

# R15 POWER INDUSTRIAL RELAY

## COIL DATA

Rated voltage	6...220 V DC 6...240 V AC 50Hz, 50/60Hz
Must release voltage	0,1 U <sub>n</sub> (DC) 0,15 U <sub>n</sub> (AC)
Operating range of supply voltage	see tables below
Rated power consumption	1,5 W (DC) 2,5 VA (AC)



## Coil data - DC version

Coil code	Rated voltage V DC	Coil resistance +/- 10% at 20°C, Ohm	Operating range of supply voltage at 20°C, 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	1750	38.4	52.8
1060	60	2700	48	66
1110	110	9200	88	121
1120	120	11000	96	132
1220	220	37000	176	242

## Coil data - AC 50 Hz version

Coil code	Rated voltage V AC	Coil resistance +/- 15% at 20°C, Ohm	Operating range of supply voltage at 20°C, V AC	
			min. (at 20°C)	max. (at 55°C)
3006	6	5.3	4.8	6.6
3012	12	20	9.6	13.2
3024	24	88	19.2	26.4
3048	48	360	38.4	52.8
3060	60	510	48	66
3110	110	2000	88	121
3120	120	2300	96	132
3220	220	7200	176	242
3230	230	7900	184	253
3240	240	8300	192	264

## Coil data - AC 50/60Hz version

Coil code	Rated voltage V AC	Coil resistance +/- 15% at 20°C, Ohm	Operating range of supply voltage at 20°C, 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	19.2	26.4
5048	48	305	38.4	52.8
5060	60	475	48	66
5110	110	1700	88	121
5120	120	1910	96	132
5220	220	6980	176	242
5230	230	7080	184	253
5240	240	7760	192	264

## CONTACTS DATA

Contact number & arrangement  
Contact material

2C/O, 3C/O  
AgNi  
AgNi/Au 0,2µm  
AgNi/Au 5µm

### Voltage

Max. switching voltage AC/DC  
Min. switching voltage AC/DC

250 V / 250 V  
5 V (AgNi/Au 5µm)  
10 V (AgNi, AgNi/Au 0,2µm)

### Current

Rated load AC1  
DC1  
Min. switching current  
Max. inrush current  
Rated current  
Max. breaking capacity  
Resistance

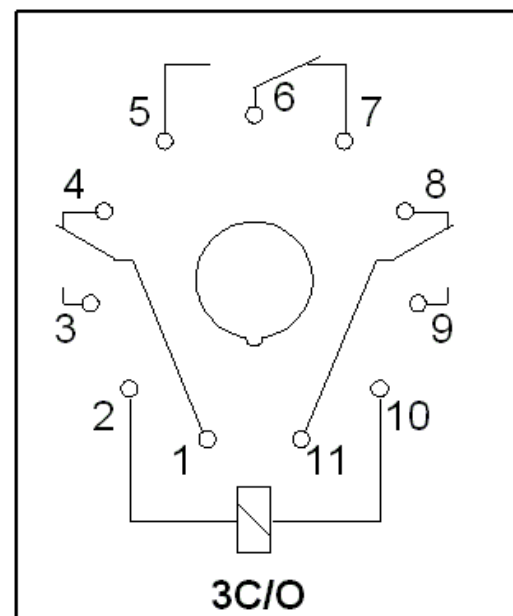
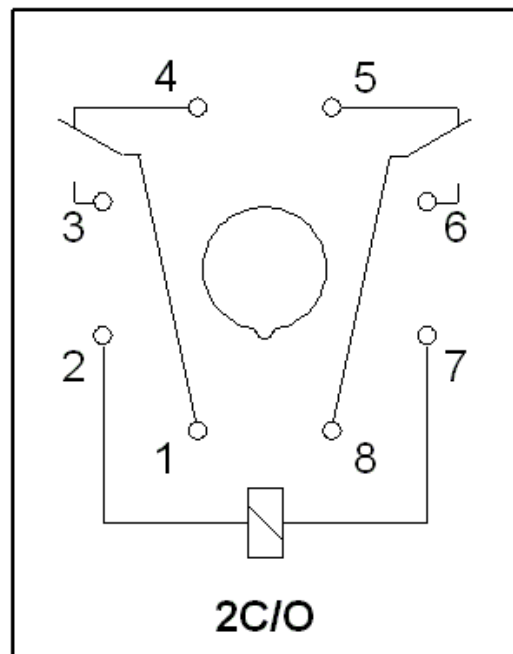
10 A / 250 V AC  
10 A / 24 V DC  
50 mA  
20 A  
10 A  
2 500 VA  
< 100 mW at 100 mA, 24 V

