

Safety Instructions

RIA14

ATEX: II2G Ex db IIC T6...T4 Gb

IECEX: Ex db IIC T6...T4 Gb

Safety instructions for electrical apparatus in
explosion-hazardous areas



RIA14

Table of contents

About this document	4
Associated documentation	4
Supplementary documentation	4
Manufacturer´s certificates	5
Manufacturer address	5
Safety instructions:	6
Safety instructions: Installation	7
Safety instructions: Specific conditions of use	7
Temperature tables	7
Electrical connection data	8

About this document



This document has been translated into several languages. Legally determined is solely the English source text.

The document translated into EU languages is available:

- In the download area of the Endress+Hauser website:
www.endress.com -> Downloads -> Manuals and Datasheets -> Type: Ex Safety Instruction (XA) -> Text Search: ...
- In the Device Viewer: www.endress.com -> Product tools -> Access device specific information -> Check device features



If not yet available, the document can be ordered.

Associated documentation

This document is an integral part of the following Operating Instructions:

- Operating instructions: BA00278R
- Brief operating instructions: KA00277R
- Technical information: TI00143R

Supplementary documentation

Explosion-protection brochure: CP00021Z/11

The Explosion-protection brochure is available:

- In the download area of the Endress+Hauser website:
www.endress.com -> Downloads -> Brochures and Catalogs -> Text Search: CP00021Z
- On the CD for devices with CD-based documentation

**Manufacturer's
certificates****IECEX certificate**

Certificate number: IECEX KEM 10.0012X

Affixing the certificate number certifies conformity with the following standards (depending on the device version)

- IEC 60079-0 : 2017
- IEC 60079-1 : 2014
-

ATEX certificate

Certificate number: KEMA 04ATEX2307 X

EU Declaration of Conformity

Declaration number: EC_00183

UKCA certificate

Certificate number: CML 21UKEX11003X

UKCA Declaration of Conformity

Declaration number: UK_00409

**Manufacturer
address**

Endress+Hauser Wetzer GmbH + Co. KG
Obere Wank 1
87484 Nesselwang, Germany

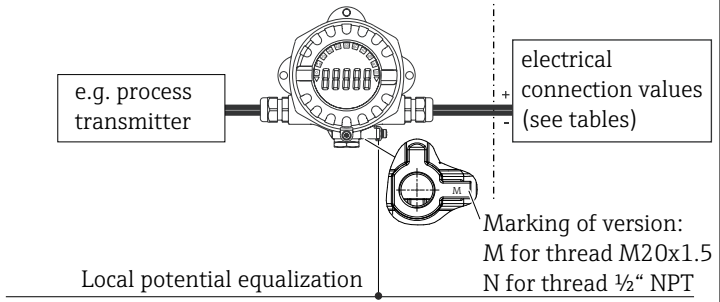
Safety instructions:

Explosion hazardous area
Zone 1, 2
EPL Gb, Gc

⚠ WARNING

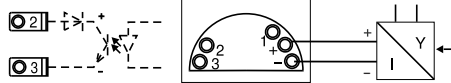
DO NOT OPEN WHEN AN EXPLOSIVE
ATMOSPHERE MAY BE PRESENT

Non-hazardous
area



Terminal 2 and 3
Open Collector

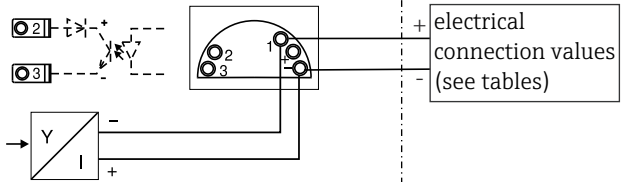
Active Configuration



Connecting an active current source
e.g. a certified sensor with its own power supply

Terminal 2 and 3
Open Collector

Passive Configuration



Connecting a passive current source
e.g. a certified 2-wire transmitter with
additional loop power supply

A0048126

1 Installation of the field indicator

Safety instructions: Installation

- Comply with the installation and safety instructions in the Operating Instructions.
- Install the device according to the manufacturer's instructions and any other valid standards and regulations (e.g. EN/IEC 60079-14).
- The housing of field display must be connected to the potential matching line.
- Only the approved wire entries as specified in paragraph 10.3 of EN/IEC 60079-14, paragraph 16 of EN/IEC 60079-0, paragraph 13 of EN/IEC 60079-1 must be used.
- For connection through a conduit entry approved for this purpose the associated sealing facility shall be mounted directly to the housing.
- Seal the cable entries with certified cable glands and or blanking elements which have at least type of protection Ex db.
- For operating the display housing at an ambient temperature under -20°C , appropriate cables and cable entries permitted for this application must be used.
- For ambient temperatures higher than $+70^{\circ}\text{C}$, use suitable heat-resisting cables or wires, cable entries and sealing facilities for $T_a +5\text{K}$ above surrounding.
- During operation, the cover must be screwed all the way in and the cover's safety catch must be fastened.

WARNING

Explosive atmosphere

- ▶ Do not open the electrical connection of the power supply circuit in an explosive atmosphere.

Safety instructions: Specific conditions of use

- The flameproof joints are not intended to be repaired.
- When the enclosure is provided with a non-conductive coating, electrostatic charges on the equipment enclosure shall be avoided. For more details see safety instructions.

Temperature tables

Type	Temperature class	Ambient temperature
RIA14	T6	$-40^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$
	T5	$-40^{\circ}\text{C} \leq T_a \leq +70^{\circ}\text{C}$
	T4	$-40^{\circ}\text{C} \leq T_a \leq +80^{\circ}\text{C}$

**Electrical
connection data**

Type	Electrical data	
RIA14	Supply (Terminals + and - or + and 1)	$U \leq 35 V_{DC}$ $I \leq 200 \text{ mA}$ $P \leq 3 \text{ W}$
	Open Collector (terminals 2 and 3)	$U \leq 35 V_{DC}$ $I \leq 100 \text{ mA}$ $P \leq 875 \text{ mW}$

Category	Type of protection (ATEX)	Type
II2G	Ex db IIC T6...T4 Gb	RIA14

Type of protection (IEC)	Type
Ex db IIC T6...T4 Gb	RIA14



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