


Safety Instructions

Active barrier

RN221N

JPN: [Ex ia] IIC



Document: XA01960K
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

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

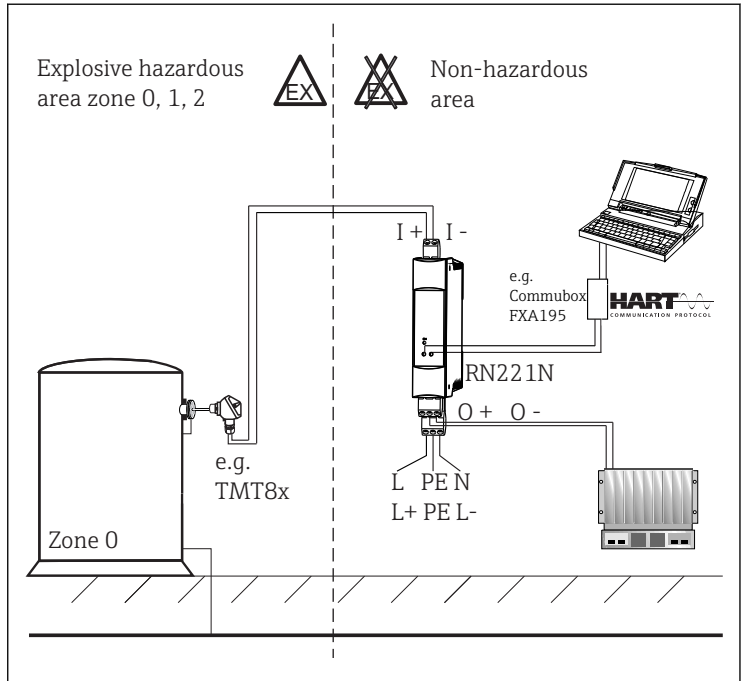
Manufacturer address

Endress+Hauser Wetzler GmbH + Co KG
Obere Wank 1
D-87484 Nesselwang
Germany
Phone: +49 (0)8361 308 0

Manufacturer's certificates

JPN certificate of conformity
Certificate number: CSAUK 19JPN053X
Affixing the certificate number certifies conformity with the following standards (depending on the device version):
JNIO SH-TR46-1:2015
JNIO SH-TR46-6:2015

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		[Ex ia] 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		[Ex ia] 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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