

## Relay Module - PLC-RSC- 60DC/21 - 2966139

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



PLC relay, consisting of base terminal block PLC-BSC.../21 with screw connection and pluggable miniature relay with power contact, for assembly on DIN rail NS 35/7.5, 1 PDT, input voltage 60 V DC

### Your advantages

- ✓ Slim design
- ✓ Efficient connection to system cabling using V8 adapter
- ✓ RT III sealed relay
- ✓ Safe isolation according to DIN EN 50178 between coil and contact
- ✓ Integrated input circuit and interference suppression circuit
- ✓ Functional plug-in bridges



### Key Commercial Data

|              |               |
|--------------|---------------|
| Packing unit | 10 pc         |
| GTIN         |               |
| GTIN         | 4017918162047 |
| Sales Key    | 08            |

### Technical data

#### Note

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

#### Dimensions

|        |        |
|--------|--------|
| Width  | 6.2 mm |
| Height | 80 mm  |
| Depth  | 94 mm  |

#### Ambient conditions

|   |                  |
|---|------------------|
| Ambient temperature (operation)         | -40 °C ... 60 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

# Relay Module - PLC-RSC- 60DC/21 - 2966139

## Technical data

### Ambient conditions

|                      |                   |
|----------------------|-------------------|
| Degree of protection | IP20 (Relay base) |
|----------------------|-------------------|

### Coil side

|   |   |
|---|---|
| Nominal input voltage $U_N$             | 60 V DC   |
| Typical input current at $U_N$          | 4.8 mA  |
| Typical response time                   | 5 ms  |
| Typical release time                    | 8 ms  |
| Protective circuit                      | Reverse polarity protection Polarity protection diode |
|   | Free-wheeling diode Damping diode                     |
| Operating voltage display               | yes   |
| Power dissipation for nominal condition | 0.29 W  |

### Contact side

|                                       |   |
|---------------------------------------|---|
| Contact type                          | 1 PDT   |
| Type of switch contact                | Single contact  |
| Contact material                      | AgSnO   |
| Maximum switching voltage             | 250 V AC/DC (The separating plate PLC-ATP should be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...) |
| Minimum switching voltage             | 5 V (at 100 mA)   |
| Min. switching current                | 10 mA (at 12 V)   |
| Maximum inrush current                | 10 A (4 s)  |
| Limiting continuous current           | 6 A   |
| Interrupting rating (ohmic load) max. | 140 W (at 24 V DC)  |
|                                       | 20 W (at 48 V DC)   |
|                                       | 18 W (at 60 V DC)   |
|                                       | 23 W (at 110 V DC)  |
|                                       | 40 W (at 220 V DC)  |
|                                       | 1500 VA (for 250 V AC)  |
| Switching capacity                    | 2 A (at 24 V, DC13)   |
|                                       | 0.2 A (at 110 V, DC13)  |
|                                       | 0.1 A (at 220 V, DC13)  |
|                                       | 3 A (at 24 V, AC15)   |
|                                       | 3 A (at 120 V, AC15)  |
|                                       | 3 A (at 230 V, AC15)  |

### Connection data

|                               |  |
|-------------------------------|--|
| Connection name               | Coil side                                    |
| Connection method             | Screw connection                             |
| Stripping length              | 8 mm   |
| Screw thread                  | M3   |
| Conductor cross section solid | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> |

# Relay Module - PLC-RSC- 60DC/21 - 2966139

## Technical data

### Connection data

|                                  |   |
|----------------------------------|---|
| Conductor cross section flexible | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>                  |
|                                  | 0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule)  |
|                                  | 2x 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (TWIN ferrule) |
| Conductor cross section AWG      | 26 ... 14   |

### Connection data 2

|                                  |   |
|----------------------------------|---|
| Connection name                  | Contact side  |
| Connection method                | Screw connection  |
| Stripping length                 | 8 mm  |
| Screw thread                     | M3  |
| Conductor cross section solid    | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>                  |
| Conductor cross section flexible | 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>                  |
|                                  | 0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule)  |
|                                  | 2x 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (TWIN ferrule) |
| Conductor cross section AWG      | 26 ... 14   |

