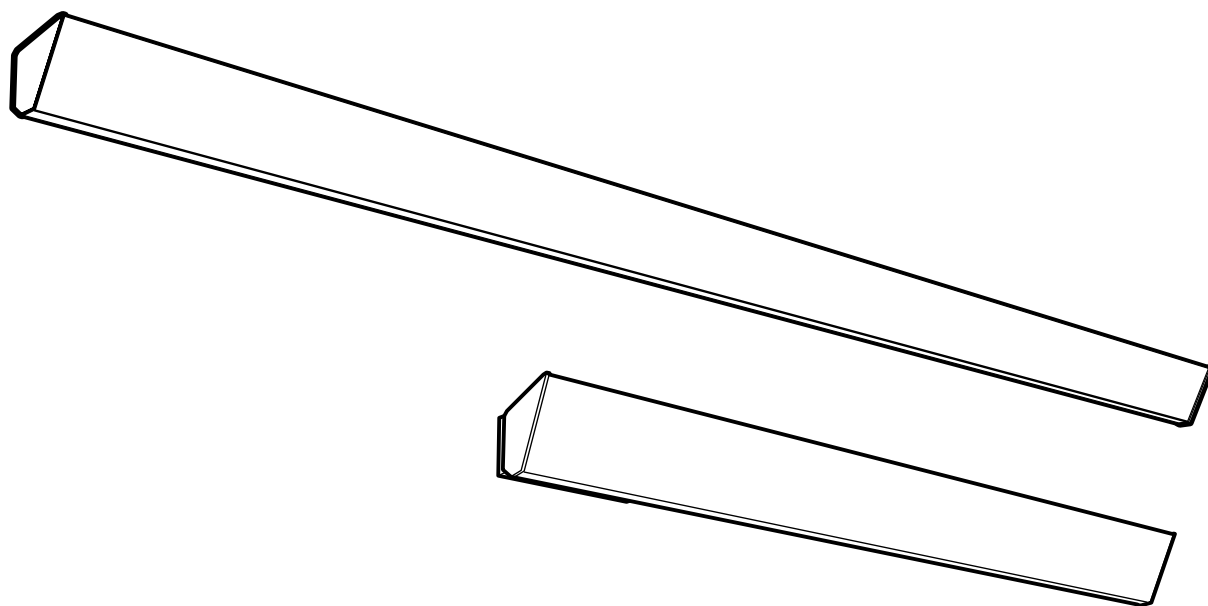


Original instructions
Thermoplus ECVTN



EN ... 5

SE ... 15

NO ... 25

FR ... 35

DE ... 45

FI ... 55

NL ... 65

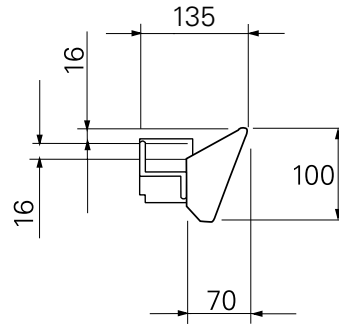
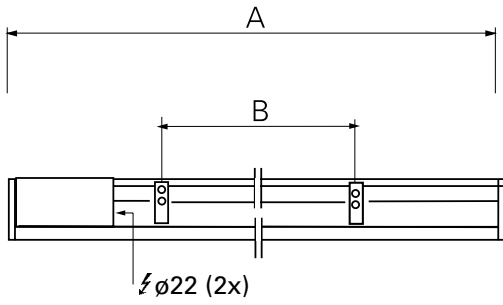
PL ... 75

RU ... 85

ES ... 95

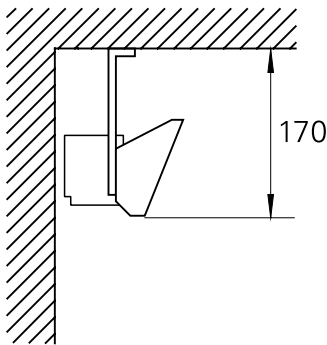
IT ... 105

Thermoplus ECVTN



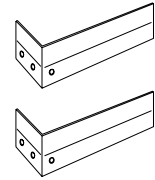
Type	A [mm]	B [mm]
ECVTN300	870	400
ECVTN550	1505	900
ECVTN700	1810	1200

Ceiling (with accessory TF1)

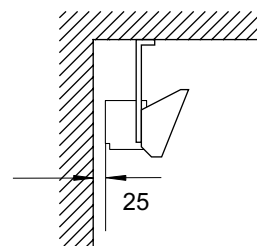
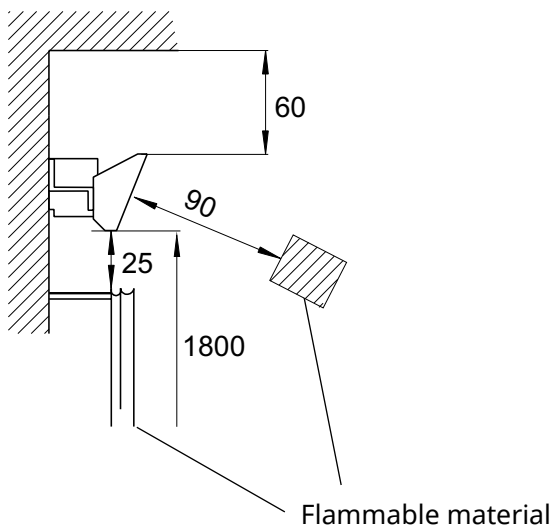


