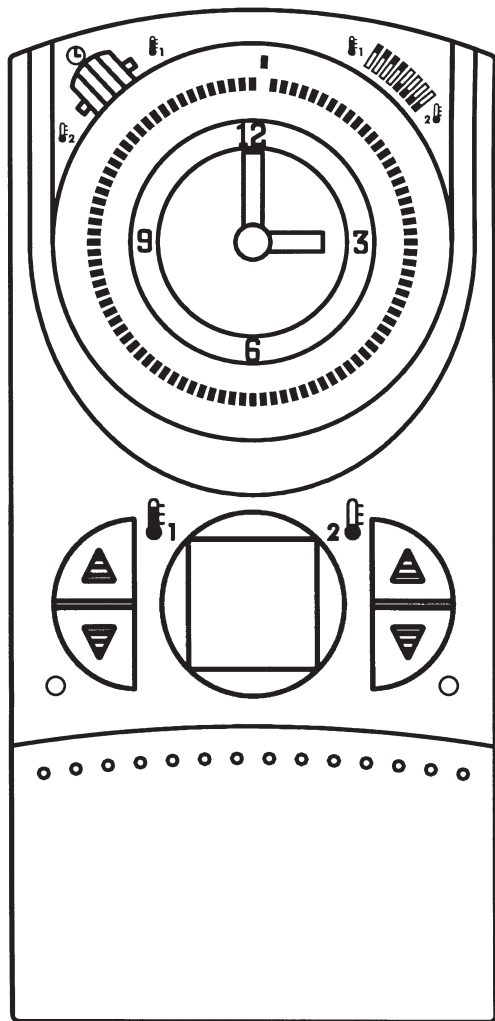


1.	List of contents	2
1.	List of contents	Page
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Grey area indicates user range



This room thermostat clock creates comfortable room temperatures in the simplest way possible.


The two temperature levels

 f_1 = Comfort temperature



 f_2 = Lower temperature

are set with the according knobs.

Settings between 5 °C and 32 °C possible.

The  manual switch can be used to switch between three operating modes:

 Operating mode = Automatic

The unit operates during the set switching times and switches between  f_1 and  f_2 .

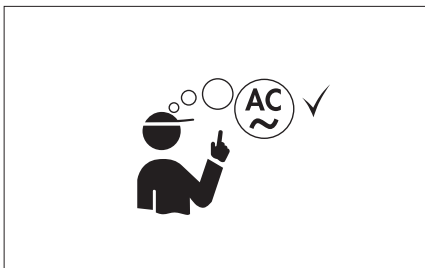
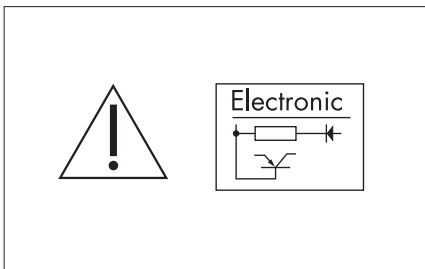
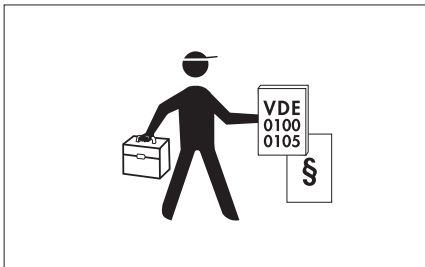
Continuous temperature operating modes

 f_1 = Comfort temperature

 f_2 = Lower temperature

The selected temperature remains constant until a different operating mode has been selected.

Please remember when setting the switching times that the heating system requires a certain amount of time before it reaches the desired temperature.



Assembly/installation should only be carried out by qualified person exercising due care.
Switch off the heating system before assembly.
Check and make sure that the connection wires are not live.

! Assembly note:

- only use PVC-sheathed cables (solid wire) during installation
- may only be attached to a non-conducting, level and stable surface
- only suitable for ambient conditions where normal quantities of dirt occur
- if installed properly in accordance with VDE 0100, Part 40, the components where contact remains possible may be regarded as doubly insulated (Class of protection II)

