



# 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](http://www.iecex.com)

Certificate No.: IECEx DEK 11.0035X Issue No: 0 Certificate history:  
Issue No. 0 (2011-11-07)

Status: **Current** Page 1 of 3

Date of Issue: **2011-11-07**

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

Electrical Apparatus: **Temperature sensor**  
*Optional accessory:*

Type of Protection: **Ex d, Ex tb**

Marking: **Ex d IIC T6 ... T1 Gb**  
**Ex tb IIIC T85 °C ... T450 °C Db IP 6x**

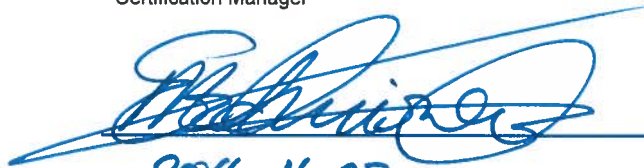
*Approved for issue on behalf of the IECEx  
Certification Body:*

M.Erdhuizen

*Position:*

Certification Manager

*Signature:  
(for printed version)*



2011-11-07

*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](http://www.iecex.com).

Certificate issued by:

**DEKRA Certification B.V.**  
Utrechtseweg 310  
6812 AR Arnhem  
The Netherlands





# IECEX Certificate of Conformity

Certificate No: IECEX DEK 11.0035X

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Page 2 of 3

Manufacturer: **Rodax N.V.**  
Santvoortbeeklaan 33  
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 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:

<b>IEC 60079-0 : 2007-10</b> Edition:5	Explosive atmospheres - Part 0:Equipment - General requirements
<b>IEC 60079-1 : 2007-04</b> Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-31 : 2008</b> 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:

[NL/DEK/ExTR11.0027/00](#)

Quality Assessment Report:

[NL/KEM/QAR08.0050/01](#)



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Page 3 of 3

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The Temperature Sensors, Types S18-TCCB, S18-TCRB, S18-TCTP, TCRA-TCWD, D19-TCRA, D18-TCLI, D18-TCZA, D28-TCLI, D38-TCLI and RTD Types S18-PT100CB, S18-PT100RB, S18-PT100TP, PRA-PT100WD, D19-PRA, D18-PT100LI, D18-PT100ZA, D28-PT100LI and D38-PT100LI for temperature measurement, in different versions, consists of one or more inserts, , an optional connection head with a simple geometry and a max free volume of 200cc, with or without transmitter, provided with terminals and optionally extension parts.

All transmitters can be used with these temperature elements. However, for the installation, maintenance and correct use of the transmitter always use the operating and instruction manual of the manufacturer.

For thermal and electrical data see attachment.

### CONDITIONS OF CERTIFICATION: YES as shown below:

For information about the dimensions of the flameproof joints contact the manufacturer.  
Ambient temperature range: -20 °C to +60 °C.

### Annex:

[NL\\_DEK\\_ExTR11\\_0027\\_00 Rodax Ex-d Attachment1.pdf](#)

Attachment 1 to: IECEx DEK 11.0035X  
Applicant's name: Rodax N.V.  
Test item: Temperature sensor



### Electrical data

Max. supply voltage: 50 Vdc

### Thermal data

Ambient temperature range: -20 °C to +60 °C

The maximum surface temperature due to process conditions ( $T_p$ ) is the maximum surface temperature of any part of the assembly in contact with the explosive atmosphere.

The temperature class and the maximum surface temperature of the assembly depend on  $T_p$  as listed in the table below

$T_p$ [°C]	Temperature class of the assembly	Max. surface temperature of the assembly [°C]
80	T6	85
95	T5	100
130	T4	135
195	T3	200
295	T2	300
445	T1	450
> 445	-	$T_p + 5$

If the sensor assembly is influenced by the temperature of the process medium, it shall be verified that the surface temperature of the connection head and the connection box does not exceed the specified maximum ambient temperature.