

Thermal Switch. Product Overview They're every- where you look.

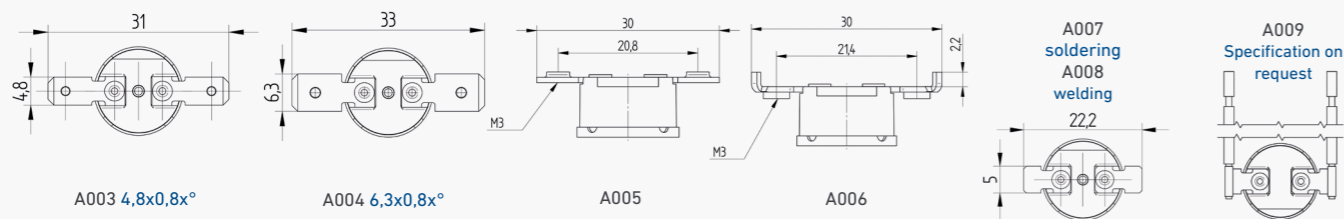


ELECTRICAL CONNECTION

Flat-cable plug DIN 46244

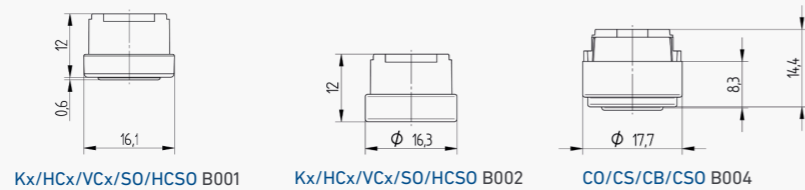
Screw Connection

Soldering- welding- & lead wire terminal

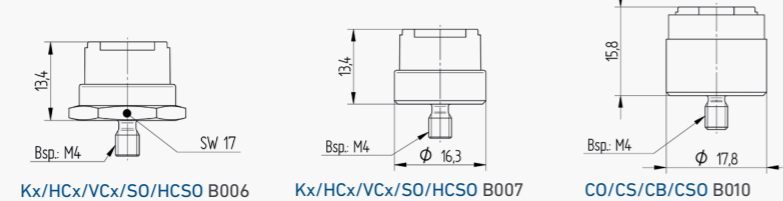


LOCK CAPS AND FASTENING CONNECTION

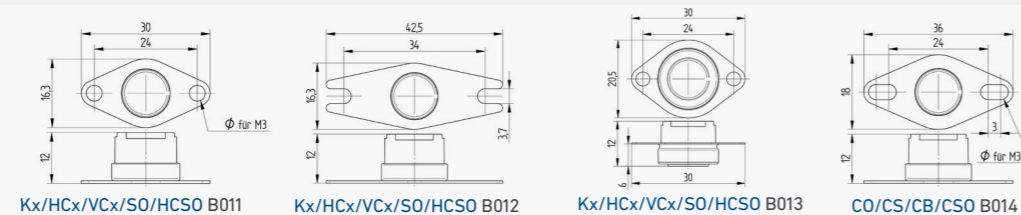
Lock caps - standard Material: Al or CrNi



Lock caps with screw fitting Material: Brass, standard threads m4x6, other sizes available



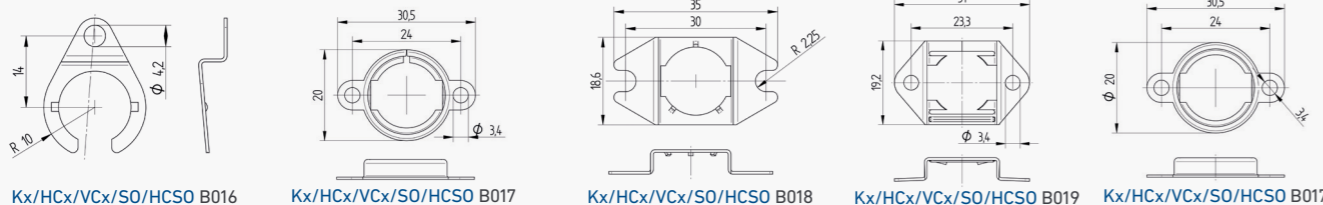
Lock caps with fastening flange Cap with fixed flange, (Material CrNi) / Air flange cap (Material Al or CrNi)



