

# RIF-4-RSC-LV-120AC/3X21 - Relay Module



2903287

<https://www.phoenixcontact.com/au/products/2903287>

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 documentation. Our general terms of use for downloads are valid.



Preassembled relay module with screw connection, consisting of: relay base, power contact relay, plug-in display/interference suppression module, and retaining bracket. Contact switching type: 3 changeover contacts. Input voltage: 120 V AC

## Product description

The pluggable electromechanical and solid-state relays in the RIFLINE complete product range and the base are recognized and approved in accordance with UL 508. The relevant approvals can be called up at the individual components in question.

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 2903287                        |
| Packing unit                         | 5 pc                           |
| Minimum order quantity               | 5 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | CK651C                         |
| Product key                          | CK651C                         |
| Catalog page                         | Page 355 (C-5-2019)            |
| GTIN                                 | 4046356731898                  |
| Weight per piece (including packing) | 188.8 g                        |
| Weight per piece (excluding packing) | 188 g                          |
| Customs tariff number                | 85364900                       |
| Country of origin                    | CN                             |

# RIF-4-RSC-LV-120AC/3X21 - Relay Module



2903287

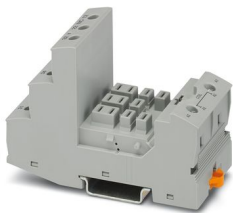
<https://www.phoenixcontact.com/au/products/2903287>

## Set consists of

### RIF-4-BSC/3X21 - Relay base

2900960

<https://www.phoenixcontact.com/au/products/2900960>



RIF-4... relay base, for high-power relay with 2 or 3 changeover contacts or 3 N/O contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

---

### REL-PR3-120AC/3X21 - Single relay

2903704

<https://www.phoenixcontact.com/au/products/2903704>



Plug-in high-power relay with power contacts, 3 changeover contacts, coil voltage: 120 V AC

# RIF-4-RSC-LV-120AC/3X21 - Relay Module



2903287

<https://www.phoenixcontact.com/au/products/2903287>

## RIF-LV-120-230 AC/110 DC - Plug-in module

2900944

<https://www.phoenixcontact.com/au/products/2900944>



Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor and yellow LED, input voltage: 120 V AC... 230 V AC / 110 V DC  $\pm 20$  %

---

## RIF-RH-4 - Retaining bracket

2900956

<https://www.phoenixcontact.com/au/products/2900956>



Relay retaining bracket, with holder for marking material, suitable for RIF-4 relay base, for high-power relay

# RIF-4-RSC-LV-120AC/3X21 - Relay Module



2903287

<https://www.phoenixcontact.com/au/products/2903287>

## Technical data

### Product properties

|                         |                       |
|-------------------------|-----------------------|
| Product type            | Relay Module          |
| Product family          | RIFLINE complete      |
| Application             | Universal             |
| Operating mode          | 100% operating factor |
| Mechanical service life | approx. $10^7$ 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 | 2.88 W                                                 |
| Test voltage (Winding/contact)                  | 2.5 kV <sub>rms</sub> (50 Hz, 1 min., winding/contact) |
| Test voltage (Contact/contact)                  | 2.5 kV <sub>rms</sub> (50 Hz, 1 min., contact/contact) |
| Rated insulation voltage                        | 250 V AC                                               |
| Rated surge voltage                             | 4 kV                                                   |

### Input data

#### Coil side

|                                           |                               |
|-------------------------------------------|-------------------------------|
| Nominal input voltage $U_N$               | 120 V AC                      |
| Input voltage range                       | 102 V AC ... 132 V AC (20 °C) |
| Input voltage range in reference to $U_N$ | see diagram                   |
| Mains frequency                           | 50/60 Hz                      |
| Drive and function                        | monostable                    |
| Drive (polarity)                          | polarized                     |
| Typical input current at $U_N$            | 24 mA                         |
| Typical response time                     | 5 ms ... 25 ms                |
| Typical release time range                | 5 ms ... 20 ms                |
| Coil voltage                              | 120 V AC                      |
| Protective circuit                        | Varistor                      |
| Operating voltage display                 | Yellow LED                    |

### Output data

#### Switching

|                        |                       |
|------------------------|-----------------------|
| Contact switching type | 3 changeover contacts |
| Type of switch contact | Single contact        |

