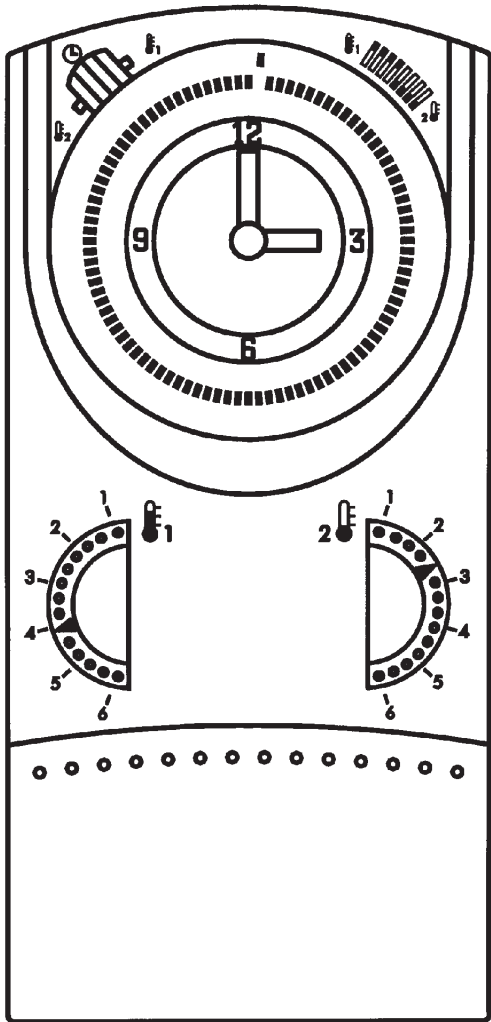


1.	List of contents	Page
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Grey area indicates user range



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


The two temperature levels

 = Comfort temperature



 = Set-back temperature



are set with the appropriate dials.

Settings between 5°C and 30°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  and .

Please note that when switching the manual switch from „Temperature  to „“, the coloured mark on the manual switch must be aligned for a short time with the clock symbol on the unit to immediately activate the automatic mode.

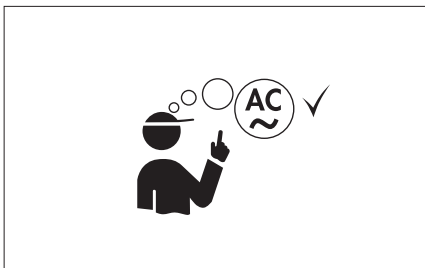
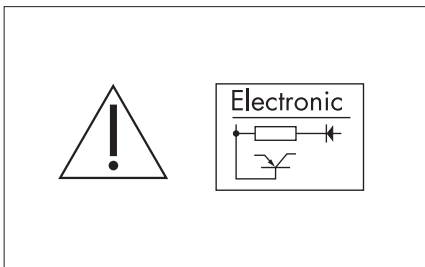
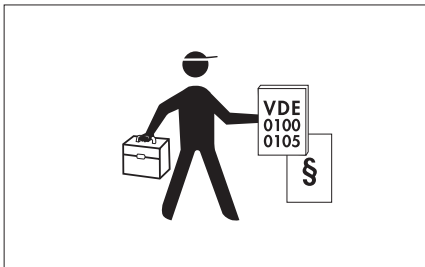
Continuous temperature operating modes

 = Comfort temperature

 = Lower temperature

The manually 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:

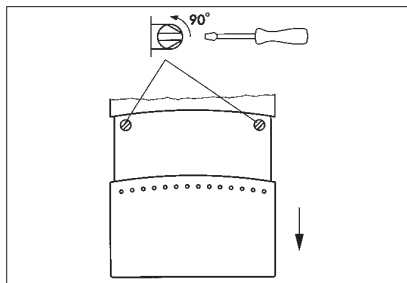
This unit's electronic unit has been protected from external interference. However – depending on the type of assembly – remember that the mains voltage may be overlaid with extremely high interference voltage peaks. Also, when switching coils, e. g. solenoid valves, contactors, interference occurs that 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.

