Operating Instructions

Room temperature controller with clock 0389 ..

GIRA

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Basic operation of the room temperature controller

The \blacksquare and \blacksquare buttons are used to set the values such as the time or the temperature.

The **SET** button is used to confirm the set values.

If you do not press the set button after carrying out a setting, the display changes automatically back to the normal display 1 minute after a button has been pressed. Changes to the respective values are not accepted in this case.

The **PROF** button can be used at any time to return to the normal time program.

The individual displays and buttons

- 1) The current weekday is displayed here.
- (2) Symbol for the "Time program" operating mode.
- (3) Symbol for the "Comfort temperature" operating mode.
- (4) Symbol for the "Lowering temperature" operating mode.
- 5) Symbol for the "Anti-freeze temperature" operating mode.
- 6 The respective current operating mode is indicated here by means of triangles.
- 7 The ranges set for the comfort temperature in the time program are displayed here.
- 8) or button, also called the economy button.
- 9) **PROG** button
- 10 SET button.
- 11) 🖪 or 🔀 button, also called the party button.
- (12) The time is displayed here. You can have this display changed by the installer to, for example, the temperature display.
- (13) This indicates whether heating (▲) or cooling (▼) is being carried out.
- (14) Further information on the settings which you carry out is displayed here: e.g. an **H** if you set the time.

On these instructions

The following symbols and marks are used in these instructions:

- 1. Action instructions are numbered consecutively.
- ✓ Results of actions are identified by this check mark.
- Enumerations are identified by this point.

Note!

Information on the economical use of the room temperature controller is identified by this sign.

How the room temperature controller functions

Your room temperature controller functions similarly to a time delay switch – at specific times which can be set, your heating system is regulated by the room temperature controller to three temperatures which can be set.

- The comfort temperature is usually used for the daytime, put more precisely for the periods when you are present.
- The lowering temperature is usually used for the night. It is also called the economy temperature.
- The anti-freeze temperature is usually used for longer periods of absence (e.g. holidays). The temperature is just high enough to protect the heating system against freezing.

Starting up the room temperature controller

When the room temperature controller is switched on for the first time as well as after long deactivation periods, e.g. after a power failure, the room temperature controller jumps automatically to the time input - the current data **has to be** entered here.

(you can edit these data later --> for further information please refer to "Setting the date and time – Uhr menu item" on Page 7).

- ✓ The hour display flashes





Time format

You can have the time displayed in international 24 hour format (0H...23H) or in the English-speaking a.m. (12AM...11AM) and p.m. format (12PM...11PM). When you set the clock, the di5 play begins with the 24-hour format, followed by the AM/PM format. Depending on the hour format which you confirm with set, the time is displayed in future in 24-hour format or in AM/PM format.

- 2. Press the **SET** button.
- ✓ The hour is set and the minute display flashes.
- 3. You now have to enter all the further data in the same manner:
 - Minutes
 - Calendar year
 - Month
 - Day
- 4. Confirm each entry with the **SET** button.
- ✓ After the last confirmation with SSS, the system returns automatically to the normal display.



Prolonging the heating phase (party function)

If necessary, you can extend or activate the comfort temperature - the socalled party function. This extension applies only once. After the extension has expired, the set time program is executed as usual.

Note!

You can extend or activate the heating phase by up to four hours. This extension can furthermore be repeated as often as wished.

- 1 Press the 🖾 button
- ✓ The comfort temperature is extended by 1 hour whenever the button is pressed counting is started from the time the button is pressed.

The period for which the party function is set flashes at the lower display margin.

✓ The display returns to the normal display when no button is pressed for a few seconds

The period for which the party function is set flashes at the lower display margin.

Terminating the party function

You can terminate the party function as follows:

- 1. Press the **PROG** button in order to terminate the party function.
- The room temperature controller returns to the normal time program.

You can change over to the lowering temperature for brief or long-term periods of absence by means of the economy button.

Switching for brief periods to the lowering temperature

- 1. Press the **G** button for less than 5 seconds.
- ✓ The room temperature controller switches over to the lowering temperature. The Lowering temperature mode is displayed.



This changeover is retained until the next switching time in the time program.

Switching for longer periods to the lowering temperature

- 1. Press the **G** button for longer than 5 seconds.
- ✓ The room temperature controller switches over continuously to the lowering temperature.



