Declaration of Performance

No. 202309-1089-US

Emmeline III 34in

Unique product code:	CI-EML3-870
Type, batch or serial number:	CI-EML3-870
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)	$\varphi = Km \cdot \Delta T^{n}$. See appendix for factor Km 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

Castrads®

Appendix to DoP No. 202309-1089-US: Dimensions and thermal outputs

Panel dimensions: 34.3 in (870 mm) high when floor standing, 9.1 in (230 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-EML3-870-03	3	9.1	1,775	2,847	11.7	2.813	1.2930
CI-EML3-870-04	4	11.7	2,367	3,796	15.5	3.750	1.2930
CI-EML3-870-05	5	14.3	2,958	4,746	19.4	4.688	1.2930
CI-EML3-870-06	6	16.9	3,550	5,695	23.3	5.626	1.2930
CI-EML3-870-07	7	19.5	4,142	6,644	27.2	6.563	1.2930
CI-EML3-870-08	8	22.1	4,734	7,593	31.1	7.501	1.2930
CI-EML3-870-09	9	24.8	5,325	8,542	35.0	8.438	1.2930
CI-EML3-870-10	10	27.4	5,917	9,491	38.9	9.376	1.2930
CI-EML3-870-11	11	30	6,509	10,440	42.7	10.314	1.2930
CI-EML3-870-12	12	32.6	7,100	11,389	46.6	11.251	1.2930
CI-EML3-870-13	13	35.2	7,692	12,338	50.5	12.189	1.2930
CI-EML3-870-14	14	37.8	8,284	13,288	54.4	13.126	1.2930
CI-EML3-870-15	15	40.5	8,875	14,237	58.3	14.064	1.2930
CI-EML3-870-16	16	43.1	9,467	15,186	62.2	15.002	1.2930
CI-EML3-870-17	17	45.7	10,059	16,135	66.0	15.939	1.2930
CI-EML3-870-18	18	48.3	10,650	17,084	69.9	16.877	1.2930
CI-EML3-870-19	19	50.9	11,242	18,033	73.8	17.814	1.2930
CI-EML3-870-20	20	53.5	11,834	18,982	77.7	18.752	1.2930
CI-EML3-870-21	21	56.2	12,426	19,931	81.6	19.690	1.2930
CI-EML3-870-22	22	58.8	13,017	20,881	85.5	20.627	1.2930
CI-EML3-870-23	23	61.4	13,609	21,830	89.4	21.565	1.2930
CI-EML3-870-24	24	64	14,201	22,779	93.2	22.502	1.2930
CI-EML3-870-25	25	66.7	14,792	23,728	97.1	23.440	1.2930
CI-EML3-870-26	26	69.3	15,384	24,677	101.0	24.378	1.2930
CI-EML3-870-27	27	71.9	15,976	25,626	104.9	25.315	1.2930
CI-EML3-870-28	28	74.5	16,567	26,575	108.8	26.253	1.2930
CI-EML3-870-29	29	77.1	17,159	27,524	112.7	27.190	1.2930
CI-EML3-870-30	30	79.7	17,751	28,473	116.6	28.128	1.2930
CI-EML3-870-31	31	82.4	18,343	29,423	120.4	29.066	1.2930
CI-EML3-870-32	32	85	18,934	30,372	124.3	30.003	1.2930
CI-EML3-870-33	33	87.6	19,526	31,321	128.2	30.941	1.2930
CI-EML3-870-34	34	90.2	20,118	32,270	132.1	31.878	1.2930
CI-EML3-870-35	35	92.8	20,709	33,219	136.0	32.816	1.2930
CI-EML3-870-36	36	95.4	21,301	34,168	139.9	33.754	1.2930
CI-EML3-870-37	37	98.1	21,893	35,117	143.8	34.691	1.2930
CI-EML3-870-38	38	100.7	22,484	36,066	147.6	35.629	1.2930
CI-EML3-870-39	39	103.3	23,076	37,015	151.5	36.566	1.2930
CI-EML3-870-40	40	105.9	23,668	37,965	155.4	37.504	1.2930

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 $\varphi = Km \times \Delta T^{n}$ (ΔT = mean water − room, °C); BTU/h rounded to whole numbers, EDR to one decimal place.