



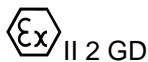
## EU Type Examination Certificate CML 20ATEX3171 Issue 1

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **ELSR-SHH Self-Regulating Trace Heater**
- 3 Manufacturer **eltherm production GmbH**
- 4 Address **Ernst-Heinkel-Str. 6-10,  
57299 Burbach,  
Germany**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018

EN 60079-30-1:2017

- 10 The equipment shall be marked with the following:



II 2 GD

Ex 60079-30-1 IIC T3 Gb<sup>1</sup>

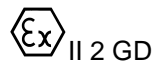
Ex 60079-30-1 IIIC T200°C Db<sup>1</sup>

IP67

Withstand temp range: -40°C to +250°C

<sup>1</sup> Products rated up to and including 75 W/m and 277 V max

<sup>2</sup> Products rated above 75 W/m and for nominally rated 230 V products powered to a maximum 277 V



II 2 GD

Ex 60079-30-1 IIC T2 Gb<sup>2</sup>

Ex 60079-30-1 IIIC T300°C Db<sup>2</sup>



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## 11 Description

The ELSR-SHH Self-Regulating Trace Heater comprises two parallel buswires housed within a semi-conductive self-limiting matrix. The semi-conductive self-limiting matrix is covered with a fluoropolymer insulation jacket which is then protected by an aluminium sheath or a metallic braid of either tinned copper or nickel-plated copper. An optional outer jacket of MFA, PFA or Silicone can be specified. The cables are rated at up to 90 W/m and 277 V.

The cable is intended to be cut to length on site and the equipment is designed to be connected to a supply by means of suitable certified cable entries and junction boxes (i.e. Ex e or Ex d) in accordance with the manufacturer's installation instructions. Termination can be made using the Heat Trace termination kits approved under CML 20ATEX3170U or any suitably certified type termination kit which fully isolate, insulate and seal the conductive cores.

Description	Temperature
Max. continuous exposure temperature (Power ON)	250°C
Max. permissible exposure temperature (Power OFF)	250°C
T- Rating	T3 up to and including 75 W/m
	T2 above 75 W/m
Minimum installation temperature	-40°C

## 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	24 Jul 2020	R13383A/00	Issue of Prime Certificate
1	21 Aug 2020	-	Updated Format

Note: Drawings that describe the equipment or component are listed in the Annex.

## 13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. An electric strength test of  $2 U + 1000$  V rms shall be applied between the conductors and the outer braid or sheath as appropriate for 60 seconds in accordance with the requirements of EN 60079-30-1:2017 clause 5.1.2.
- ii. An electric strength test of the polymeric sheath (over jacket) used for corrosion resistance shall be carried out in accordance with the requirements of EN 60079-30-1:2017 clause 5.2.1.
- iii. The manufacturer shall verify the output rating for each cable manufactured in accordance with the requirements of EN 60079-30-1:2017 clause 5.2.2.
- iv. The manufacturer shall demonstrate, through their quality program, the thermal safety of the trace heating cable with respect to time in accordance with the requirements of EN 60079-30-1:2017 clause 5.1.12.



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**14 Specific Conditions of Use (Special Conditions)**

None.

## Certificate Annex

**Certificate Number** CML 20ATEX3171  
**Equipment** ELSR-SHH Self-Regulating Trace Heater  
**Manufacturer** eltherm production GmbH



The following documents describe the equipment or component defined in this certificate:

### Issue 0

Drawing No	Sheets	Rev	Approved date	Title
Ex-1-BOHH0000-10	1 of 1	0	13 Jul 2020	ELSR-SHH