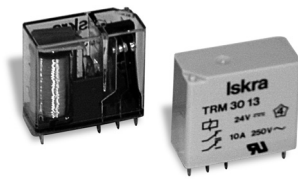


## TRM 30

Relay for printed circuits with socket



- 6Amps and 10Amps 250VAC
- High Insulation Resistance
- High Switching Capacity
- Low Coil Consumption

### Technical data

#### Characteristics

- Contact Form: 2 Change-over, 2 Make, 2 Break
- Contact Material: For TRM3001 to TRM3003 AgNi10 (Gold-plated on request)  
For TRM3011 to TRM3013 AgCdO
- Rated Current: 6A TRM3001 to TRM3003  
10A TRM3011 to TRM3013
- Max. Switch-on current: 10A TRM3001 to TRM3003  
20A TRM3011 to TRM3013
- Rated Voltage acc. to VDE: 250VAC
- Max. Operating Voltage: 380VAC
- Max. Switching Power: 1500VA TRM3001 to TRM3003  
2500VA TRM3011 to TRM3013
- Min. Permissible Load: 5VDC 100mA
- Electrical Life: 5x10<sup>4</sup> operations TRM3001 to TRM3003  
3x10<sup>4</sup> operations TRM3011 to TRM3013
- Operating Frequency-Rated Load:  
1200 operations/h TRM3001 to TRM3003  
600 operations/h TRM3011 to TRM3013
- Excitation Data:  $U_{t \min.} = K_1 U_{\min.} 20^\circ\text{C}$   
 $U_{t \max.} = K_2 U_{\max.} 20^\circ\text{C}$
- Test Voltage: contact-coil > 4 kVrms  
open-contacts > 1 kVrms  
contacts systems > 2.5 kVrms
- Creepage Distances: contact-coil > 8 mm
- Insulation Resistance: > 10<sup>9</sup> MΩ (New Relay)Ω
- Ambient Temperature: operating -25°C/+55°C,  
storage -40°C/+85°C
- Mechanical Life: > 10<sup>7</sup> operations
- Make Time at Un (bounce incl.): < 15ms
- Break Time (bounce incl.): < 10ms
- Resistance to Shocks (11ms): safe operation 10 G  
endurance 100 G
- Resistance to Vibrations:  
10 G, 10 to 55 Hz, (contact interruption < 10 μs)
- Protection Degree: IP 67, IEC 529
- Seal Test: Qc/2, IEC68-2-17
- Enclosure Nonflammability: V-O UL 94
- Pick-up Class: b, IEC 255-1-00
- Mounting Position: optional, mounting distance is 5 mm
- Relay Weight: abt. 17 g

Factor \ °C	40	-20	0	+20	+40	+60
K <sub>1</sub>	0.76	0.84	0.92	1	1.08	1.16
K <sub>2</sub>	1.19	1.16	1.08	1	0.88	0.75

- Nominal Coil Power: standard version 0.6W to 0.8W  
sensitive version 0.5W to 0.6W
- Permanent Thermal Coil Power: 1.5W
- Pick-up Voltage:  $U_{pi.} \leq 80\% U_n$
- Drop-out Voltage:  $U_{dr.} \geq 10\% U_n$
- Max. Coil Temperature: 130°C
- Operative Range: class 1, IEC 255-1-00

