

2942108  
<https://www.phoenixcontact.com/us/products/2942108>

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Relay module, with soldered-in miniature switching relay, contacts (AgNi): Medium to large loads, 1 N/O contact, input voltage 24 V DC

Your advantages

- Integrated input circuit and interference suppression circuit

Commercial data

|                                      |                    |
|--------------------------------------|--------------------|
| Item number                          | 2942108            |
| Packing unit                         | 1 pc               |
| Minimum order quantity               | 10 pc              |
| Sales key                            | C460               |
| Product key                          | CK6142             |
| Catalog page                         | Page 133 (IF-2011) |
| GTIN                                 | 4017918080594      |
| Weight per piece (including packing) | 36.05 g            |
| Weight per piece (excluding packing) | 36.05 g            |
| Customs tariff number                | 85364190           |
| Country of origin                    | DE                 |

# EMG 10-REL/KSR-G 24/ 1-LC - Relay Module



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## Technical data

### Notes

#### Utilization restriction

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

### Product properties

|                         |                                |
|-------------------------|--------------------------------|
| Product type            | Relay Module                   |
| Product family          | EMG                            |
| Application             | Universal                      |
| Operating mode          | 100% operating factor          |
| Mechanical service life | approx. $2 \times 10^7$ cycles |

#### Insulation characteristics

|            |                  |
|------------|------------------|
| Insulation | Basic insulation |
|------------|------------------|

#### Insulation characteristics

|                      |                  |
|----------------------|------------------|
| Insulation           | Basic insulation |
| Overvoltage category | III              |
| Pollution degree     | 2                |

### Electrical properties

|   |  |
|---|--|
| Maximum power dissipation for nominal condition | 0.5 W                                    |
| Test voltage (Winding/contact)                  | 4 kV AC (50 Hz, 1 min., winding/contact) |
| Rated insulation voltage                        | 260 V AC                                 |
| Rated surge voltage                             | 4 kV                                     |

### Input data

#### Coil side

|                                |  |
|--------------------------------|--|
| Nominal input voltage $U_N$    | 24 V DC  |
| Input voltage range            | 19.2 V DC ... 26.4 V DC (20 °C)  |
| Drive and function             | monostable   |
| Drive (polarity)               | polarized  |
| Typical input current at $U_N$ | 21 mA  |
| Typical response time          | 7 ms   |
| Typical release time           | 11 ms  |
| Protective circuit             | Reverse polarity protection; Polarity protection diode<br>Freewheeling diode; Freewheeling diode |
| Operating voltage display      | Yellow LED   |

### Output data

#### Switching

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|                                       |                        |
|---------------------------------------|------------------------|
| Contact switching type                | 1 N/O contact          |
| Type of switch contact                | Single contact         |
| Contact material                      | AgNi                   |
| Maximum switching voltage             | 250 V AC/DC            |
| Minimum switching voltage             | 12 V                   |
| Limiting continuous current           | 6 A                    |
| Maximum inrush current                | 8 A                    |
| Min. switching current                | 100 mA                 |
| Interrupting rating (ohmic load) max. | 140 W (at 24 V DC)     |
|                                       | 60 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) |

## Connection data

### Coil side

|                                  |   |
|----------------------------------|---|
| Connection method                | Screw connection                            |
| Stripping length                 | 8 mm  |
| Screw thread                     | M3  |
| Conductor cross section rigid    | 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                                   |

### Contact side

|                                  |   |
|----------------------------------|---|
| Connection method                | Screw connection                            |
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| Conductor cross section AWG      | 24 ... 12                                   |

## Dimensions

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

## Environmental and real-life conditions

### Ambient conditions

|   |                  |
|---|------------------|
| Degree of protection                    | IP20             |
| Ambient temperature (operation)         | -20 °C ... 40 °C |
| Ambient temperature (storage/transport) | -20 °C ... 70 °C |

## Standards and regulations

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|                       |           |
|-----------------------|-----------|
| Standards/regulations | IEC 60664 |
|                       | EN 50178  |

## Mounting

|                       |                           |
|-----------------------|---------------------------|
| Mounting type         | DIN rail mounting         |
| Assembly instructions | in rows with zero spacing |
| Mounting position     | any                       |