The Lowering temperature mode is displayed, the time program is no longer displayed.

This changeover is retained until you return to the normal time program.

2. Press the **PROG** button in order to return to the normal time program.

Deactivating the lowering temperature

You can deactivate the lowering temperature at any time:

- 1. Press the **PROG** button in order to deactivate the lowering temperature.
- \checkmark The room temperature controller returns to the normal time program.



Mo DiMi Do Fr Sa So

Setting the individual temperature

You can set an individual temperature if the currently set temperature of the time program does not appear to be suitable.

- 1. Press the **SET** button.
- The currently set individual temperature is displayed flashing.
- 2. Press the or button in order to set the individual temperature.
- Press the set individual temperature.
- ✓ The room temperature controller returns to the normal display and regulates the set individual temperature until the next switching time in the time program. As long as the individual temperature is used as the setpoint input, no operating mode

(Comfort, Lowering, Anti-freeze) is displayed, since none of the temperatures stored there is valid.

Deactivating the individual temperature

You can deactivate the individual temperature at any time:

- 1. Press the **Pros** button in order to deactivate the individual temperature.
- $\checkmark\,$ The room temperature controller returns to the normal time program.

Locking buttons

To prevent accidental or unauthorised operation of the room temperature controller, you can activate the button locking function in the normal view.

Activating button locking function

- Press the seconds.
- ✓ When the button locking function is active, "-- --" appears in the display each time a button is pressed to signal that the desired operation has been denied.



Deactivating button locking function

- 1. Press the set and buttons for longer than 5 seconds.
- ✓ During unlocking "----" appears in the display for 5 seconds. When the button locking function is deactivated, the normal display appears again and the buttons can be released.





Settings in the program menu

You can change the following settings in the so-called program menu:

- Date and time (Uhr menu item)
- Temperature steps (tEmP menu item)
- Time program (ProG menu item)
- Holiday function (UrLb menu item)
- Anti-freeze function (FrSt menu item)

How to access the menu items in the program menu

Irrespective of the setting you want to change you always access the desired menu item in the program menu as follows:

- 1. In normal display press the program button at least 5 seconds in order to access the program menu.
- Press the
 I or

 Press the

 or

 button in order to access

 the desired menu item. The adjacent

 example shows the first menu item, the

 time.



3. Press the set button in order to select the desired menu item.

Setting the date and time - Uhr menu item

You can modify the date and time at any time.

) Note!

The clock is designed as a week-based time switch which functions for at least four hours if the power fails.

The changeover between the summer and winter time is carried out automatically.

The installed calendar automatically takes the leap years into consideration.

1. Go in the program menu to the Uhr menu item (see above).

- ✓ The hour display flashes.



∫ Time format

ĺ

You can have the time displayed in international 24 hour format (0H...23H) or in the English-speaking a.m. (12AM...11AM) and p.m. format (12PM...11PM). When you set the clock, the di5 play begins with the 24-hour format, followed by the AM/PM format. Depending on the hour format which you confirm with set, the time is displayed in future in 24-hour format or in AM/PM format.

- 3. Press the SET button.
- The hour is set and the minute display flashes.



- 4. Use the same method to carry out the further settings. These are:
 - Minutes the time is set after confirmation with the SET button
 - Calendar year
 - Month

1

• Day – only enter the date here. The weekday does not have to be entered since it is calculated automatically from the entered date.

J Date does not have to be set!

If the date is already set (correctly), you can already exit the setting here by pressing the **PROG** button.

- Confirm each entry with the set button. After the last confirmation with set, the system returns automatically to the program menu.
- 6. Press the **PROG** button in order to return to the normal view.

Modifying the temperature steps - tEMP menu item

You can modify the following temperature steps in the $\ensuremath{\textbf{tEMP}}$ menu item.

- Comfort temperature (default 21.0 °C)
- Lowering temperature (default 18.0 °C)
- Anti-freeze temperature (default 10.0 °C)

Checking the anti-freeze temperature

The anti-freeze temperature can be checked and set in the "Anti-freeze function" menu item. A change in the anti-freeze temperature in one of the menu items has a direct effect on the respective other menu item. Only one anti-freeze temperature is valid in a room temperature controller.

