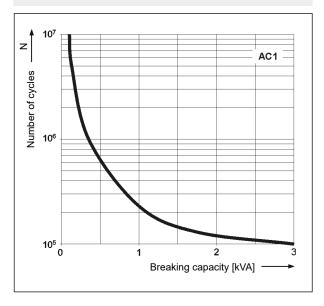
# miniature industrial relays

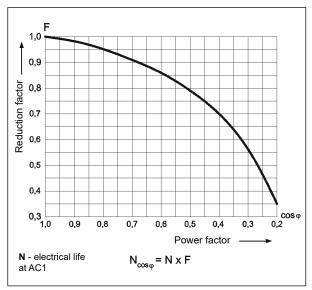
Fig. 1

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

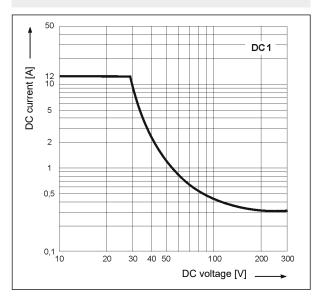


## Electrical life reduction factor at AC inductive load

Fig. 2



#### Max. DC resistive load breaking capacity Fig. 3



## Mounting

Relays R2N are offered in versions: • for plug-in sockets. 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 saparately.

Relays R2N are designed for: • screw terminals plug-in sockets GZT2 • and GZM2 • 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 GZMB2 • 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) • plug-in sockets for PCB mounting SU4/2D with clip G4 1053 • solder terminals sockets SU4/2L with clip G4 1053 and spring clamp G4 1040 • solder terminals sockets G4/2 with clip G4 1053.

#### 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.
- Plug-in sockets GZT2, GZM2 may be linked with interconnection strip type ZGGZ4 (see page 10).
- Professional For sockets GZMB2 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
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.

#### **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.



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