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 22.0005X**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2022-05-24

Applicant: **Endress+Hauser Conducta GmbH+Co. KG**
Dieselstr. 24
70839 Gerlingen
Germany

Equipment: **Memosens Wave process sensor CKI50**

Optional accessory:

Type of Protection: **Probe: ia op is / Sensor box: db tb [ia]**

Marking: Ex ia op is /db [ia Ga] IIC T6...T3 Ga/Gb

Ex ia op is /tb [ia Da] IIIC T85°C...T135°C Da/Db

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

Position: **Assigned certifier**

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:

TUV Rheinland Industrie Service GmbH
Am Grauen Stein
51105 Cologne
Germany

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Manufacturer: **Endress+Hauser Conducta GmbH+Co. KG**
Landsberger Strasse 28
04736 Waldheim
Germany

Manufacturing locations: **Endress+Hauser Conducta GmbH+Co. KG**
Landsberger Strasse 28
04736 Waldheim
Germany

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 Edition:7.0	Explosive atmospheres - Part 0: Equipment - 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 60079-26:2014-10 Edition:3.0	Explosive atmospheres – Part 26: Equipment with Equipment Protection Level (EPL) Ga
IEC 60079-28:2015 Edition:2	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31:2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

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/ExTR22.0005/00

Quality Assessment Report:

DE/BVS/QAR06.0005/12

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The CKI50 is a compact VIS spectrometer for the process industry. It can be directly connected to the process and measures certain product properties (e.g., color, color deviations) in liquids.

The Memosens Wave process sensor CKI50 is designed such that various combinations of spectral sensors, light sources, probes and flange adapters can be used.

The process sensors are equipped with a probe connected to a flange adapter. The probe with the flange adapter can be integrated into any pipe or vessel with an appropriated inner diameter. The flange adapter is intended for the connection to the pipe or vessel, while the probe is in contact with the medium inside the pipe or vessel. Therefore, the probe is exposed to the temperature of the process medium, and not the ambient temperature as the sensor box.

The process sensor CKI50 for hazardous area possesses a separation barrier and can be used between two different zones. The probe is designed for the use in zone 0, while the sensor box is constructed for zone 1.

SPECIFIC CONDITIONS OF USE: YES as shown below:
The ambient temperature range is -20°C to +50°C for the enclosure, the maximum medium temperature depends on the desired temperature class for gas, resp. max surface temperature for dust applications (see technical data).

The device must be operated with a fuse, which has a breaking capability of at least 1500A.

Annex:

DE-IECEx_TUR_22.0005_X_00_Attachment.pdf

Attachment to Certificate IECEx TUR 22.0005X

Device: **Memosens Wave Process Sensor**
Type: **CKI50**

Manufacturer: **Endress+Hauser Conducta GmbH+Co. KG**

Address: **Dieselstrasse 24**
70839 Gerlingen
Germany

Technical data

Rated voltage	24 V (including 10% tolerance: 21.6 V to 26.4 V
Maximum current by fuse	0.63 A
Maximum permitted power Pmax for safety purposes	16.7 W
Ingress Protection code	IP68
Minimum cable length	2 m

Hazardous location	Ambient temperature	Process temperature
Gas	-20°C ≤ T_a ≤ +50°C (T6) -20°C ≤ T_a ≤ +50°C (T4) -20°C ≤ T_a ≤ +50°C (T4) -20°C ≤ T_a ≤ +50°C (T3)	-20°C ≤ T_p ≤ +50°C (T6) -20°C ≤ T_p ≤ +65°C (T5) -20°C ≤ T_p ≤ +100°C (T4) -20°C ≤ T_p ≤ +140°C (T3)
Dust	-20°C ≤ T_a ≤ +50°C (T85°C) -20°C ≤ T_a ≤ +50°C (T135°C)	-20°C ≤ T_p ≤ +55°C (T85°C) -20°C ≤ T_p ≤ +100°C (T135°C)