

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

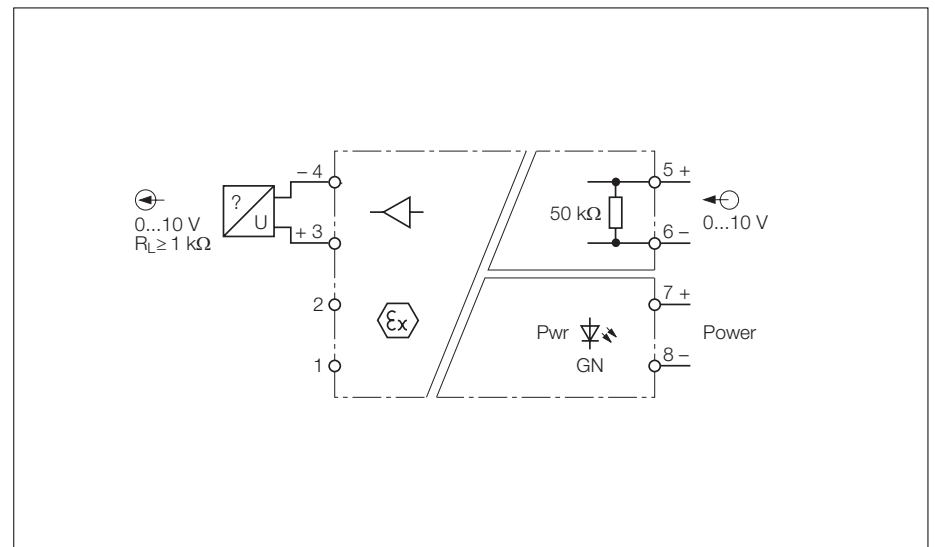


- **1-channel analogue data repeater**
- **Intrinsically safe output circuit EEx ia**
- **Area of application according to ATEX: II (1) GD**
- **Transmission of 0...10 V voltage signals**
- **Linearity $\leq 0.1 \%$**
- **Temperature drift $\leq 0.01 \%/K$ of final value**
- **Galvanic isolation between input circuit, output circuit and supply voltage**

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

A typical repeater application includes display devices located in hazardous areas.

A green LED indicates that the device is powered.



Analogue Data Repeater MK35-11Ex0-LU

Type	MK35-11Ex0-LU/24VDC
Ident-No.	7506701
Supply voltage U_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 _{rms} test voltage 4 kV _{rms}
Input circuits	
Current input	
– Input resistance	50 k Ω
– Operating characteristics	0...10 V
Output circuits	
	intrinsically safe according to EN 50020
Voltage output (3 and 4)	
Output voltage	0...10 V
Load resistance	$\geq 1 \text{ k}\Omega$
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	722 Ω
Max. external inductances/capacitances L_0/C_0	
– [Ex ia/ib] IIC	25 mH/0,76 μ F
– [Ex ia/ib] IIC	50 mH/4.9 μ F
Marking of devices	II (1) GD [Ex ia] IIC
Transfer characteristics	
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
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	$\leq 2 \times 2.5 \text{ mm}^2$ 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

