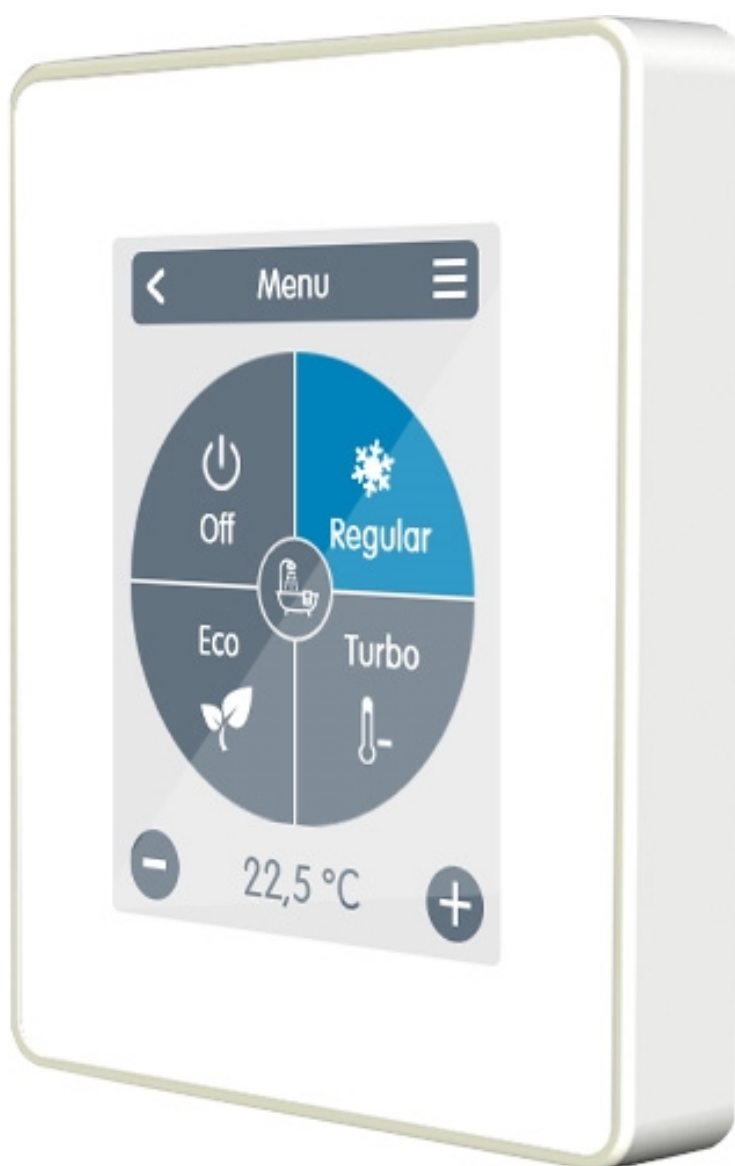


°caleon clima

Installation and operating instruction



Read carefully before installation, commissioning and operation

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SAFETY INSTRUCTIONS

EG-Conformity

By affixing the CE mark to the unit the manufacturer declares that °CALEON Clima conforms to the following relevant safety regulations:

- EU low voltage directive 2014/35/EU
- EU electromagnetic compatibility directive 2014/30/EU

conforms. Conformity has been verified and the corresponding documentation and the EU declaration of conformity are kept on file by the manufacturer.

General instructions

Please read carefully!

These installation and operating instructions contain basic instructions and important information regarding safety, installation, commissioning, maintenance and the optimal use of the unit. Therefore these instructions must be read and understood completely by the installation technician/specialist and by the system user before installation, commissioning and operation of the unit.

This unit is an automatic, electrical °CALEON Clima Roomthermostat. Install the device only in dry rooms and under environmental conditions as described under "Technical Data".

