



| Supply voltage  |                                    |
|---|------------------------------------|
| Rated value (DC)  |                                    |
| <ul style="list-style-type: none"> <li>• 24 V DC</li> </ul>           | Yes                                |
| Input current   |                                    |
| Current consumption, typ.   | 40 mA                              |
| from backplane bus 5 V DC, typ.                                       | 80 mA                              |
| Power loss  |                                    |
| Power loss, typ.  | 1.5 W                              |
| Analog inputs   |                                    |
| Number of analog inputs   | 4; Resistance thermometer          |
| permissible input voltage for current input (destruction limit), max. | ± 35 V                             |
| Technical unit for temperature measurement adjustable                 | Degrees Celsius/degrees Fahrenheit |
| Input ranges  |                                    |
| <ul style="list-style-type: none"> <li>• Voltage</li> </ul>           | No                                 |
| <ul style="list-style-type: none"> <li>• Current</li> </ul>           | No                                 |
| <ul style="list-style-type: none"> <li>• Thermocouple</li> </ul>      | No                                 |

|  |   |
|--|---|
| • Resistance thermometer   | Yes; Resistance-type transmitter: Pt10, Pt50, Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120, Ni200, Ni500, Ni1000, Cu10, Cu50, Cu100, LG-Ni1000 |
| • Resistance   | Yes; 150 Ω, 300 Ω, 600 Ω  |
| <b>Input ranges (rated values), resistance thermometer</b>             |   |
| • Cu 10  | Yes   |
| • Input resistance (Cu 10)   | 10 Ω  |
| • Ni 100   | Yes   |
| • Input resistance (Ni 100)  | 100 Ω   |
| • Ni 1000  | Yes   |
| • Input resistance (Ni 1000)   | 1 000 Ω   |
| • LG-Ni 1000   | Yes   |
| • Input resistance (LG-Ni 1000)  | 1 000 Ω   |
| • Ni 120   | Yes   |
| • Input resistance (Ni 120)  | 120 Ω   |
| • Ni 200   | Yes   |
| • Input resistance (Ni 200)  | 200 Ω   |
| • Ni 500   | Yes   |
| • Input resistance (Ni 500)  | 500 Ω   |
| • Pt 100   | Yes   |
| • Input resistance (Pt 100)  | 100 Ω   |
| • Pt 1000  | Yes   |
| • Input resistance (Pt 1000)   | 1 000 Ω   |
| • Pt 200   | Yes   |
| • Input resistance (Pt 200)  | 200 Ω   |
| • Pt 500   | Yes   |
| • Input resistance (Pt 500)  | 500 Ω   |
| <b>Input ranges (rated values), resistors</b>                          |   |
| • 0 to 150 ohms  | Yes   |
| • 0 to 300 ohms  | Yes   |
| • 0 to 600 ohms  | Yes   |
| <b>Thermocouple (TC)</b>   |   |
| <b>Temperature compensation</b>  |   |
| — parameterizable  | No  |
| <b>Analog value generation for the inputs</b>                          |   |
| Measurement principle  | integrating   |
| <b>Integration and conversion time/resolution per channel</b>          |   |
| • Resolution with overrange (bit including sign), max.                 | 15 bit; + sign  |
| • Integration time, parameterizable                                    | No  |
| • Interference voltage suppression for interference frequency f1 in Hz | 85 dB at 50 / 60 / 400 Hz   |

| Errors/accuracies   |   |
|---|---|
| Temperature error (relative to input range), (+/-)  | 25 °C ±0.1%, to 55 °C ±0.2% total measurement range |
| Repeat accuracy in steady state at 25 °C (relative to output range), (+/-)                          | 0.05 %  |
| Interference voltage suppression for $f = n \times (f_1 \pm 1 \%)$ , $f_1 =$ interference frequency |   |
| <ul style="list-style-type: none"> <li>• Common mode interference, min.</li> </ul>                  | 120 dB  |
| Interrupts/diagnostics/status information   |   |
| Alarms  | Yes   |
| Diagnostic functions  | Yes; Can be read out                                |
| Alarms  |   |
| <ul style="list-style-type: none"> <li>• Diagnostic alarm</li> </ul>                                | Yes   |
| Diagnostic messages   |   |
| <ul style="list-style-type: none"> <li>• Monitoring the supply voltage</li> </ul>                   | Yes   |
| <ul style="list-style-type: none"> <li>• Wire-break</li> </ul>                                      | Yes   |
| Diagnostics indication LED  |   |
| <ul style="list-style-type: none"> <li>• for status of the inputs</li> </ul>                        | Yes   |
| <ul style="list-style-type: none"> <li>• for maintenance</li> </ul>                                 | Yes   |
| Degree and class of protection  |   |
| Degree of protection acc. to EN 60529   |   |
| <ul style="list-style-type: none"> <li>• IP20</li> </ul>  | Yes   |
| Standards, approvals, certificates  |   |
| CE mark   | Yes   |
| CSA approval  | Yes   |
| FM approval   | Yes   |
| RCM (formerly C-TICK)   | Yes   |
| Ambient conditions  |   |
| Free fall   |   |
| <ul style="list-style-type: none"> <li>• Fall height, max.</li> </ul>                               | 0.3 m; five times, in product package               |
| Ambient temperature during operation  |   |
| <ul style="list-style-type: none"> <li>• min.</li> </ul>  | -20 °C  |
| <ul style="list-style-type: none"> <li>• max.</li> </ul>  | 60 °C   |
| <ul style="list-style-type: none"> <li>• horizontal installation, min.</li> </ul>                   | -20 °C  |
| <ul style="list-style-type: none"> <li>• horizontal installation, max.</li> </ul>                   | 60 °C   |
| <ul style="list-style-type: none"> <li>• vertical installation, min.</li> </ul>                     | -20 °C  |
| <ul style="list-style-type: none"> <li>• vertical installation, max.</li> </ul>                     | 50 °C   |
| Ambient temperature during storage/transportation   |   |
| <ul style="list-style-type: none"> <li>• min.</li> </ul>  | -40 °C  |
| <ul style="list-style-type: none"> <li>• max.</li> </ul>  | 70 °C   |
| Air pressure acc. to IEC 60068-2-13   |   |
| <ul style="list-style-type: none"> <li>• Operation, min.</li> </ul>                                 | 795 hPa   |

|   |  |
|---|--|
| • Operation, max.                               | 1 080 hPa  |
| • Storage/transport, min.                       | 660 hPa  |
| • Storage/transport, max.                       | 1 080 hPa  |
| <b>Relative humidity</b>                        |  |
| • Operation at 25 °C without condensation, max. | 95 %   |
| <b>Pollutant concentrations</b>                 |  |
| • SO2 at RH < 60% without condensation          | SO2: < 0.5 ppm; H2S: < 0.1 ppm; RH < 60% condensation-free |
| <b>Connection method</b>                        |  |
| required front connector                        | Yes  |
| <b>Mechanics/material</b>                       |  |
| Enclosure material (front)                      |  |
| • Plastic                                       | Yes  |
| <b>Dimensions</b>                               |  |
| Width   | 45 mm  |
| Height  | 100 mm   |
| Depth   | 75 mm  |
| <b>Weights</b>                                  |  |
| Weight, approx.                                 | 220 g  |
| <b>last modified:</b>                           | 12/22/2017   |