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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).

## 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

## Application

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

## Standards

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

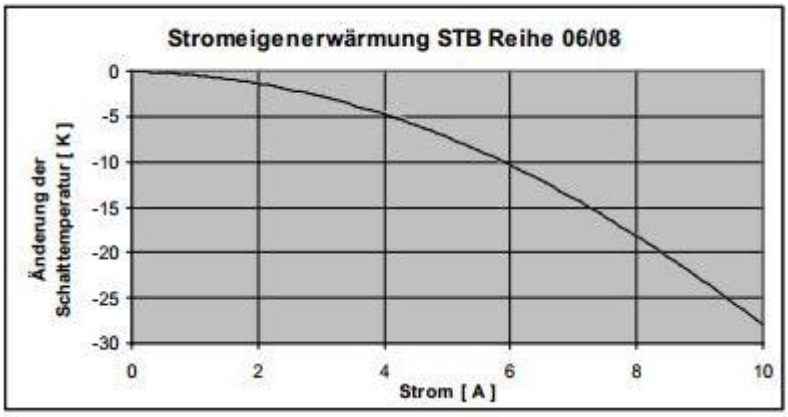
## Delivery forms

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.

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## NST-diagram




[Translate to Englisch:]

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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 | $mm^2$ | 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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