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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: [info@chipsmall.com](mailto:info@chipsmall.com) Web: [www.chipsmall.com](http://www.chipsmall.com)

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## Relay Module - EMG 17-REL/SG-B 48/21/P - 2946654

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

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



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	50.0 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
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)
Maximum switching voltage	250 V AC/DC
Limiting continuous current	6 A
Maximum inrush current	8 A
Interrupting rating (ohmic load) max.	140 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)
	1500 VA (for 250 V AC)

### General

Test voltage relay winding/relay contact	4 kV <sub>rms</sub> (50 Hz, 1 min.)
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## Technical data

### General

Operating mode	100% operating factor
Mechanical service life	Approx. 10 <sup>7</sup> cycles
Degree of pollution	2
Overvoltage category	III
Standards/regulations	EN 50178
	IEC 62103
Degree of pollution	2
Overvoltage category	III
Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	DIN EN 50178
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

Standards/regulations	EN 50178
	IEC 62103
Degree of pollution	2
Overvoltage category	III
Designation	Air clearances and creepage distances between the power circuits
Standards/regulations	DIN EN 50178



## Relay Module - EMG 17-REL/SG-B 48/21/P - 2946654

### Technical data

#### Standards and Regulations

Insulation	Safe isolation, reinforced insulation
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### Classifications

#### eCl@ss

eCl@ss 4.0	27371102
eCl@ss 4.1	27371102
eCl@ss 5.0	27371001
eCl@ss 5.1	27371001
eCl@ss 6.0	27371001
eCl@ss 8.0	27371601
eCl@ss 9.0	27371601

#### ETIM

ETIM 2.0	EC000196
ETIM 3.0	EC000196
ETIM 4.0	EC000196
ETIM 5.0	EC001437

#### UNSPSC

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

### Approvals

#### Approvals

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Approvals

EAC

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Ex Approvals

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Approvals submitted

## Relay Module - EMG 17-REL/SG-B 48/21/P - 2946654

### Approvals

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#### Approval details

EAC
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### Drawings

Circuit diagram

