# RIF-3-RPT-LV-230AC/3X21 - Relay Module

2903292

https://www.phoenixcontact.com/gb/products/2903292

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Preassembled relay module with Push-in 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: 230 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 | 2903292 |
| Packing unit | 5 pc |
| Minimum order quantity | 5 pc |
| Sales key | CK652B |
| Product key | CK652B |
| Catalog page | Page 347 (C-5-2019) |
| GTIN | 4046356732741 |
| Weight per piece (including packing) | 176.09 g |
| Weight per piece (excluding packing) | 175 g |
| Customs tariff number | 85364900 |
| Country of origin | CN |



sales@prom-elec.com / ООО ПРОМЭЛЕКТРОНИКА

## Set consists of

### RIF-3-BPT/3X21 - Relay base

2900938

https://www.phoenixcontact.com/gb/products/2900938

Relay base RIF-3..., for octal relays with 3 changeover contacts, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

### REL-OR3/L-230AC/3X21 - Single relay

2903696

https://www.phoenixcontact.com/gb/products/2903696

Plug-in octal relays with power contacts, 3 changeover contacts, test button, mechanical switching position indicator, input voltage: 230 V AC

## RIF-V-120-230 UC - Plug-in module

2900948

https://www.phoenixcontact.com/gb/products/2900948

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

## RIF-RH-3 - Retaining bracket

2900955

https://www.phoenixcontact.com/gb/products/2900955

Relay retaining bracket, with holder for marking material, suitable for RIF-3 relay base, for octal relay

# Technical data

## Product properties

| | |
|---|---|
| Product type | Relay Module |
| Product family | RIFLINE complete |
| Application | Universal |
| Operating mode | 100% operating factor |
| Mechanical service life | approx. 2x $10^7$ 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 | 3 W |
| Test voltage (Winding/contact) | 2.5 $kV_{rms}$ (50 Hz, 1 min., winding/contact) |
| Test voltage (Contact/contact) | 2 $kV_{rms}$ (50 Hz, 1 min., contact/contact) |
| Rated insulation voltage | 250 V AC |
| Rated surge voltage | 4 kV |

## Input data

Coil side

| | |
|---|---|
| Nominal input voltage $U_N$ | 230 V AC |
| Input voltage range | 195.5 V AC ... 253 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 $U_N$ | 13 mA |
| Typical response time | 5 ms ... 15 ms |
| Typical release time range | 5 ms ... 20 ms |
| Coil voltage | 230 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 |

| | |
|---|---|
| Contact material | AgNi |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 10 V (24 mA) |
| Limiting continuous current | 6 A (see diagram) |
| Maximum inrush current | 30 A (20 ms, N/O contacts) |
| Min. switching current | 10 mA (24 V) |
| Interrupting rating (ohmic load) max. | 144 W (24 V DC) |
| | 124 W (48 V DC) |
| | 108 W (60 V DC) |
| | 52 W (110 V DC) |
| | 48 W (220 V DC) |
| | 1500 VA (250 V AC) |
| 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 | Push-in connection |
| Stripping length | 8 mm |
| Conductor cross section rigid | 0.14 mm² ... 1.5 mm² |
| Conductor cross section flexible | 0.14 mm² ... 1.5 mm² |
| | 0.14 mm² ... 1.5 mm² (Ferrule with plastic sleeve) |
| | 0.14 mm² ... 1 mm² (Ferrule with plastic sleeve, two conductors on double terminal block) |
| Conductor cross section AWG | 26 ... 16 (solid) |
| | 26 ... 16 (flexible) |

## Dimensions

### Drill hole

| | |
|---|---|
| Diameter | 3.2 mm |
| Width | 40 mm |
| Height | 103 mm |
| Depth | 90 mm |

## Material specifications

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

## Environmental and real-life conditions

### Ambient conditions

| | |
|---|---|
| Degree of protection (Relay base) | IP20 (Relay base) |
| Degree of protection (Relay) | RT I (Relay) |
| Ambient temperature (operation) | -40 °C ... 50 °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

