

Thermal management for electrical enclosures



ETUH

ELECTRONIC HYGRO-THERMOSTAT User's manual

www.alfaelectric.com

WARNING

- Safety of Hygro-thermostat is warranted only by proper use of these instructions 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 Hygro-thermostat 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 Hygro-thermostat in ambient with excessive moisture and dirt
- Installation position of Hygro-thermostat 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

Electronic Hygro-thermostat for DIN 35 mm. rail mounting. Typically used to control enclosure heaters. The change over contact triggers either for high humidity or low temperature, independently set adjustable. LED display of power on and status.

	ETUH22	ETUH11
Power supply	230V 50/60Hz	115V 50/60Hz
Temperature setting range	0 / +60°C	
Precision	±1K	
Temperature Hysteresis	2K	
Rel. Humidity setting range	20 / 90Rh%	
Relative Humidity Hysteresis	5%	
Ambient temperature rating	-20/+60°C	
Construction control	Incorporated control	
Type of control	Type 1 action	
Control pollution degree	pollution degree 2	
Rated impulse voltage	2500V	
Conformity	CE, UL File n. E348803	

2 - INSTALLATION

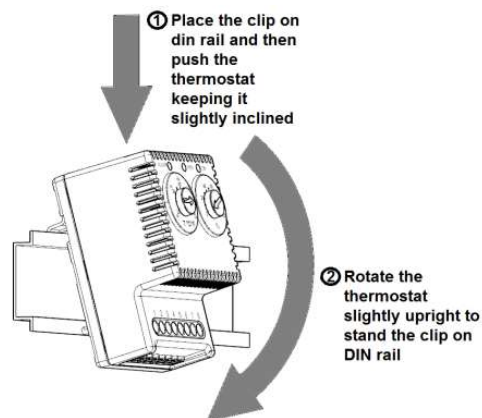
2.1 GENERAL DESCRIPTION

Hygro-thermostats are fitted by clip for DIN rail 35mm mounting.

2.2 INSTALLATION

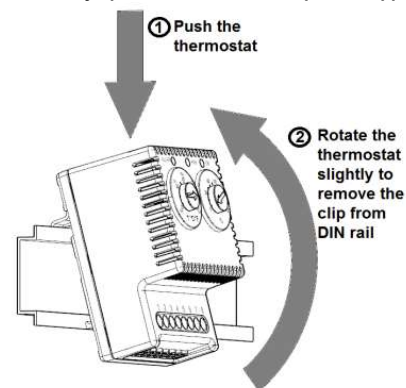
WARNING

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



3 - REMOVAL

- Before any operation, switch off the power supply



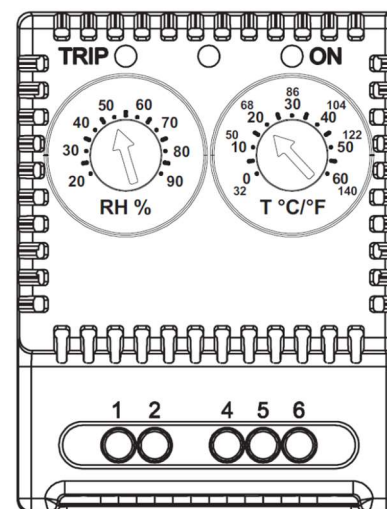
4 - ELECTRICAL CONNECTION

4.1 ELECTRICAL RATING

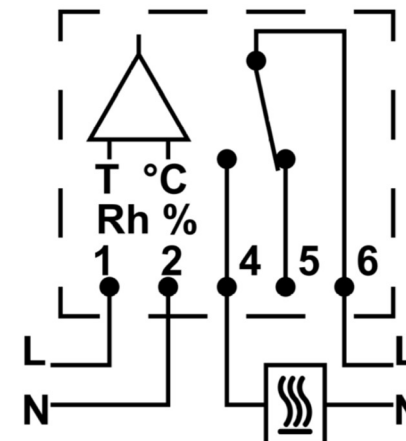
Terminal	ETUH22	ETUH11
1-2 (input supply)	230V, 50-60Hz, 20VA	115V, 50-60Hz, 10VA
4-6 (output NO contact)	Resistive 250Vac, 50-60Hz, 10A Resistive 30Vdc, 8A, DC Motor load 240Vac, 1/2 Hp, 50-60Hz Motor load 120Vac, 1/4 Hp, 50-60Hz	
5-6 (output NC contact)	Resistive 250Vac, 50-60Hz, 10A Resistive 30Vdc, 8A, DC	

4.2 ELECTRICAL CONNECTION

Hygro-thermostats connections must be done by trained electricians according national electrical safety codes.



- Before any operation, disconnect cabinet
- Connect the Hygro-thermostat according to wiring diagram below following the electrical data shown on label pasted on side of ETUH



5 - FUNCTIONING

Electronic Hygro-thermostat used to control enclosure heaters. The change over contact triggers either for high humidity or low temperature, independently set adjustable

4-6 contact closes (and then 5-6 contact opens) if humidity rises above humidity set point or if temperature falls below temperature set point

5-6 contact closes (and then 4-6 contact opens) if temperature rises above temperature set point or if humidity falls below humidity set point

- Hygro-thermostat ETUH must only be used in stationary, closed electric cabinets.

6 - 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