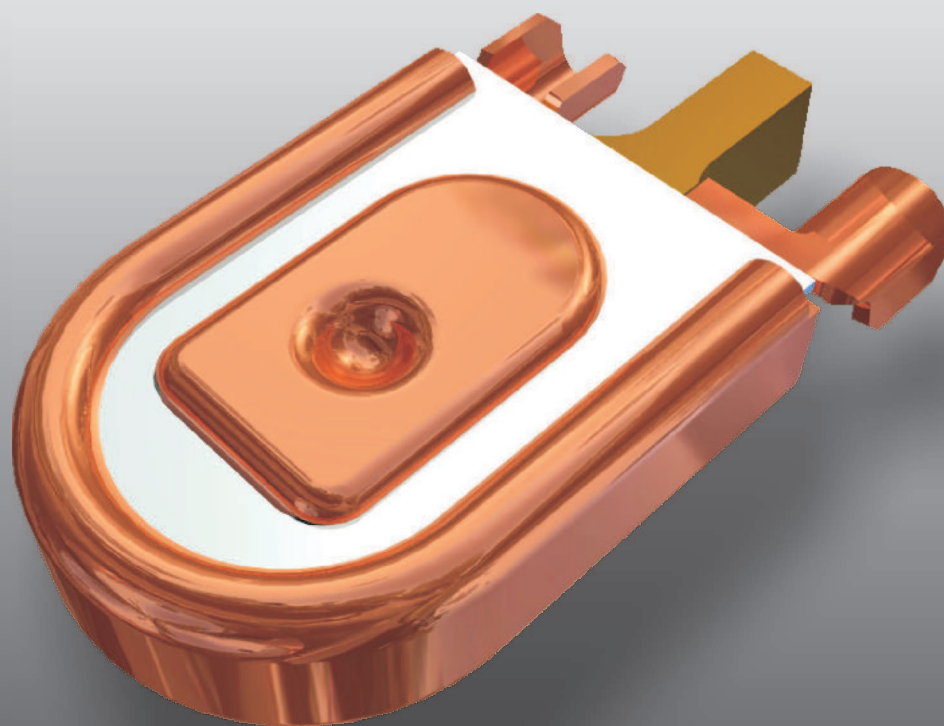




11MP thermal protector

small / reliable / economical



Zona Industriale SO.CO.MER. - 81100 Caserta (CE)
www.dmpcontrols.com info@dmpcontrols.com



11MP delivers full thermal protection in a small package at an excellent price

11MP thermal protector is based on proven bimetal technology. It is a miniature snap-acting device designed particularly for the protection where space is critical. In spite of its dimensions it has certified contact rating up to 7A.

Main applications in :

- Shaded pole motors
- Transformers
- Ballasts
- Solenoids
- Electronic boards
- Other AC loads

Use of **DMP** 11MP thermal protector offers :

- Miniature size
- Individual temperature calibration
- Snap contacts opening
- Repeatability over life
- Current and Temperature sensitivity
- Epoxy version suitable for most impregnation processes.
- Sleeve version ideal for on winding assembly
- Pill version for highly automated assembly
- Full flexibility on leads

DMP Production of 11MP means :

- Quality excellence based on modern statistical techniques into manufacturing processes fully automated.
- Best delivery time in the market based on just in time principles.
- Lot size flexibility
- All materials certified according to ROHS
- A unique on call customer service promptly available.
- Highly qualified application support

