

Coil data - DC voltage version

Table 1

| Coil code | Rated voltage U_n V DC | Coil resistance $\pm 10\%$ at 20 °C Ω | Coil operating range V DC | |
|-------------|-----------------------------|--|------------------------------|-----------------|
| | | | min. (at 20 °C) | max. (at 55 °C) |
| 1006 | 6 | 28 | 4,8 | 6,6 |
| 1012 | 12 | 110 | 9,6 | 13,2 |
| 1024 | 24 | 430 | 19,2 | 26,4 |
| 1048 | 48 | 1 750 | 38,4 | 52,8 |
| 1060 | 60 | 2 700 | 48,0 | 66,0 |
| 1110 | 110 | 9 200 | 88,0 | 121,0 |
| 1120 | 120 | 11 000 | 96,0 | 132,0 |
| 1220 | 220 | 37 000 | 176,0 | 242,0 |

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

Coil data - AC 50/60 Hz voltage version (standard for R15 2C/O, R15 3C/O)

Table 2

| Coil code | Rated voltage U_n V AC | Coil resistance $\pm 15\%$ at 20 °C Ω | Coil operating range V AC | |
|-------------|-----------------------------|--|------------------------------|-----------------|
| | | | min. (at 20 °C) | max. (at 55 °C) |
| 5006 | 6 | 4,3 | 4,8 | 6,6 |
| 5012 | 12 | 18,5 | 9,6 | 13,2 |
| 5024 | 24 | 75,0 | 19,2 | 26,4 |
| 5048 | 48 | 305,0 | 38,4 | 52,8 |
| 5060 | 60 | 475,0 | 48,0 | 66,0 |
| 5115 | 115 | 1 840,0 | 92,0 | 126,5 |
| 5120 | 120 | 1 910,0 | 96,0 | 132,0 |
| 5220 | 220 | 6 980,0 | 176,0 | 242,0 |
| 5230 | 230 | 7 080,0 | 184,0 | 253,0 |
| 5240 | 240 | 7 760,0 | 192,0 | 264,0 |

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

Coil data - AC 50 Hz voltage version (standard for R15 4C/O)

Table 3

| Coil code | Rated voltage U_n V AC | Coil resistance $\pm 15\%$ at 20 °C Ω | Coil operating range V AC | |
|-----------|-----------------------------|--|------------------------------|-----------------|
| | | | min. (at 20 °C) | max. (at 55 °C) |
| 3006 | 6 | 4,8 | 4,8 | 6,6 |
| 3012 | 12 | 20,0 | 9,6 | 13,2 |
| 3024 | 24 | 72,0 | 19,2 | 26,4 |
| 3048 | 48 | 360,0 | 38,4 | 52,8 |
| 3060 | 60 | 520,0 | 48,0 | 66,0 |
| 3115 | 115 | 2 100,0 | 92,0 | 126,5 |
| 3120 | 120 | 2 300,0 | 96,0 | 132,0 |
| 3220 | 220 | 7 000,0 | 176,0 | 242,0 |
| 3230 | 230 | 7 900,0 | 184,0 | 253,0 |
| 3240 | 240 | 8 300,0 | 192,0 | 264,0 |

Coil data - AC 60 Hz voltage version (special for R15 4C/O)

Table 4

| Coil code | Rated voltage U_n V AC | Coil resistance $\pm 15\%$ at 20 °C Ω | Coil operating range V AC | |
|-----------|-----------------------------|--|------------------------------|-----------------|
| | | | min. (at 20 °C) | max. (at 55 °C) |
| 6006 | 6 | 4,8 | 4,8 | 6,6 |
| 6012 | 12 | 17,0 | 9,6 | 13,2 |
| 6024 | 24 | 75,0 | 19,2 | 26,4 |
| 6048 | 48 | 310,0 | 38,4 | 52,8 |
| 6060 | 60 | 490,0 | 48,0 | 66,0 |
| 6110 | 110 | 1 760,0 | 88,0 | 121,0 |
| 6120 | 120 | 2 000,0 | 96,0 | 132,0 |
| 6220 | 220 | 6 900,0 | 176,0 | 242,0 |
| 6230 | 230 | 7 000,0 | 184,0 | 253,0 |
| 6240 | 240 | 7 100,0 | 192,0 | 264,0 |

