



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 DEK 18.0032X

Issue No: 0

Certificate history:

[Issue No. 0 \(2018-07-06\)](#)

Status: **Current**

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Date of Issue: **2018-07-06**

Applicant: **Rodax N.V.**
Santvoortbeeklaan 33
B-2100 Antwerpen
Belgium

Equipment: **Temperature Sensors**

Optional accessory: *see Annex*

Type of Protection: **db, eb, ec, ia, ic and tb**

Marking:

Ex db IIC T6...T1 Gb

Ex eb IIC T6...T1 Gb

Ex ec IIC T6...T1 Gc

Ex ia IIC T6...T1 Ga

Ex ic IIC T6...T1 Gc

Ex ia IIIC T85 °C Da

Ex tb IIIC T450 °C...T85 °C Db

Approved for issue on behalf of the IECEx
Certification Body:

T. Pijpker

Position:

Certification Manager

Signature:
(for printed version)

Date:

2018-07-06

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:

DEKRA Certification B.V.
Meander 1051,
6825 MJ Arnhem
The Netherlands





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Manufacturer: **Rodax N.V.**
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B-2100 Antwerpen
Belgium

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 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 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2017 Edition:5.1	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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:

[NL/DEK/ExTR18.0036/00](#)

Quality Assessment Report:

[NL/DEK/QAR11.0079/04](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Temperature Sensor series consists of a wide range of sensor types and sensor arrangements, one or more inserts, threaded insert entries, termination options, connection head options, a direct cable connection option, cable sensor options and a ceramic insert option, available in several types of protection.

The connection head / junction box may be provided with terminals or a transmitter, depending on the type of protection.

Each temperature sensor assembly is identified by a unique article number which is shown on the marking label.

Maximum ambient temperature range $-45\text{ }^{\circ}\text{C}$ to $+80\text{ }^{\circ}\text{C}$; this can be limited depending on the materials applied or in case a temperature transmitter is applied.

For further details per series see Annex.

SPECIFIC CONDITIONS OF USE: YES as shown below:

All models:

1. The influence of the process temperature must be taken into account. It shall be verified that the service temperature of the process connection, the connection head, the connection box and the cable does not exceed the specified temperatures.
2. The label material is not antistatic; precautions have to be taken to avoid electrostatic charging of the label

Ex db models:

Flameproof joints are not intended to be repaired.

Ex eb, Ex ec and Ex tb models:

The sensor assembly with connection head and extension part shall have a degree of protection of at least IP54 (Ex eb and Ex ec) or IP6X (Ex tb), provided by the user with a thermowell or equivalent component at the process side of the assembly.

Ex eb, Ex ec, Ex ia and Ex ic models:

In case the diameter of the sensor is less than 3 mm, the sensor must be considered as connected to ground. It must be assumed that it will not be able to pass a 500 V or higher voltage dielectric strength test.



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Ex ia models:

1. If the connection head is made of aluminum and it is mounted in an area where the use of EPL Ga equipment is required, the connection head must be installed such that, even in the event of rare incidents, ignition sources due to impact and friction sparks are excluded.
2. If the connection head is made of aluminum and it is mounted in an area where the use of EPL Da, Db or Gb is required, the enclosure material shall not contain, by mass, more than 7.5 % in total of magnesium, titanium and zirconium.

Ex ia and Ex ic models:

If the connection head is made of non-conductive non-metallic material, precautions have to be taken to avoid electrostatic charging.

Annex:

[Annex to IECEx DEK 18.0032 X.pdf](#)