# R4N
## miniature industrial relays

**R4N (AC)**

**R4N (DC)**

**7 A / 230 V AC**

- Relays of general application
- For plug-in sockets: on 35 mm rail mount acc. to EN 60715; on panel mounting; with terminals for soldering
- PCB version available • AC and DC coils, insulation class F: 155 °C
- WT (mechanical indicator + lockable front test button) - standard equipment of relays. Relays may be provided with the test buttons (no latching) and plugs - page 8
- **Have obtained LR Type Approval Certificate (Lloyd's Register)**
- Recognitions, certifications, directives: RoHS, CE cULus D-E EHC SP LR

## Contact data

| | | |
|---|---|---|
| Number and type of contacts | | 4 CO |
| Contact material | | **AgNi**, AgNi/Au flash gold plating, AgNi/Au hard gold plating |
| Rated / max. switching voltage | AC | 250 V / 250 V |
| Min. switching voltage | | 10 V AgNi, 10 V AgNi/Au flash gold plating |
| | | 5 V AgNi/Au hard gold plating |
| Rated load (capacity) | AC1 | 7 A / 230 V AC (VDE)   6 A / 250 V AC |
| | AC15 | 1,5 A / 120 V   0,75 A / 240 V (C300) |
| | DC1 | 6 A / 24 V DC (see Fig. 3) |
| | DC13 | 0,22 A / 120 V   0,1 A / 250 V (R300) |
| Motor load | acc. to UL 508 | 1/3 HP   240 V AC, 3,6 FLA, single-phase motor ❶ |
| | AC3 acc. to IEC 60947-4-1 | 0,125 kW   240 V AC, single-phase motor |
| Min. switching current | | 5 mA |
| Max. inrush current | | 12 A |
| Rated current | | 7 A |
| Max. breaking capacity | AC1 | 1 500 VA |
| Min. breaking capacity | | 0,3 W AgNi, 0,3 W AgNi/Au flash gold plating |
| | | 0,1 W AgNi/Au hard gold plating |
| Contact resistance | | ≤ 100 mΩ |
| Max. operating frequency | • at rated load AC1 | 1 200 cycles/hour |
| | • no load | 18 000 cycles/hour |

## Coil data

| | | |
|---|---|---|
| Rated voltage | 50/60 Hz AC | 6, 12, **24**, 42, 48, 60, 80, 110, 115, 120, 127, 220, **230**, 240 V |
| | DC | 5, 6, **12**, **24**, 48, 60, 80, 110, 125, **220** V |
| Must release voltage | | AC: ≥ 0,2 $U_n$   DC: ≥ 0,1 $U_n$ |
| Operating range of supply voltage | | see Tables 1, 2 and Fig. 4, 5 |
| Rated power consumption | AC | 1,6 VA |
| | DC | 0,9 W |

## Insulation according to EN 60664-1

| | | |
|---|---|---|
| Insulation rated voltage | | 250 V AC |
| Rated surge voltage | | 2 500 V   1,2 / 50 µs |
| Overvoltage category | | II |
| Insulation pollution degree | | 2 |
| Dielectric strength | • between coil and contacts | 2 500 V AC   type of insulation: basic |
| | • contact clearance | 1 500 V AC   type of clearance: micro-disconnection |
| | • pole - pole | 2 000 V AC   type of insulation: basic |
| Contact - coil distance | • clearance | ≥ 1,6 mm |
| | • creepage | ≥ 3,2 mm |

## General data

| | | |
|---|---|---|
| Operating / release time (typical values) | | AC: 10 ms / 8 ms   DC: 13 ms / 3 ms |
| Electrical life | • resistive AC1 | > 5 x 10⁴ 7 A, 230 V AC (VDE) |
| | | > 10⁵ 6 A, 250 V AC |
| | • cosφ | see Fig. 2 |
| Mechanical life (cycles) | | > 2 x 10⁷ |
| Dimensions (L x W x H) | | 27,4 x 21 x 35,5 mm |
| Weight | | 35 g |
| Ambient temperature | • storage | -40...+85 ºC |
| (non-condensation and/or icing) | • operating | AC: -40...+55 ºC   DC: -40...+70 ºC |
| Cover protection category | | IP 40   EN 60529 |
| Environmental protection | | RTI   EN 61810-7 |
| Shock resistance | (NO/NC) | 10 g / 5 g |
| Vibration resistance | | 5 g   10...150 Hz |

The data in bold type relate to the standard versions of the relays.
❶ For single phase motors for 110-120 V AC do not use motors with higher FLA than given for 240 V AC.

## Design



**Improvement of the functionality of the mechanical indicator (W)**: it is mounted on an insulation base of the unit of the movable contacts; the changes provide the appropriate position in the window in the upper side of the housing irrespectively of the number of operations performed by the relay.



**Application of electronics made in the SMD technology:** additional equipment L (LED diode) and D (diode) are located on the printed circuit board; the change of the position of the LED diode and optimization of the quality and intensity of its light provide certainty that the relay is in operation status when the LED is on.
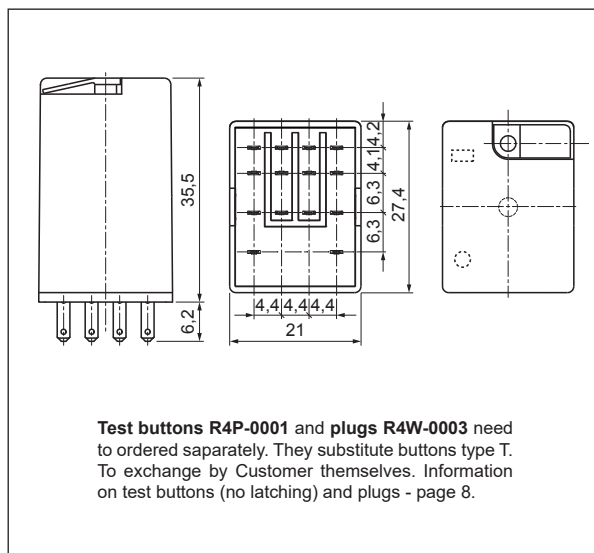


**Improvement of the efficiency of the electromagnet:** an innovational technology of connecting elements has been introduced, which guarantees more reliable operation of the relay.