Mounting

Relays R15 2 C/O and R15 3 C/O are offered in version: • standard WT (mechanical indicator + lockable front test button), for plug-in sockets. **In standard version of relays (WT) is possibility self-exchange of button type T for test button R15-M404 (no latching) or plug R15-M203 (no manual operation). Test buttons (no latching) and plugs need to ordered separately.**

Relays **R15 2 C/O** are designed for: • screw terminals plug-in sockets **PZ8** with clip **PZ11 0031**, 35 mm rail mount acc. to PN-EN 60715 or on panel mounting with two M3 screws • screw terminals plug-in sockets **GZU8** with clip **GZU 1052**, 35 mm rail mount acc. to PN-EN 60715 • screw terminals plug-in sockets **GZ8** with clip **GZ 1050**, on panel mounting with two M3 screws • screw terminals plug-in sockets **GZS8**, 35 mm rail mount acc. to PN-EN 60715 or on panel mounting with two M3 screws • screw terminals plug-in sockets **GZP8** with clip **GZP-0054**, 35 mm rail mount acc. to PN-EN 60715 or on panel mounting with two M3 screws • solder terminals sockets **GOP8** with clip **R159 1051** and spring clamp **R15 5922** • direct PCB mounting.

Relays **R15 3 C/O** are designed for: • screw terminals plug-in sockets **PS11** and **PZ11** with clip **PZ11 0031**, 35 mm rail mount acc. to PN-EN 60715 or on panel mounting with two M3 screws • screw terminals plug-in sockets **GZU11** with clip **GZU 1052**, 35 mm rail mount acc. to PN-EN 60715 • screw terminals plug-in sockets **GZ11** with clip **GZ 1050**, on panel mounting with two M3 screws • screw terminals plug-in sockets **GZS11**, 35 mm rail mount acc. to PN-EN 60715 or on panel mounting with two M3 screws • screw terminals plug-in sockets **GZP11** with clip **GZP-0054**, 35 mm rail mount acc. to PN-EN 60715 or on panel mounting with two M3 screws • solder terminals sockets **GOP11** with clip **R159 1051** and spring clamp **R15 5922** • direct PCB mounting.

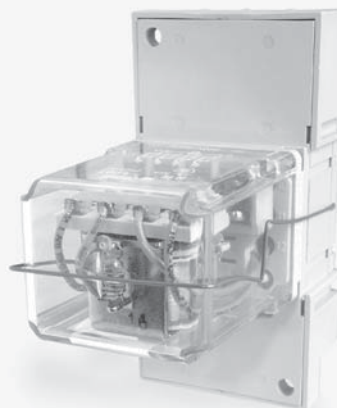
Relays R15 4 C/O are offered in version • in cover, for plug-in sockets.

Relays **R15 4 C/O** are designed for: • screw terminals plug-in sockets **GZ14U** with clip **GZ14 0737**, 35 mm rail mount acc. to PN-EN 60715 • screw terminals plug-in sockets **GZ14** with clip **GZ14 0737**, on panel mounting with two M3 screws • screw terminals plug-in sockets **GZ14Z** with clip **GZ14 0737**, on panel mounting with two M3 screws • solder terminals sockets **GOP14** with clip **R15 0736** and spring clamp **R15 5922**.

NEW product 

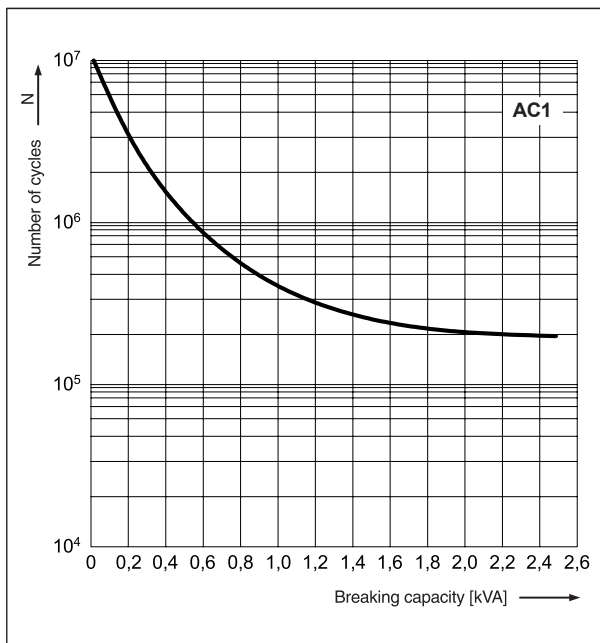
GZ14Z

Screw terminals plug-in socket for R15 4 C/O **to be mounted behind the assembly panel** - see page 247.