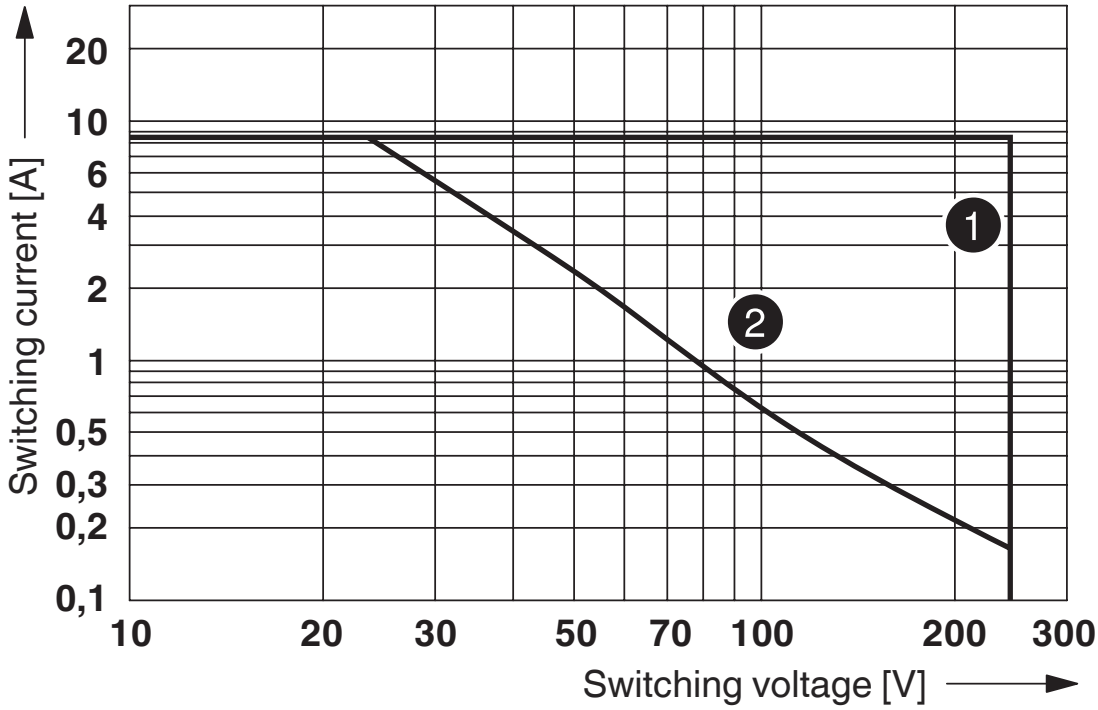
| | |
|---|---|
| Standards/regulations | IEC 60947-5-1 |

