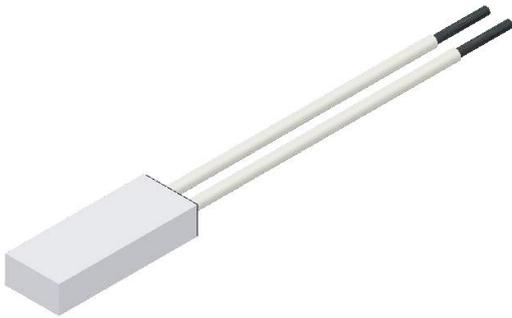


Thermal protector ST-22 series



- Very small, compact design
- Not sensitive to current
- Short response time
- High temperature sensitivity
- Good heat transfer due to homogeneous design

Application

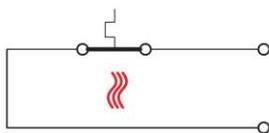
The temperature limiter of the ST-22 series used where protection against over temperature is required and an automatic reset of the device to protect desired after cooling down.

Function

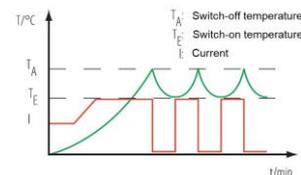
The temperature limiter ST-22 series is independent of current.

The temperature measured by means of a continuously operating bimetallic snap-action disk, which is previously been dimensioned according to the desired switch-off temperature. When this fixed switch-off temperature reached, the bimetal disc snaps, opens the contact system of 900 silver and thus interrupts the electrical circuit of the device to protect. After cooling and reaching the switchback temperature of the bimetal disc, the temperature switch automatically switches back to its initial position. (Automatic reset).

Circuit diagram



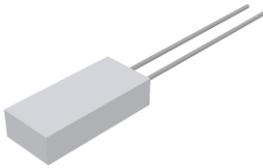
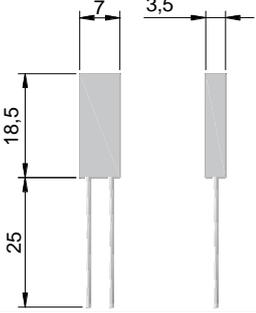
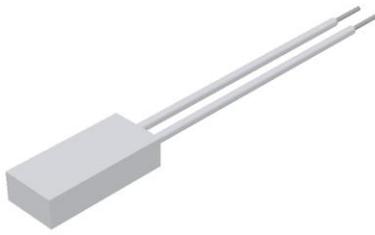
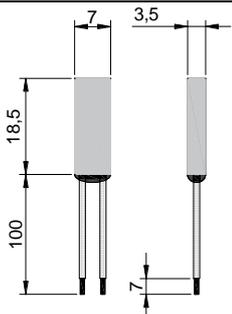
Functional scheme



Technical data

Function	Normally closed (NC)
Temperature setting range in 5K steps	50°C ~ 145°C
Tolerance	± 5K
Cycle life	AC 250V 7,0A 10.000 cycles
	AC 125V 10,0A 10.000 cycles
	AC 250V 7,0A 10.000 cycles
	AC 277V 1,0A 10.000 cycles
	DC 48V 3,0A 6.000 cycles
	DC 48V 2,2A 10.000 cycles
	DC 60V 2,2A 6.000 cycles
Contact resistance	< 50mΩ
Withstand voltage	1,5kV 10mA / 1 minute or 1,8kV 10mA / 1 second
Lead wire length (standard)	100mm long with 7mm stripped and tinned
wire length (Standard)	∅0,7 x 25mm
Recognized standards	VDE EN60730-2-2 VDE EN60730-2-3 VDE EN60730-2-9 UL 873, UL2111

Available designs

Type	Model	Illustration	Dimensions (mm)	Description
ST-22	P			with wire connections
ST-22	W			with lead wire connections

