

### **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 TUR 20.0049X** Page 1 of 3 Certificate history:

Current Issue No: 0 Status:

Date of Issue: 2020-10-19

Applicant: Dräger Safety AG & Co KGaA

Revalstr. 1, 23560 Lübeck

Germany

Gas Transmitter types ITR 0\*\*\* (Polytron P8700) Equipment:

Optional accessory:

Type of Protection: Gas performance tests

Marking: 60079-29-1

Year of production

Approved for issue on behalf of the IECEx Certification Body:

Position:

Date:

Signature: (for printed version)

**Andreas Maschke** 

**Deputy Head of Certification Body** 

S. Mes

2020-10-19

1. This certificate and schedule may only be reproduced in full.

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The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

**TUV Rheinland Industrie Service GmbH Am Grauen Stein** 51105 Cologne Germany





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Date of issue: 2020-10-19 Issue No: 0

Manufacturer: Dräger Safety AG & Co KGaA

Revalstr. 1. 23560 Lübeck

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

EC Explosive atmospheres – Part 29-1: Gas detectors – Performance requirements of detectors for flammable

60079-29-1:2016-07 gases

Edition:2.0

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/TUR/ExTR20.0049/00

**Quality Assessment Report:** 

DE/BVS/QAR06.0001/14



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#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The transmitters ITR 04\*\* and ITR 05\*\* (Polytron 8700) are fixed infrared gas detectors intended for continuously measuring of combustible or non-combustible gases and vapours. The enclosure consists of aluminium (ITR 04\*\*) or stainless steel (ITR 05\*\*). The infrared sensor IDS 01\*\* (PIR 7000) may be directly connected to the transmitter housing or operated as remote sensor with junction box EAC 01\*\* or other junction boxes. The gas detector provides a 4 to 20 mA analog output signal for safety relevant purposes proportional to the measured gas concentration. The transmitter can be equipped with a relay module providing two alarm relays and one fault relay.

#### Measuring Function for Explosive Protection

Measuring function for transmitter type ITR 041\* and ITR 051\* with sensor type IDS 01\*1 (type 334) as well as transmitter type ITR 042\* and ITR 052\* with sensor type IDS 01\*2 (type 340) for those gases and vapours as listed in IECEx TUR 20.0048X von PIR 7000 issued for IDS 01\*\* (PIR 7000).

#### Transmitter:

ITR 041\* Polytron 8700 aluminium enclosure with PIR 7000 334 ITR 042\* Polytron 8700 with PIR 7000 340 aluminium enclosure ITR 051\* Polytron 8700 stainless steel enclosure with PIR 7000 334 ITR 052\* Polytron 8700 stainless steel enclosure with PIR 7000 340

\* = interface: 0 = "d", 4-20mA

1 = "d", 4-20mA with relays I = "d" + "e", 4-20mA

J = "d" + "e", 4-20mA with relays

#### Sensor:

IDS 0101 PIR 7000 NPT 334 via junction box EAC 01\*\* or others junction box IDS 0102 PIR 7000 NPT 340 via junction box EAC 01\*\* or others junction box IDS 0111 PIR 7000 M25 334 via other junction box

#### **Accessories**

- Spacer (part-no. 68 12 617)
- Mounting set PIR 7000 (part-no. 68 11 648)
- Splash guard PIR 7000 (part-no. 68 11 911)
- Insect guard PIR 7000 (part-no. 68 11 609)
- Hydrophobic filter PIR 7000 (part-no. 68 11 890)
- Calibration adapter PIR 7000 (part-no. 68 11 610)
- Status display PIR 7000 (part-no. 68 11 625)
- Flowcell PIR 7000 (part-no. 68 11 490)
- Process adapter PIR 7000 (part-no. 68 11 915)
- Process adapter PIR 7000 SGR (part-no. 68 13 349)
- Process cuvette PIR 7000 (part-no. 68 11 415)
- Process cuvette PIR 7000 SGR (part-no. 68 13 219)
- Junction box Ex e (part-no. 68 11 751)
- Junction box Ex d (part-no. 45 20 561)
- Magnetic wand (part-no. 45 44 101)

#### Extended ranges:

Extended ranges from operating conditions required by IEC 60079-29-1 are:

- ambient temperature: -40 °C to +77 °C
- ambient pressure: 70 kPa to 130 kPa
- humidity of the measured gas: 0 % RH to 95 % RH

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

- See IECEx PTB 11.0005X
- See IECEX TUR 20.0048X
- · If operated with a relay module
  - The main alarm shall be configured "latching" and "non-acknowledgeable" or "pre-acknowledgeable".
  - The pre-alarm shall only be configured "acknowledgeable" if it is used for operation of an acoustic alarm device.