F mean water, 68°F room. **Output (Steam, 215°F):** BTU/h at 215°F steam, 68°F room. **EDR:** square feet of Equivalent Direct Radiation at the reference condition (215°F steam, 70°F room; 1 sq ft = 240 BTU/h). Outputs are derived from the EN 442-1 power law $\phi = Km \times \Delta T^n$ (ΔT = mean water – room, °C); BTU/h rounded to whole numbers, EDR to one decimal place.