IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx SIR 16.0113	Issue No: 0	Certificate history: Issue No. 0 (2017-02-01)
Status:	**Current**	Page 1 of 5	
Date of Issue:	**2017-02-01**		

Applicant: **eltherm production GmbH**
Ernst-Heinkel-Straße 6 – 10
57299 Burbach
Germany

Equipment: **ELSR-SHH Range of Trace Heating Cables**

Optional accessory:

Type of Protection: **Trace Heating and Dust**

Marking:

Ex e IIC T3 Gb	Applicable for products rated up to and including 75W/m and 277 V max
Ex tb III C T200ºC Db	
Ex e IIC T2 Gb	Applicable for products rated above 75W/m and for nominally rated 230V products powere maximum 277 V
Ex tb III C T300ºC Db.	

*Due to restrictions applied by the applicant some products that are detailed in this certificate may not be commercially available.

Approved for issue on behalf of the IECEx Certification Body: A G Boyes

Position: Certifcation Support Officer

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

IECEx Certificate of Conformity

Certificate No: IECEx SIR 16.0113 Issue No: 0

Date of Issue: 2017-02-01

SIRA Certification Service
CSA Group
Unit 6, Hawarden Industrial Park
Hawarden, Deeside, CH5 3US
United Kingdom

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Manufacturer:	**eltherm production GmbH** Ernst-Heinkel-Straße 6 – 10 57299 Burbach **Germany**	

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-30-1 : 2007-01 Edition:1	Explosive atmospheres - Part 30-1: Electrical resistance trace heating - General and testing requirements
IEC 60079-31 : 2008 Edition:1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/SIR/ExTR17.0016/00

Quality Assessment Report:

FR/INE/QAR12.0007/02

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The ELSR-SHH Self-Regulating Heating Cables utilise two parallel buswires housed within a semi-conductive self-limiting matrix. The semi-conductive self-limiting matrix is covered with a jacket which is then protected by an aluminium sheath or metallic braid of either tinned copper or nickel plated copper. An 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 Eltherm termination kits approved under IECEx SIR 16.0114X 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

These heating cables meet the requirements for degree of protection IP67.

SPECIFIC CONDITIONS OF USE: NO

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EQUIPMENT (continued):

Conditions of manufacture

The Manufacturer shall comply with the following:

1. An electric strength test of 2 U +1000 V rms shall be applied between the conductors and the outer braid or jacket as appropriate for 60 seconds as required by clause 5.1.2 of IEC 60079-30-1:2007.

2. An electric strength test of the polymeric sheath (overjacket) used for corrosion resistance shall be carried out in accordance with the requirements of IEC 60079-30-1:2007 clause 5.2.1.

3. The manufacturer shall verify the output rating for each cable manufactured in accordance with IEC 60079-30-1-2007 clause 5.2.2.

4. The manufacturer shall demonstrate, through their quality program, the thermal safety of the trace heating cable with respect to time as per IEC 60079-30-1:2007 clause 5.1.12.