**Strengthening of the insulation in the area of the contact plate:** polyamide PA66 has been applied; it has very good mechanical and electrical parameters and best thermal properties.
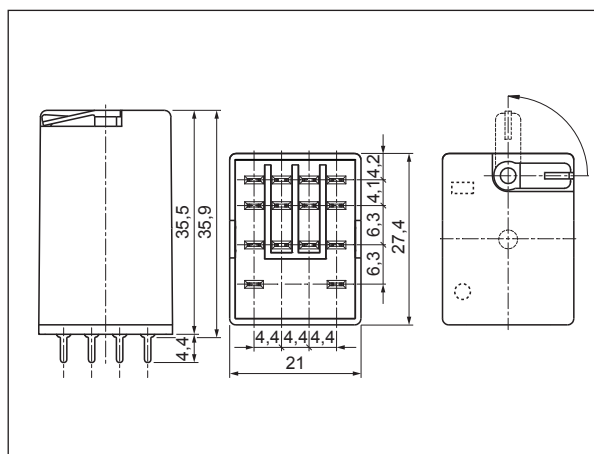
**Dimensions** - plug-in version (WT), with lockable front test button type T
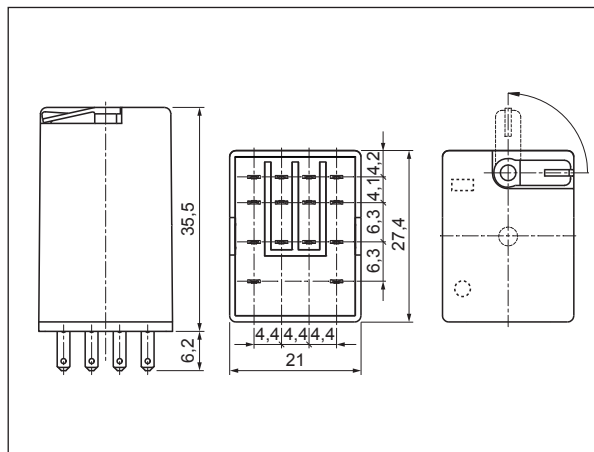


**Dimensions** - plug-in version, with test button (no latching) or with plug (no manual operation)



**Test buttons R4P-0001** and **plugs R4W-0003** need to ordered separately. They substitute buttons type T. To exchange by Customer themselves. Information on test buttons (no latching) and plugs - page 8.

**Dimensions** - PCB version (WT), with lockable front test button type T
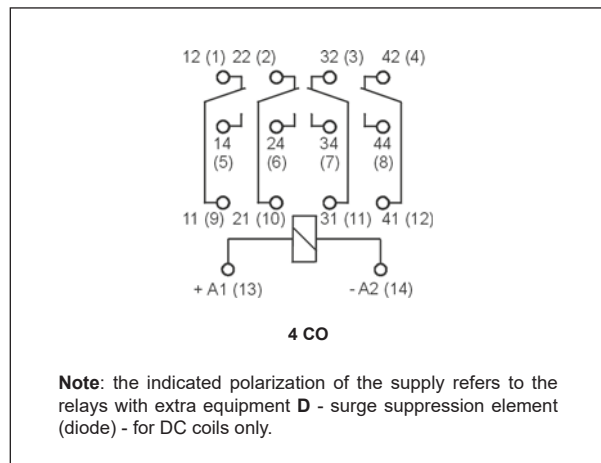
**2**

## Mounting, sockets and accessories for relays

Relays **R4N** are offered in versions: • for plug-in sockets • for PCB. **With WT equipment as standard** (**W** - mechanical indicator + **T** - lockable front test button). In these relays is **possibility self-exchange of button type T for test button R4P-0001** (no latching) **or on plug R4W-0003** (no manual operation). The buttons **R4P-0001** and the plugs **R4W-0003 need to ordered separately**.

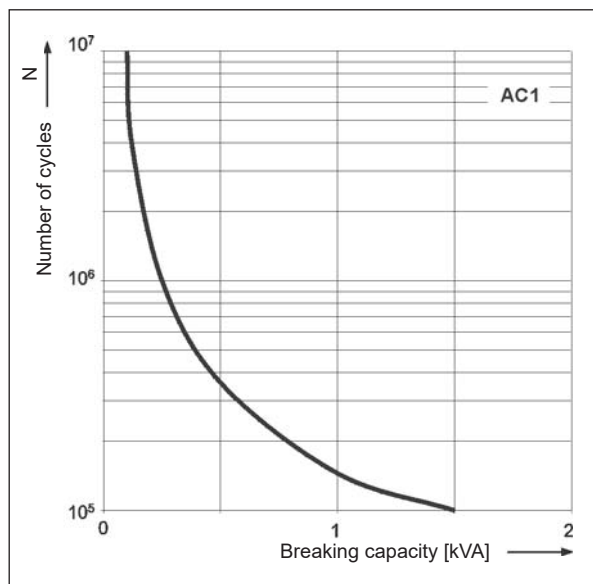| Sockets for R4N | Accessories | | | Additional equipment |
|---|---|---|---|---|
| | Retainer / retractor clips | Spring wire clips | Description plates | |
| **Screw terminals sockets**, 35 mm rail mount (acc. to EN 60715) or on panel mounting (two M3 screws) | | | | |
| GZT4 | GZT4-0040 | G4 1052 | GZT4-0035 | M... ❸, ZGGZ4 ❹ |
| GZM4 | GZT4-0040 | G4 1052 | GZT4-0035 | M... ❸, ZGGZ4 ❹ |
| GZ4 | – | G4 1052 | – | – |
| GS4 | – | GS4-0036 | GS4-0035 | – |
| **Push-in terminals sockets**, 35 mm rail mount (acc. to EN 60715) or on panel mounting (two M3 screws) | | | | |
| GZP4 ❷ | GZP4-0400, GZT4-0040 | G4 1052 | MP15 | M... ❸, ZGZP4-8, ZGZP4-2, ZGZP-2 ❹ |
| **Sockets for PCB** | | | | |
| SU4D | – | G4 1053 | – | – |
| **Solder terminals sockets** | | | | |
| SU4L | – | G4 1053 | – | G4 1040 ❺ |
| G4 | – | G4 1053 | – | – |

❷ Sockets GZP4: wire connection - see page 10.     ❸ Signalling / protecting modules type M... - see page 12.
❹ Interconnection strips ZGGZ4, ZGZP... - see page 13-14.     ❺ Spring clamps G4 1040.
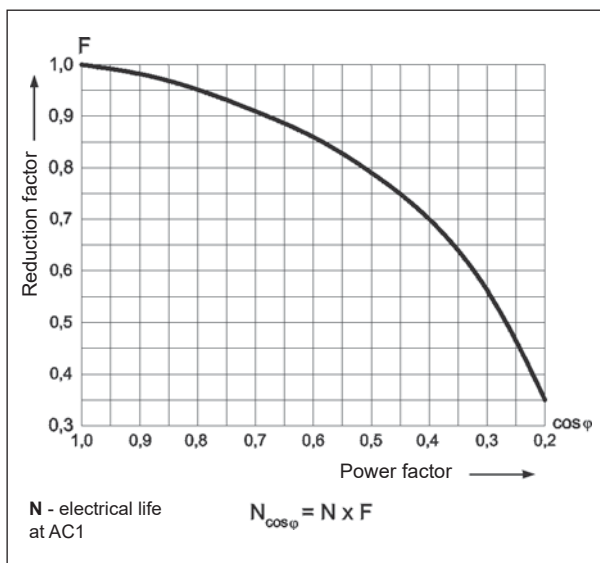
## Connection diagram (pin side view)



**4 CO**

**Note**: the indicated polarization of the supply refers to the relays with extra equipment **D** - surge suppression element (diode) - for DC coils only.