## Mounting

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

## Drawings

Diagram

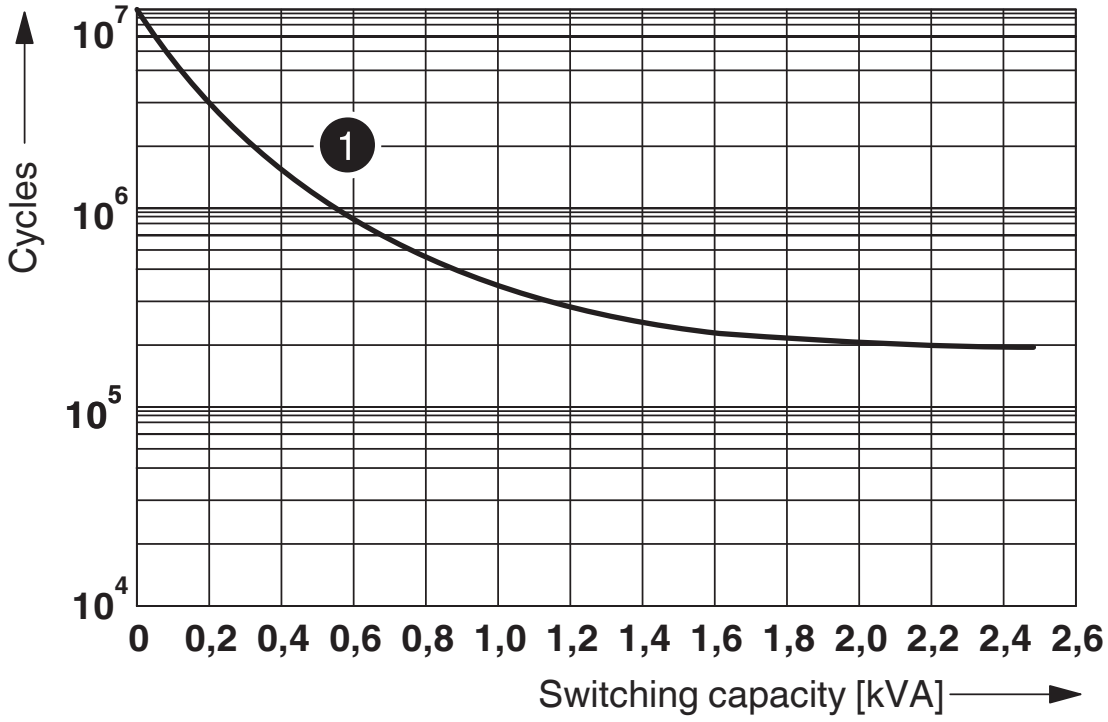



1 AC, ohmic load

2 DC, ohmic load

Interrupting rating

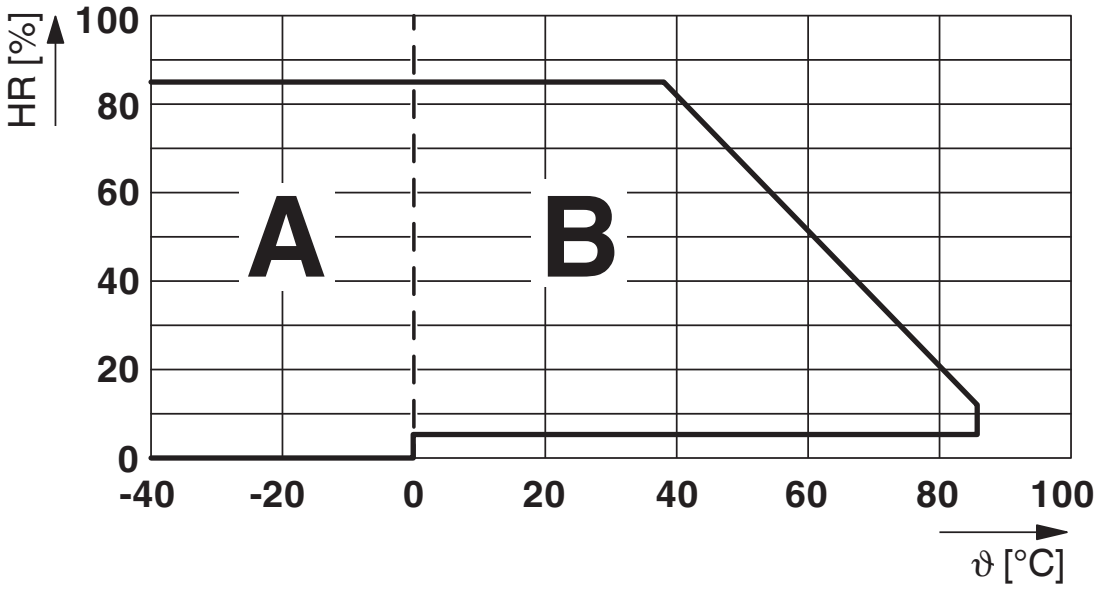
Diagram




250 V AC, ohmic load

Electrical service life

Diagram

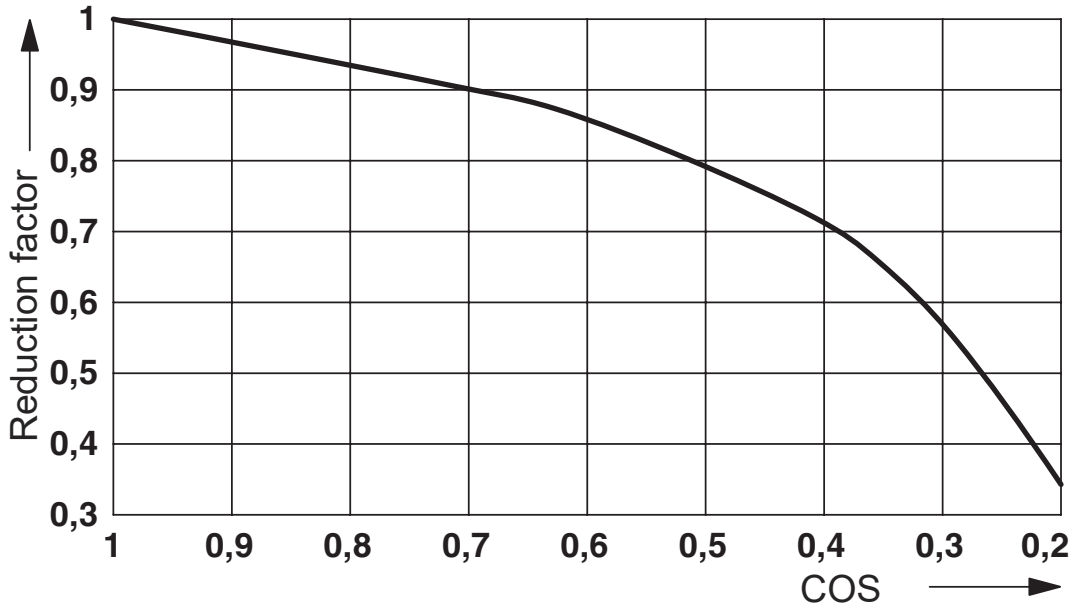