LOOSE FLANGES

For all electrical terminals

For 90° beut off terminals only



SPECIAL DESIGNS

Thermostats / temperature limiters

Bimetal Snap Disk Ø 12,7mm and 17mm



Switching temperature range -25°C up to 360°C, Tolerances and hysteresis of switching temperatures upon request



Special designs with diverse electrical and fastening connections, sealed sleeves, wire connections, trip-free mechanism as well as sensors with NTC- / PTC-starters are available upon request.

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All thermostats can be supplied with following operating principals:

- Automatic Operation
- Manual Reset
- Electric self-holding contacts (for reset, interrupt from the line)
- Single Operation Devices (SOD)
- Automatic Operation incl. time-delayed release by internal heating resistor



For solutions to your development and manufacturing tasks

EAW Relaisstechnik GmbH has been successfully working in the market segment of temperature switches with bimetallic snap disks for more than 40 years. As a result, our employees have a wealth of experience. This is a guarantee that with ½ „thermostats from our diverse product range you will always find the optimal solution for temperature monitoring and control.

Individual designs according to your specifications

For the electrical connection or for the installation of ½ „thermostats, we have a comprehensive range of parts in our program. If required, we also produce special application-related solutions according to your documentation or requirements. The design of the switch contacts can be varied for the smallest switching loads from 10mA / 10mV up to switching loads of 16A / 400VAC.

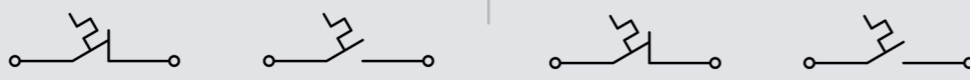


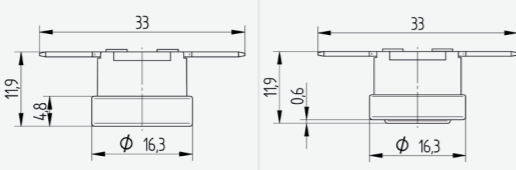
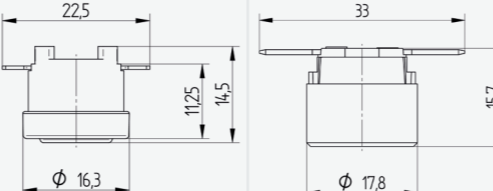
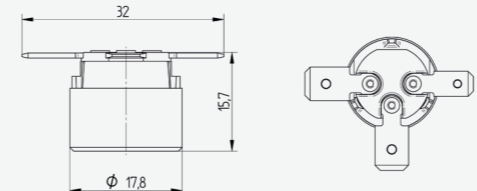
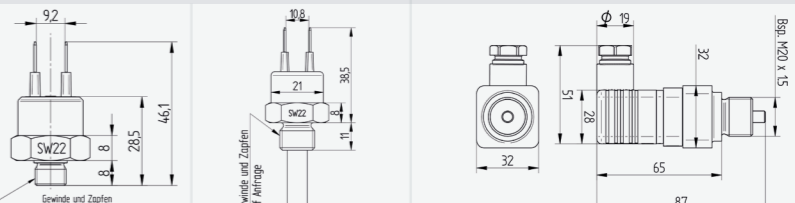
Technical Parameters, Application and Tests

The technical parameters contained in the data sheet apply in conjunction with the test methods and equipment customary in our company and refer to the delivery condition of the products. In applications and use of other test methods differences to the measurement result are possible. The adaptation of our thermostats and proof of suitability for the intended use are to be carried out by the customer. A guarantee for mismatches and a use of the products outside the specified technical parameters is excluded. In addition, the guarantee for the installation of our products, which have been stored over a period of more than one year is not adopted (this period may be lower in aggressive environments). Changes in the interest of technical progress we reserve the right.

