

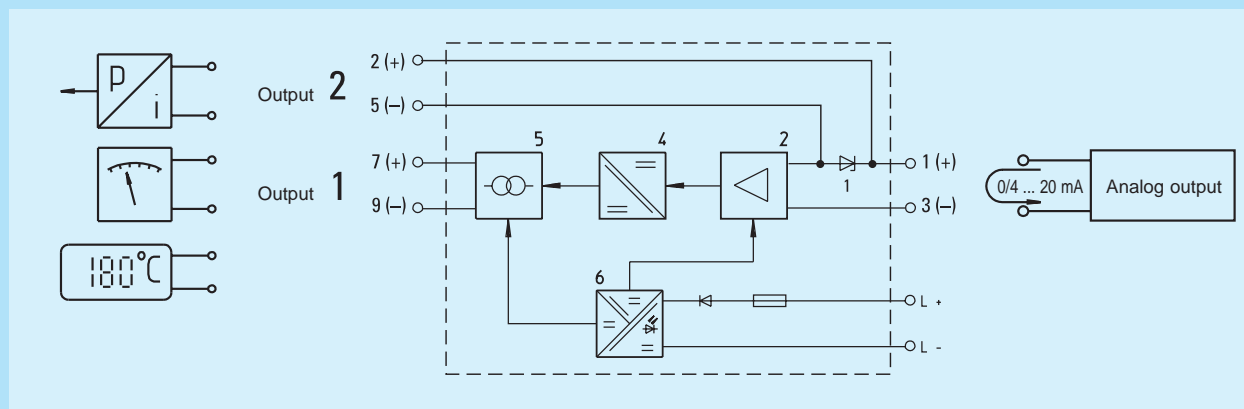
### I.S. Isolators (DIN Rail Mounting) mA Isolating Repeater Type M318

- without explosion protection
- 1 input to 2 galvanically isolated outputs
- For signals 4 .. 20 mA or 0 .. 20 mA
- Galvanic isolation between input, output 1 and power supply
- Open-circuit detection
- Power supply 18 .. 35 V DC
- EMC tested, CE marking

Basic function: one analog input to two analog outputs, mA.

The mA isolating repeaters M318 are used for signal multiplication of non intrinsically safe 0/4...20 mA signals.

The analog input signal (e.g. from transmitter supply unit 9303) is transferred to output 1 galvanically isolated. At the same time the input signal is available at output 2. Both outputs are decoupled via Z-diodes.



Selection table	
Version	Ordering code
mA isolating repeater	M318 / 12 - 11 - 00
Technical data	
<b>Certification</b>	without explosion protection
<b>Power supply</b>	
Rated voltage $U_N$	24 V DC
Voltage range	18 .. 35 V
Rated current (for $U_N$ , $I_A = 20$ mA) $I_N$	52 mA
Max. power consumption	1.25 W
Polarity reversal protection	yes
<b>Signal transmission</b>	
The current ( $I_E$ ) fed to the input (terminals 7 and 9) is transferred linearly to the outputs 1 and 2 ( $I_A$ ).	
Current range	$I_A = I_E$ 0 .. 22 mA
Response time (10 .. 90%)	$\leq$ 25 ms
<b>Input</b>	
Minimum required input voltage	11 V
<b>Output</b>	
Load resistance $I_A = 20$ mA	
Output 1	$R_{L1} \leq$ 1 k $\Omega$
Output 2	$R_{L2} \leq$ 350 $\Omega$
<b>Open-circuit</b>	
Open-circuit on input	$I_E =$ 0 mA
Output behaviour	$I_A =$ 0 mA
<b>Error limits</b>	
Tolerance band setting, in % of the measuring range	$\leq$ 0.1 %
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.	

