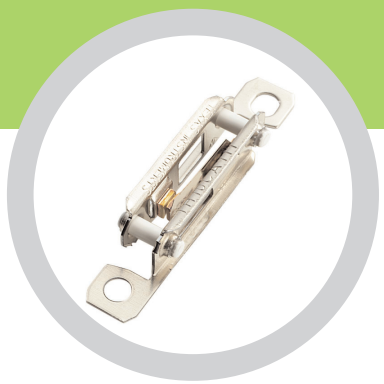
Sensata Technologies



TH10

Thermal Cut-Out

KEY BENEFITS

Flexible mounting:

3 terminal configurations available

Robust design:

The bimetal disc is protected by the metal support

Full automated live:

Provides stable setting values

Low price:

The particular design provides high competitivity

KLIXON®

Sensata Technologies has developed the TH10 temperature cut-out to respond to the need of increasing power of heating and personal care appliances. As a result of this, Sensata Technologies has further established its leading position in the worldwide thermal protection market.

Design and operating principles

The TH10 consists of two nickel-plated supports, held together with ceramic pins. One support holds the high performance Klixon® bimetal disc, which, in combination with the sophisticated contact system, provides superior cycling performance. For self-hold versions see TH11/21. A wide temperature range, standard 5K tolerance, different bimetal resistivity, plus optional terminal configurations make the TH10 suitable for a very wide range of applications.

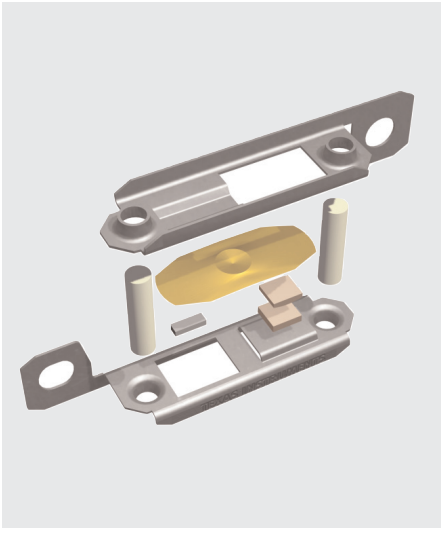
The operating principle of the TH10 is simple and effective. A current flows through the resistive Klixon® bimetal disc. When a fault condition occurs, the increased ambient temperature causes the bimetal disc to snap open the contacts. As the device cools down to a safe temperature again, the contacts will automatically reset.

Applications

The TH10 operates as a sensitive power cut-out for:

- Hair dryers
- Fan heaters
- Convector heaters
- Transformers
- Hand dryers

and various other applications. With the TH10 Sensata Technologies provides you with cost-effective protection while offering superior quality and reliability.



Certifications

Agency	File number	Rating A-res (A-ind. @ PF=0.6)V / cycles	Standard
ENEC	2014531.03	13(2)A250 Vac @ 30.000 cycles	EN60730-2-9
		30(5)A250 Vac @ 3.000 cycles	EN60730-2-9 special rating EN61558
ENEC	2014531.03		EN60730-2-2
UL / C-UL	E 54813		UL873 / CSA C22.2 No 24

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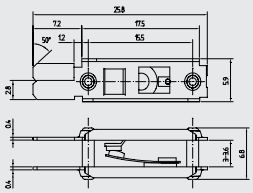
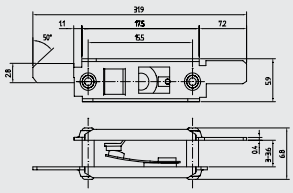
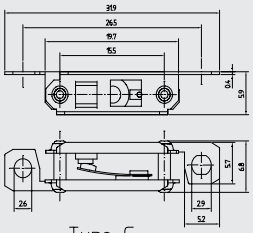


Type A



Type B



Type C

Coding System

TH 10 C A 101

Terminal Configuration

Code	Terminals
A	Terminals on same end
B	Terminals on opposite end
C	Terminals on opposite end (with holes)

Disc and contact support material

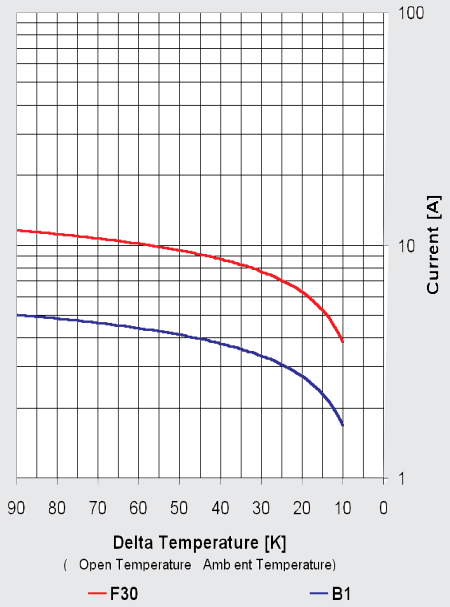
Code	Material
A	Nickel plated steel

Standard opening temperature

Operating Temp.	Low resistivity bimetal disc (F30)	High resistivity bimetal disc (B1)
60°C	031	035
65°C	041	045
70°C	051	055
75°C	061	065
80°C	071	075
85°C	081	085
90°C	091	095
95°C	101	105
100°C	111	115
105°C	121	125
110°C	131	135
115°C	141	145
120°C	151	155
125°C	161	165
130°C	171	175
135°C	181	185
140°C	191	195
145°C	201	205
150°C	211	215
170°C		255

Ultimate Trip Current vs. Ambient Temperature (non-circulating air)

Approx to be used for se ect ng samp es for verificat on tests



Specifications

Standard operating temperature range	from 45°C - 170°C
Max. Ambient temperature	200°C
Tolerance on open temperature	± 5K

Declarations

Declarations to EN60730-2-9		Declarations to EN60730-2-2	
Purpose of the control	Thermal Cut-Out	Purpose of the control	Thermal Motorprotector
Construction	Incorporated, non-electronic		
Degree of protection	IP00		
Terminals for ext. conductors	For internal conductors only		
Method of (dis) connection of terminals	Riveting, soldering, spotwelding, springloaded contacting		
Details for terminals for internal conductors	Insulation of conductors used by OEM's must be able to withstand the operating temperatures in normal usage		
Temperature limits of the switchhead	200°C		
PTI of insulation materials	PTI 250	PTI of insulation materials	PTI 250
Method of mounting	By various means in conjunction with (holes in) terminals, such that adequate creepage and clearance distances are maintained between live parts and accessible metal parts	Method of mounting	By various means in conjunction with (holes in) terminals, such that adequate creepage and clearance distances are maintained between live parts and accessible metal parts
Operating time	For continuous operation		
Type of action	Type 2B	Type of action	Type 3C
Reset characteristic	Automatic	Reset characteristic	Automatic
Extent of sensing element	Whole control		
Control pollution degree	Degree 2	Control pollution degree	Degree 2

Sensata
Technologies

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