Declaration of Performance

No. 202009-1102-US

Mercury 4 Column 18in

Unique product code:	CI-M4C-460
Type, batch or serial number:	CI-M4C-460
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
27th August 2026

Castrads®

Appendix to DoP No. 202009-1102-US: Dimensions and thermal outputs

Panel dimensions: 18.1 in (460 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-460-03	3	8.1	688	1,081	4.4	1.375	1.2357
CI-M4C-460-04	4	10.4	918	1,442	5.9	1.833	1.2357
CI-M4C-460-05	5	12.7	1,147	1,802	7.4	2.292	1.2357
CI-M4C-460-06	6	15	1,377	2,163	8.9	2.750	1.2357
CI-M4C-460-07	7	17.2	1,606	2,523	10.3	3.208	1.2357
CI-M4C-460-08	8	19.5	1,836	2,884	11.8	3.666	1.2357
CI-M4C-460-09	9	21.9	2,065	3,244	13.3	4.125	1.2357
CI-M4C-460-10	10	24.1	2,295	3,605	14.8	4.583	1.2357
CI-M4C-460-11	11	26.4	2,524	3,965	16.2	5.041	1.2357
CI-M4C-460-12	12	28.7	2,754	4,326	17.7	5.500	1.2357
CI-M4C-460-13	13	31	2,983	4,686	19.2	5.958	1.2357
CI-M4C-460-14	14	33.3	3,213	5,047	20.7	6.416	1.2357
CI-M4C-460-15	15	35.6	3,442	5,407	22.2	6.875	1.2357
CI-M4C-460-16	16	37.9	3,672	5,768	23.6	7.333	1.2357
CI-M4C-460-17	17	40.2	3,901	6,128	25.1	7.791	1.2357
CI-M4C-460-18	18	42.5	4,131	6,489	26.6	8.249	1.2357
CI-M4C-460-19	19	44.8	4,360	6,849	28.1	8.708	1.2357
CI-M4C-460-20	20	47.1	4,590	7,210	29.5	9.166	1.2357
CI-M4C-460-21	21	49.4	4,819	7,570	31.0	9.624	1.2357
CI-M4C-460-22	22	51.7	5,049	7,931	32.5	10.083	1.2357
CI-M4C-460-23	23	54	5,278	8,291	34.0	10.541	1.2357
CI-M4C-460-24	24	56.3	5,508	8,652	35.4	10.999	1.2357
CI-M4C-460-25	25	58.6	5,737	9,012	36.9	11.458	1.2357
CI-M4C-460-26	26	60.9	5,967	9,373	38.4	11.916	1.2357
CI-M4C-460-27	27	63.1	6,196	9,733	39.9	12.374	1.2357
CI-M4C-460-28	28	65.4	6,426	10,094	41.4	12.832	1.2357
CI-M4C-460-29	29	67.8	6,655	10,454	42.8	13.291	1.2357
CI-M4C-460-30	30	70	6,885	10,815	44.3	13.749	1.2357
CI-M4C-460-31	31	72.3	7,114	11,175	45.8	14.207	1.2357
CI-M4C-460-32	32	74.6	7,344	11,536	47.3	14.666	1.2357
CI-M4C-460-33	33	76.9	7,573	11,896	48.7	15.124	1.2357
CI-M4C-460-34	34	79.2	7,803	12,257	50.2	15.582	1.2357
CI-M4C-460-35	35	81.5	8,032	12,617	51.7	16.041	1.2357
CI-M4C-460-36	36	83.8	8,262	12,978	53.2	16.499	1.2357
CI-M4C-460-37	37	86.1	8,491	13,338	54.6	16.957	1.2357
CI-M4C-460-38	38	88.4	8,721	13,699	56.1	17.415	1.2357
CI-M4C-460-39	39	90.7	8,950	14,059	57.6	17.874	1.2357
CI-M4C-460-40	40	93	9,180	14,420	59.1	18.332	1.2357

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.