## Electrical life at AC resistive load. Switching frequency: 1 200 cycles/hour     Fig. 1
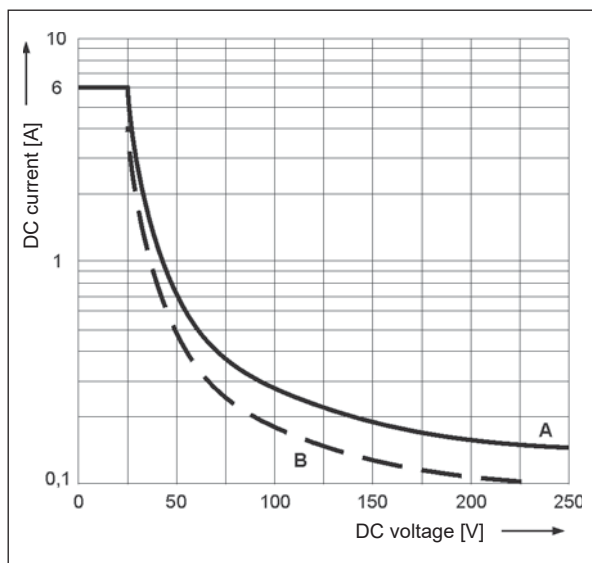
**Electrical life reduction factor
at AC inductive load** — Fig. 2



**N** - electrical life
at AC1

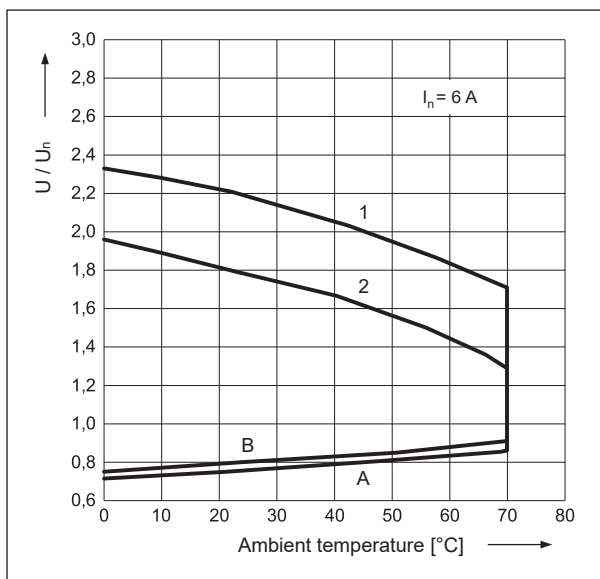$$N_{cos\,\varphi} = N \times F$$

**Max. DC breaking capacity
A - resistive load DC1
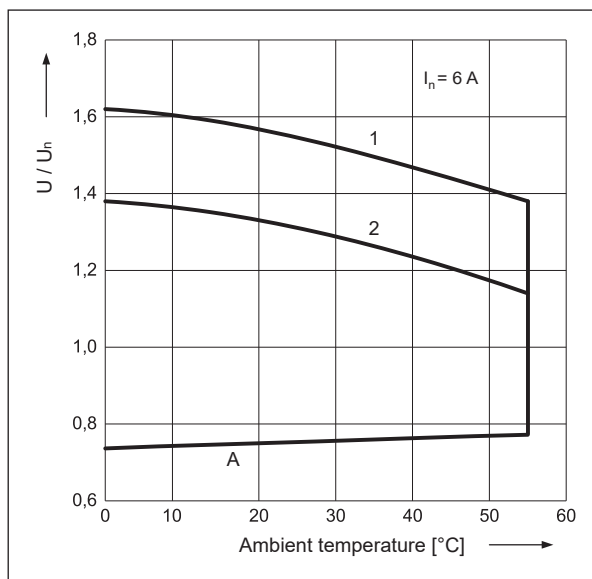B - inductive load L/R = 40 ms** — Fig. 3



**Coil operating range - DC** — Fig. 4



**Coil operating range - AC 50 Hz** — Fig. 5



### Description of Fig. 4 and 5

**A** - relations between make voltage and ambient temperature at no load on contacts. Coil temperature and ambient temperature are equal before coil energizing. Make voltage is not higher than the value read on Y axis (multiplication of rated voltage).
**B** - relations between make voltage and ambient temperature after initial coil heating up with 1,1 $U_n$, at continues load of $I_n$ on contacts. Make voltage is not higher than the value read on Y axis (multiplication of rated voltage).

**1**, **2** - values on Y axis represent allowed overvoltage on coil at certain ambient temperature and contact load:
**1** - no load
**2** - rated load

## Contact material selection for different load types

• **AgNi** - for resistive or inductive loads,
• **AgNi/Au flash gold plating** - Au protects the contact surface during storage,
• **AgNi/Au hard gold plating** - for small resistive loads in control circuits.

**Coil data** - DC voltage version                                                    Table 1

| Coil code | Rated voltage V DC | Coil resistance at 20 °C Ω | Acceptable resistance | Coil operating range V DC | |
|---|---|---|---|---|---|
| | | | | min. (at 20 °C) | max. (at 70 °C) |
| 1005 | 5 | 28 | ± 10% | 4,0 | 5,5 |
| 1006 | 6 | 40 | ± 10% | 4,8 | 6,6 |
| **1012** | **12** | **160** | **± 10%** | **9,6** | **13,2** |
| **1024** | **24** | **640** | **± 10%** | **19,2** | **26,4** |
| 1048 | 48 | 2 600 | ± 10% | 38,4 | 52,8 |
| 1060 | 60 | 4 000 | ± 10% | 48,0 | 66,0 |
| 1080 | 80 | 7 100 | ± 10% | 64,0 | 88,0 |
| 1110 | 110 | 13 600 | ± 10% | 88,0 | 121,0 |
| 1125 | 125 | 16 000 | ± 10% | 100,0 | 137,5 |
| **1220** | **220** | **54 000** | **± 10%** | **176,0** | **242,0** |

The data in bold type relate to the standard versions of the relays.

**Coil data** - AC 50/60 Hz voltage version                                           Table 2

| Coil code | Rated voltage V AC | Coil resistance at 20 °C Ω | Acceptable resistance | Coil operating range V AC | |
|---|---|---|---|---|---|
| | | | | min. (at 20 °C) | max. (at 55 °C) |
| 5006 | 6 | 9,8 | ± 10% | 4,8 | 6,6 |
| 5012 | 12 | 39,5 | ± 10% | 9,6 | 13,2 |
| **5024** | **24** | **158** | **± 10%** | **19,2** | **26,4** |
| 5042 | 42 | 470 | ± 10% | 33,6 | 46,2 |
| 5048 | 48 | 640 | ± 10% | 38,4 | 52,8 |
| 5060 | 60 | 930 | ± 10% | 48,0 | 66,0 |
| 5080 | 80 | 1 720 | ± 10% | 64,0 | 88,0 |
| 5110 | 110 | 3 450 | ± 10% | 88,0 | 121,0 |
| 5115 | 115 | 3 610 | ± 10% | 92,0 | 127,0 |
| 5120 | 120 | 3 770 | ± 10% | 96,0 | 132,0 |
| 5127 | 127 | 4 000 | ± 10% | 101,6 | 139,0 |
| 5220 | 220 | 15 400 | ± 10% | 176,0 | 242,0 |
| **5230** | **230** | **16 100** | **± 10%** | **184,0** | **253,0** |
| 5240 | 240 | 16 800 | ± 10% | 192,0 | 264,0 |

The data in bold type relate to the standard versions of the relays.