If you need samples, please use our inquiry form for thermostats on our website: www.eaw-relaisstechnik.de

CE- and RoHS-Identification: The products of EAW Relaisstechnik GmbH and labeled with CE- and RoHS-labels on their devices, packaging or in the documentation.

Quality system: Quality management according to DIN EN ISO 9001 **Documented proof:** certificate **Standard quality:** production-related routine inspection, voltage test, switching temperature test (limit value control)

DESIGN	TEMP. CONTROLLER		TEMP. CONTROLLER		TEMPERATURE CONTROLLER		TEMPERATURE CONTROLLER	
Type & Housing material	KO NC Contact KS NO Contact Plastic	HCO NC Contact HCS NO Contact Ceramic	VCO NC Contact VCS NO Contact Ceramic	CO NC Contact CS NO Contact Ceramic	CW Changeover Contact Ceramic	THO NC Contact THS NO Contact Plastic	TGO NC Contact TGS NO Contact Plastic	
Function	 <p>Open respectively close an electrical contact when the temperature rises or falls</p>				 <p>Changed an electrical contact when the temperature rises or falls</p>		 <p>Open respectively close an electrical contact when the temperature rises or falls</p>	
Reset Type	Automatically				Automatically			
Rated Voltage DC on Request	250VAC		250VAC	400VAC	250VAC		250VAC	
Rated current resistiv inductive, DC on Request	16A / 6A	16A / 6A ($\leq 200^\circ\text{C}$) 4A / 1,5A ($>200^\circ\text{C}$)	16A / 6A ($\leq 200^\circ\text{C}$) 4A / 1,5A ($>200^\circ\text{C}$)	16A / 6A ($\leq 200^\circ\text{C}$) 4A / 1,5A ($>200^\circ\text{C}$)	10A / 1,6A		16A / 6A	
Switching Cycles	100.000 (10A) 10.000 (16A)	100.000 (10A) 10.000 (16A $\leq 200^\circ\text{C}$ / 4A $>200^\circ\text{C}$)	100.000 (10A) 10.000 (16A $\leq 200^\circ\text{C}$ / 4A $>200^\circ\text{C}$)	10.000 (10A $\leq 200^\circ\text{C}$ / 4A $>200^\circ\text{C}$) 1.000 (16A)	50.000		100.000 (10A) 10.000 (16A)	
Isolation Base/Disconnection Veff, 50Hz	2kV / 0,5kV	2kV / 0,5kV	2kV / 0,5kV	2kV / 0,88kV	2kV / 0,5kV		2kV / 0,5kV	
Switching Temperature	-25 bis 200°C	-25 bis 360°C (Öffner) -25 bis 340°C (Schließer)	-25 bis 360°C (Öffner) -25 bis 340°C (Schließer)	-25 bis 360°C (Öffner) -25 bis 340°C (Schließer)	-25 bis 200°C		-25 bis 120°C	
tolerance other Values on Request	$\pm 3\text{K}$, $\pm 5\text{K}$, $\pm 8\text{K}$	$\pm 3\text{K}$, $\pm 5\text{K}$, $\pm 8\text{K}$ ($\leq 200^\circ\text{C}$) $\pm 10\text{K}$, $\pm 15\text{K}$ ($> 200^\circ\text{C}$)	$\pm 3\text{K}$, $\pm 5\text{K}$, $\pm 8\text{K}$ ($\leq 200^\circ\text{C}$) $\pm 10\text{K}$, $\pm 15\text{K}$ ($> 200^\circ\text{C}$)	$\pm 3\text{K}$, $\pm 5\text{K}$, $\pm 8\text{K}$ ($\leq 200^\circ\text{C}$) $\pm 10\text{K}$, $\pm 15\text{K}$ ($> 200^\circ\text{C}$)	$\pm 3\text{K}$, $\pm 5\text{K}$, $\pm 8\text{K}$		$\pm 3\text{K}$, $\pm 5\text{K}$, $\pm 8\text{K}$	
Switching temperature difference standard / minimum	15K / 5K	15K / 5K ($< 300^\circ\text{C}$) 100K / 50K ($\geq 300^\circ\text{C}$)	15K / 5K ($< 300^\circ\text{C}$) 100K / 50K ($\geq 300^\circ\text{C}$)	15K / 5K ($< 300^\circ\text{C}$) 100K / 50K ($\geq 300^\circ\text{C}$)	15K / 5K		15K / 5K	
Contact Resistance Au/Ag/AgPd	$\leq 10\text{m}\Omega / \leq 25\text{m}\Omega / \text{---}$	$\leq 10\text{m}\Omega / \leq 25\text{m}\Omega / \leq 75\text{m}\Omega$	$\leq 10\text{m}\Omega / \leq 25\text{m}\Omega / \leq 75\text{m}\Omega$	$\leq 10\text{m}\Omega / \leq 25\text{m}\Omega / \leq 75\text{m}\Omega$	$\leq 25\text{m}\Omega$		$\leq 10\text{m}\Omega / \leq 25\text{m}\Omega / \text{---}$	
min. rate of change of the test temperature	0,5K/min		0,5K/min		0,5K/min		0,5K/min	
Ambient Temperature Limits	-40 bis 200°C	-40 bis 400°C	-40 bis 400°C	-40 bis 400°C	-40 bis 230°C		-40 bis 120°C	
Ingress Protection Rating	IP40		IP40		IP40		IP40	IP65
Dimensions								
Certifications	VDE/UL/CSA	VDE/VDE-CB	VDE ($\leq 200^\circ\text{C}$)	VDE ($\leq 200^\circ\text{C}$)	VDE		CE	
Product Standard	DIN EN 60730 UL873 CSA C22.2 Mo. 24	DIN EN 60730	DIN EN 60730	DIN EN 60730	DIN EN 60730		DIN EN 60730	

