

**TRP 651 - 652
Universal Power
Relays**



- Monostable, neutral relay
- DC or AC coil
- High switching power
- Sockets and accessories
- VDE, UL, CE Approvals

Technical data

Characteristics

- Contact Material: AgNi 10
- Rated Current: TRP 652 16A - TRP 651 25A
- Max. Switch-on Current: TRP 652 32A (4 s, 10% duty cycle)
TRP 651 50A (4 s, 10% duty cycle)
- Max. Operating Voltage: 250VAC
- Max. Switching Power: TRP 652 4000VA
TRP 651 6000VA
- 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 EN61810-1
- 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 : $\geq 20 \text{ ms}$
- 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 40, EN60529
- Insulation Class: 3-250, IEC 60664-1
- Mounting Position: as desired, relay distance 10 mm
- Relay Weight: 80 g

Coil data at 20 °C

Coil Rated Voltage U_n (V)	Coil Resistance $R_n(\Omega) \pm 10\%$			Operative Voltage Range		
	DC	50 Hz	60 Hz	Operate $U_{op} \leq$ (V)	$U_{MAX DC}$ \leq (V)	$U_{MAX AC}$ \leq (V)
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	5	X	XXX XXXX
Basic designation				
Type of terminals: 5 - Faston terminals or socket				
Number of change-over contacts: 1 or 2				
Rated voltage of coil				

Relay

TRP 651 - Relay with one CO contacts for current up to 25A
 TRP 652 - Relay with two CO contacts for current up to 16A

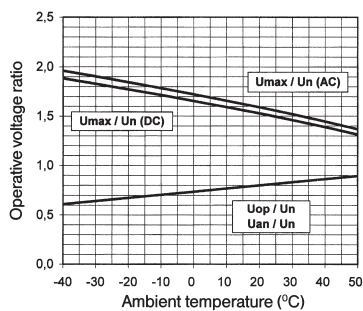
Relay Mounting

TRP 651 - TRP 652
 - with two screws B2.2x6.5 DIN7971 directly via cover or via bracket TLK 1041 to the plate
 - with adapter TLK 1042 on the rail 35 mm

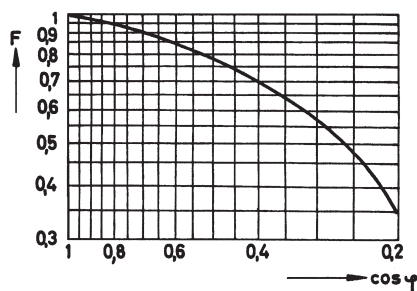
Relay connection

TRP 651 - TRP 652
 - for faston terminals 6.3x0.8 mm bracket TLK 1041
 - direct soldering of wire to the terminals of relay adapter TLK 1042

Operative voltage range

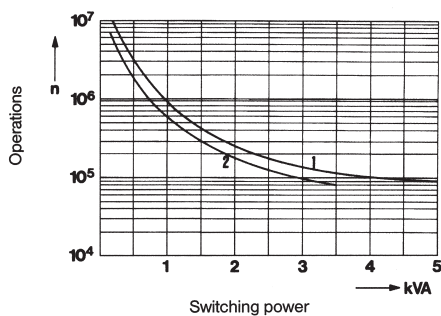


Reduction factor

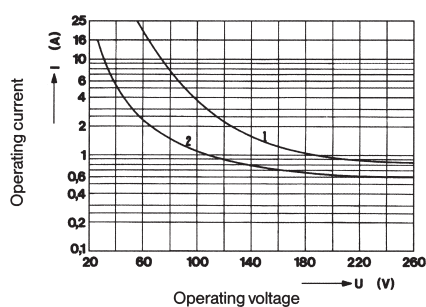


Operations eff. = operations (cosφ = 1) x F

Electrical life, resistive AC load

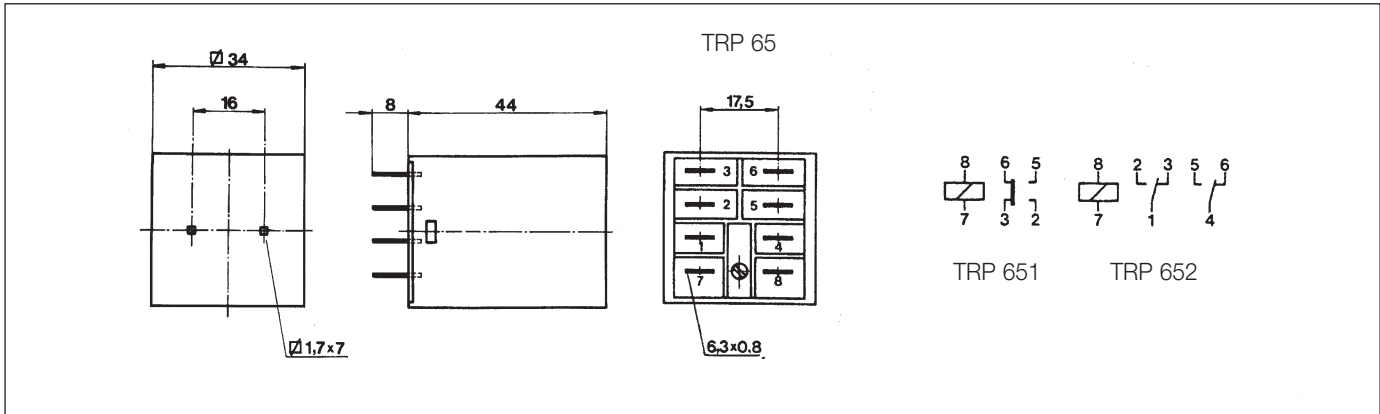


Max. switching capacity, DC load



1-TRP651
2-TRP652

Dimensions and Terminals Layout in mm



Accessories

