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# MOSTEC

## Threshold Converter Type M2218-A (-T)



### Technical description

The threshold converter M2218 is used to check or control either a signal current or a temperature. A Pt-100 platinum sensor in 3-wire mode can be connected to the unit. It converts the input signal to an internal standard signal of 0 to 100.0%. Two independent limit contacts can be set within this range.

All settings as limit values, hysteresis, range and operating mode of the contacts can be set with a PC-program.

The unit may be programmed to customers values or ranges by the factory.

A typical application would be to measure and monitor pressure in a process vessel: A pressure transmitter converts the pressure of 1 to 10 bar to a current signal

of 4 to 20mA. The M2218 monitors under- and overpressure in the vessel. It converts the 4...20mA signal current to 0...100.0%. The alarm is set between 0% (=1 bar) and 100.0% (=10 bar). With these floating alarm contacts, overpressure valves, compressor relays, etc. are driven directly.

If a Pt-100 sensor is connected to the input, the unit works as a temperature monitor or as a simple temperature controller.

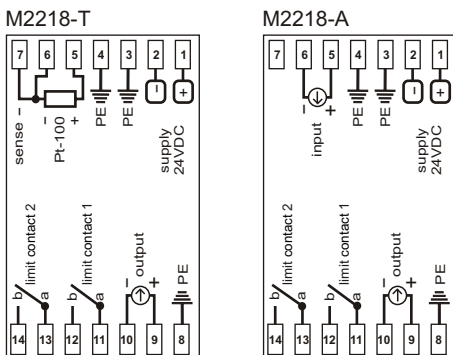
Optionally a galvanically isolated output signal of 4...20mA is available.

The 24VDC power supply is galvanically isolated from the input circuit and the output current source.

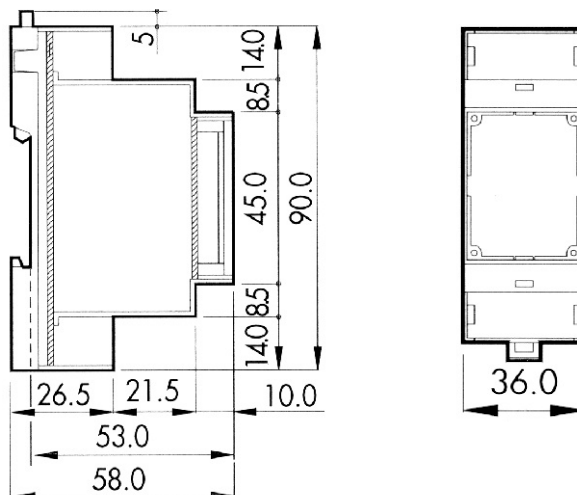
## Technical Data:

Input signal:	M2218-A: 4...20mA M2218-T: Pt-100 platinum sensor with 3-wire connection, temperature range: 0...160°C																		
Input load:	M2218-A: 51Ω																		
Accuracy :	±0.2% at 23°C ambient temperature																		
Reproducibility:	±0.1%																		
Temperature coefficient:	zero drift: 50ppM/°C typical, gain drift: 50ppM/°C typical																		
Long-term stability:	±0.2%																		
Working temperature range:	-5 to +45°C																		
Maximum humidity:	95%, non-condensing																		
Programming:	with a programming cable to a front panel miniature plug																		
Limit contacts:	two, adjustable between 0.0 and 100.0%																		
Hysteresis:	computer programmable, see manual																		
Contacts:	floating normally open contacts																		
Max. contact load:	1A/48V resistive																		
Change limit contacts:	computer programmable, see manual																		
Display limit contacts:	computer programmable, see manual																		
Current output:	4...20mA, galvanically isolated																		
Max. load:	<400Ω																		
Output impedance:	>1MΩ typical																		
Power supply:	24VDC, ±15%																		
Power supply load:	<2.5W at 24VDC																		
CE-conformity:	fulfilled																		
Terminals:	2 x 7-pole plug-in screw terminals																		
Terminal description:	<table border="0"> <tr> <td>1 = supply voltage: 24VDC(+)</td> <td>2 = supply voltage: 24VDC(-)</td> </tr> <tr> <td>3 = supply voltage: PE</td> <td>4 = signal input PE</td> </tr> <tr> <td>5 = M2218-T: input Pt-100 (+)</td> <td>6 = M2218-T: input Pt-100 (-)</td> </tr> <tr> <td>M2218-A: input 4...20mA (+)</td> <td>M2218-A: input 4...20mA (-)</td> </tr> <tr> <td>7 = M2218-T: Pt-100 sense (-)</td> <td>8 = signal output PE</td> </tr> <tr> <td>M2218-A: not used</td> <td></td> </tr> <tr> <td>9 = output 4...20mA: (+)</td> <td>10 = output 4...20mA: (-)</td> </tr> <tr> <td>11 = limit contact 2: (a)</td> <td>12 = limit contact 2: (b)</td> </tr> <tr> <td>13 = limit contact 1: (a)</td> <td>14 = limit contact 1: (b)</td> </tr> </table>	1 = supply voltage: 24VDC(+)	2 = supply voltage: 24VDC(-)	3 = supply voltage: PE	4 = signal input PE	5 = M2218-T: input Pt-100 (+)	6 = M2218-T: input Pt-100 (-)	M2218-A: input 4...20mA (+)	M2218-A: input 4...20mA (-)	7 = M2218-T: Pt-100 sense (-)	8 = signal output PE	M2218-A: not used		9 = output 4...20mA: (+)	10 = output 4...20mA: (-)	11 = limit contact 2: (a)	12 = limit contact 2: (b)	13 = limit contact 1: (a)	14 = limit contact 1: (b)
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Case:	DIN-standard case (L x W x H) 90 x 36 x 58mm																		
Mounting:	35mm mounting rail, EN50022-35, min. distance from one instrument to the next: 5mm																		
Weight:	~90g																		
Warranty:	2 years																		

### Wiring:



### Dimensions (mm):



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