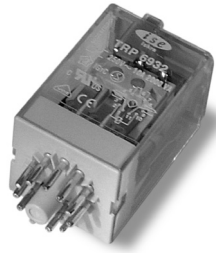


**TRP 68 - 69
Power Relays**



- Monostable, neutral relay
- DC or AC coils
- High switching power
- 8 or 11 pins terminals
- Single or double flag for switch indication
- LED for switch indication
- Manual test key
- Protection diode for DC types
- VDE, UL, CE Approvals

Technical data

Characteristics

- Contact Material: AgNi 10
- Rated Current: 10A
- Max. Switch-on Current: 20A (4 s, 10% duty cycle)
- Max. Operating Voltage: 250VAC VDC
- Max. Switching Power: 2500VA 400W
- Min. Switching Load: 12VAC 100mA
- Contact Resistance: $\leq 100 \text{ m}\Omega$ (New relay)
- Max. Operating Frequency:
1000 operations/h rated load 36000 operations/h min. load
- Mechanical Life: $> 10^7$ operations
- Electrical Life: See diagram
- Rated Power: abt. 1.3 W 2 VA
- Operate Power: abt. 0.8 W 1.2 VA
- Max. Coil Temperature: 155°C
- Thermal Coil Resistance: 50 K / W
- Operate Voltage: $U_{op} \leq 80\% U_n$
- Release Voltage: $U_{re} \geq 10\% U_n$ (DC) - $U_{re} \geq 15\% U_n$ (AC)
- Operative Range: 1 (EN 61810-1)
- Test Voltage (1 min.): contact-coil $\geq 2 \text{ kV rms } 50 \text{ Hz}$
contact-contact $\geq 1 \text{ kV rms } 50 \text{ Hz}$
between contact sets $\geq 2 \text{ kV rms } 50 \text{ Hz}$
- Operate Time at U_n : $\leq 15 \text{ ms}$
- Release Time: $\leq 15 \text{ ms}$
- Bounce Time: $\leq 5 \text{ ms}$
- Insulation Resistance (500 VDC): $> 10^9 \text{ M}\Omega$
- Vibration Resistance (10–55Hz): $3 g_n$
- Shock Resistance (11 ms): functional $10 g_n$
destructive $100 g_n$
- Ambient Temperature: operating $-25^\circ\text{C}/+50^\circ\text{C}$,
storage $-40^\circ\text{C}/+80^\circ\text{C}$
- Protection Degree: IP 50, EN60529
- Insulation Class: 3-250 IEC 60669-1
- Mounting Position: as desired, relay distance 10 mm
- Relay Weight: 85 g

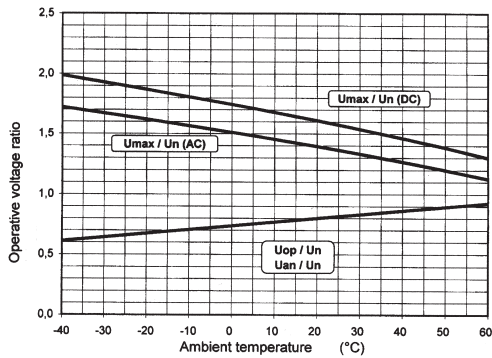
Coil data at 20 °C

Coil Rated Voltage U_n (V)	Coil Resistance			Operative Voltage Range		
	DC	50 Hz	60 Hz	Operate $U_{op} \leq$ (V)	U_{MAX} DC \leq (V)	U_{MAX} AC \leq (V)
	$R_n(\Omega) \pm 10\%$					
6	28	5.7	5	4.8	9	9.5
12	110	25	20	9.6	18	19
24	440	100	80	19.2	36	38
48	1740	400	320	38.4	73	76
60	2750	630	510	48	91	95
110	9000	2000	1750	88	168	174
220	36000	7700	7000	176	336	349
230	39000	8800	7500	184	351	365

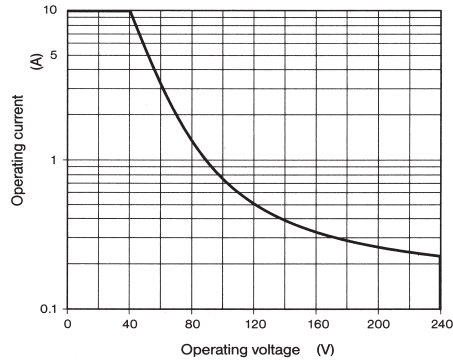
Ordering information

	TPR 6	X	X	X	XXX XXXX
Basic designation					
8 - 8 terminal pins 9 - 11 terminal pins					
Number of change-over contacts: 1 or 2 for TRP 68, 3 for TRP 69					
1 - Relay with test key 2 - Relay with test key and 1 flag 3 - Relay with test key and 2 flag 4 - Relay with test key and LED 5 - Relay with test key, LD and flag Relays with DC coil 6 - Relay with test key and protection diode 7 - Relay with test key, 1 flag and protection diode 8 - Relay with test key, 2 flags and protection diode 9 - Relay with test key, LED and protection diode 0 - Relay with test key, 1 flag, LED and protection diode					
Rated voltage of coil: Type of voltage DC 50 Hz 60 Hz					