The valid accident prevention regulations, VDE regulations, the regulations of the local power utility, the applicable DIN-EN standards and the installation and operating instruction of the additional system components must also be observed. Under no circumstances does the unit replace any safety devices to be provided by the customer! Installation, electrical connection, commissioning and maintenance of the unit may only be carried out by specialists who possess the appropriate training.

Users: Make sure that the specialist gives you detailed information on the function and operation of the unit. Always keep these instructions in the vicinity of the unit.

The manufacturer does not take over any liability for damage caused through improper usage or non-compliance of this manual!

Changes to the Unit

- Changes, additions to or conversion of the unit are not permitted without written permission from the manufacturer.
- It is likewise forbidden to install additional components that have not been tested together with the unit.
- If it becomes clear that safe operation of the unit is no longer possible, for example because of damage to the housing, turn the Unit off immediately.
- Any parts of the unit or accessories that are not in perfect condition must be exchanged immediately.
- Use only original spare parts and accessories from the manufacturer.
- Markings made on the unit at the factory must not be altered, removed or made illegible.
- Only the settings described in these instructions may be set using the Unit.



Changes to the unit can compromise the safety and function of the unit or the entire system.

Warranty and Liability

The Unit has been manufactured and tested with regard to high quality and safety requirements. The warranty and liability shall not include, however, any injury to persons or material damage that is attributable to one or more of the following causes:

- Failure to observe these installation and operating instructions.
- Improper installation, commissioning, maintenance and operation.
- Improperly executed repairs.
- Unauthorized structural changes to the unit.
- Use of the device for other than its intended purpose.
- Operation above or below the limit values listed in the 'Specifications' section.
- Force majeure.

Disposal and Pollutants

The unit conforms to the European RoHS 2011/65/EU for the restriction of the use of certain hazardous substances in electrical and electronic equipment.



Under no circumstances may the device be disposed of with the normal household waste. Dispose of the unit only at appropriate collection points or ship it back to the seller or manufacturer.

DESCRIPTION °CALEON CLIMA

Specifications



Housing

2-part, ABS plastic
75 mm x 95 mm x 19 mm
Glass front



Display

Capacitive touch panel
Color display with 240x320 dots
2.8 inches (7 cm) diagonal



Operation

Intuitive user guidance



Language

Deutsch
English
Español
Français
Italiano
Polski
Русский

Electrical specifications:

Power supply	12 - 24 VDC +/- 10%
Power consumption	0,5 W - 1,0 W
Protection category	IP20
Protection class / overvoltage category	III / II

Max. cable length

CAN	<3m, if the cable length is >=3m it is necessary to use a shielded twisted pair bus cable and connect the shield on one side to the protective conductor.
1-Wire Bus	Optional, without function

Permissible Ambient Conditions

during operation	0 °C - 50 °C, no moisture condensation permitted
for transport/storage	0 °C - 60 °C, no moisture condensation permitted

Measuring range

Internal temperature sensor	0 °C - 60 °C	Accuracy +/- 1 °C Resolution 0,1 °C
Internal sensor for rel. humidity	0 % - 100 %	Accuracy +/- 6 °C Resolution 0,1 %
1-Wire temperature sensors	Optional, without function Outside the measuring ranges there are larger deviations	

Other Specifications

Installation methods	Wall installation, with/without wall socket
Real Time Clock	RTC with 24 hour power reserve

Scope of supply

- °CALEON Clima Roomthermostat
- 2 screws 3,5 x 35 mm and 2 plugs 6 mm for wall installation.
- 2 single conductor connectors, CAN connector with connecting cables, terminating resistor CAN connector, terminating resistor °CALEON, operating tool
- °CALEON Clima Quick Guide

