Product Bulletin

8MM

Motor protector/Thermal cut-out

Sleeved version Epoxy version

As a world market leader in appliance motor protection Texas Instruments builds the 8MM to meet your requirements. This compact motor protector provides locked rotor and overload protection in a wide range of industrial and domestic appliances.

Design and operating principles
The 8MM design utilizes a sealed nickel-zinc plated steel can that holds and protects the inner components against infiltration as well as mechanical deformation.
The 8MM is supplied in the basic metal version, without wire leads, or with shrinkable sleeve and wire leads, or with epoxy resin and wire leads. The can contains the calibrated Klixon™ disc, carrying a contact of silver-nickel. The fixed contact is placed on the opposite side, separated from the terminal by an insulator.

The operating principle of the 8MM is both simple and effective. A current flows through the resistive Klixon™ bimetal disc. When a fault condition occurs, the increased current and ambient temperature make the bimetal disc snap open the contacts. The contacts close again automatically as the device cools down to a safe running temperature.

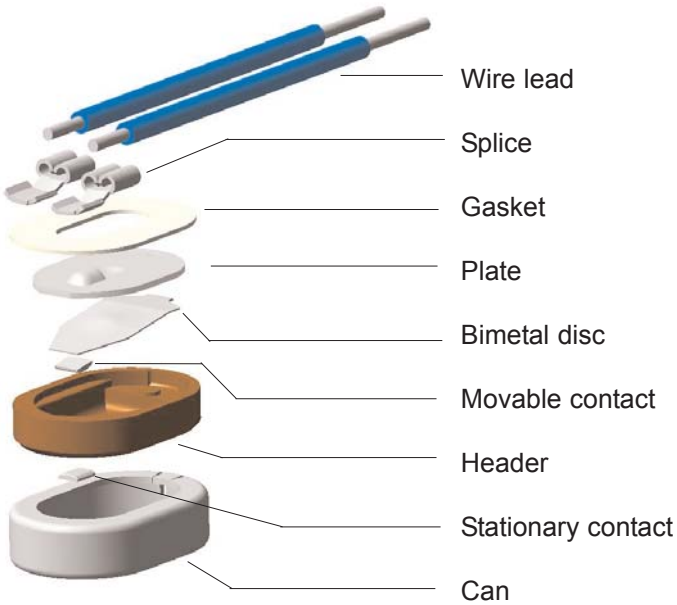
Applications
The 8MM operates as a sensitive power cut-out for applications like:

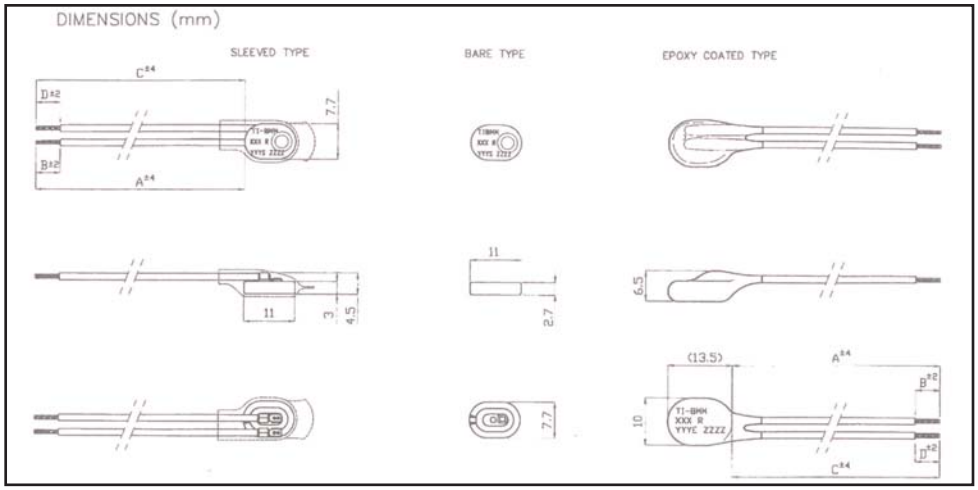
- Small motors
- Coils
- Solenoid valves
- Transformers

