

# RS485 multi-protocol interface ACE969TP-2 Sepam series 20, 40, 60,80

59723

Main		
Range of product	Sepam series 60 Sepam series 80 NPP Sepam series 40 Sepam series 80 Sepam series 20	
Device short name	ACE969TP-2	
Complementary		
Communication port protocol	DNP3 network: S-LAN interface: RS485 - 2-wire IEC 60870-5-103 network: S-LAN interface: RS485 - 2-wire Modbus RTU network: E-LAN interface: RS485 - 2-wire Modbus RTU network: S-LAN interface: RS485 - 2-wire	

ocal signalling	Green LED for energized (from

LED for receiving data (front face) LED for sending data (front face)

Red LED flashing for not set up or set up incorrect (front face) Red LED off for set up and communication operational (front face)

Red LED remains ON for fault (front face)

Mounting mode	Fixed
Mounting support	Symmetrical DIN rail
Height	90 mm
Width	144 mm
Depth	52 mm
Net weight	0.285 kg

#### Mechanical robustness Earthquakes in operation (level: 2): 1 Gn (vertical axes) conforming to IEC

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): 30 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

### 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

	Supply: screw-type connector 2 pin(s) 1 cable(s) wire 2.5 mm <sup>2</sup> Supply: screw-type connector 2 pin(s) 2 cable(s) wire 0.21 mm <sup>2</sup> Supply: screw-type connector 2 pin(s) 2 cable(s) wire 1 mm <sup>2</sup> Functional earth: ring lug 1 pin(s) 1 cable(s)
Auxiliary connection terminal	Protective earth: screw-type connector 1 pin(s) 1 cable(s) wire 2.5 mm² <3 m Supply: screw-type connector 2 pin(s) 1 cable(s) wire 0.22.5 mm² Supply: screw-type connector 2 pin(s) 1 cable(s) wire 1.5 mm²

### Wire stripping length

Supply: 8 mm

#### **Environment**

#### Electromagnetic compatibility

1 MHz damped oscillating wave: (immunity tests-conducted disturbances), 2.5 kV MC and MD, conforming to ANSI C37.90.1

1 MHz damped oscillating wave: (immunity tests-conducted disturbances), III, 2.5 kV MC, 1 kV MD, conforming to IEC 60255-22-1

100 kHz damped oscillating wave: (immunity tests-conducted disturbances), 2.5 kV MC, 1 kV MD, conforming to IEC 61000-4-12

Conducted disturbance emission: (emission tests), conforming to IEC 60255-25 Conducted disturbance emission: (emission tests), B, 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 or 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), 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 (13 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 (1995)

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 MC, 1 kV MD, conforming to IEC 61000-4-5

Voltage interruptions: (immunity tests-conducted disturbances), 100 %, 10 ms, conforming to IEC 60255-11

### Climatic withstand

Influence of corrosion/gaz test 4 (in operation) : 21 days, 75 % RH, 25 °C, 0.01 ppm H2S, 0.2 ppm S02, 0.02 ppm NO2, 0.01 ppm Cl2 conforming to IEC 60068-2-60 Continuous exposure to damp heat (in operation) : Ca: 10 days, 93 % RH, 40 °C (104 °F) conforming to IEC 60068-2-3

Continuous exposure to damp heat (in storage) : Ca: 56 days, 93 % RH, 40 °C (104 °F) conforming to IEC 60068-2-3

Exposure to cold (in operation) : Ab: - 25 °C (- 13 °F) conforming to IEC 60068-2-1 Exposure to cold (in storage) : Ab: - 25 °C (- 13 °F) conforming to IEC 60068-2-1 Exposure to dry heat (in operation) : Bb: 70 °C (158 °F) conforming to IEC 60068-2-2 Exposure to dry heat (in storage) : Bb: 70 °C (158 °F) conforming to IEC 60068-2-2 Influence of corrosion/gaz test 2 (in operation) : C: 21 days, 75 % RH, 25 °C (- 13 °F), 0.5 ppm H2S, 1 ppm S02 conforming to IEC 60068-2-60 Salt mist (in operation) : Kb/2 conforming to IEC 60068-2-52

Temperature variation with specified variation rate (in operation) : Nb: - 25  $^{\circ}$ C to 70  $^{\circ}$ C (- 13  $^{\circ}$ F to 158  $^{\circ}$ F) 5  $^{\circ}$ C/min (41  $^{\circ}$ F/min) conforming to IEC 60068-2-14

# 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	6.4 cm
Package 1 Width	12.4 cm
Package 1 Length	18.4 cm

Package 1 Weight	385.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	16
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	6.59 kg

## **Contractual warranty**

Warranty 12 months

# **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**

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACh Regulation	DEAOL Dealersking
NEACH Regulation	REACh Declaration

### **Use Again**

○ Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No