PROTECTION TEMPERATURE LIMITER

OPERATING TEMPERATURE LIMITER

SELF-HOLDER

SELF-HOLDER

KB(F)
Plastic

HCB
Ceramic

VCB
Ceramic

CB
Ceramic

C2B
Ceramic

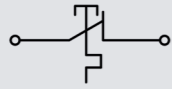
K3B(F)
Plastic

S0
Plastic

HCSO
Ceramic

VCSO
Ceramic

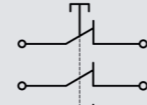
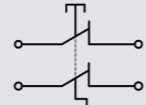
CSO
Ceramic



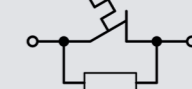
Open an electrical contact when the temperature rises



Open an electrical contact when the temperature rises



Open an electrical contact when the temperature rises



Open an electrical contact when the temperature rises

Manually

Electrical

250VAC

400VAC

400VAC

3 x 250VAC

250VAC

250VAC

16A / 6A

16A / 6A (≤ 200°C)
4A / 1,5A (>200°C)

16A / 6A (≤ 200°C)
4A / 1,5A (>200°C)

16A / 6A (≤ 200°C)
4A / 1,5A (>200°C)

25A

16A / 6A

16A / 6A

16A / 6A

3.000 (10A)
1.000 (16A)

1.000 (16A, ≤ 200°C)
500 (4A, >200°C)

1.000 (16A, ≤ 200°C)
500 (4A, >200°C)

10.000 (10A, ≤ 200°C)
1.000 (16A, ≤ 200°C /
4A >200°C)

1.000

1.000

3.000 (10A)
1.000 (16A)

3.000 (10A)
1.000 (16A)

2kV / 0,5kV

2kV / 0,5kV

2kV / 0,5kV

2kV / 0,88kV

2kV / 0,88kV

2kV / 0,5kV

2kV / 0,5kV

2kV / 0,5kV

-25 bis 200°C
-25 bis 120°C
(mit Freiauslösung)

