

Castrads®

Declaration of Performance

No. 202209-1085-US

Emmeline II 26in

Unique product code:	CI-EML2-670
Type, batch or serial number:	CI-EML2-670
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. 202209-1085-US: Dimensions and thermal outputs

Panel dimensions: 26.4 in (670 mm) high when floor standing, 6.7 in (170 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-EML2-670-03	3	9.1	1,042	1,655	6.8	1.856	1.2642
CI-EML2-670-04	4	11.7	1,390	2,206	9.0	2.474	1.2642
CI-EML2-670-05	5	14.3	1,737	2,758	11.3	3.093	1.2642
CI-EML2-670-06	6	16.9	2,085	3,309	13.6	3.711	1.2642
CI-EML2-670-07	7	19.5	2,432	3,861	15.8	4.330	1.2642
CI-EML2-670-08	8	22.1	2,780	4,412	18.1	4.948	1.2642
CI-EML2-670-09	9	24.8	3,127	4,964	20.3	5.567	1.2642
CI-EML2-670-10	10	27.4	3,475	5,516	22.6	6.185	1.2642
CI-EML2-670-11	11	30	3,822	6,067	24.8	6.804	1.2642
CI-EML2-670-12	12	32.6	4,170	6,619	27.1	7.422	1.2642
CI-EML2-670-13	13	35.2	4,517	7,170	29.4	8.041	1.2642
CI-EML2-670-14	14	37.8	4,865	7,722	31.6	8.659	1.2642
CI-EML2-670-15	15	40.5	5,212	8,273	33.9	9.278	1.2642
CI-EML2-670-16	16	43.1	5,560	8,825	36.1	9.896	1.2642
CI-EML2-670-17	17	45.7	5,907	9,377	38.4	10.515	1.2642
CI-EML2-670-18	18	48.3	6,255	9,928	40.7	11.134	1.2642
CI-EML2-670-19	19	50.9	6,602	10,480	42.9	11.752	1.2642
CI-EML2-670-20	20	53.5	6,950	11,031	45.2	12.371	1.2642
CI-EML2-670-21	21	56.2	7,297	11,583	47.4	12.989	1.2642
CI-EML2-670-22	22	58.8	7,645	12,134	49.7	13.608	1.2642
CI-EML2-670-23	23	61.4	7,992	12,686	52.0	14.226	1.2642
CI-EML2-670-24	24	64	8,340	13,237	54.2	14.845	1.2642
CI-EML2-670-25	25	66.7	8,687	13,789	56.5	15.463	1.2642
CI-EML2-670-26	26	69.3	9,035	14,341	58.7	16.082	1.2642
CI-EML2-670-27	27	71.9	9,382	14,892	61.0	16.700	1.2642
CI-EML2-670-28	28	74.5	9,730	15,444	63.2	17.319	1.2642
CI-EML2-670-29	29	77.1	10,077	15,995	65.5	17.937	1.2642
CI-EML2-670-30	30	79.7	10,425	16,547	67.8	18.556	1.2642
CI-EML2-670-31	31	82.4	10,772	17,098	70.0	19.174	1.2642
CI-EML2-670-32	32	85	11,120	17,650	72.3	19.793	1.2642
CI-EML2-670-33	33	87.6	11,467	18,202	74.5	20.411	1.2642
CI-EML2-670-34	34	90.2	11,815	18,753	76.8	21.030	1.2642
CI-EML2-670-35	35	92.8	12,162	19,305	79.1	21.649	1.2642
CI-EML2-670-36	36	95.4	12,510	19,856	81.3	22.267	1.2642
CI-EML2-670-37	37	98.1	12,857	20,408	83.6	22.886	1.2642
CI-EML2-670-38	38	100.7	13,205	20,959	85.8	23.504	1.2642
CI-EML2-670-39	39	103.3	13,552	21,511	88.1	24.123	1.2642
CI-EML2-670-40	40	105.9	13,900	22,062	90.3	24.741	1.2642

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.