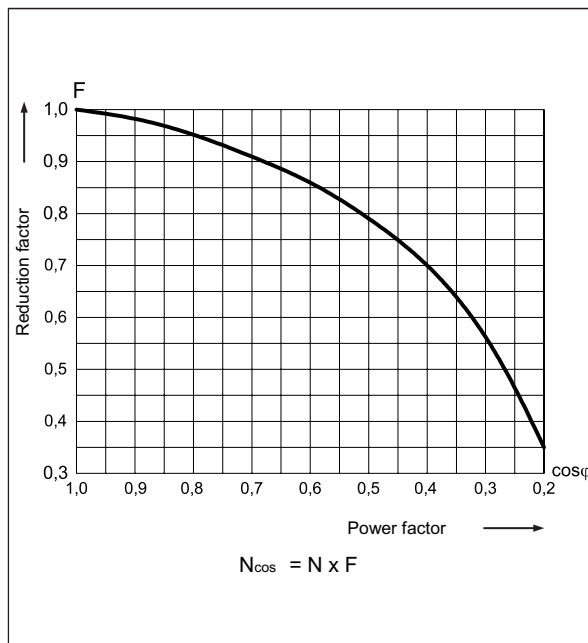
Electrical life at AC resistive load

Fig. 1



Electrical life reduction factor at AC inductive load

Fig. 2

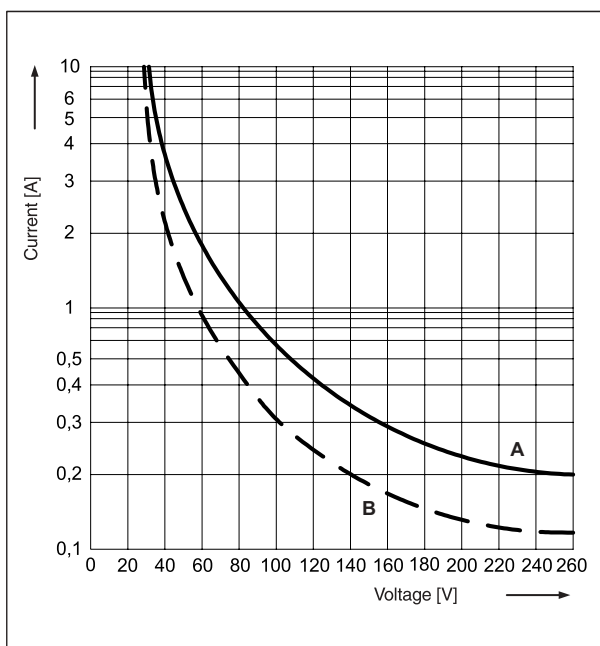


Max. DC breaking capacity

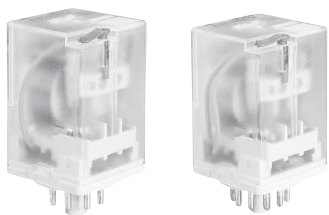
A - resistive load DC1

Fig. 3

B - inductive load L/R = 40 ms









R15 2 C/O, R15 3 C/O in cover, for plug-in sockets



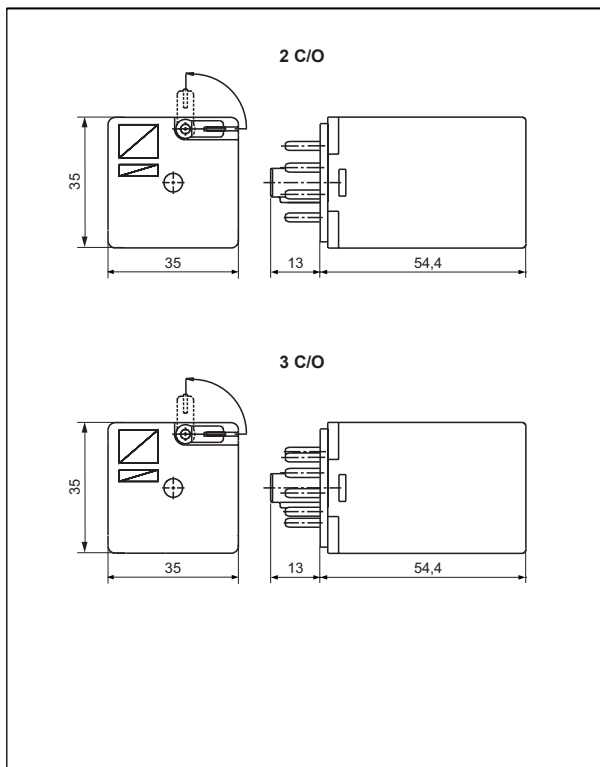
R15 2 C/O

R15 3 C/O

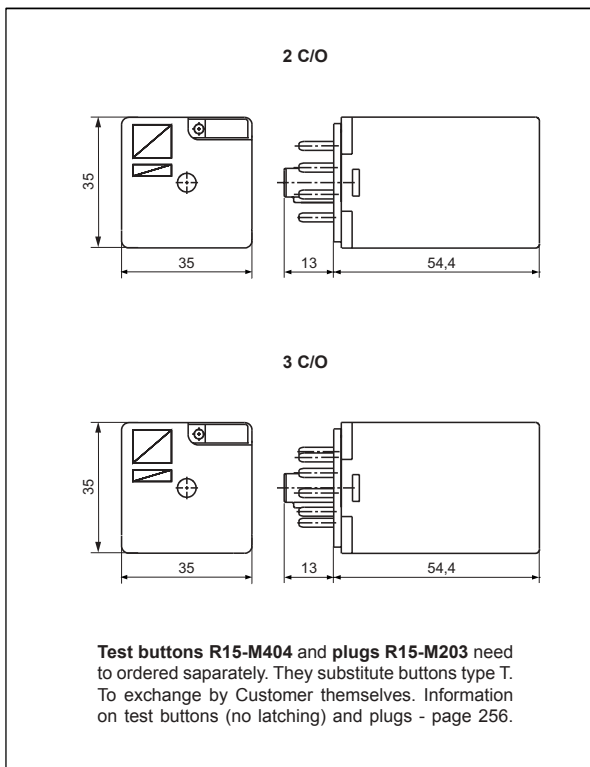
- WT (mechanical indicator + lockable front test button) - standard features of R15 2 C/O, R15 3 C/O relays in cover, for plug-in sockets. Relays may be provided with the test buttons (no latching) and plugs - page 256
