



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEX LCIE 17.0027X** Page 1 of 4 [Certificate history:](#)
Issue 0 (2017-08-25)

Status: **Current** Issue No: 1

Date of Issue: 2025-08-04

Applicant: **Fonteck Industries B.V.**
Glasblazerstraat 12E
2984 BL, Ridderkerk
Netherlands

Equipment: **Temperature sensor / transmitter / switch - Type : ESTS-TSDC-*******

Optional accessory:

Type of Protection: **Ex db ; Ex tb**

Marking: Ex db IIC T6 Gb
Ex tb IIIC T80°C Db
(See Annex for complete marking)

Approved for issue on behalf of the IECEx
Certification Body:

Julien Gauthier

Position:

Certification Officer

Signature:
(for printed version)



Date:
(for printed version)

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 www.iecex.com or use of this QR Code.



Certificate issued by:

Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
FR-92260 Fontenay-aux-Roses
France





IECEX Certificate of Conformity

Certificate No.: **IECEX LCIE 17.0027X**

Page 2 of 4

Date of issue: 2025-08-04

Issue No: 1

Manufacturer: **BoxFonteck B.V.**
Glasblazerstraat 12E
2984 BL, Ridderkerk
Netherlands

Manufacturing
locations: **BoxFonteck B.V.**
Glasblazerstraat 12E
2984 BL, Ridderkerk
Netherlands

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 equipment 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](#) Explosive atmospheres - Part 0: General requirements
Edition:6.0

[IEC 60079-1:2014](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

This Certificate **does not** indicate compliance with 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:

[FR/LCIE/ExTR17.0030/00](#)

Quality Assessment Report:

[GB/CSAE/QAR24.0021/00](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX LCIE 17.0027X**

Page 3 of 4

Date of issue: 2025-08-04

Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The TSDC is a part of ESTS series, which consist of 8 types of sensor/transmitter/switch.

The TSDC is a temperature sensor/transmitter/switch. It exists in 3 different sizes, thus in 3 different models. The codes for the 3 sizes are L (large size), M (medium size) and S (small size).

The models are:

TSDC-L, TSDC-M and TSDC-S.

Refer to attachment for full equipment description and ratings.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- A repair and overhaul of the flameproof joints are only allowed according to constructive information given from the original manufacturer. A repair according to the values given in Table 3 and Table 4 of IEC 60079-1 standard is not permitted.
- For model TSDC-L, the special fasteners of the cover are hexagon socket countersunk head screws conforming to ISO 10642. The minimum grade of screws must be A2-70. If any, the screws shall only be replaced with identical ones.
- Tube and cable gland of model TSDC-L shall not be disassembled.
- Models TSDC-M and TSDC-S shall not be disassembled.



IECEX Certificate of Conformity

Certificate No.: **IECEX LCIE 17.0027X**

Page 4 of 4

Date of issue: 2025-08-04

Issue No: 1

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

Update of Quality Assessment Report (LCIE File #27252891).

Annex:

[Annex 01 to Certificate IECEx LCIE 17.0027X issue 1.pdf](#)



Annex 01 to Certificate IECEx LCIE 17.0027X issue 1



FULL EQUIPMENT DESCRIPTION

The TSDC is a part of ESTS series products, which consist of 8 types of sensor/transmitter/switch.

The TSDC is a temperature sensor/transmitter/switch. It exists in 3 different sizes, thus in 3 different models. The codes for 3 sizes are L (large size), M (medium size) and S (small size).

The models are: TSDC-L, TSDC-M and TSDC-S.

The model TSDC-L has a main body with an integrated cable gland (M16 x 1.0).

The main body comprises a main enclosure and a cover. The cover is fixed to the main enclosure by six hexagon socket countersunk head screws. There are an optional LED status light glass observation window and an optional manual reset button located on the cover.

A tube, in which the temperature sensor/switch is mounted, is screwed into the main enclosure through an adapter. The remaining free space inside the tube is filled with epoxy resin.

The product is provided with a permanently connected 6x0.5 braid armoured cable intended for fixed installation.

The model TSDC-M comprises of an integrated cable gland (M16 x 1.0), an adapter defined as the main enclosure of product, and a tube in which the temperature sensor/switch is mounted. Both the integrated cable gland and the tube are screwed into the adapter. The product is provided with a permanently connected 3x1.0 braid armoured cable intended for fixed installation. Same as the TSDC-L model, the remaining free space inside the tube is filled with epoxy resin.

The model TSDC-S comprises of an integrated cable gland (M12 x 1.0) and the main enclosure with the tube in which is mounted the temperature sensor. Unlike the TSDC-M model, adapter and tube are not separated and form a single continuous part defined as the main enclosure of the product. The remaining free space inside the tube is filled with epoxy resin.

The product is provided with a permanently connected 3x0.5 braid armoured cable intended for fixed installation.

All the enclosures are made of stainless steel. The protection mode is flameproof.

