Touch Screen Programmable Room Thermostat

Installation and User Manual

Polypipe

Safety Instruction

Installation and mounting of electrical appliances must be carried out only by skilled electricians. It is imperative to observe the generally applicable safety measures, such as:

Before starting work on the appliance, switch off power supply and secure against switching on.

Positioning

The room thermostat should be positioned away from direct sunlight or heat producing appliances. It is recommended that the thermostat is installed 1·2 metres above floor level.
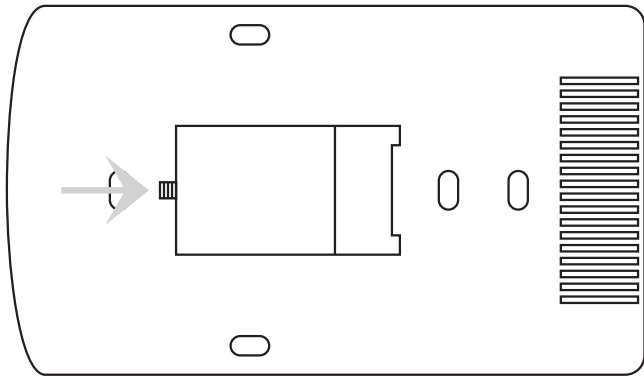
Installation

Step 1:

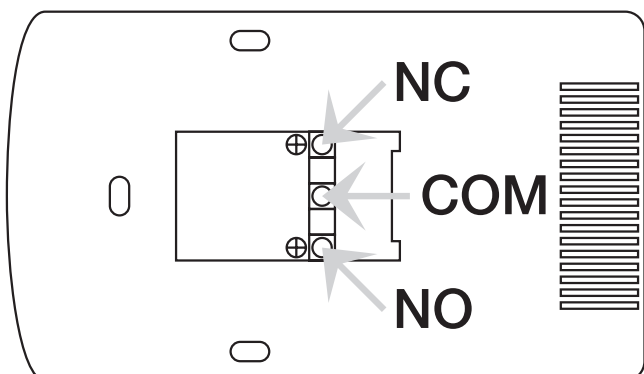Open front and rear case with screwdriver, then take off the front case
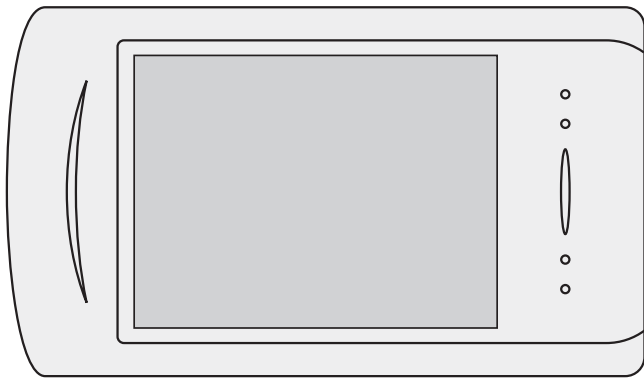
Step 2:

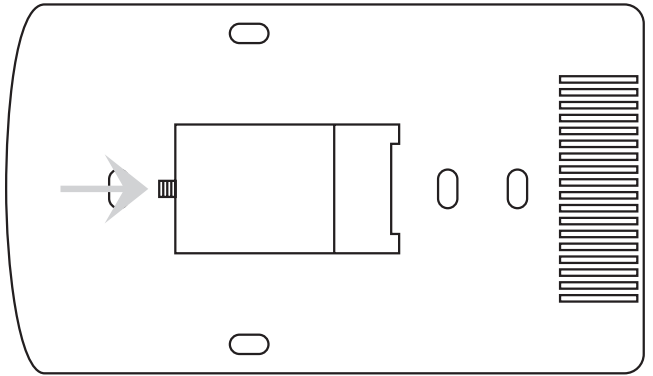Open relay case with screwdriver and take off the relay case

Step 3:

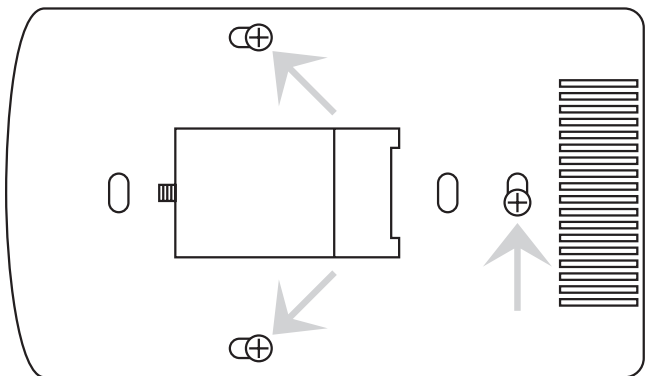Connect all wires properly (See page 2)

