

(1) EU-TYPE EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**
- (3) EU-Type Examination Certificate Number

TÜV 18 ATEX 8194 X

Issue: 01

- (4) Equipment: **Two-wire Measurement Transmitter with Memosens functionality type CM82 and CM72**
- (5) Manufacturer: **Endress+Hauser Conducta GmbH+Co. KG**
- (6) Address: **Dieselstraße 24
70839 Gerlingen, Germany**
- (7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.
- The examination and test results are recorded in the confidential report 557 / Ex 8194.01 / 18
- (9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:
- EN 60079-0:2018** **EN 60079-11:2012**
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.
- (12) The marking of the equipment shall include the following:



II 1 G Ex ia IIC T4 / T6 Ga
II 2 D Ex ia IIIC T85°C / T135°C Db

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2019-04-06


Dipl.-Ing. Klauspeter Graffi

This EU-Type Examination Certificate without signature and stamp shall not be valid.
This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the
TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln
Tel. +49 (0) 221 806-0 Fax +49 (0) 221 806 114

(13) Annex

(14) **EU Type Examination Certificate**
TÜV 18 ATEX 8194 X Issue: 01

(15) Description of equipment

15.1 Equipment and type:

CM82 Two-wire Measurement Transmitter with Memosens functionality and Bluetooth LE
CM72 Two-wire Measurement Transmitter with Memosens functionality (Bluetooth LE disabled)

15.2 Description / Details of Change

General product information

The two-wire field measuring transmitters CM82 and CM72 are used to acquire different parameters in analytical measuring technology, such as for example pH value, electrolytical conductivity or dissolved oxygen.

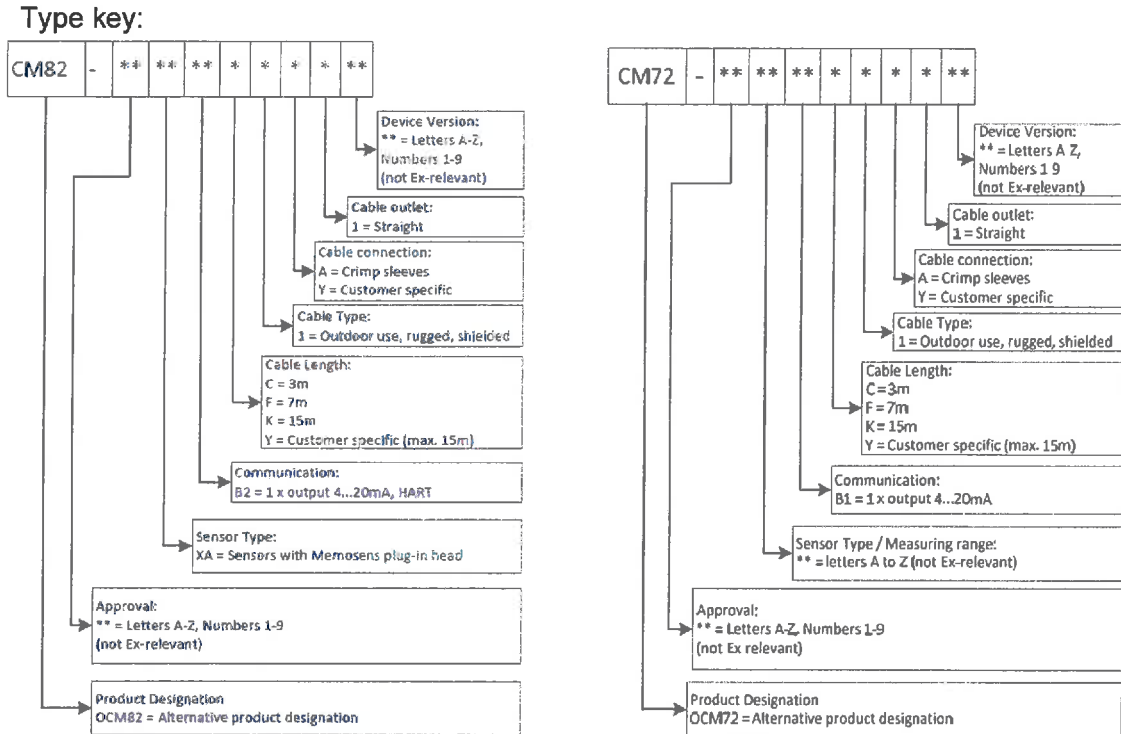
CM82 and CM72 are identical in hardware. Different are software features. The software is not Ex-relevant.

The transmitters provide the inductive Memosens interface for connection to digital sensors. A Bluetooth Low Energy transceiver is built in to provide access for service and configuration purposes.

Details of Change

- Assessment of alternative components, housing material and alternative construction in non-Ex potting area. The assembly and components of issue 00 of this certificate remain valid as well.
- Standard update to EN 60079-0: 2018

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Technical Data

Electrical data

Current Output (max. Input values):

$U_i = 30 \text{ V}$

$I_i = 100 \text{ mA}$

$P_i = 750 \text{ mW}$

$C_i = 7 \text{ nF}$ (including 15m cable)

$L_i = 20 \text{ uH}$ (including 15m cable)

Inductive Memosens interface to measuring sensor (max. Output value):

$P_o = 105 \text{ mW}$

Ambient temperature range

For epl Ga:

Temperature class T6: $-20^\circ\text{C} \leq T_a \leq 55^\circ\text{C}$

Temperature class T4: $-20^\circ\text{C} \leq T_a \leq 80^\circ\text{C}$

For epl Db:

Temperature class T85°C: $-20^\circ\text{C} \leq T_a \leq 55^\circ\text{C}$

Temperature class T135°C: $-20^\circ\text{C} \leq T_a \leq 80^\circ\text{C}$

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(16) Test-Report No. 557 / Ex 8194.01 / 18

(17) Special Conditions for safe use

1. The transmitters CM82 and CM72 are suitable to be operated in the following ambient temperature ranges:
For epl Ga:
Temperature class T6: $-20^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$
Temperature class T4: $-20^{\circ}\text{C} \leq T_a \leq 80^{\circ}\text{C}$
For epl Db:
Temperature class T85°C: $-20^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$
Temperature class T135°C: $-20^{\circ}\text{C} \leq T_a \leq 80^{\circ}\text{C}$
2. Installation, connection to the electricity supply, commissioning, inspection, maintenance and repair of the devices must be carried out by qualified specialists trained to work on Ex-rated devices according to applicable codes of practice, e.g. EN 60079-14, -17, -19, and according to the Operating Instructions.
3. If installed in Zone 0 or Zone 21, the measurement transmitters CM82 and CM72 and their connectors must be protected against electrostatic charge.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

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