# c user applications

# **Product datasheet**

Specifications





I/O module MES114 - Sepam series 20, 40 - 10 inputs+ 4 outputs 24...250V DC

59646

# Main

Module Type	Input/output module	
Range Of Product	Sepam series 48	
	Sepam series 20	
	Sepam series 40	
Device Short Name	MES114	

# Complementary

Input/Output Type	10 inputs + 4 outputs 24250 V at DC
Logic Input Number	10 24250 V 19.2275 V DC 3 mA 14 V enhanced
Number Of Outputs	1 control relay 3 indication relay

#### **Output Type**

Control relay: 100...240 V AC 47.5...63 Hz continuous current: 8 A breaking capacity:

 $0.005 \text{ kA } \cos \varphi > 0.3 \text{ making capacity:} < 15 \text{ A for } 200 \text{ ms}$ 

Control relay: 100...240 V AC 47.5...63 Hz continuous current: 8 A breaking capacity:

0.008 kA resistive making capacity: < 15 A for 200 ms

Control relay: 127 V DC continuous current: 8 A breaking capacity: 0.0002 kA L/R < 40 ms making capacity: < 15 A for 200 ms

Control relay: 127 V DC continuous current: 8 A breaking capacity: 0.0005 kA L/R <

20 ms making capacity: < 15 A for 200 ms

Control relay: 127 V DC continuous current: 8 A breaking capacity: 0.0007 kA

resistive making capacity: < 15 A for 200 ms

Control relay: 220 V DC continuous current: 8 A breaking capacity: 0.0001 kA L/R < 40 ms making capacity: < 15 A for 200 ms

Control relay: 220 V DC continuous current: 8 A breaking capacity: 0.0002 kA L/R <

20 ms making capacity: < 15 A for 200 ms Control relay: 220 V DC continuous current: 8 A breaking capacity: 0.0003 kA

resistive making capacity: < 15 A for 200 ms

Control relay: 24 V DC continuous current: 8 A breaking capacity: 0.004 kA L/R < 40 ms making capacity: < 15 A for 200 ms

Control relay: 24 V DC continuous current: 8 A breaking capacity: 0.006 kA L/R < 20 ms making capacity: < 15 A for 200 ms

Control relay: 24 V DC continuous current: 8 A breaking capacity: 0.008 kA resistive making capacity: < 15 A for 200 ms

Control relay: 250 V DC continuous current: 8 A breaking capacity: 0.0002 kA resistive making capacity: < 15 A for 200 ms

Control relay: 48 V DC continuous current: 8 A breaking capacity: 0.001 kA L/R < 40 ms making capacity: < 15 A for 200 ms

Control relay: 48 V DC continuous current: 8 A breaking capacity: 0.002 kA L/R < 20 ms making capacity: < 15 A for 200 ms

Control relay: 48 V DC continuous current: 8 A breaking capacity: 0.004 kA resistive making capacity: < 15 A for 200 ms

Indication relay: 100...240 V AC 47.5...63 Hz continuous current: 2 A breaking capacity: 0.001 kA cos  $\phi$  > 0.3 making capacity: < 15 A for 200 ms

Indication relay: 127 V DC continuous current: 2 A breaking capacity: 0.0005 kA L/R < 20 ms making capacity: < 15 A for 200 ms

Indication relay: 127 V DC continuous current: 2 A breaking capacity: 0.0006 kA resistive making capacity: < 15 A for 200 ms

Indication relay: 220 V DC continuous current: 2 A breaking capacity: 0.00015 kA L/R < 20 ms making capacity: < 15 A for 200 ms

Indication relay: 220 V DC continuous current: 2 A breaking capacity: 0.0003 kA resistive making capacity: < 15 A for 200 ms

Indication relay: 24 V DC continuous current: 2 A breaking capacity: 0.002 kA L/R < 20 ms making capacity: < 15 A for 200 ms

Indication relay: 24 V DC continuous current: 2 A breaking capacity: 0.002 kA resistive making capacity: < 15 A for 200 ms

Indication relay: 250 V DC continuous current: 2 A breaking capacity: 0.0002 kA resistive making capacity: < 15 A for 200 ms

Indication relay: 48 V DC continuous current: 2 A breaking capacity: 0.001 kA L/R < 20 ms making capacity: < 15 A for 200 ms

Indication relay: 48 V DC continuous current: 2 A breaking capacity: 0.001 kA resistive making capacity: < 15 A for 200 ms

#### **Net Weight**

0.28 ka

#### 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

#### **Auxiliary Connection Terminal**

Screw-type connectors1 cable(s) 0.2...2.5 mm<sup>2</sup> Screw-type connectors1 cable(s) 1.5 mm<sup>2</sup> Screw-type connectors1 cable(s) 2.5 mm² Screw-type connectors2 cable(s) 0.2...1 mm² Screw-type connectors2 cable(s) 1 mm<sup>2</sup>

#### **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),  $2.5\,\mathrm{kV}$  MC,  $1\,\mathrm{kV}$  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  $^{\circ}\text{C}$  (104  $^{\circ}\text{F}) conforming to IEC 60068-2-3$ 

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

### **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	9.300 cm
Package 1 Width	10.200 cm
Package 1 Length	25.500 cm
Package 1 Weight	410.000 g
Unit Type Of Package 2	S03
Number Of Units In Package 2	9
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.134 kg
Unit Type Of Package 3	P12

Number Of Units In Package 3	72
Package 3 Height	50.000 cm
Package 3 Width	80.000 cm
Package 3 Length	120.000 cm
Package 3 Weight	45.704 ka



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Transparency RoHS/REACh

# Well-being performance



Mercury Free



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