Accessories

Item number	Type
10114	TF1

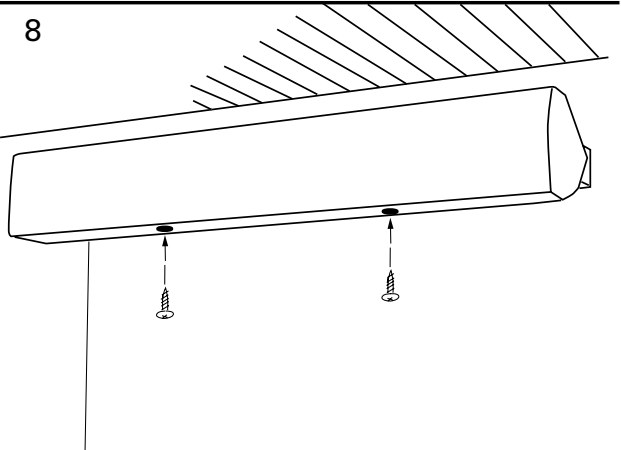
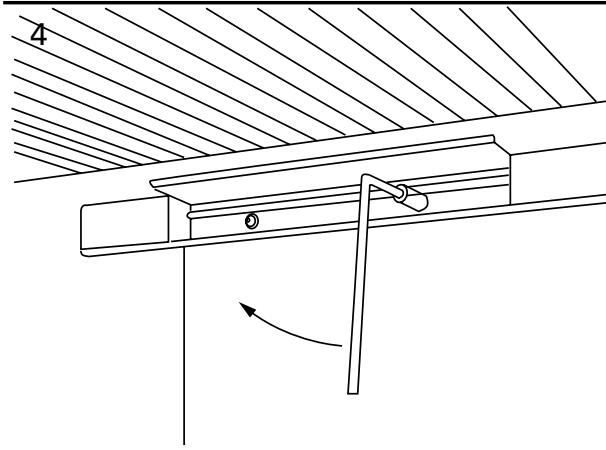
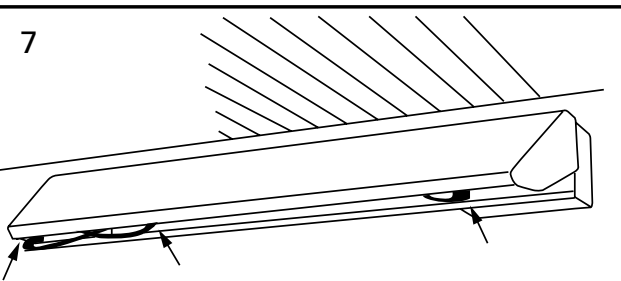
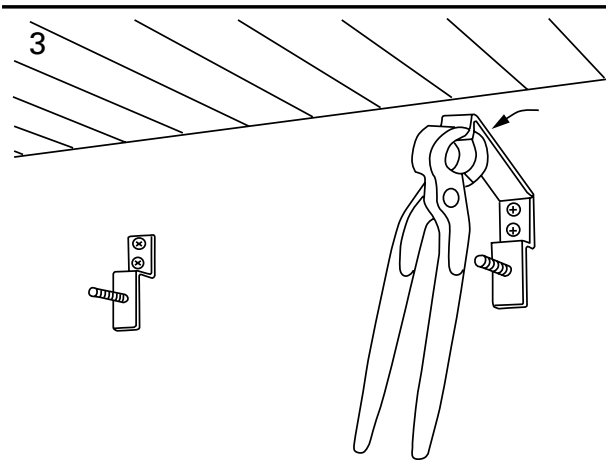
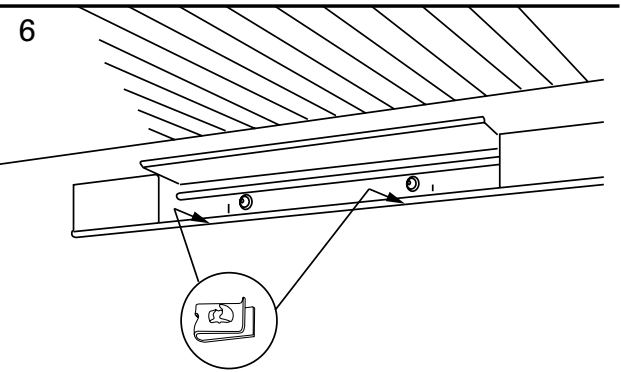
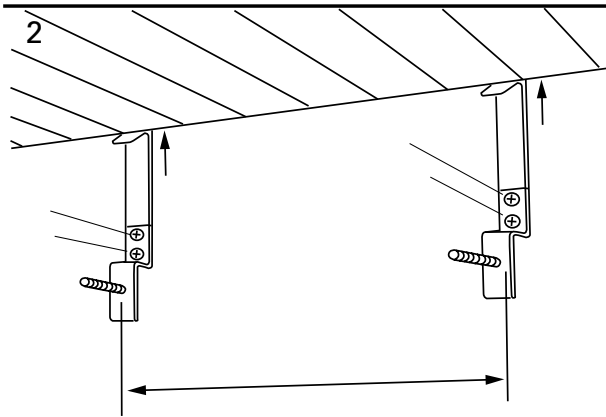
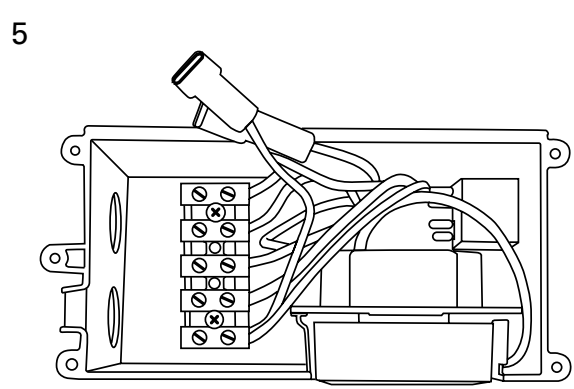
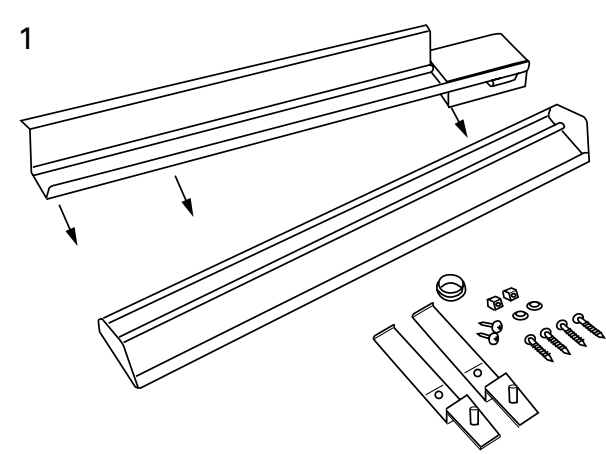


