

# EMG 12-REL/KSR-120/1 - Relay module



2949211

<https://www.phoenixcontact.com/us/products/2949211>

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Relay module, with soldered-in miniature switching relay, contact (AgNi): Medium to large loads, 1 N/O contact, 120 V AC/DC input voltage

## Commercial data

Item number	2949211
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C460
Product key	DK6142
GTIN	4017918083717
Weight per piece (including packing)	45.16 g
Weight per piece (excluding packing)	45.16 g
Customs tariff number	85364900
Country of origin	DE

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## Technical data

### Notes

#### Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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### Product properties

Product type	Relay Module
Mechanical service life	approx. $2 \times 10^7$ cycles

#### Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

#### Data management status

Date of last data management	12.09.2025
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### Electrical properties

Maximum power dissipation for nominal condition	0.6 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)

### Input data

#### Coil side

Nominal input voltage $U_N$	120 V AC/DC
Input voltage range	96 V AC/DC ... 127.2 V AC/DC
Input voltage range in reference to $U_N$	0.8 ... 1.06
Drive and function	monostable
Typical input current at $U_N$	5 mA
Typical response time	8 ms
Typical release time	10 ms
Protective circuit	Bridge rectifier; Bridge rectifier Varistor; Varistor
Operating voltage display	Yellow LED

### Output data

#### Switching

Contact switching type	Single contact, 1 N/O contact
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Limiting continuous current	6 A

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Maximum inrush current	8 A
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	60 W (at 48 V DC)
	48 W (at 60 V DC)
	35 MW (at 110 V DC)
	55 W (at 220 V DC)
	1500 VA (for 250 V AC)

## Connection data

### Coil side

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 12

### Contact side

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 12

## Dimensions

Width	12.5 mm
Height	75 mm
Depth	62.5 mm

## Material specifications

Color	green (RAL 6021)
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## Environmental and real-life conditions

### Ambient conditions

Ambient temperature (operation)	-20 °C ... 50 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

## Standards and regulations

Standards/regulations	VDE 0160
	VDE 0435 (in sections)
	VDE 0110b

## Mounting

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Mounting type	DIN rail mounting
Mounting position	any

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