

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.:	IECEx BVS 13.0074X	Page 1 of 5	<u>Certificate history:</u>
Status:	Current	Issue No: 1	Issue 0 (2014-07-14)
Date of Issue:	2020-05-26		
Applicant:	Dittmer GbR Carl Zeiss-Strasse 19 47475 Kamp-Lintfort Germany		
Equipment:	Temperature sensor type 7.**.**.*	*	
Optional accessory	y:		
Type of Protection	Flameproof Enclosures "d", Pro	ection by Enclosure "t"	
Marking:	Ex db I Mb Ex db IIC T* Gb Ex tb IIIC T*°C Db		
	*) See general product information		
Approved for issue Certification Body:	on behalf of the IECEx	Jörg Koch	
Position:		Head of Certification Body	
Signature: (for printed version	n)		
Date:			
	and schedule may only be reproduced is not transferable and remains the pro		

Certificate issued by:

DEKRA Testing and Certification GmbH Certification Body Dinnendahlstrasse 9 44809 Bochum Germany





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Manufacturer: Dittmer GbR

Carl Zeiss-Strasse 19 47475 Kamp-Lintfort

Germany

Additional manufacturing locations:

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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements Edition:7.0

IEC 60079-1:2014-06 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:

DE/BVS/ExTR14.0035/01

Quality Assessment Report:

DE/BVS/QAR10.0013/07



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Subject and Type

Temperature sensor type 7.**.**

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Type 7.01.**.**, 7.02.**.**, 7.03.**.** and 7.04.**.** = temperature range -40 °C up to +95 °C Type 7.11.**.**, 7.22.**.**, 7.33.**.** and 7.44.**.** = temperature range -40 °C up to +195 °C Type 7.01.**.** and 7.11.**.** = diameter of head 30 mm Type 7.02.**.** and 7.22.**.** = diameter of head 40 mm Type 7.03.**.** and 7.33.**.** = diameter of head 55 mm Type 7.04.**.** and 7.44.**.** = diameter of head 75 mm Type 7.04.**.** up to 7.**.14.** = pipe diameter 05 up to 14 mm Type 7.**.** xx  xx = nominal length and number of Pt100 in plain text
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Description

The temperature sensor type 7.**.*** is designed in the type of protection Flameproof Enclosure "d" and Protection by Enclosure "t", serves the purpose of recording temperature values of mechanical components and machines.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The temperature sensor has to be connected by means of a fixed installation of the connecting cable. Thus the free end of the connecting cable has to be connected either inside a connection box meeting the requirements of a type of protection approved according to 1 of IEC 600079 or outside the hazardous area.



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Equipment (continued):

Parameters

Electrical Data

Maximum measurement voltage 12 V up to Measurement current up to 3 mΑ Thermoelectric voltage at 200 °C mV up to 15 Power up to 120 mW

Temperature class allocated and permissible media temperatures for Group II and Group III

Permissible media temperature (max.)	Ambient temperature range	Minimum distance for mounting	Temperature class	Maximum surface temperature
80 °C	-40 °C up to + 60 °C	-	Т6	T 80 °C
90 °C	-40 °C up to + 60 °C	-	T5	T 95 °C
130 °C	-40 °C up to + 60 °C	50 mm	T4	T 130 °C
195 °C	-40 °C up to + 60 °C	50 mm	Т3	T 195 °C

Permissible surface temperature and media temperatures for Group I

Permissible media temperature (max.)	Ambient temperature range	Minimum distance for mounting	
150 °C	-40 °C up to + 60 °C	50 mm	



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Updating the status of standards:

• - IEC 60079-0:2017

• - IEC 60079-1:2014

• - IEC 60079-31:2013