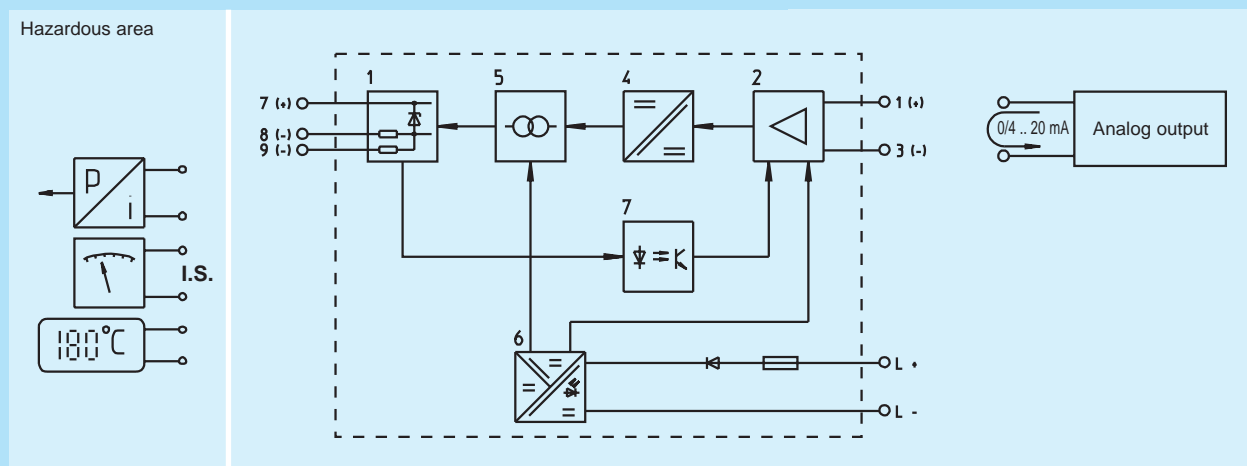




I.S. Isolators (DIN Rail Mounting) mA Isolating Repeater Type 9318/12

- Intrinsically safe output [Ex ia] IIC
- For signals 4 .. 20 mA or 0 .. 20 mA
- Galvanic isolation between input, output and power supply
- Open-circuit detection
- Power supply 18 .. 35 V DC
- Installation in Zone 2 (Div 2) possible
- EMC tested, CE marking
- For HART valves see type 9318/16

Basic function: analog output 0/4 .. 20 mA, 1 channel.
The isolating repeaters are suitable for intrinsically safe operation of control valves, i/p converters, analog and digital displays etc.



Selection table

Version	Ordering code
Intrinsically safe output	9318 / 12 - 11 - 10

Safety Data

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

Safe maximum values (CENELEC)

Terminals	7 and 8	7 and 9
Max. voltage U_m	27.2 V	27.2 V
Max. current I_m	57 mA	103 mA
Max. power P_m	388 mW	701 mW
Max. capacitance C_a for [EEx ia] IIC / IIB	70 nF/500 nF	70 nF/500 nF
Max. inductance L_a for [EEx ia] IIC / IIB	11 mH/43 mH	3 mH/12 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 , $I_L = 20$ mA) I_N		52 mA
Max. power consumption		1.25 W
Polarity reversal protection		yes
Signal transmission		
Current range	$I_L = I_E$	0 .. 22 mA
Response time (10 .. 90%)	\leq	25 ms
Input		
Input resistance		70 Ω
Output		
Terminals		7 and 8
Load resistance	$R_L \leq$	500 Ω
		7 and 9 750 Ω
Open-circuit		
Open-circuit on I.S. output	$I_L =$	0 mA
Input behaviour on open circuit	$I_E \leq$	0.1 mA
Error limits		
Tolerance band setting, in % of the measuring range		
Linearity error at U_N , 23 °C	\leq	0.1 %
Temperature effect	\leq	0.1 % / 10 K

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

