



## Thermal management for electrical enclosures



### FSHT

FAN ASSISTED HEATERS  
User's manual

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

### WARNING

- Safety of FSHT 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 FSHT only inside an electrical enclosure, in vertical position, in the bottom part of cabinet.
- FSHT series is fitted with dedicated ground terminal, it must be connected with an adequate ground circuit according to the local norms and safety regulations which govern the use of electrical material;
- 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 FSHT in ambient with excessive moisture and dirt
- Installation position of FSHT must be selected to ensure good ventilation. Take care that any internal components of enclosure don't obstruct air passage.
- Do not mount FSHT 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. The same applies to each person or Company involved in the issuing of this manual.

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ALFA ELECTRIC reserves the right to make any formal or functional changes at any moment and without any notice.

### 1 - DESCRIPTION

#### GENERAL DESCRIPTION

FSHT is an anticondensation fan assisted heaters optimized to avoid condensation or grant a minimum temperature in closed cabinets. It is fitted with screw terminal for electrical connection,

A green led shows the status of heater, if it is light the heater is turned on and it works properly.

Tab.1

Model	Heating Capacity* [W]	Power supply [V/Hz]
FSHT250	250	230/50-60
FSHT251	250	115/50-60
FSHT400	400	230/50-60
FSHT401	400	115/50-60
FSHT500	500	230/50-60
FSHT501	500	115/50-60
FSHT750	750	230/50-60
FSHT751	750	115/50-60

### 2 - INSTALLATION

#### 2.1 GENERAL DESCRIPTION

FSHT are fitted by clip for DIN rail 35mm mounting.

#### 2.2 INSTALLATION

##### WARNING

- Before any operation, switch off the power supply
- Keep a thermal safety clearance of 300 mm from the air outlet and 100mm from air inlet, 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 FSHT only in an electrical enclosure



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#### 2.1 GENERAL DESCRIPTION

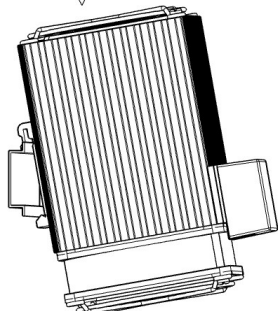
FSHT are fitted by clip for DIN rail 35mm mounting.

#### 2.2 INSTALLATION

##### WARNING

- Before any operation, switch off the power supply
- 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 over easily inflammable materials
- Do not operate in corrosive ambient air.
- Install FSHT only in an electrical enclosure

- 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

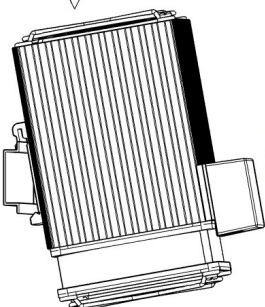
2

### 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

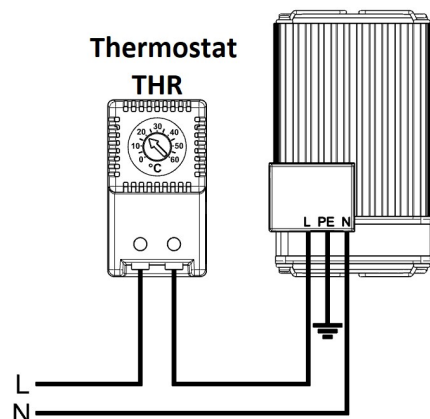
### 4 - ELECTRICAL CONNECTION

#### 4.1 ELECTRICAL CONNECTION

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

- Before any operation, disconnect cabinet

- Connect FSHT according to wiring diagram
- Connect the FSHT to the power supply by adequate section cable according to dimension allowed by terminal.
- FSHT series is fitted with dedicated ground terminal, it must be connected with an adequate ground circuit according to the local norms and safety regulations which govern the use of electrical material;
- Use a thermostat ALFAELECTRIC THR series to pilot heating functions according to enclosure temperature.
- Connect the cabinet



**WARNING:** FSHT is fitted with thermal cut out fuse in case of fan failure. It avoids temperature rises over value which could damage the unit.

#### 4.2 ELECTRICAL DISCONNECTION

##### WARNING

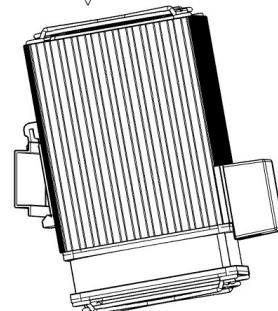
- Disconnection must be done by qualified personnel only after power supply disconnecting
- Before any operation, switch off the power supply.

### 5 - CLEANING, MAINTENANCE AND DISPOSAL

Cleaning and maintenance must be done only after switching off power supply. For cleaning use only a wiper and compressed air.

FSHT must be disposed of separately from ordinary household wastes

- 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

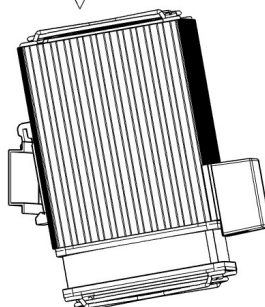
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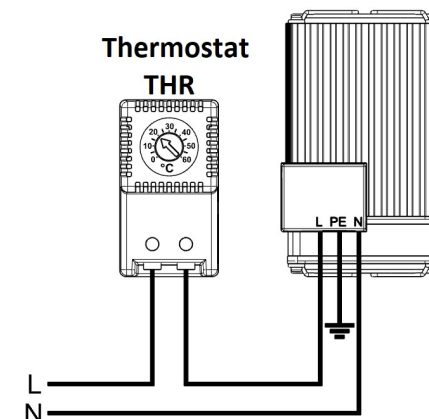
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