

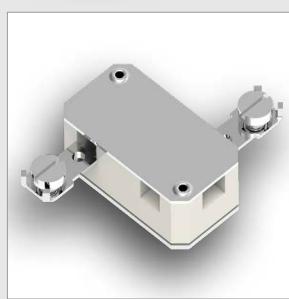
Thermal cut-out

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

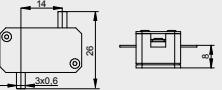
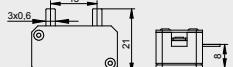
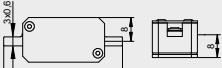
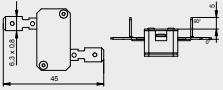
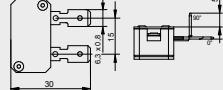
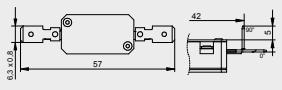
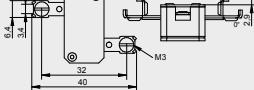
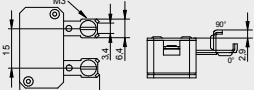
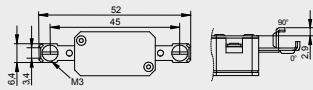
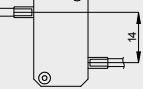
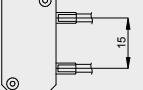
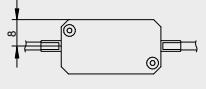
ratings		control type	
		K1AV	K1AT
function			automatic
version		normally closed	normally open
rated current at 230 V 50 / 60 Hz (cos φ 0,95)			10 A
rated current at 400 V 50 / 60 Hz (cos φ 0,95)			6 A
switching cycles			10,000
temperature range T <sub>A</sub> ( steps in 5 K)			200°C bis 450°C
tolerances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

\* Depending on T-off

## 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 <sub>A</sub> max 350°C	VDE
A171 (0°) A172 (90°)			terminals 6.3 x 0.8, steel, also available: angle 90 deg T <sub>A</sub> max 350°C	VDE
A181 (0°) A182 (90°)			terminals 6.3 x 0.8, steel, also available: angle 90 deg T <sub>A</sub> max 350°C	VDE
A163 (0°) A164 (90°)			screw terminals, steel, also available: angle 90 deg T <sub>A</sub> max 350°C	VDE
A173 (0°) A174 (90°)			screw terminals, steel, also available: angle 90 deg T <sub>A</sub> max 350°C	VDE
A183 (0°) A184 (90°)			screw terminals, steel, also available: angle 90 deg T <sub>A</sub> 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 mm<sup>2</sup> (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

- type (normally closed)
- temperature
- tolerance
- lead (details see previous page)
- length of lead 250 mm
- lead L551, welded
- bottom plate, stud of M4x6
- 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)

XXXXX

production number

K1AT --123

type (normally open)  
drawing number

XXXXX

production number

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10/2021-Technical subject to change without notice



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