

I.S. Isolators (DIN Rail Mounting) mV Isolating Repeater Type 9323

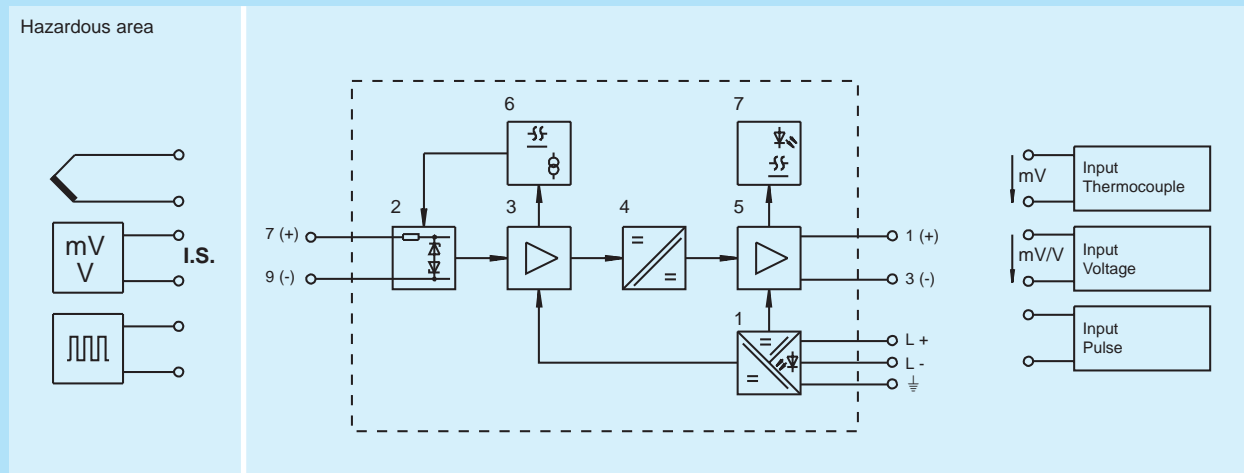
- Intrinsically safe input [EEx ia] IIC
- Galvanic isolation between input, output and power supply
- Power supply 18 .. 35 V DC
- Open-circuit monitoring
- Transmission frequency up to 2.5 kHz
- Measurement ± 100 mV, ± 1 V, ± 10 V
- Installation in Zone 2 (Div 2) possible
- EMC tested, CE marking

LED indication power supply

Basic function: analog input, mV or V, 1 channel.

The mV isolating repeaters are used for the intrinsically safe operation of thermocouples or other voltage generating transducers. Also suitable for pulsed signals.

STAHL



Selection table		
Version	Signal input	Ordering code
Isolating repeater without open-circuit detection	± 100 mV	9323 / 10 - 10 - 10
Isolating repeater with open-circuit detection	± 100 mV	9323 / 10 - 10 - 11
Isolating repeater without open-circuit detection	± 1 V	9323 / 10 - 20 - 10
Isolating repeater without open-circuit detection	± 10 V	9323 / 10 - 30 - 10

Safety data for input	
Certifications	BVS (Europe, CENELEC), CSA (Canada), SEV (Switzerland), FTZU (Czech Republic), EVPU (Slovakia), BKI (Hungary), KDB (Poland), VNIIEF (Russia), FM (USA)
Marking	[EEx ia] IIC/IIB according to CENELEC
Classification	associated electrical apparatus

Safe maximum values (CENELEC)			
Types	9323/10-10	9323/10-20	9323/10-30
Max. voltage U_m	± 6.6 V	± 6.6 V	± 16.5 V
Max. current I_m	± 8.9 mA	± 8.9 mA	± 9.2 mA
Max. power P_m	14,7 mW	14,7 mW	38 mW
Max. capacitance C_a for [EEx ia] IIC / IIB	800 nF/2000 nF	800 nF/2000 nF	170 nF/600 nF
Max. inductance L_a for [EEx ia] IIC / IIB	5 mH/5 mH	5 mH/5 mH	1 mH/5 mH

Further information and combinations of values, see certifications.

Technical data			
Power supply			
Rated voltage U_N		24 V DC	
Voltage range		18 .. 35 V	
Rated current (for U_N)	$I_N \leq$	15 mA	
Max. power consumption		1.0 W	
Polarity reversal protection		yes	
Types		9323/10-10	9323/10-20
Current range $U_A=U_E$ (specified accuracy)		-0.1..+0.1 V	-1..+1 V
Response time (10 .. 90%)	\leq	0.2 ms	0.2 ms
Input			
Input resistance	\geq	10 M Ω	10 M Ω
Output			
Load resistance	$R_L \geq$	10 k Ω	10 k Ω
Internal resistance	\leq	5 Ω	5 Ω
Open-circuit Type 9323/10-10-11			
Output behavior on open-circuit	$U_A \geq$	0.4 V	0.4 V
Error limits			
Tolerance band setting, in % of the measuring range			
Linearity error at U_N , 23 °C, $R_L = 100$ k Ω	\leq	0.02%	0.05%
Temperature effect per 10 K	\leq	0.025 %	0.05 %

Dimensions (Casing type A), mechanical data, ambient conditions and accessories see page 3/58f.

