

# EMG 10-REL/KSR-120/ 1-LC - Relay module



2964432

<https://www.phoenixcontact.com/us/products/2964432>

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



## Your advantages

- Integrated input circuit and interference suppression circuit

## Commercial data

Item number	2964432
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	C460
Product key	CK61C2
Catalog page	Page 133 (IF-2011)
GTIN	4017918125103
Weight per piece (including packing)	36.22 g
Weight per piece (excluding packing)	36.22 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
Product family	EMG
Application	Universal
Operating mode	100% operating factor
Mechanical service life	approx. $2 \times 10^7$ cycles

#### Insulation characteristics

Insulation	Basic insulation
Oversupply category	III
Pollution degree	2

#### Data management status

Date of last data management	02.05.2024
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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)
Rated insulation voltage	260 V AC
Rated surge voltage	4 kV

### Input data

Coil side	
Nominal input voltage $U_N$	120 V AC/DC
Input voltage range	96 V AC/DC ... 132 V AC/DC (20 °C)
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at $U_N$	5 mA
Typical response time	7 ms
Typical release time	11 ms
Protective circuit	Bridge rectifier; Bridge rectifier
	Surge protection; Varistor
Operating voltage display	Yellow LED

### Output data

Switching	
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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
Limiting continuous current	6 A
Maximum inrush current	8 A
Min. switching current	100 mA
Interrupting rating (ohmic load) max.	140 W (at 24 V DC) 60 W (at 48 V DC) 45 W (at 60 V DC) 35 W (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	10.6 mm
Height	75 mm
Depth	53.5 mm

## Material specifications

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

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 40 °C

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Ambient temperature (storage/transport)	-20 °C ... 70 °C
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## Standards and regulations

Standards/regulations	IEC 60664 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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## Drawings

Connection diagram



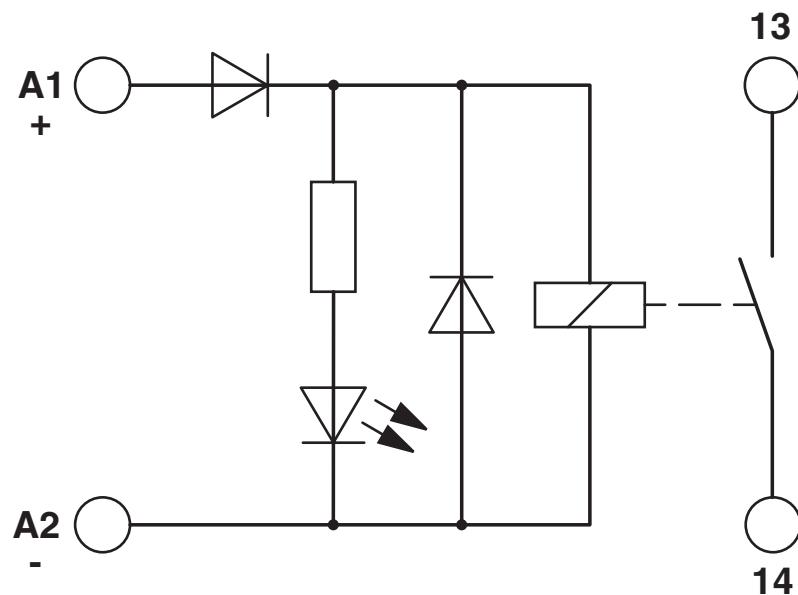
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Circuit diagram



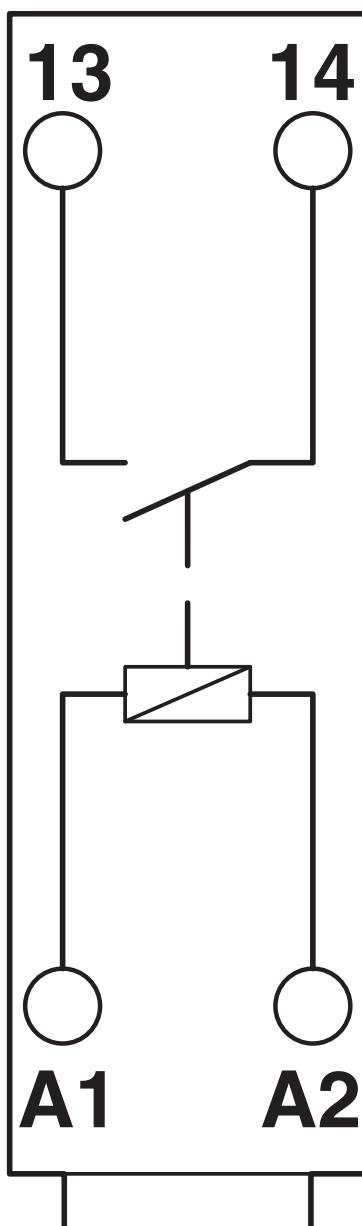
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Circuit diagram



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## Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2964432>



**cUL Recognized**

Approval ID: E238705



**UL Recognized**

Approval ID: E238705



**EAC**

Approval ID: RU\*C-DE.\*08.B.00010

**cULus Recognized**

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## Classifications

### ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

### ETIM

ETIM 9.0	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	6(c), 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	eb980dc0-eae1-49a2-8314-7379533de230

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