Minimum mounting distance



- SE: Minimiavstånd, Brännbart material
- NO: Minsteavstand, Brennbart materiale
- FR: Distances minimales, Matériau inflammable
- DE: Mindestabstand, Entflammbares Material
- NL: Minimale afstand, Brandbaar materiaal
- ES: Distancias mínimas, Material inflamable
- PL: Minimalne odległości, Materiał łatwopalny
- RU: Минимальные расстояния при установке, Легковоспламеняемые материалы
- IT: Distanze minime, Materiali infiammabili
- FI: Minimietäisyydet, Tulenarka materiaali
- DK: Minimumsafstande, Brændbart materiale

Thermoplus ECVTN



Thermoplus ECVTN

Thermoplus ECVTN (IP44)

Item number	Type	Heat output	Voltage	Amperage	Max. surface temperature	Weight
		[W]	[V]	[A]	[°C]	[kg]
153948	ECVTN30021	300	230V~	1,3	180	2,3
153949	ECVTN55021	550	230V~	2,4	180	4,6
153956	ECVTN70021	700	230V~	3,0	180	5,0



EN: Heat output

SE: Värmeeffekt
 NO: Varmeeffekt
 FR: Puissance
 DE: Heizleistung
 NL: Verwarmingscapaciteit
 ES: Potencia calorífica
 IT: Potenza termica
 PL: Moc grzewcza
 RU: Выходная мощность
 FI: Lämmitysteho
 DK: Varmeeffekt

EN: Voltage

SE: Spänning
 NO: Spenning
 FR: Tension
 DE: Spannung
 NL: Voltage
 ES: Tensión
 IT: Tensione
 PL: Napięcie
 RU: Напряжение
 FI: Jännite
 DK: Spænding

EN: Amperage

SE: Ström
 NO: Strøm
 FR: Intensité
 DE: Stromstärke
 NL: Stroomsterkte
 ES: Intensidad
 IT: Corrente
 PL: Natężenie
 RU: Ток
 FI: Virta
 DK: Strømstyrke

