



**Thermal management  
for electrical enclosures**



**TMC**

**FAN ASSISTED PTC HEATERS  
User's manual**

[www.alfaelectric.com](http://www.alfaelectric.com)

## WARNING

- Safety of TMC is warranted only by proper use of these instruction which must be kept.
- Installation must be done by qualified personnel only after power supply disconnecting
- Before any operation, switch off the power supply.
- Install the TMC only inside an electrical enclosure, in the bottom part of cabinet.
- Upstream of the electrical connection, an efficient disconnection system must be provided
- Protection against access to live parts must be warranty by installer.
- Don't install TMC in ambient with excessive moisture and dirt
- Installation position of TMC must be selected to ensure good ventilation. Take care that any internal components of enclosure don't obstruct air passage.
- Do not mount TMC under easily inflammable materials
- Follow all technical data shown in this manual.

This manual contains the information necessary for the product to be installed correctly and also instructions for its maintenance and use; we therefore recommend that the utmost attention is paid to the following instructions.

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## 1 - DESCRIPTION

### 1.1 GENERAL DESCRIPTION

Super compact and light weight fan assisted PTC heaters with spring terminal, optimized to avoid condensation or grant a minimum temperature in closed cabinets.

Tab. 1

Model	Heating Capacity [W]	Power supply [V/Hz]
TMC200.700	200	Heating element 230/50-60 Hz Fan 24VDC
TMC350.700	350	Heating element 230/50-60 Hz Fan 24VDC

## 2 - INSTALLATION

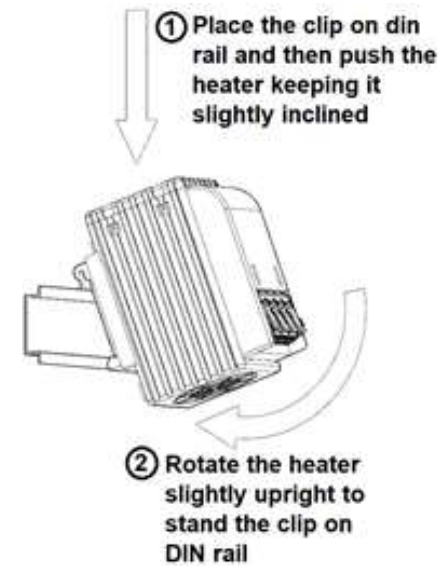
### 2.1 GENERAL DESCRIPTION

TMC is fitted by clip for DIN rail 35mm mounting.

### 2.2 INSTALLATION

#### WARNING

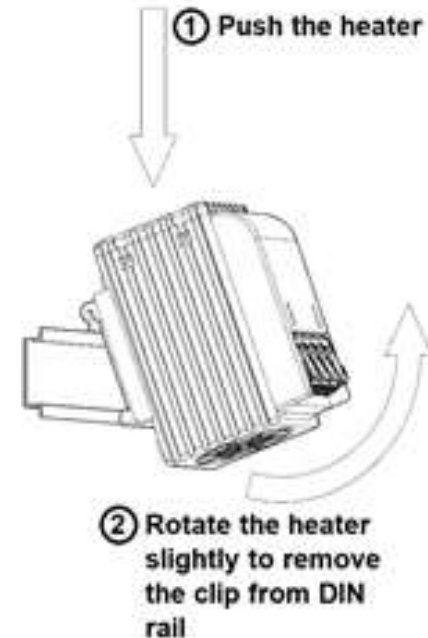
- Keep a thermal safety clearance of 300 mm from the air outlet and 100mm from air inlet, 20mm of clearance from sides
- Install vertically (cables below heater) in the bottom part of cabinet.
- Do not mount heaters under easily inflammable materials
- Do not operate in corrosive ambient air.
- Install TMC only in an electrical enclosure



## 3 - REMOVAL

- Before any operation, switch off the power supply

**WARNING: top grill surface is very hot for 15-20 minutes after electrical disconnection.**



## 4 - ELECTRICAL CONNECTION

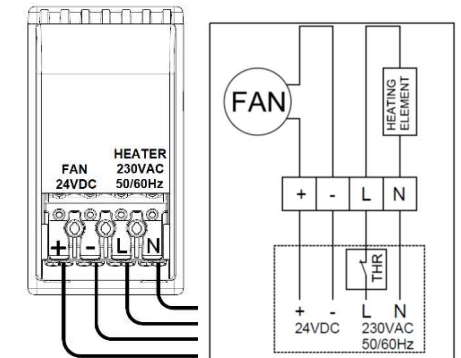
### 4.1 GENERAL DESCRIPTION

TMC must be powered at voltage rating shown on label pasted above the terminal.

### 4.2 ELECTRICAL CONNECTION

TMC connection must be done by trained electricians according national electrical safety codes.

- Before any operation, disconnect cabinet
- 1) Connect TMC according to wiring diagram
  - 2) Use a thermostat ALFAELECTRIC THR series to pilot heating functions according to enclosure temperature.
  - 3) Connect the cabinet



Inrush current could be 6 times higher than rated current, a delayed fuse is suggested to prevent fuse break during TMC starting (see tab.1 for references).

### 4.3 ELECTRICAL DISCONNECTION

#### WARNING

- 4) Disconnection must be done by qualified personnel only after power supply disconnecting
- 5) Before any operation, switch off the power supply.

## 5 - CLEANING, MAINTENANCE AND DISPOSAL

Cleaning and maintenance must be done only by specialized people after switching off power supply.

For cleaning use only a wiper and compressed air. TMC must be disposed of separately from ordinary household wastes