Permissible humidity for operation and storage.
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures ≤ 0°C must be prevented
Area B: Condensation at ambient temperatures > 0°C must be prevented

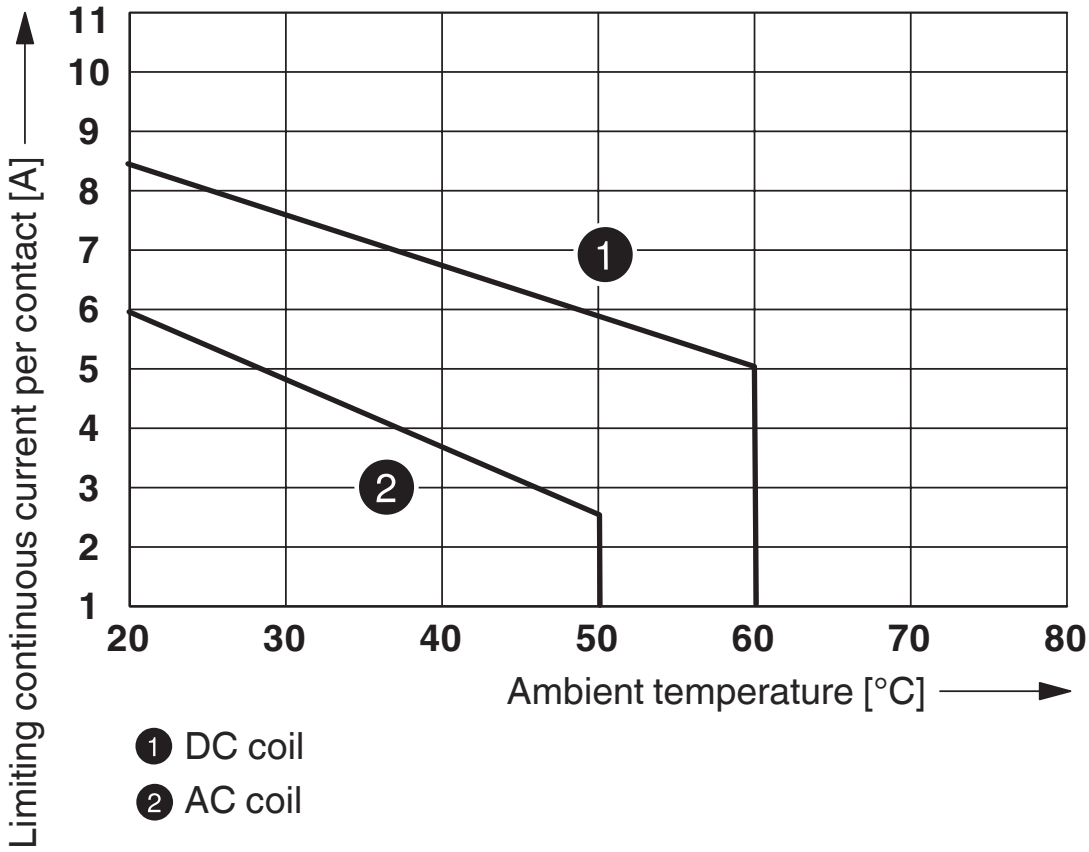
On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature ≤ 25°C.

