

Safety Instructions

RN22, RN42

Ex tc IIIC Dc



RN22, RN42

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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. RN22

Supplementary documentation

Explosion protection brochure: CP00021Z

The explosion protection brochure is available on the Internet:
www.endress.com/Downloads

Manufacturer's certificates**EU Declaration of Conformity**

Declaration number: EU_01005 U

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

- EN IEC 60079-0 : 2018
- EN IEC 60079-31 : 2014

The EU Declaration of Conformity is available on the Internet:
www.endress.com/Downloads

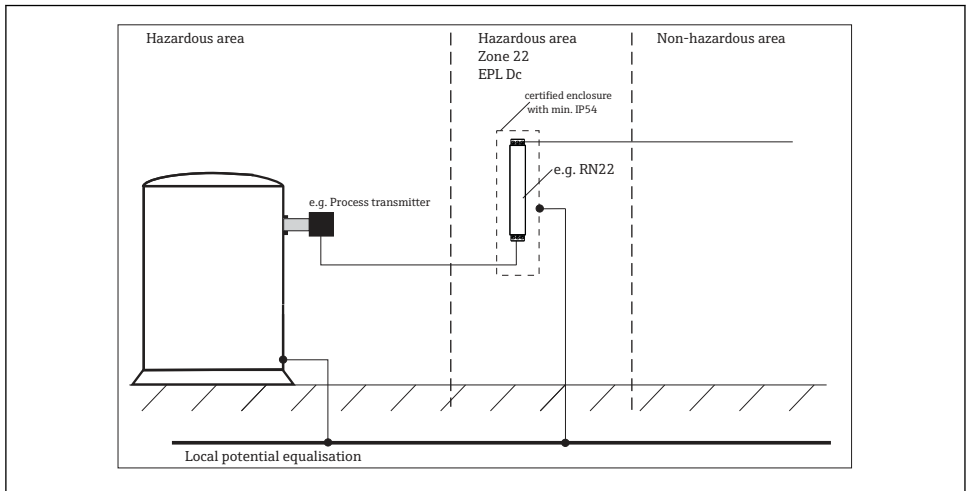
UKCA Declaration of Conformity

Declaration number: UK_00558

Certificate holder

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

Safety instructions:



A0052541

Safety instructions: Installation in Zone 22 (EPL Dc)

These instructions concern the required enclosure, accessories and supply cables in final application.

- 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).
- Seal the cable entries tight with certified cable glands which have at least type of protection Ex tc suitable for Group IIIC (degree of protection IP54).

Safety instructions: Schedule of limitations

- When install the unit in EPL Dc a certified enclosure shall be used providing a degree of protection of at least IP54 in event of non-conductive dust or IP6X in event of conductive dust according to EN/IEC 60079-0 and EN/IEC 60079-31.
- In an explosive atmosphere, do not open the certified enclosure when voltage is supplied (ensure that the required IP rating is maintained during operation).
- For full certification as an electrical equipment for use in EPL Dc the tests according to EN IEC 60079-0:2018 section 5.2 and 5.3 have to be carried out. Based on the test results a temperature shall be assigned.

Electrical
connection data

Ambient temperature: -40 °C ≤ Tamb ≤ +60 °C

Electrical data		
Supply RN22: terminals 1.1 (+), 1.2 (-)	U = 24 V _{DC} (-20 %/+25 %) Um = 250 V	
Supply RN42: terminals 1.1 (L/+), 1.2 (N/-)	U = 24 to 230 V AC/DC (-20 %/+10 %) 50/60 Hz Um = 250 V	
Output circuit: terminal 3.1 (+), 3.2 (-) terminal 2.1 (+), 2.2 (-)	I = 0 to 22 mA 0/4 to 20 mA U = 17.5 V (± 5 %) 12 to 30 V Um = 30 V	Output signal range (under-/overrange) Function range, output signal Open-circuit voltage, active mode External voltage, passive mode
Input circuit: Connection 2-wire (active) RN22: terminal 4.1 (+), 4.2 (-) terminal 6.1 (+), 6.2 (-) RN42: terminal 4.1 (+), 4.2 (-) Connection 4-wire (passive) RN22: terminal 4.2 (+), 5.1 (-) terminal 6.2 (+), 5.2 (-) RN42: terminal 4.2 (+), 4.3 (-)	I = 0 to 22 mA 0/4 to 20 mA U = 17.5 V ± 1 V 24.5 V (± 5 %) U < 7 V	Input signal range (under-/overrange) Function range, input signal Transmitter supply voltage (at 20 mA) Open-circuit voltage Input voltage drop signal (at 20 mA) for 4-wire connection

Category	Type of protection (ATEX)
II3D	Ex tc IIIC Dc



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www.addresses.endress.com
