

The types CK1, SK1, LK1 and NK1 are automatically resetting switches with or without Expoxy

- **CK1, SK1, LK1 with connecting cables**
- **SK1 insulated with Mylar®-Nomex® cap**
- **LK1 with screw-on housing**
- **NK1 with connecting wires, partially insulated with plastic cap**

Possible applications in control cabinets, on motor housings or heat sinks, printed circuit boards

Thermal Protectors type CK1 / SK1 / LK1 / NK1; 1.6 - 7.5 A

CK1	SK1	LK1	NK1
			

Note

The data and information provided are based on tests and test series. They are intended as a guide, which is why there may be deviations for individual applications and uses. The suitability in a specific application must be checked by the user in each individual case.

Switching type	**NC contact CK1 resetting**	**NC contact SK1 resetting**	**NC contact LK1 resetting**	**NC contact NK1 resetting**
Insulated: Housing / insulating cap	Yes	Yes	no	no
Partially insulated: Plastic cap	no	no	no	yes
Temperature				
Reverse Switch Temperature (NST), [°C], in 5 K steps	60 - 200			
Tolerance range -Standard- Tol [[K]	± 5			
Reverse Switch Temperature (RST below NST) UL [K] Switch-back temperature (RST below NST) VDE [°C]	-35 ± 15 ≥ 35			
Tension				
max. operating voltage range up to ...	500 V DC / 14 V DC			
Rated voltage AC [VAC]	250 (VDE), 277 (UL)			
Current/switching cycles				
Rated current AC - cos ϕ = 1.0 [A] / [n]	2,5 / 10'000			
Rated current AC - cos ϕ = 0.6 [A] / [n]	1,6 / 10'000			
max. Switching current - cos ϕ = 1.0 [A] / [n]	6,3 / 3'000 7,5 / 300			
Rated current cos ϕ = 0.4 [A] / [n]	1,8 / 10'000			
max. Switching current - cos ϕ = 0.4 [A] / [n]	7,2 / 1'000			
Rated voltage DC [V]	12			
Max. Switching current DC [A] / [n]	40,0 / 10'000			
Additional specifications				
High-voltage strength [kV]	---	2	2	---
Total bounce time [ms]	< 1			
Contact resistance (according to MIL-STD R5757) [mΩ]	50			
Vibration resistance 10 ... 60 Hz [m/s2]	100			
Compressive strength of the switch housing [N]	450			
Suitable for installation in protection class	I	I + II	I + II	I
Impregnation resistance	suitable			
Available Licenses and Approvals				
please specify	IEC, ENEC, VDE, UL, CSA, CQC		IEC, ENEC, VDE, UL, CQC	
Dimensions (standard)				
Diameter Ø d [mm]	10,0	10,0	10,0	10,0
Overall height h [mm]	from 3.9	from 4.3	from 7.0	3,4
Length of connection pin l [mm]	---	15,0	---	14,0 / 20,0
Thread (size x length) [M x mm]	---	---	M4 x 5	---
Width across flats / max. Torque [mm / Nm]			10,0 / 2	
Standard stranded wire connection:	0.25 mm2/AWG 22			Connection wire d = 0.5 mm
Characteristics of current dependence				
The special feature of the 01 and 02 series is that they are temperature-sensitive switches. In their rated operation (rated current), they exhibit very low self-heating due to the current. Therefore, a switching point reduction takes place at most within the nominal switching temperature tolerance.				

CK1	**SK1**	**LK1**	**NK1**
			