



Thermal management
for electrical enclosures



SHT – SHT W

PTC HEATERS
User's manual

www.alfaelectric.com

1 - DESCRIPTION

GENERAL DESCRIPTION

SHT – SHTW are anticondensation heaters optimized to avoid condensation or grant a minimum temperature in closed cabinets.

SHT series is fitted with screw terminal for electrical connection. **Versions with T at the end of the code are fitted with integrated fixed set point compact thermostat.**

SHTW is fitted with cable for electrical connection.

Tab.1

Model	Heating Capacity* [W]	Power supply [V/Hz]	Delayed fuse (advised) [A]
SHT15W	15	115-250/50-60	4
SHT25	25	115-250/50-60	4
SHT25 T	25	115-250/50-60	4
SHT25 W	25	115-250/50-60	4
SHT50	50	115-250/50-60	4
SHT50 T	50	115-250/50-60	4
SHT50W	50	115-250/50-60	4
SHT75	75	115-250/50-60	6.3
SHT75 T	75	115-250/50-60	6.3
SHT100	100	115-250/50-60	8
SHT100 T	100	115-250/50-60	8
SHT125	125	115-250/50-60	8
SHT125 T	125	115-250/50-60	8
SHT150	150	115-250/50-60	10
SHT150 T	150	115-250/50-60	10

2 - INSTALLATION

2.1 GENERAL DESCRIPTION

SHT-SHTW 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 SHT-SHTW only in an electrical enclosure



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SHT75	75	115-250/50-60	6.3
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WARNING

- Safety of SHT-SHTW 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 SHT-SHTW only inside an electrical enclosure, in vertical position, 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 SHT-SHTW in ambient with excessive moisture and dirt
- Do not mount SHT-SHTW 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.

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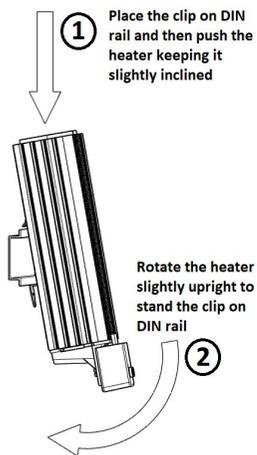
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① Place the clip on DIN rail and then push the heater keeping it slightly inclined

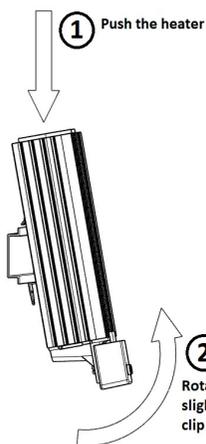
Rotate the heater slightly upright to stand the clip on DIN rail

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

② Rotate the heater slightly to remove the clip from DIN rail

4 - ELECTRICAL CONNECTION

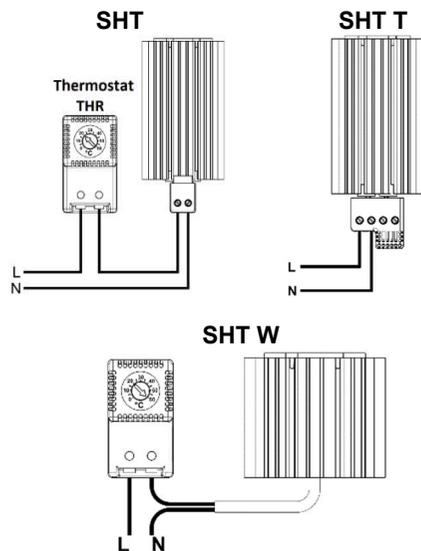
4.1 ELECTRICAL CONNECTION

SHT-SHTW electrical connection must be done by trained electricians according to national electrical safety codes.

- Before any operation, disconnect cabinet
- Connect SHT-SHTW according to wiring diagram
- Connect the SHT 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



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 SHT starting. (see tab.1 for references)

4.2 ELECTRICAL DISCONNECTION

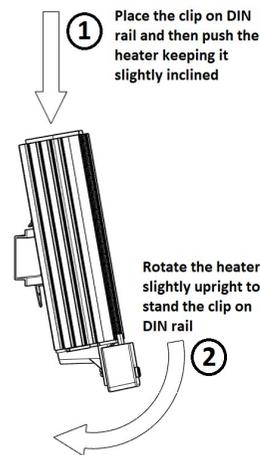
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- Disconnection must be done by qualified personnel only after power supply disconnecting
- Before any operation, switch off the power supply.

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.

SHT-SHTW 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

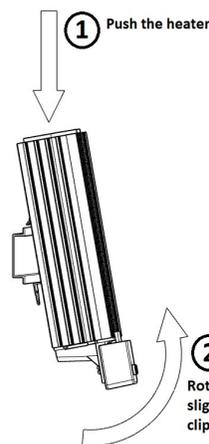
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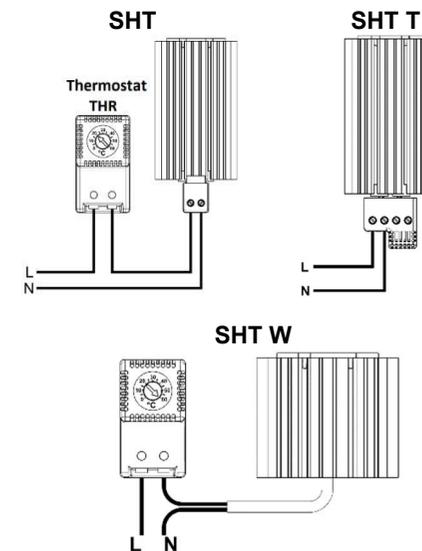
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