

# Safety Instructions

## Active barrier

RN221N

[Ex ia Ga] IIC



Document: XA01451K  
Safety instructions for electrical apparatus for explosion-  
hazardous areas →  3



# Active barrier

RN221N

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**Associated  
documentation**

- Operating instructions: KA00124R/09/
- Operating instructions with HART® diagnosis: BA00202R/09/

**Supplementary  
Documentation**

Explosion-protection brochure:  
CP00021Z/11

**EAC certificate of  
conformity  
according to TR  
CU 012/2011**

The device meets the fundamental health and safety requirements for the design and construction of devices and protective systems intended for use in potentially explosive atmospheres in accordance with TR CU 012/2011.

Certification body: ООО "НАННО ЦСБЭ"

Certificate number: TC RU C-DE.AA87.B.01212

Affixing the certificate number certifies conformity with the following standards:

ГОСТ 31610.11-2014 (IEC 60079-11:2011)

ГОСТ 31610.0-2014 (IEC 60079-0:2011)

**Manufacturer  
address**

Endress+Hauser Wetzler GmbH + Co KG

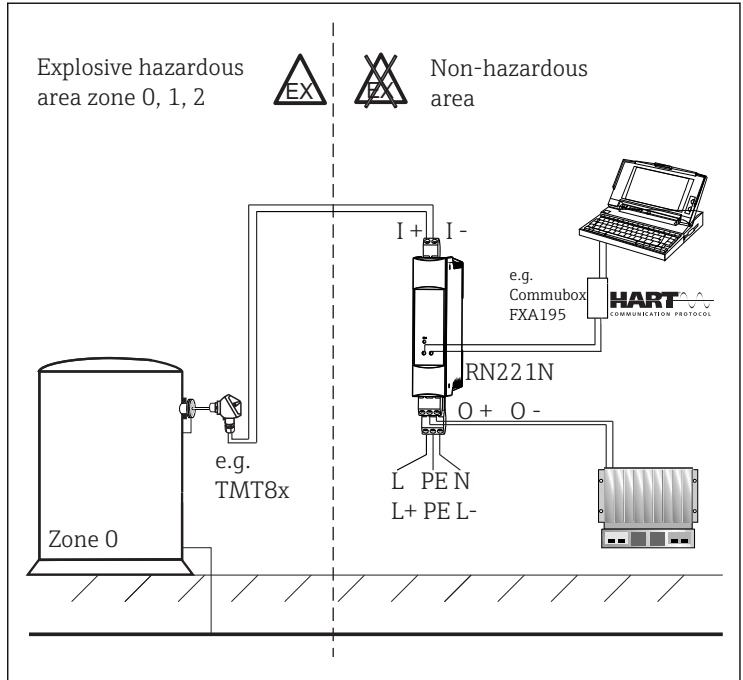
Obere Wank 1

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## Safety instructions



A0009620-EN

### Safety instructions: Installation

- Install the device according to the manufacturer's instructions and any other valid standards and regulations.
- The unit is an associated electrical apparatus and can only be installed outside the hazardous area.
- The unit must be installed in such a way that a minimum ingress protection of IP 20 is achieved.
- When installing the unit care must be taken that there must be a spacing of at least 50 mm (zone radius) to the intrinsically safe terminals.

### Electrical connection data

RN221N			[Exia]IIC
Supply set	L/L+	N/L	$U_m = 20$ to $250$ V DC/AC 50/60 Hz
Ground cable		PE	
Loop power (intrinsically safe)	I+	I-	$U_o \leq 27.3$ V $I_o \leq 87.6$ mA $P_o \leq 597$ mW

RN221N		[Exia]IIC	
Internal capacitance		$C_i =$ negligibly small	
Internal inductance		$L_i \approx 24 \mu\text{H}$	
Max. connection values	Ex ia IIC	$C_o \leq 86 \text{ nF}$	$L_o \leq 5.2 \text{ mH}$
	Ex ia IIB	$C_o \leq 683 \text{ nF}$	$L_o \leq 18.9 \text{ mH}$
Output	O+ O-	4 to 20 mA	
(HART® communication)	O+H		
Temperature range		$T_a = -20 \text{ to } +50 \text{ }^\circ\text{C}$	



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