NC

COM

NO

Step 4:

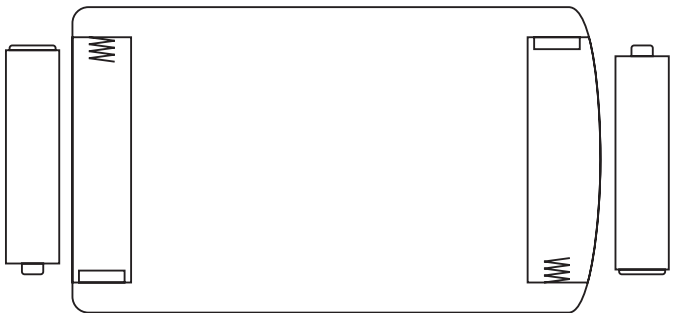Cover the relay case and screw it properly with screwdriver
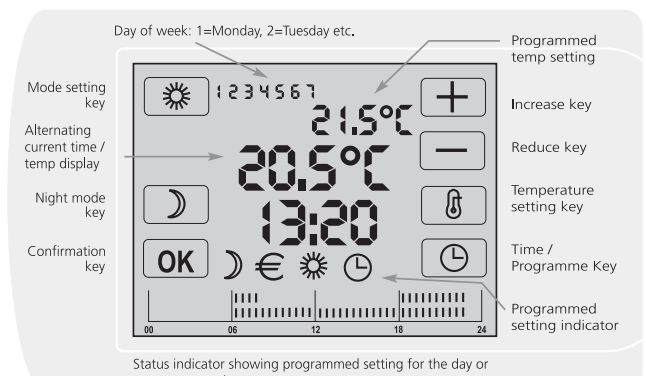

Step 5:

Mount and fix rear case with screws in wall

Step 6:

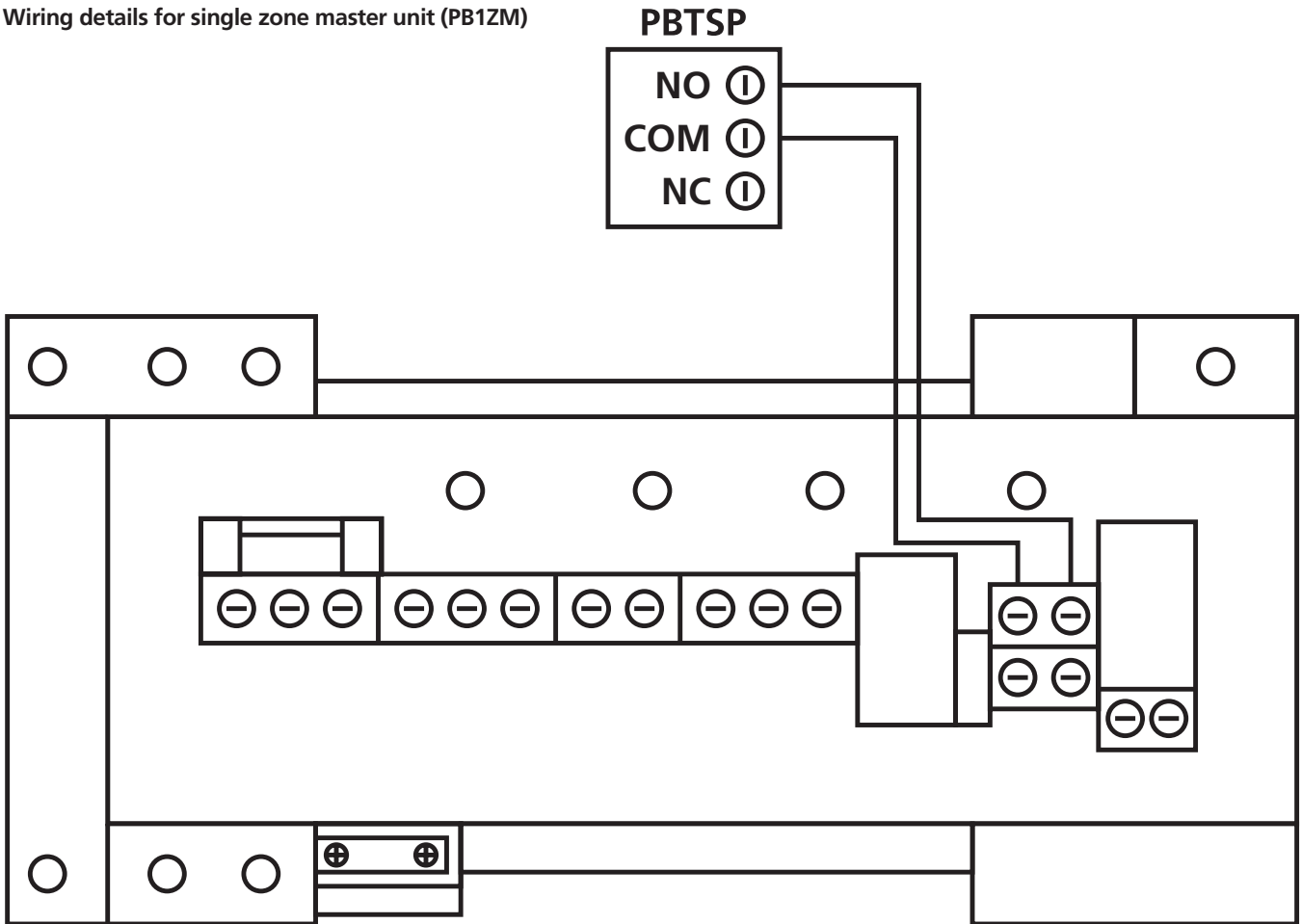Put 2 x 1·5v AA batteries into battery box observing polarity

