

# 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 24...250 V at DC
Logic input number	10 24...250 V 19.2...275 V DC 3 mA 14 V enhanced
Number of outputs	1 control relay 3 indication relay

Output type	<p>Control relay: 100...240 V AC 47.5...63 Hz continuous current: 8 A breaking capacity: 0.005 kA <math>\cos \varphi &gt; 0.3</math> making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Control relay: 100...240 V AC 47.5...63 Hz continuous current: 8 A breaking capacity: 0.008 kA resistive making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Control relay: 127 V DC continuous current: 8 A breaking capacity: 0.0002 kA L/R <math>&lt; 40</math> ms making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Control relay: 127 V DC continuous current: 8 A breaking capacity: 0.0005 kA L/R <math>&lt; 20</math> ms making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Control relay: 127 V DC continuous current: 8 A breaking capacity: 0.0007 kA resistive making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Control relay: 220 V DC continuous current: 8 A breaking capacity: 0.0001 kA L/R <math>&lt; 40</math> ms making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Control relay: 220 V DC continuous current: 8 A breaking capacity: 0.0002 kA L/R <math>&lt; 20</math> ms making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Control relay: 220 V DC continuous current: 8 A breaking capacity: 0.0003 kA resistive making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Control relay: 24 V DC continuous current: 8 A breaking capacity: 0.004 kA L/R <math>&lt; 40</math> ms making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Control relay: 24 V DC continuous current: 8 A breaking capacity: 0.006 kA L/R <math>&lt; 20</math> ms making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Control relay: 24 V DC continuous current: 8 A breaking capacity: 0.008 kA resistive making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Control relay: 250 V DC continuous current: 8 A breaking capacity: 0.0002 kA resistive making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Control relay: 48 V DC continuous current: 8 A breaking capacity: 0.001 kA L/R <math>&lt; 40</math> ms making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Control relay: 48 V DC continuous current: 8 A breaking capacity: 0.002 kA L/R <math>&lt; 20</math> ms making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Control relay: 48 V DC continuous current: 8 A breaking capacity: 0.004 kA resistive making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Indication relay: 100...240 V AC 47.5...63 Hz continuous current: 2 A breaking capacity: 0.001 kA <math>\cos \varphi &gt; 0.3</math> making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Indication relay: 127 V DC continuous current: 2 A breaking capacity: 0.0005 kA L/R <math>&lt; 20</math> ms making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Indication relay: 127 V DC continuous current: 2 A breaking capacity: 0.0006 kA resistive making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Indication relay: 220 V DC continuous current: 2 A breaking capacity: 0.00015 kA L/R <math>&lt; 20</math> ms making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Indication relay: 220 V DC continuous current: 2 A breaking capacity: 0.0003 kA resistive making capacity: <math>&lt; 15</math> A for 200 ms</p> <p>Indication relay: 24 V DC continuous current: 2 A breaking capacity: 0.002 kA L/R <math>&lt; 20</math> ms making capacity: <math>&lt; 15</math> A for 200 ms</p>
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	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
Product weight	0.28 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
Auxiliary connection terminal	Screw-type connectors1 cable(s) 0.2...2.5 mm² Screw-type connectors1 cable(s) 1.5 mm² Screw-type connectors1 cable(s) 2.5 mm² Screw-type connectors2 cable(s) 0.2...1 mm² Screw-type connectors2 cable(s) 1 mm²

## 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 SO2, 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 SO2 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

## 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 kg

### Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>

### Contractual warranty

Warranty	12 months
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### Recommended replacement(s)