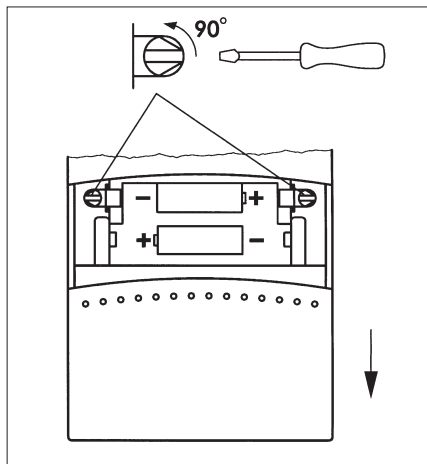
! Operating note:

This unit's electronic unit has been protected from external interference. However – depending on the type of assembly – remember that the mains voltage may be overlaid with extremely high interference voltage peaks. Also, when switching coils, e. g. solenoid valves, contactors, interference occurs that may affect an electronic unit in spite of all internal protective measures. To guarantee the greatest operating safety, the following details must be observed when connecting:

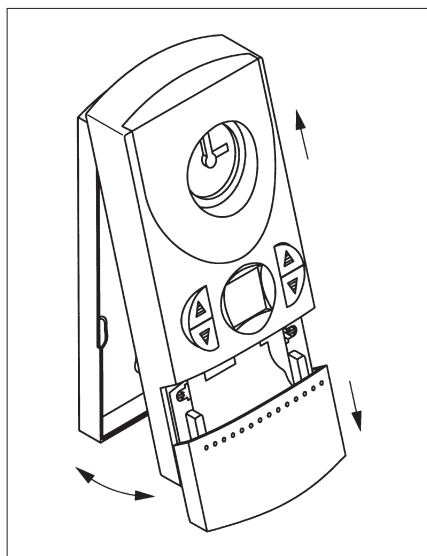
- where larger plants are concerned, it will be necessary to shield coils, e. g. solenoid valves, contactors, that are switched directly by the unit with a suitable varistor or RC element
 - if inductive DC voltage consumers are switched, a free-wheeling diode must be added
 - inductive and capacitive loads especially exert a lot of stress on the output contacts.
- In individual cases check, whether the installation requires
- an isolation relay or contactor or
 - an interference suppression filter, e. g. Type NEF 2.-1,0 A, Messrs. Murr.

! Operation notes:

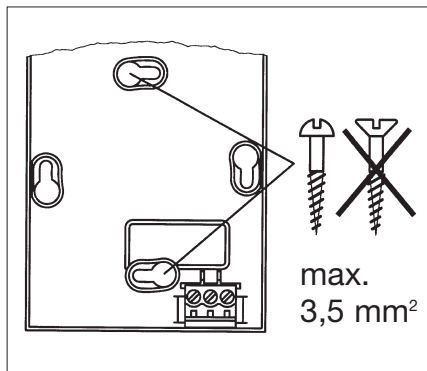
Pointed metal objects should not be used on keys that need to be operated with an aid (e. g. needles) – the rubber keys will be damaged!



Open the battery compartment lid and release the catch

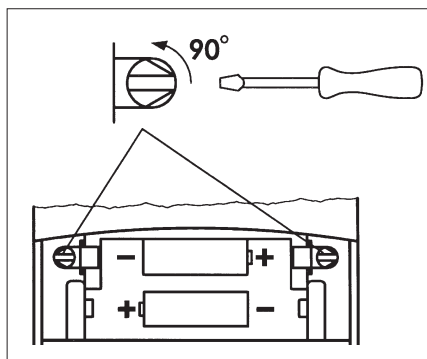


Remove the famoso from its base



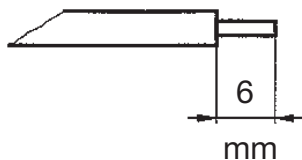
- Feed the connection wires through the opening in the unit's base

- Attach the base on a firm surface or surface-mounted socket



- Place the famoso on its base and
resecure

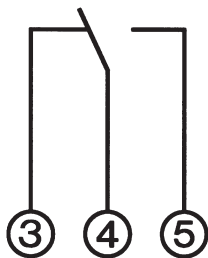
max. 2,5 mm²



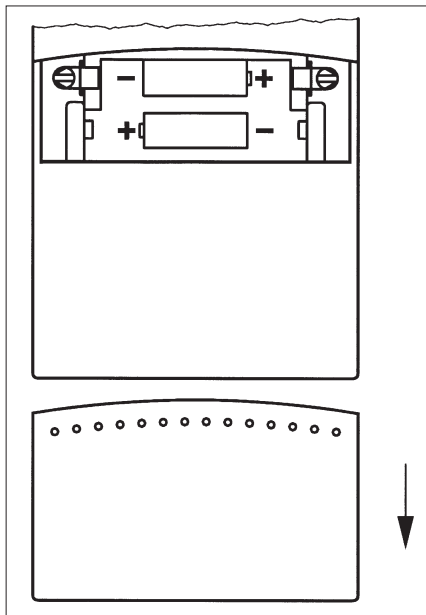
- The unit must be connected by a qualified person exercising due care.