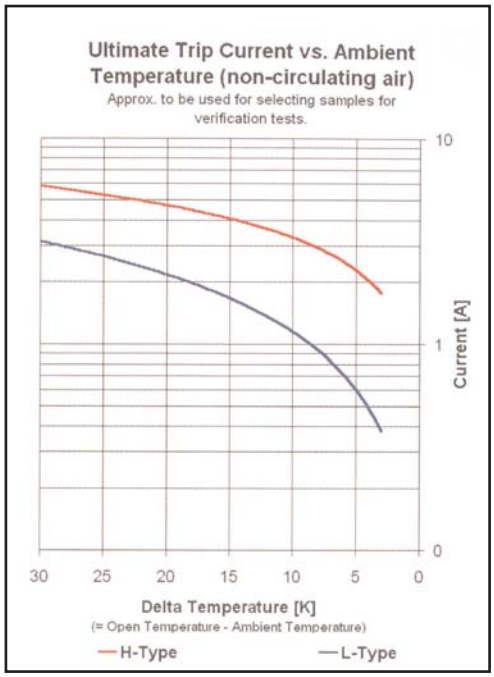
In single phase motors, it can be mounted directly in the main circuit to serve as on- or in-winding protector. It's compact size provides ease of installation, even in small spaces. At this time there is practically no small motor the 8MM cannot protect against overheating and overloading. Texas Instruments' 8MM provides you with a cost effective solution in terms of maximum quality and reliability.

Key Benefits

- Available in Epoxy and Sleeved version
- Wide variety of leads, provided with tabs on customers request
- Robust design for all on- and inwinding applications
- Manufactured on fully automatic state-of-the-art equipment







Coding System

8MM	XXX	R	YYY	Z

Standard opening temperature

70	100	130	160
75	105	135	
80	110	140	
85	115	145	
90	120	150	
95	125	155	

Current carrying capacity

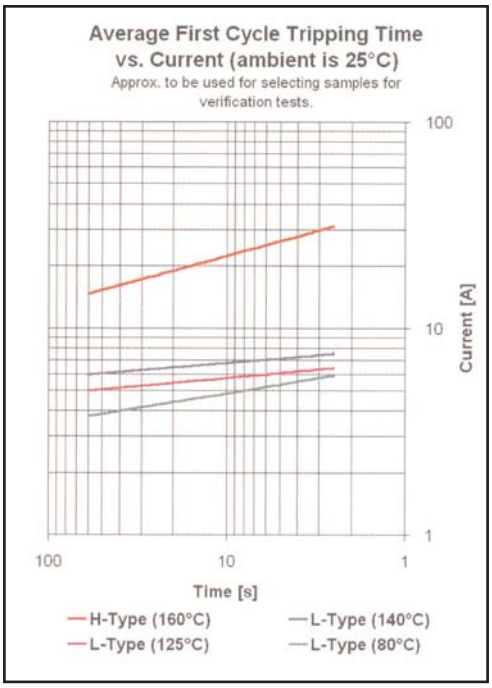
Code	Max current
H	7 amp
L	3 amp

Wire lead code*

Insulation

Code	Type
S	Sleeve
E	Epoxy
Blank	No insulation

*** Size and length on customer request**



Specifications

Standard operating temperature range	from 70°C - 160°C in 5K step
Tolerance on open temperature	± 5K*
Max. Ambient temperature	175°C
Differential	20K minimum

* ± 10K available

Maximum contact rating

Type	
8MM xxx -L	4.5 (1.6)A250Vac (10,000 cycles)
8MM xxx -H	7 (3)A250Vac (3,000 cycles)
	10 (2)A250Vac (3,000 cycles)

Certifications

Agency	File number	Standard	Note
UL	E 15962	UL2111	Limited short circuit capability
ENEC	2014531.09	EN60730-2-2	Thermal motorprotector
ENEC	2014531.09	EN60730-2-9	Thermal cut-out
CSA	LR11372-120	CSAC22.2 n°77/95	Motor controller

Declarations

Declarations to EN60730-2-9	Declarations to EN60730-2-2
Purpose of the control.....Thermal cut-out	Purpose of the control.....Thermal Motorprotector
Temperature limits of the switchhead.....175°C (without and with Mylarsleeve) 150°C (with Epoxy)	
PTI of insulation materials.....PTI 175	PTI of insulation materials.....PTI 175
Method of mounting..... On-winding or by special means in the appliance	Method of mounting..... On-winding or by special means in the appliance
Operating time.....For continuous operation	
Type of action.....Type 2C	Type of action.....Type 3C
Reset characteristic.....Automatic	Reset characteristic.....Automatic
Extent of sensing element....Whole control	
Control pollution degree.....Normal	Control pollution degree.....Normal

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TEXAS INSTRUMENTS

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