Step 7:
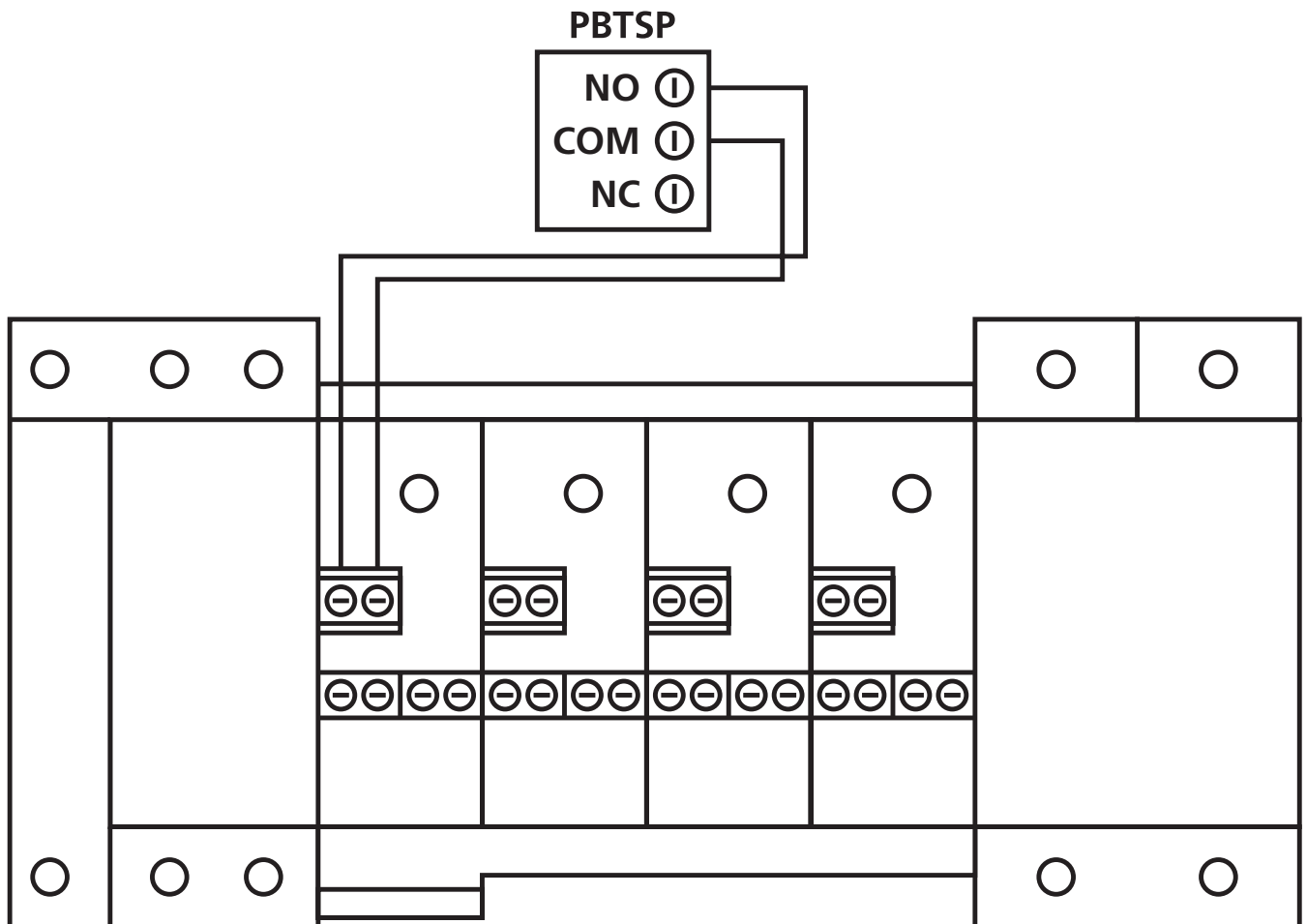
Cover front and rear case correctly