- **Have obtained LR Type Approval Certificate (Lloyd's Register) - R15...WT 2 C/O, R15...WT 3 C/O**

• Recognitions, certifications, directives: RoHS,       

Dimensions - plug-in version (WT), with lockable front test button type T

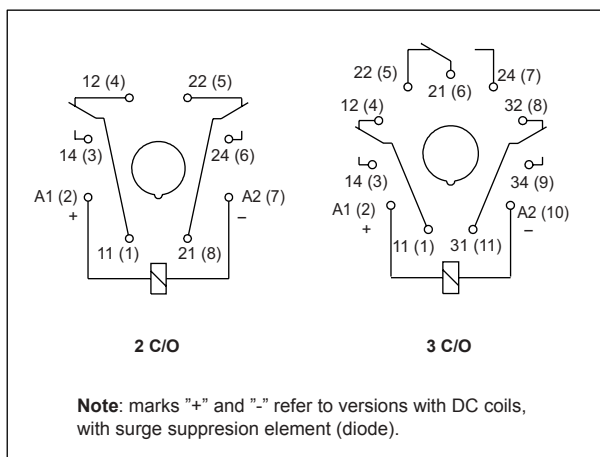


Dimensions - plug-in version, with test button (no latching) or with plug (no manual operation)



Test buttons R15-M404 and plugs R15-M203 need to be ordered separately. They substitute buttons type T. To be exchanged by the Customer themselves. Information on test buttons (no latching) and plugs - page 256.

