

UL-EU CERTIFICATE

Certificate No.
UL-EU-01116-CPR

Issue date
23-08-2019

Issue No.
03

Re-Issue date
22-04-2025

Expiry date
23-08-2029
(10 Years)

Certificate Holder:
Thermocable Flexible Elements Ltd

Address:
Pasture Lane, Clayton,
Bradford, BD14 6LU
United Kingdom

Product:
Fire detection and fire alarm systems – Non-resettable line-type heat detector Non-resettable line-type heat detectors:
DSCU-EN - ProReact Fixed Activation Sensor Control Unit
EN68 - ProReact EN Fixed Activation LHD Cable
EN68SS - ProReact EN Fixed Activation LHD Cable
EN78 - ProReact EN Fixed Activation LHD Cable
EN78SS - ProReact EN Fixed Activation LHD Cable
EN88 - ProReact EN Fixed Activation LHD Cable
EN88SS - ProReact EN Fixed Activation LHD Cable
EOLU-EN - ProReact Fixed Activation EOL Unit

Places of production:
As per certificate holder

Standard:
EN54-28:2016

Authorised Signatory:



Richard Bristow

Issued by UL International (UK) Ltd

This is to certify that representative samples of the Certified Product listed above have been investigated by Underwriters Laboratories to the Standard(s) indicated on this Certificate, in accordance with the UL Global Services Agreement and the UL-EU Mark Service Terms and Conditions ("Agreement"). The Certificate Holder is entitled to use the UL-EU Mark for the Certified Product listed on the certificate and manufactured at the production site(s) listed, in accordance with the terms of the Agreement. Only those products bearing the UL-EU Mark for Europe should be considered as being covered by UL's UL-EU Mark Service. This Certificate shall remain valid through the Expiration date, unless a Standard identified on this Certificate is amended or withdrawn prior to that date or there is a non-compliance with the Agreement.



4705



Solutions

Form-ULID-006104 V8.0

Appendix UL-EU CERTIFICATE UL-EU-01116-CPR

Rating/Classification:

Ratings for Sensor Control Unit (DSCU-EN)

Operating Voltage:	24 VDC (12-36 VDC)
Alarm Relay Rating:	30 VAC/42.4 VDC, 2 A (2 x Form C)
Fault Contact Ratings:	35 VDC maximum, 80 mA maximum (2 x outputs)
Zone End-of-Line Resistor	3.6 k ohm (Zone 1 and Zone 2)
Environmental Group	II

This device must only be powered with an EN54-4 compliant power supply.

Ratings for Sensing Element (EN68, EN68SS)

Marked Rating:	T068-V10-A045
Nominal Alarm Temperature:	68°C
Tolerance Alarm Temperature:	±10% (±7.8°C)
Maximum Ambient Temperature:	45°C
Environmental Group	II

Ratings for Sensing Element (EN78, EN78SS)

Marked Rating:	T078-V10-A045
Nominal Alarm Temperature:	78°C
Tolerance Alarm Temperature:	±10% (±7.8°C)
Maximum Ambient Temperature:	45°C
Environmental Group	III

Ratings for Sensing Element (EN88, EN88SS)

Marked Rating:	T088-V10-A065
Nominal Alarm Temperature:	88°C
Tolerance Alarm Temperature:	±10% (±8.8°C)
Maximum Ambient Temperature:	65°C
Environmental Group	III

Ratings for Functional Unit (EOLU-EN)

Environmental Group	III
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Appendix UL-EU CERTIFICATE UL-EU-01116-CPR

Intended Use:

This certificate relates to the non-resettable line-type heat detectors for use in fire detection and fire alarm systems installed in and around buildings and civil engineering works

The product is certified on the basis of:

- i) S36157-D01-EuropeanDirective-Original
- ii) Inspection and surveillance of factory production control by UL
- iii) Being used in accordance with the supplier's installation instructions, and technical datasheet.



Appendix UL-EU CERTIFICATE UL-EU- 01116-EN

Standard: EN 54-28:2016

Essential Characteristics	Performance
4 - Product Characteristics	Pass
Nominal activation conditions/sensitivity	
5.2.1 - Individual alarm indication	Pass
5.2.2 - Signalling	Pass
Operational reliability	
5.3.1 - Maximum ambient temperature test (endurance) for sensing element	Pass
5.3.2 - Connection of ancillary devices	Pass
5.3.3 - Manufacturer's adjustments	Pass
5.3.4 - Requirements for software-controlled detectors	Pass
5.3.5 - Sensing element fault	Pass
5.3.6 - On-site adjustment of response behaviour	NA
Tolerance to supply voltage	
5.4.1 - Variation in supply parameters	Pass
5.4.2 - Low voltage fault (sensor control unit with external power supply)	Pass
5.5 - Performance parameters under fire condition	Pass
Durability of performance parameters under fire condition	
Temperature resistance	
5.6.1.1 - Dry heat (operational) test for sensor control unit	Pass
5.6.1.2 - Cold (operational) for sensing element	Pass
5.6.1.3 - Cold (operational) for sensor control unit	Pass
Humidity resistance	
5.6.2.1 - Damp heat, stead-state (endurance) for sensor control unit and sensing element	Pass
5.6.2.2 - Damp heat, cyclic (operational) for sensing element	Pass
5.6.2.3 - Damp heat, cyclic (operational) for sensor control unit	Pass
5.6.2.4 - Damp heat, steady-state (operational) for sensor control unit	NA
5.6.2.5 - Damp heat, cyclic (endurance) for sensor control unit and sensing element	Pass
Shock and vibration resistance	
5.6.3.1 - Shock (operational) for sensor control unit	Pass
5.6.3.2 - Impact (operational) for sensor control unit	Pass
5.6.3.3 - Impact (operational) for sensing element	Pass
5.6.3.4 - Vibration, sinusoidal (operational) for sensor control unit	Pass
5.6.3.5 - Vibration, sinusoidal (operational) for sensing element	Pass
5.6.3.6 - Vibration, sinusoidal (endurance) for sensor control unit	Pass
5.6.3.7 - Vibration, sinusoidal (endurance) for sensing element	Pass
Corrosion resistance	
5.6.4.1 - Sulphur dioxide (SO ₂) corrosion (endurance) for sensing element	Pass
5.6.4.2 - Sulphur dioxide (SO ₂) corrosion (endurance) for sensor control unit	Pass
5.6.5 - Electrical stability	Pass



Appendix UL-EU CERTIFICATE UL-EU- 01116-EN

The UL-EU Mark, as displayed below, shall appear on certified products only. Minimum size is not specified, as long as the Mark is legible. The following is suggested.



The minimum height of the registered trademark symbol ® shall be 1 mm. When the overall diameter of the UL-EU Mark is less than 9.5 mm, the trademark symbol may be omitted if it is not legible to the naked eye.

The UL-EU Mark may appear on a label, nameplate, or may be cast, stamped or molded into the product. When appearing on a label or nameplate, the Manufacturer's name or trademark along with a model number are also required on that same label or nameplate. If cast, stamped or molded, the Manufacturer's name or trademark and model number shall also appear elsewhere on the product.

All content shall be in accordance with the details provided on this UL-EU Certificate.

PROCUREMENT

The Production site may reproduce the Mark or obtain it from a UL authorized supplier. The list of UL authorized suppliers can be found on UL's online directory at www.ul.com.

