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:

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:** $-40 \, ^\circ \text{C} \leq T_{\text{amb}} \leq +60 \, ^\circ \text{C}$

<table>
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<tr>
<th>Electrical data</th>
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| **Supply RN22:** terminals 1.1 (+), 1.2 (-) | $U = 24 \, \text{V}_{\text{DC}} (-20 \% / +25 \%)$
|                                 | $U_m = 250 \, \text{V}$  
| **Supply RN42:** terminals 1.1 (L/+), 1.2 (N/-) | $U = 24 \text{ to } 230 \, \text{V}_{\text{AC/DC}} (-20 \% / +10 \%)$
| | 50/60 Hz
| | $U_m = 250 \, \text{V}$  
| **Output circuit:** terminal 3.1 (+), 3.2 (-), terminal 2.1 (+), 2.2 (-) | $I = 0 \text{ to } 22 \, \text{mA}$
| | $0/4 \text{ to } 20 \, \text{mA}$
| | $U = 17.5 \, \text{V} (\pm 5 \%)$
| | $12 \text{ to } 30 \, \text{V}$
| | $U_m = 30 \, \text{V}$  
| **Input circuit:** Connection 2-wire (active) RN22: terminal 4.1 (+), 4.2 (-), terminal 6.1 (+), 6.2 (-) | $I = 0 \text{ to } 22 \, \text{mA}$
| | $0/4 \text{ to } 20 \, \text{mA}$
| | $U = 17.5 \, \text{V} \pm 1 \, \text{V}$
| | $24.5 \, \text{V} (\pm 5 \%)$
| | $U < 7 \, \text{V}$  
| Connection 4-wire (passive) RN22: terminal 4.2 (+), 5.1 (-), terminal 6.2 (+), 5.2 (-) |  
| Connection 4-wire (passive) RN42: terminal 4.2 (+), 4.3 (-) |  
| **Category** | **Type of protection (ATEX)**
| II3D | Ex tc IIIC Dc |