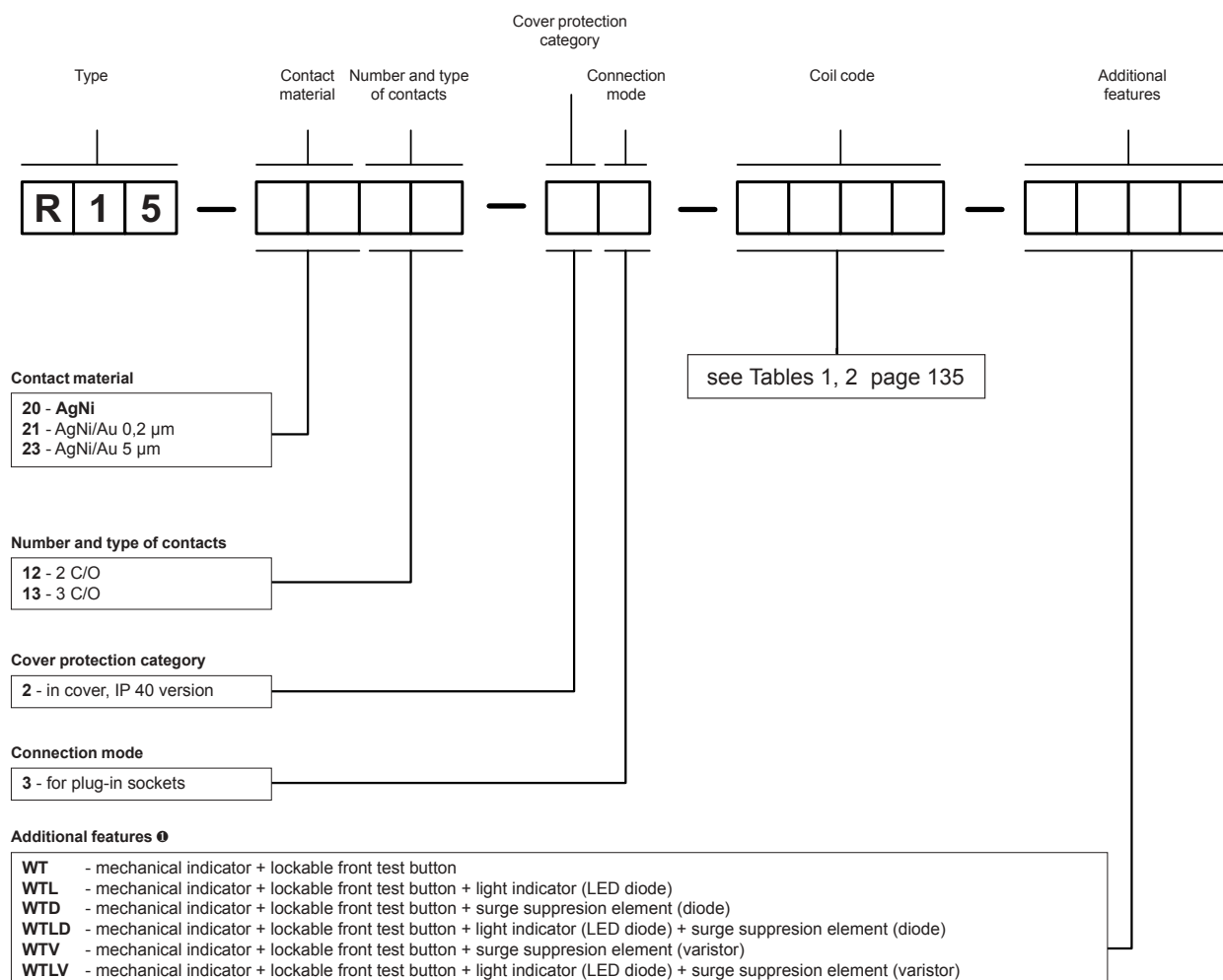
Connection diagrams (pin side view)



Note: marks "+" and "-" refer to versions with DC coils, with surge suppression element (diode).

R15 2 C/O, R15 3 C/O in cover, for plug-in sockets

Ordering codes



❶ WT - standard features of relays for plug-in sockets. WTD, WTLT - only for DC coils, WTV, WTLV - only for AC coils

Test buttons (no latching) and plugs need to be ordered separately. They substitute buttons type T. To be exchanged by the customer themselves. Information on test buttons (no latching) and plugs - page 256.

