

Miniature bistable relay TRK 18

Last Updated: September 2, 2004
Data subject to alteration!



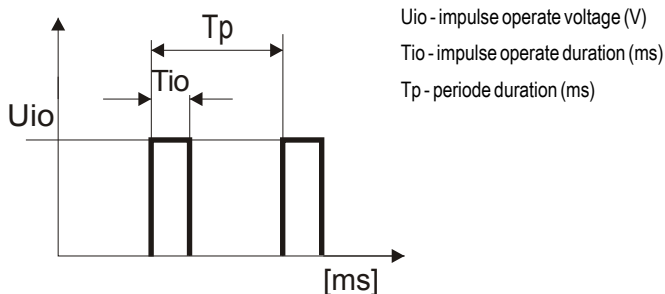
Coil energizing by DC voltage impulse
Independent from coil voltage failure
Contact switching current 7 A or 10 A
Ambient temperature up to +70°C
Washable version Qc/2
Extinguishable casing V - 0
Direct instalation on PCB
Plastic bars packing
UL approval

Contact data

Contact form:	1 Change-over,	1 Make,	1 Break
Contact material	AgNi10	AgCdO, AgSnO ₂ *	
Rated current	7A	10A	
Max. operating voltage	250V _{AC} , 220 V _{DC}		
Max. switching power	1750 VA, 170 W	2500 VA, 240 W	
Min. switching load	5V _{DC} , 10 mA		
Contact resistance	≤ 100 m W		
(New relay)	5V, 100 mA		
Max. operating freq. at rated load	600 oper./h	360 oper./h	
Max. operating freq. at minimal load	36000 operations/h		
Capacitance	<1.5pF contact-contact		
Mechanical life	>2x 10 ⁷ operations		
Max. switch-on current (4s, 10% duty cycle)	12 A	16 A	

* by special agreement

Impulse energizing



Coil data for energizing at 20° C

Rated power.	0,9 W to 1,4 W
Max. coil temperature:	155° C
Thermal coil resistance:	abt. 115 K/W
Operate voltage:	Uop ≤ 75%Un (cold coil)
Nonrelease voltage:	Unr ≥ 3% (-Un)
Release voltage:	Ure ~ 25% (-Un), max 45% (-Un)
Operative range:	class 1, IEC 61810 - 1

Coil data for continuous energizing

Coil rated voltage	Coil resistance at 20° C	Operative voltage range at 20° C			Release resistor E12/0.5W
		Must operate	Umax	Must release	
Un (V _{DC})	Rn(W) ±10%	Uop ≤(V _{DC})	Umax (V _{DC})	Ure ~ (V _{DC})	R (W) ±5%
3	8	2.2	3,1	- 0,75	15
5	22	3.7	5,2	- 1,25	47
6	33	4.5	6,3	- 1,50	68
9	74	6,7	9,5	- 2,25	150
12	119	9.0	12	- 3,0	330
16	188	12.0	16	- 4,0	560
18	280	13.5	18	- 4,5	820
24	475	18.0	24	- 6,0	1000
36	1050	27,0	36	- 9,0	2000
48	1750	36,0	48	-12,0	3900
60	2750	45,0	60	-15,0	6800

Other data

Test voltage (1 min.)	
contact - coil:	≥ 4 or $2 \text{ kV}_{\text{rms}}$, 50 Hz
contact - contact:	$\geq 1 \text{ kV}_{\text{rms}}$, 50 Hz
Rated impulse voltage (1.2/50) μs :	$\geq 5 \text{ kV}_{\text{imp}}$ (contact-coil)
Overvoltage category:	III, IEC 60664-1
Degree of pollution:	2, IEC 60664-1
Operate time at U_n	abt. 5 ms
Release time:	abt. 6 ms
Bounce time:	abt. 5 ms - make, abt. 10 ms - break
Insulation resistance (500 V_{DC}):	$> 10^3 \text{ M}\Omega$
Vibration resistance (10-200Hz):	10 g_n
Shock resistance (11 ms)	
functional:	10 g_n
destructive:	100 g_n
Ambient temperature	
for operating:	-40°C to $+70^\circ \text{C}$
for storage:	-40°C to $+85^\circ \text{C}$
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. 8 g



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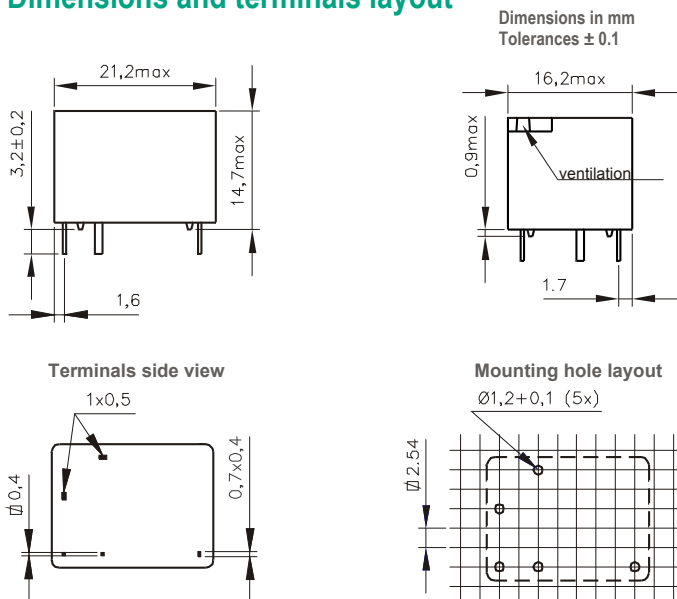
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Subject to technical alteration

Dimensions and terminals layout



Wiring diagram

