



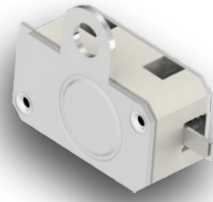
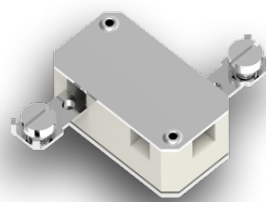
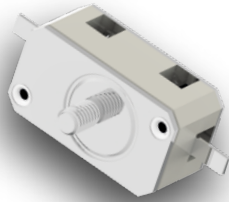
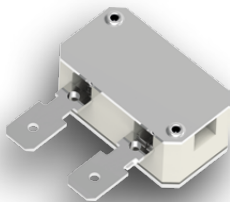
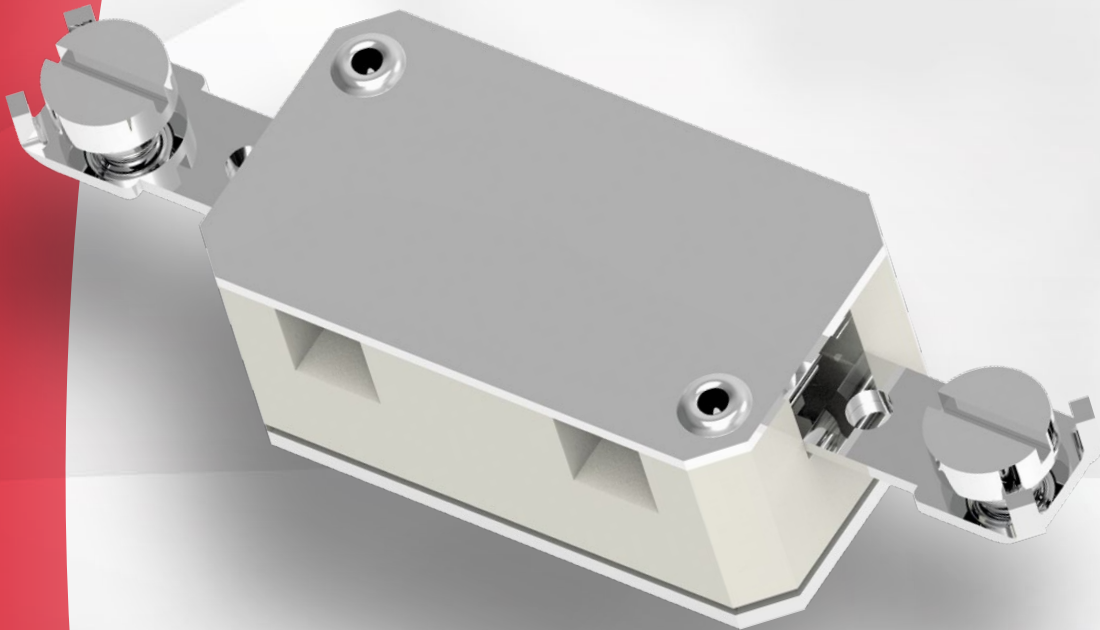
MICROTHERM

Thermal cut-out Thermostat

K

1AV

1AT



Applications

- Fuel oil burner
- Welding- /soldering equipment
- Ironing Stations
- Hotplates
- Warming plates

Benefits

- High temperature materials (ceramic, steel, mikanite)
- Fixed set temperature
- Automatic reset
- Various connection possibilities

Description

High-temperature switches of the **K1 type series** operate in a current-independent manner, and measure the temperature by means of a thermo-bimetal snap-disc. After reaching the defined temperature, the switch opens or closes the circuit of the device to be protected. When the switch-back temperature is reached, the contact system automatically switches back.

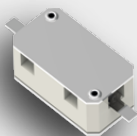
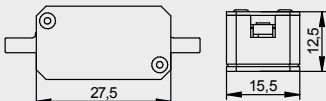
K1 switches function as **auxiliary switches**, which convey the temperature across the base plate directly to the bimetallic disc. The base plate and the housing are free of stress.