- Button R15-M404-A - orange colour (AC coils)
- Button R15-M404-D - green colour (DC coils)
- Plug R15-M203-A - orange colour (AC coils)
- Plug R15-M203-D - green colour (DC coils)

Note:

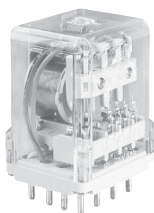
Colour of lockable front test button type T represents type of coil supply current: orange - AC coil, green - DC coil.

Examples of ordering codes:

- R15-2012-23-1024-WT** relay R15, contact material AgNi, with two changeover contacts, in cover IP 40, for plug-in sockets, voltage version 24 V DC, with mechanical indicator and lockable front test button
- R15-2013-23-5230-WTL** relay R15, contact material AgNi, with three changeover contacts, in cover IP 40, for plug-in sockets, voltage version 230 V AC 50/60 Hz, with mechanical indicator and lockable front test button and light indicator (LED diode)

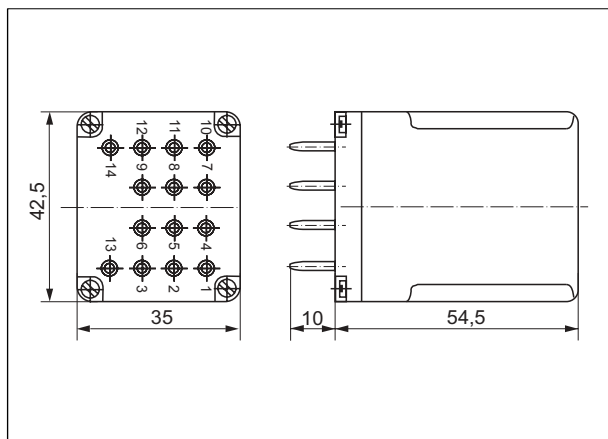
R15 4 C/O in cover, for plug-in sockets

• Recognitions, certifications, directives: RoHS,     

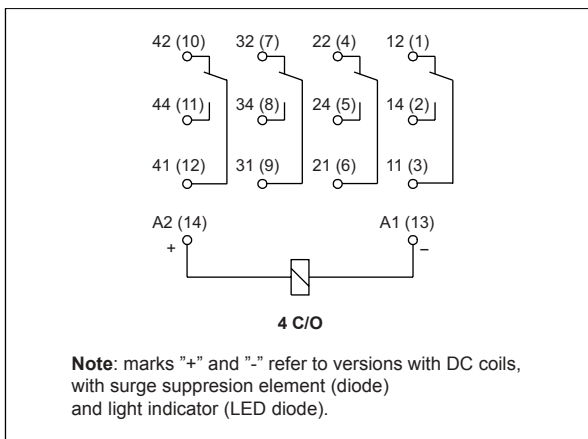


R15 4 C/O

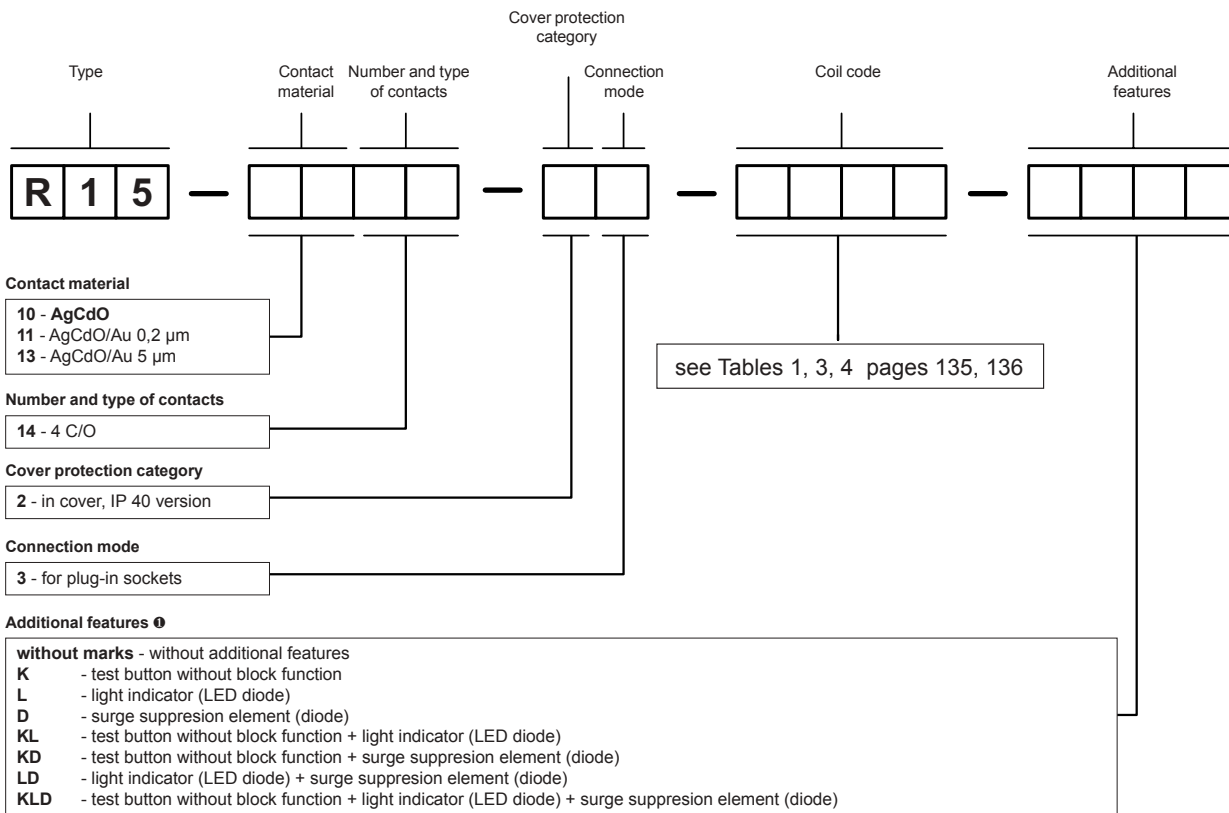
Dimensions