-25 bis 360°C

-25 bis 360°C

-25 bis 360°C

-25 bis 200°C

-25 bis 120°C

-25 bis 200°C

-25 bis 200°C

±3K, ±5K, ±8K

±3K, ±5K, ±8K (≤ 200°C)
±10K, ±15K (> 200°C)

±3K, ±5K, ±8K (≤ 200°C)
±10K, ±15K (> 200°C)

±3K, ±5K, ±8K (≤ 200°C)
±10K, ±15K (> 200°C)

±3K, ±5K, ±8K

±3K, ±5K, ±8K

±3K, ±5K, ±8K

±3K, ±5K, ±8K

manual Reset

manual Reset

Reset by Interrupting the Load Circuit

Reset by Interrupting the Load Circuit

≤10mΩ/≤25mΩ/---

≤10mΩ/≤25mΩ/≤75mΩ

≤10mΩ/≤25mΩ/≤75mΩ

≤10mΩ/≤25mΩ/≤75mΩ

≤25mΩ

≤25mΩ

≤25mΩ

≤25mΩ

0,5K/min

0,5K/min

0,5K/min

0,5K/min

-40 bis 200°C
-25 bis 120°C
(mit Freiauslösung)

-40 bis 400°C

-40 bis 400°C

-40 bis 400°C

-40 bis 200°C

-40 bis 175°C

-40 bis 200°C

-40 bis 230°C

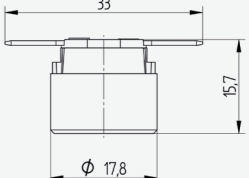
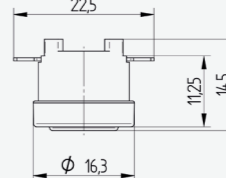
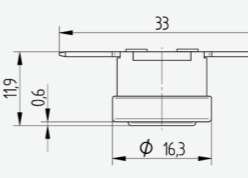
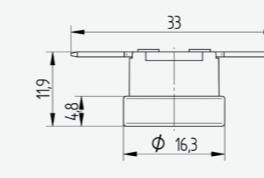
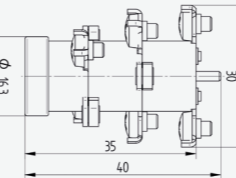
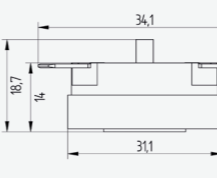
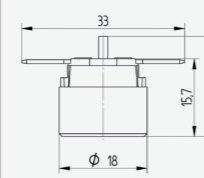
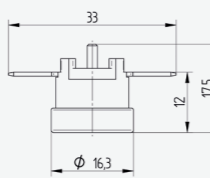
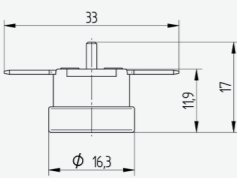
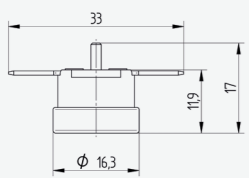
-40 bis 230°C

IP40

IP40

IP40

IP40



VDE/UL/CSA

VDE/VDE-CB

VDE/VDE-CB

VDE (≤ 200°C)

CE

CE

VDE/UL/CSA

CE

CE

DIN EN 60730
UL873
CSA C22.2 Mo. 24

DIN EN 60730

DIN EN 60730

DIN EN 60730

DIN EN 60730

DIN EN 60730

DIN EN 60730
UL873
CSA C22.2 Mo. 24

DIN EN 60730

DIN EN 60730

A click above

Eaw is a developer, manufacturer and distributor of innovative and reliable relay technology. Our range can be found in the automotive, energy-supply and mining industries, rail networks, household appliances, heating and air conditioning technology, and much, much more.

So when it comes to developing customized solutions both for and with our customers, not to mention setting the bar for standards, we have years of experience behind us. All of the premium quality you'd expect from anything a "Made in Germany" label.



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