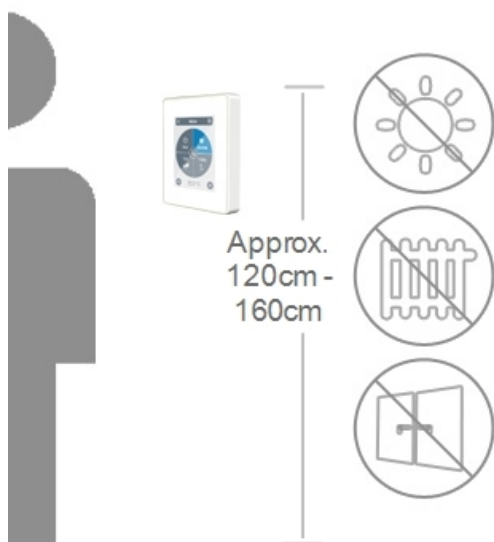
INSTALLATION

°CALEON Clima Installation

Mount the unit at a suitable location.



Pay attention to suitable environmental conditions. Direct sunlight, sources of heat and cold, e.g. radiators and windows must be avoided.



Strip cables, slip protective conductor over, and remove fill material as needed.

When mounting °CALEON's base to the wall the connecting cables must be kept as short as possible. For direct wall mounting a maximum length of 40 mm is recommended. Long wire loops inside the °CALEON's housing may cause problems.

When mounting °CALEON's base to a plastic wall socket the connecting cables must be kept as short as possible (strip cables not more than 55 mm). Also make sure that wire loops are led back to the plastic wall socket, since long wire loops inside the °CALEON's housing may cause problems.

Strip the last 8 - 9 mm of the wires. Isolate shielding and connect it at a suitable location (controller or CAN-box) to the protective conductor.



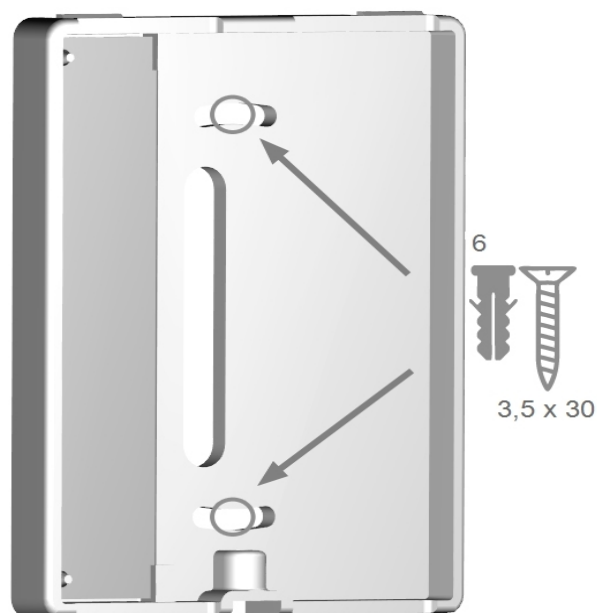
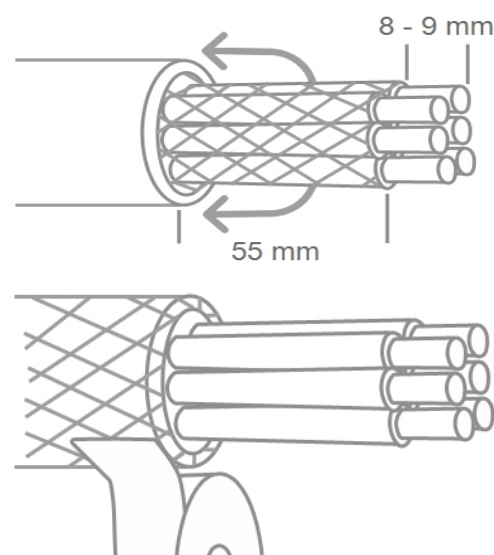
Any contact between protective conductor and circuit board can cause serious damage.

