



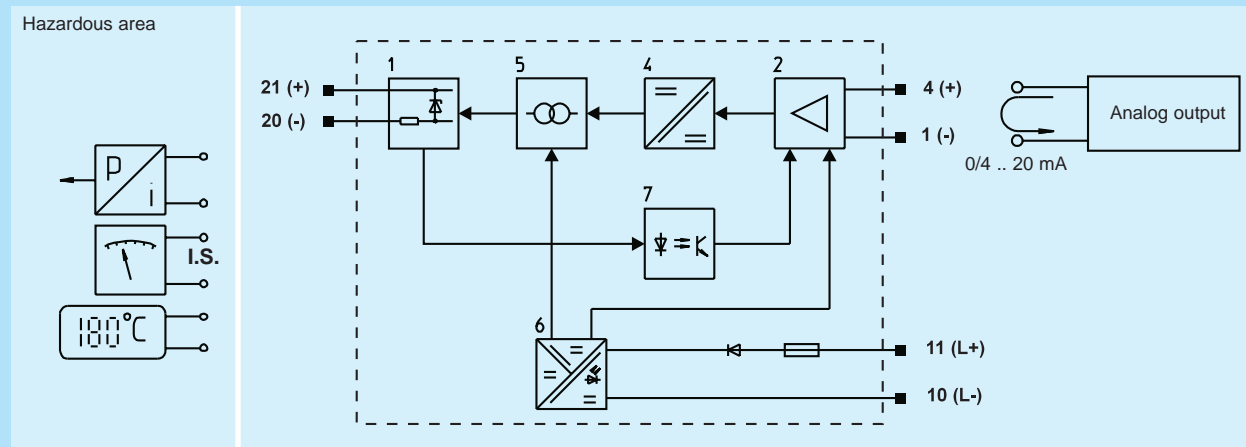
I.S. Isolators (Modules) mA Isolating Repeater Type 9118/12

- 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 monitoring
 - Power supply 18 .. 35 V DC
 - EMC tested, CE marking
- For HART valves, see Type 9118/16

Basic function: analog output, 0/4 .. 20 mA, 1 channel.

These isolators are suitable for intrinsically safe operation of control valves, i/p converters and displays.

STAHL



Selection table

Version	Ordering code
mA isolating repeater, intrinsically safe output	9118 / 12 - 11 - 10

Safety data

Certifications	BVS (Europe CENELEC), CSA (Canada), SEV (Switzerland), FTZU (Czech Republic), EVPU (Slovakia), FM (USA)
Marking	[Ex ia] IIC/IIB according to CENELEC
Classification	associated electrical apparatus

Safe maximum values (CENELEC)

Max. voltage U_m	27.2 V
Max. current I_m	103 mA
Max. power P_m	701 mW
Max. capacitance C_a for [Ex ia] IIC / IIB	70 nF / 500 nF
Max. inductance L_a for [Ex ia] IIC / IIB	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
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Output

Load resistance	$R_L \leq$	700 Ω
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Open-circuit

Output behavior on open-circuit in the field circuit	$I_E \leq$	0.1 mA
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Error limits

Tolerance band setting, in % of the measuring range		
Linearity error for U_N , 23 °C	\leq	0.1 %
Temperature effect	\leq	0.1 % / 10 K