- Check and make sure that the connecting wires are not live.

- Strip the connection wires properly and connect as shown in the circuit diagram.



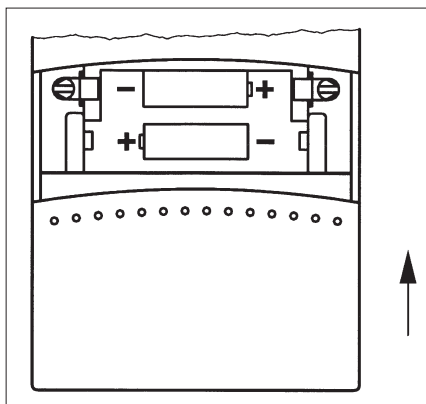
- Contacts 4-5 closed = heating mode

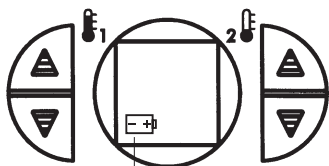


- Open the battery compartment lid
- Fit the batteries
Battery type LR6/AA (2 batteries)
- Close the battery compartment lid

**Note:**

If the actual temperature is not displayed after the batteries have been changed, press the „Reset“ button, see page 16





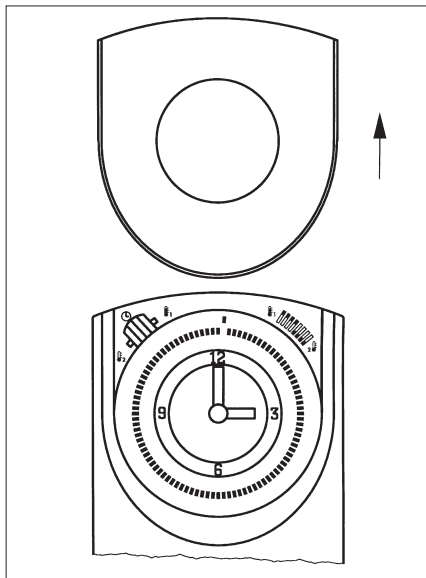
Battery symbol is displayed

- Change batteries immediately. Otherwise safe functioning is not guaranteed.
- The entered data will not be erased when the batteries are changed.



Note:

The unit measures the battery voltage when switching on and off. The battery display will not change if no switching occurs.



Type 800 day time switch
Type 850 week time switch

Slide the cover upwards and remove.

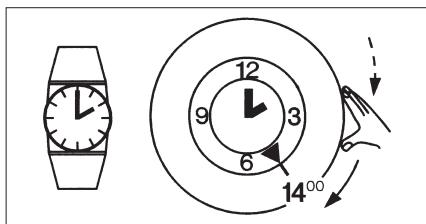
⚠ Only turn in the direction of the arrow ⚠

Day time switch

e. g. 14.00 h

Turn the ring in the direction of the arrow until the desired hour is aligned with the locating arrow.

The precise setting is made with the minute hand.

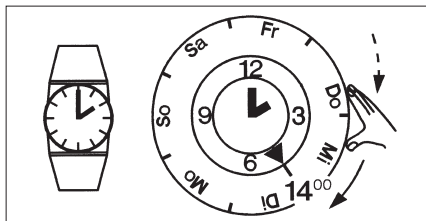


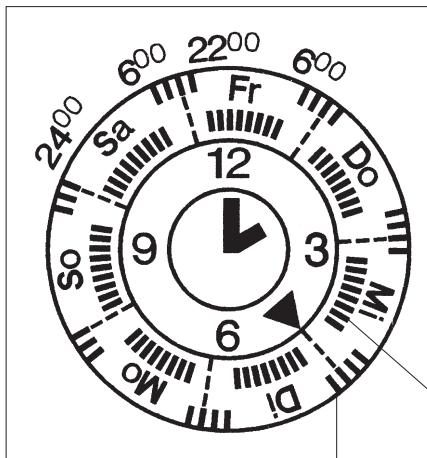
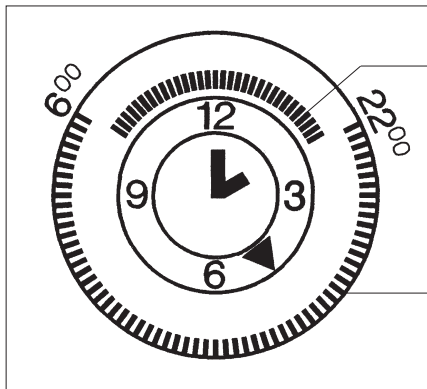
Week time switch

e. g. Thursday 14.00 h

Turn the ring in the direction of the arrow until the desired week day is in the area of the locating arrow.