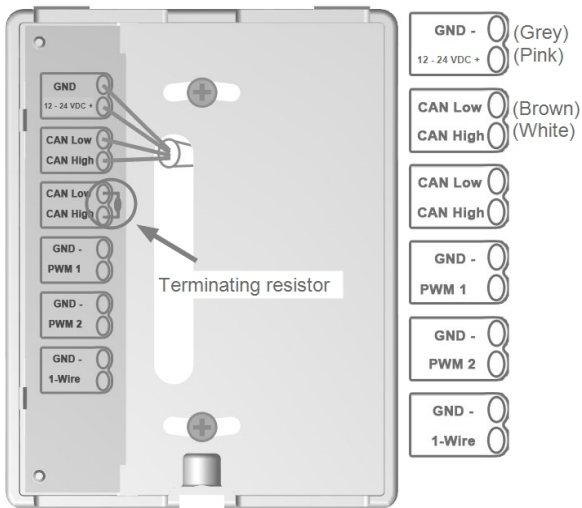
Mounting on plastic wall socket

Fix the base with the screws (3.0 x 16) to the mounting box.

Direct wall mounting

Hold the lower part of the housing up to the selected position and mark the three mounting holes. Make sure that the wall surface is as even as possible so that the housing does not become distorted when screwed on. Using a drill and drill holes at the points marked on the wall and push in the plugs. Insert screws and screw it in slightly. Align the base and tighten the screws.





Open the terminals with the accompanying operating tool and make the electrical connection as described.



Power supply 12 - 24 VDC, ensure correct polarity or it may cause damage to the unit!



The first and last unit in the CAN-network in series must be fitted with terminating resistance.



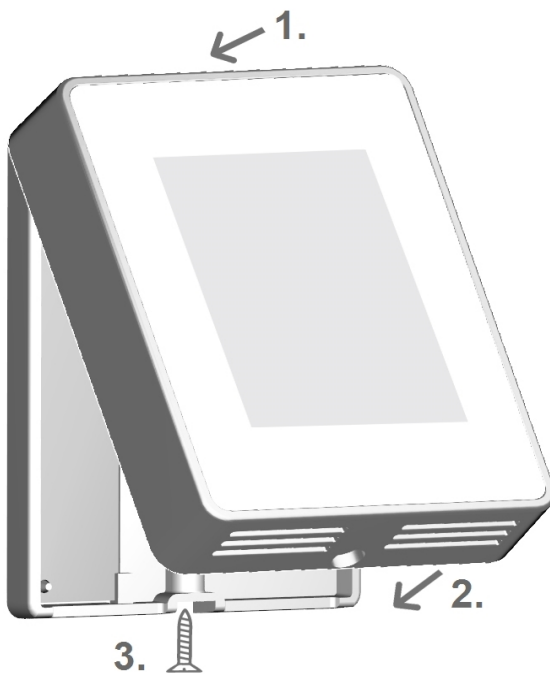
Operating tool

The connection of the opposite side (controller) can be found in the corresponding terminal diagram in the controller manual.