Electrical characteristics

Normally-close circuit, single pole

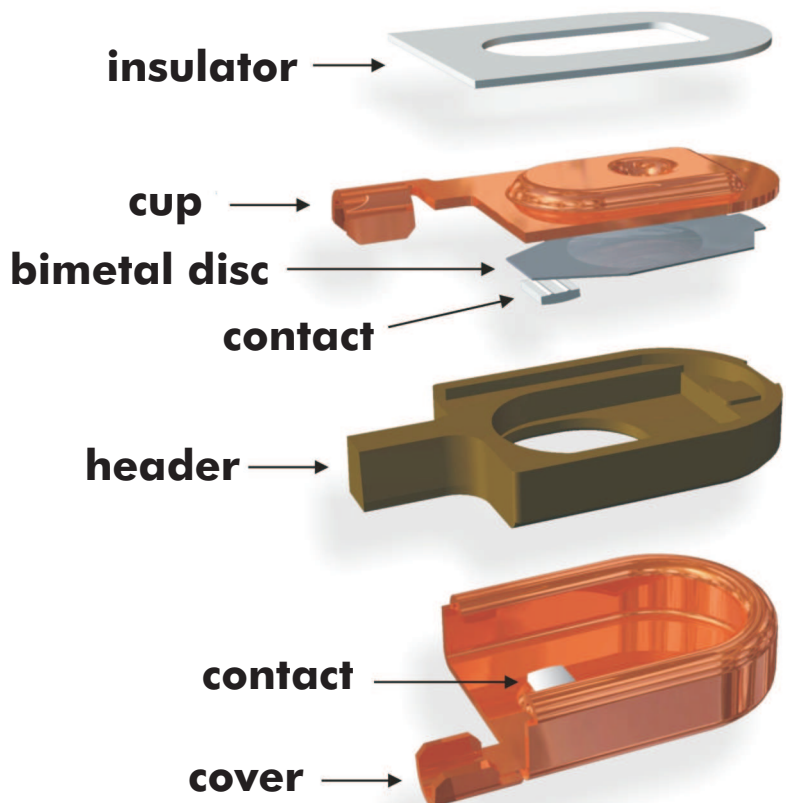
Operating temperature range : 70C to 160C (5C step)
Tolerance on open temperature +/- 7C (+/-5 on request)

Temperature Differential 20C minimum

Contact rating
L type 4,5(1,6)A at 250VAC
H type 7,0A(3,0)A at 250VAC

Endurance :
10.000 operations 4,5(1,6)A 250VAC
3,000 operations 7,0(3,0)A 250VAC

Open Temperature drift after endurance max +/- 10C



How to select and configure the **DMP** 11MP thermal protector

Step 1 Contacts rating

Verify that application does not exceed 7A at 220V.

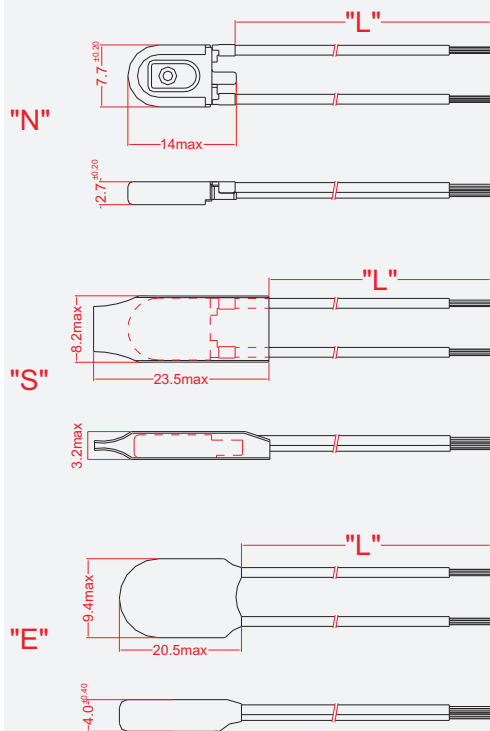
Step 2 Package

Choose the 11MP package configuration that best fits the application.

N type, without insulation

S type, with mylar sleeve insulation

E type, with epoxy insulation



Step 3 Leads

Standard 11MP wire lead is UL1332 approved, AWG22, FEP insulation, 200C/300V, white.

Different leads are available on request.

Maximum leads length for E type is 300mm.

There is no length limitation for S type.

