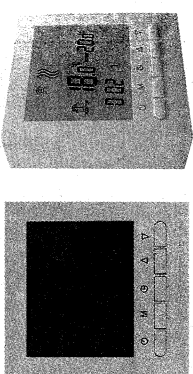


# THERMOSTAT BOT-313 (BL and WH)



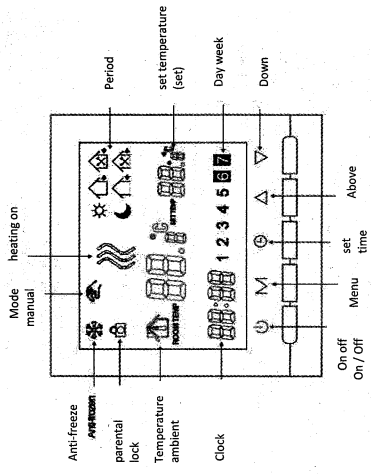
Connect the following terminals to the cables coming from the boiler (or load control):

- COM (common) – usually Blue
- NO (Normally Open or Normally Open) – usually Black, Grey or Brown
- NC (Normally Closed) terminal is left empty, without any cable connection

Installation cables should be 1.5 or 2.5 mm<sup>2</sup>.

Attention: Please check the wiring diagram carefully before connecting. If you connect wrongly, it may occur cortocircuito, and your boiler could be damaged.

## V. User Interface - thermostat



## I. Summary:

The thermostat BOT-313 is a weekly schedule thermostat, typically used for individual control of gas boilers, but can also be used to control gasoil boilers, motorized valves, electric valves, solenoid, etc.

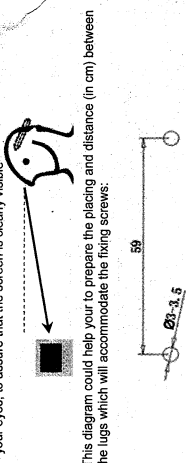
The thermostat has a large LCD screen for management, developed according to the requirements of its customers. This thermostat model is very easy to operate, with a full set of functions.

## II. Important

- ✓ For optimal display of the screen, set it to the height recommended in Chapter IV for optimal display.
- ✓ For the exact measurement of temperature, calibrate it in advanced settings, chapter VIII, attention to parameter ADJ.
- ✓ To enable and disable it more accurately at marked temperatures, use the advanced settings, and adjust the DIF parameter.
- ✓ Please read section IX on the most frequently asked questions related to this product.

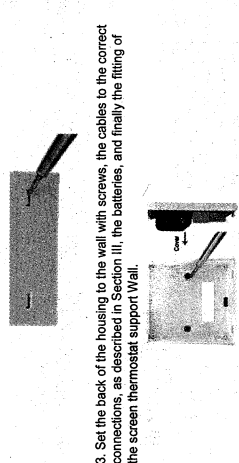
## III. Installation Instructions

1. Prepare the installation on the wall, placing the thermostat at a height lower than your eyes, to assure that the screen is clearly visible.



This diagram could help you to prepare the placing anti distance (in cm) between the ligs which will accommodate the fixing screws.

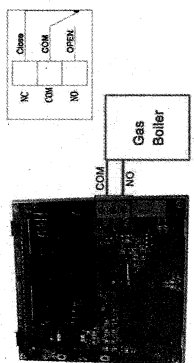
2. Open the case and route the cables coming from the boiler inside the housing, leaving enough cable length inside.



3. Set the back of the housing to the wall with screws, the cables to the correct connections, as described in Section III, the batteries, and finally the fitting of the screen thermostat support Wall.

## IV. Wiring diagram

This thermostat is able to manage gas heaters wired with two cables to the temperature monitor, and up to 3A electrical current.



## 6. Adjust programming

To make programming simple and effective, it is done by blocks of week days (typically labor and weekend), and periods within the day.

- First let's set the blocks of days we most agree, as following:
- Press and hold the M button to enter the programming mode. LOOP and 12345 will be displayed on the screen. Press Δ to select the mode:
- 12345 which is displayed on the display means to be programmed together 5 working days (Monday-Friday), and then 2 weekend (Saturday-Sunday).
  - 4+2 mode means programming block 6 days (Monday-Saturday) and then on Sunday.
  - 0+1 mode programming
  - 1234567 mode means programming 7 days a week block. 7 mode

Then we can program the time periods within each of the. Periods corresponds to the times when we do not need an automatic change in the set temperature. For example, when we go to raise the temperature to achieve a warm, and when we go from home to work we go down to avoid wasting energy.

In block business days you can specify up to 6 periods, and the block-day weekend, 2 periods. If you do not need any of the periods in the block, just set the temperature to 00, and the thermostat will maintain the settings of the previous period.