The precise setting is made with the minute hand.





5.1 Switching times for changing temperatures with the day time switch (famoso 800)

e. g. 06.00 – 22.00 Uhours = Comfort-temperature

e. g. 22.00 – 06.00 hours = Lower temperature

Inside segments = Lower temperature

Outside segments = Comfort-temperature

1 segment = 15 minutes

5.2 Switching times for changing temperatures with the week time switch (famoso 850)

e. g. Monday - Friday

06.00 – 22.00 h = Comfort-temperature

22.00 – 06.00 h = Lower temperature

Saturday - Sunday

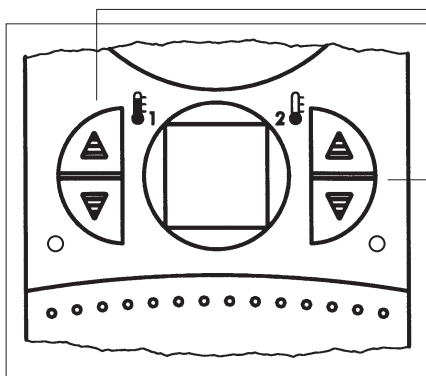
06.00 – 24.00 h = Comfort-temperature

24.00 – 06.00 h = Lower temperature

Inside segments = Lower temperature

Outside segments = Comfort-temperature

1 segment = 1 hour



Comfort temperature
e. g. +22 °C
(Factory setting 21 °C)

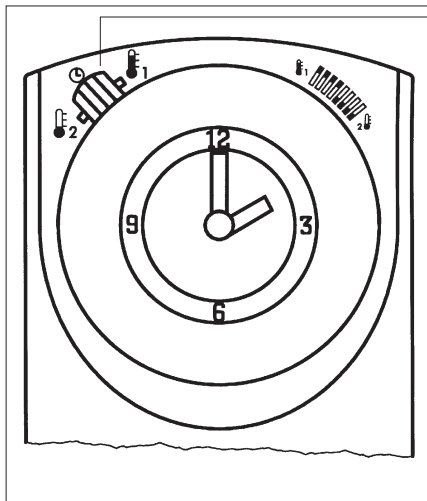



Lower temperature
e. g. +15 °C
(Factory setting 15 °C)

After approx. 4 seconds, the unit
switches into the current state:
actual temperature





Protection from frost is guaran-
teed in any event because no
settings below 5 °C are possible.




The  manual switch selects on of three operating modes:

 Operating mode = Automatic

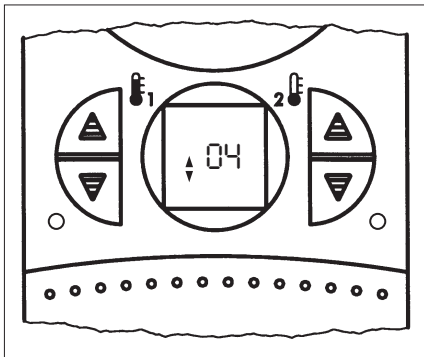
The unit operates during the set times and switches between  and .

Continuous temperature operating modes

 = Comfort temperature

 = Lower temperature

The selected temperature remains until a different operating mode is selected.



The heating-cycle setting (CDF value) is for adapting to the control range.

This is affected by:

- Room size
- Type of heating, e. g. convectors, storey heating
- Type of assembly
- Temperature control/thermostat

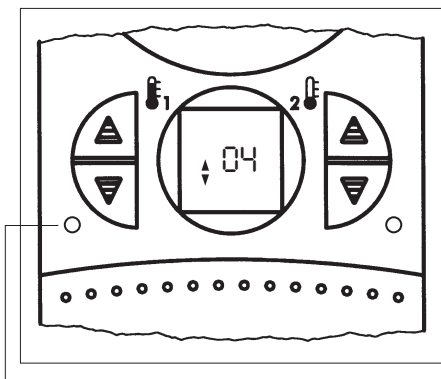
The set value can be altered to achieve an optimum heating control.