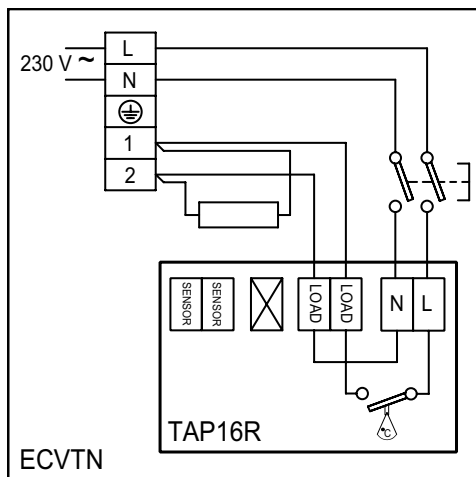
EN: Max. surface temperature

SE: Maximal yttemperatur
 NO: Maksimal overflatetemp.
 FR: Température max. de surface
 DE: Max. Oberflächentemperatur
 NL: Max. oppervlaktetemperatuur
 ES: Temperatura superficial máxima
 IT: Temperatura max. filamento
 PL: Maksymalna temp. elementu grzejnego
 RU: Max. температура поверхности
 FI: Suurin pintalämpötila
 DK: Maksimal overfladetemperatur

EN: Weight

SE: Vikt
 NO: Vekt
 FR: Poids
 DE: Gewicht
 NL: Gewicht
 ES: Peso
 IT: Peso
 PL: Masa
 RU: Вес
 FI: Paino
 DK: Vægt

Wiring diagram



Installation and operating instructions

General Instructions

Read these instructions carefully prior to installation and use. Keep this manual for future reference.

The product may only be used as set out in the assembly and operating instructions. The guarantee is only valid should the product be used in the manner intended and in accordance with the instructions.

Application area

Thermoplus is mounted above windows and gives an efficient protection against cold draught. The slim shape also makes it suitable for heating areas with limited space, like for example bathrooms. Thermoplus can furthermore be a cost-effective and flexible alternative to floor heating. Thermoplus ECVTN is equipped with a built-in Ecodesign approved thermostat (+5 – +37 °C).

Protection class: IP44.

Connection

Thermoplus is intended for permanent installation.

Mounting

Thermoplus among other things is used to protect against cold draughts from windows and is mounted horizontally above the window. Two wall mounting brackets are included as standard. Fixtures for ceiling mounting are extra, TF1. For minimum mounting distance, see p.2.

1. Remove the front plate, and detach the electrical connections from the back plate.
2. Fit the brackets to the wall below the coving. See Table B for distance between brackets. Allow 15 mm for heater expansion.
3. Break off the top spacing part of the brackets at the break mark.
4. Fasten the back plate to the brackets.
5. Press the two u-nuts into place in the bottom flange of the backplate.
6. Re-connect the wiring, be sure to place the joints in the connections box. Hook the front panel onto the top flange of the backplate.
7. Lower the front plate and screw into place via the two u-nuts.

Start-up

When the unit is used for the first time or after a long period of non-use, smoke or an odour may result from dust or dirt which has collected on the element. This is completely normal and disappears after a short time.

Maintenance

The power supply to the unit must be disconnected during all service, repair and maintenance work. Wait until the unit is cold. The unit has no moving parts so the maintenance requirement is small, but it must be kept clean and free from dust and dirt. The back of the unit can be vacuum cleaned, use a brush to prevent damaging sensitive parts. The front can be wiped with a soft, dry cloth. If it is very dirty, use a slightly damp cloth and, if necessary, a mild detergent. Wipe afterwards with a dry cloth to remove moisture.

- In all electrical heating appliances, small clicks can occur due to movement when the material expands and contracts with changes in temperature.
- The product should always be handled with clean gloves. Make sure the product is clean before it is switched on.
- Presence of aerosols, lacquer, solvents, dust and similar may cause a coating on the product and discolor them.
- A slight change of colour of the product over time is normal. Incorrect installation or uncommonly high ambient temperature can cause increased discoloration. The output is not affected.

Residual current circuit breaker

When the installation is protected by means of a residual current circuit breaker, which trips when the appliance is connected, this may be due to moisture in the heating element. When an appliance containing a heater element has not been used for a long period or stored in a damp environment, moisture can enter the element.

This should not be seen as a fault, but is simply rectified by connecting the appliance to the main supply via a socket without a safety cut-out so that the moisture can be eliminated from the element. The drying time can vary from a few hours to a few days. As a preventive measure, the unit should occasionally be run for a short time when it is not being used for extended periods of time.

Packaging

Packaging materials are chosen with consideration to the environment and are therefore recyclable.

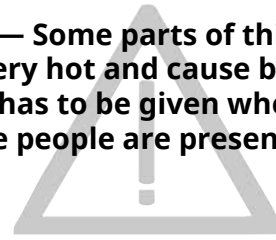
Handling of product at end of working life

This product may contain substances necessary for the functionality of the product but potentially dangerous for the environment. The product should not be disposed of mixed with general household waste but delivered to a designated collection point for environmental recycling. Please contact the local authority for further details of your nearest designated collection point. Recycling of used products saves earth's resources and reduces global footprint.