### Max. operating frequency

at rated load  
no load

1 200 cycles/hour  
12 000 cycles/hour

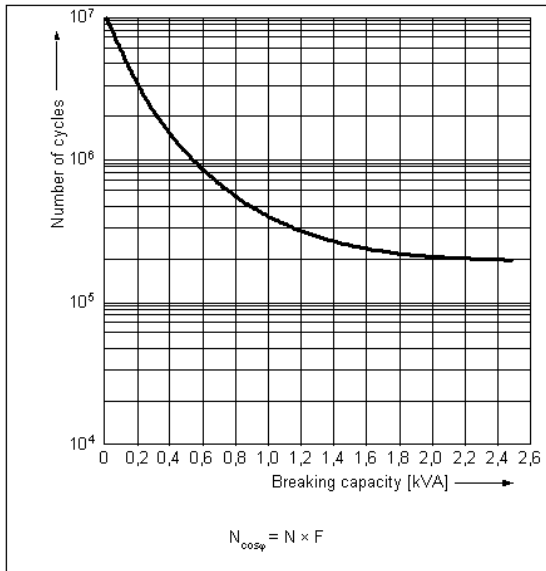
## Connections Diagram (pin side view)



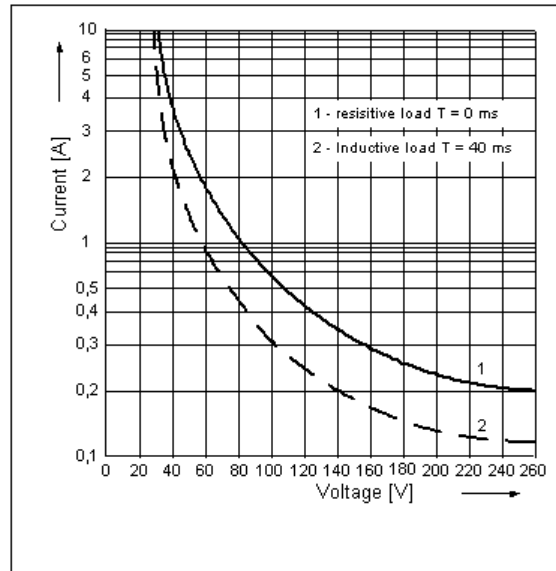
### INSULATION DATA

Insulation category	C250
<b>Voltage</b>	
Insulation rated voltage	250 V AC
Dielectric strength	
coil-contact	2 500 V AC
contact-contact	1 500 V AC
pole-pole	2 000 V AC
<b>Contact-coil distance</b>	
clearance	> 3 mm
creepage	> 4,2 mm

### ELECTRICAL LIFE AT AC RESISTIVE LOAD



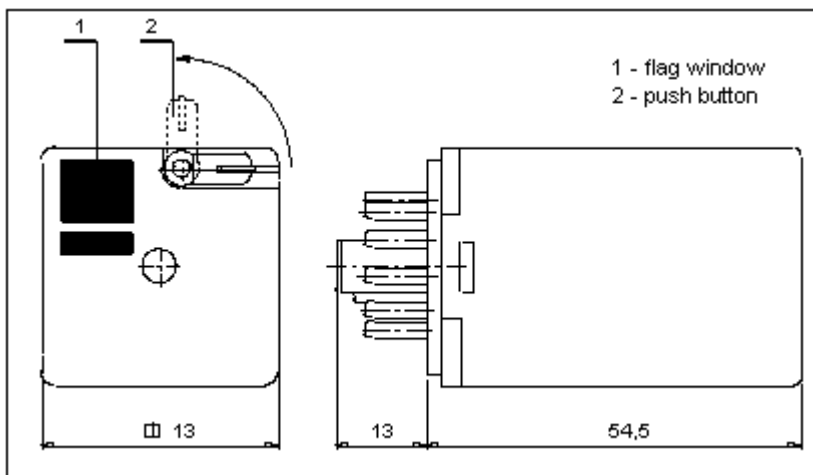
### MAX. DC RESISTIVE LOAD BREAKING CAPACITY



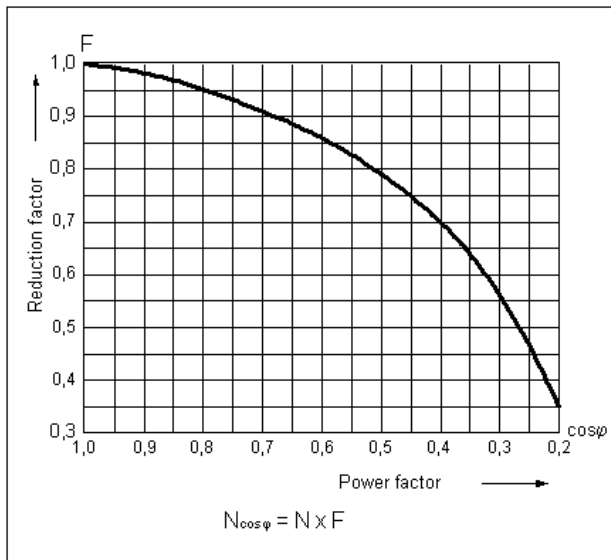
### GENERAL DATA

Operating time (typical values)	12 ms (AC), 18 ms (DC)
Release time (typical values)	12 ms (AC), 7 ms (DC)
<b>Electrical life</b>	
resistive	$2 \times 10^5$ at 10 A, 250 V AC
cos φ	see diagram
Mechanical life (cycles)	$2 \times 10^7$
Dimensions (L x W x H)	35 x 35 x 54,4 mm
Weight	83 g
<b>Ambient temperature</b>	
storing	-40...+85°C
operating	-40...+70°C
Cover protection category	IP40
Shock resistance	10 g
Vibration resistance	5 g at 10...150 Hz

