



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	MET148-2

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 Hz...150 Hz conforming to IEC 60255-21-1 Vibrations in operation (level: 2) : 1 Gn, 10 Hz...150 Hz conforming to IEC 60255-21-1 Vibrations in operation (level: Fc) : 2 Hz...13.2 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 6...100 mm² <1000 m RTDs: screw-type connectors1 cable(s) wire 0.2...2.5 mm² RTDs: screw-type connectors2 cable(s) wire 0.2...1 mm²

Maximum distance between sensor and module	1 km
Tightening torque	Earthing terminal: 2.2 N.m

Environment

Electromagnetic compatibility	<p>1 MHz damped oscillating wave: (immunity tests-conducted disturbances), 2.5 kV CM, 1 kV DM, conforming to IEC 60255-22-1</p> <p>1 MHz damped oscillating wave: (immunity tests-conducted disturbances), 2.5 kV CM, 2.5 kV DM, conforming to ANSI C37.90.1</p> <p>100 kHz damped oscillating wave: (immunity tests-conducted disturbances), 2.5 kV CM, 1 kV DM, conforming to IEC 61000-4-12</p> <p>Conducted disturbance emission: (emission tests), conforming to IEC 60255-25</p> <p>Conducted disturbance emission: (emission tests), A, conforming to EN 55022</p> <p>Disturbing field emission: (emission tests), conforming to IEC 60255-25</p> <p>Disturbing field emission: (emission tests), A, conforming to EN 55022</p> <p>Electrostatic discharge: (immunity tests-radiated disturbances), 8 kV air, 4 kV contact, conforming to ANSI C37.90.3</p> <p>Electrostatic discharge: (immunity tests-radiated disturbances), 8 kV air, 6 kV contact, conforming to IEC 60255-22-2</p> <p>Fast transient bursts: (immunity tests-conducted disturbances), 4kV, 2.5 kHz, conforming to ANSI C37.90.1</p> <p>Fast transient bursts: (immunity tests-conducted disturbances), A and B, 4kV, 2.5 kHz/2 kV, 5 kHz, conforming to IEC 60255-22-4</p> <p>Fast transient bursts: (immunity tests-conducted disturbances), IV, 4kV, 2.5 kHz, conforming to IEC 61000-4-4</p> <p>Immunity to conducted RF disturbances: (immunity tests-conducted disturbances), III, 10 V, conforming to IEC 60255-22-6</p> <p>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</p> <p>Immunity to radiated fields: (immunity tests-radiated disturbances), 10 V/m, 80 MHz...1 GHz, conforming to IEC 60255-22-3</p> <p>Immunity to radiated fields: (immunity tests-radiated disturbances), 35 V/m, 25 MHz...1 GHz, conforming to ANSI C37.90.2</p> <p>Immunity to radiated fields: (immunity tests-radiated disturbances), III, 10 V/m, 80 MHz...2 GHz, conforming to IEC 61000-4-3</p> <p>Surges: (immunity tests-conducted disturbances), III, 2 kV CM, 1 kV DM, conforming to IEC 61000-4-5</p> <p>Voltage interruptions: (immunity tests-conducted disturbances), 100 % during 100 ms, conforming to IEC 60255-11</p>
Climatic withstand	<p>Influence of corrosion/gaz test 2 (in operation) : 21 days, 75 % RH, 25 °C, 0.5 ppm H2S, 1 ppm SO2 conforming to IEC 60068-2-60</p> <p>Influence of corrosion/gaz test 4 (in operation) : 21 days, 75 % RH, 25 °C, 0.01 ppm H2S, 0.2 ppm SO2, 0.2 ppm NO2, 0.01 ppm Cl2 conforming to IEC 60068-2-60</p> <p>Continuous exposure to damp heat (in operation) : Cab: 10 days, 93 % RH, 40 °C conforming to IEC 60068-2-78</p> <p>Continuous exposure to damp heat (in storage) : Cab: 56 days, 93 % RH, 40 °C conforming to IEC 60068-2-78</p> <p>Continuous exposure to damp heat (in storage) : Db: 6 days, 95 % RH, 55 °C conforming to IEC 60068-2-30</p> <p>Exposure to cold (in operation) : Ad: - 25 °C conforming to IEC 60068-2-1</p> <p>Exposure to cold (in storage) : Ab: - 25 °C conforming to IEC 60068-2-1</p> <p>Exposure to dry heat (in operation) : Bd: 70 °C conforming to IEC 60068-2-2</p> <p>Exposure to dry heat (in storage) : Bb: 70 °C conforming to IEC 60068-2-2</p> <p>Salt mist (in operation) : Kb/2: 6 days conforming to IEC 60068-2-52</p> <p>Temperature variation with specified variation rate (in storage) : Nb: - 25 °C to 70 °C, 5 °C/min conforming to IEC 60068-2-14</p>
Ambient air temperature for operation	-25...70 °C

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	240 g
Package 1 Height	6.1 cm
Package 1 width	12.3 cm
Package 1 Length	18.3 cm
Unit Type of Package 2	S02
Number of Units in Package 2	8

Package 2 Weight	2.2 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information