Mo Di Mi Do Fr Sa So

- 1. Go in the program menu to the **tEMP** menu item (see Page 7).
- ✓ The temperature setting of the comfort temperature is displayed flashing. In addition the operating mode is displayed at the right-hand display margin.
- 2. Press the
 or
 button in order to set the desired temperature.
- 3. Confirm with the **SET** button.
- ✓ The display changes automatically to the next temperature step, the lowering temperature.
- 4. Use the same procedure to set the lowering and the anti-freeze temperature.
- ✓ After the last confirmation with S™, the system returns automatically to the program menu.
- 5. Press the **PROG** button in order to return to the normal view.

Aborting modifications to the temperature steps:

- 1. Press the **PROG** button in order to abort setting the temperature steps.
- ✓ You return automatically to the program menu. The temperature step which you have opened last for editing is not saved.
- 2. Press the prog button in order to return to the normal view.

Modifying the time program - ProG menu item

You can change the switching times of your room temperature controller in the **ProG** menu item. A maximum of 32 switching times are available. Each switching time specifies a point within a week at which a change between the comfort and lowering modes takes place. You can change the time in steps of 10 minutes.

After commissioning, a time program preset in our works is activated.

Weekdays	Period
Monday - Friday	6:00 – 22:00 comfort temperature
Saturday, Sunday	6:00 – 23:00 comfort temperature

These settings can be modified or extended freely.

Viewing the switching times

- 1. Go in the program menu to the ProG menu item (see Page 7).
- ✓ The first switching time is displayed.
- 2. Press the or button in order to view the further switching times.
- ✓ The switching times are displayed chronologically, beginning at Monday 0.00 hours, rising to a maximum of Sunday 23.50.



1

✓ An empty switching time is offered at the end of the list if at least one switching time is still available



Mo Di Mi Do Fr Sa So

Modifying the switching time

- 1. Go in the program menu to the **ProG** menu item (see Page 7).
- 2. If a switching time exists, press the set button.
- The switching time is opened for editing, the hour display flashes.
- 3 Press the **B** or **B** button in order to modify the hour display.
- 4. Confirm with the **SET** button.
- 5. Use the same method to carry out the further settings. These are:
 - Minutes
 - Day here the weekdays are initially displayed from Mo-Su, then the groupings Sa-Su, Mo-Fr, Mo-Sa and Mo-Su.
 - Comfort or lowering temperature

Grouping days

If a grouping of days is selected, a separate program point with the specified time and the temperature step is created for each selected day of the group.

Renewed editing of the entire grouping is not possible - only the individual program items can be edited.

- 6. Confirm respectively with the **SET** button.
- ✓ After the last confirmation with set the modified switching time is saved and the chronologically next switching time is displayed.

Deleting the switching time

- 1. Go in the program menu to the **ProG** menu item (see Page 7).
- 2. Press the 🖬 or 🖬 button in order to access the desired switching time.
- 3. Press the **H** and **H** buttons for longer than 5 seconds.
- ✓ The switching time is deleted irrevocably and the chronologically next switching time is displayed.

Deleting all switching times

With this function you can delete all stored switching times. This can, for example, be practical when a complete changeover of the time program is to be carried out and the deleting of individual program points is too time-consuming.

- 1. Go in the program menu to the ProG menu item (see Page 7).
- 2. Select any desired switching time with the 🖬 or 🗖 button



- 3. Press the **H** and **H** buttons for longer than 10 seconds.
- ✓ All switching times are deleted irreversibly and a blank program point appears with the display "--:--".



Note

During this procedure the factory-programmed switching times are also deleted. These times can be restored via the reset function.

Inserting a new switching time

- 1. Go in the program menu to the **ProG** menu item (see Page 7).
- 2. Press the or button in order to access the empty switching time.
- 3. Confirm with the **SET** button.

You can now carry out all the settings for a new switching time:

- ✓ The new switching time is opened for editing, the hour display flashes.
- Press the
 I or button in order to modify the hour display.
- 5. Confirm with the **SET** button.
- 6. Use the same method to carry out the further settings. These are:
 - Minutes
 - Day here the weekdays are initially displayed from Mo-Su, then the groupings Sa-Su, Mo-Fr, Mo-Sa, Mo-Su.
 - Comfort or lowering temperature

Grouping days

If you select a grouping of days, a separate switching time with the specified time and the temperature step is created for each selected day of the group.