## Relays for railroad industry

**PIR4T**
- interface

**R4T**
- industrial

## Ordering codes

| Type | Contact material | Number and type of contacts | Cover protection category | Connection mode | Coil code | Additional equipment |
|---|---|---|---|---|---|---|

R4N – ☐☐☐☐ – ☐☐ – ☐☐☐☐ – ☐☐☐☐

see Tables 1, 2 page 5

**Contact material**

**20** - AgNi
**21** - AgNi/Au flash gold plating
**23** - AgNi/Au hard gold plating

**Number and type of contacts**

**14** - 4 CO

**Cover protection category**

**2** - in cover, IP 40 version

**Connection mode**

**3** - for plug-in sockets
**5** - for PCB

**Additional equipment ⑥**

**without marks** - without additional equipment
**WT** - mechanical indicator + lockable front test button
**WTL** - mechanical indicator + lockable front test button + light indicator (LED diode)
**WTD** - mechanical indicator + lockable front test button + surge suppression element (diode)
**WTLD** - mechanical indicator + lockable front test button + light indicator (LED diode) + surge suppression element (diode)

⑥ **T** - orange colour (AC coils), green (DC coils). **WT** - standard equipment of relays. **WTD, WTLD** - available only in relays with DC coils.

**Test buttons (no latching) and plugs** need to ordered separately. They substitute buttons type T. To exchange by Customer themselves. Information on test buttons (no latching) and plugs - page 8.
  • Button R4P-0001-A  - orange colour (AC coils)
  • Button R4P-0001-D  - green colour (DC coils)
  • Plug R4W-0003-A  - orange colour (AC coils)
  • Plug R4W-0003-D  - green colour (DC coils)

**Note:**

While the relay operates, the test button of the **T** type becomes heated. In order to push the test button manually, you should first turn the supply voltage off, and wait some time until the button becomes colder (or push the button immediately using a protective glove or an insulated tool). The button shall be pushed smoothly and quickly. The normally open contacts are closed with the button for the time during which the button is pushed. Releasing the button opens the normally open contacts. Normally open contacts may be closed with the blocking function of the button (it shall be turned by 90°). When the button is turned back, the normally open contacts are opened.

For relays with additional equipment **D** - surge suppression element (diode) (versions WTD and WTLD) - fixed supply polarization compulsory for the DC load of coils: +A1(13) / -A2(14). The polarization is indicated on the relay cover. For other versions of the relays with DC coils any polarization is possible.

Examples of ordering codes:

**R4N-2014-23-5230-WTL**   relay **R4N**, for plug-in sockets, four changeover contacts, contact material AgNi, coil voltage 230 V AC 50/60 Hz, with mechanical indicator and lockable front test button and light indicator (LED diode), in cover IP 40

**R4N-2014-25-1024-WT**   relay **R4N**, for PCB, four changeover contacts, contact material AgNi, coil voltage 24 V DC, with mechanical indicator and lockable front test button, in cover IP 40

23.12.2020

Industrial relays for plug-in sockets: R2N, R3N, R4N, R15 - 2 CO ❷, R15 - 3 CO ❷ **with WT equipment as standard** (**W** - mechanical indicator + **T** - lockable front test button). **Detailed information** on additional equipment of individual relays can be found in the data sheets on the side of "Ordering codes".

**Note:**
While the relay operates, the test button of the **T** type becomes heated. In order to push the test button manually, you should first turn the supply voltage off, and wait some time until the button becomes colder (or push the button immediately using a protective glove or an insulated tool). The button shall be pushed smoothly and quickly. The normally open contacts are closed with the button for the time during which the button is pushed. Releasing the button opens the normally open contacts. Normally open contacts may be closed with the blocking function of the button (it shall be turned by 90°). When the button is turned back, the normally open contacts are opened.

| Type ❶ | Description | For industrial relays |
|---|---|---|
| W | mechanical indicator | R2N, R3N, R4N, (R15 - 2 CO, 3 CO ❷) |
| T | lockable front test button, orange (AC coils), green (DC coils) | R2N, R3N, R4N, (R15 - 2 CO, 3 CO ❷) |
| L | light indicator (LED diode), located inside the relay | R2N, R3N, R4N, RY2, (R15 - 2 CO, 3 CO, 4 CO ❷) RUC, RUC-M |
| D | surge suppression element (diode) - only for DC coils | R2N, R3N, R4N, RY2, (R15 - 2 CO, 3 CO, 4 CO ❷) |
| V | surge suppression element (varistor) - only for AC coils | (R15 - 2 CO, 3 CO ❷) |
| K | test button without block function, orange (AC coils), green (DC coils) | (R15 - 4 CO ❷), RUC |

❶ Available combinations:
**WT, WTL, WTD, WTLD** - in relays R2N, R3N, R4N for plug-in sockets
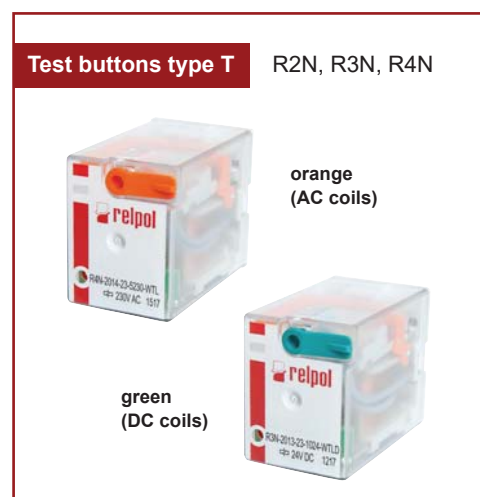**L, D, LD** - in relays RY2 for plug-in sockets
**WT, WTL, WTD, WTLD, WTV, WTLV** - in relays R15 - 2 CO, 3 CO for plug-in sockets
**K, L, D, KL, KD, LD, KLD** - in relays R15 - 4 CO for plug-in sockets
**K, L, KL** - in relays RUC
**L** - in relays RUC-M
❷ Voltage versions, in covers



**Test buttons type T**  R2N, R3N, R4N

orange (AC coils)