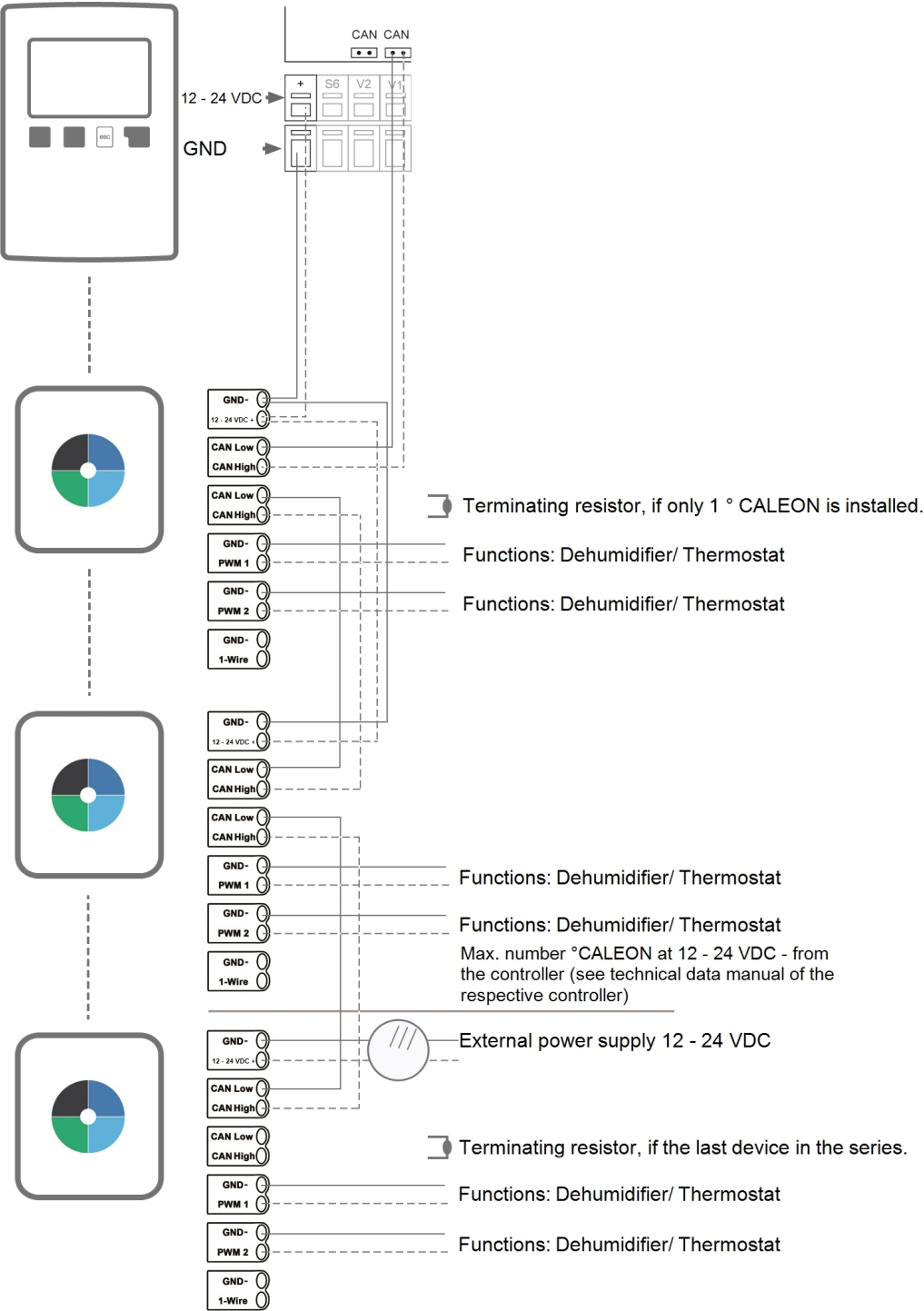
Refit the base and fasten with screw. Switch on mains voltage and place °CALEON in operation.



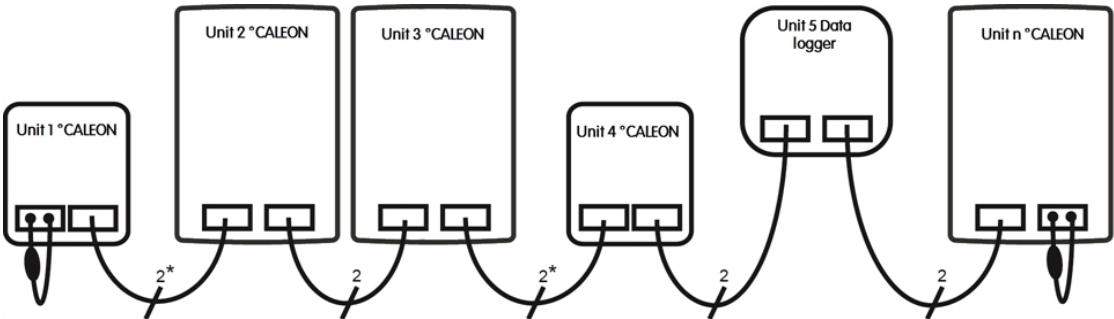
The commissioning can be accessed in the °CALEON menu under Expert at any time.



