

2964403

<https://www.phoenixcontact.com/us/products/2964403>

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

Your advantages

- Integrated input circuit and interference suppression circuit

Commercial data

Item number	2964403
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	CK6142
Catalog page	Page 133 (IF-2011)
GTIN	4017918107468
Weight per piece (including packing)	37.53 g
Weight per piece (excluding packing)	35.9 g
Customs tariff number	85364900
Country of origin	DE

# EMG 10-REL/KSR-230/ 1-LC - Relay Module



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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
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#### Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

### Electrical properties

Maximum power dissipation for nominal condition	1.1 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 $U_N$	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; 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>
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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

## Mounting

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

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## Drawings

Connection diagram



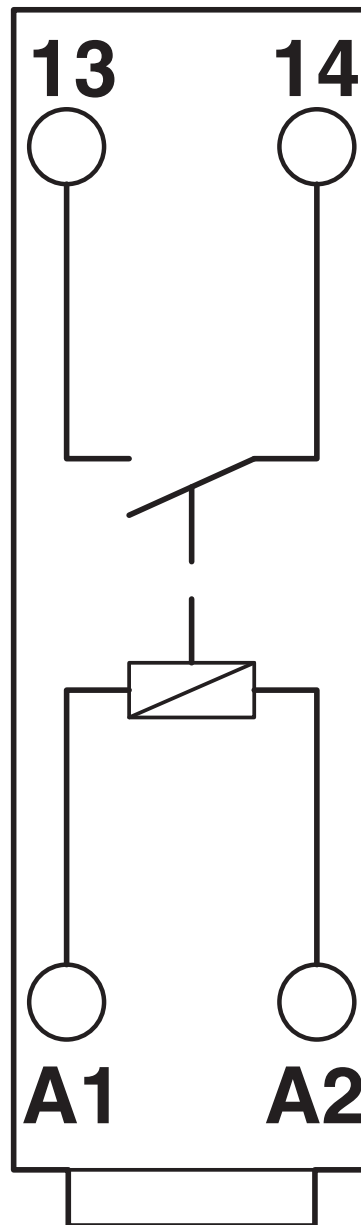
# EMG 10-REL/KSR-230/ 1-LC - Relay Module

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Circuit diagram



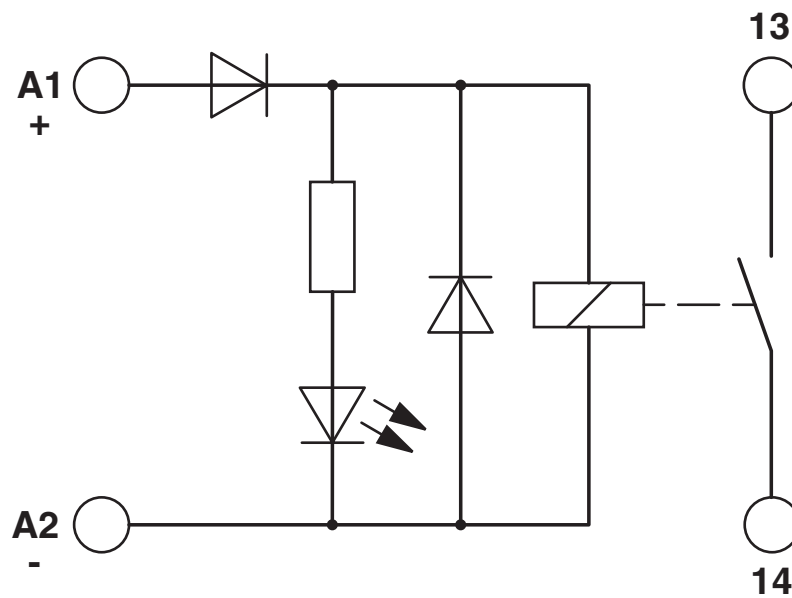
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Circuit diagram



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## Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2964403>




**cUL Recognized**  
Approval ID: FILE E 238705



**UL Recognized**  
Approval ID: FILE E 238705



**EAC**  
Approval ID: TR\_TS\_D\_00573\_c



**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

REACH SVHC	Lead 7439-92-1
	Hexahydromethylphthalic anhydride
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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