

1. Basic safety information



WARNING

Danger of death through electric shock or fire!

➤ Installation should only be carried out by a professional electrician!

- The device is designed for installation on DIN top hat rails (in accordance with EN 60715)
- Equivalent to Type 1 B
- Power reserve (10 years) is reduced if memory card is inserted (using battery power)

⚠ OBELISK top2 memory card: Avoid mechanical overload and contamination during storage/transportation

2. Proper use

- The digital clock thermostat is intended for time-dependent monitoring and control of the room temperature
- Use only in closed and dry rooms of halls, industrial buildings
- 2 different temperature sensors can be used: a non-adjustable sensor (9070191) and an adjustable sensor (9070192), which can be used for temporarily and adjusting the set temperature, if required

Disposal

➤ Dispose of device in environmentally sound manner

3. Installation and connection

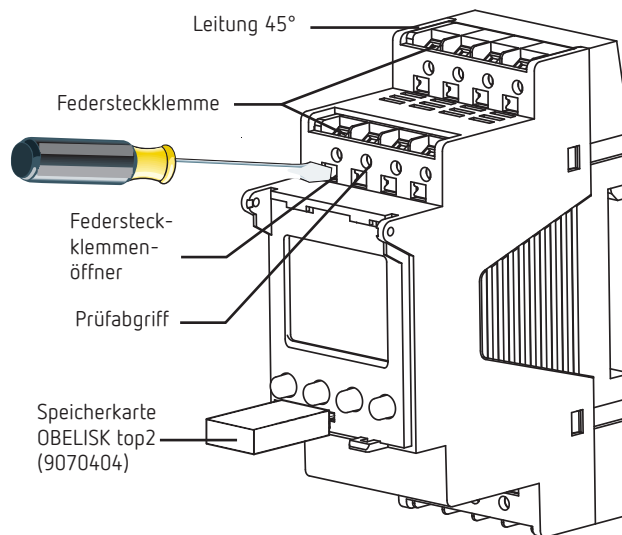
Mounting the Digital clock thermostat



WARNING

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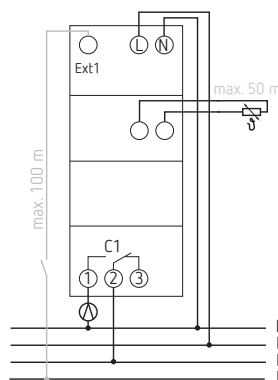
➤ Installation should only be carried out by a professional electrician!



- Mount on DIN top hat rails (as defined in EN 60715)
- Switched voltage-free
- Ensure device cannot be switched on
- Check absence of voltage
- Earth and bypass
- Cover or shield any adjacent live components

Connecting the cable

Wiring diagram



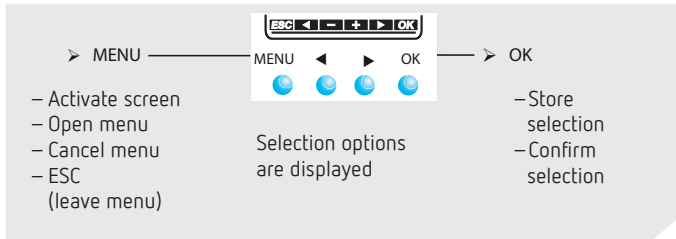
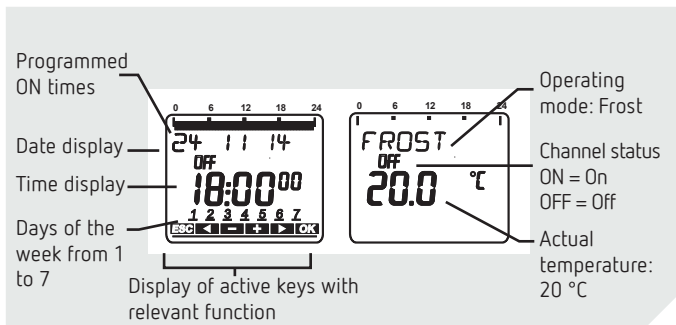
- Strip cable to 8 mm (max. 9)
- Insert cable in the open DuoFix® plug-in terminal at 45°
- ⓘ 2 cables per terminal position possible
- To open the DuoFix® plug-in terminal, press screwdriver downwards

