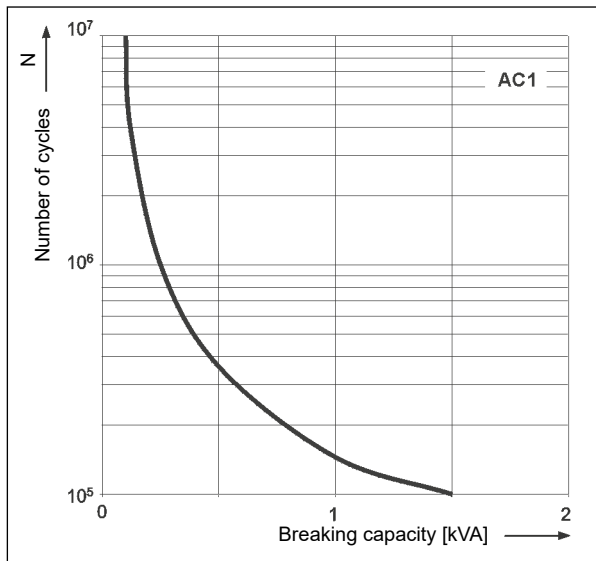


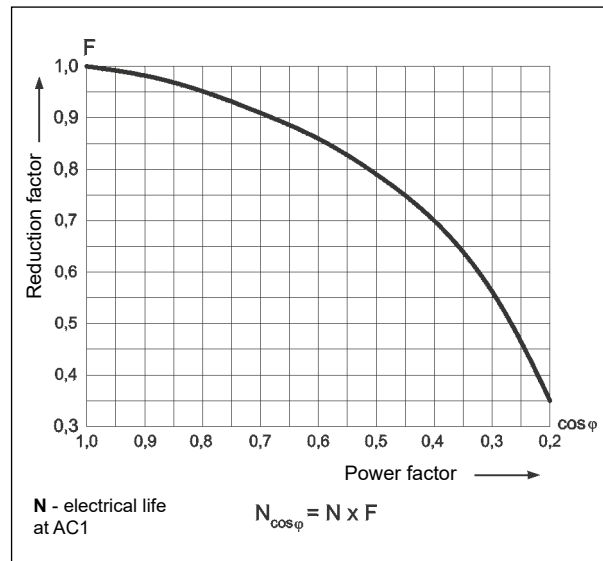
**Electrical life at AC resistive load.**  
Switching frequency: 1 200 cycles/hour

Fig. 1



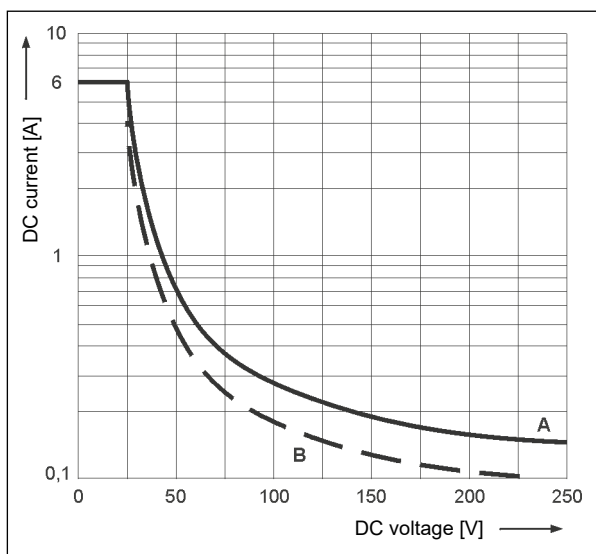
**Electrical life reduction factor at AC inductive load**

Fig. 2

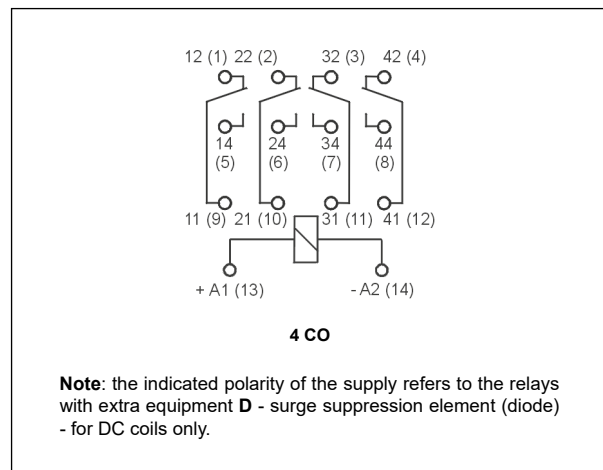


**Max. DC breaking capacity**  
A - resistive load DC1  
B - inductive load L/R = 40 ms

Fig. 3



**Connection diagram (pin side view)**



**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.

**NEW TECHNOLOGY**

The new R2N, R3N, R4N relays are modernized versions of the R2, R3, R4 relays. The modernization covered the design of the relays and the manufacturing process.



## Mounting

Relays R4N are offered in versions: • for plug-in sockets • for PCB. With WT features 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.

Relays R4N are designed for: • screw terminals plug-in sockets GZT4 ① and GZM4 ① with clip GZT4-0040 or G4 1052, 35 mm rail mount acc. to PN-EN 60715 or on panel mounting with two M3 screws • spring terminals plug-in sockets GZMB4 ② with clip GZMB4-0040 or G4 1052, 35 mm rail mount acc. to PN-EN 60715. Signalling / protecting modules type M... are available with sockets (see page 9) • screw terminals plug-in sockets GZ4 with clip G4 1052 or plug-in sockets GS4 with clip GS4-0036, 35 mm rail mount acc. to PN-EN 60715 or on panel mounting with two M3 screws • plug-in sockets for PCB mounting SU4D with clip G4 1053 • solder terminals sockets SU4L with clip G4 1053 and spring clamp G4 1040 • solder terminals sockets G4 with clip G4 1053 • direct PCB mounting.

① Plug-in sockets GZT4, GZM4 may be linked with interconnection strip type ZGGZ4 (see page 10). ② For sockets GZMB4 - see page 6 (wire connection).

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
<b>1012</b>	<b>12</b>	<b>160</b>	<b>± 10%</b>	<b>9,6</b>	<b>13,2</b>
<b>1024</b>	<b>24</b>	<b>640</b>	<b>± 10%</b>	<b>19,2</b>	<b>26,4</b>
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
<b>1220</b>	<b>220</b>	<b>54 000</b>	<b>± 10%</b>	<b>176,0</b>	<b>242,0</b>

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
<b>5024</b>	<b>24</b>	<b>158</b>	<b>± 10%</b>	<b>19,2</b>	<b>26,4</b>
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
<b>5230</b>	<b>230</b>	<b>16 100</b>	<b>± 10%</b>	<b>184,0</b>	<b>253,0</b>
5240	240	16 800	± 10%	192,0	264,0

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