Product datasheet

Specification





8 temperature sensor module MET148-2 for Sepam series 20, 40, 60, 80

59641

Main

| Module Type | Temperature sensor |
|-------------------|---------------------|
| Range Of Product | Sepam series 80 |
| | Sepam series 60 |
| | Sepam series 80 NPP |
| | Sepam series 40 |
| | Sepam series 20 |
| Device Short Name | MFT148-2 |

Complementary

| Type Of Measurement | Temperature | |
|---|---|--|
| Number Of Inputs | 8 | |
| Temperature Probe Type | Ni 100/Ni 120, <4 mA isolation from earth: none Pt 100, <4 mA isolation from earth: none | |
| Mounting Mode | Fixed | |
| Mounting Support | Symmetrical DIN rail | |
| Height | 88 mm | |
| Width | 144 mm | |
| Depth | 30 mm | |
| Net Weight | 0.2 kg | |
| Mechanical Robustness | Earthquakes in operation (level: 2): 1 Gn (vertical axes) conforming to IEC 60255-21-3 Earthquakes in operation (level: 2): 2 Gn (horizontal axes) conforming to IEC 60255-21-3 Jolts de-energized (level: 2): 20 Gn/16 ms conforming to IEC 60255-21-2 Shocks de-energized (level: 2): 27 Gn/11 ms conforming to IEC 60255-21-2 Shocks in operation (level: 2): 10 Gn/11 ms conforming to IEC 60255-21-2 Vibrations de-energized (level: 2): 2 Gn, 10 Hz150 Hz conforming to IEC 60255-21-1 Vibrations in operation (level: 2): 1 Gn, 10 Hz150 Hz conforming to IEC 60255-21-1 Vibrations in operation (level: Pc): 2 Hz13.2 Hz, a = +/- 1 mm conforming to IEC 60068-2-6 | |
| Auxiliary Connection Terminal | Earthing terminal: screw-type connectorscable <1000 m Earthing terminal: screw-type connectorstinned copper braid 6100 mm² <1000 m RTDs: screw-type connectors1 cable(s) wire 0.22.5 mm² RTDs: screw-type connectors2 cable(s) wire 0.21 mm² | |
| Maximum Distance Between Sensor And Module | 1 km | |
| Tightening Torque | Earthing terminal: 2.2 N.m | |

Environment

Electromagnetic Compatibility

1 MHz damped oscillating wave: (immunity tests-conducted disturbances), 2.5 kV CM, 1 kV DM, conforming to IEC 60255-22-1

1 MHz damped oscillating wave: (immunity tests-conducted disturbances), 2.5 kV CM, 2.5 kV DM, conforming to ANSI C37.90.1

100 kHz damped oscillating wave: (immunity tests-conducted disturbances), $2.5\ kV$ CM, 1 kV DM, conforming to IEC 61000-4-12

Conducted disturbance emission: (emission tests), conforming to IEC 60255-25 Conducted disturbance emission: (emission tests), A, conforming to EN 55022 Disturbing field emission: (emission tests), conforming to IEC 60255-25

Electrostatic discharge: (immunity tests-radiated disturbances), 8 kV air, 4 kV contact, conforming to ANSI C37.90.3

Disturbing field emission: (emission tests), A, conforming to EN 55022

Electrostatic discharge: (immunity tests-radiated disturbances), 8 kV air, 6 kV contact, conforming to IEC 60255-22-2

Fast transient bursts: (immunity tests-conducted disturbances), 4kV, 2.5 kHz, conforming to ANSI C37.90.1

Fast transient bursts: (immunity tests-conducted disturbances), A and B, 4kV, 2.5 kHz/2 kV, 5 kHz, conforming to IEC 60255-22-4

Fast transient bursts: (immunity tests-conducted disturbances), IV, 4kV, 2.5 kHz, conforming to IEC 61000-4-4

Immunity to conducted RF disturbances: (immunity tests-conducted disturbances), III, 10 V, conforming to IEC 60255-22-6

Immunity to magnetic fields at network frequency: (immunity tests-radiated disturbances), IV, 30 A/m (continuous)-300 A/m (1-3 s), conforming to IEC 61000-4-8 Immunity to radiated fields: (immunity tests-radiated disturbances), 10 V/m, 80 MHz... 1 GHz, conforming to IEC 60255-22-3

Immunity to radiated fields: (immunity tests-radiated disturbances), 35 V/m, 25 MHz... 1 GHz, conforming to ANSI C37.90.2

Immunity to radiated fields: (immunity tests-radiated disturbances), III, 10 V/m, 80 MHz...2 GHz, conforming to IEC 61000-4-3

Surges: (immunity tests-conducted disturbances), III, 2 kV CM, 1 kV DM, conforming to IEC 61000-4-5

Voltage interruptions: (immunity tests-conducted disturbances), 100 % during 100 ms, conforming to IEC 60255-11

Climatic Withstand

Influence of corrosion/gaz test 2 (in operation) : 21 days, 75 % RH, 25 $^{\circ}\text{C}, 0.5$ ppm H2S, 1 ppm S02 conforming to IEC 60068-2-60

Influence of corrosion/gaz test 4 (in operation) : 21 days, 75 % RH, 25 °C, 0.01 ppm H2S, 0.2 ppm S02, 0.2 ppm NO2, 0.01 ppm Cl2 conforming to IEC 60068-2-60 Continuous exposure to damp heat (in operation) : Cab: 10 days, 93 % RH, 40 °C conforming to IEC 60068-2-78

Continuous exposure to damp heat (in storage) : Cab: 56 days, 93 % RH, 40 $^{\circ}\text{C}$ conforming to IEC 60068-2-78

Continuous exposure to damp heat (in storage) : Db: 6 days, 95 % RH, 55 $^{\circ}$ C conforming to IEC 60068-2-30

Exposure to cold (in operation): Ad: - 25 °C conforming to IEC 60068-2-1
Exposure to cold (in storage): Ab: - 25 °C conforming to IEC 60068-2-1
Exposure to dry heat (in operation): Bd: 70 °C conforming to IEC 60068-2-2
Exposure to dry heat (in storage): Bb: 70 °C conforming to IEC 60068-2-2
Salt mist (in operation): Kb/2: 6 days conforming to IEC 60068-2-52

Temperature variation with specified variation rate (in storage) : Nb: - 25 °C to 70 °C, 5 °C/min conforming to IEC 60068-2-14

Ambient Air Temperature For

-25...70 °C

Packing Units

| Unit Type Of Package 1 | PCE |
|------------------------------|---------|
| Number Of Units In Package 1 | 1 |
| Package 1 Height | 6.1 cm |
| Package 1 Width | 12.3 cm |
| Package 1 Length | 18.3 cm |
| Package 1 Weight | 240.0 g |
| Unit Type Of Package 2 | S02 |
| Number Of Units In Package 2 | 8 |
| Package 2 Height | 15.0 cm |
| Package 2 Width | 30.0 cm |
| Package 2 Length | 40.0 cm |

Package 2 Weight

2.2 kg

Sustainability Green Premium

Green PremiumTM **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

Well-being performance



Mercury Free



Rohs Exemption Information

Yes

Certifications & Standards

| Reach Regulation | REACh Declaration |
|--------------------------|--|
| Eu Rohs Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| China Rohs Regulation | China RoHS declaration |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |