

# Product datasheet

Specifications



## I/O module MES120 - Sepam series 60, 80 - 14 inputs+ 6 outputs 24...250V DC

59715

### Main

Module type	Input/output module
range of product	Sepam series 80 Sepam series 60
Device short name	MES120

### Complementary

Input/output type	14 inputs + 6 outputs 24...250 V at DC
Logic input number	14 24...250 V 19.2...275 V DC 3 mA 14 V enhanced
Number of outputs	1 control relay 5 annunciation relay

Output type	<p>Annunciation relay: 100...240 V AC 47.5...63 Hz continuous current: 2 A breaking capacity: 0.001 kA <math>\cos \phi &gt; 0.3</math></p> <p>Annunciation relay: 127 V DC continuous current: 2 A breaking capacity: 0.0005 kA L/R &lt; 20 ms</p> <p>Annunciation relay: 220 V DC continuous current: 2 A breaking capacity: 0.00015 kA L/R &lt; 20 ms</p> <p>Annunciation relay: 24 V DC continuous current: 2 A breaking capacity: 0.002 kA L/R &lt; 20 ms</p> <p>Annunciation relay: 250 V DC continuous current: 2 A breaking capacity: 0.0002 kA L/R &lt; 20 ms</p> <p>Annunciation relay: 48 V DC continuous current: 2 A breaking capacity: 0.001 kA L/R &lt; 20 ms</p> <p>Control relay: 100...240 V AC 47.5...63 Hz continuous current: 8 A breaking capacity: 0.005 kA <math>\cos \phi &gt; 0.3</math> making capacity: &lt; 15 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: &lt; 15 A for 200 ms</p> <p>Control relay: 127 V DC continuous current: 8 A breaking capacity: 0.0002 kA L/R &lt; 40 ms making capacity: &lt; 15 A for 200 ms</p> <p>Control relay: 127 V DC continuous current: 8 A breaking capacity: 0.0005 kA L/R &lt; 20 ms making capacity: &lt; 15 A for 200 ms</p> <p>Control relay: 127 V DC continuous current: 8 A breaking capacity: 0.0007 kA resistive making capacity: &lt; 15 A for 200 ms</p> <p>Control relay: 220 V DC continuous current: 8 A breaking capacity: 0.0001 kA L/R &lt; 40 ms making capacity: &lt; 15 A for 200 ms</p> <p>Control relay: 220 V DC continuous current: 8 A breaking capacity: 0.0002 kA L/R &lt; 20 ms making capacity: &lt; 15 A for 200 ms</p> <p>Control relay: 220 V DC continuous current: 8 A breaking capacity: 0.0003 kA resistive making capacity: &lt; 15 A for 200 ms</p> <p>Control relay: 24 V DC continuous current: 8 A breaking capacity: 0.004 kA L/R &lt; 40 ms making capacity: &lt; 15 A for 200 ms</p> <p>Control relay: 24 V DC continuous current: 8 A breaking capacity: 0.006 kA L/R &lt; 20 ms making capacity: &lt; 15 A for 200 ms</p> <p>Control relay: 24 V DC continuous current: 8 A breaking capacity: 0.008 kA resistive making capacity: &lt; 15 A for 200 ms</p> <p>Control relay: 250 V DC continuous current: 8 A breaking capacity: 0.0002 kA resistive making capacity: &lt; 15 A for 200 ms</p> <p>Control relay: 48 V DC continuous current: 8 A breaking capacity: 0.001 kA L/R &lt; 40 ms making capacity: &lt; 15 A for 200 ms</p> <p>Control relay: 48 V DC continuous current: 8 A breaking capacity: 0.002 kA L/R &lt; 20 ms making capacity: &lt; 15 A for 200 ms</p> <p>Control relay: 48 V DC continuous current: 8 A breaking capacity: 0.004 kA resistive making capacity: &lt; 15 A for 200 ms</p>
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<b>Height</b>	170 mm
<b>Width</b>	40 mm
<b>Depth</b>	120 mm
<b>net weight</b>	0.38 kg
<b>Mechanical robustness</b>	<p>Earthquakes in operation (level: 2) : 1 Gn (vertical axes) conforming to IEC 60255-21-3</p> <p>Earthquakes in operation (level: 2) : 2 Gn (horizontal axes) conforming to IEC 60255-21-3</p> <p>Jolts de-energized (level: 2) : 20 Gn/16 ms conforming to IEC 60255-21-2</p> <p>Shocks de-energized (level: 2) : 27 Gn/11 ms conforming to IEC 60255-21-2</p> <p>Shocks in operation (level: 2) : 10 Gn/11 ms conforming to IEC 60255-21-2</p> <p>Vibrations de-energized (level: 2) : 2 Gn, 10 Hz...150 Hz conforming to IEC 60255-21-1</p> <p>Vibrations in operation (level: 2) : 1 Gn, 10 Hz...150 Hz conforming to IEC 60255-21-1</p> <p>Vibrations in operation (level: Fc) : 2 Hz...13.2 Hz, a = +/- 1 mm conforming to IEC 60068-2-6</p>
<b>Auxiliary connection terminal</b>	<p>Screw-type connectors1 cable(s) 0.2...2.5 mm<sup>2</sup></p> <p>Screw-type connectors1 cable(s) 1.5 mm<sup>2</sup></p> <p>Screw-type connectors1 cable(s) 2.5 mm<sup>2</sup></p> <p>Screw-type connectors2 cable(s) 0.2...1 mm<sup>2</sup></p> <p>Screw-type connectors2 cable(s) 1 mm<sup>2</sup></p>

## Environment

<b>Electromagnetic compatibility</b>	<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>
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<b>Climatic withstand</b>	<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>
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## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	5.300 cm
<b>Package 1 Width</b>	15.000 cm
<b>Package 1 Length</b>	21.100 cm
<b>Package 1 Weight</b>	525.000 g
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	10
<b>Package 2 Height</b>	30.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	5.700 kg
<b>Unit Type of Package 3</b>	P12
<b>Number of Units in Package 3</b>	80
<b>Package 3 Height</b>	50.000 cm
<b>Package 3 Width</b>	80.000 cm
<b>Package 3 Length</b>	120.000 cm
<b>Package 3 Weight</b>	58.136 kg

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



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](#)