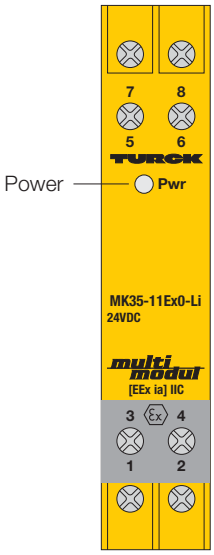
Analogue Data Repeater MK35-11Ex0-Li/24VDC 1-channel



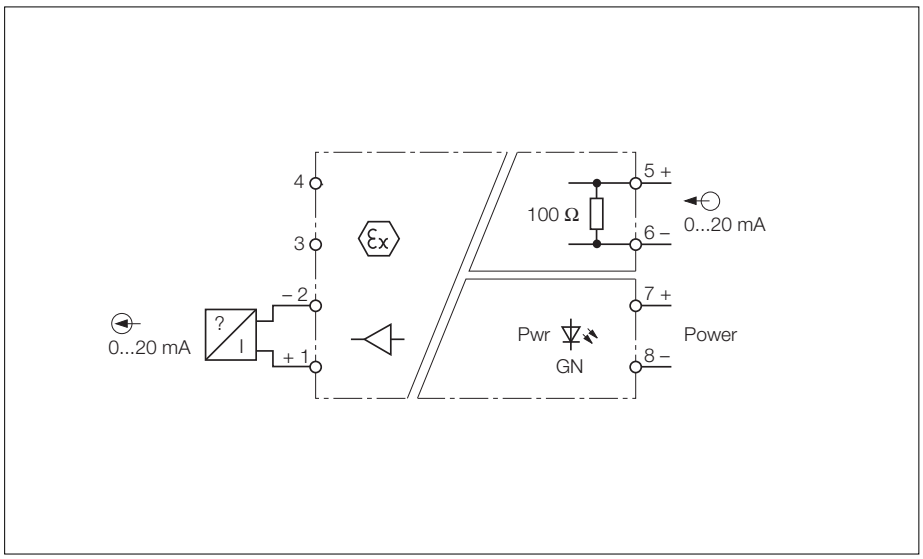
- **1-channel analogue data repeater**
- **Intrinsically safe output circuit EEx ia**
- **Area of application according to ATEX: II (1) GD**
- **Transmission of 0…20 mA current signals**
- **Linearity ≤ 0.1 %**
- **Temperature drift ≤ 0.01 %/K of final value**
- **Galvanic isolation between input circuit,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

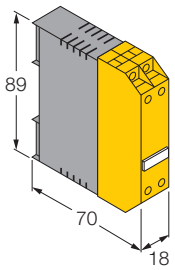
If the transfer of digital information to HART® terminals is required in addition to analogue data transfer, the HART®-compatible Ex output isolators IM35-11Ex-Hi/24VDC and IM35-22Ex-Hi/24VDC are available (see page 3 – 79 and 3 – 81).

A green LED indicates that the device is powered.



Analogue Data Repeater MK35-11Ex0-Li

Type	MK35-11Ex0-Li/24VDC
Ident-No.	7506501
Supply voltage U_B	19...29 VDC
Ripple W_{PP}	≤ 10 %
Current consumption	approx. 50 mA
Galvanic isolation	between input circuit, output circuit and supply voltage for 250 V_{rms} test voltage 4 kV_{rms}
Input circuits	
Current input	
– Input resistance	≤ 100 Ω
– Operating characteristics	0… 20 mA (< 40 mA)
Output circuits	intrinsically safe according to EN 50020
Current output (1 and 2)	
Output current	0…20 mA
Load impedance	≤ 500 Ω
Ex-approvals acc. certificate of conformity	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	Ⓔx II (1) GD [EEx ia] IIC
Transfer characteristics	
Linearity tolerance	≤ 0.1 % of final value
Measuring tolerance	≤ 0.2 % (linearity tolerance is included in the measuring tolerance)
Load impedance	≤ 0,01 %
Effect of load impedance	≤ 0,01 %
Ambient temperature sensitivity	≤ 0.01 %/K of final value
Pulse rise time (10 %...90 %)	< 50 ms
Release time (90 %..0.10 %)	< 50 ms
LED indication	
– Power	green
Housing	8-pole, 18 mm wide, Polycarbonate/ABS flammability class V-0 conform to UL 94
Mounting	snap-on clamps for top-hat rail (DIN 50022) or screw terminals for panel mounting
Connection	via flat terminals with self-lifting pressure plates
Connection profile	≤ 2 x 2.5 mm^2 or 2 x 1.5 mm^2 with wire sleeves
Degree of protection (IEC 60529/EN 60529)	IP20
Operating temperature range	-25…+60 °C



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