Disconnecting the cable

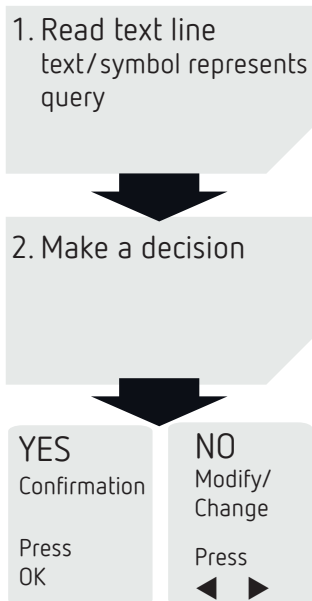
- Use the screwdriver to push the load line connection opener downwards

4. Device description

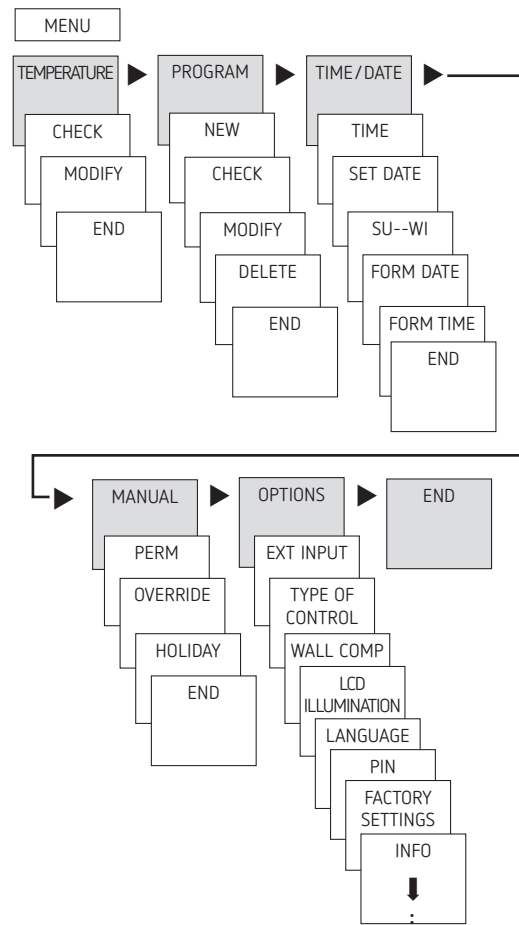
Display & buttons



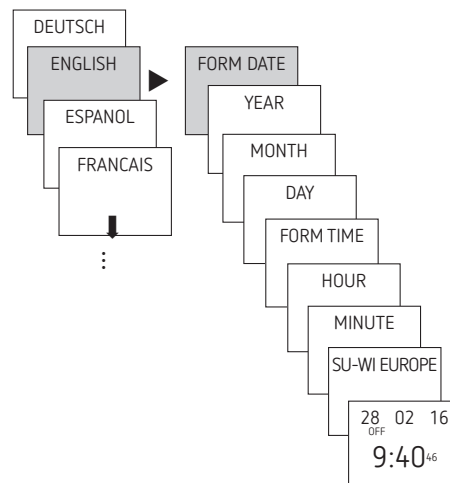
Operating instructions



Overview of navigation menu



Initial operation



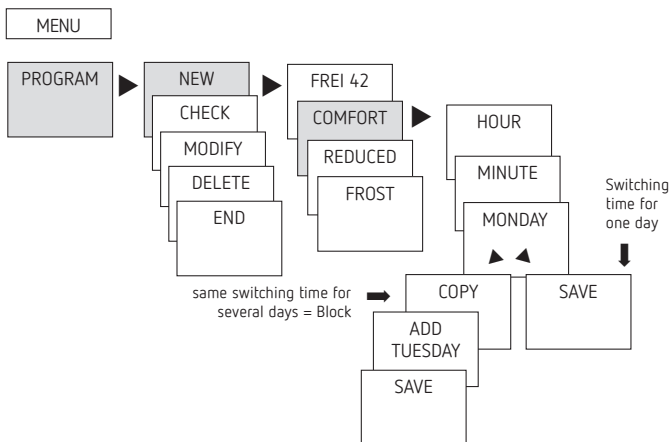
- Set language, date, time as well as summer/winter time (SU-WI)
- Press any button and display follows on screen (see figure)

5. Settings and functions

Set switching time

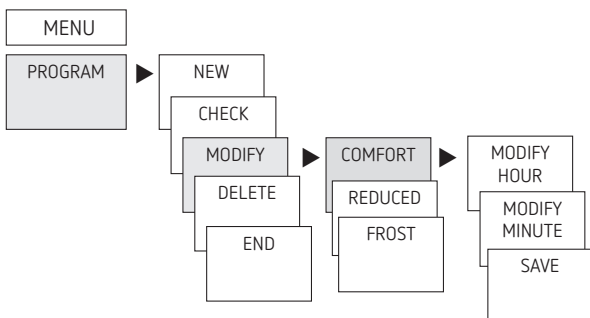
① Without programmed switching times, the clock thermostat permanently regulates to frostprotection temperature.

