Plug-in thermostat with timer
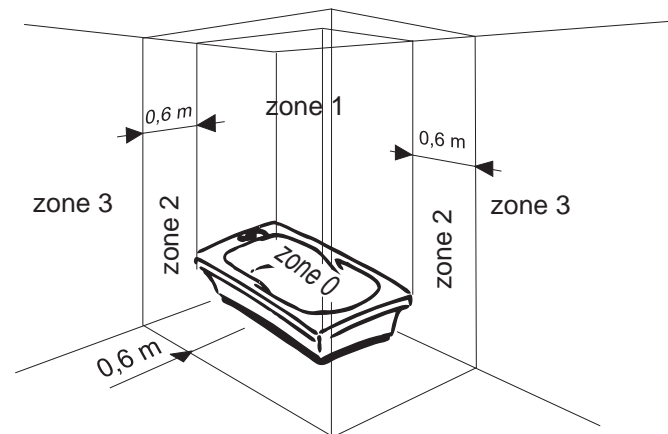# **ST311**

Functions and use

- It is intended for switching a single-phase electric heating with max. switched value of 16A.
- When in thermostat mode, the appliance turns the heating equipment on and off depending on the desired and momentary room temperature (heating to a desired temperature between 5° and 35°C).
- When in timer mode, the appliance turns the heating equipment on for a set time period (heating for a set time interval between 15 min. and 5 hours).
- Easy control using 3 keys: up ▲, down ▼ and OK (☞).
- LCD shows ambient temperature and the remaining countdown time.
- Switch-on condition is indicated by a flame symbol on the LCD and a green LED on.
- The frost function switches heating on when the ambient temperature drops below 5°C, and a snowflake symbol (✽) appears on the display.
- Timer functions can be switched off by returning to the thermostat mode.

Technical data

Model	ST311
Power supply	230 V~ / 50Hz
Switch load	16 (3) A
Temperature probe	NTC
Operating temperature	0 - 45 °C
Timer setting range	15 min. to 5 hours, in 15 min. increments
Temperature setting range	5 - 35 °C in 0,5 °C increments
Ambient temperature display range	0 - 40 °C in 0,5 °C increments
Relative humidity	5 - 95 % (non-condensing)
El. protection	IP 20
Storing temperature	-20 to 55 °C

Suitable Position

If the plug-in thermostat ST311 is used in bathrooms or rooms with wash facilities, it may be plugged only into a fixed wall socket with residual current circuit breaker with nominal residual current below 30 mA, that is placed in zone 3 according to ČSN 33 2000-7-701 (see pic.)

Description and adjustment of the thermostat mode

The thermostat ST311 turns on as soon as plugged in, *"On"* and 20°C temperature appears on the display. After about 30 minutes the measured temperature is stabilized and its value is kept displayed.

In this mode, the thermostat switches heating on and off in such a way that the room temperature reaches the set value (the factory preset value is 20°C).

Setting another temperature: press *up* ▲ or *down* ▼ key, the timer time starts flashing. Press *OK* (☞) and the preset temperature start flashing. It can be modified by pressing *up* ▲ or *down* ▼ key, in the range from 5 to 35°C in 0.5°C increments. Press *OK* (☞). to save the value. The LCD returns to displaying *"On"* and the ambient temperature.
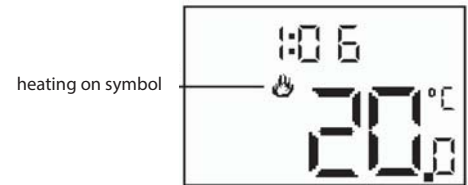
Description and adjustment of the timer mode

Switching from the thermostat mode into the timer mode is done by pressing *OK* (☞). The remaining time is displayed on the LCD together with a flame symbol (heating on). The countdown starts running, indicated by a flashing colon in the remaining time (factory preset value is 2:00 hours). After a short delay, the thermostat will switch the heating on. This is indicated by the lit green LED. The heating is turned on regardless of the ambient and preset temperatures.

Setting another timer value: press *up* ▲ or *down* ▼ key, the timer time starts flashing. The desired timer value can be set by pressing *up* ▲ or *down* ▼ key between 15 min. and 5 hours, in 15min. steps. Then press

OK (☞). After one more pressing (☞) the display will show the timer and the flame symbol again (heating on). The preset timer value will be modified in case the appliance is the thermostat mode. When in timer mode, the timer value will be updated only after pressing twice the key

heating on symbol

OK (☞). Countdown starts. When the preset time expires, timer mode ends and the appliance returns to the thermostat mode. The display shows *"On"* and the ambient temperature again.

Note:

Temperature and countdown time can be changed from either thermostat mode or timer mode. After pressing OK (☞) the appliance will return to the mode preceding to pressing up ▲ or down ▼ key.
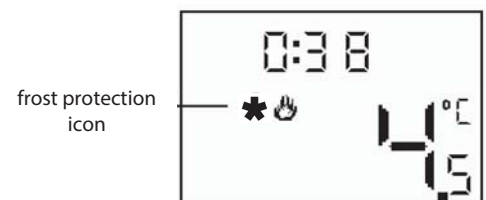*If during the thermostat adjustment no key is pressed for 10 sec., the appliance will return to the mode preceding to pressing up ▲ or down ▼.*

Warning:

In case of a power supply interruption the modified values will be lost and the factory values set as default.

Temperature Control

1) Switching heating on: Heating is switched on (the thermostat closed) if the ambient temperature is by 0.5°C lower than the set temperature.
2) Switching heating off: Heating is switched off (the thermostat open) if the ambient temperature is by 0.5°C higher than the set temperature.
3) If the ambient temperature falls below 5°C, the frost protection mode is activated and heating switched on regardless of the desired temperature. The frost mode is indicated by the symbol ✳ .

frost protection icon

PROPER DISPOSAL OF E-WASTE AS REQUIRED BY THE EC DIRECTIVE 2002/96/EC (WEEE)

Do not dispose of this product as unsorted municipal waste.
Please dispose of this product by returning it to the point of sale or to your local municipal collection point for recycling.
Respecting these rules will help to preserve, protect and improve the quality of the environment, protect human health and utilise natural resources prudently and rationally.
The crossed out wheeled bin with marking bar, printed also on the product itself, identifies that the product must be disposed of at a recycling collection site.