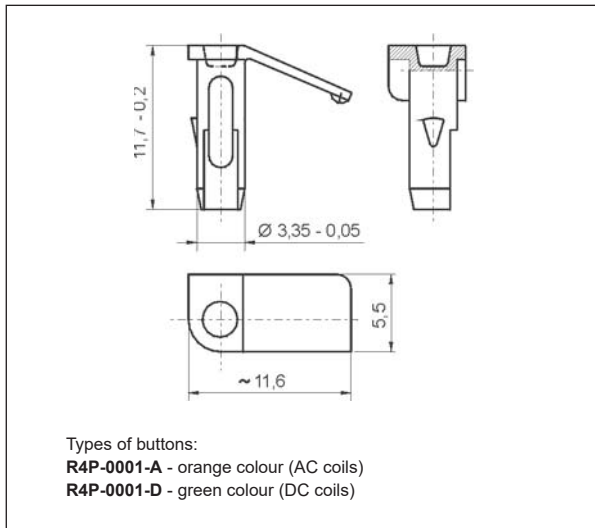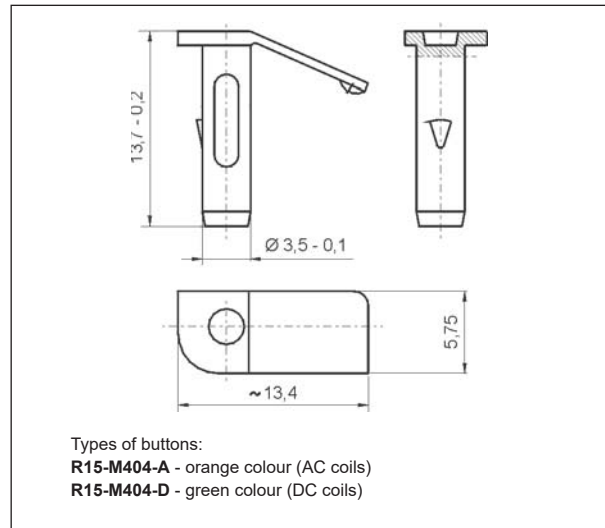green (DC coils)

relpol ® S.A.

**Test buttons (no latching)** are recommended for R2N...WT, R3N...WT, R4N...WT, R15...WT 2 CO, R15...WT 3 CO relays - **for applications that do not allow permanent contact latching**. By manual operation (pressing the button) relay contacts can get switched for as long time as long the button is pressed. Contacts return to initial position as soon as pressure is released from the button. Those operations can be done while the coil is deenergized ❸.

Button **R4P-0001** or **R15-M404** can be easily inserted by the Customer after removal of button type **T** (see Fig. 2). Button type **T** can be removed with screwdriver as shown on Fig. 1.

Fig. 1

Fig. 2

❸ While the relay operates, the test button becomes heated. In order to push the test button manually, you should first turn the supply voltage off, and wait some time until the button becomes colder (or push the button immediately using a protective glove or an insulated tool). The button shall be pushed smoothly and quickly.

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**Dimensions** - test button **R4P-0001**
for **R2N...WT, R3N...WT, R4N...WT**



Types of buttons:
**R4P-0001-A** - orange colour (AC coils)
**R4P-0001-D** - green colour (DC coils)

**Dimensions** - test button **R15-M404**
for **R15...WT 2 CO, R15...WT 3 CO**



Types of buttons:
**R15-M404-A** - orange colour (AC coils)
**R15-M404-D** - green colour (DC coils)

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**Plugs R4W-0003** or **R15-M203** can substitute button type **T if manual operation (latching and testing) is not allowed**. Changing button type **T** for plug can be done by Customer themselves in the same way as changing button type **T** for button (no latching).

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**Dimensions** - plug **R4W-0003**
for **R2N...WT, R3N...WT, R4N...WT**



Types of plugs:
**R4W-0003-A** - orange colour (AC coils)
**R4W-0003-D** - green colour (DC coils)
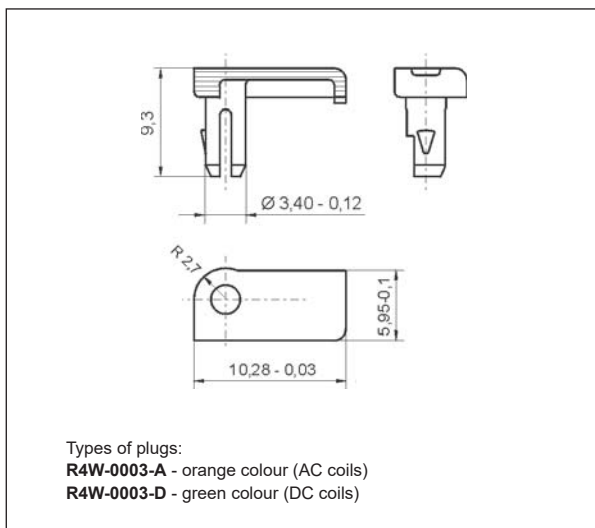
**Dimensions** - plug **R15-M203**
for **R15...WT 2 CO, R15...WT 3 CO**
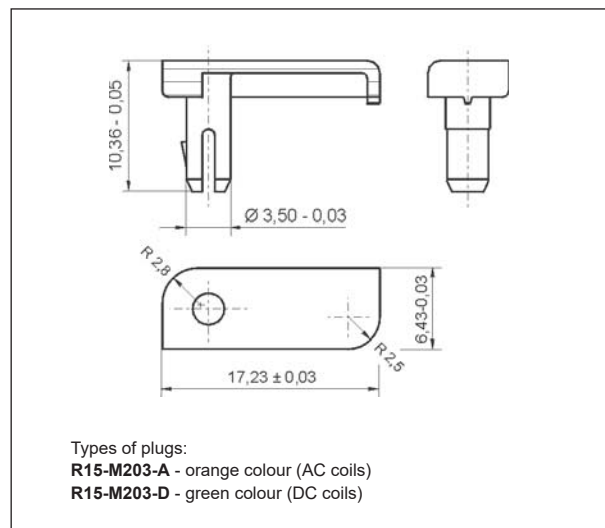


Types of plugs:
**R15-M203-A** - orange colour (AC coils)
**R15-M203-D** - green colour (DC coils)

Export Sales Department phone +48 68 47 90 832, 951 • e-mail: export@relpol.com.pl
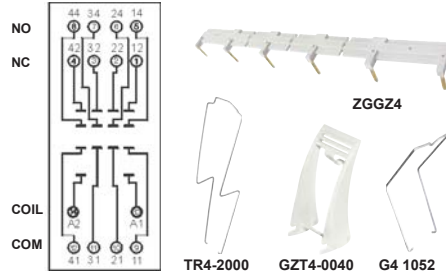
relpol S.A.
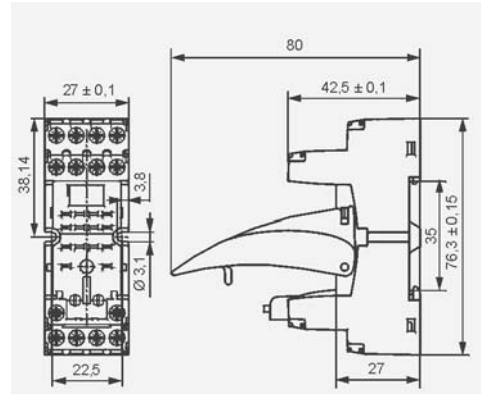
23.12.2020