Example Controller-Connection



Example CAN-Connection



*Only CAN in power supply from 4 cores of the regulator.

The order and the number of devices (max. 50) is arbitrary.

OPERATION

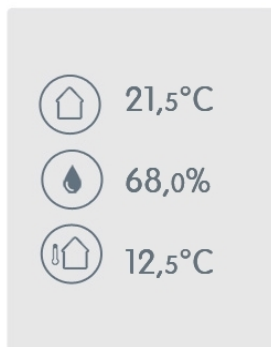
Overview of temperatures & humidity

It displays room temperature, humidity and outdoor temperature. If there is no activity for 60 sec., the device is automatically switched to the overview.



Room temperature

Indicates the temperature of the selected Space in 0.1 degree increments.



Room humidity

Is the relative humidity of The selected space in 0.1 degree increments.



Outdoor temperature

Is the outdoor temperature in 0.5 degree increments. Measured by the HCC controller.

Select Operating Mode



Back

Navigate back to the overview.



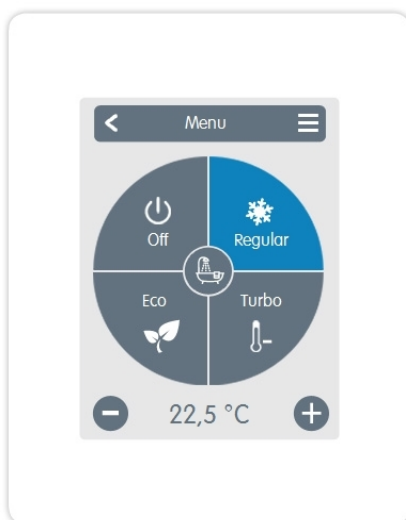
Room

Displays the selected space.



Minus/Plus

Change the target temperature +/- 0.5 ° C.



Main menu

Navigate to the main menu



Operating modes

Specifies which operating mode (Normal, Turbo, Eco and Off) is selected. The selected mode is shown in color. By pressing the plus and minus keys it is possible to adjust the set-point temperature of the modes.

Main Menu

Overview > Operating Mode > Main Menu



Heating/Cooling

Switch between heating and cooling modes.



Holiday

Set time and temperature for the period of absence.



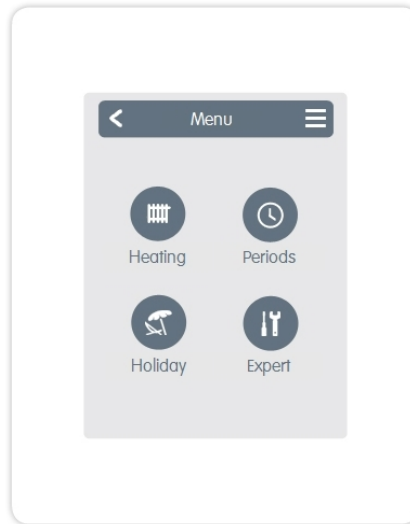
Periods

Adjustment of individual heating resp. cooling times for each weekday with copy function for subsequent days.



Expert

Standard settings such as language, time and date, functional options and factory setting.



Expert Menu

Overview > Operating Mode > Main Menu > Expert

1. Language

The configuration of the device language.

2. Time & Date

The configuration of the time and date and automatic summer/winter changeover.

3. Caleon

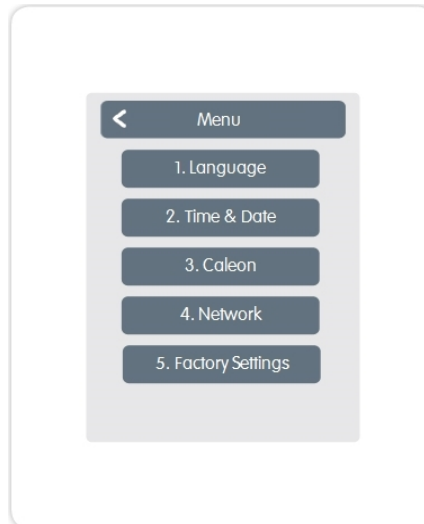
Settings concerning basic functions such as sensor calibration, functions,, location and commissioning.

