Product data sheet
Characteristics

REL59808
substat., transfo.- A41A - Sepam series 10

Main

Range of product	Sepam series 10
Device short name	A41A
Relay application	Substation Transformer
Protection type	Earth fault/standard earth fault 50N/51N Thermal overload protection 49RMS Phase overcurrent 50/51 Cold load pick-up CPLU 50/51 Cold load pick-up Io CPLU 50N/51N
Control and monitoring type	Latching/Acknowledgement 86 Annunciation 30 Logic discrimination 68
Metering type	Phase currents Peak demand currents Earth-fault current
Network and machine diagnosis type	Tripping context
Switchgear diagnosis type	Trip circuit supervision
Communication port protocol	IEC 60870-5-103 Modbus
Communication of data	Reading of time-stamped measurements and events Reading of measurements Reading of status conditions Time setting and synchronisation Transmission of remote controls
Physical interface	RS485
Input output max capacity	4 inputs + 7 outputs
Communication compatibility	Modbus RTU IEC 60870-5-103
Local signalling	LEDs Sepam operating status front face LEDs fault indication front face
Logic input number	4 125 V + 20 % DC 3 mA 4 120 V + 20 % AC 47...63 Hz 3 mA
Number of outputs	4 control relay 3 indication relay
Output type	Indication relay 48 V DC 2 A 1 kA L/R < 20 ms Indication relay 24 V DC 2 A 2 kA L/R < 20 ms Indication relay 220 V DC 2 A 0.15 kA L/R < 20 ms Indication relay 127 V DC 2 A 0.5 kA L/R < 20 ms Indication relay 100...240 V AC 47...63 Hz 2 A 1 kA cos φ > 0.3 Control relay 48 V DC 5 A 4 kA resistive 30 A for 200 ms 2000 cycles Control relay 48 V DC 5 A 1 kA L/R < 40 ms 30 A for 200 ms 2000 cycles Control relay 24 V DC 5 A 5 kA L/R < 40 ms 30 A for 200 ms 2000 cycles Control relay 24 V DC 5 A 4 kA resistive 30 A for 200 ms 2000 cycles Control relay 220 V DC 5 A 0.3 kA resistive 30 A for 200 ms 2000 cycles Control relay 220 V DC 5 A 0.1 kA L/R < 40 ms 30 A for 200 ms 2000 cycles Control relay 127 V DC 5 A 0.7 kA resistive 30 A for 200 ms 2000 cycles Control relay 100...240 V AC 47...63 Hz 5 A 5 kA cos φ > 0.3 30 A for 200 ms 2000 cycles
[Us] rated supply voltage	24...125 V DC +/- 20 % 100...120 V AC +/- 20 %

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein.
This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications.
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Supply inrush current	< 20 A 0.1 ms
Power consumption in VA	3 VA typical 8 VA maximum
Mounting mode	Fixed
Mounting support	Plate

Complementary

Height	139 mm
Width	179 mm
Depth	123 mm
Product weight	1.46 kg

Environment

Standards	EN 50263 UL 508 CSA C22.2
Product certifications	C22.2 file N° 210625 CE UL 508 file N° 212533
Fire resistance	650 °C IEC 60695-2-11
IP degree of protection	IP54 IEC 60529 front panel IP40 IEC 60529 rear panel
NEMA degree of protection	Type 12 Nema type 250
IK degree of protection	IK07 IEC 62262
Power frequency dielectric withstand	2 kV IEC 60255-27 60 s
[Uimp] rated impulse withstand voltage	5 kV IEC 60255-5 1.2/50 µs 3 kV IEC 60255-27 1.2/50 µs
Immunity to microbreaks	100 ms CEI 60255-11

