

## Analogue Data Repeater MK35-11Ex0-Li/24VDC 1-channel



- **1-channel analogue data repeater**
- **Intrinsically safe output circuit EEx ia**
- **Area of application according to ATEX: II (1) GD**
- **Transmission of 0...20 mA current signals**
- **Linearity  $\leq 0.1\%$**
- **Temperature drift  $\leq 0.01\%/\text{K}$  of final value**
- **Galvanic isolation between input circuit, output circuit and supply voltage**

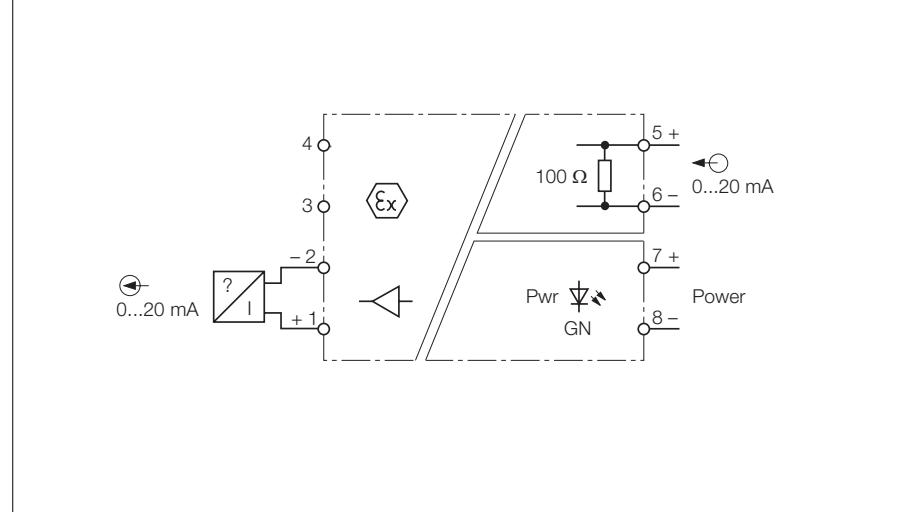
The MK35-11Ex0-Li... single channel analogue data repeaters are used to isolate and convert standard current signals which are passed 1:1 without attenuation from the explosion non-hazardous area to hazardous area.

Typical repeater applications include driving I/P transducers (e. g. for valve control) or display devices located in hazardous areas.

If the transfer of digital information to HART® terminals is required in addition to analogue data transfer, the HART®-compatible Ex output isolators IM35-11Ex-Hi/24VDC and IM35-22Ex-Hi/24VDC are available.

A green LED indicates that the device is powered.

**3**



## Analogue Data Repeater MK35-11Ex0-Li

<b>Type</b>	MK35-11Ex0-Li/24VDC
Ident-No.	7506501
<b>Supply voltage <math>U_B</math></b>	19...29 VDC
Ripple $W_{PP}$	$\leq 10 \%$
Current consumption	approx. 50 mA
Galvanic isolation	between input circuit, output circuit and supply voltage for 250 V <sub>rms</sub> test voltage 4 kV <sub>rms</sub>
<b>Input circuits</b>	
Current input	
– Input resistance	$\leq 100 \Omega$
– Operating characteristics	0...20 mA (< 40 mA)
<b>Output circuits</b>	intrinsically safe according to EN 50020
Current output (1 and 2)	
Output current	0...20 mA
Load impedance	$\leq 500 \Omega$
<b>Ex-approvals acc. certificate of conformity</b>	TÜV 01 ATEX 1659
Maximum values	
– No load voltage $U_0$	13.8 V
– Short-circuit current $I_0$	61 mA
– Internal resistance $R_i$	362 Ω
Max. external inductances/capacitances $L_0/C_0$	
– [EEx ia(ib)] IIC	10 mH/760 nF
– [EEx ia(ib)] IIC	25 mH/4.9 μF
Marking of devices	II (1) GD [EEx ia] IIC
<b>Transfer characteristics</b>	
Linearity tolerance	$\leq 0.1 \%$ of final value
Measuring tolerance	$\leq 0.2 \%$ (linearity tolerance is included in the measuring tolerance)
Load impedance	$\leq 0.01 \%$
Effect of load impedance	$\leq 0.01 \%$
Ambient temperature sensitivity	$\leq 0.01 \%/K$ of final value
Pulse rise time (10 %...90 %)	< 50 ms
Release time (90 %...0.10 %)	< 50 ms
<b>LED indication</b>	
– Power	green
<b>Housing</b>	8-pole, 18 mm wide, Polycarbonate/ABS flammability class V-0 conform to UL 94 snap-on clamps for top-hat rail (DIN 50022) or screw terminals for panel mounting
Mounting	
Connection	via flat terminals with self-lifting pressure plates
Connection profile	$\leq 2 \times 2.5 \text{ mm}^2$ or $2 \times 1.5 \text{ mm}^2$ with wire sleeves
Degree of protection (IEC 60529/EN 60529)	IP20
Operating temperature range	-25...+60 °C

