



Thermal management
for electrical enclosures



STHT - HT - MHT

PTC HEATERS
User's manual

www.alfaelectric.com

WARNING

- Safety of STHT-HT-MHT 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 STHT-HT-MHT 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 STHT-HT-MHT in ambient with excessive moisture and dirt
- Do not mount STHT-HT-MHT 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

GENERAL DESCRIPTION

STHT-HT-MHT are anticondensation PTC heaters optimized to avoid condensation or grant a minimum temperature in closed cabinets. STHT series is fitted with plastic casing optimized to achieve lower surface temperature and increased heat transfer efficiency. Thermo-resistant plastic shield surrounds the unit to prevents direct contacts with high temperature internal parts. **Versions with .001 at the end of the code are equipped with integrated fixed set point compact thermostat.**

Tab.1

Model	Heating Capacity* [W]	Power supply [V/Hz]	Delayed fuse (advised) [A]
STHT25.000	25	120-240/50-60	4
STHT25.001	25	120-240/50-60	4
HT25.000	25	120-240/50-60	4
HT25.001	25	120-240/50-60	4
STHT50.000	50	120-240/50-60	4
STHT50.001	50	120-240/50-60	4
HT50.000	50	120-240/50-60	4
HT50.240	40	24VDC	6.3
HT50.001	50	120-240/50-60	4
STHT75.000	75	120-240/50-60	6.3
STHT75.001	75	120-240/50-60	6.3
HT75.000	75	120-240/50-60	6.3
HT75.001	75	120-240/50-60	6.3
STHT100.000	100	120-240/50-60	8
STHT100.001	100	120-240/50-60	8
HT100.000	100	120-240/50-60	8
HT100.001	100	120-240/50-60	8
HT100.240	100	24VDC	8
HT100.480	100	48VDC	8
STHT150.000	150	120-240/50-60	10
STHT150.001	150	120-240/50-60	10
HT150.000	150	120-240/50-60	10
HT150.001	150	120-240/50-60	10
MHT25	25	120-240/50-60	4
MHT50	50	120-240/50-60	4

2 - INSTALLATION

2.1 GENERAL DESCRIPTION

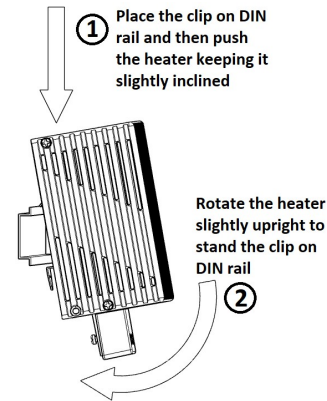
STHT-HT-MHT are fitted with clip for DIN rail 35mm mounting.

2.2 INSTALLATION

WARNING

- Before any operation, switch off the power supply
- Keep a thermal safety clearance of 100 mm from the top and 100mm from bottom, 60mm of clearance from sides
- Install vertically (cables below heater) in the bottom part of cabinet.

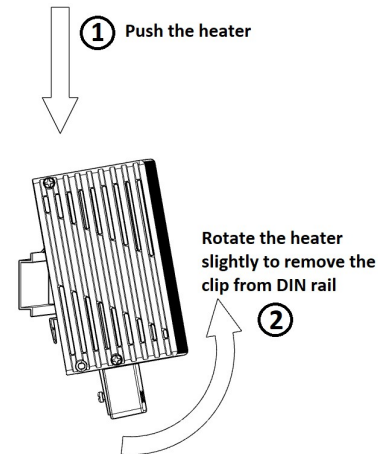
- Do not mount heaters over easily inflammable materials
- Do not operate in corrosive ambient air.
- Install STHT-HT-MHT only in an electrical enclosure



3 - REMOVAL

- Before any operation, switch off the power supply

WARNING: Heater surface is very hot for 15-20 minutes after electrical disconnection.



4 - ELECTRICAL CONNECTION

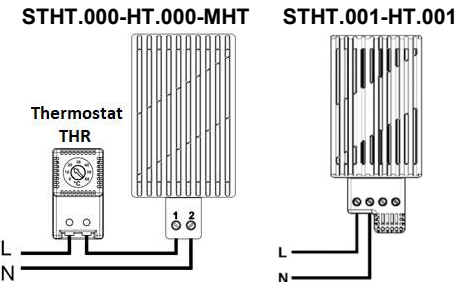
4.1 ELECTRICAL CONNECTION

STHT-HT-MHT electrical connection must be done by trained electricians according national electrical safety codes.

- Before any operation, disconnect cabinet
- Connect STHT-HT-MHT according to wiring diagram

- Connect the STHT -MHT to the power supply by adequate section cable according to dimension allowed by terminal.
- For model without integrated thermostat use a thermostat ALFAELECTRIC THR series to pilot heating functions according to enclosure temperature. (Not for VDC supply)
- Connect the cabinet

Voltage rating is shown by label pasted on product.



Model with .001 at the end of the code are equipped with fixed set point compact thermostat. Set is fixed at 5°C: the heating element starts to heat at enclosure temperature under 5°C and then it turns off at enclosure temperature higher than 15°C

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

4.2 ELECTRICAL DISCONNECTION

WARNING

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

4 - 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.

STHT-HT-MHT must be disposed of separately from ordinary household wastes