Product data sheet
Characteristics

59647
analog output module MSA141 for Sepam series 20, 40, 60, 80

Main

Module type	Analog output
Range of product	Sepam series 80 Sepam series 20 Sepam series 60 Sepam series 80 NPP Sepam series 40 Sepam series 48
Device short name	MSA141

Complementary

Type of measurement	Apparent power (0.1 kVA) Remote setting via communication link Temperature (1 °C) Active power (0.1 kW) Frequency (0.01 Hz) Phase and residual current (0.1 A) Phase-to-neutral and phase-to-phase voltages (1 V) Power factor (0,01) Reactive power (0.1 kvar) Thermal capacity used (1 %)
Number of outputs	1 analog output(s)
Analogue output current	0...10 mA load impedance: < 600 Ohm (including wiring) accuracy: 0,005 0...20 mA load impedance: < 600 Ohm (including wiring) accuracy: 0,005 4...20 mA load impedance: < 600 Ohm (including wiring) accuracy: 0,005
Mounting mode	Fixed
Mounting support	Symmetrical DIN rail
Height	88 mm
Width	144 mm
Depth	30 mm
Product 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	Analog output : screw-type connectors 1 cable(s) wire 0.2...2.5 mm² Analog output : screw-type connectors 2 cable(s) wire 0.2...1 mm² Earthing terminal : screw-type connectors cable 2.5...50 mm² Earthing terminal : screw-type connectors tinned copper braid 6...100 mm²
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 Disturbing field emission emission tests: A conforming to EN 55022 Electrostatic discharge immunity tests-radiated disturbances (8 kV air, 4 kV contact) conforming to ANSI C37.90.3 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	Exposure to cold (in operation) : Ad: - 25 °C conforming to IEC 60068-2-1 Exposure to dry heat (in operation) : Bd: 70 °C conforming to IEC 60068-2-2 Continuous exposure to damp heat (in operation) : Cab: 10 days, 93 % RH, 40 °C conforming to IEC 60068-2-78 Salt mist (in operation) : Kb/2: 6 days conforming to IEC 60068-2-52 Influence of corrosion/gaz test 2 (in operation) : 21 days, 75 % RH, 25 °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 Temperature variation with specified variation rate (in storage) : Nb: - 25 °C to 70 °C, 5 °C/min conforming to IEC 60068-2-14 Exposure to cold (in storage) : Ab: - 25 °C conforming to IEC 60068-2-1 Exposure to dry heat (in storage) : Bb: 70 °C conforming to IEC 60068-2-2 Continuous exposure to damp heat (in storage) : Cab: 56 days, 93 % RH, 40 °C conforming to IEC 60068-2-78 Continuous exposure to damp heat (in storage) : Db: 6 days, 95 % RH, 55 °C conforming to IEC 60068-2-30
Ambient air temperature for operation	-25...70 °C

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0934 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold

	Reference not containing SVHC above the threshold
Product environmental profile	Available Product environmental
Product end of life instructions	Available