

# EMG 12-REL/KSR-230/1 - Relay module



2944494

<https://www.phoenixcontact.com/us/products/2944494>

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Relay module, with soldered-in miniature switching relay, contact (AgNi): medium to large loads, 1 N/O contact, input voltage 230 V AC/DC

## Commercial data

Item number	2944494
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	DK61C2
GTIN	4017918081591
Weight per piece (including packing)	45.19 g
Weight per piece (excluding packing)	44.54 g
Customs tariff number	85364900
Country of origin	DE

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## Technical data

### Product properties

Product type	Relay Module
Operating mode	100% operating factor
Mechanical service life	approx. $2 \times 10^7$ cycles

Insulation characteristics: Air clearances and creepage distances between the power circuits

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	01.04.2026
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### Electrical properties

Maximum power dissipation for nominal condition	1.15 W
Test voltage (Winding/contact)	4 kV <sub>rms</sub> (50 Hz, 1 min., winding/contact)
Test voltage (open contact)	1 kV <sub>rms</sub> (50 Hz, 1 min., open contact)

Air clearances and creepage distances between the power circuits

Rated insulation voltage	260 V AC
Rated surge voltage	4 kV

### Input data

Coil side

Nominal input voltage $U_N$	230 V AC/DC
Input voltage range	184 V AC/DC ... 253 V AC/DC (20 °C)
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at $U_N$	4.8 mA
Typical response time	7 ms
Typical release time	11 ms
Protective circuit	Bridge rectifier Varistor
Operating voltage display	Yellow LED

### Output data

Switching

Contact switching type	1 N/O contact
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V

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Limiting continuous current	6 A
Maximum inrush current	8 A
Min. switching current	100 mA
Interrupting rating (ohmic load) max.	140 W (24 V DC)
	60 W (48 V DC)
	45 W (60 V DC)
	35 W (110 V DC)
	55 W (220 V DC)
	1500 VA (250 V AC)

## Connection data

Connection method	Screw connection
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 mm
Height	65.5 mm
Depth	75 mm

## Material specifications

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

### Ambient conditions

Degree of protection (Relay)	RT III (Relay)
Degree of protection (Relay base)	IP20 (Relay base)
Ambient temperature (operation)	-20 °C ... 40 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

## Standards and regulations

### Air clearances and creepage distances between the power circuits

Standards/regulations	DIN EN 50178
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## Mounting

Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

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## Classifications

### ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

### ETIM

ETIM 10.0	EC001437
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### UNSPSC

UNSPSC 21.0	39122300
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a)

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Hexahydromethylphthalic anhydride(CAS: n/a)
	Lead(CAS: 7439-92-1)
SCIP	aa993b27-ed45-4984-b11d-541c9e9d11e0

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