Electromagnetic compatibility	Surges immunity tests-conducted disturbances 3 1.2/50 µs, 10/700 µs, 2 kV CM, 1 kV DM IEC 61000-4-5 Surges immunity tests-conducted disturbances 1.2/50 µs, 10/700 µs, 2 kV CM, 1 kV DM IEC 60255-22-5 Radiated RF fields immunity tests-radiated disturbances 3 10 V/m, 80 MHz...2000 MHz IEC 61000-4-3 Radiated RF fields immunity tests-radiated disturbances 20 V/m, 80...1000 MHz ANSI C37.90.2 (2004) Radiated RF fields immunity tests-radiated disturbances 10 V/m, 80...1000 MHz, 1.4...2.7 GHz IEC 60255-22-3 Radiated emission tests A EN 55022 Radiated emission tests A CISPR22 Power frequency for status inputs immunity tests-conducted disturbances 4 300 V CM, 150 V DM IEC 61000-4-16 Power frequency for status inputs immunity tests-conducted disturbances 300 V CM, 150 V DM IEC 60255-22-7 Overall tests A IEC 60255-26 Magnetic field at power frequency immunity tests-radiated disturbances 4 30 A/m (continuous) 100 A/m (for 1...3 s) IEC 61000-4-8 Fast transient bursts immunity tests-conducted disturbances 4 4 kV CM, 5kHz IEC 61000-4-4 Fast transient bursts immunity tests-conducted disturbances 4 kV CM, 5kHz IEC 60255-22-4 Fast transient bursts immunity tests-conducted disturbances 4 kV CM and DM, 5 kHz ANSI C37.90.1 Electrostatic discharge immunity tests-radiated disturbances 3 8 kV air, 6 kV contact IEC 61000-4-2 Electrostatic discharge immunity tests-radiated disturbances 8 kV air, 6 kV contact IEC 60255-22-2 Electrostatic discharge immunity tests-radiated disturbances 8 kV air, 6 kV contact ANSI C37.90.3 Damped oscillatory wave immunity tests-conducted disturbances 3 2.5 kV DM, 1 kV DM, 100 kHz and 1 MHz IEC 61000-4-18 Damped oscillatory wave immunity tests-conducted disturbances 2.5 kV DM, 1 kV DM, 100 kHz and 1 MHz IEC 60255-22-1 Damped oscillatory wave immunity tests-conducted disturbances 2.5 kV CM and DM ANSI C37.90.1 Conducted RF disturbances immunity tests-conducted disturbances 3 10 V, 0.15...80 MHz IEC 61000-4-6 Conducted RF disturbances immunity tests-conducted disturbances 10 V, 0.15...80 MHz IEC 60255-22-6 Conducted emission tests A EN 55022 Conducted emission tests A CISPR22
Mechanical robustness	Vibrations in operation 2 1 Gn, 10...150 Hz, 1 cycle IEC 60255-21-1 Vibrations de-energized 2 2 Gn, 10...150 Hz, 20 cycle IEC 60255-21-1 Shocks in operation 2 10 Gn for 11 ms IEC 60255-21-2 Shocks enclosure protection IK7 2 joules IEC 62262 Shocks de-energized 2 30 Gn for 11 ms IEC 60255-21-2 Rear panel enclosure protection IP40 IEC 60529 Front panel enclosure protection type 12 Nema type 250 Front panel enclosure protection IP54 IEC 60529 Earthquakes in operation 2 2 Gn horizontal, 1 Gn vertical IEC 60255-21-3 Bumps de-energized 2 20 Gn for 16 ms IEC 60255-21-2 Fire resistance enclosure protection 650 °C IEC 60695-2-11
Climatic withstand	Temperature variation storage in original packaging Nb 5 °C/min at - 40...70 °C (- 40...158 °F) IEC 60068-2-14 Salt mist in operation Kb/2 6 cycles IEC 60068-2-52 Exposure to dry heat storage in original packaging Bd 70 °C (158 °F), 96 h IEC 60068-2-2 Exposure to dry heat in operation Bd 70 °C (158 °F), 96 h IEC 60068-2-2 Exposure to damp heat storage in original packaging Cab 93 % RH, 40 °C, 56 days IEC 60068-2-78 Exposure to damp heat in operation Cab 93 % RH, 40 °C, 56 days IEC 60068-2-78 Exposure to cold in operation Ad - 40 °C (104 °F), 96 h IEC 60068-2-1 Corrosive atmosphere/2 gas test in operation Ke 21 days, 75 % RH, 25 °C (77 °F), 0.5 ppm H2S, 1 ppm SO2 IEC 60068-2-60 Exposure to cold storage in original packaging - 40 °C (104 °F), 96 h IEC 60068-2-1

Offer Sustainability

Sustainable offer status	Not Green Premium product
RoHS	Compliant - since 0810 - Schneider Electric declaration of conformity
REACh	Reference contains SVHC above the threshold - go to CaP for more details