4. Network

Information on device version as well as the CAN ID for the device on the network, in order to identify the device such as a heating resp. cooling circuit.

5. Factory Settings

The factory settings are restored in the device.



Expert Menu °CALEON Clima

Overview > Operating Mode > Main Menu > Expert > °CALEON

Sensor calibration

Used to adapt the temperature and humidity of the said local sensor for the selected area.

Functions

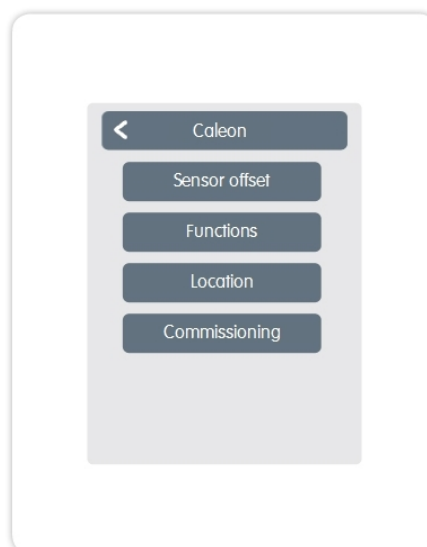
Additional functions for PWM outputs V1 and V2.

Location

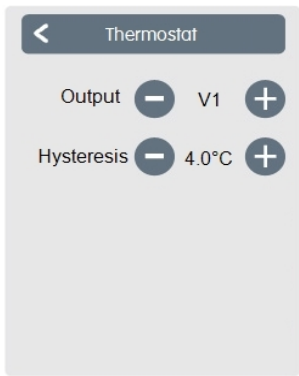
In the menu item location you specify in which room °CALEON Clima is installed.

Commissioning

Commissioning allows you to configure basic settings such as language, time and date, as well as the automation of summer and winter time subsequently. In the initial start-up, commissioning is carried out automatically.



Thermostat

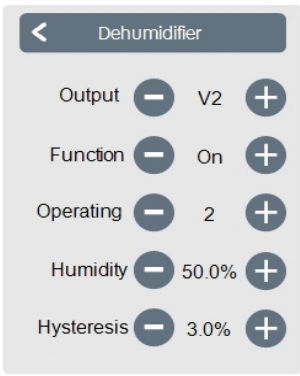


Output: Switching output of the function.

Hysteresis: Heating hysteresis of the thermostat function in relation to the actual set room temperature.



Dehumidifier



Output: Switching output of the function.

Function: Enables or disables the function.

Operating mode: Operating mode of the function. 1= Summer, 2= Full-year, 3= Circulation (Summer + Cooling).

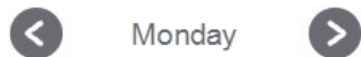
Humidity: Setpoint of humidity.

Hysteresis: Hysteresis of the dehumidifier function with reference to the target value set under humidity.

Set Operation Hours

For the operating modes heating and cooling own mode-related times are set.
To do this, first switch to the heating mode and define the corresponding times for this operating mode under Main menu > Timer. Then change to the cooling mode and define the corresponding times for this operating mode under Main menu > Timer.

Adjustment of individual heating resp. cooling times by a simple copy function for every day.



