

# Relay Module - EMG 17-REL/KSR- 48/21-21-LC - 2940401

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Relay module, with soldered-in miniature switching relay, contact (AgNi): Medium to large loads, 2 PDT, input voltage 48 V AC/DC


The figure shows version EMG 17-REL/KSR- 24/21-21-LC AU, with soldered-in miniature switching relay

## Your advantages

- Safe isolation according to DIN EN 50178 between coil and contact
- Integrated input circuit and interference suppression circuit



## Key Commercial Data

Packing unit	10 pc
GTIN	 4 017918 080075
GTIN	4017918080075

## Technical data

### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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### Dimensions

Width	17.5 mm
Height	75 mm
Depth	62.5 mm

### Ambient conditions

Ambient temperature (operation)	-20 °C ... 40 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

### Coil side

Nominal input voltage $U_N$	48 V AC/DC
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## Technical data

### Coil side

Input voltage range in reference to $U_N$	0.8 ... 1.1
Typical input current at $U_N$	10 mA
Typical response time	8 ms
Typical release time	10 ms
Protective circuit	Bridge rectifier Bridge rectifier
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.48 W

### Contact side

Contact type	Single contact, 2-PDT
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Maximum inrush current	6 A
Limiting continuous current	5 A
Interrupting rating (ohmic load) max.	120 W (at 24 V DC)
	95 W (at 48 V DC)
	60 W (at 60 V DC)
	40 W (at 110 V DC)
	55 W (at 220 V DC)
	1250 VA (for 250 V AC)

### General

Test voltage relay winding/relay contact	4 kV AC (50 Hz, 1 min.)
Test voltage relay contact/relay contact	1 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Mechanical service life	approx. $5 \times 10^7$ cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

### Connection data

Connection name	Coil side
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	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

### Connection data 2

Connection name	Contact side
Connection method	Screw connection
Stripping length	8 mm

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## Technical data

### Connection data 2

Screw thread	M3
Conductor cross section solid	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

### Standards and Regulations

Connection in acc. with standard	CUL
Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	EN 50178
Rated insulation voltage	260 V AC
Rated surge voltage	2.3 kV
Insulation	Basic insulation
	Safe isolation, reinforced insulation, and 6 kV between input circuit and output contact current paths
Pollution degree	2
Overvoltage category	II
Designation	Air clearances and creepage distances between input and contact circuit (or output contact current path)
Standards/regulations	EN 50178
Rated insulation voltage	260 V AC
Rated surge voltage	6 kV
Insulation	Safe isolation, reinforced insulation
Pollution degree	2
Overvoltage category	III
Designation	Standards/regulations
Standards/regulations	EN 61810-1

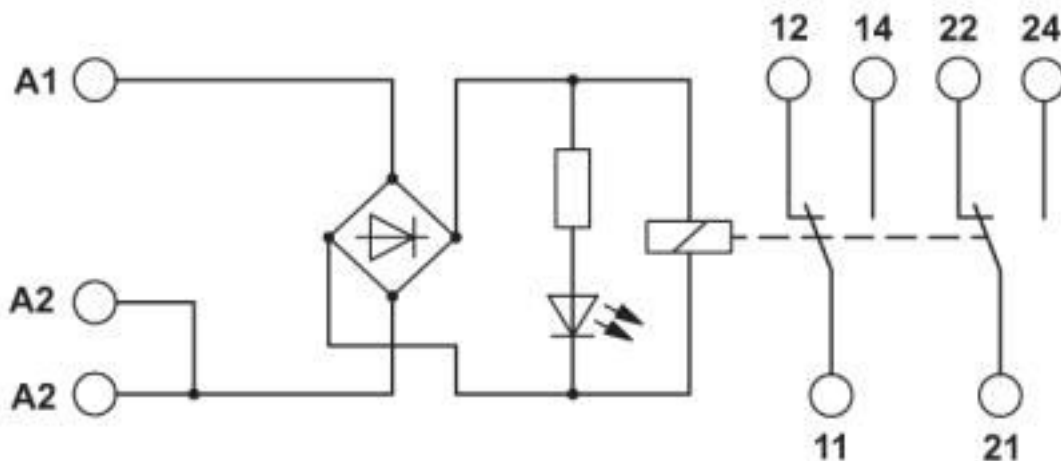
### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

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Circuit diagram



## Classifications

### eCl@ss

eCl@ss 10.0.1	27371601
eCl@ss 4.0	27371100
eCl@ss 4.1	27371100
eCl@ss 5.0	27371600
eCl@ss 5.1	27371600
eCl@ss 6.0	27371600
eCl@ss 7.0	27371601
eCl@ss 8.0	27371601
eCl@ss 9.0	27371601

### ETIM

ETIM 2.0	EC001437
ETIM 3.0	EC001437
ETIM 4.0	EC001437
ETIM 5.0	EC001437
ETIM 6.0	EC001437
ETIM 7.0	EC001437

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39122334
UNSPSC 18.0	39122334
UNSPSC 19.0	39122334

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## Classifications

### UNSPSC

UNSPSC 20.0	39122334
UNSPSC 21.0	39122334

## Approvals

### Approvals

#### Approvals

UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized

#### Ex Approvals

### Approval details

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
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cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
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EAC			TR_TS_D_00573_c
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EAC			RU*C- DE.*08.B.00010
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cULus Recognized			
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## Accessories

### Accessories

## Relay Module - EMG 17-REL/KSR- 48/21-21-LC - 2940401

### Accessories

Marking material - EMG-GKS 12 - 2947035



Device marking label, width: 12 mm, area: 12 x 8 mm, e.g. for EML(10x7) R adhesive marking material

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