Renewed editing of the entire grouping is not possible - only the individual switching times can be edited.

- 7. Confirm respectively with the **SET** button.
- ✓ After the last confirmation with set the modified switching time is saved and the chronologically next switching time is displayed.



You can **abort** the modifications at the time program if no switching time is opened for processing.

- 1. To do so, press the **PROG** button.
- ✓ You return automatically to the program menu. The currently active switching time which was displayed for setting is not saved.
- 2. Press the prog button in order to return to the normal view.

Further information on programming switching times

- If no further switching time is available, no empty switching time is offered.
- If a group of days is programmed and insufficient switching times are free, **FULL** is output and the number of free switching times is displayed. You then have to decide whether you want to remove enough switching times or whether you want to implement the desired program by using individual days.
- If a group of days covers an existing switching time, the existing switching time is overwritten without any query.
- If a switching time is placed on the moment of an existing switching time, the existing switching time is overwritten without any query.
- If an existing switching time is modified and placed on a moment which is already occupied by an existing switching time, the existing switching time is overwritten without any query.
- Redundant switching times (switching times in the time program which do not cause a change in the temperature step) are not recognized or removed automatically. You have to search for such switching times and remove them yourself if further free switching times are required.



Mo DiMi Do Fr Sa So

Setting the holiday program - UrLb menu item

A holiday program is available in the **UrLb** menu item. You set the starting date and end date of your absence here. During this period the system regulates to a constant selectable temperature step. After the holiday period has expired the holiday program is deleted automatically so that it is not repeated every year.

Setting the holiday period

- 1. Go in the program menu to the UrLb menu item (see Page 7).
- ✓ When the **UrLb** menu item is entered the unit displays either:
 - The holiday beginning with the day and month



or

• The display "--.--" if no holiday period has been defined yet.

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0	•		A		· 1.2		· 1.8			

- 2. Press the set button in order to set a holiday period.
- The current date is entered automatically as the holiday beginning.
 However, you can also edit this date:
- ✓ The month is displayed flashing.
- 3. Press the 🖬 or 🗖 button in order to set the month.
- 4. Confirm with the **SET** button.
- ✓ The day begins to flash.
- 5. Press the \blacksquare or \blacksquare button in order to set the day.
- 6. Press the **SET** button again.



- ✓ The display changes to the holiday end.
- ✓ The month is displayed flashing.
- 7. Use the same procedure to set the holiday end (month and day).
- 8. Confirm each entry with the **SET** button.
- The operating mode display begins to flash.
- Press the or button in order to select the desired temperature step which is to be maintained during the holiday.. All three temperature steps (Comfort, Lowering and Anti-freeze) are available.
- 10.Confirm with the **SET** button.
- ✓ After the last confirmation with [■] , the system returns automatically to the program menu.
- 11.Press the **PROG** button and the room temperature controller returns to the normal view.
- ✓ As soon as the internal date reaches the specified holiday day at 0:00 hours, the temperature step is changed. The view in the display changes and displays the holiday end date.



Deleting the holiday period

- 1. Go to the UrLb menu item.
- Keep the or button pressed for more than 3 seconds in order to delete a specified holiday period completely.
- $\checkmark\,$ The room temperature controller returns to the program menu.
- 3. Press the prog button and the room temperature controller returns to the normal view.



Activating/deactivating the anti-freeze function – FrSt menu item

You can only permanently activate the anti-freeze function here.

Anti-freeze temperature

The anti-freeze temperature can only be set in the range of +5 °C and +15 °C.

- 1. Go in the program menu to the **FrSt** menu item (see Page 7).
- ✓ The set anti-freeze temperature is displayed flashing. In addition the corresponding operating mode is displayed flashing at the right-hand display margin.
- Press the
 I or
 button in order to select the desired anti-freeze temperature.
- 3. Confirm with the **SET** button.

Modifying the anti-freeze temperature

A modification of the anti-freeze temperature also acts on the anti-freeze temperature set under "Modifying temperature steps" (refer to Page 8).

- ✓ On or OFF is displayed.
- Press the button in order to activate the anti-freeze function (**On**) or the ■ button in order to deactivate the anti-freeze function (**OFF**).