# EMG 10-REL/KSR-G 24/ 1-LC - Relay Module

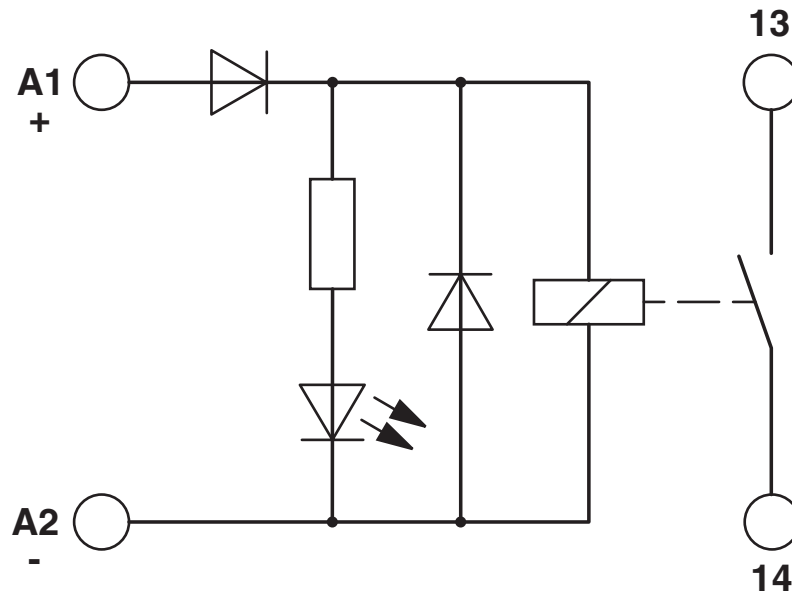
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## Drawings

Circuit diagram



# EMG 10-REL/KSR-G 24/ 1-LC - Relay Module

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Connection diagram



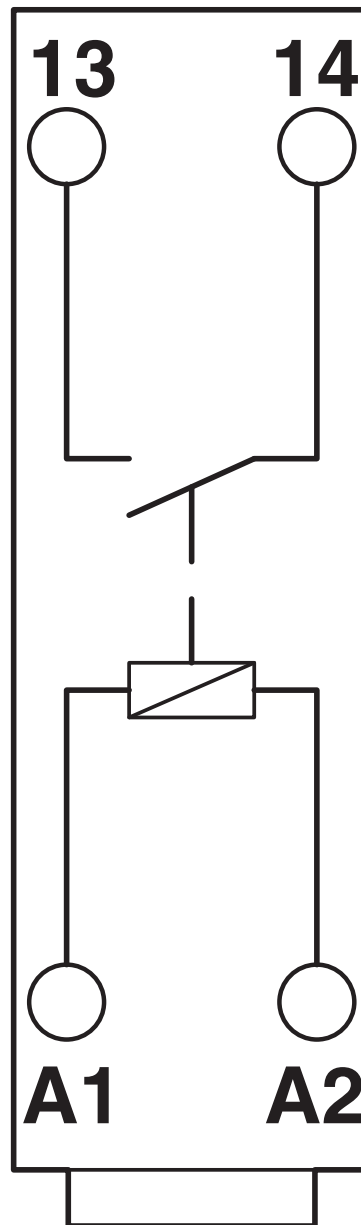
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Circuit diagram



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2942108>




**cUL Recognized**  
Approval ID: FILE E 238705



**UL Recognized**  
Approval ID: FILE E 238705



**EAC**  
Approval ID: TR\_TS\_D\_00573\_c



**EAC**  
Approval ID: RU\*C-DE.\*08.B.00010

**cULus Recognized**



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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27371601 |
| ECLASS-12.0 | 27371601 |
| ECLASS-13.0 | 27371601 |

### ETIM

|          |          |
|----------|----------|
| ETIM 8.0 | EC001437 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39122300 |
|-------------|----------|

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## Environmental product compliance

|            |  |
|------------|--|
| REACH SVHC | Lead 7439-92-1   |
| China RoHS | Environmentally Friendly Use Period = 50 years   |
|            | For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads" |

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## Accessories

### EMG-SGKS 10 - Marking material

2947585

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Equipment marker, narrow



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