Connection diagram (pin side view)



Ordering codes



ⓘ D, KD, LD, KLD - only for DC coils

Note: for R15 4 C/O relays 50/60 Hz coils are not offered, show coil according with Table 3 or 4, pages 135, 135.

Example of ordering code:

R15-1014-23-3230-K relay R15, contact material AgCdO, with four changeover contacts, in cover IP 40, for plug-in sockets, voltage version 230 V AC 50 Hz, with test button without block function

Plug-in sockets and accessories

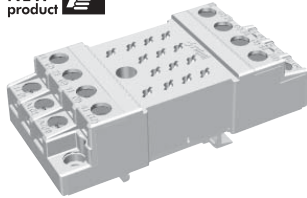
for relays R15 4 C/O

GZ14U

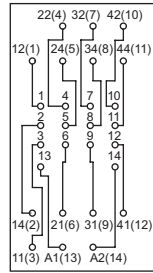
For R15 4 C/O

Screw terminals
Maximum screw torque: 0,7 Nm
35 mm rail mount acc. to PN-EN 60715
96,8 x 46,2 x 33,3 mm
Four poles
10 A, 250 V AC

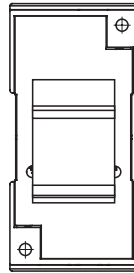
NEW product



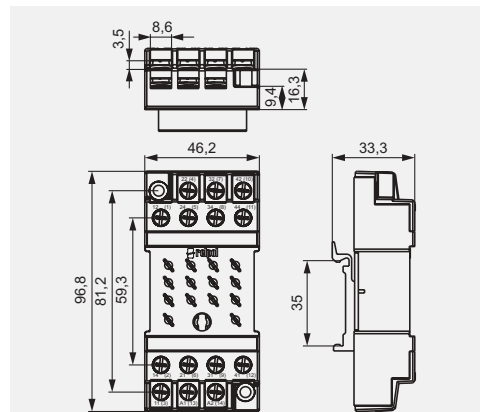
Connection diagram



Adaptor



Dimensions



Accessories

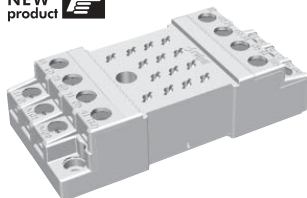
GZ14 0737

GZ14

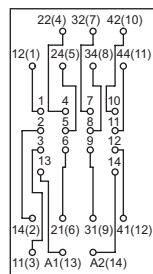
For R15 4 C/O

Screw terminals
Maximum screw torque: 0,7 Nm
On panel mounting
96,8 x 46,2 x 24,5 mm
Four poles
10 A, 250 V AC