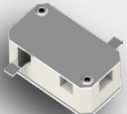
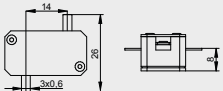
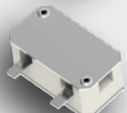
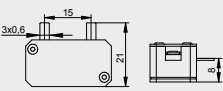
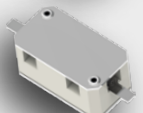
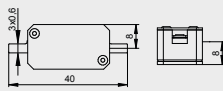
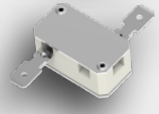
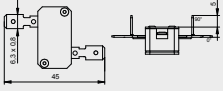
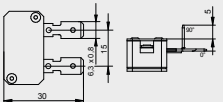
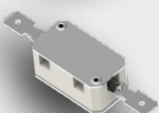
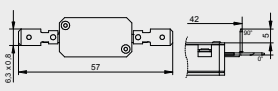
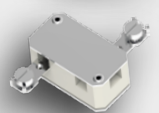
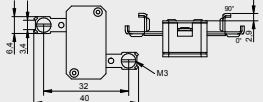
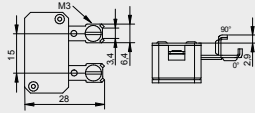
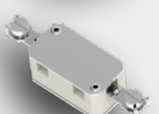
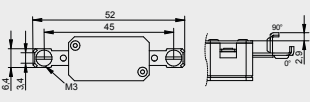
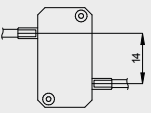
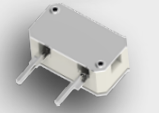
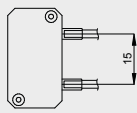
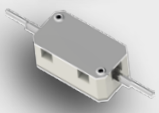
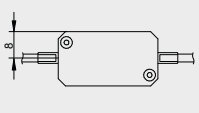
Technical data

ratings			control type	
			K1AV	K1AT
function			automatic	
version			normally closed	normally open
rated current at 230 V 50 / 60 Hz (cos ϕ 0,95)			10 A	
rated current at 400 V 50 / 60 Hz (cos ϕ 0,95)			6 A	
switching cycles			10,000	
temperature range T _A (steps in 5 K)			200°C bis 450°C	
tolerances			± 5%	± 10%
feature of automatic action			1.B	
contact resistance			< 50 mΩ	
hysteresis			100K ± 20K	
degrees of protection provided by enclosures (EN 60529)			IP00	
suitable for use in protection class			I	
approval	VDE		EN 60730-1 / -2-9	-

Standard type

type	nc	no	illustration	drawing dimensions (mm)	technical description	approval
K1A	V	T			cover micanite housing ceramic bottom plate steel	VDE

Terminals

code	illustration	drawing dimensions (mm)	technical description	approval (K1AV)
A160			welding terminals, steel	VDE
A170			welding terminals, steel	VDE
A180			welding terminals, steel	VDE
A161 (0°) A162 (90°)			terminals 6.3 x 0.8, steel, also available: angle 90 deg T _A max 350°C	VDE
A171 (0°) A172 (90°)			terminals 6.3 x 0.8, steel, also available: angle 90 deg T _A max 350°C	VDE
A181 (0°) A182 (90°)			terminals 6.3 x 0.8, steel, also available: angle 90 deg T _A max 350°C	VDE
A163 (0°) A164 (90°)			screw terminals, steel, also available: angle 90 deg T _A max 350°C	VDE
A173 (0°) A174 (90°)			screw terminals, steel, also available: angle 90 deg T _A max 350°C	VDE
A183 (0°) A184 (90°)			screw terminals, steel, also available: angle 90 deg T _A max 350°C	VDE
A168			lead L551, welded	VDE
A178			lead L551, welded	VDE
A188			lead L551, welded	VDE

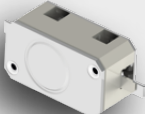
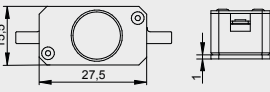
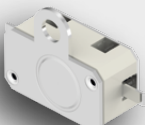
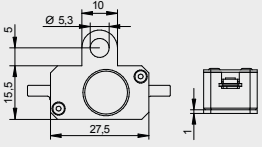
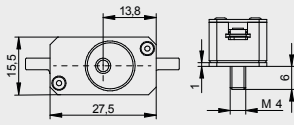
lead L551: UL style 5107, 600V, max. 450°C, insulation glass bre-PTFE,
cross-section of conductor 1,3 mm² (AWG16) , grey, stripped 10mm



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Fixings

code	illustration	drawing dimensions (mm)	technical description	approval (K1AV)
B410			bottom plate, steel	VDE
B412			bottom plate with flange, steel	VDE
B413 (M4x6) B414 (M5x6)			bottom plate with stud, steel	VDE

Ordering example

K1A	V	300	15	L551	250	A168	B413	
								bottom plate, stud of M4x6
								lead L551, welded
								length of lead 250 mm
								lead (details see previous page)
								tolerance
								temperature
								contact execution (V=normally closed / T=normally open)
								type (housing ceramic, cover micanite)

Marking

K1AV 30015	type (normally closed) response temperature (300°C), tolerance (+/- 15K)
XXXXXX	production number
K1AT --123	type (normally open) drawing number
XXXXXX	production number

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