# RIF-4-RSC-LV-120AC/3X21 - Relay Module



2903287

<https://www.phoenixcontact.com/au/products/2903287>

|                                                |                                                |
|------------------------------------------------|------------------------------------------------|
| Contact material                               | AgNi                                           |
| Maximum switching voltage                      | 440 V AC                                       |
|                                                | 250 V DC                                       |
| Minimum switching voltage                      | 10 V (24 mA)                                   |
| Limiting continuous current                    | 8 A (see diagram)                              |
| Maximum inrush current                         | 50 A (20 ms, N/O contacts)                     |
| Min. switching current                         | 10 mA (24 V)                                   |
| Interrupting rating (ohmic load) max.          | 216 W (24 V DC)                                |
|                                                | 124 W (48 V DC)                                |
|                                                | 108 W (60 V DC)                                |
|                                                | 52 W (110 V DC)                                |
|                                                | 70 W (220 V DC)                                |
|                                                | 2250 VA (250 V AC)                             |
|                                                | 4000 VA (440 V AC)                             |
| 3-phase motor load                             | 1500 W                                         |
| Motor load according to UL 508                 | 1/3 HP, 120 V AC (single-phase AC motor)       |
|                                                | 1/2 HP, 240 V AC (single-phase AC motor)       |
|                                                | 1/2 HP, 240 V AC (three-phase induction motor) |
| Utilization category CB Scheme (IEC 60947-5-1) | AC15, 1.5 A/240 V (N/O contact)                |
|                                                | DC13, 2 A/240 V (N/O contact)                  |

## Connection data

|                                                                         |                                                                                |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Connection method                                                       | Screw connection                                                               |
| Stripping length                                                        | 8 mm                                                                           |
| Conductor cross section rigid                                           | 0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>                                      |
| Conductor cross-section rigid (2 conductors with same cross section)    | 0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>                                    |
| Conductor cross section flexible                                        | 0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>                                      |
|                                                                         | 0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup> (Ferrule with plastic sleeve)        |
| Conductor cross section flexible (2 conductors with same cross section) | 0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>                                    |
|                                                                         | 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (TWIN ferrule with plastic sleeve) |
| Conductor cross section AWG                                             | 20 ... 10 (solid)                                                              |
|                                                                         | 20 ... 12 (flexible)                                                           |
| Tightening torque                                                       | 0.5 Nm ... 0.6 Nm                                                              |

## Dimensions

|        |       |
|--------|-------|
| Width  | 44 mm |
| Height | 96 mm |
| Depth  | 91 mm |

## Material specifications

|                                        |                 |
|----------------------------------------|-----------------|
| Color                                  | gray (RAL 7042) |
| Flammability rating according to UL 94 | V2 (Housing)    |

## Environmental and real-life conditions

# RIF-4-RSC-LV-120AC/3X21 - Relay Module



2903287

<https://www.phoenixcontact.com/au/products/2903287>

## Ambient conditions

|                                         |                   |
|-----------------------------------------|-------------------|
| Degree of protection (Relay base)       | IP20 (Relay base) |
| Degree of protection (Relay)            | RT I (Relay)      |
| Ambient temperature (operation)         | -40 °C ... 40 °C  |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C  |

## Approvals

### Corrosive gas test

|                |                            |
|----------------|----------------------------|
| Identification | ISA-S71.04. G3 Harsh Group |
|                | EN 60068-2-60              |

