

## Solid-state relay terminal block - DEK-OV- 24DC/240AC/800 - 2964649

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Power solid-state relay terminal block, input: 24 V DC, output: 10 - 253 V AC/800 mA, terminal block width: 6.2 mm

### Your advantages

- ✓ EB-DIK insertion bridges
- ✓ Actuator version available
- ✓ Labeling and mounting with user-friendly modular terminal blocks
- ✓ Wear-free switching of up to 24 V DC/10 A or 240 V AC/800 mA
- ✓ Integrated output protective circuit
- ✓ Zero voltage switch at AC output
- ✓ Integrated input circuit
- ✓ Electrical isolation between input and output at up to 2.5 kVrms
- ✓ Status indicator



### Key Commercial Data

|              |   |
|--------------|---|
| Packing unit | 10 pc   |
| GTIN         | <br>4 017918 131043 |
| GTIN         | 4017918131043   |

### Technical data

#### Dimensions

|        |        |
|--------|--------|
| Width  | 6.2 mm |
| Height | 80 mm  |
| Depth  | 56 mm  |

#### Ambient conditions

|   |                  |
|---|------------------|
| Ambient temperature (operation)         | -20 °C ... 60 °C |
| Ambient temperature (storage/transport) | -20 °C ... 70 °C |

#### Input data

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## Technical data

### Input data

|  |                             |
|--|-----------------------------|
| Nominal input voltage $U_N$                          | 24 V DC                     |
| Input voltage range in reference to $U_N$            | 0.8 ... 1.2                 |
| Input voltage range                                  | 19.2 V DC ... 28.8 V DC     |
| Switching threshold "0" signal in reference to $U_N$ | $\leq 0.4$                  |
| Switching threshold "1" signal in reference to $U_N$ | $\geq 0.8$                  |
| Typical input current at $U_N$                       | 10.7 mA                     |
| Typical response time                                | < 10 ms                     |
| Typical turn-off time                                | < 10 ms                     |
| Operating voltage display                            | Yellow LED                  |
| Type of protection                                   | Reverse polarity protection |
|  | Surge protection            |
| Protective circuit/component                         | Polarity protection diode   |
| Transmission frequency                               | 10 Hz                       |

### Output data

|  |   |
|--|---|
| Output voltage range                             | 10 V AC ... 253 V AC (50/60 Hz)           |
| Limiting continuous current                      | 0.8 A (see derating curve)                |
| Maximum inrush current                           | 30 A (t = 10 ms)                          |
| Min. load current                                | 10 mA                                     |
| Leakage current                                  | 1.2 mA (in off state)                     |
| Max. load value                                  | 4.5 A <sup>2</sup> s                      |
| Peak offstate voltage                            | 600 V (Periodic peak reverse voltage)     |
| Voltage drop at max. limiting continuous current | $\leq 1$ V                                |
| Output circuit                                   | 2-conductor floating, zero voltage switch |
| Type of protection                               | RCV circuit                               |
| Protective circuit/component                     | RCV circuit                               |

### Connection data, input side

|                                  |   |
|----------------------------------|---|
| Connection name                  | Input 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                                   |
| Torque                           | 0.5 Nm                                      |

### Connection data, output side

|                   |                  |
|-------------------|------------------|
| Connection name   | Output side      |
| Connection method | Screw connection |
| Stripping length  | 8 mm             |
| Screw thread      | M3               |

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## Technical data

### Connection data, output side

|                                  |   |
|----------------------------------|---|
| 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                                   |
| Torque                           | 0.5 Nm                                      |

### General

|                           |                           |
|---------------------------|---------------------------|
| Test voltage input/output | 2.5 kV AC                 |
| Mounting position         | any                       |
| Assembly instructions     | In rows with zero spacing |
| Operating mode            | 100% operating factor     |

### Standards and Regulations

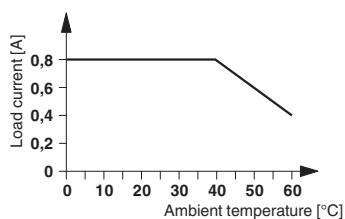
|                       |                       |
|-----------------------|-----------------------|
| Designation           | Standards/regulations |
| Standards/regulations | IEC 60664             |
|                       | EN 50178              |
| Insulation            | Basic insulation      |
| Degree of pollution   | 2                     |
| Overvoltage category  | III                   |

### Environmental Product Compliance

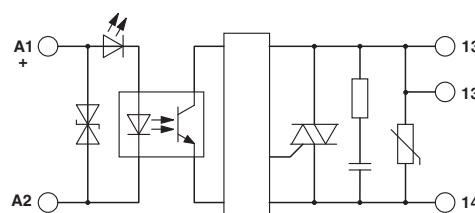
|            |   |
|------------|---|
|            | Lead 7439-92-1  |
| China RoHS | Environmentally Friendly Use Period = 50  |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

## Drawings

Diagram



Circuit diagram



1 = zero voltage switch

## Approvals

### Approvals

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## Approvals

Approvals


EAC

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Ex Approvals

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## Approval details

|     |   |                          |
|-----|---|--------------------------|
| EAC |  | RU C-<br>DE.A*30.B.01742 |
|-----|---|--------------------------|

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