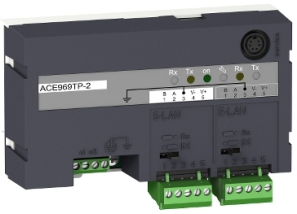
Product datasheet

Specifications



FO multi-protocol interface ACE969FO-2 Sepam series 20, 40, 60, 80

59724

Main

Range of product	Sepam series 80 NPP Sepam series 20 Sepam series 60 Sepam series 40 Sepam series 80
Device short name	ACE969FO-2
Optic fiber type	Graded-index multimode silica wavelength: 820 nm connector(s): ST (BFOC bayonet fiber optic connector)

Complementary

Communication port protocol	DNP3 network: S-LAN interface: fiber optic ST - ring DNP3 network: S-LAN interface: fiber optic ST - star IEC 60870-5-103 network: S-LAN interface: fiber optic ST - ring IEC 60870-5-103 network: S-LAN interface: fiber optic ST - star Modbus RTU network: E-LAN interface: RS485 - 2-wire Modbus RTU network: S-LAN interface: fiber optic ST - star
Local signalling	Green LED for energized (front face) 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 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) : 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
Optic fiber length	1800 m diameter: 62.5/125 µm numerical aperture: 0.275 attenuation: 3.2 dB optical power (dBm) 9.4 2600 m diameter: 200 µm numerical aperture: 0.37 attenuation: 6 dB optical power (dBm) 19.2 2800 m diameter: 100/140 µm numerical aperture: 0.3 attenuation: 4 dB optical power (dBm) 14.9 700 m diameter: 50/125 µm numerical aperture: 0.2 attenuation: 2.7 dB optical power (dBm) 5.6
Auxiliary connection terminal	Protective earth: screw-type connector 1 pin(s) 1 cable(s) wire 2.5 mm² <3 m Functional earth: ring lug 1 pin(s) 1 cable(s) 4 mm² Supply: screw-type connector 2 pin(s) 1 cable(s) wire 0.2…2.5 mm² Supply: screw-type connector 2 pin(s) 1 cable(s) wire 1.5 mm² Supply: screw-type connector 2 pin(s) 1 cable(s) wire 2.5 mm² Supply: screw-type connector 2 pin(s) 2 cable(s) wire 0.2…1 mm² Supply: screw-type connector 2 pin(s) 2 cable(s) wire 1 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 °C to 70 °C (- 13 °F to 158 °F) 5 °C/min (41 °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	6.5 cm
Package 1 Width	12.5 cm
Package 1 Length	18.5 cm
Package 1 Weight	379.0 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	6.777 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
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACh Regulation	REACh Declaration
China RoHS Regulation	China RoHS declaration

Use Again

Repack and remanufacture

Circularity Profile	End of Life Information
Take-back	No