Declaration of Performance

No. 202009-1105-US

Mercury 4 Column 34in

Unique product code:	CI-M4C-860
Type, batch or serial number:	CI-M4C-860
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:	61431

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
8th October 2026

Castrads®

Appendix to DoP No. 202009-1105-US: Dimensions and thermal outputs

Panel dimensions: 33.9 in (860 mm) high when floor standing, 5.5 in (140 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-M4C-860-03	3	8.1	1,302	2,073	8.5	2.228	1.2739
CI-M4C-860-04	4	10.4	1,735	2,764	11.3	2.970	1.2739
CI-M4C-860-05	5	12.7	2,169	3,455	14.1	3.713	1.2739
CI-M4C-860-06	6	15	2,603	4,147	17.0	4.456	1.2739
CI-M4C-860-07	7	17.2	3,037	4,838	19.8	5.198	1.2739
CI-M4C-860-08	8	19.5	3,471	5,529	22.6	5.941	1.2739
CI-M4C-860-09	9	21.9	3,905	6,220	25.5	6.683	1.2739
CI-M4C-860-10	10	24.1	4,339	6,911	28.3	7.426	1.2739
CI-M4C-860-11	11	26.4	4,772	7,602	31.1	8.169	1.2739
CI-M4C-860-12	12	28.7	5,206	8,293	34.0	8.911	1.2739
CI-M4C-860-13	13	31	5,640	8,984	36.8	9.654	1.2739
CI-M4C-860-14	14	33.3	6,074	9,675	39.6	10.396	1.2739
CI-M4C-860-15	15	35.6	6,508	10,366	42.4	11.139	1.2739
CI-M4C-860-16	16	37.9	6,942	11,057	45.3	11.882	1.2739
CI-M4C-860-17	17	40.2	7,376	11,749	48.1	12.624	1.2739
CI-M4C-860-18	18	42.5	7,809	12,440	50.9	13.367	1.2739
CI-M4C-860-19	19	44.8	8,243	13,131	53.8	14.109	1.2739
CI-M4C-860-20	20	47.1	8,677	13,822	56.6	14.852	1.2739
CI-M4C-860-21	21	49.4	9,111	14,513	59.4	15.595	1.2739
CI-M4C-860-22	22	51.7	9,545	15,204	62.3	16.337	1.2739
CI-M4C-860-23	23	54	9,979	15,895	65.1	17.080	1.2739
CI-M4C-860-24	24	56.3	10,413	16,586	67.9	17.822	1.2739
CI-M4C-860-25	25	58.6	10,846	17,277	70.7	18.565	1.2739
CI-M4C-860-26	26	60.9	11,280	17,968	73.6	19.308	1.2739
CI-M4C-860-27	27	63.1	11,714	18,659	76.4	20.050	1.2739
CI-M4C-860-28	28	65.4	12,148	19,351	79.2	20.793	1.2739
CI-M4C-860-29	29	67.8	12,582	20,042	82.1	21.535	1.2739
CI-M4C-860-30	30	70	13,016	20,733	84.9	22.278	1.2739
CI-M4C-860-31	31	72.3	13,450	21,424	87.7	23.021	1.2739
CI-M4C-860-32	32	74.6	13,883	22,115	90.6	23.763	1.2739
CI-M4C-860-33	33	76.9	14,317	22,806	93.4	24.506	1.2739
CI-M4C-860-34	34	79.2	14,751	23,497	96.2	25.248	1.2739
CI-M4C-860-35	35	81.5	15,185	24,188	99.0	25.991	1.2739
CI-M4C-860-36	36	83.8	15,619	24,879	101.9	26.734	1.2739
CI-M4C-860-37	37	86.1	16,053	25,570	104.7	27.476	1.2739
CI-M4C-860-38	38	88.4	16,487	26,261	107.5	28.219	1.2739
CI-M4C-860-39	39	90.7	16,920	26,953	110.4	28.961	1.2739
CI-M4C-860-40	40	93	17,354	27,644	113.2	29.704	1.2739

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.