Safety

- *For all installations of electrically heated products a residual current circuit breaker 300 mA for fire protection should be used.*
- *The unit must not be fully or partially covered as overheating can result in a fire risk!*
- *The unit must not be placed directly under fixed wall sockets!*
- *The unit must not be used if the unit or the cord is damaged. Risk of injury!*
- *The cable and plug must not be placed inside the hot radiant area.*
- *This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.*
- *Children of less than 3 years should be kept away unless continuously supervised.*
- *Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.*
- *Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.*

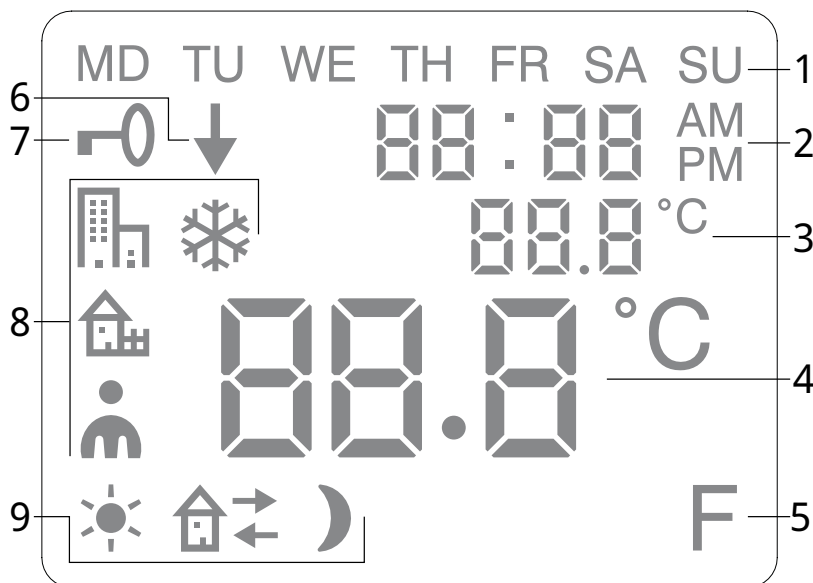
CAUTION — Some parts of this product can become very hot and cause burns. Particular attention has to be given where children and vulnerable people are present.



Control

Thermoplus ECVTN has an integrated thermostat with digital display on which all settings are made.

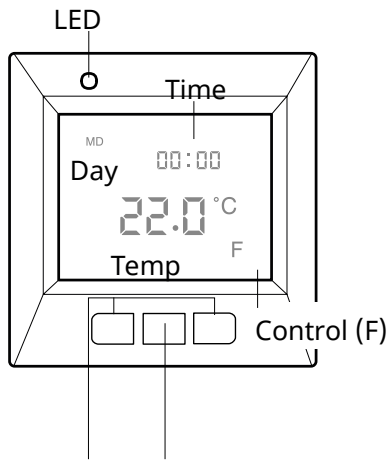
Symbols on the display



1. Day of the week
2. Time and date
3. Selected menu/Current temp (actual value) °C
4. Set temp (set point) °C
5. Control (F) = sensor selection ECVTN
6. Shows that a program is running
7. Lock symbol
8. Program
9. Event functions for personal settings

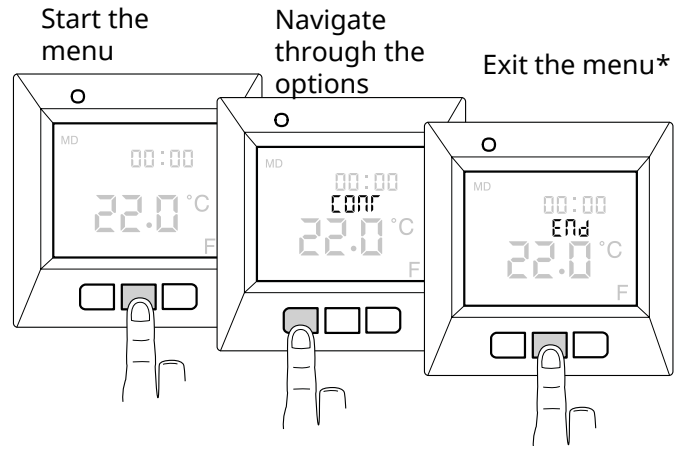
Start up

This is what the display looks like at first start.