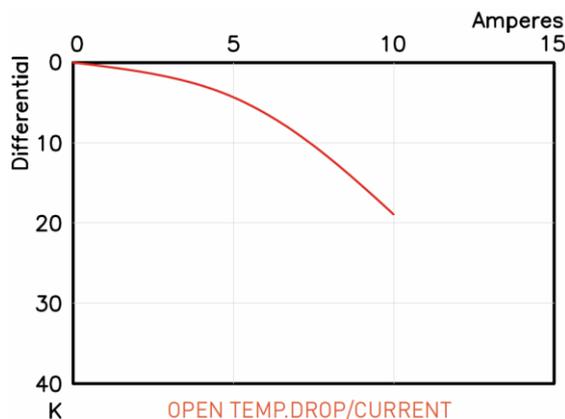
Available switch-off & switch-on temperatures

Switch-off temperature	Switch-on temperature	Switch-off temperature	Switch-on temperature
50°C ±5K	35°C ±10K	100°C ±5K	70°C ±15K
55°C ±5K	40°C ±10K	105°C ±5K	75°C ±15K
60°C ±5K	40°C ±10K	110°C ±5K	80°C ±15K
65°C ±5K	45°C ±10K	115°C ±5K	85°C ±15K
70°C ±5K	50°C ±10K	120°C ±5K	90°C ±15K
75°C ±5K	55°C ±10K	125°C ±5K	95°C ±15K
80°C ±5K	50°C ±15K	130°C ±5K	100°C ±15K
85°C ±5K	55°C ±15K	135°C ±5K	105°C ±15K
90°C ±5K	60°C ±15K	140°C ±5K	110°C ±15K
95°C ±5K	65°C ±15K	145°C ±5K	115°C ±15K

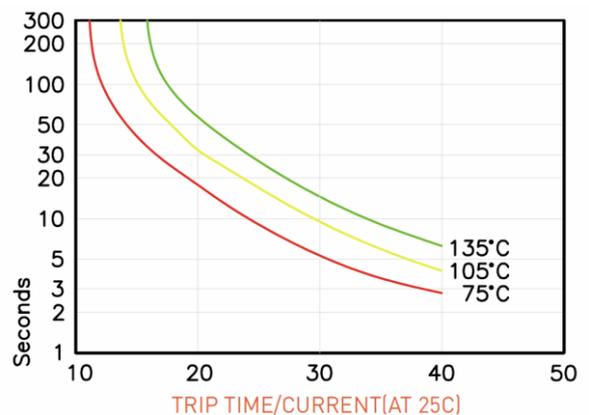
Current dependency

During normal use, the current in the circuit has a minimal influence on the set switch-off temperature. If a current above the rated current is flowing the shutdown temperature and Response time as shown in the graphic below.

Open temperature / current



Trip time / current (at 25°C)



Order Code

	ST-22	W	120	05	100-7/100-7
Model:	ST-22				
Function:	P = wire connections W = lead wire connection				
Rated operating temperature:	50°C ~ 145°C in 5K steps				
Tolerance:	05 (± 5K)				
Lead wire length / wire length:	lead wire = 100mm (Standard), 7mm tinned wire = 25mm (Standard) Special lengths are available upon request				

Example: ST-22W.120.05.100-7/100-7
ST-22P.120.05.25/25

Available wire / lead wire specifications

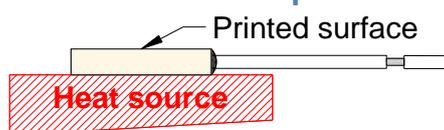
Insulation material	Temperature max.	Size	UL-Style
Bare wire	>200°C	∅ 0,7mm	---
XLPE	125°C	AWG 22	3266

The standard lead wire length is 100mm with 7mm stripped and tinned.

The standard wire length is 25mm.

White XLPE with AWG 22 wire is used up to 150°C as standard. (UL3266)

Installation of temperature switches



Accessories

- Mounting Bracket
CB.00.35.110
[Data sheet](#)

