

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 |
|-------------------------|---|

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 _{rms} (50 Hz, 1 min.) |
| Operating mode | 100% operating factor |

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Technical data

General

| | |
|-------------------------|--------------------------------|
| Mechanical service life | approx. 10 ⁷ 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 ² ... 4 mm ² |
| Conductor cross section flexible | 0.2 mm ² ... 2.5 mm ² |
| 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 ² ... 4 mm ² |
| Conductor cross section flexible | 0.2 mm ² ... 2.5 mm ² |
| 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 |

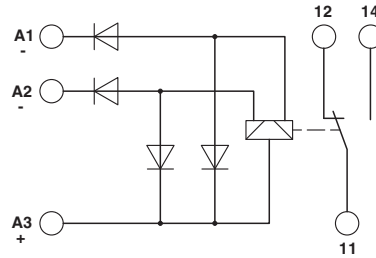
Environmental Product Compliance

| | |
|------------|---|
| 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

Approvals

EAC

Ex Approvals

Approval details

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Approvals

| | | |
|-----|---|--------------------------|
| EAC |  | RU C- DE.A*30.B.01082 |
|-----|---|--------------------------|

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