Thermocable Flexible Elements Ltd
Pasture Lane Clayton Bradford West Yorkshire
BD14 6LU England United Kingdom
Tel: +44(0)1274 882359 • Fax: +44(0)1274 882229
E-mail: info@thermocable.com

# DECLARATION OF PERFORMANCE

**(in accordance with the Construction Products Regulation EU 305/2011)**

**No. PRENDIG-24081903**

1 . Unique identification code of the product type:

**ProReact Digital Sensor Control Unit – DSCU-EN**
**ProReact EN Digital Linear Heat Detection Cable – EN68, EN78, EN88, EN68SS, EN78SS, EN8SS**
**ProReact Digital End-of-line Unit – EOLU-EN**

Description:

**Non-resettable line-type heat detector**
**(sensor control unit, sensing element, functional unit)**

2. Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11(4) of the CPR:

**See product label and serial number printed on product**

3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:

**Fire and/or overheat detection installed in and around buildings,**
**civil engineering works and other equivalent uses.**

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required under Article 11(5):

**Thermocable Flexible Elements Ltd**
**Pasture Lane**
**Clayton, Bradford**
**BD14 6LU**
**United Kingdom**

5. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2):

**Thermocable (Flexible Elements) IRE Ltd, Ground Floor, 71 Lower Baggot Street, Dublin, D02 P593, Ireland**

6. System or systems of assessment and verification of constancy of performance of the construction product as set out in CPR, Annex V:

**System 1**

7. In case of the declaration of performance concerning a construction product covered by a harmonized standard:

**EN54-28:2016 (approved by CEN 13 December 2015)**
**UL International (UK) Ltd performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control and issued the certificate of conformity of the factory production control**

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## 8.Declared Performance:

**Environmental Group II (EGII)** – ProReact EN Digital Sensor Control Unit (DSCU-EN), EN68 & EN68SS
**Environmental Group III (EGIII)** – ProReact EN Digital End-of-line Unit (EOLU-EN), EN78, EN78SS, EN88, EN88SS

| Essential characteristics | Performance | Technical Specification |
|---|---|---|
| Nominal activation conditions / sensitivity | | EN54-28:2016 |
| Individual alarm indication | Red LED (per Zone) | |
| Signalling | Power; alarm and fault status signalled per zone | |
| Operational reliability | | |
| Maximum ambient temperature test (endurance) for sensing element | Meets manufacturer's declared values (°C) | |
| Connection of ancillary devices (if applicable) | No functional effect | |
| Manufacturer's adjustments (if applicable) | Special means required | |
| Requirements for software controlled detectors (if applicable) | Modular structure / invalid data not permitted / program deadlock avoided / site specific data in non-volatile memory with >10 year retention. | |
| Sensing element fault | Fault signal <100s, no alarm | |
| On-site adjustment of response behaviour (if applicable) | Not applicable | |
| Tolerance to supply voltage | | EN54-28:2016 |
| Variation in supply parameters | Meets manufacturer's declared values (V) | |
| Low voltage fault (if applicable) | Fault signal <100s, no alarm | |
| Performance parameters under fire conditions | | EN54-28:2016 |
| Performance and reproducibility test | Meets manufacturer's declared values (°C, %) | |
| Durability of performance parameters under fire conditions | | EN54-28:2016 |
| Temperature resistance: | | |
| Dry heat (operational) sensor control unit | No false operation during 16 h at 55°C (EGII); alarms given after simulation | |
| | No false operation during 16h at 70°C (EGIII); Alarms given after simulation | |
| Cold (operational) sensing element | No false operation during 16 h at -10°C (EGII); meets manufacturer's declared values | |
| | No false operation during 16 h at -40°C (EGIII); meets manufacturer's declared values | |
| Cold (operational) for sensor control unit | No false operation during 16 h at -10°C (EGII); meets manufacturer's declared values | |
| | No false operation during 16 h at -40°C (EGIII); meets manufacturer's declared values | |

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| | | |
|---|---|---|
| Humidity resistance | | |
| Damp heat, steady-state (endurance) for sensor control unit and sensing element | No false operation after 21 d at 40°C and 93% RH; meets manufacturer's declared values | |
| Damp heat, cyclic (operational) for sensing element | No false operation during 2 cycles at 40°C and 93% RH (EGII); meets manufacturer's declared values | |
| Damp heat, cyclic (operational) for sensor control unit (if applicable) | No false operation during 2 cycles at 40°C and 93%RH (EGII); meets manufacturer's declared values<br>No false operation during 2 cycles at 55°C and 93%RH (EGIII); meets manufacturer's declared values | |
| Damp heat, steady-state (operational) for sensing control unit (if applicable) | Not applicable (EGI only) | |
| Damp heat, cyclic (endurance) for sensor control unit and sensing element (if applicable) | No false operation during 6 cycles at 55°C and 93%RH (EGIII); meets manufacturer's declared values | |
| Shock and vibration resistance | | |
| Shock (operational) for sensor control unit (if applicable) | No false operation during 18 6ms shock pulses of 1000 – (200 X M) $ms^{-2}$ (EGII & EGIII); alarms given after simulation | |
| Impact (operational) for sensor control unit | No false operational after three 0,5 J impacts; alarms given after simulation | |
| Impact (operational) for sensing element | No false operation during impact; no visible cracking or cutting of the sheath; meets manufacturer's declared values | |
| Vibration, sinusoidal (operational) for sensing control unit | No false operation during vibration for a sweep between 10Hz and 150Hz at 5$ms^{-2}$ (EGII & EGIII); alarms given after simulation | EN54-28:2016 |
| Vibration, sinusoidal (operational) for sensing element | No false operation during vibration for a sweep between 10Hz and 150Hz at 5$ms^{-2}$ (EGII & EGIII); alarms given after simulation | |
| Vibration, sinusoidal (endurance) for sensor control unit | No false operation after vibration for 20 sweeps between 10Hz and 150Hz at 10$ms^{-2}$ (EGII & EGIII); alarms given after simulation | |
| Vibration, sinusoidal (endurance) for sensing element | No false operation after vibration for 20 sweeps between 10Hz and 150Hz at 10$ms^{-2}$ (EGII & EGIII); alarms given after simulation | |
| Corrosion resistance | | |
| Sulphur dioxide ($SO_2$) corrosion (endurance) for sensing element | No false operation after 21d at 25°C, 93% RH and 25µl/l $SO_2$ content (EGII & EGIII); meets manufacturer's declared values | |
| Sulphur dioxide ($SO_2$) corrosion (endurance) for sensor control unit (if applicable) | No false operation after 21d at 25°C, 93% RH and 25µl/l $SO_2$ content (EGII & EGIII); alarms given after simulation | |

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| | | |
|---|---|---|
| Electrical stability<br><br>EMC, immunity | No false operation when applying electrostatic discharge, radiated electromagnetic fields, conducted disturbances induced by electromagnetic fields, fast transient bursts and slow high energy voltage surges; alarms given after simulation | EN54-28:2016 |

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9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

**Signed for and on behalf of the manufacturer by:**

**Thomas Robst – Technical Director**

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**(name and function)**

Thermocable Flexible Elements Ltd
Bradford, United Kingdom
**on** 26th May 2023

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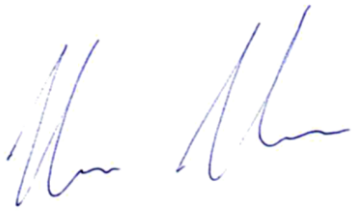
**(placed and date of issue)**



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**(signature)**