### General

|  |                           |
|--|---------------------------|
| Test voltage relay winding/relay contact | 4 kV AC (50 Hz, 1 min.)   |
| Operating mode                           | 100% operating factor     |
| Degree of protection                     | IP20 (Relay base)         |
| Mechanical service life                  | 2x 10 <sup>7</sup> cycles |
| Mounting position                        | any                       |
| Assembly instructions                    | In rows with zero spacing |

### Standards and Regulations

|  |                       |
|--|-----------------------|
| Connection in acc. with standard       | CUL                   |
| Designation                            | Standards/regulations |
| Standards/regulations                  | IEC 60664             |
|  | EN 50178              |
| Degree of pollution                    | 3                     |
| Overvoltage category                   | III                   |
| Flammability rating according to UL 94 | V0                    |

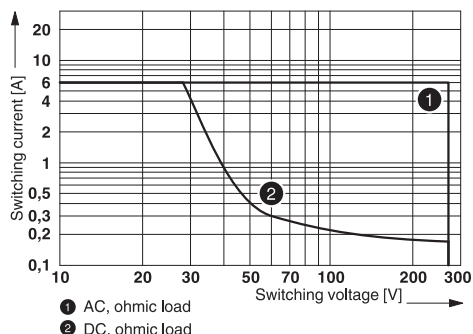
### Environmental Product Compliance

|            |   |
|------------|---|
| 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" |

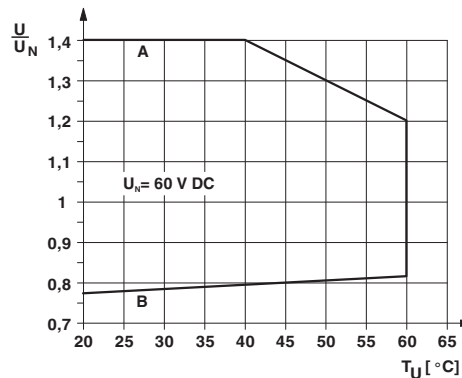
## Drawings

# Relay Module - PLC-RSC- 60DC/21 - 2966139

Diagram



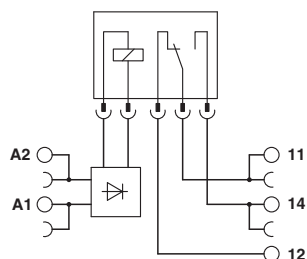
Diagram



Interrupting rating

Curve A  
Maximum permissible continuous voltage  $U_{max}$  with limiting continuous current on the contact side (see relevant technical data)  
Curve B  
Minimum permissible operate voltage  $U_{op}$  after pre-excitation (see relevant technical data)

Circuit diagram



## Approvals

Approvals

Approvals

PRS / UL Listed / UL Recognized / cUL Recognized / cUL Listed / EAC / RC FRT / DNV GL / cULus Recognized / cULus Listed

Ex Approvals

## Approval details

|     |  |   |                   |
|-----|--|---|-------------------|
| PRS |  | <a href="http://www.prs.pl/">http://www.prs.pl/</a> | TE/2109/880590/16 |
|-----|--|---|-------------------|

# Relay Module - PLC-RSC- 60DC/21 - 2966139

## Approvals

|                  |  |   |                          |
|------------------|--|---|--------------------------|
| UL Listed        |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 172140            |
| UL Recognized    |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 238705            |
| cUL Recognized   |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 238705            |
| cUL Listed       |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 172140            |
| EAC              |  |   | RU C-<br>DE.A*30.B.01082 |
| RC FRT           |  |   | B.00094                  |
| DNV GL           |  | <a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>   | TAE0000196-02            |
| cULus Recognized |  |   |                          |
| cULus Listed     |  |   |                          |

Phoenix Contact 2019 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>