Diagram



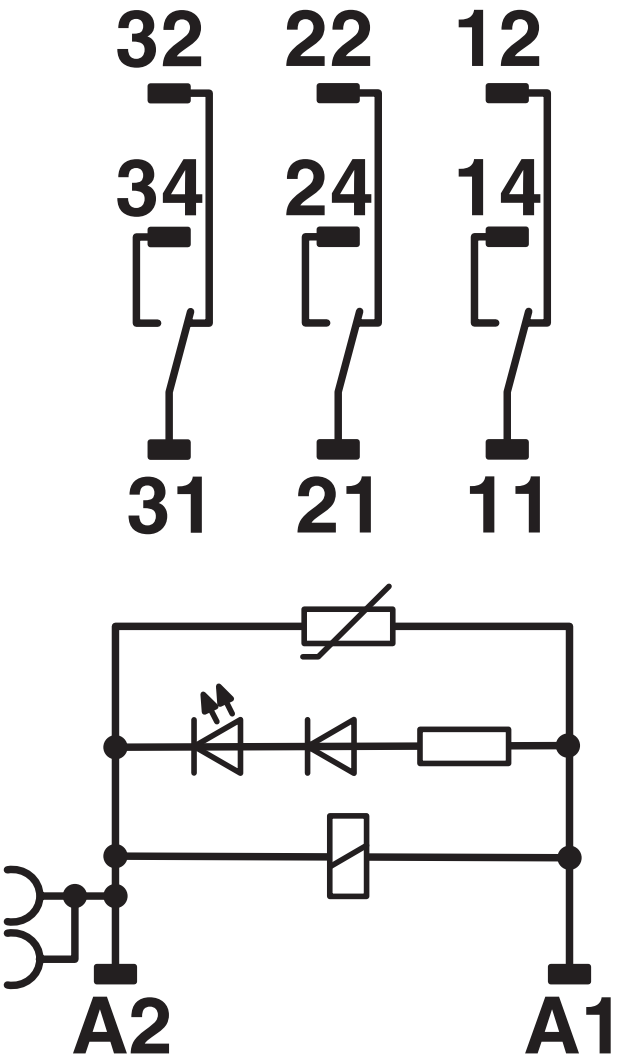

Service life reduction factor

Diagram

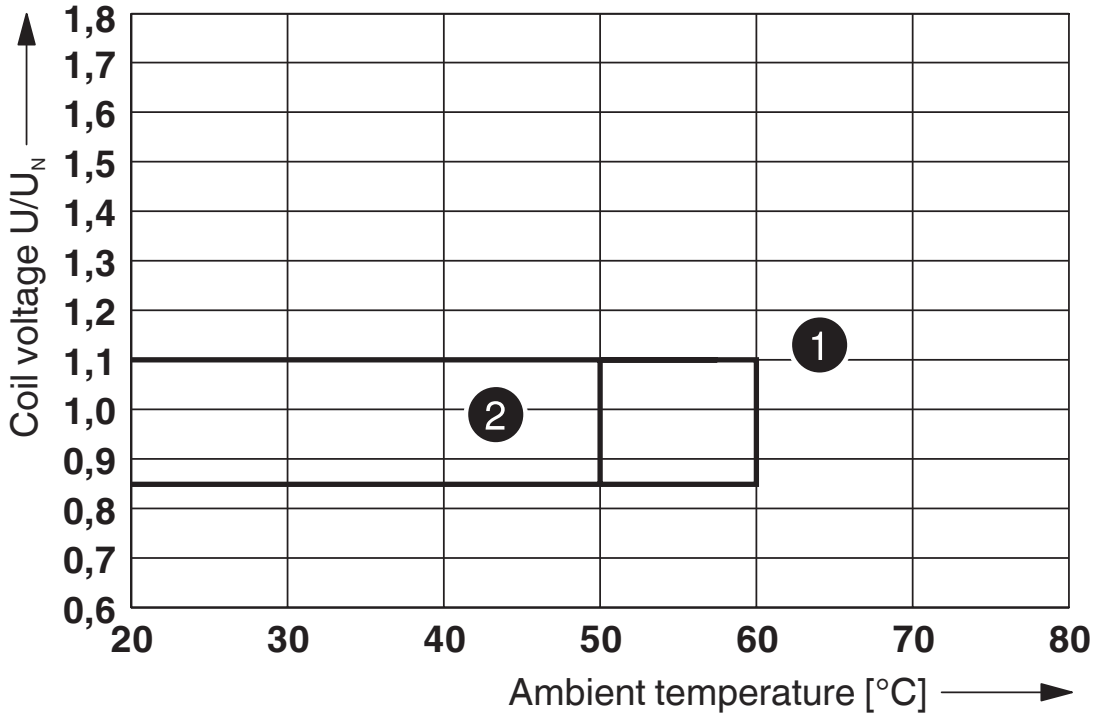



Contact derating

Circuit diagram



Diagram




1 DC coil (observe contact derating)

2 AC coil (observe contact derating)

Operating voltage range

## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/2903292

**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

## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

## Environmental product compliance

| | |
|---|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

## Accessories

### FBS 2-6 - Plug-in bridge

3030336

https://www.phoenixcontact.com/gb/products/3030336

Plug-in bridge, pitch: 6.2 mm, number of positions: 2, color: red

### FBS 2-6 BU - Plug-in bridge

3036932

https://www.phoenixcontact.com/gb/products/3036932

Plug-in bridge, pitch: 6.2 mm, number of positions: 2, color: blue

## FBS 2-6 GY - Plug-in bridge

3032237

https://www.phoenixcontact.com/gb/products/3032237

Plug-in bridge, pitch: 6.2 mm, number of positions: 2, color: gray

## STP 5-2 - Marker carriers

0800967

https://www.phoenixcontact.com/gb/products/0800967

Marker carriers, snaps into STTB 2,5, STTB 4, PTTB 2,5, and PTTB 4 double-level spring-cage terminal blocks, can be marked with UC-TM 5, UC-TMF 5, UCT-TM 5, UCT-TMF 5, ZB 5, or ZBF 5, gray, unlabeled, mounting type: plug in, lettering field size: 5 x 10.5 mm

## NS 35/ 7,5 PERF 2000MM - DIN rail perforated

0801733

https://www.phoenixcontact.com/gb/products/0801733

DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

## NS 35/ 7,5 UNPERF 2000MM - DIN rail, unperforated

0801681

https://www.phoenixcontact.com/gb/products/0801681

DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

## NS 35/ 7,5 WH PERF 2000MM - DIN rail perforated

1204119

https://www.phoenixcontact.com/gb/products/1204119

DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

## NS 35/ 7,5 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204122

https://www.phoenixcontact.com/gb/products/1204122

DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

## NS 35/ 7,5 AL UNPERF 2000MM - DIN rail, unperforated

0801704

https://www.phoenixcontact.com/gb/products/0801704

DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

## NS 35/ 7,5 ZN PERF 2000MM - DIN rail perforated

1206421

https://www.phoenixcontact.com/gb/products/1206421

DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, Standard profile, color: silver

## NS 35/ 7,5 ZN UNPERF 2000MM - DIN rail, unperforated

1206434

https://www.phoenixcontact.com/gb/products/1206434

DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, Standard profile, color: silver

## NS 35/ 7,5 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

0801762

https://www.phoenixcontact.com/gb/products/0801762

DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored

## NS 35/ 7,5 CAP - End cap

1206560

https://www.phoenixcontact.com/gb/products/1206560

DIN rail end piece, for DIN rail NS 35/7.5

## NS 35/15 PERF 2000MM - DIN rail perforated

1201730

https://www.phoenixcontact.com/gb/products/1201730

DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

## NS 35/15 UNPERF 2000MM - DIN rail, unperforated

1201714

https://www.phoenixcontact.com/gb/products/1201714

DIN rail, unperforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

## NS 35/15 WH PERF 2000MM - DIN rail perforated

0806602

https://www.phoenixcontact.com/gb/products/0806602

DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: white

## NS 35/15 WH UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1204135

https://www.phoenixcontact.com/gb/products/1204135

DIN rail, unperforated, Pack of 10 (20 m), similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver

