

Safety Instructions

RIA14, RIA16

Field Indicator

Ex ib IIC T4...T6 Gb



RIA14, RIA16

Field Indicator

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About this document

The document number of these Safety Instructions (XA) must match the information on the nameplate.

Associated documentation

All documentation is available on the Internet:

www.endress.com/Deviceviewer

(enter the serial number from the nameplate).



If not yet available, a translation into EU languages can be ordered.

To commission the device, please observe the Operating Instructions pertaining to the device:

www.endress.com/<product code>, e.g. RIA14

Supplementary documentation

Explosion protection brochure: CP00021Z

The explosion protection brochure is available on the Internet:

www.endress.com/Downloads

Certificates and declarations**NEPSI certificate**

Certificate number: GYJ25.1094X

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

- GB/T 3836.1-2021
- GB/T 3836.4-2021



Please refer to NEPSI/CCC certificates for conditions of safe use.

Manufacturer address

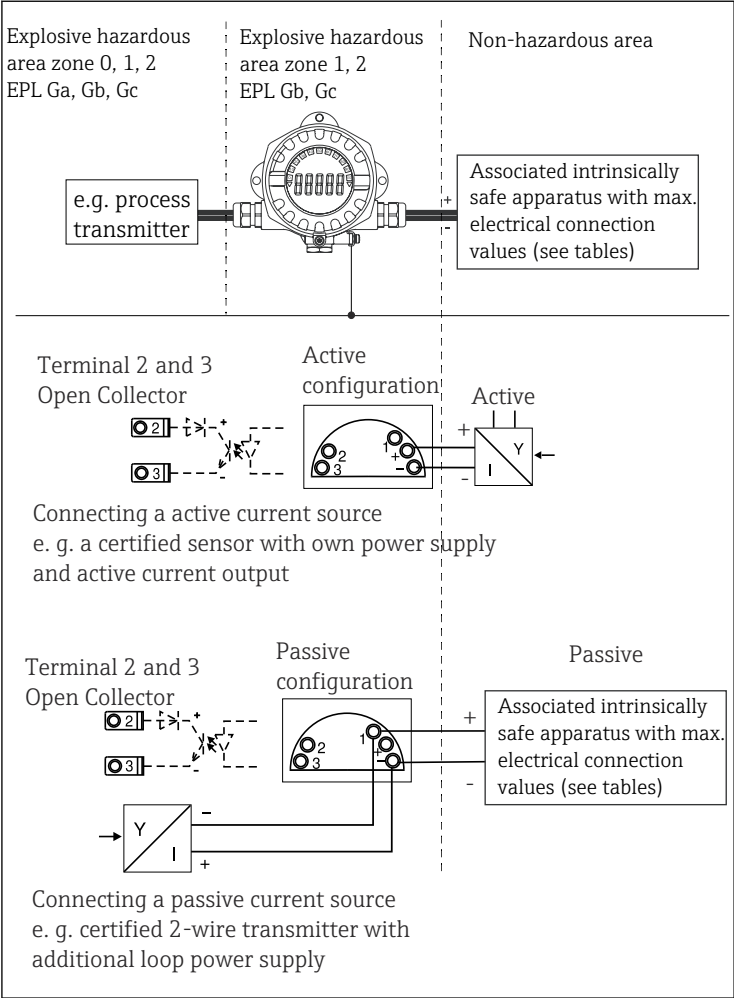
Endress+Hauser Wetzer GmbH + Co. KG

Obere Wank 1

87484 Nesselwang, Germany

Safety instructions

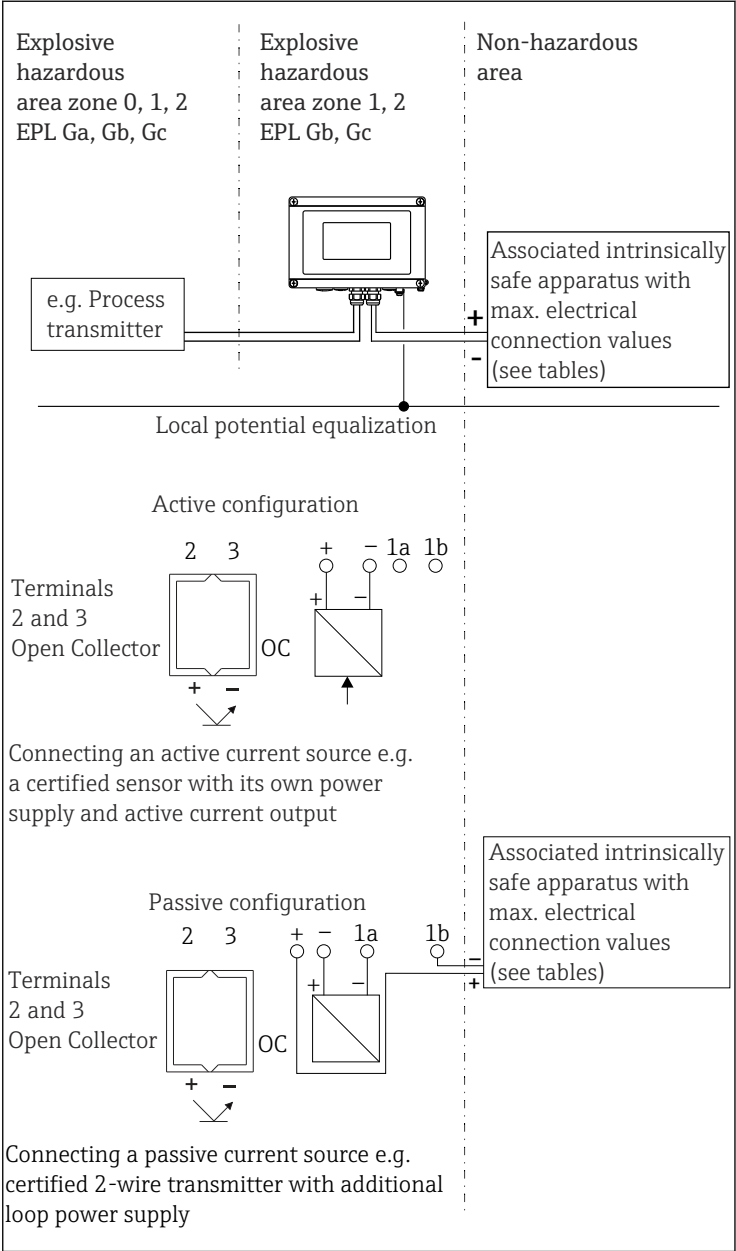
RIA14



A0048122

1 Installation of the field indicator

RIA16



A0050340

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 indicator housing must be connected to the potential matching line.
- The type of protection changes as follows when the devices are connected to certified intrinsically safe circuits of Category ib: Ex ib IIC.
- When connecting an intrinsically safe ib circuit, do not operate the process transmitter at Zone 0.
- The indicator must be installed so, that even in the event of rare incidents, an ignition source due to impact or friction between the enclosure and iron/steel is excluded.
- The circuits of indicator are isolated from its enclosure in conformance with EN/IEC 60079-11 chapter 6.3.13.

Safety instructions: Specific conditions of use

