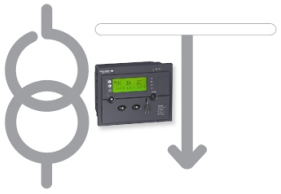
Product data sheet

Specifications



substat., transfo.- B42A - Sepam series 10

REL59803

Discontinued on: Dec 31, 2021

To be end-of-service on: Dec 31, 2025

Discontinued - Service only

Main

Range Of Product	Sepam series 10
Device Short Name	B42A
Relay Application	Substation Transformer
Protection Type	Cold load pick-up Io CPLU 50N/51N Cold load pick-up CPLU 50/51 Phase overcurrent 50/51 Thermal overload protection 49RMS Earth fault/sensitive earth fault 50N/51N
Control And Monitoring Type	Logic discrimination ANSI code: 68 Annunciation ANSI code: 30 Latching/acknowledgement ANSI code: 86
Metering Type	Earth-fault current Peak demand currents Phase currents
Network And Machine Diagnosis Type	Tripping context
Input Output Max Capacity	3 outputs
Communication Compatibility	IEC 60870-5-103 Modbus RTU
Local Signalling	LEDs for fault indication (front face) LEDs for Sepam operating status (front face)
Number Of Outputs	3 control relay
Output Type	Control relay: 100...240 V AC 47...63 Hz continuous current: 5 A breaking capacity: 5 kA cos φ > 0.3 making capacity: 30 A for 200 ms 2000 cycles Control relay: 127 V DC continuous current: 5 A breaking capacity: 0.7 kA resistive making capacity: 30 A for 200 ms 2000 cycles Control relay: 220 V DC continuous current: 5 A breaking capacity: 0.1 kA L/R < 40 ms making capacity: 30 A for 200 ms 2000 cycles Control relay: 220 V DC continuous current: 5 A breaking capacity: 0.3 kA resistive making capacity: 30 A for 200 ms 2000 cycles Control relay: 24 V DC continuous current: 5 A breaking capacity: 4 kA resistive making capacity: 30 A for 200 ms 2000 cycles Control relay: 24 V DC continuous current: 5 A breaking capacity: 5 kA L/R < 40 ms making capacity: 30 A for 200 ms 2000 cycles Control relay: 48 V DC continuous current: 5 A breaking capacity: 1 kA L/R < 40 ms making capacity: 30 A for 200 ms 2000 cycles Control relay: 48 V DC continuous current: 5 A breaking capacity: 4 kA resistive making capacity: 30 A for 200 ms 2000 cycles
[Us] Rated Supply Voltage	100...120 V AC tolerance: +/- 20 % 24...125 V DC tolerance: +/- 20 %
Supply Inrush Current	< 20 A 0.1 ms
Power Consumption In Va	8 VA maximum 3 VA typical

Mounting Mode	Fixed
Mounting Support	Plate

Complementary

Height	139 mm
Width	179 mm
Depth	123 mm
Net Weight	1.26 kg

Environment

Standards	UL 508 EN 50263 CSA C22.2
Product Certifications	C22.2 file N° 210625 UL 508 file N° 212533 CE
Fire Resistance	650 °C conforming to IEC 60695-2-11
Ip Degree Of Protection	Rear panel: IP40 conforming to IEC 60529 Front panel: IP54 conforming to IEC 60529
Nema Degree Of Protection	Type 12 conforming to Nema type 250
Ik Degree Of Protection	IK07 conforming to IEC 62262
Power Frequency Dielectric Withstand	2 kV during 60 s conforming to IEC 60255-5
[Uimp] Rated Impulse Withstand Voltage	5 kV (1.2/50 µs) conforming to IEC 60255-5
Immunity To Microbreaks	100 ms conforming to CEI 60255-11

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

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	16.0 cm
Package 1 Width	20.0 cm
Package 1 Length	23.0 cm
Package 1 Weight	1.57 kg
Unit Type Of Package 2	S04
Number Of Units In Package 2	6
Package 2 Height	30.0 cm
Package 2 Width	40.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	11.5 kg

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 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

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