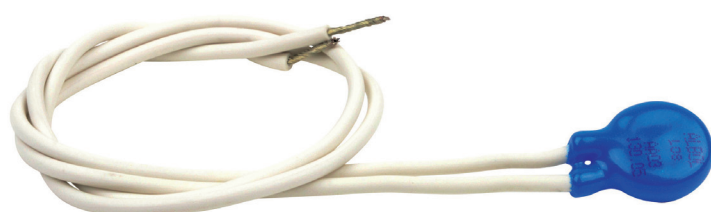


THERMAL CUT OUTS

Type TV03, TV13



Notice d'utilisation

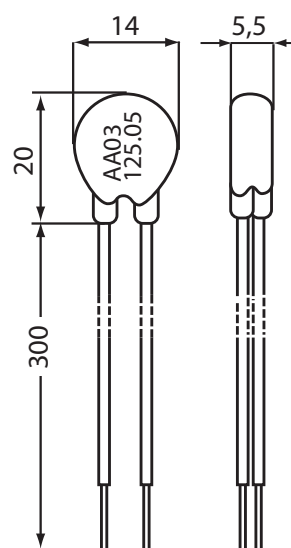
TV13

Thermal cut out 13 A. NC contact



Small dimensions thermal cut-outs used especially for thermal protection of electric motors and transformers, mounted directly into windings. They could also be used for protection of heaters and controllers. They often protect devices by control the change-over systems.

- Incorporated
- No electronic
- Reduced overall dimensions
- High breaking capacity
- Low contact resistance
- High-sensitivity
- Lot of applications

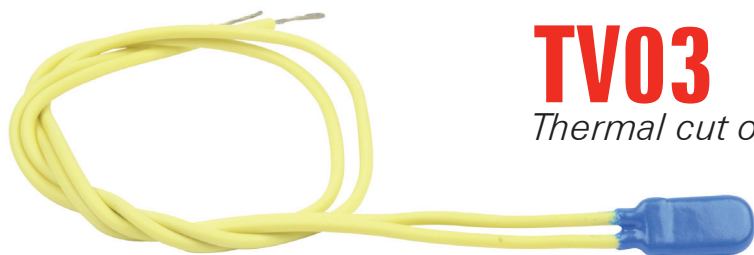


Dimensions in mm

Operation

A thermal bimetallic plate with double temperature sensitive contacts opens or closes a circuit. When the reference temperature is reached, the current flows through the bimetallic plate. The heat is transmitted on all sides by convection (or radiation in gaseous or solid area). Maximum voltage 250V, 50/60 Hz.

Contact TV13-F1	NC single, contact at opening single-pole single-throw	Switching differential	30 ± 15K
Rated voltage	250 V, AC	Speed of temperature changes	0,5 ÷ 1 K / min
Rated current	13 A at cos φ = 1 6 A at cos φ = 0,6	Degree of pollution	2
Number of switching cycles at rated loading	10000 cycles	Thermal resistance	max 230 K / 1 min
Maximum loading/number of automatic cycles	16 A / 2000 cycles	Degree of protection	IP00
Range of rated switching temperatures	130°C - 150°C	Contact resistance	max < 15 mili ohm
Switching temperature tolerance	± 5K / ±7,5K / ±10K	Electrical strength of insulation	2500 V, 50 Hz

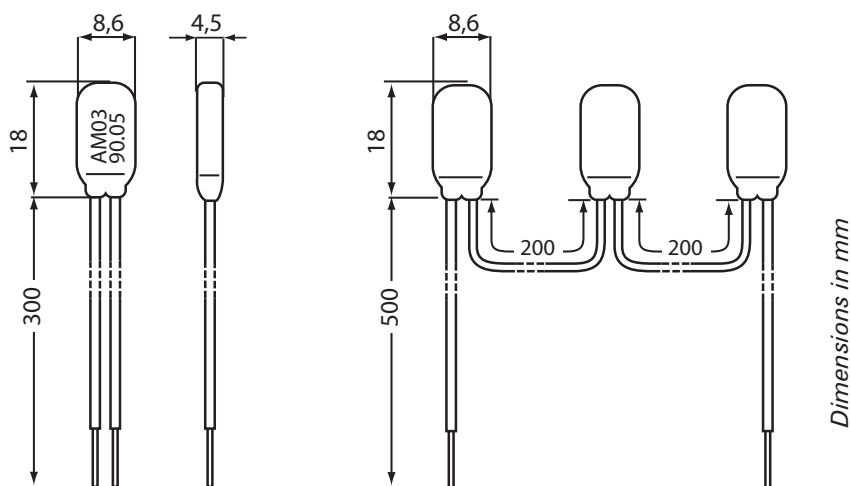


TV03

Thermal cut out 2,5 A. NC or NO contact

Small dimensions thermal cut-outs used especially for thermal protection of electric motors and transformers, mounted directly into windings. They could also be used for protection of heaters and controllers. They often protect devices by control the change-over systems.

- Incorporated
- No electronic
- Reduced overall dimensions
- High breaking capacity
- Low contact resistance
- High-sensitivity
- Lot of applications



Operation

A thermal bimetallic plate with double temperature sensitive contacts opens or closes a circuit. When the reference temperature is reached, the current flows through the bimetallic plate. The heat is transmitted on all sides by convection (or radiation in gaseous or solid area). Maximum voltage 250V, 50/60 Hz.

Contact	TV03-F1	NC single, contact at opening	Switching temperature tolerance	± 5K / ±7,5K / ±10K
	TV03-01	NO single, contact at closing	Switching differential	30 ± 15K
	TV03-F1	NC triple, contact at opening	Speed of temperature changes	0,5 ÷ 1 K / min
Rated voltage		250 V, CA	Degree of pollution	2
Rated courant		2,5 A à cos φ = 1 1,6 A à cos φ = 0,6	Thermal resistance	max 190 K / 1 min
Number of switching cycles at rated loading		10000 cycles	Degree of protection	IP00
Maximum loading/number of automatic cycles		3,6 A / 2000 cycles	Contact resistance	max < 40 mili ohm
Range of rated switching temperatures		110° - 130°C - 150°C	Electrical strength of insulation	2500 V, 50 Hz