Day of week: 1=Monday, 2=Tuesday etc.

Programmed temp setting

Mode setting key

Alternating current time / temp display

Night mode key

Confirmation key

21.5°C

20.5°C

13:20

Increase key

Reduce key

Temperature setting key

Time / Programme Key

Programmed setting indicator

Status indicator showing programmed setting for the day or permanent setting

Wiring details for single zone master unit (PB1ZM)

PBTSP

NO ⓘ
COM ⓘ
NC ⓘ

Wiring details for 4 zone and 6 zone slave (PB4ZS and PB6ZS)

PBTSP

NO ⓘ
COM ⓘ
NC ⓘ

Programmed
temp setting

Increase key

Reduce key

Temperature
setting key

Time /
Programme Key

Programmed
setting indicator

Day of week: 1=Monday, 2=Tuesday etc.
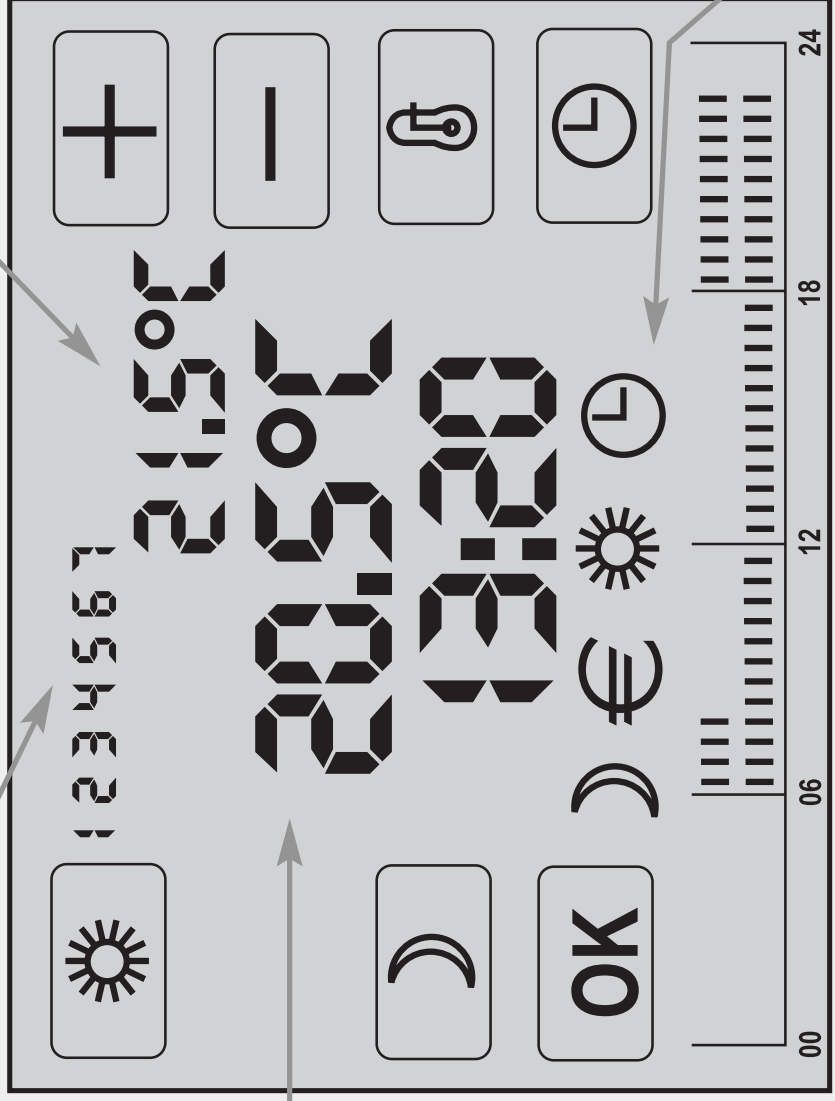
Mode setting
key

