



HIGH PERFORMANCE THERMAL CUTOUTS

- QUALITY SINGLE-USE FUSES (50°C TO 280°C)
- **BIMETAL RESETTABLE SWITCHES (40°C TO 155°C)**
- ⊕ VDE & UL-APPROVED & ROHS COMPLIANT
- HARNESS ASSEMBLIES FOR CUSTOM APPLICATIONS







TRUSTED AND RELIABLE COMPONENTS FROM HIGHLY REGARDED INTERNATIONAL SUPPLIERS



Thermal cutouts are an **essential safety component** in nearly every electrical device, from small household appliances to scientific apparatus, motors and commercial catering equipment. Despite their simplicity, thermal links must demonstrate the required level of **reliable performance** - as well as be **correctly specified** - in order to be effective.

We offer a range of **different thermal cutouts** covering functioning temperatures between 40°C and 280°C - all manufactured by international brands with a trusted reputation for high production quality.

These span a **wide choice** of AC and DC current ratings, operation types, size, construction materials and accuracy to meet your specific application - with **custom options** available to make assembly into your products quicker and easier.





Expert advice to help you select the right thermal cutout to meet your standard or special criteria

- Wide range of rated current from 0.5A to 16A (250V AC) or 3A to 7A (DC)
- Normal functioning temperature range between 40°C and 280°C
- Special designs available for small areas, temperature protection or mould-resistance



Components manufactured and tested to meet stringent international safety standards

- Certfication supplied for all major safety standards including CE, UL, cUL, CSA and VDE
- Production compliance with RoHS directive and ISO 9001 quality management systems



Standard items can be customised to make them easier to install as part of your production process

- Different lead types, shapes and lengths can be provided
- Accessories include mounting clips and brackets
- Available as part of a custom-built harness to match your particular application



Vast majority of thermal fuses and switches available for delivery within five days

- Small quantities ordered specially to minimise costs and wastage
- Components required regularly can be held as a consignment agreement and supplied next-day to meet changes in your production levels

Limitor Thermal Fuses

28 Models: 50°C to 280°C (Tf)



- DF-S 16A
- DF-SL



VDE & UL-approval. RoHS compliant

Thermal Bimetal Switches

- Small dimension: 71mm x 4mm
- DF-SL with long leads
- Made in Germany

SEFUSE® Thermal Fuses

52 Models: 73°C to 240°C (Tf)



- SF-K 6A
- 10A/ 15A SF-R
- SFH-R

SCHOTT

- VDE & UL-approval. RoHS compliant
- Uses thermosensitive material as the thermal pellet
- Large rated current (6A to 15A) with SFH/R for high temperatures
- Made in Japan

SEFUSE® Thermal Fuses

19 Models: 76°C to 151°C (Tf)



- 0.5A SM-G
- SM-B
- SM-A
- VDE & UL-approval. RoHS compliant
- Fusible alloy inside miniature ceramic case
- Rated current of 0.5A to 2.0A (AC) / 3.0A to 7.0A (DC)
- Made in Japan

AUPO Thermal Fuses

18 (3A & 5A) Models: 84°C to 150°C (Tf)



- A-3A-F
- A-5A-F



- VDE & UL-approval. 14 models conform to RoHS
- Alloy thermal cut out
- 1A, 10A, 15A and 20A also available
- Made in China







Large Home Appliances



Foodservice Equipment



Automotive



Commercial Kitchen Equipment



Scientific





40°C...150°C | 20 mA

- P-Type
- Q-Type



- VDE & UL-approval. RoHS compliant
- Choice of switch open or close
- Mould-proof construction and temperature-resistent mousing
- Made in Germany

Thermal Bimetal Switches 50°C...155°C | 50 mA



- TB-02
- 5A TB-05
- 11A **TB-11**

Limitor

- VDE & UL-approval. RoHS compliant
- Choice of switch open or close
- Time-delayed reset possible
- Made in Germany

Also Available





Motor Protectors







High Temperature Limiter Max switching temperature 450°C.

FOR FULL PRODUCT SPECIFICATIONS & SELECTOR TOOL, VISIT WWW.HAWCO.CO.UK/TCO

Most Popular Items At a Glance

Thermal Fuses



| RANGE | RATED | FUNCTIONING | MAX HOLDING | MAX TEMP |
|------------|---------------|-----------------|-----------------|-------------|
| | CURRENT | TEMP RANGE (TF) | TEMP RANGE (TH) | RANGE (TM) |
| DF-S/DF-SL | 16A (250V AC) | 50°C280°C | TH = TF -24°C | 110°C 300°C |

SCHOTT

| SF-K | 15A/10A (Resistive) 250V AC | 73°C216°C | 45°C198°C | 150°C300°C |
|-------|------------------------------------------------|------------|-----------|------------|
| SF-R | 6A (Resistive) 250V AC | 73°C240°C | 58°C200°C | 165°C380°C |
| SFH-R | 15A/10A (Resistive) 250V AC | 110°C176°C | 99°C165°C | 400°C |
| SM-G | 0.5A (Resistive) 250V AC; 5A 50V DC | 115°C225°C | N/A | 125°C235°C |
| SM-B | 1A (Resistive) 250V AC; 3.5A or 6A 50V DC | 97°C225°C | N/A | 125°C235°C |
| SM-A | 2A (Resistive) 250V AC; 3A, 4A or 7A 50V DC | 76°C225°C | N/A | 100°C235°C |

AuP?

| Ax-3A-F | 3A 250V AC | 84°C160°C | 65°C135°C | 203°C |
|---------|------------|-----------|-----------|-------|
| Ax-5A-F | 5A 250V AC | 84°C160°C | 65°C135°C | 203°C |

Thermal Switches



| RANGE | BREAKING CAPACITY | MINIMUM CURRENT | SWITCHING TEMPERATURE | SWITCHING DIFFERENTIAL | MAX AMBIENT TEMPERATURE |
|-------|-------------------------------|--------------------|--------------------------------|---------------------------|----------------------------|
| 0 | 1A 250V AC / 50Hz | 20 mA | 50°C130°C in 5 Kelvin steps | 10K to 60K | 160°C/200°C 1 minute |
| Р | 2.5 A (1.6) 250V AC / 50Hz | 20 mA | 40°C150°C in 5 Kelvin steps | 10K to 60K | 160°C/200°C 1 minute |
| Q | 2.5A (1.0) 250V AC / 50Hz | 5V / 20 mA | 40°C120°C (150°C) | N/A | 160°C |
| TB-02 | 2A 250V AC / 50Hz | 50 mA | 50°C155°C | 10K to 50K | 160°C |
| TB-05 | 5 A 250V AC / 50Hz | 50 mA | 50°C155°C | 10K to 50K | 160°C |
| TB-11 | 11A (1.0) 250V AC / 50Hz | 50 mA | 55°C160°C | 10K to 45K | 180°C |

To discuss your application in detail - or for full technical details including specialist ranges, dimensions, performance data, international approvals and available options - contact our OEM technical team.

GOT A PROJECT IN MIND? WE CAN HELP

Every day, our in-house design team advise OEM customers on the components they need.

We can source a suitable part from an existing design specification or set of technical drawings. Or we can investigate a number of different solutions based on original requirements.

If you want advice on how to improve your product or reduce its cost, discuss your project with us.



REQUEST A TEST SAMPLE FOR YOUR PRODUCT DESIGN



ARRANGE A MEETING WITH A TECHNICAL EXPERT



SEND US YOUR PROJECT SCOPE

TO TALK TO OUR EXPERT TEAM, CALL +44 (0)1483 869 070 OR EMAIL SALES@HAWCO.CO.UK