The set value from 1 to 6. If the room-temperature change is too great (e. g. caused by ventilation), the cycle time can be prematurely ended or the unit can be re-activated.

If the temperature difference in the room is too great, the system switches ON and OFF too infrequently. This means that the CDF value must be reduced.

If the system switches too frequently, a higher CDF value must be selected accordingly.

Factory setting CDF = 4



Recommended settings	Set value
----------------------	-----------

Direct electric heating	1 or 2
Supplementary electric bathroom radiator	2 or 3
Single-room control system with electrically operated radiator valves (hot-water heating) Small or medium-sized rooms	3 or 4
Single-room control system with electrically operated radiator valves (hot-water heating) Medium-sized or large rooms	4 or 5
Wall-mounted gas-fired boiler for single-storey heating systems	4 or 5
Free-standing gas-fired boiler or oil-fired boiler for larger living modules	4,5 or 6

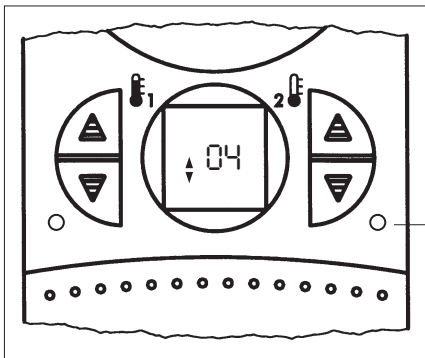
Set value	1	2	3	4	5	6
Cycle time 1x ON - 1x OFF in minutes	4	8,5	13	17	21	25,5

Press the 1x button with a pencil or similar object

Read CDF value

Press the button several times
Change the setting

After approx. 8 seconds, the display will return to its original status.
The last value set is stored.



The unit is put into a defined operating status with reset.
The set temperature values and the CDF setting are maintained

Press the 1x button with a pencil or similar object

The room temperature is displayed after approx. 8 seconds.

Dimensions H x W x D (mm) 158 x 75 x 36,5

Operating voltage battery, type LR6/AA
(2 batteries)

Switching capacity

- at ohmic loads 5 A/250 V~
- at inductive loads 1 A/250 V~
cos φ 0,6
- min. 1 mA at 24 V DC

Switching output floating

Switching contact 1 changeover contact

Ambient temperature -5 °C ... +45 °C

Class of protection II


Accuracy $\pm 2,5$ s/day at +25 °C

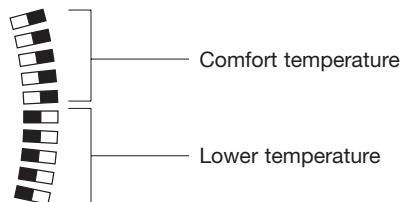
Battery life approx. 1 year


Shortest switching period

- daily programme 15 min.
- weekley programme 2 h, settings
by hours

Operating modes

 Automatic mode



 Comfort temperature continuous mode

 Lower temperature continuous mode


Temperature regulation range +5 °C to +32 °C

Temperature switching difference $\pm 0,25$... 0,5 K*

Regulator digital

Degree of protection IP 20

* Greater fluctuations are possible as a result of the heating system and the heated room

Problems:	Remedy:	Page
Restricted operation and function. The symbol  appears in the display.	Change batteries	8 / 9
The room is too hot or cold	Check temperature settings	12
The heating system does not switch on or off on time	Check time and switching time	10 / 11
The heating system does not switch on or off	Check the manual switch Unit is switched to continuous mode	13
The heating system takes too long to reach the desired temperature. The heating system switches too frequently.	Check heating-cycle setting correct if necessary	15
“--:--” appears in the display The ambient temperature is lower or higher than the temperature measuring range	Adapt ambient temperature, e. g. prevent exposure to direct sunlight.	

Use a dry cloth to clean the unit.
Never use any caustic cleaning agents.

13. Service addresses

GRÄSSLIN GmbH & Co. KG
FEINWERKTECHNIK
Postfach 1232
D-78104 St. Georgen/Schw.
Telefon (07724) 933-0
Telefax (07724) 933-240

Key word	Page
Automatic mode	3 / 11 / 13
Battery	8 / 9
CDF value	14 / 15
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Heating-systems	
Installation	5 / 6
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Programme setting	11
Reset	16
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Setting the current time	10
System settings	14 / 15
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Unit base	5 / 6