# Product data sheet

Specifications

## I/O module MES120NPP - Sepam series 80 NPP - 14 inputs + 6 outputs 24...250 V DC

59715NPP

## Main

| | |
|---|---|
| **Module Type** | Input/output module |
| **Range Of Product** | Sepam series 80 NPP |
| **Device Short Name** | MES120NPP |

## 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<br>5 annunciation relay |
| **Output Type** | Annunciation relay: 100...240 V AC 47.5...63 Hz continuous current: 2 A breaking capacity: 0.001 kA cos φ > 0.3<br>Annunciation relay: 127 V DC continuous current: 2 A breaking capacity: 0.0005 kA L/R < 20 ms<br>Annunciation relay: 220 V DC continuous current: 2 A breaking capacity: 0.00015 kA L/R < 20 ms<br>Annunciation relay: 24 V DC continuous current: 2 A breaking capacity: 0.002 kA L/R < 20 ms<br>Annunciation relay: 250 V DC continuous current: 2 A breaking capacity: 0.0002 kA L/R < 20 ms<br>Annunciation relay: 48 V DC continuous current: 2 A breaking capacity: 0.001 kA L/R < 20 ms<br>Control relay: 100...240 V AC 47.5...63 Hz continuous current: 8 A breaking capacity: 0.005 kA cos φ > 0.3 making capacity: < 15 A for 200 ms<br>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<br>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<br>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<br>Control relay: 127 V DC continuous current: 8 A breaking capacity: 0.0007 kA resistive making capacity: < 15 A for 200 ms<br>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<br>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<br>Control relay: 220 V DC continuous current: 8 A breaking capacity: 0.0003 kA resistive making capacity: < 15 A for 200 ms<br>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<br>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<br>Control relay: 24 V DC continuous current: 8 A breaking capacity: 0.008 kA resistive making capacity: < 15 A for 200 ms<br>Control relay: 250 V DC continuous current: 8 A breaking capacity: 0.0002 kA resistive making capacity: < 15 A for 200 ms<br>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<br>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<br>Control relay: 48 V DC continuous current: 8 A breaking capacity: 0.004 kA resistive making capacity: < 15 A for 200 ms |
| **Height** | 170 mm |

| | |
|---|---|
| **Width** | 40 mm |
| **Depth** | 120 mm |
| **Net Weight** | 0.38 kg |
| **Mechanical Robustness** | Earthquakes in operation (level: 2) : 1 Gn (vertical axes) conforming to IEC 60255-21-3<br>Earthquakes in operation (level: 2) : 2 Gn (horizontal axes) conforming to IEC 60255-21-3<br>Jolts de-energized (level: 2) : 20 Gn/16 ms conforming to IEC 60255-21-2<br>Shocks de-energized (level: 2) : 27 Gn/11 ms conforming to IEC 60255-21-2<br>Shocks in operation (level: 2) : 10 Gn/11 ms conforming to IEC 60255-21-2<br>Vibrations de-energized (level: 2) : 2 Gn, 10 Hz...150 Hz conforming to IEC 60255-21-1<br>Vibrations in operation (level: 2) : 1 Gn, 10 Hz...150 Hz conforming to IEC 60255-21-1<br>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<br>Screw-type connectors1 cable(s) 1.5 mm²<br>Screw-type connectors1 cable(s) 2.5 mm²<br>Screw-type connectors2 cable(s) 0.2…1 mm²<br>Screw-type connectors2 cable(s) 1 mm² |

