

## Relay Module - EMG 17-REL/SG-B 48/21/M - 2953935

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Relay module, with soldered-in remanence miniature switching relay, with negative switching diode wiring, contacts (AgSnO): small to large loads, 1 PDT, 48 V DC input voltage

The figure shows version EMG 17-REL, with soldered-in Latching miniature switching relay



### Key Commercial Data

Packing unit	10 pc
GTIN	 4 017918 084677
GTIN	4017918084677
Weight per Piece (excluding packing)	48.620 g
Custom tariff number	85364190
Country of origin	Germany

### 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)	-40 °C ... 50 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C

#### Coil side

Nominal input voltage $U_N$	48 V 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 $U_N$	typ. 8.5 mA
Typical response time	5 ms
Typical release time	5 ms
Coil voltage	24 V DC
Protective circuit	Free-wheeling diode Damping diode
	Reverse polarity protection Polarity protection diode
Pulse time range	30 ms ... 5 s
Power dissipation for nominal condition	0.41 W

### Contact side

Contact type	Single contact, 1-PDT
Type of switch contact	Single contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
	24 V (At 1 mA)
Min. switching current	1 mA (at 24 V)
	100 mA (At 5 V)
Maximum inrush current	8 A
Limiting continuous current	6 A
Interrupting rating (ohmic load) max.	144 W (at 24 V DC)
	43 W (at 48 V DC)
	42 W (at 60 V DC)
	55 W (at 110 V DC)
	100 W (at 220 V DC)
	1500 VA (for 250 V AC)

### Contact side (with destroyed gold layer)

Maximum switching voltage	250 V AC/DC
Limiting continuous current	5 A
Maximum inrush current	6 A
Interrupting rating (ohmic load) max.	120 W (at 24 V DC)
	40 W (at 48 V DC)
	35 W (at 60 V DC)
	30 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 <sub>rms</sub> (50 Hz, 1 min.)
Operating mode	100% operating factor

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## Technical data

### General

Mechanical service life	approx. 10 <sup>7</sup> cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

### Connection data input side

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 output side

Connection name	Contact 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

### Standards and Regulations

Degree of pollution	2
Overvoltage category	III
Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	DIN EN 50178
Insulation	Safe isolation, reinforced insulation

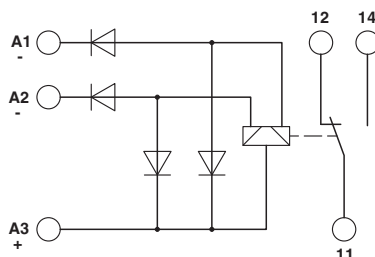
### Environmental Product Compliance

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

## Drawings

# Relay Module - EMG 17-REL/SG-B 48/21/M - 2953935

Circuit diagram



## Classifications

### eCl@ss

eCl@ss 5.0	27371601
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

### UNSPSC

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

## Approvals

### Approvals

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Approvals

EAC

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Ex Approvals

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### Approval details

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### Approvals

EAC		RU C- DE.A*30.B.01082
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### Accessories

#### 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