## Standards and regulations

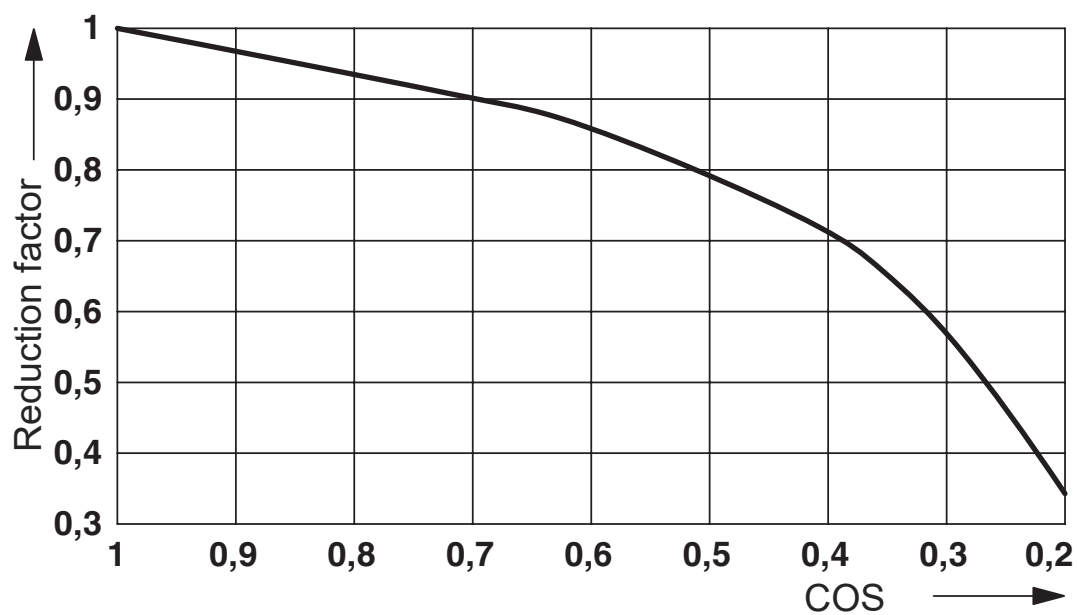
|                       |               |
|-----------------------|---------------|
| Standards/regulations | IEC 60947-5-1 |
|-----------------------|---------------|

## Mounting

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

## Drawings

Diagram



Service life reduction factor



Permissible humidity for operation and storage.

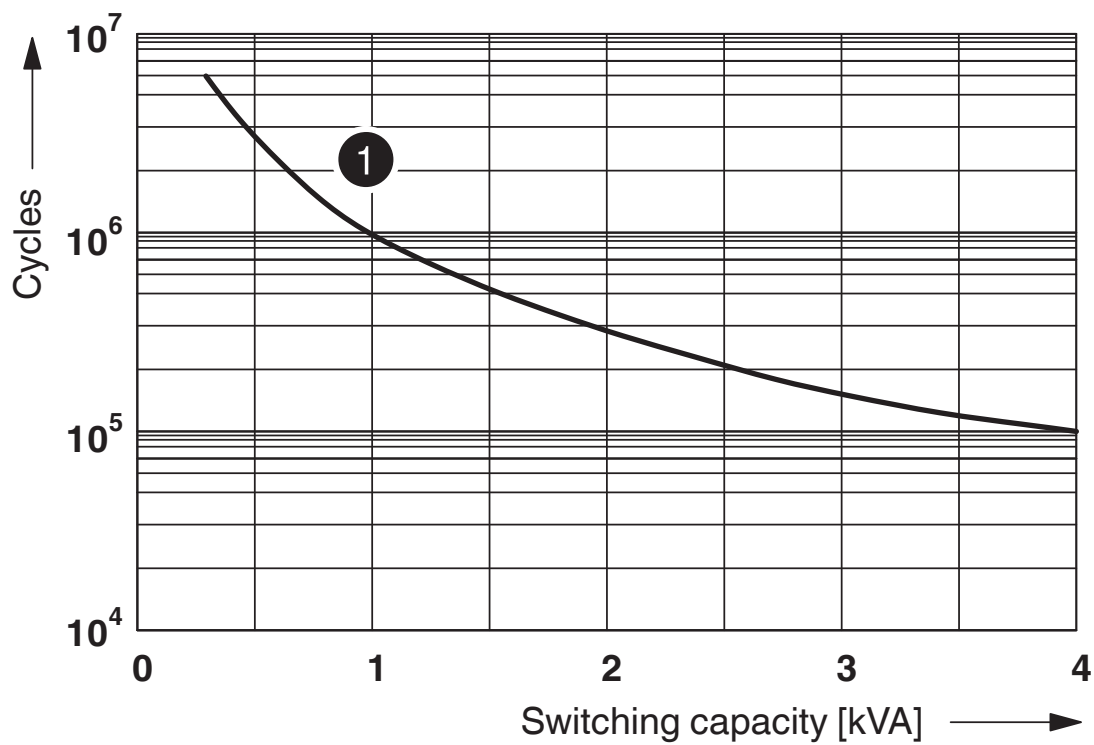
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures  $\leq 0^{\circ}\text{C}$  must be prevented

Area B: Condensation at ambient temperatures  $> 0^{\circ}\text{C}$  must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature  $\leq 25^{\circ}\text{C}$ .

