



Thermal management  
for electrical enclosures



STHT - HT

PTC HEATERS  
User's manual

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

## 1 - DESCRIPTION

### GENERAL DESCRIPTION

STHT-HT 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 T at the end of the code are fitted with integrated fixed set point compact thermostat.**

Tab.1

Model	Heating Capacity* [W]	Power supply [V/Hz]	Delayed fuse (advised) [A]
STHT25	25	120-240/50-60	4
STHT25T	25	120-240/50-60	4
HT25	25	120-240/50-60	4
STHT50	50	120-240/50-60	4
STHT50T	50	120-240/50-60	4
HT50	50	120-240/50-60	4
STHT75	75	120-240/50-60	6.3
STHT75T	75	120-240/50-60	6.3
HT75	75	120-240/50-60	6.3
HT75T	75	120-240/50-60	6.3
STHT100	100	120-240/50-60	8
STHT100T	100	120-240/50-60	8
HT100	100	120-240/50-60	8
HT100T	100	120-240/50-60	8
STHT150	150	120-240/50-60	10
STHT150T	150	120-240/50-60	10
HT150	150	120-240/50-60	10
HT150T	150	120-240/50-60	10

## 2 - INSTALLATION

### 2.1 GENERAL DESCRIPTION

STHT-HT 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 only in an electrical enclosure



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STHT50	50	120-240/50-60	4
STHT50T	50	120-240/50-60	4
HT50	50	120-240/50-60	4
STHT75	75	120-240/50-60	6.3
STHT75T	75	120-240/50-60	6.3
HT75	75	120-240/50-60	6.3
HT75T	75	120-240/50-60	6.3
STHT100	100	120-240/50-60	8
STHT100T	100	120-240/50-60	8
HT100	100	120-240/50-60	8
HT100T	100	120-240/50-60	8
STHT150	150	120-240/50-60	10
STHT150T	150	120-240/50-60	10
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- Do not operate in corrosive ambient air.
- Install STHT-HT only in an electrical enclosure

## WARNING

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

Though this manual has been issued with the greatest care, ALFA ELECTRIC will not take any responsibility deriving from its use. he same applies to each person or Company involved in the issuing of this manual.

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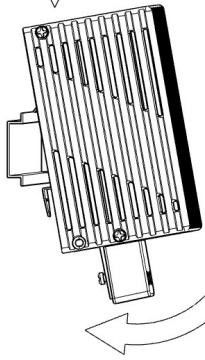
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- 1 Place the clip on DIN rail and then push the heater keeping it slightly inclined



Rotate the heater slightly upright to stand the clip on DIN rail

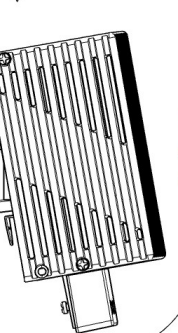
- 2

### 3 - REMOVAL

- Before any operation, switch off the power supply

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

- 1 Push the heater



Rotate the heater slightly to remove the clip from DIN rail

- 2

### 4 - ELECTRICAL CONNECTION

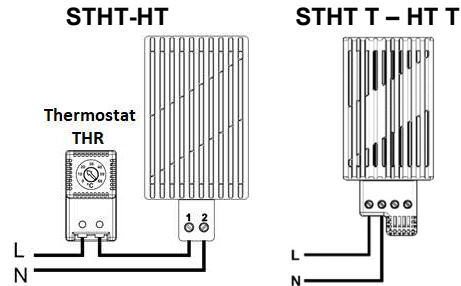
#### 4.1 ELECTRICAL CONNECTION

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

- Before any operation, disconnect cabinet

- Connect STHT-HT according to wiring diagram
- Connect the STHT-HT 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.
- Connect the cabinet

Voltage rating is shown by label pasted on product.



Model with T at the end of the code are fitted 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 starting. (see tab.1 for references)

#### 4.2 ELECTRICAL DISCONNECTION

##### WARNING

- Disconnection must be done by qualified personnel only after power supply disconnecting
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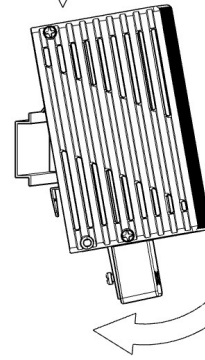
### 4 - CLEANING, MAINTENANCE AND DISPOSAL

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 must be disposed of separately from ordinary household wastes

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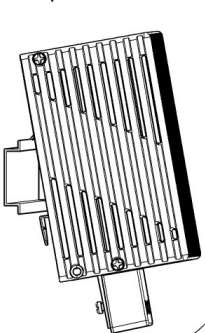
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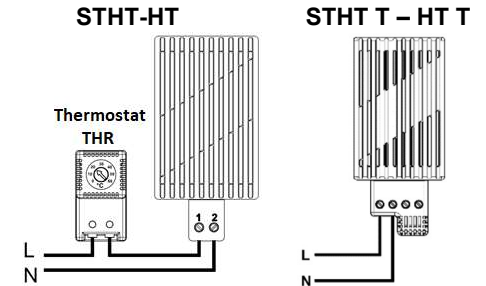
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