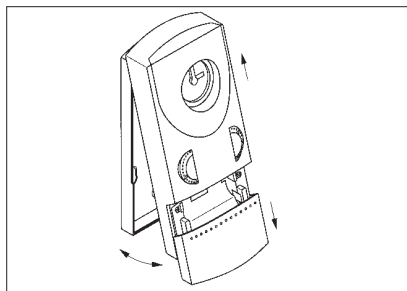
In individual cases check, whether the installation requires

- an isolation relay or contactor or
- an interference suppression filter, e. g. Type NEF 2.-1,0 A, Messrs. Murr.

Open the battery compartment lid and release the catch

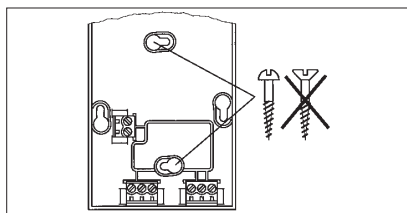


Remove the room thermostat clock from its base



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

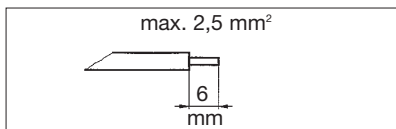
Attach the base on a firm surface or surface-mounted socket



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.



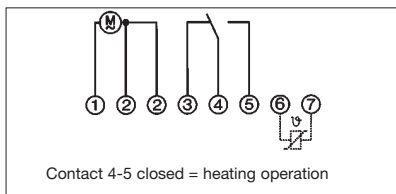
Contacts 4-5 closed = heating operation

Connection of floor sensor (terminals 6-7)

! Install line at sufficient distance from mains cables.

Note: If the sensor line is interrupted or in the case of a sensor failure, you have the option to temporarily install a fixed resistor in order to ensure heating operation.

- Line interrupted (high-impedance) = heating operation
- 25,0 k Ω fixed resistor $\hat{=}$ approx. +10° C
- 10,0 k Ω fixed resistor $\hat{=}$ approx. +25° C
- 6,8 k Ω fixed resistor $\hat{=}$ approx. +35° C



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.

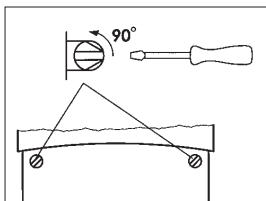
Set the value accordingly with the potentiometer on the rear of the unit.

(Factory setting 4)

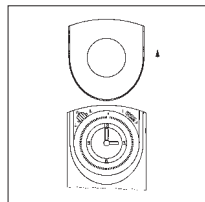
Recommended positions for	Position
Underfloor heating	
• Electric	4-5
• Warm water	5-6



Mount device on base and lock.



Slide the cover upwards and remove.



4. Setting the correct time/weekday

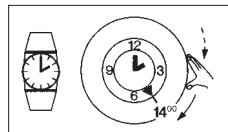
⚠ Only turn in the direction of the arrow ⚠

Day time switch

e. g. 14.00 h

Turn the dial 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.

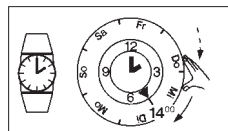


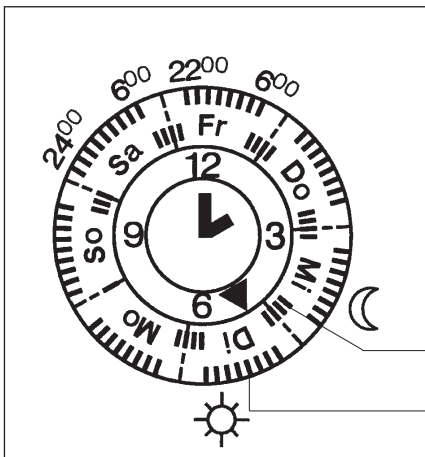
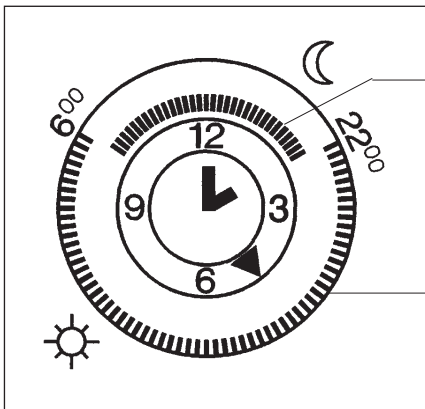
Week time switch

e. g. Tuesday 14.00 h





Turn the dial 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.











