



# Declaration of Performance

No. 202009-1063

Florence 5 Column 685mm

|  |   |
|--|---|
| <b>Unique product code:</b>                      | SMC-F5C-687   |
| <b>Type, batch or serial number:</b>             | SMC-F5C-687   |
| <b>Intended use of the construction product:</b> | In heating systems in buildings   |
| <b>Manufacturer:</b>                             | Castrads Limited<br>1 Kenwood Road<br>Stockport SK5 6PH<br>United Kingdom                                   |
| <b>System of AVCP:</b>                           | System 3  |
| <b>Harmonized standard:</b>                      | EN 442-1:2014   |
| <b>Notified body:</b>                            | CETIAT<br>Domaine Scientifique de la Doua<br>25 Avenue des Arts<br>BP 52042<br>69603 Villeurbanne<br>France |
| <b>Test report number:</b>                       | ENE/MRT.RES.01003_C   |

## Declared performance

| Essential characteristics   | Performance   | Harmonized technical specification |
|---|---|------------------------------------|
| Reaction to fire  | A1  | EN 442-1:2014                      |
| Release of dangerous substances   | None  |                                    |
| Pressure tightness  | No leakage at 1.3 × maximum operating pressure [kPa]                            |                                    |
| Surface temperature   | Maximum 120 °C  |                                    |
| Resistance to pressure  | No breakage at 1.69 × maximum operating pressure [kPa]                          |                                    |
| Resistance to pressure  | Maximum operating pressure: 1000 [kPa]  |                                    |
| Rated thermal outputs   | See appendix 1  |                                    |
| Thermal output in different operating conditions (characteristic curve) | $\phi = K_m \cdot \Delta T^n$<br>See appendix for factor $K_m$ and exponent $n$ |                                    |
| Resistance against corrosion:   | No corrosion after 100h humidity  |                                    |
| Resistance against minor impact:  | Class 0   |                                    |

## Appendix: Dimensions and thermal outputs

Panel dimensions: 787mm h, 177mm d for all numbers of sections. See table for length.

| SKU            | Number of sections | Length, mm | Output, W $\Delta T50$ | Output, W $\Delta T30$ | Factor, Km | Exponent, n |
|----------------|--------------------|------------|------------------------|------------------------|------------|-------------|
| SMC-F5C-687/03 | 3                  | 165        | 324                    | 164                    | 1.744      | 1.33578     |
| SMC-F5C-687/04 | 4                  | 210        | 432                    | 218                    | 2.325      | 1.33578     |
| SMC-F5C-687/05 | 5                  | 255        | 541                    | 273                    | 2.906      | 1.33578     |
| SMC-F5C-687/06 | 6                  | 300        | 649                    | 328                    | 3.488      | 1.33578     |
| SMC-F5C-687/07 | 7                  | 345        | 757                    | 382                    | 4.069      | 1.33578     |
| SMC-F5C-687/08 | 8                  | 390        | 865                    | 437                    | 4.650      | 1.33578     |
| SMC-F5C-687/09 | 9                  | 435        | 973                    | 491                    | 5.231      | 1.33578     |
| SMC-F5C-687/10 | 10                 | 480        | 1081                   | 546                    | 5.813      | 1.33578     |
| SMC-F5C-687/11 | 11                 | 525        | 1189                   | 601                    | 6.394      | 1.33578     |
| SMC-F5C-687/12 | 12                 | 570        | 1297                   | 655                    | 6.975      | 1.33578     |
| SMC-F5C-687/13 | 13                 | 615        | 1405                   | 710                    | 7.556      | 1.33578     |
| SMC-F5C-687/14 | 14                 | 660        | 1513                   | 764                    | 8.138      | 1.33578     |
| SMC-F5C-687/15 | 15                 | 705        | 1622                   | 819                    | 8.719      | 1.33578     |
| SMC-F5C-687/16 | 16                 | 750        | 1730                   | 874                    | 9.300      | 1.33578     |
| SMC-F5C-687/17 | 17                 | 795        | 1838                   | 928                    | 9.881      | 1.33578     |
| SMC-F5C-687/18 | 18                 | 840        | 1946                   | 983                    | 10.463     | 1.33578     |
| SMC-F5C-687/19 | 19                 | 885        | 2054                   | 1037                   | 11.044     | 1.33578     |
| SMC-F5C-687/20 | 20                 | 930        | 2162                   | 1092                   | 11.625     | 1.33578     |
| SMC-F5C-687/21 | 21                 | 975        | 2270                   | 1147                   | 12.206     | 1.33578     |
| SMC-F5C-687/22 | 22                 | 1020       | 2378                   | 1201                   | 12.788     | 1.33578     |
| SMC-F5C-687/23 | 23                 | 1065       | 2486                   | 1256                   | 13.369     | 1.33578     |
| SMC-F5C-687/24 | 24                 | 1110       | 2594                   | 1310                   | 13.950     | 1.33578     |
| SMC-F5C-687/25 | 25                 | 1155       | 2703                   | 1365                   | 14.532     | 1.33578     |
| SMC-F5C-687/26 | 26                 | 1200       | 2811                   | 1420                   | 15.113     | 1.33578     |
| SMC-F5C-687/27 | 27                 | 1245       | 2919                   | 1474                   | 15.694     | 1.33578     |
| SMC-F5C-687/28 | 28                 | 1290       | 3027                   | 1529                   | 16.275     | 1.33578     |
| SMC-F5C-687/29 | 29                 | 1335       | 3135                   | 1583                   | 16.857     | 1.33578     |
| SMC-F5C-687/30 | 30                 | 1380       | 3243                   | 1638                   | 17.438     | 1.33578     |
| SMC-F5C-687/31 | 31                 | 1425       | 3351                   | 1693                   | 18.019     | 1.33578     |
| SMC-F5C-687/32 | 32                 | 1470       | 3459                   | 1747                   | 18.600     | 1.33578     |
| SMC-F5C-687/33 | 33                 | 1515       | 3567                   | 1802                   | 19.182     | 1.33578     |
| SMC-F5C-687/34 | 34                 | 1560       | 3675                   | 1856                   | 19.763     | 1.33578     |
| SMC-F5C-687/35 | 35                 | 1605       | 3784                   | 1911                   | 20.344     | 1.33578     |
| SMC-F5C-687/36 | 36                 | 1650       | 3892                   | 1966                   | 20.925     | 1.33578     |
| SMC-F5C-687/37 | 37                 | 1695       | 4000                   | 2020                   | 21.507     | 1.33578     |
| SMC-F5C-687/38 | 38                 | 1740       | 4108                   | 2075                   | 22.088     | 1.33578     |
| SMC-F5C-687/39 | 39                 | 1785       | 4216                   | 2129                   | 22.669     | 1.33578     |
| SMC-F5C-687/40 | 40                 | 1830       | 4324                   | 2184                   | 23.250     | 1.33578     |