1. Press M to select the period to program;
  2. Press Δ to change the temperature setting;
  3. Press M to set the activation time;
  4. Press M to save this period (icon will be highlighted) following the next period (icon will be highlighted). Repeat steps from 1 to 4 to complete all of the time periods.
    - In 5+2 and 6+1 modes, there will be 8 time periods, 6 for work days and 2 for the weekends;
    - In 7 mode, there will be 6 periods, valid for the 7 week days.
- In 7 mode, when the programming is done, you can press M to change between Manual and Programming operation.

This is the default setting for Mode 5 + 2, that you can change according to your needs:

Day	Work days	Period	Icon	Description	Hour	Temp.
1	☀	1	☀	Time to wake up	8:00	20°C
2	☀	2	☀	Go to work	8:00	15°C
3	☀	3	☀	Midmorning	11:30	15°C
4	☀	4	☀	Midday	12:30	15°C
5	☀	5	☀	From work	17:30	22°C
6	☀	6	☀	Bedtime	22:00	15°C
Days Weekend	☀	1	☀	Time to wake up	8:00	22°C
		2	☀	Bedtime	23:00	15°C

In 7 mode, it is possible to set up 6 periods, valid for the 7 week days

## Attention:

- (1) The default temperature of periods 2, 3, 4 is the same. In the default setting, the thermostat is set at 6 looking for an ambient temperature of 20 ° C. At 8 changes the target temperature at 15 ° C, and maintained until 17h30. Times and temperatures change according to your tastes.
- (2) When the temperature is set to 00 the idle period, the thermostat does not act.

## VIII. Advanced settings

With the thermostat off, press and hold the button ▽ and then press the power button ⏻ to enter Advanced Settings mode. Then press M to set the desired parameter.

Code	Function	Setting and Options	Default value
DIF	Temperature sensitivity	0.5 - 4.5 ° C	1°C
SVH	Max internal temperature sensor	5 - 99 ° C	35
SVL	Min internal temperature sensor	5 - 99 ° C	5 ° C
ADJ	Adjust sensor	Calibrating the current temperature	0
FRE	Anti freeze	00: Disabled 01: Activated	00

LOC	Lock button function	00: unlocking 01: buttons locked except on / off 02: all the buttons locked	00
FAC	Factory setting	08: Normal 00: I reset to factory settings	08

## Attention:

Initially, the temperature sensitivity (DIF) is set to 1. This means that the thermostat will only react when the temperature is 1°C above the set temperature. This will allow all parts of the room (and house) reach the set temperature. This is called the Hysteresis cycle, and also protects the boiler from continuous starts and stops.

This occurs both, the temperature rising to the comfort zone and coming through as DIF mark (for example, fixed at 22 ° C, heating off when it reaches 23 ° C, if DIF is 1 ° C). In the same way down to the set temperature. In which case, will activate the boiler when inferior thereto as check DIF (for example, fixed at 16, will activate the heating when it reaches 17 ° C, if DIF is 1 ° C).

## IX. Frequent questions

- 1. Numbers on the screen are not very visible**  
Please make sure to install the device at a height somewhat below your eyes level, so the screen visibility is always great.
- 2. The thermostat doesn't react at the set temperature**  
The behavior is normal, to protect the boiler, and corresponds to its hysteresis cycle. By default, the cycle is set at 1°C, which means that it will turn off the boiler when the temperature is 1°C above the set one, and will turn on again when it is 1°C below it. Of course, you can change this behavior according to your taste, with the DIF parameter, as described in the Advanced Settings section.
- 3. The shown temperature is not correct**  
In electronic measuring devices it is important to have a calibration function to adjust the behavior in each case. In this thermostat you can calibrate the temperature measurement with the ADJ parameter, as described in the Advanced Settings section.

## X. Technical parameters:

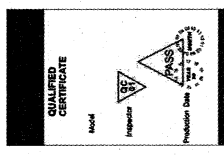
Operating voltage	1.5V x2 (two AA batteries)
Load	3A
Precision temperature control	±1 ° C
Temperature adjustment range	5-99 ° C (factory setting: 5-35 ° C)
Limitation temperature setting	5-99 ° C
Consumption	<0.15W
Temperature sensor	NTC

## Thank you

Thank you for purchasing this product!  
Please read this manual carefully, which contain complete instructions for installing and operating your new smart thermostat. If you require further assistance, please contact us.

## Our service:

We offer warranty from date of sale.  
During the warranty, if there is any quality problem, repair or replace the thermostat free, after checking the article.  
If not a quality problem, or the warranty period has elapsed, we could charge for customer service.



This symbol means that the unit can pose a shock hazard on maintenance and installation, therefore, be sure to take the necessary security measures, and installed by a qualified professional