8

## GZT4 ❸
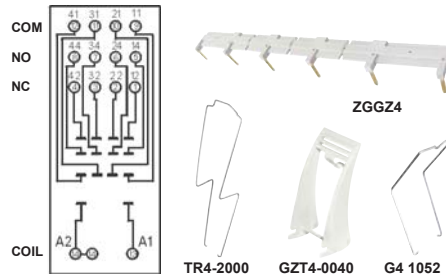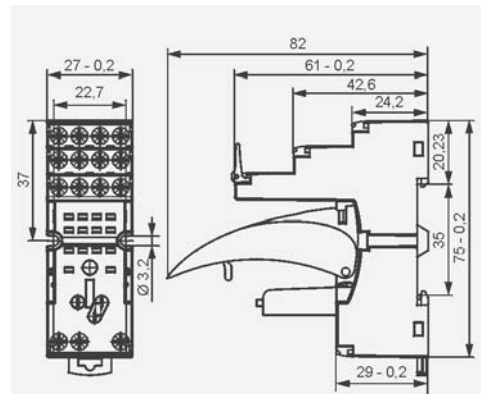
For R4N, T-R4

Screw terminals
Max. tightening moment
for the terminal: 0,7 Nm
35 mm rail mount
acc. to EN 60715
or on panel mounting
76,3 x 27 x 42,5(80) mm ❷
Four poles
6 A, 300 V AC

**Connection diagram**

NO
NC

COIL
COM

ZGGZ4

TR4-2000   GZT4-0040   G4 1052

**Accessories ❶ ❹**   GZT4-0035   Module type M...

**Dimensions**

## GZM4

For R4N, T-R4

Screw terminals
Max. tightening moment
for the terminal: 0,7 Nm
35 mm rail mount
acc. to EN 60715
or on panel mounting
75 x 27 x 61(82) mm ❷
Four poles
6 A, 300 V AC

**Connection diagram**

COM
NO
NC

COIL

ZGGZ4

TR4-2000   GZT4-0040   G4 1052

**Accessories ❶ ❹**   GZT4-0035   Module type M...

**Dimensions**

❶ Mounting and sub-assemblies of accessories in the socket - see page 9. Signalling / protecting modules type M... - see page 13.   ❷ In the bracket the height of socket with retainer / retractor clip is shown.   ❸ Have obtained LR Type Approval Certificate (Lloyd's Register).   ❹ For R4N relays: G4 1052, GZT4-0040, GZT4-0035, TR, module type M...; for T-R4 relays: TR4-2000, GZT4-0035, TR.

# Mounting and sub-assemblies of the relay and accessories in the socket

Signalling / protecting module type M...

Electromagnetic relay

Retainer / retractor clip

**Removing the relay from the socket with a retrainer / retractor clip**

Description plate

Screw terminals plug-in socket

23.12.2020

## GZP4

For R4N, R2N

Push-in terminals
Max. cross section of the cables:
2 x 1,5 mm² (ferrules without insulation)
2 x 1 mm² (ferrules with insulation)
Stripping length: 8...10 mm

35 mm rail mount
acc. to EN 60715
or on panel mounting
97 x 31 x 45,9(75,8) mm ❷
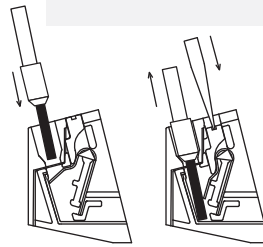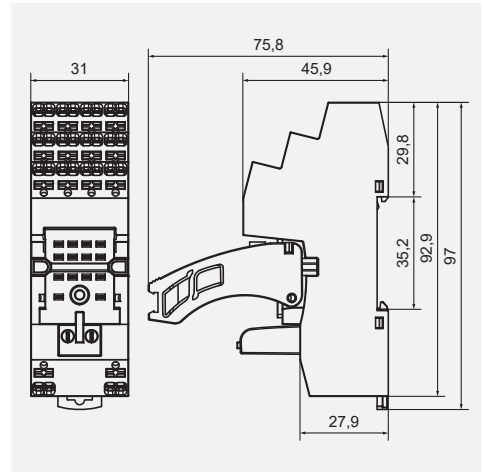Two poles
12 A, 300 V AC
Four poles
8 A, 300 V AC

### Connection diagrams



R4N          R2N

### Dimensions



The drawings present inserting wire into the Push-in terminal and removing wire using the button releasing a clamp (assembly without tools).


ZGZP4-8

| GZP4-0400 | GZT4-0040 | G4 1052 | MP15 | ZGZP4-2 | ZGZP-2 | Module type M... |

**Accessories ❶**

**Wire connection**

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## GZ4

For R4N

Screw terminals
Max. tightening moment
for the terminal: 0,7 Nm
35 mm rail mount
acc. to EN 60715
or on panel mounting
66,4 x 29,5 x 29 mm
Four poles
10 A, 300 V AC

### Connection diagram
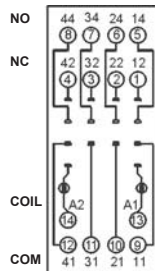


### Dimensions



**Accessories**

G4 1052

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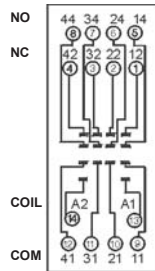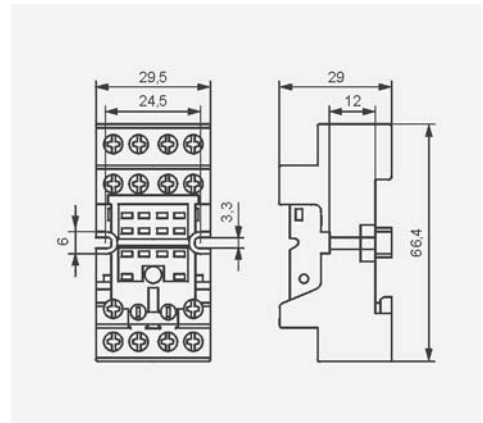
## GS4

For R4N

Screw terminals
Max. tightening moment
for the terminal: 0,7 Nm
35 mm rail mount
acc. to EN 60715
or on panel mounting
67 x 30,8 x 30(~63,7) mm ❺
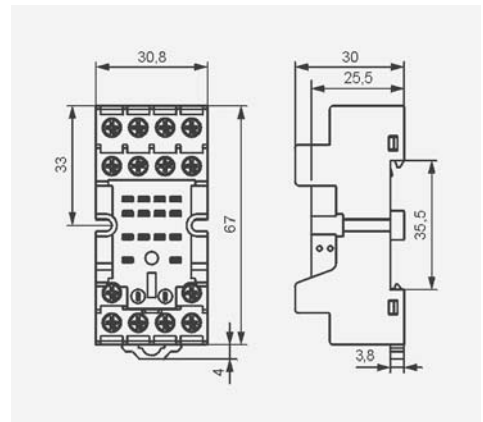Four poles
10 A, 300 V AC

### Connection diagram



### Dimensions



**Accessories**

GS4-0036          GS4-0035

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❶ Mounting and sub-assemblies of accessories in the socket - see page 9. Signalling / protecting modules type M... - see page 13.
❷ In the bracket the height of socket with retainer / retractor clip is shown.      ❺ In the bracket the height of socket with spring wire clip is shown.
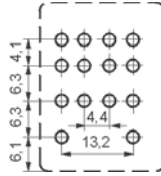
## SU4D

