

Thermal management for electrical enclosures



THVF-THRF THERMOSTAT FIXED SET

User's manual

www.alfaelectric.com

WARNING

- Safety of thermostats are 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 thermostats only inside an electrical enclosure.
- 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 thermostats in ambient with excessive moisture and dirt
- Installation position of thermostats must be selected to ensure good ventilation. Take care that any internal components of enclosure don't obstruct air passage.
- 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 their maintenance and use; we therefore recommend that the utmost attention is paid to the following instructions.

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1 - DESCRIPTION

GENERAL DESCRIPTION

THVF - THRF are fixed set point compact thermostat for DIN 35 mm. rail mounting. Based on bimetallic junction, provides high capacity NO or NC contact. Three versions available.

2 - INSTALLATION

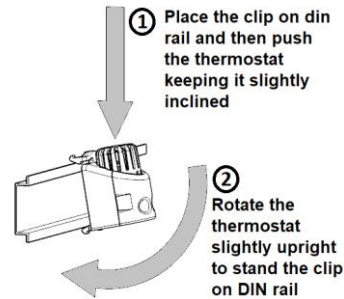
2.1 GENERAL DESCRIPTION

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

2.2 INSTALLATION

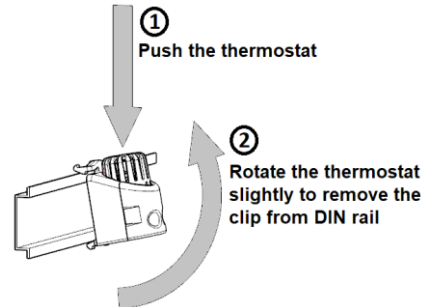
WARNING

- Install vertically (cables below controller) inside of electrical enclosure where temperature control is requested.
- Do not mount thermostats near heat sources which could influence the proper temperature sensing.
- Do not operate in corrosive ambient air.
- Install thermostats only in an electrical enclosures



3 - REMOVAL

- Before any operation, switch off the power supply



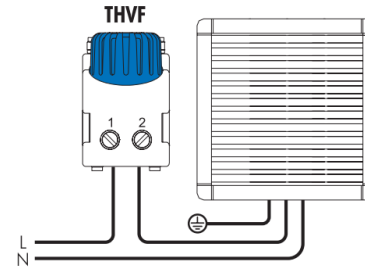
4 - ELECTRICAL CONNECTION

Thermostats connections must be done by trained electricians according national electrical safety codes.

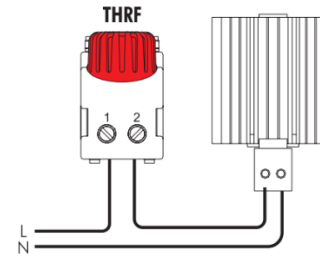
- Before any operation, disconnect cabinet
- NO contact is particularly designed to drive ALFAELECTRIC fans, filter fan units and roof fans unit.
- NC contact is particularly designed to drive ALFAELECTRIC heaters.
- Connect thermostats according to wiring diagram below

- Connect thermostats according to technical data show on label pasted on controller side

Connection with fan



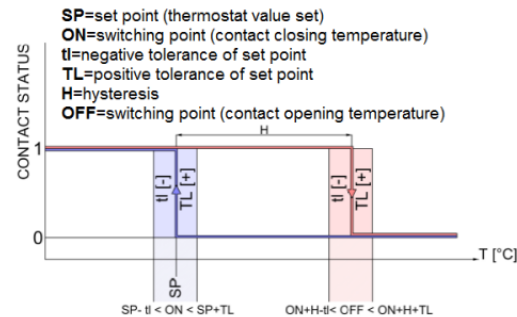
Connection with heater



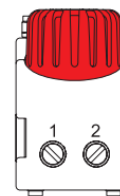
5 - FUNCTIONING

Contact status according to graphics below :

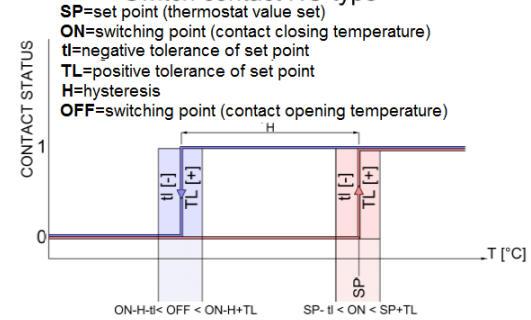
Switch contact NC type



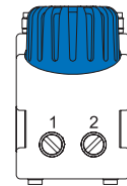
THRF



Switch contact NO type



THVF



6 - TECHNICAL DATA

Features	Unit	THRF05	THVF35	THVF50
Contact function	-	NC	NO	NO
Temperature setting	°C	+5	+35	+50
Precision	°C	±4		
Hysteresis	°C	10		
240Vac resistive load (ind. load)	A	5 (1.6)		
120Vac resistive load (ind. load)	A	10 (2.0)		
Max. switching power in Vdc	W	30		
Electrical connection	-	terminals 2.5 mm ²		
Operating temperature	°C (°F)	-25/+80 (-13/+176)		
Conformity/certification	-	CE		

7 - 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.

Thermostats must be disposed of separately from ordinary household wastes