Example: for comfort, decrease and frost temperature



- Press MENU. TEMPERATURE is displayed.
- Press ► to select PROGRAM.
- Confirm by pressing OK. NEW is displayed.
- Confirm by pressing OK. COMFORT (► REDUCED/► FROST) is displayed.
- Confirm by pressing OK. HOUR is displayed.
- Use the + or – buttons to enter hour, minute and confirm by pressing OK. MONDAY is displayed.
- Confirm by pressing OK. COPY is displayed.
- Confirm by pressing OK. ADD TUESDAY is displayed.
- Confirm with OK and confirm the desired days, e.g. Wed to Sun with OK (skip not desired days with ►).
- SAVE is displayed. Confirm by pressing OK

Check/modify/delete switching time



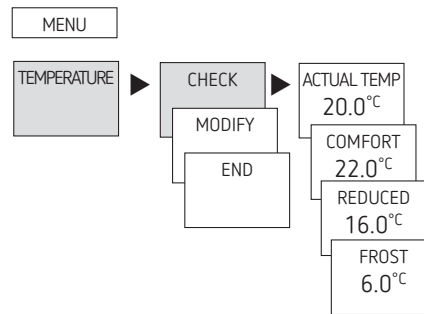
- Press MENU. TEMPERATURE is displayed.
- Press ► to select PROGRAM.
- Confirm by pressing OK. NEW is displayed.
- Press ► to select CHECK/MODIFY or DELETE.
- Confirm by pressing OK. COMFORT is displayed.
- Confirm by pressing OK. The first of the entered switching times is displayed.
- Confirm by pressing OK. NEXT is displayed

Change or delete individual switching times

- Press ► to select MODIFY (or DELETE). COMFORT is displayed.
- Confirm by pressing OK. MODIFY HOUR is displayed.
- Use the + or – buttons to change hour and minute (block or single day) and confirm by pressing OK.

Request temperature program

For comfort, decrease and frost temperature



- Press MENU. TEMPERATURE is displayed.
- Confirm by pressing OK. CHECK is displayed.
- Confirm by pressing OK. ACTUAL TEMPERATURE (COMFORT/REDUCED/FROST) is displayed

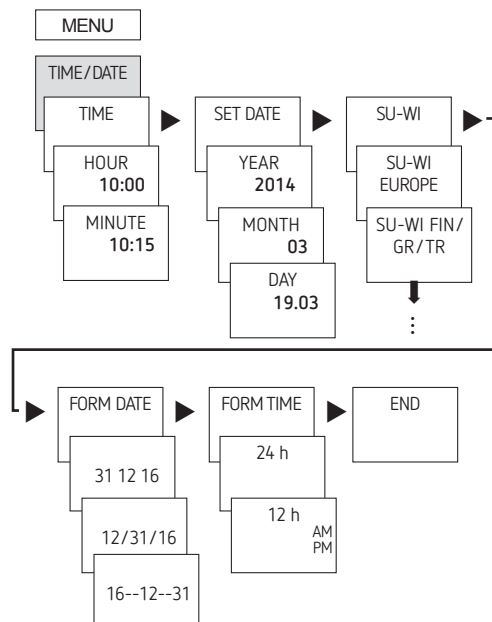
Change temperature program

- Press MENU. TEMPERATURE is displayed.
- Confirm by pressing OK. MODIFY is displayed.
- Press ► to select MODIFY.
- Confirm by pressing OK. COMFORT (► REDUCED/► FROST) is displayed.
- Confirm by pressing OK.
- Use the + or – buttons to enter the value and confirm with OK. SAVE is displayed.
- Confirm by pressing OK

Set time / date

In the TIME/DATE menu, the submenus TIME, DATE, SU-WI (summer/winter rule), FORM DATE or FORM TIME can be entered/changed.

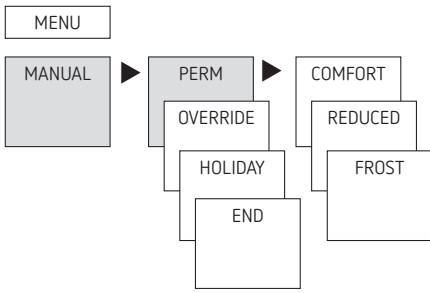
- Press MENU, select TIME/DATE with ► and follow the indications on the display.