### DIMENSIONS



**ELECTRICAL LIFE REDUCTION FACTOR AT AC INDUCTIVE LOAD**



**MOUNTING:**

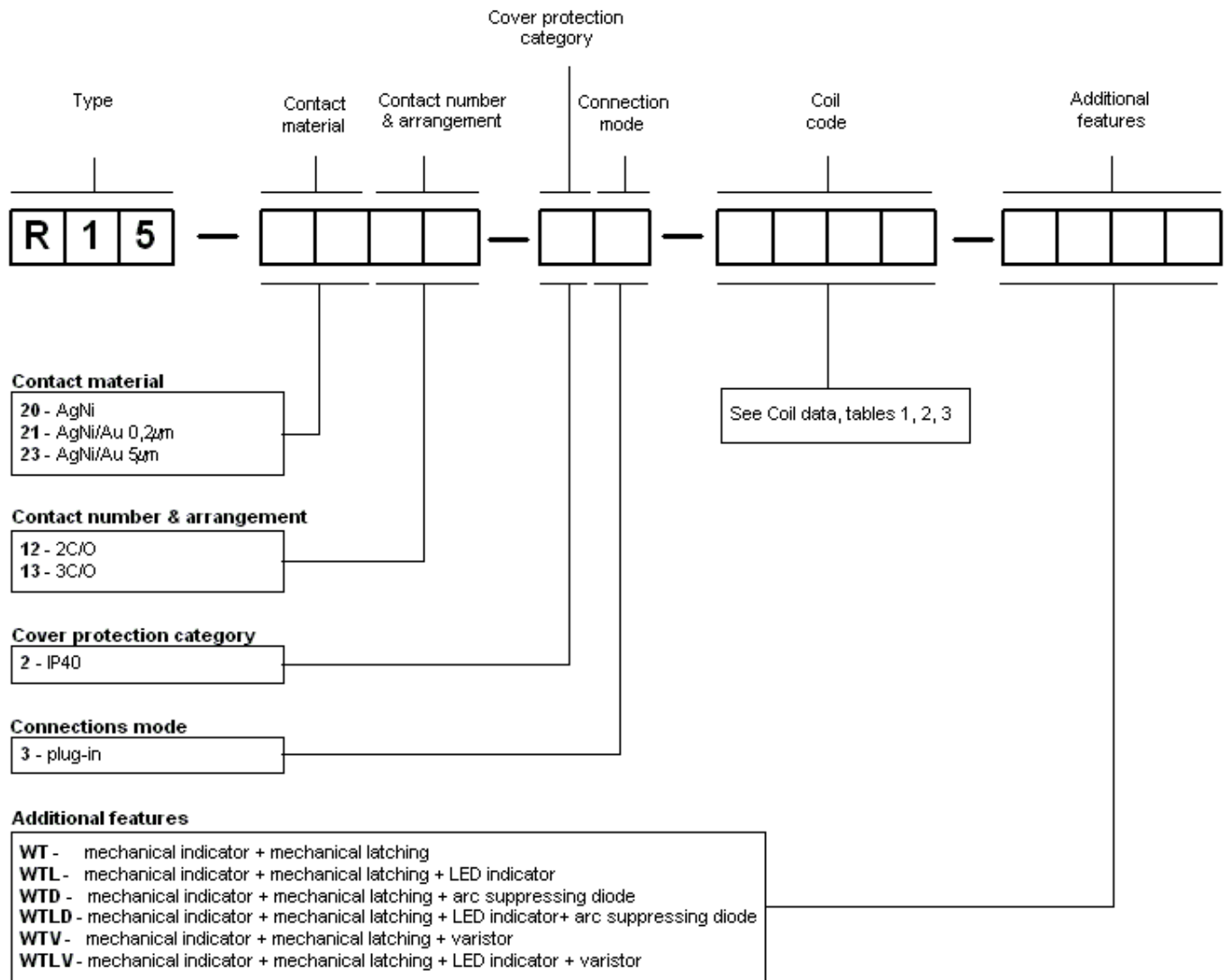
**R15 relays with 2C/O contacts:**

- solder terminals sockets GOP8 (clip R159 1051)
- DIN rail mount socket with screw terminal PZ8 (clip PZ11 0031), GZ8 (clip GZ 1050) and GZU8 (clip GZU 1052)

**R15 relays with 3C/O contacts:**

- solder terminals sockets GOP11 (clip R159 1051),
- DIN socket with screw terminal PZ11(clip PZ11 0031), PS11(clip PZ11 0031), GZ11 (clip GZU 1050), GZU11 (clip GZU 1052).

**HOW TO ORDER R15 RELAY: ORDERING CODES**



WTD, WTL D, WKD, WKLD - only for DC coils  
WTV, WTLV -only for AC coils