

Product datasheet

Specifications

RS485 interface 4 wires ACE959 for Sepam 20, 40, 60, 80



59643

Main

Range of product	Sepam series 20 Sepam series 40 Sepam series 48 Sepam series 80 NPP Sepam series 80 Sepam series 60
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Device short name	ACE959
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Complementary

Communication port protocol	Modbus RTU network: E-LAN interface: RS485 - 4-wire Modbus RTU network: S-LAN interface: RS485 - 4-wire
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Local signalling	LED for link activity (front face)
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[Us] rated supply voltage	12 V DC tolerance: +/- 10 % 24 V DC tolerance: +/- 10 %
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Maximum supply current	16 mA: receiving mode 40 mA: maximum in sending mode
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Mounting mode	Fixed
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Mounting support	Symmetrical DIN rail
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Height	88 mm
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Width	144 mm
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Depth	30 mm
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Net weight	0.2 kg
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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
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Maximum cable distance between devices	10 Devices <180 m at 12 V DC 10 Devices <750 m at 24 V DC 20 Devices <160 m at 12 V DC 20 Devices <450 m at 24 V DC 25 Devices <125 m at 12 V DC 25 Devices <375 m at 24 V DC 5 Devices <1000 m at 24 V DC 5 Devices <320 m at 12 V DC
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Auxiliary connection terminal	Earthing terminal: screw-type connector cable 2.5...50 mm² <0.2 m Earthing terminal: screw-type connector tinned copper braid 6...100 mm²
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Disclaimer: 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

Tightening torque	Earthing terminal: 2.2 N.m
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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 Height	6.5 cm
Package 1 Width	12.5 cm
Package 1 Length	18.3 cm
Package 1 Weight	207.0 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	1.91 kg

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint

Environmental Disclosure

[Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
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Packaging without single use plastic	No
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EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
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REACH Regulation	REACH Declaration
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China RoHS Regulation	China RoHS declaration
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Use Again

Repack and remanufacture

Circularity Profile	End of Life Information
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Take-back	No
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