RN42 active barrier, wide range power supply

1-channel wide range supply and active barrier for safe isolation of 4 to 20 mA standard signal circuits

**Benefits:**
- Wide range power supply of 19.2 to 253 V\text{ AC/DC} 
- Quick and easy wiring thanks to plug-in terminals
- Optional for safety-oriented applications up to SIL 2 (SC3) in accordance with IEC 61508
- Optional installation in Ex Zone 2
- Compact housing width with 17.5 mm (0.69 in) for efficient use of space
- Option for installation rotated by 180° (terminals for power supply at top or bottom)

**Specs at a glance**
- **Input** 0/4...20 mA / HART feeding/not feeding
- **Output** 0/4...20 mA / HART active/passive
- **Power Supply** 24...230 V AC/DC

**Field of application:** The active barrier is used for transmission and galvanic isolation of 4 to 20 mA/HART signals. The device has an active / passive current input to which a 2- or 4-wire transmitter can be connected directly. The output of the device can be operated actively or passively. The current signal is then available to the PLC / controller or for further instrumentation at pluggable screw or optional push-in terminals.

**Features and specifications**
### Power supplies & barrier

**Measuring principle**
Active barrier

**Function**
1-channel

**Loop power supply**
17.5 V ±1 V bei 20 mA
open circuit voltage: 24.5 V ±5 %

**Power Supply**
24...230 V AC/DC

Input
0/4...20 mA / HART
feeding/not feeding

Output
0/4...20 mA / HART
active/passive

**Certificates**
- ATEX II3G Ex tc IIIC Dc
- CSA C/US AIS, I/2/ABCD
- EAC [Ex ia Ga] IIC, [Ex ia Da] IIIC, Ex ec IIC Gc
- JPN [Ex ia Ga] IIC, [Ex ia Da] IIIC, Ex ec IIC Gc
- INMETRO [Ex ia Ga] IIC,[Ex ia Da] IIIC, Ex ec IIC Gc
- NEPSI [Ex ia Ga] IIC, [Ex ia Da] IIIC, Ex ec IIC Gc
- UK II3G Ex tc IIIC Dc
- UK II(1)G [Ex ia Ga] IIC, II(1)D [Ex ia Da] IIIC, II3G Ex ec IIC Gc
- ATEX IECEx II(1)G [Ex ia Ga] IIC, II(1)D [Ex ia Da] IIIC, II3G Ex ec IIC Gc
- UL C/US
- DNV
Power supplies & barrier

**SIL**
SIL 2 SC 3

**Operation**
HART

More information [www.us.endress.com/RN42](http://www.us.endress.com/RN42)