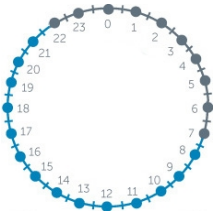
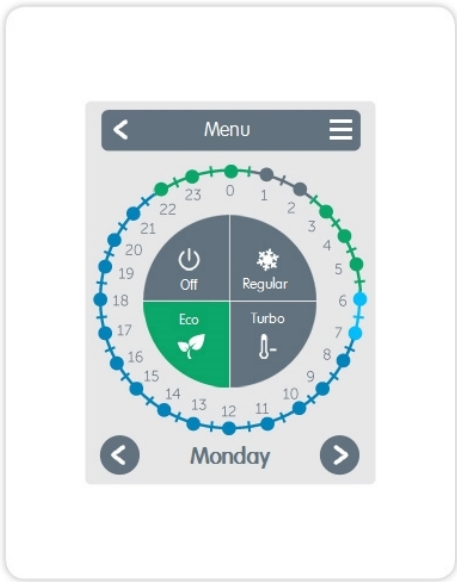
Previous/Next week

Selects the set day.



Operating modes

Selects the operating mode to individual heating resp. cooling sections.



Clock

Time table of the selection in periods of 30 minutes increments.



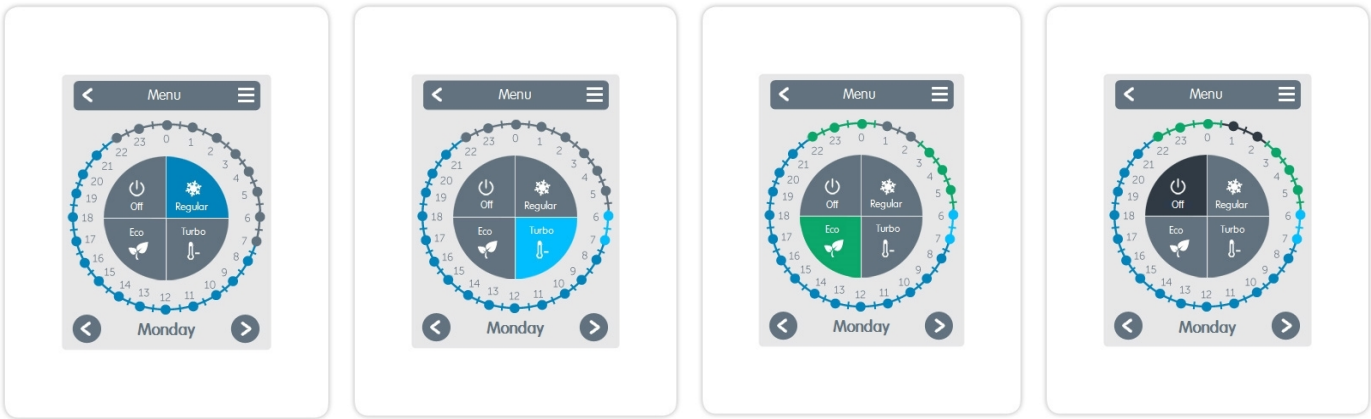
Menu

Opens the copy function. This function allows you to copy the heating resp. cooling times for the next day, on Monday-Friday or Monday-Sunday.

Example Set Operation Hours

Step 1

Use the arrow keys to select the desired day.



Step 2

Select the first heating mode (Normal) - with the index finger select the desired length of time. The selected period is colored by selecting the color of the operating mode (normal = Blue).

Step 3

Continue to the next mode (Turbo) and proceed as described above, select the time period for the Turbo Mode.

Step 4

Continue to the next mode (Eco) and proceed as described above, select the time period for the Eco Mode.

Step 5

Continue to the next mode (Off) and proceed as described above, select the time period for the Off Mode.

Step 6

After the completion of the setting of the individual heating resp. cooling times, you have the option of selecting times using the main menu for the next day, or to copy Monday-Friday or Monday-Sunday.

Final declaration

Although these instructions have been created with the greatest possible care, the possibility of incorrect or incomplete information cannot be excluded. Subject as a basic principle to errors and technical changes.

Date and time of installation:

Name of installation company:

Space for notes:

Your specialist dealer:

Manufacturer:

SOREL GmbH Mikroelektronik
Reme-Str. 12
D - 58300 Wetter (Ruhr)

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