



ETU

Plug-In Line Electronic Thermostat

PRODUCTS

ETU is a simple, precise and reliable electronic plug-in thermostat designed to control electric heating cables for frost/freeze protection or general temperature control in winter conditions.

The ETU thermostat consists of an electronic circuit, power supply cable with a plug, temperature sensor and a load connection cable – all combined together in one robust unit.

The ETU thermostat controls the connected load through a **powerful 16 A relay**. All the thermostat components are protected with polyamide plastic, which insures an **IP 68** ingress protection rating. The load working condition is indicated via a LED diode (**GREEN** – heating off; **RED** – heating on).

The **power supply cable, 1.2 m long**, is a type H05VV-F 3x1,5 mm², with a factory installed “Schuko” (IEC type F) EU plug. As a temperature sensor the thermostat uses an **NTC thermistor, 0.5 m long**, with double electric insulation. The **load connection cable, 0.3 m long**, is also type H05VV-F 3x1,5 mm², and is used as a means of connecting the thermostat with the heating cable.

The main advantages of the ETU thermostat are simple and compact design, **high accuracy of $\pm 0,5$ °C**, safety and reliability, long working life, ease of use and equally important **low price**.

STANDARD TEMPERATURES (ON/OFF)

2,5/4,5°C and 17/19°C

ACCURACY ± 0.5 °C



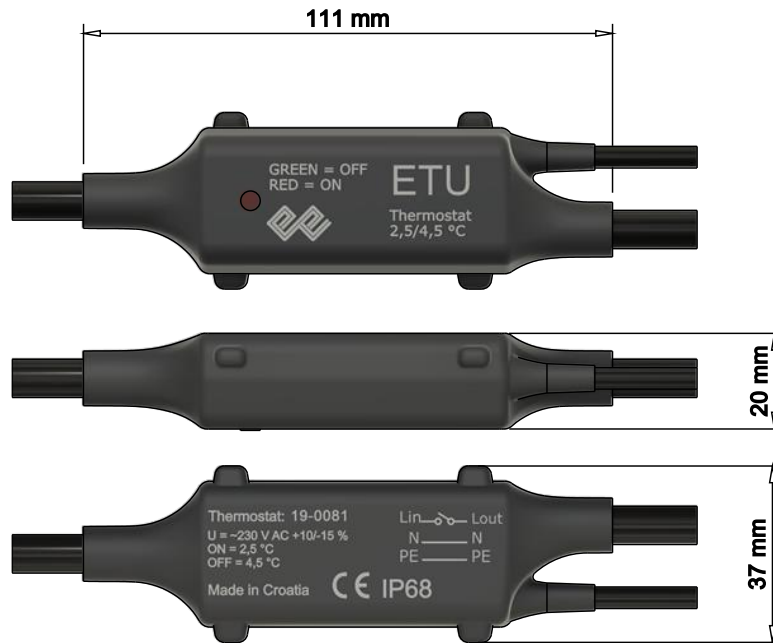
Area of application

- frost/freeze protection of water pipes, valves, reservoirs, filters, water meters, hydrants and sprinkler systems
- frost/freeze protection of water condensate drainage pipes
- frost/freeze protection of sewage pipes
- frost/freeze protection of gutter or downpipes

Technical information

- analog electronic thermostat
- accuracy $\pm 0,5^{\circ}\text{C}$
- control mode: ON/OFF
- supply voltage: 230 V~ (-15 /+10%) / 50 Hz
- max. load current: **16 A** at 25°C ambient temperature, resistive load only ($\cos\phi\geq 0,95$)
- temperature sensor: NTC thermistor 0,5m long
- standard temperatures (ON/OFF): 2,5/4,5 °C and 17/19°C, other temperatures available on demand
- resistance against ice, water, moisture and most acids and bases: EXCELLENT
- resistance against pure alcohols: BAD
- ingress protection: IP 68
- ambient temperature range: from -25°C to +55 °C

Dimensions



Possible customizations

ETU electronic thermostats can be manufactured with different temperature setpoints, according to customer needs. In this case the setpoint temperatures must be between 0 and 25 °C, and the ON/OFF temperature difference (hysteresis) must be at least 1 °C. The minimal order quantity for customizations is 100 units.

Order example:

ETU-2,5/4,5

① ②

①

Temperature below which the thermostat will turn ON the load.
Min 0°C
Max 24°C

②

Temperature above which the thermostat will turn OFF the load.
Min 1°C
Max 25°C
NOTE: this temperature must be higher than ① by at least 1°C

Temperature derating

In case the thermostat operates at ambient temperatures higher than 35°C, the maximum allowed RMS must be derated according to the following diagram:

