
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

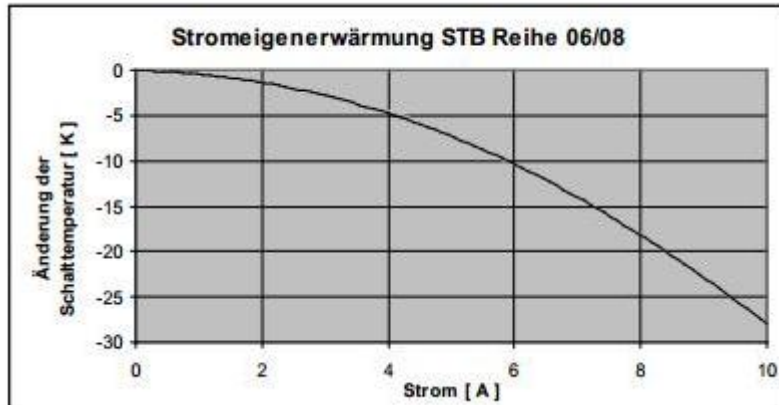
Nominal switching temperature in 5°C-steps of 60 to 200°C as standard, further temperatures on request.

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.

NST-diagram



[Translate to English:]

The information on this data sheet is based on the information provided by our supplier. It does not represent any specification or agreements regarding conditions or properties. The indicated values are standard values. Deviations from those values due to production and application cannot be excluded. The information on this data sheet is addressed to experts who use it at their own discretion and at their own risk. We do not guarantee results, or accept liability for the indicated specifications or for results obtained based on the specifications. Please contact us for more detailed information. Non-toxic and toxic substances are listed on the safety data sheet.
Updated 09/20

Mylar®, Melinex® are registered trademarks of Mylar Specialty Films U.S. Limited Partnership.
Nomex® is a registered trademark of E.I. Du Pont de Nemours and Company.



| 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 |

The information on this data sheet is based on the information provided by our supplier. It does not represent any specification or agreements regarding conditions or properties. The indicated values are standard values. Deviations from those values due to production and application cannot be excluded. The information on this data sheet is addressed to experts who use it at their own discretion and at their own risk. We do not guarantee results, or accept liability for the indicated specifications or for results obtained based on the specifications. Please contact us for more detailed information. Non-toxic and toxic substances are listed on the safety data sheet.
Updated 09/20

Mylar®, Melinex® are registered trademarks of Mylar Specialty Films U.S. Limited Partnership.
Nomex® is a registered trademark of E.I. Du Pont de Nemours and Company.



| 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 | m Ω | ≤ 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 |

The information on this data sheet is based on the information provided by our supplier. It does not represent any specification or agreements regarding conditions or properties. The indicated values are standard values. Deviations from those values due to production and application cannot be excluded. The information on this data sheet is addressed to experts who use it at their own discretion and at their own risk. We do not guarantee results, or accept liability for the indicated specifications or for results obtained based on the specifications. Please contact us for more detailed information. Non-toxic and toxic substances are listed on the safety data sheet.
Updated 09/20

Mylar®, Melinex® are registered trademarks of Mylar Specialty Films U.S. Limited Partnership.
Nomex® is a registered trademark of E.I. Du Pont de Nemours and Company.