Alternating
current time /
temp display

Night mode
key

Confirmation
key

Status indicator showing programmed setting for the day or
permanent setting

No bars   = Night time setting
1 bar   = Economy setting
2 bars   = Comfort setting
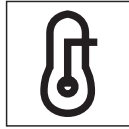
Time Setting

a) Press the 🕐 key to flash the following in order:
   Year, Month, Day, Hour, Minute.
   Use the + or – key to adjust each
b) Press OK when complete to confirm exit

Note: The internal calendar will calculate the correct day of the week (1=Monday etc.)

Note: The time with change automatically to adjust BST and GMT on the correct date.

Temperature Setting

There are 3 temperature settings available:
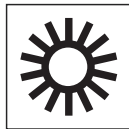Comfort ☀️ used when room is permanently occupied e.g. 21°C
Economy € used when room is temporarily occupied e.g. 18°C
Night ☽ used when the room is unoccupied e.g. 15°C
a) Press the 🌡️ key to flash the following in order:
   Comfort, Economy, Night. Use the + or – key to adjust each
b) Press OK when complete to confirm exit.

Mode Setting

a) Press the ☀️ key to select the following:
Automatic (programme mode). The display will also show the current temperature at that time e.g. ☀️ ☽ or €
Continuous operating at comfort temperature
Continuous operating at economy temperature
Continuous operating at night temperature
Continuous operating at frost protection setting (+7°C)

Quick Set Up

To enable quick set up of the Thermostat, there is a pre-installed programme. Simply enter the year, date and time. Then switch to Auto.
The programme for each day will be as follows:

6.00 a.m. - 8.00 a.m.	Comfort setting	Set at 21°C
8.00 a.m. - 6.00 p.m.	Economy setting	Set at 18°C
6.00 p.m. - 11.00 a.m.	Comfort setting	Set at 21°C
11.00 a.m. - 8.00 a.m.	Night setting	Set at 15°C

To change any of the temperatures for these times see Temperature Setting Instructions. To enter different heating times for each day proceed to Programme Setting Instructions.

Programme Setting

There are three different kinds of programme during the automatic mode. That is: Daily programme (different programme for each day of a week), 5/2 programme (the same programme for Monday (1) - Friday (2) and the same programme for Saturday (6) - Sunday (7)), Weekly programme (the same programme for each day of a week).

Daily Programme

a) Press and hold ☀️ key for 3 seconds to flash the day (1-7)
b) Press + or – key to set the day which you want to programme
c) After setting the day/days, press 🕐 key to flash time 0:00 and the corresponding bar dot for programme is flashing
d) Press € key to enter into energy saving mode; press key to enter into comfort (sun) mode; press ☽ key to enter into night (moon) mode
e) Press + or – key to adjust time. Repeat step d) and e) if you want to change the programmed level temperature
f) When you finish setting one day programme, press 🕐 to flash day
g) Set the rest days' programme of a week as above operation from step b) to step f), after finishing all settings, press OK to confirm and exit, or exit automatically in 1 minute (after 15 seconds the display will switch off).

5/2 Programme

a) Press and hold ☀️ key for 3 seconds to flash date
b) Press + or – key to select days from 1 to 5 (these days are flashing)
c) Set the programme for Monday-Friday and Saturday-Sunday by using the same way as Daily Programme A operation

Weekly Programme

a) Press and hold ☀️ key for 3 seconds to flash date
b) Press the + or – key to select days from 1 to 5 (these days are flashing)
c) Set the programme by using the same method as Daily Programme operation.