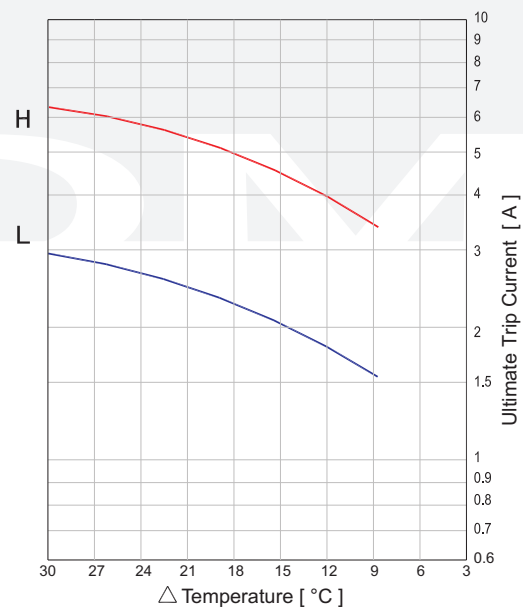
Leads configurations are made according to customer prints.

Step 4 Bimetal selection

Determine the appropriate bimetal.

Current passing through the 11MP bimetal disc has a derating effect. In applications, where the protector acts basically on temperature alone use the H type. This low resistivity bimetal minimizes the self-heating and consequently the effect of current on protector's operating temperature. For applications where faster tripping times are requested due to the effect of current use the L type.

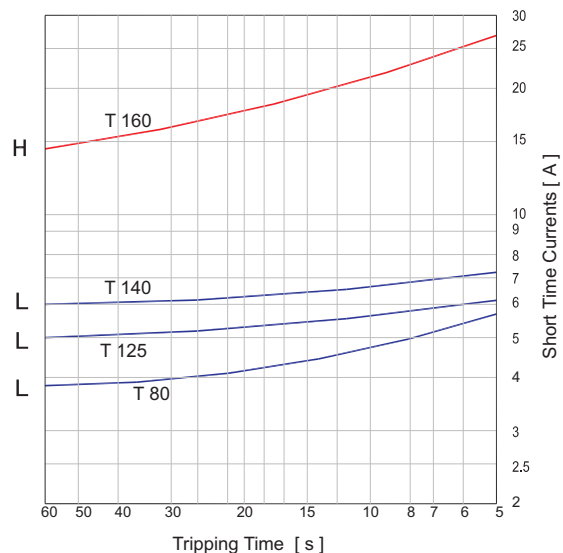
Curves below are guidelines to determine the 11MP performance in the application.



Ultimate Trip Current VS Delta Temperature

(difference between protector temperature and protector ambient temperature)

Approximate: to be used only for selecting samples.



Average first cycle tripping time VS Current at 25C

Approximate: to be used only for selecting samples.

How to specify the 11MP thermal protector

CODING SYSTEM : 11MP XXX A YYY I - MZZ

11MP Basic device

XXX Nominal opening temperature

A Bimetal type

H = 7,0A rating/low current sensitivity
L = 4,5A rating/current sensitive

YYY Leads configuration

I External insulation

E = epoxy encapsulated
S = mylar sleeve
N = no insulation

MZZ Production date code

M = production month
A-January **H**-July
B-February **K**-August
C- March **L**-September
D-April **M**-October
E-May **N**-November
F-June **P**-December
ZZ = production year



AGENCY APPROVALS

C-UL 2111	file	E224750
EN 60730-2-2	file	CA02 02988
EN 60730-2-9	file	CA02 02987

	EN 60730-2-9 Declaration	EN 60730-2-2 Declaration
Purpose of the control	Temperature sensing control	Thermal motor protector
Construction	incorporated, non electronic	
Degree of protection	IP00	
Terminals	for internal conductors only	
Temperature limits of the switch head	150C encapsulated 175C with sleeve 175C not insulated	
PTI of insulation materials	PTI 175	PTI 175
Rated Impulse Voltage	2500V	2500V
Method of mounting	on-winding or by special means in the appliance	on-winding or by special means in the appliance
Operating time	for continuous operation	
Type of action	type 2C	type 3C
Reset characteristic	automatic	automatic
Extent of sensing element	whole control	
Control pollution degree	normal 2	normal 2