**Coil data at 20 °C**

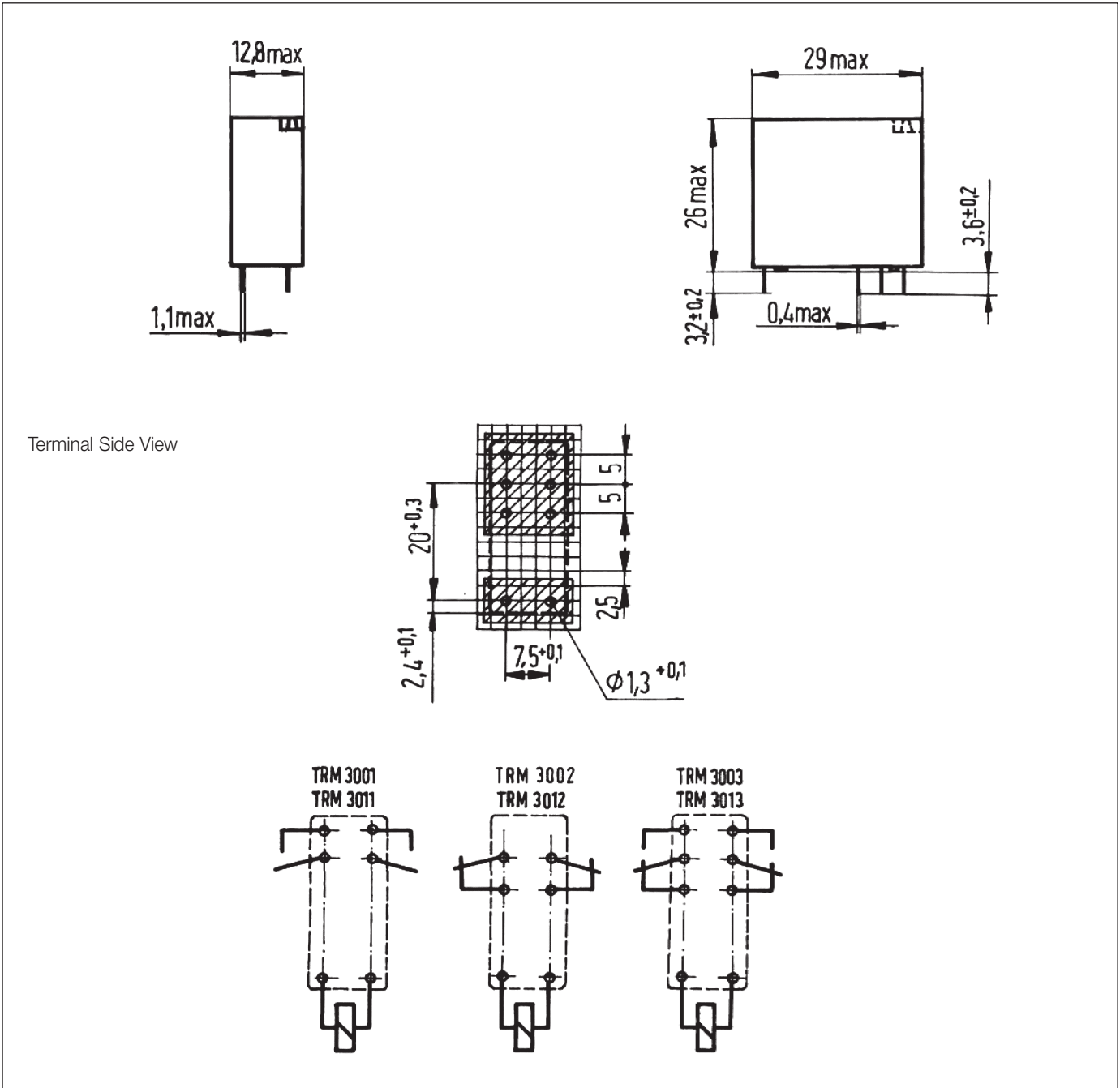
Coil				Operating Voltage Range		
Designation	Resistance Rn(Ω)	Rn ± %	Rated Current (mA)	Umin. (V)	Un (V)	Umax. (V)
<b>Standard Versions</b>						
05	42	10	119	3.7	5	7.3
06	60	10	100	4.5	6	9
09	120	10	75	6.7	9	12.7
12	215	10	55,8	9	12	16.5
18	500	10	36	13.5	18	24
24	875	10	27,4	18	24	34
36	1800	10	20	27	36	48
48	3300	15	14,5	36	48	61
60	5200	15	11,5	45	60	76
110	16000	15	6,9	82.5	110	138
<b>Sensitive Versions</b>						
F05	53	10	94,3	4	5	8.4
F06	70	10	85,7	4.8	6	9.7
F09	160	10	56,2	7.2	9	14.6
F12	280	10	42,8	9.6	12	19.4
F18	650	10	27,7	14.4	18	29
F24	1100	10	21,8	19.2	24	37
F36	2500	10	14,4	28.8	36	56
F48	4400	15	10,9	33.4	48	75
F60	6800	15	8,8	48	60	93
F110	20000	15	5,5	88	110	170

Other versions available on request.

**Ordering information**

	TRM 30	X	X	XXX V <sub>DC</sub>	X
General relay designation					
Contact material: 0 - AgNi10 (6A) 1 - AgCdO (10A) 2 - AgNi10 + 0,2 μm Au					
Contact form: 1 - 2 Make (NO) 2 - 2 Break (NC) 3 - 2 Change-over (CO)					
Designation of coil, eg. 24 or F24					
D-Dusttight					

Dimensions and Terminals Layout in mm



According to VDE 0435/26 standards, no conductive ways are allowed on double side PC Board inside hatched surfaces around terminals.