### TRK 22 Miniature Signal Relay



- 0.2 W, 0.3 W, 0.55 W rated coilpower
- 3 A, 230 VAC, 220 VDC max. contact load
- Two charge-over, twin cross contacts
- Ambient temperature up to +70°C
- Direct instalation on PCB
- Washable version Qc/2
- Extinguishable casing V-0

#### **Technical data**

#### Characteristics

- Relay type: TRK 2233 TRK 2243
- Rated Current: 2A and 3A
- Contact Material: 2A AgPd30, AuAg8 3A AgNi10, AuAg8
- Form: 2 change-over
- Contact Type: twin cross contacts
- Max. Operating Voltage: 230VAC, 220VDC
- Max. Switching Power: 120VA, 60W (see diagram)
- Min. Switching Load: 10µA, 10 mVDC
- Contact Resistance:  $\leq$  50 m $\Omega$  10 mA 30 mVDC (New relay)
- Max. Operating Frequency:
  - 1800 operations/h rated load 36000 operations/h min. load
- Capacitance cont-cont: ≤ 1,5 pF
- Mechanical Life: ≥ 2x10<sup>7</sup> operations
- Electrical Life: See diagram
- Rated Power: high sensitive-H abt. 0.2 W

sensitive-F abt. 0.3 W standard abt. 0.55 W

- Max. Coil Temperature: 155°C
- Thermal Coil Resistance: high sensitive-H abt. 250 K / W sensitive-F abt. 200 K / W

standard abt. 150 K / W

Startuaru abt. 150 K / W

- Operate Voltage: high sensitive-H Uop  $\leq$  78% Un

sensitive-F Uop ≤ 76% Un

standard Uop ≤ 70% Un

- Release Voltage: Ure ≥ 10% Un
- Operative Range: class 1, IEC61810-1

- Test Voltage (1 min.): contact-coil ≥1 kVrms 50 Hz

contact contact ≥0.75 kVrms 50 Hz

between contact systems ≥1.5 kVrms 50 Hz

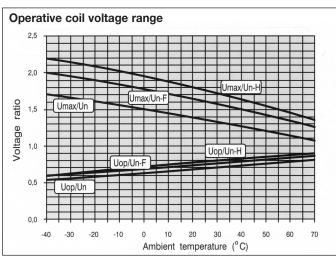
- Impulse Voltage Test (1.2/50 µs): contact-coil ≥ 2 kVimp
- Operate Time at Un: see diagram
- Release Time: abt. 3 ms
- Bouncing Time: abt. 3 ms make abt. 8 ms break
- Insulation Resistance (500 VDC):  $> 1000 \text{ M}\Omega$
- Vibration Resistance (10-200Hz): 10 g<sub>n</sub>
- Shock Resistance (11 ms): functional 10 g<sub>n</sub> destructive 100 g<sub>n</sub>
- Ambient Temperature: operating -40°C/+70°C, storage -40°C/+85°C
- Protection Degree: IP 67, IEC 529
- Seal Test (1min): Qc/2, IEC 60068-2-17
- Case Extinguishing: V-0, UL 94
- Mounting Position: optional
- Relay Weight: abt. 5 g

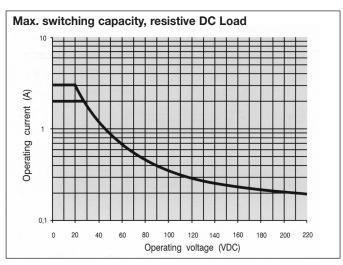


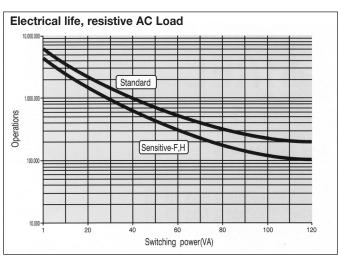
#### Coil data at 20 °C

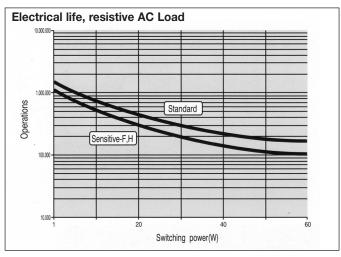
Cail Datad Valtaga	Coil Resistance	Operative Coil Voltage Range		
Coil Rated Voltage		Must Operate	Must Release	U <sub>MAX</sub>
Un (Vpc)	Rn(Ω) ± 10%	Uop ≤ (Vbc)	Ure ≥ (Vpc)	(VDC)
High sensitive version - 0.2 W				
H 3	45	2.3	0.3	5.4
H 5	125	3.9	0.5	9.0
H 6	180	4.6	0.6	10.8
H 9	405	7.0	0.9	16.1
H 12	720	9.3	1.2	21.5
H 24	2880	18.7	2.4	43.0
Sensitive version - 0.3 W				
F 3	30	2.3	0.3	4.9
F 5	82	3.8	0.5	8.2
F 6	120	4.5	0.6	9.8
F 9	270	6.8	0.9	14.7
F 12	480	9.1	1.2	19.6
F 24	1920	18.2	2.4	39.2
Standard version - 0.55 W				
3	19	2.1	0.3	4.2
5	45	3.5	0.5	7.0
6	67	4.2	0.6	8.4
9	170	6.3	0.9	12.6
12	280	8.4	1.2	16.7
18	670	12.6	1.8	25.1
24	1070	16.8	2.4	33.5
36	2300	25.2	3.6	50.2
48	4000	33.6	4.8	67.0

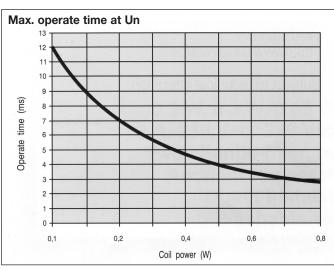
## **Ordering information** TRK22 3 XX DC X X Basic designation Contact material: 3 - AgPd30 + AuAg8 4 - AgNi10 + AuAg8 Contact form: 3 - Two change over (DPDT) Coil version H high sensitive F sensitive - standard Rated coil voltage:











# **Dimensions and Terminals Layout in mm**