The suffix "X" placed after the certificate number indicates that this product is subject to special conditions for safe use, which is:

- 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.
Users must take effective measures to prevent the risk of ignition of the product casing caused by impact or friction.
- The user shall not change the configuration in order to maintain/ensure the explosion protection performance of the equipment. Any change may impair safety.
- For installation, use and maintenance of this product, the end user shall observe the instruction manual and the following standards:
 - GB/T 3836.13-2021 "Explosive atmospheres- Part 13:Equipment repair, overhaul, reclamation and modification".
 - GB/T 3836.15-2017 "Explosive atmospheres- Part 15:Electrical installations design, selection and erection".
 - GB/T 3836.16-2022 "Explosive atmospheres- Part 16:Electrical installations inspection and maintenance".
 - GB/T 3836.18-2024 "Explosive atmospheres- Part 18:Intrinsically safe electrical systems".
 - GB50257-2014 "Code for construction and acceptance of electric equipment on fire and device for explosion hazard electrical installation engineering".

Temperature
tables

The relationship between ambient temperature and temperature class is shown as follows:

Type	Temperature class	Ambient temperature
RIA14 RIA16	T6	$-40\text{ }^{\circ}\text{C} \leq T_a \leq +50\text{ }^{\circ}\text{C}$
	T5	$-40\text{ }^{\circ}\text{C} \leq T_a \leq +60\text{ }^{\circ}\text{C}$
	T4	$-40\text{ }^{\circ}\text{C} \leq T_a \leq +85\text{ }^{\circ}\text{C}$

Electrical
connection data

Type	Electrical data	
RIA14 RIA16	Power supply (Terminals + and -, + and 1)	$U_i = 30\text{ V}_{DC}$
		$I_i = 100\text{ mA}$
		$P_i = 750\text{ mW}$
		$L_i = 0\text{ mH}$
		$C_i = 15.2\text{ nF}$
	Open Collector (Terminals 2 and 3)	$U_i = 30\text{ V}_{DC}$
		$I_i = 100\text{ mA}$
		$P_i = 375\text{ mW}$
		$L_i = 0\text{ mH}$
		$C_i = 0\text{ nF}$



71716390

www.addresses.endress.com