# Environment

| | |
|---|---|
| **Electromagnetic Compatibility** | 1 MHz damped oscillating wave: (immunity tests-conducted disturbances), 2.5 kV CM, 1 kV DM, conforming to IEC 60255-22-1<br>1 MHz damped oscillating wave: (immunity tests-conducted disturbances), 2.5 kV CM, 2.5 kV DM, conforming to ANSI C37.90.1<br>100 kHz damped oscillating wave: (immunity tests-conducted disturbances), 2.5 kV CM, 1 kV DM, conforming to IEC 61000-4-12<br>Conducted disturbance emission: (emission tests), conforming to IEC 60255-25<br>Conducted disturbance emission: (emission tests), A, conforming to EN 55022<br>Disturbing field emission: (emission tests), conforming to IEC 60255-25<br>Disturbing field emission: (emission tests), A, conforming to EN 55022<br>Electrostatic discharge: (immunity tests-radiated disturbances), 8 kV air, 4 kV contact, conforming to ANSI C37.90.3<br>Electrostatic discharge: (immunity tests-radiated disturbances), 8 kV air, 6 kV contact, conforming to IEC 60255-22-2<br>Fast transient bursts: (immunity tests-conducted disturbances), 4kV, 2.5 kHz, conforming to ANSI C37.90.1<br>Fast transient bursts: (immunity tests-conducted disturbances), A and B, 4kV, 2.5 kHz/2 kV, 5 kHz, conforming to IEC 60255-22-4<br>Fast transient bursts: (immunity tests-conducted disturbances), IV, 4kV, 2.5 kHz, conforming to IEC 61000-4-4<br>Immunity to conducted RF disturbances: (immunity tests-conducted disturbances), III, 10 V, conforming to IEC 60255-22-6<br>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<br>Immunity to radiated fields: (immunity tests-radiated disturbances), 10 V/m, 80 MHz... 1 GHz, conforming to IEC 60255-22-3<br>Immunity to radiated fields: (immunity tests-radiated disturbances), 35 V/m, 25 MHz... 1 GHz, conforming to ANSI C37.90.2<br>Immunity to radiated fields: (immunity tests-radiated disturbances), III, 10 V/m, 80 MHz...2 GHz, conforming to IEC 61000-4-3<br>Surges: (immunity tests-conducted disturbances), III, 2 kV CM, 1 kV DM, conforming to IEC 61000-4-5<br>Voltage interruptions: (immunity tests-conducted disturbances), 100 % during 100 ms, conforming to IEC 60255-11 |

| | |
|---|---|
| **Climatic Withstand** | Influence of corrosion/gaz test 2 (in operation) : 21 days, 75 % RH, 25 °C, 0.5 ppm H2S, 1 ppm S02 conforming to IEC 60068-2-60<br>Influence of corrosion/gaz test 4 (in operation) : 21 days, 75 % RH, 25 °C, 0.01 ppm H2S, 0.2 ppm S02, 0.2 ppm NO2, 0.01 ppm Cl2 conforming to IEC 60068-2-60<br>Continuous exposure to damp heat (in operation) : Cab: 10 days, 93 % RH, 40 °C conforming to IEC 60068-2-78<br>Continuous exposure to damp heat (in storage) : Cab: 56 days, 93 % RH, 40 °C conforming to IEC 60068-2-78<br>Continuous exposure to damp heat (in storage) : Db: 6 days, 95 % RH, 55 °C conforming to IEC 60068-2-30<br>Exposure to cold (in operation) : Ad: - 25 °C conforming to IEC 60068-2-1<br>Exposure to cold (in storage) : Ab: - 25 °C conforming to IEC 60068-2-1<br>Exposure to dry heat (in operation) : Bd: 70 °C conforming to IEC 60068-2-2<br>Exposure to dry heat (in storage) : Bb: 70 °C conforming to IEC 60068-2-2<br>Salt mist (in operation) : Kb/2: 6 days conforming to IEC 60068-2-52<br>Temperature variation with specified variation rate (in storage) : Nb: - 25 °C to 70 °C, 5 °C/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** | 5.5 cm |
| **Package 1 Width** | 14.5 cm |
| **Package 1 Length** | 21.5 cm |
| **Package 1 Weight** | 460.0 g |

## 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-$CO_2$ 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 |