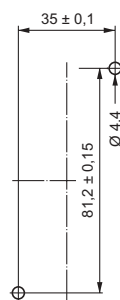
NEW product



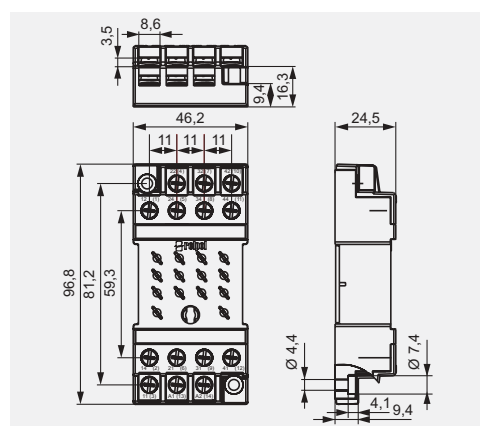
Connection diagram



Mounting dimensions



Dimensions



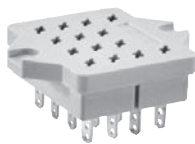
Accessories

GZ14 0737

GOP14

For R15 4 C/O

Solder terminals
50 x 42 x 23 mm
Four poles
10 A, 250 V AC



Accessories

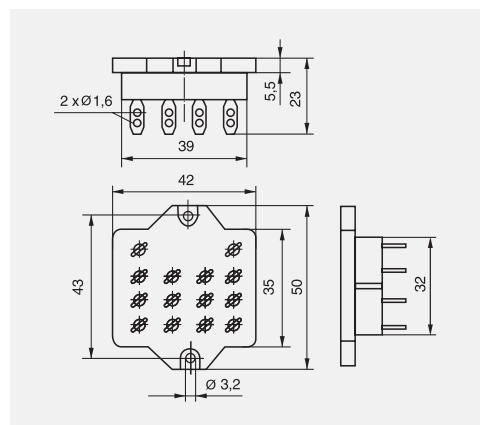


R15 0736



R15 5922

Dimensions



Plug-in sockets and accessories

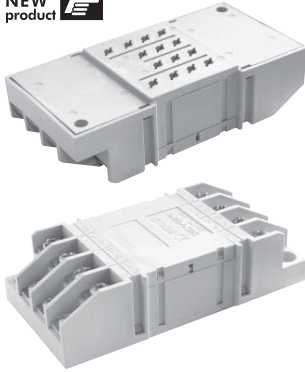
for relays R15 4 C/O

GZ14Z

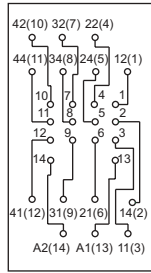
For R15 4 C/O

Screw terminals
 Maximum screw torque: 0,7 Nm
On panel mounting, behind
 92,2 x 46 x 23 mm
 Four poles
 10 A, 250 V AC

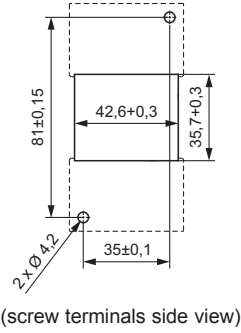
NEW product 



Connection diagram

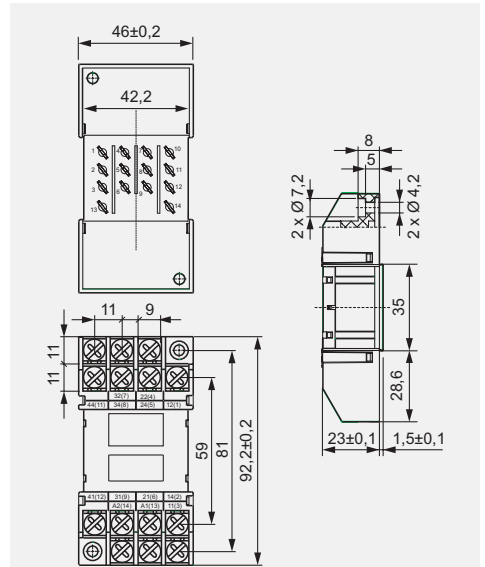


Mounting dimensions



GZ14 0737

Dimensions



Accessories

NEW product 

GZ14Z

Screw terminals
 plug-in socket for R15 4 C/O
**to be mounted behind
 the assembly panel.**