For R4N

For PCB
29,6 x 21,5 x 11 mm
Four poles
6 A, 250 V AC
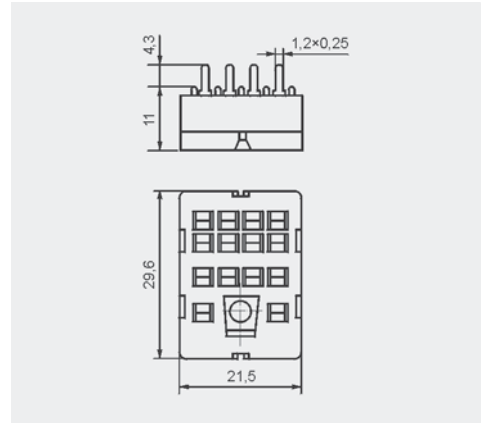
**Pinout**



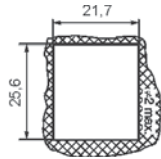**Accessories**  G4 1053

**Dimensions**



## SU4L

For R4N

Solder terminals
29,6 x 21,5 x 18,1 mm
Four poles
6 A, 250 V AC

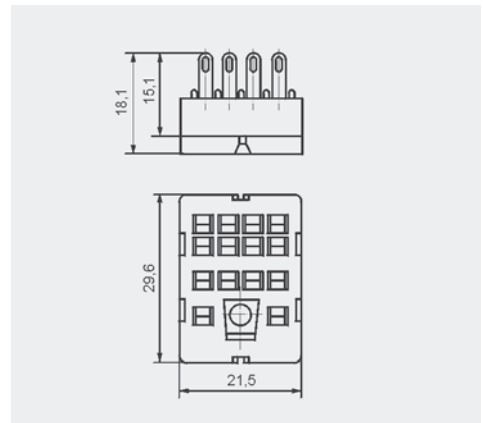**Dimensions of opening on panel mounting**



**Accessories**  G4 1053  G4 1040
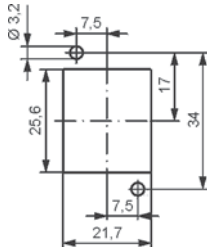
**Dimensions**



## G4

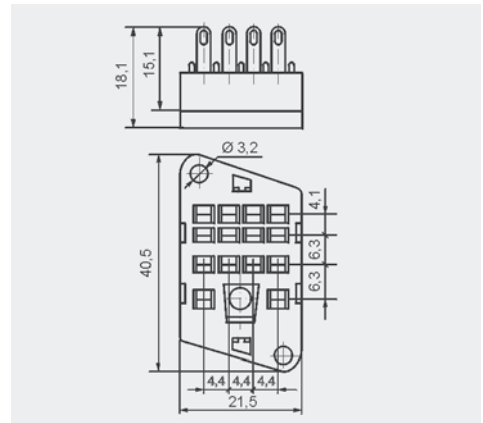For R4N

Solder terminals
40,5 x 21,5 x 18,1 mm
Four poles
6 A, 250 V AC

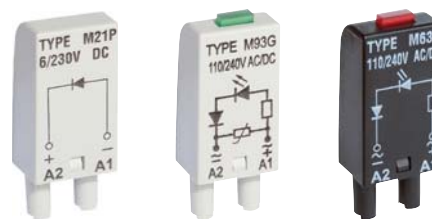**Pinout of openings on panel mounting**



**Accessories**  G4 1053

**Dimensions**

relpol S.A.

23.12.2020

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**For sockets type:**
GZT80, GZM80, GZS80, GZP80, GZT92, GZM92, GZS92, ES 32, GZT2, GZM2, GZT3, GZM3, GZT4, GZM4, GZP4
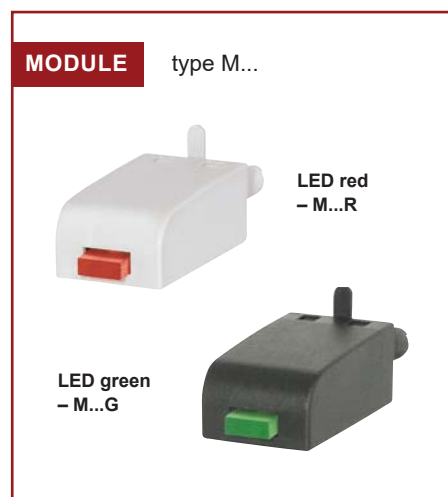
Modules type M... are parallely connected with relay coil.
Polarization P: -A1/+A2. Polarization N: +A1/-A2.

| Modules type M… | Layout | Voltage | Type of module ❶ ❷ |
|---|---|---|---|
| **Module D (polarization P)** It limits overvoltage on DC coils. | +A2 -A1 | 6/230 V DC | M21P |
| **Module D (polarization N)** It limits overvoltage on DC coils. | -A2 +A1 | 6/230 V DC | M21N |
| **Module LD (polarization P)** It limits overvoltage on DC coils. Coil energizing indication. | +A2 -A1 | 6/24 V DC 24/60 V DC 110/230 V DC | M31R, M31G M32R, M32G M33R, M33G |
| **Module LD (polarization N)** It limits overvoltage on DC coils. Coil energizing indication. | -A2 +A1 | 6/24 V DC 24/60 V DC 110/230 V DC | M41R, M41G M42R, M42G M43R, M43G |
| **Module RC** It protects against EMC disturbance. It limits overvoltage. | A2 A1 | 6/24 V AC/DC 24/60 V AC/DC 110/240 V AC/DC | M51 M52 M53 |
| **Module L** Coil energizing indication. | ≈ A2 ± A1 | 6/24 V AC/DC 24/60 V AC/DC 110/240 V AC/DC | M61R, M61G M62R, M62G M63R, M63G |
| **Module LV** It limits overvoltage on AC and DC coils. Coil energizing indication. | ≈ A2 ± A1 | 6/24 V AC/DC 24/60 V AC/DC 110/240 V AC/DC | M91R, M91G M92R, M92G M93R, M93G |
| **Module V** It limits overvoltage on AC coils. No indication. | A2 A1 | 6/24 V AC 110/130 V AC 220/240 V AC | M71 M72 M73 |
| **Module R** It limits harmful voltage on AC coils induced in long lines which causes unwanted making of the relay. | A1 A2 | 110/240 V AC | M103 |

❶ **M...R** - LED red, **M...G** - LED green
❷ When ordering modules indicate their color: gray or black.

