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## SynTemp® S01/S02 or S06/S08

Series S01 or S06 thermal cut-offs are moulded, permanently operating bimetal release switches which interrupt the current flow once the nominal temperature has been reached (normally closed contact). Closing combination also possible (S02 or S08).

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### Attributes

Permanent operation with immediate reaction once the switching temperature has been reached is ensured due to the unique free-moving and self-aligning construction of the bimetal disc in the thermal cut-off. The thermal cut-offs are available as a single component and in a twin or triplet version.

### Further advantages due to the bimetal perforated discs:

- excellent long-term stability
- improved space utilisation
- high mechanical strength
- excellent long-term stability

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### Application

The S01 and S06 thermal cut-offs are used in electric motors and transformers.

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### Standards

VDE EN 60 730-2-9,  
UL/CSA 2111, File Nr. E54236  
ENEC acc. to EN 60730

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### Delivery forms

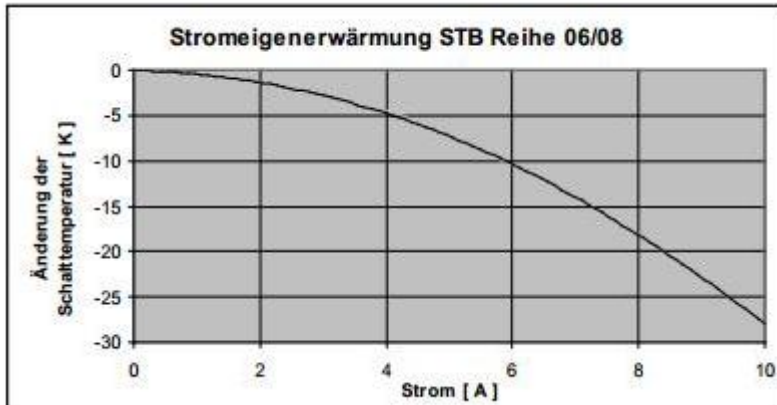
Nominal switching temperature in 5°C-steps of 60 to 200°C as standard, further temperatures on request.

Version: 01 available with (S01) or without (C01) insulation cap out of Mylar® / Nomex®, Epoxy resin impregnated or bare.

Version: 06 available with (S06) or without (C06) insulation cap, basically Epoxy resin impregnated.

Standard cable length 300 mm, other lengths on request.

## NST-diagram



[Translate to English:]

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Updated 09/20

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Switch properties	Unit of measure	S01	S02	S06	S08
Switch type		Opening contact	Closing contact	Opening contact	Closing contact
Nominal switching temperatures	°C	60-200	60-200	70-200	70-180
Tolerance	K	±2.5 / ±5	±5	±5	±5
Reverse switch temperature		Depending on NST	Depending on NST	Depending on NST	Depending on NST
Total bouncing time	ms	<1	<1	<1	<1
Operating voltage AC/DC	V	up to 500 AC / 14 DC	up to 500 AC	up to 500 AC/28 DC	up to 500 AC
Rated voltage AC	V	250 (VDE)/277 (UL)	250 (VDE)/277 (UL)	250 (VDE)/277 (UL)	250 (VDE)/277 (UL)
Rated current AC cos φ=0,4	A	1.8 / 10,000 cycles	no specification	no specification	no specification
Rated current AC cos φ=0.6	A	1.6 / 10,000 cycles	1.6 / 10,000 cycles	6.3 / 10,000 cycles	6.3 / 10,000 cycles
Rated current AC cos φ=1.0	A	2.5 / 10,000 cycles	2.5 / 10,000 cycles	10.0 / 10,000 cycles	10.0 / 10,000 cycles
Max. switching current AC cos φ=0.4	A	7.2 / 1,000 cycles	no specification	no specification	no specification

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Switch properties	Unit of measure	S01	S02	S06	S08
Max. switching current AC cos φ=1.0	A	6.3 / 3,000 cycles; 7.5 / 300 cycles	no specification	25.0 / 100 cycles	no specification

Mechanical	Unit of measure	S01	S02	S06	S08
Contact resistance	mΩ	≤50	≤50	≤50	≤50
High-voltage resistance	kV	2.0	2.0	2.0	2.0
Standard connection lead wire	mm <sup>2</sup>	0.25 / AWG22	0.25 / AWG22	0.75 / AWG18	0.75 / AWG18
For devices in protection class		I+II	I+II	I+II	I+II
Diameter (with/without insulation cap)	mm	9.5	9.5	10.5	10.5
Installation height of the housing (with/without insulation cap)	mm	from 4.3	from 4.7	from 7.0	from 7.0
Length of insulation cap	mm	15.0	15.0	17.5	17.0
Pressure resistance of the housing	N	450	450	600	600

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