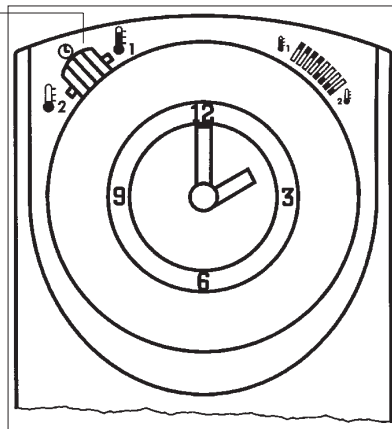
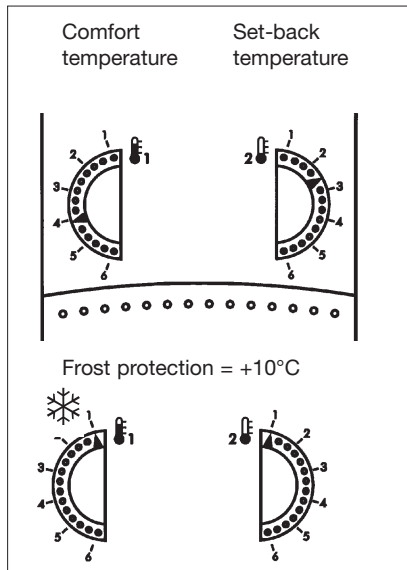
5.1 Switching times for changing temperatures with the day time switch (Type 505)


- e. g. 06.00 – 22.00 hours = Comfort-temperature 
- e. g. 22.00 – 06.00 hours = Set-back temperature 
- Inside segments = Set-back temperature 
- Outside segments = Comfort-temperature 
- 1 segment = 15 minutes

5.2 Switching times for changing temperatures with the week time switch (Type 555)



- e. g. Monday - Friday
- 06.00 – 22.00 h = Comfort-temperature 
- 22.00 – 06.00 h = Set-back temperature 
- Saturday - Sunday
- 06.00 – 24.00 h = Comfort-temperature 
- 24.00 – 06.00 h = Set-back temperature 
- Inside segments = Set-back temperature 
- Outside segments = Comfort-temperature 
- 1 segment = 1 hour

The two temperature values (desired temperatures) are set independently of each other.




The  manual switch selects one of three operating modes:

 Operating mode = Automatic

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

Continuous temperature operating modes

 = Comfort temperature

 = Set-back temperature

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

Dimensions H x W x D (mm) 158 x 75 x 36.5

Connection 230 V/50-60 Hz

Switching capacity

- resistive load 16 A/250 V~
(for ambient temperature <30 °C)
- inductive load 4 A/250 V~
cos φ 0,6
(for ambient temperature <45 °C)

Switching output volt-free

Switching contact 1 changeover contact

Ambient temperature -5 °C ... +45 °C

Class of protection II

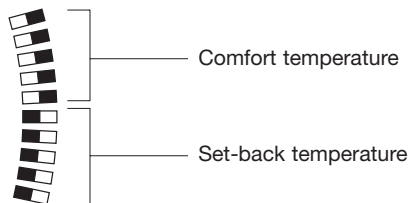
Accuracy ±2.5 s/day at +25 °C

Shortest switching period

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

Operating modes

 Automatic mode



 1 Comfort temperature continuous mode

 2 Set back temperature continuous mode

Temperature regulation range +10 °C to +50 °C

Temperature switching difference ±0.25 ... 0,5 K*

Temperature control method electronic

Degree of protection IP 20

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

	Page
Questions:	
The room is too warm or too cold	
Answers:	8
Check temperature settings	
Check sensor connection	5
Questions:	
The heating system does not switch on or off on time	
Answers:	6, 7
Check time and switching time	
Questions:	
The heating system does not switch ON or OFF	
Answers:	8
Is the manual switch set to uninterrupted duty?	
Questions:	
The heating system takes too long to reach the desired temperature.	
The heating system switches too frequently.	
Answers:	6
Check heating-cycle setting correct if necessary	

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Automatic mode	3 / 8 / 9
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Cycle times	6
Diagram	5
Factory settings	6
Frost protection	8
Heating mode	3 / 7 / 9
Heating-cycle setting	6
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Power supply	5 / 9
Programme setting	6 / 7
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Room temperature	8
Setting switching times	7
Setting the current time	6
System settings	5
Technical data	9
Temperature levels	8
Time setting	6
Unit base	4

10. Cleaning and maintenance

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