Copy Function

a) Press and hold ☽ key for 3 seconds to flash day and enter into COPY mode when you are in automatic mode 🕐 The day and COPY are flashing
b) Press the + or – key to choose the programme of target day which you want to copy from
c) Press the ☽ key again to stop flashing COPY (the programme is memorised
d) Press + or – key to choose the day which you want to copy the programme to
e) Press the ☽ key again, the programme has been downloaded
f) In the same way to copy and download programme to the rest days, after finishing all programmes, press OK to confirm and exit, or exit automatically in 1 minute (after 15 seconds the display will switch off).

Manual Override Function

During the automatic mode ⏲ you can have the override function

Temporary override (Party)

a) Press + or – key to adjust override temperature: the symbol ✍ indicator will appear on the display
b) After setting the temperature, press OK key to confirm and exit, or exit automatically in 1 minute (after 15 seconds the display will switch off). The manual setting temperature and ✍ will be kept until entering next setting programme or when pressing OK key

Hold hours

a) Press + or – key to adjust override temperature: the symbol ✍ indicator will appear on the display
b) Press ⏲ key once to display 1H and 🏢 indicator
c) Press + or – key to set holding time from 1 hour to 24 hours
d) Press OK key to confirm and exit, or exit automatically in 1 minute (after 15 seconds the display will switch off). The number of hours and the override temperature are flashing alternately on the top right side of the display. Press OK to exit from the override function.

Hold Days (Holiday)

a) Press + or – key to adjust override temperature: the symbol ✍ indicator will appear on the display
b) Press ⏲ key twice to display 1d and 🏢 indicator
c) Press OK key to confirm and exit, or exit automatically in 1 minute (after 15 seconds the display will switch off). The number of hours and the override temperature are flashing alternately on the top right side of the display. Press OK for exit from the override function.

Hold Long Period Running

a) Press + or – key to adjust override temperature: the symbol ✍ indicator will appear on the display
b) Press ⏲ key three times and will display 🏢
c) Press OK key to confirm and exit, or exit automatically in 1 minute (after 15 seconds the display will switch off). The temperature will be kept until manually pressing OK key.

Alarm Setting

a) Press and hold ⏲ key for 3 seconds to display AL
b) Then press € key once to display 🔔 on the top left. Press + or – key to select the days (1-5, 6-7, 1-7)
c) Press ⏲ key once to flash hour. Press + or – key to set hours of alarm clock
d) Press ⏲ key once again to flash minute. Press + or – key to set minutes of alarm clock
e) Press OK to confirm. After finishing the setting time, buzzer ring BI-BI for 30 seconds to the programmed time. Press OK key to turn off the alarm clock in the midway.

To Cancel Alarm

a) Press and hold ⏲ key for 3 seconds to display 🔔
b) Then press € and 🔔 will disappear, press OK key to confirm and cancel alarm or exit automatically (after 15 seconds the display will switch off).

Low Battery Indicator

When low battery occurs the 🔋 symbol will appear on the display. Change the batteries in a few minutes and the programme, temperatures and date setting will remain in memory, you only need to reset the time clock (hours and minutes)

Key Lockout Function

Hold OK key for 3 seconds to display OK only, all keys will be locked out. To unlock the keys, hold the OK key for 3 seconds to restore the display of the keys. Use this function when for example you need to clean the display.

Technical Data

Dimension H x L x W (mm)	87 x 135 x 32
Operating voltage 2 batteries	1.5v LR6/AA
Temperature control range	+5°C / +35°C
Temperature display range	+5°C / +37°C
Switching capacity (changeover contact) at ohmic loads	max 6a 240v 50hz
at inductive loads cos w = 0.6	max 2a 240v 50hz
Switching output	Floating
Function modes	Heat / Cool
Anti-frost	+7°C
Ambient temperature	−5°C / +45°C
Programming	Daily, Weekly and 5/2
Class of protection	II
Index of protection	IP20
Displayed temperature update	10s
Reading accuracy	+/–1°C at 20°C
Reading resolution	+/–0.1°C
Swing	0.2°C

Comply with EMC and LV directives

LVD: EN60730-1, EN60730-2-7, EN 60730-2-9

EMC: EN 55014-1, EN 55014-2, EN 61000-3-2, EN61000-3-3

Subject to technical modifications

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