

## Miniature solid-state relay - SIM-EI- 12DC/TTL/100 - 2271141

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Input solid-state relay, with protective circuit in input and output circuits, input: 12 V DC, output: TTL logic level, max. 100 mA

The illustration shows version SIM-EI- 5DC/TTL/100



### Key commercial data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 1 pc  |
| GTIN                                 | <br>4 017918 054182 |
| Weight per Piece (excluding packing) | 21.09 GRM   |
| Custom tariff number                 | 85364190  |
| Country of origin                    | Germany   |

### Technical data

#### Dimensions

|        |       |
|--------|-------|
| Width  | 13 mm |
| Height | 29 mm |
| Depth  | 25 mm |

#### Ambient conditions

|   |                  |
|---|------------------|
| Ambient temperature (operation)         | -20 °C ... 50 °C |
| Ambient temperature (storage/transport) | -20 °C ... 70 °C |

#### Input data

|  |                    |
|--|--------------------|
| Nominal input voltage $U_N$                          | 12 V AC $\pm 10$ % |
| Input voltage range in reference to $U_N$            | 0.9 ... 1.1        |
| Switching threshold "0" signal in reference to $U_N$ | $\leq 0.4$         |
| Switching threshold "1" signal in reference to $U_N$ | $\geq 0.8$         |

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## Technical data

### Input data

|                                |                                      |
|--------------------------------|--------------------------------------|
| Typical input current at $U_N$ | 5.7 mA                               |
| Type of protection             | Protection against polarity reversal |
| Protective circuit/component   | Polarity protection diode            |
| Transmission frequency         | 4000 Hz                              |

### Output data

|  |                                      |
|--|--------------------------------------|
| Output voltage range                             | 3 V DC ... 5.25 V DC                 |
| Limiting continuous current                      | 100 mA                               |
| Fan out  | 1                                    |
| Voltage drop at max. limiting continuous current | 0.3 V                                |
| Output circuit                                   | 3-conductor, ground-referenced       |
| Type of protection                               | Protection against polarity reversal |
|  | Free running                         |
| Protective circuit/component                     | Polarity protection diode            |
|  | Damping diode                        |
| Output resistor                                  | approx. 390 $\Omega$                 |

### General

|                           |                                  |
|---------------------------|----------------------------------|
| Test voltage input/output | 2.5 kV (50 Hz, 1 min.)           |
| Mounting position         | any                              |
| Assembly instructions     | Can be aligned with 2 mm spacing |
| Standards/regulations     | DIN VDE 0110                     |

## 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 | 27371001 |

### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC001504 |
| ETIM 3.0 | EC001504 |
| ETIM 4.0 | EC001504 |

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## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC001504 |
|----------|----------|

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211916 |
| UNSPSC 7.0901 | 39121542 |
| UNSPSC 11     | 39121542 |
| UNSPSC 12.01  | 39121542 |
| UNSPSC 13.2   | 39121542 |

## Approvals

### Approvals

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### Approvals

### GOST

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### Ex Approvals

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### Approvals submitted

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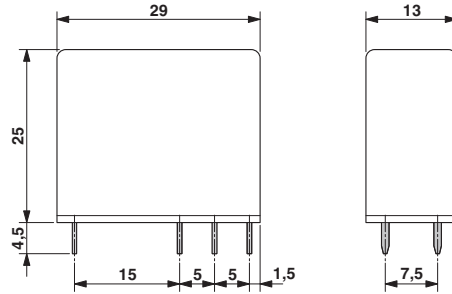
## Approval details

|  |
|--|
| GOST  |
|--|

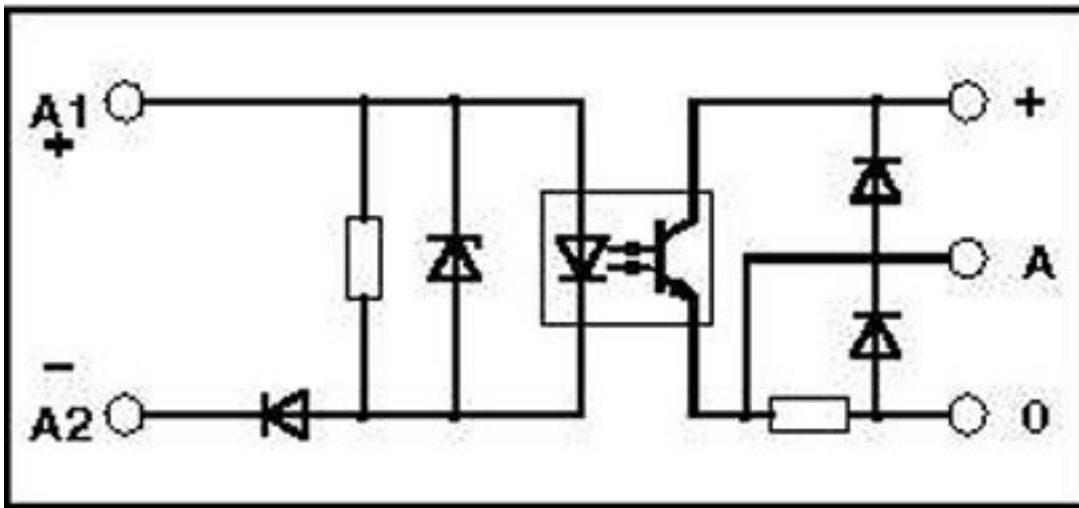
## Drawings

# Miniature solid-state relay - SIM-EI- 12DC/TTL/100 - 2271141

Dimensioned drawing

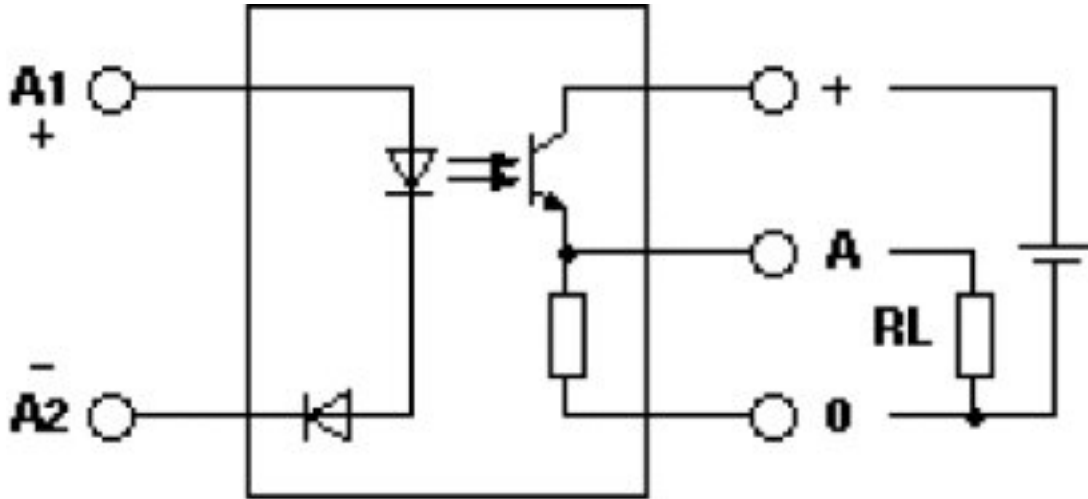


Circuit diagram



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Circuit diagram



Schematic diagram