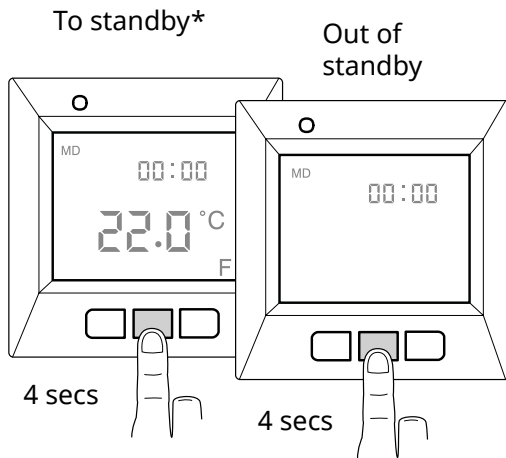
Arrow buttons [▲▼] Select button [●]

Using the menu

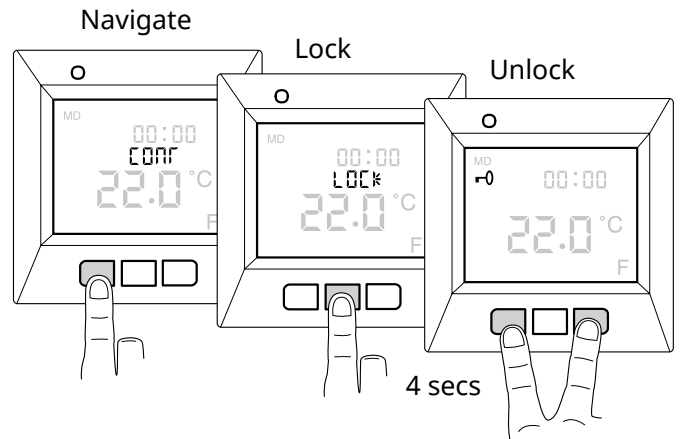


*Or wait 30 secs and exit automatically.

Turning off and on



Locking the keypad

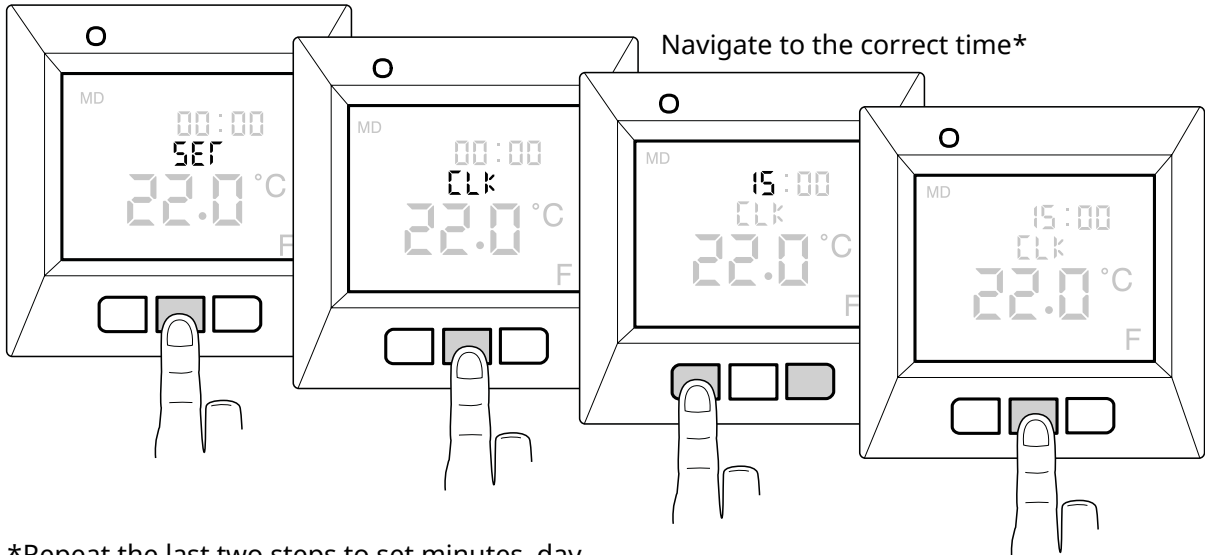


*The heat is not being regulated. The clock is running and the programming is saved in the memory.

Basic settings

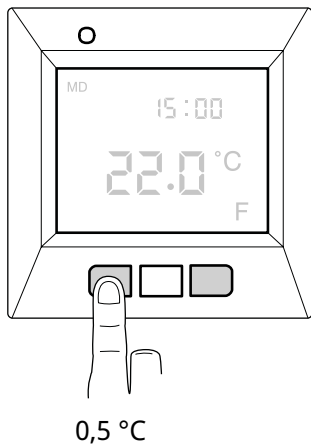
Time and date

To be able to use all the functions you need to set the time and date first.



*Repeat the last two steps to set minutes, day, month and year. The correct day of the week is set automatically.

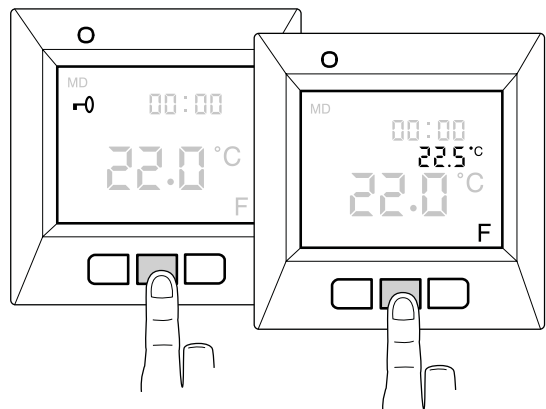
Desired temperature



Show actual temperature

Lock buttons first

The measured temperature is displayed.