## NS 35/15 AL UNPERF 2000MM - DIN rail, unperforated

1201756

https://www.phoenixcontact.com/gb/products/1201756

DIN rail, unperforated, similar to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

## NS 35/15 ZN PERF 2000MM - DIN rail perforated

1206599

https://www.phoenixcontact.com/gb/products/1206599

DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver

## NS 35/15 ZN UNPERF 2000MM - DIN rail, unperforated

1206586

https://www.phoenixcontact.com/gb/products/1206586

DIN rail, unperforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, Standard profile, color: silver

## NS 35/15 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201895

https://www.phoenixcontact.com/gb/products/1201895

DIN rail, unperforated, Pack of 10 (20 m), similar to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored

## NS 35/15 CAP - End cap

1206573

https://www.phoenixcontact.com/gb/products/1206573

DIN rail end piece, for DIN rail NS 35/15

## NS 35/15-2,3 UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201798

https://www.phoenixcontact.com/gb/products/1201798

DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile 2.3 mm, color: silver

## CLIPFIX 35 - End bracket

3022218

https://www.phoenixcontact.com/gb/products/3022218

Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

## CLIPFIX 35-5 - End bracket

3022276

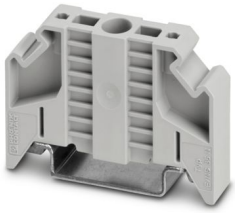
https://www.phoenixcontact.com/gb/products/3022276

Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5. 15 mm, color: gray

## E/NS 35 N - End bracket

0800886

https://www.phoenixcontact.com/gb/products/0800886



End clamp, width: 9.5 mm, color: gray

## MPS-MT - Test plug

0201744

https://www.phoenixcontact.com/gb/products/0201744

Test plug, with solder connection up to 1 $mm^2$ conductor cross section, number of positions: 1, color: gray

## MPS-IH WH - Insulating sleeve

0201663

https://www.phoenixcontact.com/gb/products/0201663

Insulating sleeve, color: white

## MPS-IH RD - Insulating sleeve

0201676

https://www.phoenixcontact.com/gb/products/0201676

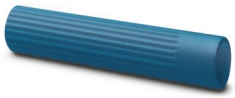
Insulating sleeve, color: red

## MPS-IH BU - Insulating sleeve

0201689

https://www.phoenixcontact.com/gb/products/0201689

Insulating sleeve, color: blue



## MPS-IH YE - Insulating sleeve

0201692

https://www.phoenixcontact.com/gb/products/0201692

Insulating sleeve, color: yellow

## MPS-IH GN - Insulating sleeve

0201702

https://www.phoenixcontact.com/gb/products/0201702

Insulating sleeve, color: green

## MPS-IH GY - Insulating sleeve

0201728

https://www.phoenixcontact.com/gb/products/0201728

Insulating sleeve, color: gray

## MPS-IH BK - Insulating sleeve

0201731

https://www.phoenixcontact.com/gb/products/0201731

Insulating sleeve, color: black

## ZB 5 :UNBEDRUCKT - Zack marker strip

1050004

https://www.phoenixcontact.com/gb/products/1050004

Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 5.1 x 10.5 mm, Number of individual labels: 10

## ZB 5 CUS - Zack marker strip

0824962

https://www.phoenixcontact.com/gb/products/0824962

Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm, Number of individual labels: 10

## ZB 5,LGS:FORTL.ZAHLEN - Zack marker strip

1050017

https://www.phoenixcontact.com/gb/products/1050017

Zack marker strip, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm, Number of individual labels: 10

## ZB 5,QR:FORTL.ZAHLEN - Zack marker strip

1050020

https://www.phoenixcontact.com/gb/products/1050020

Zack marker strip, white, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm

## ZB 5,LGS:GLEICHE ZAHLEN - Zack marker strip

1050033

https://www.phoenixcontact.com/gb/products/1050033

Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: Identical numbers 1 or 2, etc. up to 100, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm, Number of individual labels: 10

## ZB 5,LGS:L1-N,PE - Zack marker strip

1050415

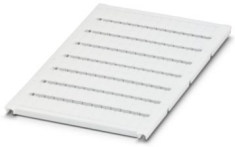
https://www.phoenixcontact.com/gb/products/1050415