Instructions:

Instruction Manual, Type ESTS Series, Sensor/Transmitter/Switch, Ref. ESTS-IM-17-001

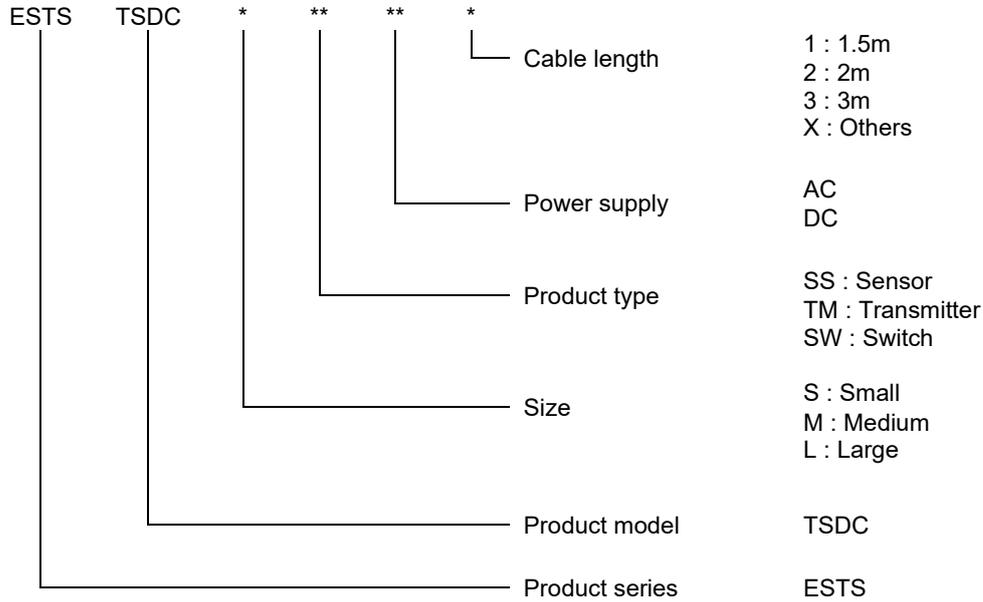
MARKING

BoxFonteck B.V.
Address: ...
Type : ESTS-TSDC-*****
Serial number: ...
Year of construction: ...
Ex db IIC T6 Gb
Ex tb IIIC T80°C Db
IECEx LCIE 17.0027X
-55°C ≤ T_{amb} ≤ +70°C
IP66

WARNING – (see table below)

WARNING	Equipment model		
	TSDC-L	TSDC-M	TSDC-S
DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT	X		
DO NOT DISASSEMBLE SENSOR TUBE	X	X	
DO NOT DISASSEMBLE CABLE GLAND	X	X	X
"X" denotes required warning.			

RANGE DETAILS



RATINGS

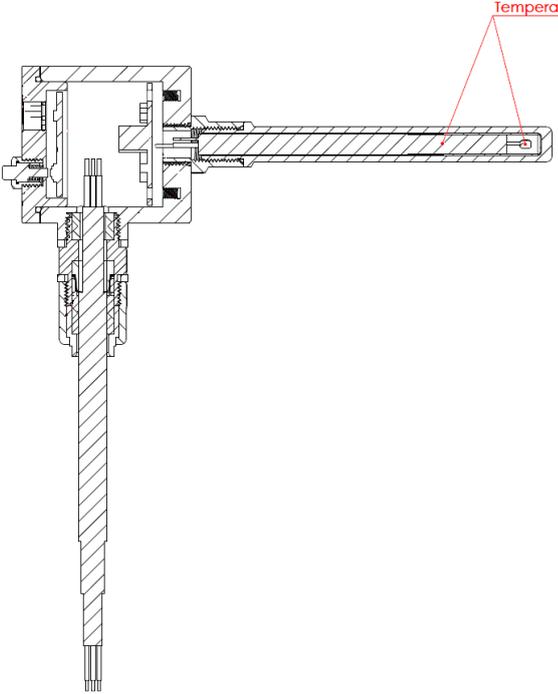
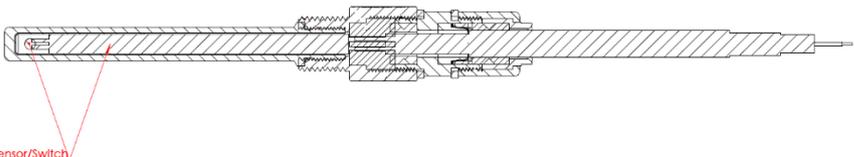
Supply voltage: 250 V AC max. or 30 V DC max.
 Switch contact load: 10 A max.
 Transmitter output current: 4 ~ 20 mA

ROUTINE TESTS

Only for model TSDC-L :

According to clause 16.1.1 of standard IEC 60079-1, each flameproof compartment shall be submitted to an overpressure test at 3.24 MPa (32.4 bar) during at least 10 seconds.

APPARATUS OVERVIEW

Model	Overview
<p style="text-align: center;">TSDC-L</p>	
<p style="text-align: center;">TSDC-M</p>	
<p style="text-align: center;">TSDC-S</p>	