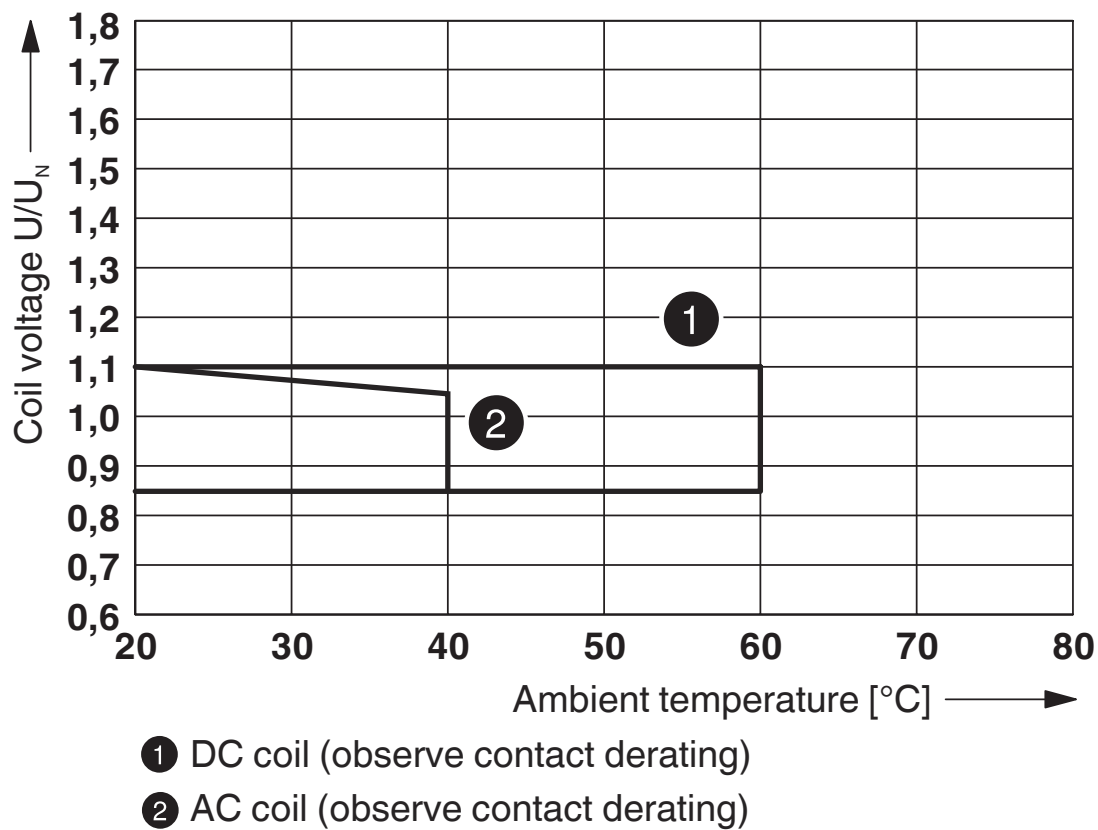
Diagram



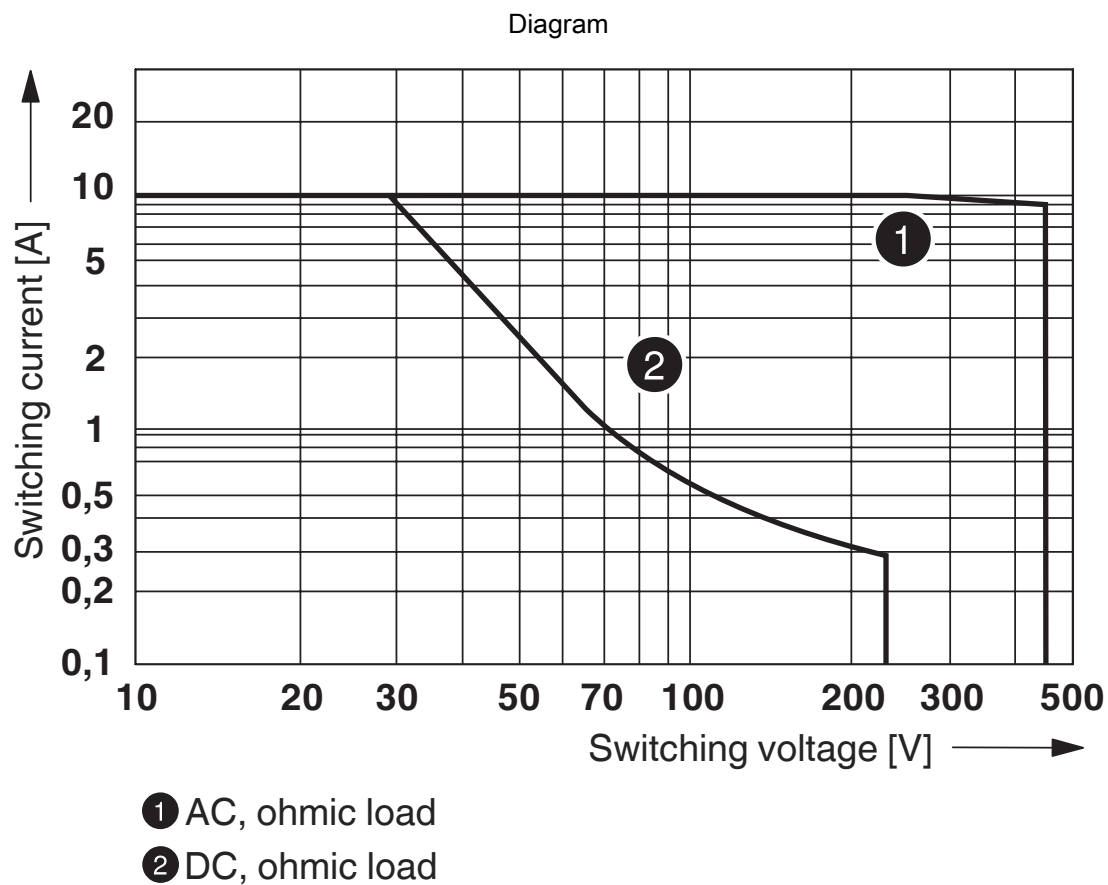
① 250 V AC, Ohmic load

Electrical service life

Diagram

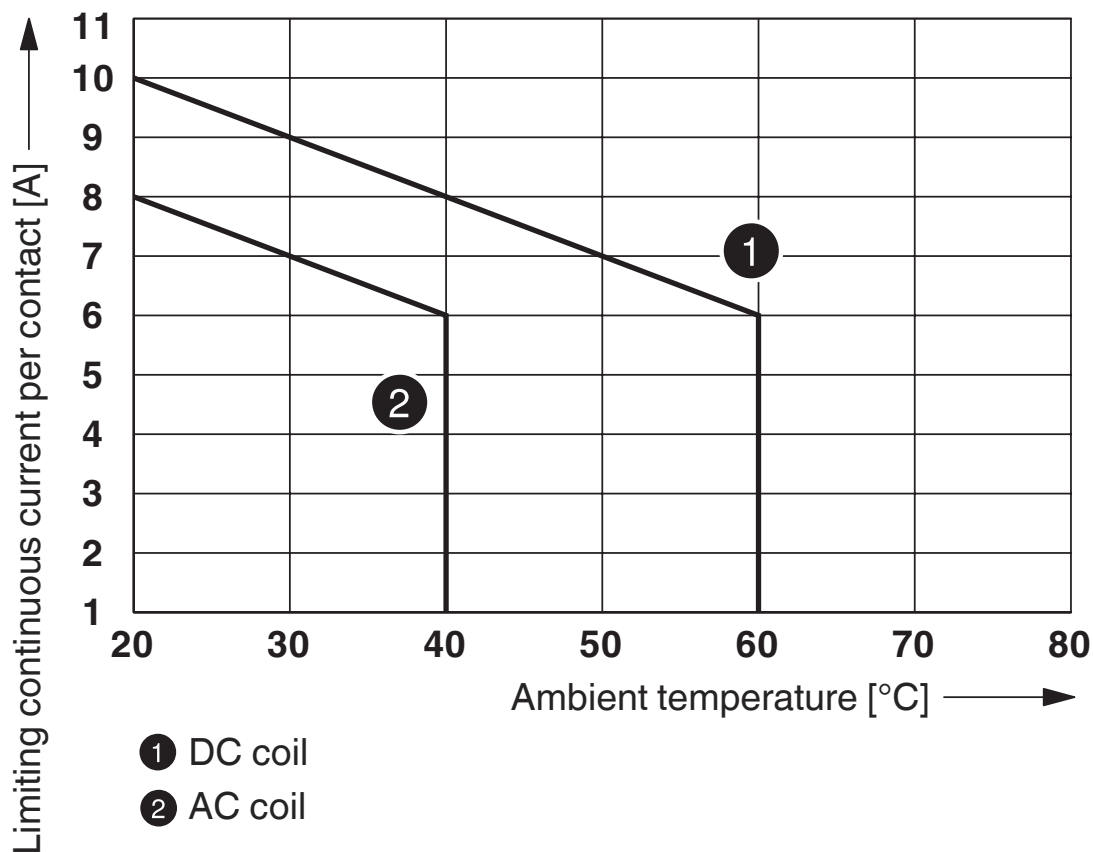


Operating voltage range



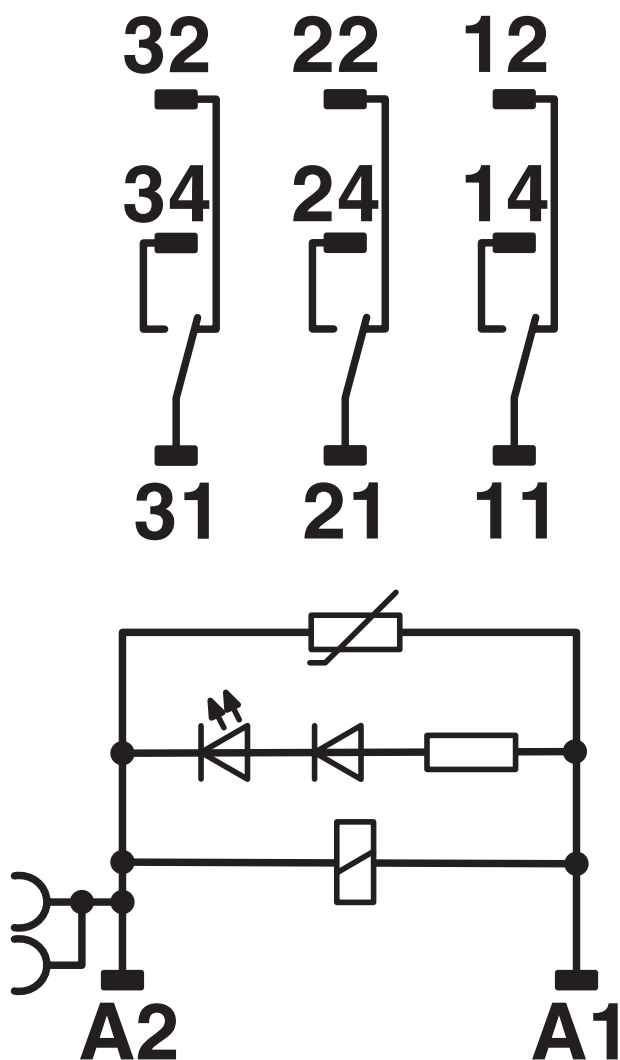
Interrupting rating

Diagram



Contact derating

Circuit diagram



# RIF-4-RSC-LV-120AC/3X21 - Relay Module



2903287

<https://www.phoenixcontact.com/au/products/2903287>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/au/products/2903287>



**CSA**

Approval ID: 76787



**EAC**

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



**DNV GL**

Approval ID: TAA000018V



**EAC**

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

# RIF-4-RSC-LV-120AC/3X21 - Relay Module



2903287

<https://www.phoenixcontact.com/au/products/2903287>

## Classifications

### ECLASS

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

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC001437 |
|----------|----------|

### UNSPSC

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

# RIF-4-RSC-LV-120AC/3X21 - Relay Module



2903287  
<https://www.phoenixcontact.com/au/products/2903287>

## 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" |

Phoenix Contact 2024 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT PTY Ltd  
Unit 7, 2-8 South Street  
Rydalmere NSW 2116  
1300 786 411  
[customerservice@phoenixcontact.com.au](mailto:customerservice@phoenixcontact.com.au)