Zack marker strip, Strip, white, labeled, horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 5.15 x 10.5 mm, Number of individual labels: 10

## UC-TM 5 - Marker for terminal blocks

0818108

https://www.phoenixcontact.com/gb/products/0818108



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 96

## UC-TM 5 CUS - Marker for terminal blocks

0824581

https://www.phoenixcontact.com/gb/products/0824581

Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 10.5 x 4.6 mm, Number of individual labels: 96

## UCT-TM 5 - Marker for terminal blocks

0828734

https://www.phoenixcontact.com/gb/products/0828734

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 72

## UCT-TM 5 CUS - Marker for terminal blocks

0829595

https://www.phoenixcontact.com/gb/products/0829595

Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 5.2 mm, lettering field size: 4.6 x 10.5 mm, Number of individual labels: 72

## GBS 5-25X12 - Group marker label for terminal marking

0810588

https://www.phoenixcontact.com/gb/products/0810588

Group marker label, snaps onto terminal center for screw, spring-cage and quick connection terminal blocks, labeled with a 25 x 12 mm label or manually with the B-STIFT, in the foot part with ZB 5

## GBS 5-25X5 - Group marker label for terminal marking

0829126

https://www.phoenixcontact.com/gb/products/0829126

Group marking label, can be snapped into terminal center for screw, spring-cage, push-in, and fast connection terminal blocks, can be labeled with a 24 x 4 mm label or manually using B-STIFT, in the foot part with ZB 5

## STP 5-2-ZB - Marker carriers

3037643

https://www.phoenixcontact.com/gb/products/3037643

Marker carriers, snaps into ST 2,5 spring-cage terminal blocks, can be marked with UC-TM 5, UC-TMF 5, UCT-TM 5, UCT-TMF 5, ZB 5, or ZBF 5, gray, unlabeled, mounting type: snapped

## ZB 15:UNBEDRUCKT - Zack marker strip

0811972

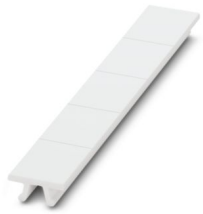
https://www.phoenixcontact.com/gb/products/0811972

Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 15.2 mm, lettering field size: 10.5 x 15.1 mm, Number of individual labels: 5

## ZB 15 CUS - Zack marker strip

0824945

https://www.phoenixcontact.com/gb/products/0824945



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 15.2 mm, lettering field size: 10.5 x 15.1 mm, Number of individual labels: 5

## ZB 15,LGS:L1-N,PE - Zack marker strip

0811998

https://www.phoenixcontact.com/gb/products/0811998

Zack marker strip, Strip, white, labeled, printed horizontally: L1, L2, L3, N, PE, mounting type: snapped, for terminal block width: 15.2 mm, lettering field size: 10.5 x 15.1 mm, Number of individual labels: 5

## UC-TM 16 - Marker for terminal blocks

0819217

https://www.phoenixcontact.com/gb/products/0819217

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 16 mm, lettering field size: 15.45 x 10.5 mm, Number of individual labels: 32

## UC-TMF 16 - Marker for terminal blocks

0819262

https://www.phoenixcontact.com/gb/products/0819262

Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 16 mm, lettering field size: 15.45 x 5.1 mm, Number of individual labels: 32

# RIF-3-RPT-LV-230AC/3X21 - Relay Module

2903292

https://www.phoenixcontact.com/gb/products/2903292

## RIF-3-BPT/3X21 - Relay base

2900938

https://www.phoenixcontact.com/gb/products/2900938

Relay base RIF-3..., for octal relays with 3 changeover contacts, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

## REL-OR3/L-230AC/3X21 - Single relay

2903696

https://www.phoenixcontact.com/gb/products/2903696

Plug-in octal relays with power contacts, 3 changeover contacts, test button, mechanical switching position indicator, input voltage: 230 V AC

## RIF-V-120-230 UC - Plug-in module

2900948

https://www.phoenixcontact.com/gb/products/2900948

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

## RIF-RH-3 - Retaining bracket

2900955

https://www.phoenixcontact.com/gb/products/2900955

Relay retaining bracket, with holder for marking material, suitable for RIF-3 relay base, for octal relay

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