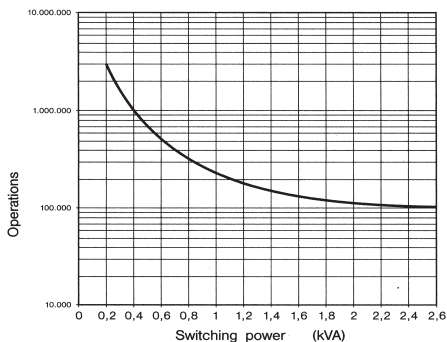
Operative voltage range



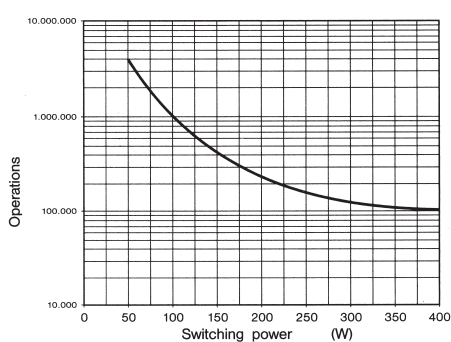
Max. switching capacity, resistive DC load



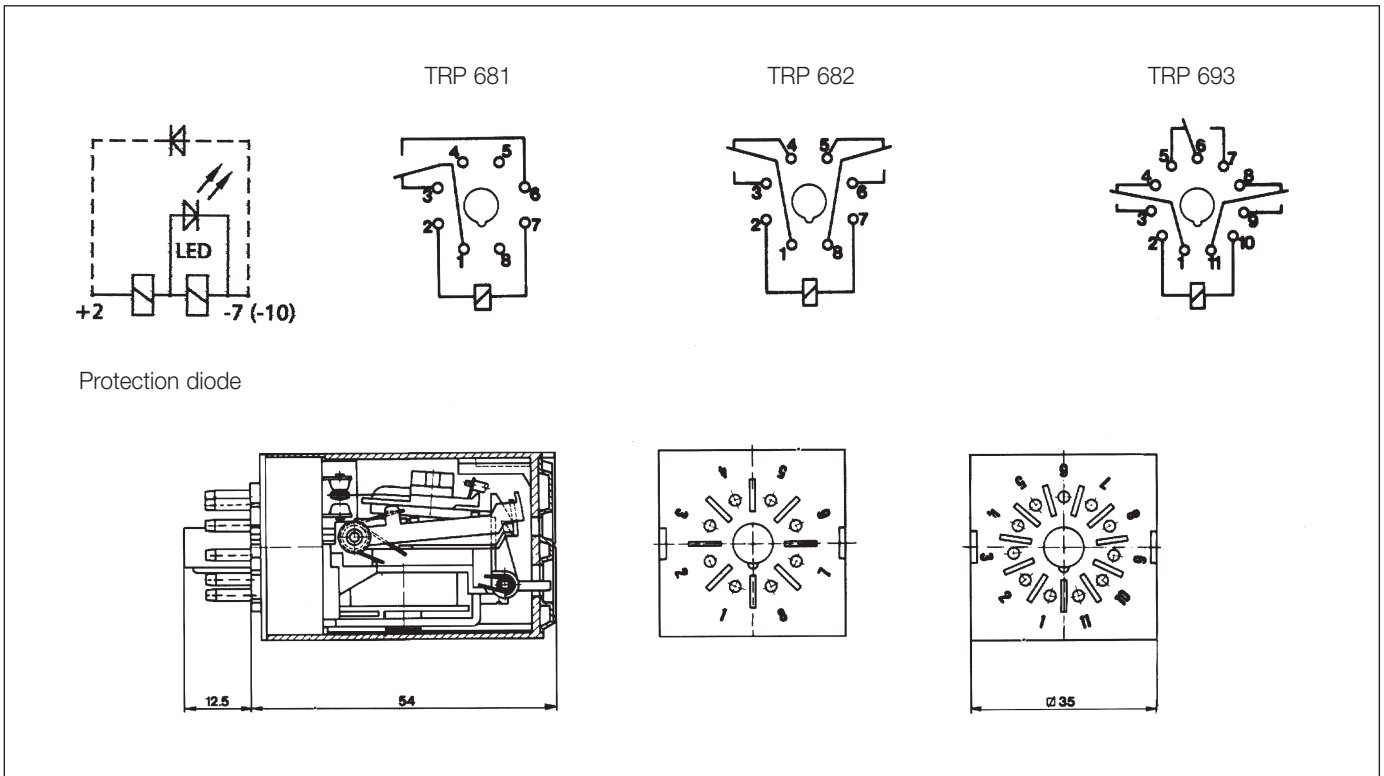
Electrical life, resistive AC load



Electrical life, resistive DC load



Dimensions and Terminals Layout in mm



Accessories