Other settings

Time and date

Set time format




Press   

and navigate to SET.

Select with   


Navigate to DISP and
select with   

Navigate between 12- and 24-hour format.


Confirm with   

Turn off DST

The calendar switches to DST automatically.
This function can be turned off.

Press   

and navigate to SET.

Select with   


Navigate to S and
select with   

Navigate between ON/OFF.


Confirm with   




Light and contrast

Set the light intensity of the LED




Press   

and navigate to SET.

Select with   

Navigate to LED and
select with   


Navigate between LED L (weak light) and LED H
(strong light).

Confirm with   




Set display contrast

Press   

and navigate to CONT.

Select with   

The display shows a number between 1 and 8
depending on the current setting. Navigate to
regulate the contrast.

Confirm with   

Reset




You use the Reset function to make the
thermostat revert to default factory settings. All
your personal settings will be deleted.

Press   

and navigate to SET.

Select with   

Navigate to RST and
select with   

Navigate between YES/NO, then
confirm with   

YES deletes the settings,
NO returns to the menu.

Adaptive function

The thermostat has a function which works out when the heating should start to give the correct temperature at the correct time. It is activated on delivery, but can be turned off:

Press   

and navigate to SET.

Select with   

Navigate to AF,

Select with   

Navigate between ON/OFF.

Confirm with   

Ventilation mode

If the room temperature falls by more than 3 °C in a single minute, e.g. when airing the room, the ventilation mode is activated. The thermostat will then stop heating for 15 minutes before returning to normal mode. This function is always active.

Delay between turning off and on

There is a built-in delay in order to avoid unnecessary wear and tear on internal components and to extend the life of the thermostat. If you raise the desired temperature so that the thermostat comes on, and then lower it shortly afterwards, it takes 30 sec before it goes off again.

Operation time

The thermostat can display the operation time as a percentage for the last 24 hours and 7/30/365 days.

Press   

and navigate to UTIL.

Press   

to select. The display now shows the operation time as a percentage for the last 24 hours. You can then navigate between the operation time as a percentage for the last 7/30/365 days.

LED

The LED allows you to see the current status of the thermostat.

Green light – the thermostat is on and the heat is turned off.

Red light – the thermostat is on and the heat is turned on.

Flashing green and red lights – error indication. The heat is turned off. The thermostat shows the error message until it is turned off.

No light – the thermostat is switched off or is not getting any power.

Energy saving programs

Save energy cleverly and easily! With these programs the heating is adapted to your actual needs and the heat is turned down when it isn't needed. There are four program options:

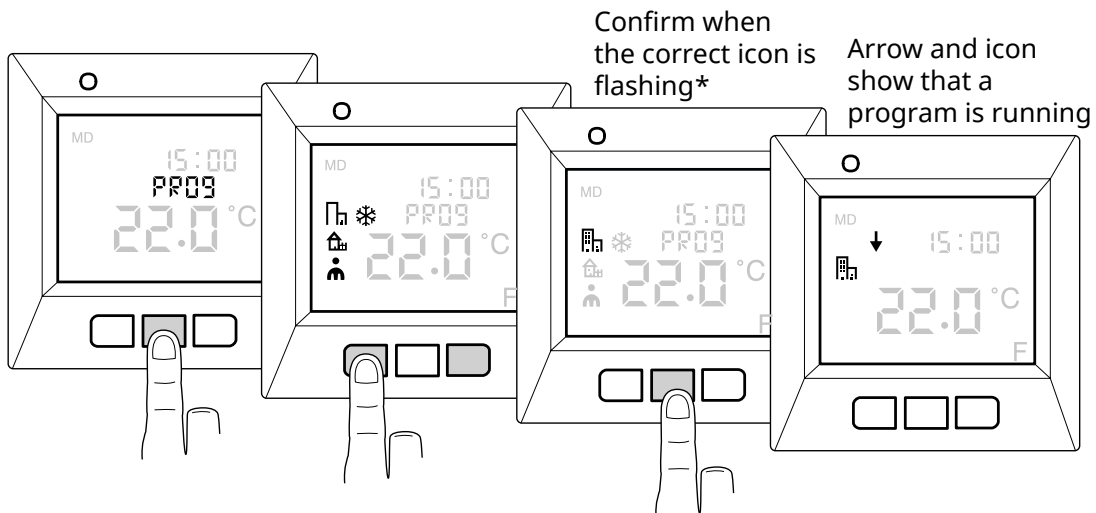
- 

Preset for office environments
- 


Preset for home environments
- 

Program your own personal settings
- 


Frost protection for premises which stand empty for long periods



*Stop program: Confirm when no icon is flashing.