MANUAL

In the MANUAL menu, manual switch functions are applied. In the submenus PERM, OVERRIDE or HOLIDAY, the manual switchings can be activated/programmed.

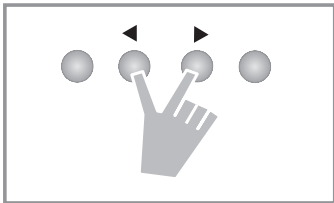
- Press MENU, use u to select MANUAL and follow the indications on the display



Setting manual or permanent switching

Manual or permanent switching can be set via the menu in MANUAL or (in the automatic screen) by button combination (see picture).

- Manual control:
Reversing the channel status to the next automatic or programmed switching.
- Permanent switching:
As long as a permanent switching (on or off) is activated, the programmed switching times are ineffective



Activating manual control

- Press buttons simultaneously. If FROST or DECREASE is active, MANUAL COMFORT will become active. If COMFORT is active, MANUAL DECREASE will become active

Activating permanent switching

- Press both buttons simultaneously for 2 seconds

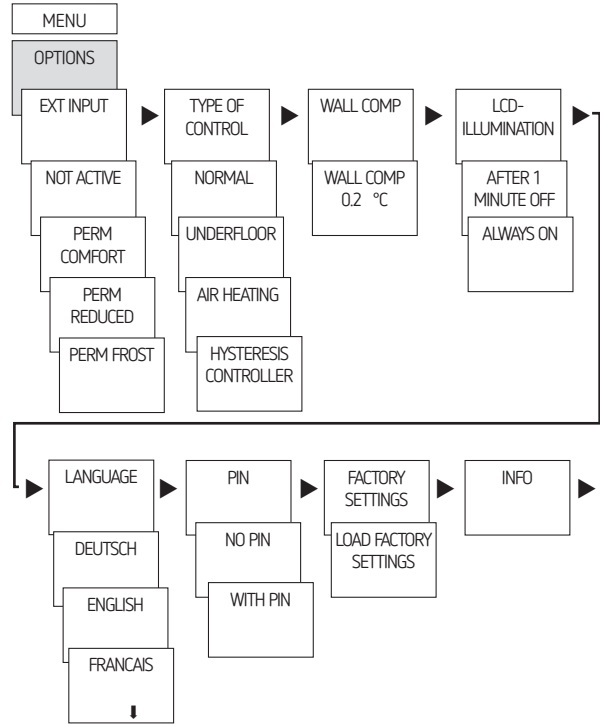
Cancelling manual/permanent switching

- Press both buttons simultaneously

Options

In the OPTIONS menu; the submenus EXT INPUT, TYPE OF CONTROL, WALL COMP, LCD ILLUMINATION, LANGUAGE, PIN, FACTORY SETTINGS or INFO can be selected.

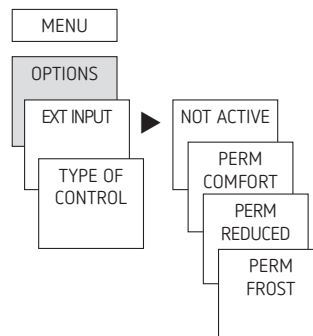
- Press MENU, use ► to select OPTIONS and follow the instructions on the display.



Set external input

Via the EXT INPUT different functions can be set.

- NOT ACTIVE: The external input has no function
- PERM COMFORT: Comfort mode is permanently on
- PERM REDUCED: Setback mode is permanently on
- PERM FROST: Frost mode is permanently on

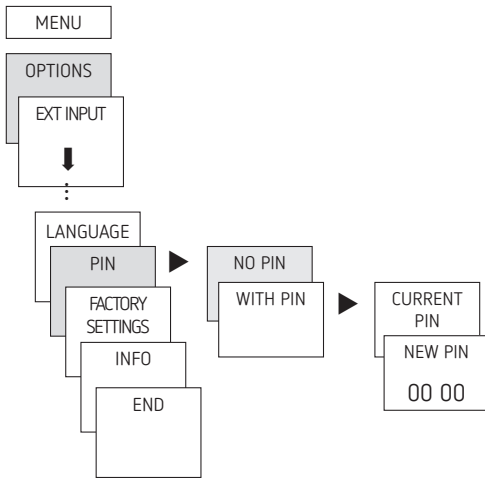


- Press MENU, use ► to select EXT INPUT and follow the indications on the display. 4 submenus can be selected:

Activating PIN code

The PIN code is set in OPTIONS via the menu.

- ① If you have forgotten your PIN, call the Theben Hotline.
- ① Have the serial number ready.

