

GOVERNMENT APPROVED TEST LABORATORY
IN TERMS OF ARP 0108: "REGULATORY REQUIREMENTS FOR EXPLOSION PROTECTED APPARATUS"

IA CERTIFICATE

Date Issued: **13 Sep 2018**
*Expiry date: **13 Sep 2021**
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Issue: 1

Ex – Type Examination Certificate

Certificate Number: **S-XPL/15.1344 X**
Equipment: **Ex-Capillary Tube Thermostat**
Model / Type: **EL-CT and EL-CT (2)**
Applicant: **Eltherm Production GmbH
Ernst-Heinkel-Strasse 6-10
57299 Burbach
Germany**
Manufacturer: **eltherm production GmbH**
Serial No: All serial numbers imported between issued- and expire date and all serial numbers covered by a valid report or acceptable product certification mark.

Supplied by
Eltherm Production GmbH
Identified by Inspection Authority number
S-XPL/15.1344 X

And as described in the Explolabs file number **XPL/16770/15.1344** is hereby certified "Explosion Protected (Refer to clause 1, for Ex Rating)", having been examined and inspected in accordance with the relevant requirements of South African Standards.

- SANS 60079-0: 2012 Ed 5** Explosive atmospheres Part 0: Equipment — General requirements
- IEC 60079-0: 2011 Ed 6**
- SANS 60079-1: 2015 Ed 5** Explosive atmospheres Part 1: Equipment protection by flameproof enclosures "d"
- IEC 60079-1: 2014 Ed 7**
- SANS 60079-31: 2014 Ed 2** Explosive atmospheres Part 31: Equipment dust ignition protection by enclosure "t"
- IEC 60079-31: 2013 Ed 2**

Risk of ignition provided:

Protection afforded	Equipment Protection Level (EPL)	Performance of protection	Conditions of operation	T class or Max Surface Temp (°C)
	Group			
High	Gb Group II	Suitable for normal operation and frequently occurring disturbances or equipment where faults are normally taken into account	Equipment remains functioning in zones 1 and 2	T6 (85°C)
High	Db Group III		Equipment remains functioning in zones 21 and 22	T85°C

This certification indicates compliance with R10.1 of the Mines Health and Safety Act and/or EMR 9(2) of the Occupational Health and Safety Act, provided that the apparatus is used as relevant in accordance with:

- i) SANS 10086 and IEC/SANS 61241-14 requirements as applicable;
- ii) Any conditions mentioned in the above report;
- iii) Any relevant requirements and codes of practice enforced in terms of the Mine Health and Safety Act or Occupational Health and Safety Act; and
- iv) Any restrictions and conditions enforced by the Chief Inspector of Mines or the Principal Inspector or the Chief Inspector: Occupational Health and Safety.
- v) A revision certificate replaces all previous version of the certificate.
- vi) * - Only covers equipment Imported between the "Issued" and "Expire" dates.
- vii) If and when your QAN (Quality Assurance Notification) Certificate for your equipment manufacturer expires during the valid period of the IA Certification (issued for your equipment) and a new certificate is not submitted the existing IA Certification will then be cancelled. It is thus the client's responsibility to always submit the updated and valid QAN certificate(s) to Explolabs (Pty) Ltd



1. GENERAL

The marking of the Ex-Capillary Tube Thermostat shall include the following:

Ex db IIC T6 Gb

Ex tb III C T85°C Db

-32 °C up to + 50 °C for EL-CT

-50 °C up to + 50 °C for EL-CT (2)

The Capillary tube thermostat type EL-CT and EL-CT (2) is provided for the connection of a heating conductor in potentially explosive atmospheres.

It consists of a flameproof enclosure with built in thermostat and capillary tube bushing.

Ambient temperature range:

-32°C up to + 50°C - CT

-50°C up to + 50°C - CT (2)

Technical data:

Max. Voltage:

230 V

400 V EL-CT (2)

Max. Current:

16 A

20 A EL-CT (2) three pole versions only

Degree of protection according to EN 60529: IP 66

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Additional Enclosure ELAK-Ex-3d (IECEX EPS 15.0021 U)

Equipment is manufactured with accordance to IEC 60079-1 Ed. 7 and IEC 60079-31 Ed. 2.

Based on the following documentation: IECEX IBE 14.0069X Issue No.: 1

2. INSTALLATION INSTRUCTIONS

It is the manufacturer's responsibility to supply installation instructions with each unit offered for sale as required by IEC/SANS 60079-0 Clause 30.

3. SPECIAL CONDITIONS FOR SAFE USE *(denoted by "X" after certificate number)*

When selecting the cable glands as well as the connection cable, the corresponding requirements of IEC 60079-14, section 10.6.2 must be observed.

Only temperature-resistant cables, which are suitable for a temperature of at least 90 °C, may be used at the Capillary tube thermostat types EL-CT and EL-CT (2).

The cable entry supplied by the manufacturer may be used only for fixed installation. The operating company has to ensure an appropriate clamping.

4. SCHEDULE OF LIMITATIONS *(denoted by "U" after certificate number)*

None.

5. CONDITIONS OF CERTIFICATION

All production units must be covered by a QAN (Quality Assurance Notification), Product Mark Scheme or batch evaluation.

6.

MARKING

The following (or similar) information have to be clearly and permanently marked on all units:

Supplier : Eltherm Production GmbH
Manufacturer : eltherm production GmbH
Equipment : Ex-Capillary Tube Thermostat
Model/Type : EL-CT and EL-CT (2)
Serial No. : ---
Ex Rating : Ex db IIC T6 Gb
Ex tb III C T85°C Db
-32 °C up to + 50 °C for EL-CT
-50 °C up to + 50 °C for EL-CT (2)

IA Certificate No : S-XPL/15.1344 X

Responsible Testing Officer:**P van Staden****Testing Officer****EXPLOLABS EXPLOSION PREVENTION SERVICES**

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