



## Automatización Eléctrica

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Relay module, with soldered-in miniature switching relay, contact (AgNi): Medium to large loads, 1 N/C contact, input voltage 24 V DC, turned by  $180^{\circ}$ 

The illustration shows version EMG 10-REL/KSR-G 24/1-LC, with soldered-in miniature switching relay

#### Why buy this product

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



### Key Commercial Data

| Packing unit | 10 STK          |
|--------------|-----------------|
| GTIN         | 4 017918 080044 |

### Technical data

#### Note

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

#### Dimensions

| Width  | 10.6 mm |
|--------|---------|
| Height | 75 mm   |
| Depth  | 53.5 mm |

#### Ambient conditions

| Ambient temperature (operation)         | -20 °C 40 °C |
|---|--------------|
| Ambient temperature (storage/transport) | -20 °C 70 °C |
| Coil side                               |              |
| Nominal input voltage U <sub>N</sub>    | 24 V DC      |



## Technical data

#### Coil side

| Input voltage range in reference to U <sub>N</sub> | 0.8 1.1  |
|--|--|
| Typical input current at $U_N$                     | 21 mA  |
| Typical response time                              | 7 ms   |
| Typical release time                               | 11 ms  |
| Protective circuit                                 | Protection against polarity reversal Polarity protection diode |
|  | Free-wheeling diode Damping diode                              |
| Operating voltage display                          | Yellow LED   |
| Power dissipation for nominal condition            | 0.5 W  |

#### Contact side

| Contact type                          | Single contact, 1 N/C contact |
|---------------------------------------|-------------------------------|
| Contact material                      | AgNi                          |
| Maximum switching voltage             | 250 V AC/DC                   |
| Maximum inrush current                | 8 A                           |
| Limiting continuous current           | 6 A                           |
| Interrupting rating (ohmic load) max. | 140 W (at 24 V DC)            |
|                                       | 53 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)        |

#### General

| Test voltage relay winding/relay contact | 4 kV AC (50 Hz, 1 min.)            |
|--|------------------------------------|
| Operating mode                           | 100% operating factor              |
| Mechanical service life                  | Approx. 2 x 10 <sup>7</sup> cycles |
| Standards/regulations                    | IEC 60664                          |
|  | EN 50178                           |
|  | IEC 62103                          |
| Rated surge voltage/insulation           | Basic insulation                   |
| Degree of pollution                      | 2                                  |
| Overvoltage category                     | 111                                |
| 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> |



### Technical data

#### Connection data input side

| 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

| Connection in acc. with standard | CUL              |
|----------------------------------|------------------|
| Standards/regulations            | IEC 60664        |
|                                  | EN 50178         |
|                                  | IEC 62103        |
| Rated surge voltage/insulation   | Basic insulation |
| Degree of pollution              | 2                |
| Overvoltage category             | III              |

### 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 7.0 | 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 |



### Classifications

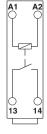
#### UNSPSC

| INSPSC 12.01 39121515<br>JINSPSC 13.2 39121515<br>approvals<br>pprovals<br>L Recognized / cUL Recognized / EAC / cULus Recognized<br>< Approvals<br>pprovals submitted<br>pproval details<br>UL Recognized R<br>UL R  |  |
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| Drawings   |  |

#### Connection diagram



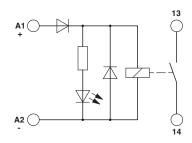
#### Circuit diagram



03/02/2016 Page 4 / 5



### Circuit diagram



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| Product   | Code    | Reference                      | Product link |
|---|---------|--------------------------------|--------------|
| Relay module, with soldered-in miniature switching<br>relay, contact (AgNi): Medium to large loads, 1 N/C<br>contact, input voltage 24 V DC, turned by 180° | 2940346 | EMG 10-REL/<br>KSR-G 24/ 2-LCU | Buy on EAN   |