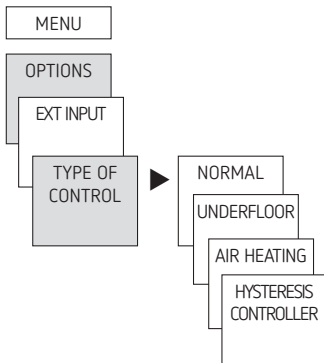


Type of control

In the submenu TYPE OF CONTROL, the following settings can be selected:

- NORMAL (e.g. radiator / convector)
- UNDERFLOOR (inertial heating systems)
- AIR HEATING (fast heating systems)
- HYSTERESIS CONTROLLER (adjustable switch on/off hysteresis of $\pm 0.2 - 2.0$ °C in 0.2 increments)

Thus, the control behaviour can be adjusted to different types of heating

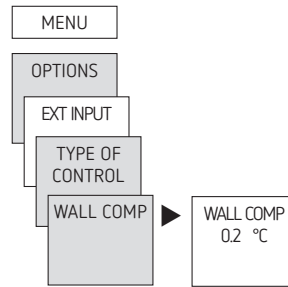


- Press MENU, use ► to select TYPE OF CONTROL and follow the indications on the display.

Wall compensation

If the installation location is unfavourable, this may lead to variations in temperature between the detected and actual room temperature (+ if indication too low, – if indication too high). This can be corrected by using wall compensation.

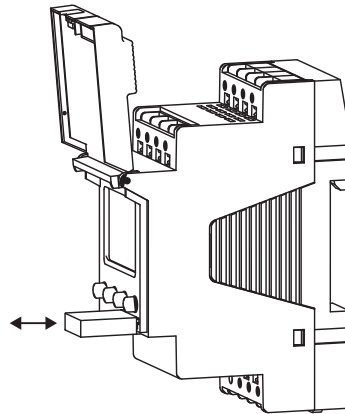
- Press MENU, use ► to select WALL COMP and follow the indications on the display.



Using the OBELISK top2 memory card

- Insert memory card in the clock thermostat
- Read in/out saved switching times and device setups in the time switch or start Obelisk program
- Remove memory card after copying etc.

- ⚠ Avoid mechanical overload and contamination during storage/transport



Copying OBELISK → TIME

This copies the switching program and optionally all time switch settings (e.g. external input, time format etc.) from the memory card in the clock thermostat.

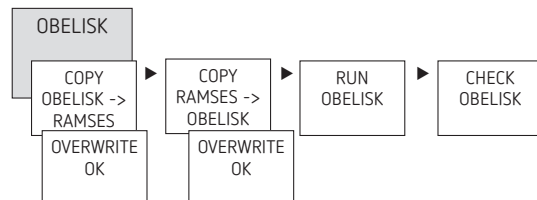
Copying TIME → OBELISK

This copies all switch programmes and settings from the clock thermostat to the memory card.

Starting OBELISK program

Takes on the switching times that are programmed on the memory card.

As soon as the memory card is removed, the switching times of the clock thermostat are re-activated.



Resetting the clock thermostat

- Press the 4 buttons simultaneously
→ You can choose between KEEP PROGRAM and DELETE PROGRAM

6. Technical data

Operating voltage:	230V AC, +10 % / -15 %
Frequency:	50–60 Hz
Power consumption:	1,4 W
Standby output:	1,36 W
Switch output:	switching of any phase is permitted
Voltage at sensor input:	Safety Extra-Low Voltage (SELV) approx. 3.5 V
Contact:	Changeover contact
Contact gap:	<3 mm (μ)
Max switching capacity:	10 A / 250 V~, cos φ = 1; 2 A / 250 V~, cos φ = 0,6
switching capacity:	10 mA / 230 V AC 100 mA / 12 V AC / DC
Sensor type:	NTC,
sensor length:	max. 50 m
Mode of operation:	type 1 B in accordance with 60730-1
Operating temperature:	0 °C ... +50 °C
Protection class:	II in accordance with EN 60730-1 subject to correct installation
Protection rating:	IP 20 in accordance with EN 60529
Time accuracy (typical):	≤ ± 0.25 s/day (25 °C)
Power reserve:	10 years at +20 °C
Pollution degree:	2
Rated impulse withstand voltage:	4 kV

7. Contact

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Product data sheet in accordance with Regulation (EU) No. 811/2013

Product group: RAMSES 360 top 2
(electronic room thermostats)

Name or trademark of the supplier	Model identification of the supplier	Class of the temperature controller	Contribution to room heating energy efficiency in %
Theben AG	RAMSES 366/1 top 2	I	1.0