

Thy types CZ1, SZ1 are current-sensitive switches, automatically resetting, with connecting cables, with or without epoxy

- **The type CZ1 is not isolated**
- **The type SZ1 is insulated with a Mylar®-Nomex® cap**

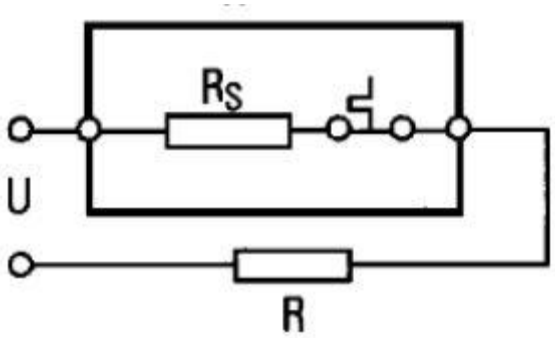
Ideal for installation on windings of electric motors, transformers or ballasts

Thermal Protectors type CZ1 / SZ1; 1.6 - 7.5 A

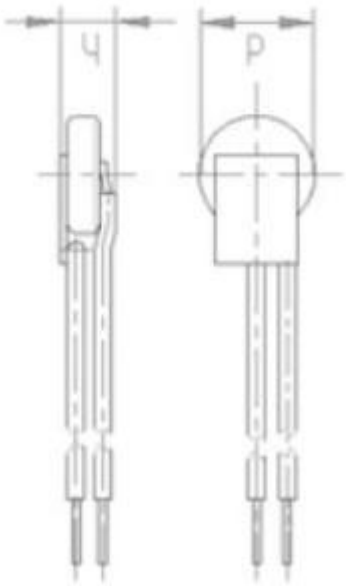
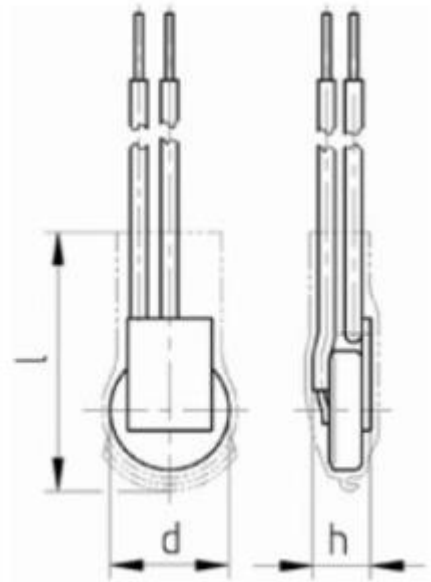
CZ1	SZ1
	

Switching type	**NC contact CZ1**	**NC contact SZ1**
	Resetting, defined current sensitive	
Insulated: Insulation cap	No	Yes
Temperature		
Nominal switching temperature (NST) in 5 K steps °C	70 - 160	
Tolerance range NST < 140 °C Tol (K)	+ 5	
Reverse Switch Temperature (RST below NST) UL (defined RST possible on request) VDE	- 35 + 15 ≥ 35	
Tension		
max. operating voltage range up to ...	500 VAC / 14 V DC	
Operating voltage AC	250 (VDE), 277 (UL)	
Current / switching cycles		
Rated current - cos ϕ = 1.0 [A] / [n]	2.0 / 3,000	
Rated current - cos ϕ = 0.6 [A] / [n]	1.6 / 3,000	
Max. Switching current [A] / [n]	4.0 / 3,000	
Rated voltage DC	12	
Max. Switching current DC [A] / [n]	on request	
Additional specifications		
Series resistors for setting the current sensitivity	From 0.12 Ω to 70 Ω	
High-voltage strength (kV)	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 + II	I
Impregnation resistance	suitable	
Available Licenses and Approvals		
please specify	IEC, ENEC, VDE, UL, CSA, COC	
Dimensions (standard)		
Diameter Ø d (mm)	10,0	10,0
Overall height h (mm)	from 7.0	from 3.4
Length of the connection pins (mm)	---	14,0 / 20,0
Thread (size x length) (M x mm)	M4 x 5.0	---
Width across flats / max. Torque (mm / Nm)	10,0 / 2	---
Standard connection	Stranded wire 0.25 mm2 / AWG22	Connection wire d = 0.5 mm

Function - Circuit diagram



The series resistor is used to adjust the current sensitivity, as its heating causes the switch to trip earlier.

CZ1	SZ1
	

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.