

| Technical Information | |
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| Model | DF58-M-4RTD-PT |
| Product Description | Thermal resistance (RTD) measurement module, 16 bit resolution, 4 channels |
| Measuring range | Thermal resistance |
| Number of channels | 4 |
| Signal type | Pt100, Pt200, Pt500, Pt1000, Ni100, Ni120, Ni 200, Ni500, Ni1000, Cu10,40 Ω, 80 Ω, 150 Ω,300 Ω, 500 Ω,1kΩ, 2kΩ, 4kΩ |
| Temperature range | depending on the sensor type 0,1mA (Pt100, Ni100, Ni120, Cu10, 40 Ω, 80 Ω, 150 Ω, 300 Ω)or 0,1mA (Pt200, Pt500, Pt1000, Ni200, Ni500, Ni1000, 500 Ω,1k Ω, 2kΩ, 4kΩ) |
| Accuracy | max. 0.2 % FSR / 0.3 % FSR for Ni sensors / 0.6 % FSR for Cu10 |
| Sensor current | depending on the sensor type 0,1mA (Pt100, Ni100, Ni120, Cu10, 40 Ω, 80 Ω, 150 Ω, 300 Ω) or 0,1mA (Pt200, Pt500, Pt1000, Ni200, Ni500, Ni1000, 500 Ω, 1kΩ, 2kΩ, 4kΩ) |
| Line type | 2/3/4 wire system |
| Temperature coefficient | ±50 ppm/K max. |
| Conversion time | 133---800ms , configurable |
| Common mode input voltage range | Line to line: max ± 2 V Line power supply: max ± 50 V |
| Reverse polarity protection | support |
| Module diagnosis | support |
| Single channel diagnosis | support |
| Isolation method | Magnetic isolation between each channel and the on-site layer, and isolation between channels |
| data size | 8 Byte |
| Internal resistance | >500K Ω |
| resolving power | 16bit, 0.1 °C/per digit |
| Frequency interference suppression | 10Hz 50Hz 60Hz 400Hz |
| diagnosis | Broken line/parameter assignment error |
| Process alarm | Upper/lower limit of each channel |
| Conversion time | 100ms/4 channels |
| Power parameters | |
| working voltage | 24V DC +20 %/ -15 % |
| System feed current | <15mA |
| Wiring parameters | |
| Connection technology: input/output | PUSH-IN type terminal blocks |
| Connection type (1) | Input/Output |
| Crimping area of wire | 0.2~1.5mm ² /26~16AWG |
| Strip length | 8-10mm ² |
| Installation method | DIN-35 type guide rail |
| Material parameters | |
| colour | Light gray |
| Shell material | PC plastic, PA66 |
| Consistency flag | CE |
| Environmental requirements | |

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| Permissible ambient temperature (during operation) | -25-60 °C |
| Permissible ambient temperature (storage) | -40-85 °C |
| Protection type | IP20 |
| Pollution level | 2. Comply with IEC 61131-2 standard |
| Working altitude | Temperature without derating: 0-2000m |
| Installation position | arbitrarily |
| Relative humidity (non condensing) | 5-95% RH |
| Anti vibration | 4g, in accordance with IEC 60068-2-6 standard |
| Impact resistance | 15g, in accordance with IEC 60068-2-27 standard |
| EMC - Immunity | Complies with EN 61000-6-2 standard |
| EMC - Radiated interference | Complies with EN 61000-6-3 standard |
| Corrosion resistance | Complies with IEC 60068-2-42 and IEC 60068-2-43 standards |
| Permissible H2S pollutant concentration at 75% relative humidity | 10ppm |
| Permissible SO2 pollutant concentration at 75% relative humidity | 25ppm |