- 

Program for office environment

The temperature is automatically reduced by 5 °C at all times except for: Mon – Fri 6:00 – 18:00
- 

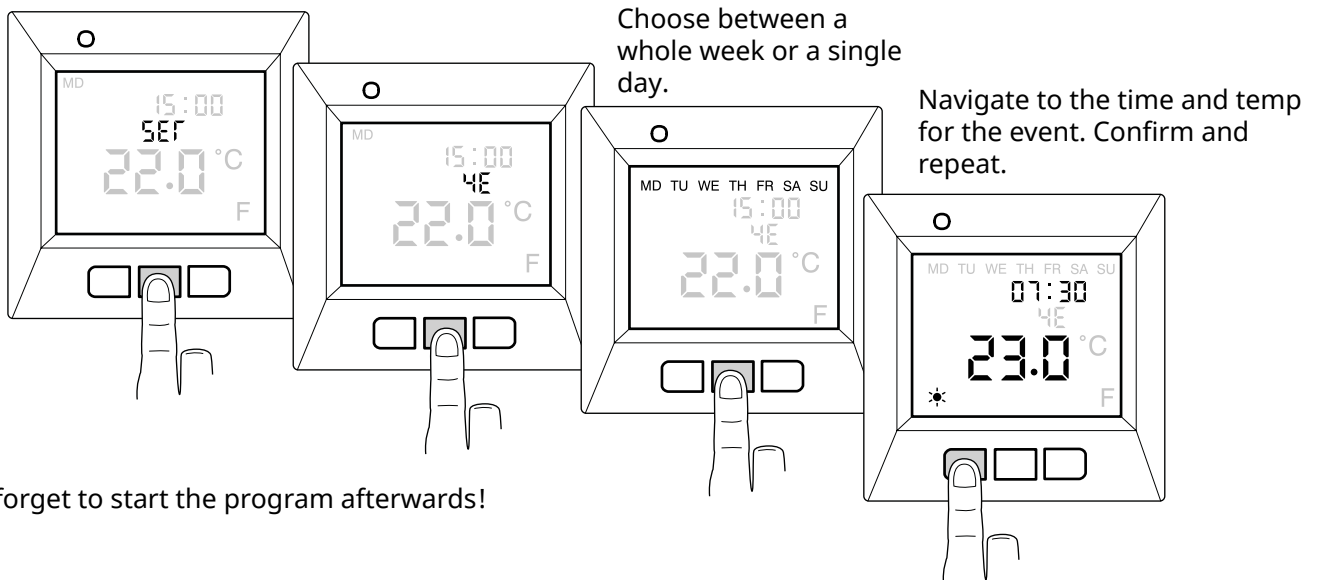
Program for home environment

The temperature is automatically reduced by 5 °C during the following periods:
 Mon – Fri 08:30 – 15:00
 Mon – Sun 23:00 – 05:00

Program personal settings

Tailor the heating to your own needs! You have the option of programming time and temperature for four events every day:

-  wakeup
-  out
-  home
-  night






Frost protection program

This program is ideal for when you want to protect against frost damage in premises which are standing empty or unused for long periods, such as holiday homes and warehouses, or when you will be away from your main home for longer than usual. You set a desired value (set point) and the thermostat regulates the temperature in line with this. The normal settings remain in the memory and the thermostat reverts to them when the frost protection program is deactivated. Temperature can be set to a level between 5 °C and 15 °C, the factory setting is 10 °C.

Press   

and navigate to SET.

Select with   

Navigate to FP,
select with   

The set temperature will flash, navigate to the desired temperature.

Confirm with   

Troubleshooting

Important

The heating system is a highvoltage system and any faults must therefore be corrected by an authorised electrician.

Error codes





When a fault occurs, the thermostat turns the heating off. The LED flashes red and green alternately. The LCD display shows a flashing error code as follows:

Error 3: Short circuit sensor.

Error 4: Interruption sensor.

Sitemap of the menu

This is how the menu in the thermostat is structured. Here you can quickly see where all the functions and settings are.

<p>CONT Set the display's contrast</p>	<p>PROG Start/stop program</p>	<p>UTIL Show connected time in %</p>
<p>1-8</p>	<ul style="list-style-type: none">  Home program  Office program  Personal program  Frost protection program 	<p>24 HR</p> <p>7 D</p> <p>30 D</p> <p>365 D</p>
<p>SET Various settings</p>		
<p>CLK Set time and date.</p> <p>S Turn off and set to automatic change to DST.</p> <p>RNF F (sensor ECVTN)</p>	<p>FP Turn off and turn on the frost protection program.</p> <p>4E Set the personal program, time and temperature for up to four events per day.</p> <p>DISP Set how the time will be shown, 24- or 12-hour format.</p> <p>LED Set the strength of the display's backlight.</p>	<p>AF Turn off and turn on the adaptive function.</p> <p>RST Reverts to factory settings and deletes all personal settings.</p> <p>END Exit the menu and return to basic mode.</p>
<p>LOCK Locks the keypad</p>	<p>END Exits the menu</p>	



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