**MODULE** type M...

**LED red – M...R**

**LED green – M...G**

PIR2-...-00L.
(R2N + GZM2)

ZGGZ4

## ■ ZGGZ4 for:

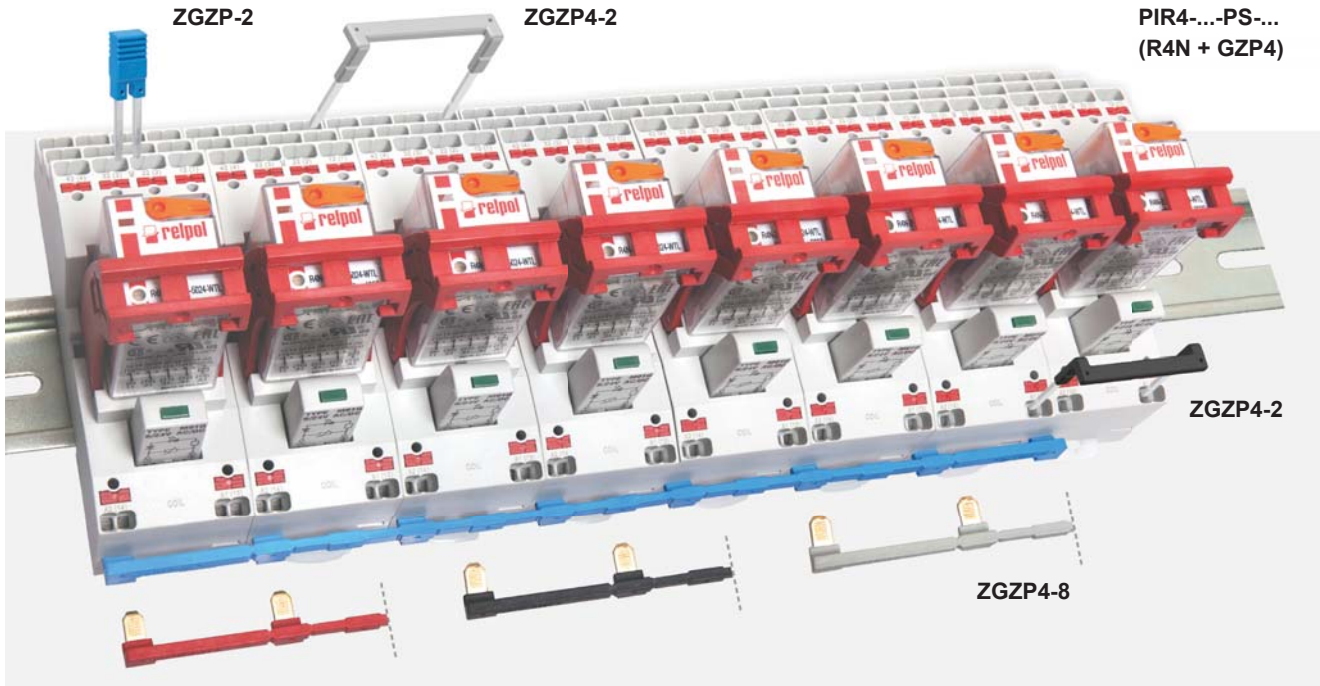| Plug-in sockets | Relays for plug-in sockets | Interface relays ❸ |
|---|---|---|
| GZM2 | R2N | PIR2-...-00L. (R2N + GZM2) |
| GZT2 | | |
| GZM3 | R3N | PIR3-...-00L. (R3N + GZM3) |
| GZT3 | | |
| GZM4 | R4N | PIR4-...-00L. (R4N + GZM4) |
| GZT4 | | |

❸ Interface relay **PIR2** (**PIR3**, **PIR4**) is offered as a **set**: electromagnetic relay **R2N** (**R3N**, **R4N**) + plug-in socket **GZM2** (**GZM3**, **GZM4**) + signalling / protecting module type **M...** + retainer / retractor clip **GZT4-0040** + description plate **GZT4-0035**.

## ■ Interconnection strip ZGGZ4

- designed for the co-operation with plug-in sockets of miniature industrial relays and with interface relays PIR2, PIR3 and PIR4, which are equipped with screw terminals; sockets and relays are mounted on 35 mm rail mount acc. to EN 60715,

- bridges common input signals (coil terminals A1 or A2) or output signals - see photo at the top,

- maximum permissible current is 10 A / 250 V AC,

- possibility of connection of 6 sockets or relays,

- colours of strips: **ZGGZ4-1** grey, **ZGGZ4-2** black.

**ZGZP-2**          **ZGZP4-2**          **PIR4-...-PS-...**
                                          **(R4N + GZP4)**
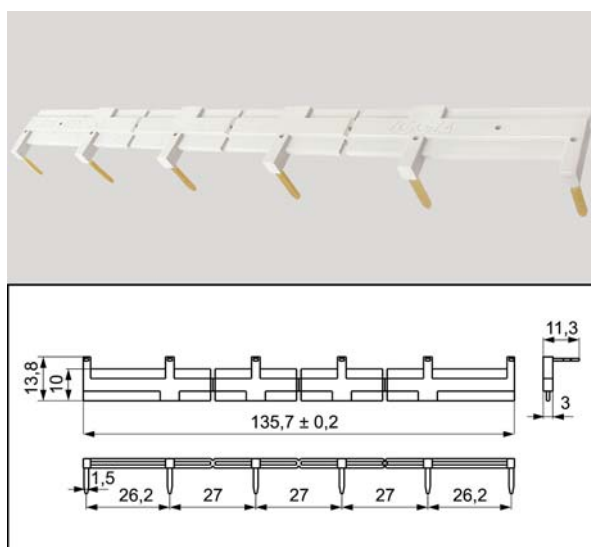


ZGZP4-2

ZGZP4-8

## ■ ZGZP… for:

| Plug-in sockets | Relays for plug-in sockets | Interface relays ❹ | |
|---|---|---|---|
| GZP4 | R2N | PIR2-...-PS-... | (R2N + GZP4) |
| | R4N | PIR4-...-PS-... | (R4N + GZP4) |

❹ Interface relay **PIR2** (**PIR4**) is offered as a **set**: electromagnetic relay **R2N** (**R4N**) + plug-in socket **GZP4** + signalling / protecting module type **M...** + retainer / retractor clip **GZP4-0400**.

## ■ Interconnection strips ZGZP…

- designed for the co-operation with plug-in sockets of miniature industrial relays and with interface relays PIR2 and PIR4, which are equipped with screw terminals; sockets and relays are mounted on 35 mm rail mount acc. to EN 60715,

- strip **ZGZP4-8** bridges common input signals (coil terminals A1 or A2), maximum permissible current is 10 A / 250 V AC, possibility of connection of 8 sockets or relays,



**ZGZP4-8 GY** grey     **ZGZP4-8 BK** black     **ZGZP4-8 RD** red     **ZGZP4-8 BE** blue

- strip **ZGZP4-2** bridges common input signals (coil terminals A1 or A2) or output signals, possibility of connection of 2+n sockets or relays,



**ZGZP4-2 GY** grey     **ZGZP4-2 BK** black     **ZGZP4-2 RD** red     **ZGZP4-2 BE** blue
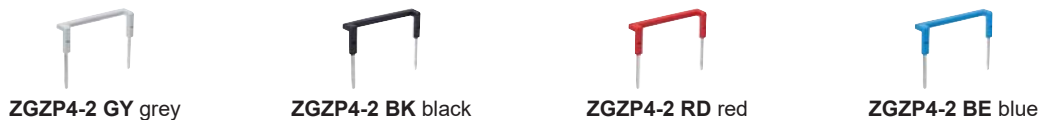
- jumper **ZGZP-2** bridges the neighboring poles of single socket **GZP4**.



**ZGZP-2 GY** grey     **ZGZP-2 BK** black     **ZGZP-2 RD** red     **ZGZP-2 BE** blue

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