- 5. Press the SET button.
- ✓ The anti-freeze function is activated or deactivated and the display return to the program menu.
- 6. Press the prog button and the room temperature controller returns to the normal view.

✓ After the anti-freeze function has been deactivated, the room temperature controller returns to continuous Lowering mode.

Proceed as follows in order to return to the normal time program:

- 1. In normal display press the prog button at least 5 seconds in order to access the program menu.
- 2. Press the
 or
 button in order return to the ProG menu item.
- 3. Press the **SET** button in order to select the **ProG** menu item.
- 4. Press the program again.

Cleaning the room temperature controller

- 1. Use only a spray-moistened cloth to wipe the housing of the room temperature controller.
- 2. Do not use any cleaning agents, since these may damage the housing.

Warranty

We provide a warranty as provided for by law.

Please send the unit postage free with a description of the defect to our central customer service via your specialised dealer:

Gira Giersiepen GmbH & Co. KG Service Center Dahlienstraße 12 42477 Radevormwald Federal Republic of Germany

Gira Giersiepen GmbH & Co. KG Electrical Installation Systems P.O. Box 1220 D-42461 Radevormwald Phone: +49 2195 / 602 - 0 Fax: +49 2195 / 602 - 339 www.gira.com info@gira.com Mounting Instructions and Commissioning for the Electrician

Room temperature controller with clock 0389 ..

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On these instructions

The following symbols and marks are used in these instructions:

- 1. Action instructions are numbered consecutively.
- ✓ Results of actions are identified by this check mark.
- Enumerations are identified by this point.

I Note!

Information on the economical use of the room temperature controller is identified by this sign.

Attention

Information on facts which can lead to damage to persons or the device are identified by this sign

Method of functioning

The room temperature controller is an electronic controlling device with an integral clock which can activate a temperature- or time controlled switching relay and thus switch electrical loads on or off with a maximum current of 8 A ($\cos \varphi = 1$) or 4 A ($\cos \varphi = 0.6$).

Temperature measurement can be implemented optionally via an integrated detector or an optional external detector.

Installation

Installation and safety instructions

Attention

Installation and mounting may only be carried out by a qualified electrician.

The room temperature controller is conceived for flush-type mounting. It is divided into two units:

- The underplaster unit which contains the power electronics and the connections (for flush-mounting box)
- The controller top unit with the operating elements which is attached to the underplaster unit.

Attention

Errors during connecting can lead to damage to the controlling device! No liability is accepted for damage caused by incorrect connection and/ or improper handling!

- Before working on the room temperature controller de-energize the device and secure against restarting!
- Only connect the room temperature controller to fixed wiring in closed dry rooms.
- Ensure that lines with supply voltage, such as the power supply and relay connecting leads do not come into contact with low-voltage lines such as sensor lines (minimum distance 4 mm at basic-insulated lines).
- If the room temperature controller does not function after mounting, first check that the connection is correct as well as the power supply.

• Lay the base sensor of the room temperature controller in a sensor conduit. If an open sensor conduit is to be used, close it with a plug so that tile bonding agent or cast plaster cannot ingress into the sensor conduit, causing the sensor to be damaged.

Mounting

The room temperature controller can be inserted or mounted into flushmounting boxes.

Please observe the following points for optimal operation:

- We recommend an optimum mounting height of 1.50 m.
- Do not subject the room temperature controller to direct sun irradiation or use it in the area of draughts or other temperature-influenced air (such as over electric cookers, refrigerators, etc. or in the area of direct radiation heat of radiators), since the control behaviour can be influenced by heat.
- Do not use the room temperature controller in a physical unit with other electrical devices, such as dimmers, since a possible heat development could influence the room temperature controller.
- When used with an external temperature sensor an empty conduit (flexible or firm plastic tube) has to be laid, for example in the flooring, until the measuring point. Select an installation location for the external sensor at which the room temperature can be measured neutrally as far as possible.

Electrical connection

All the connecting terminals are equipped with slotted screws for screwdriver mounting. A common screwdriver with a 3 mm blade can be used.



The connection has 6 terminals:

- 1 External sensor
- 2 External sensor
- 3 N
- 4 N
- 5 L' (relay contact with equipotential bonding)
- 6 L

A separate terminal can be used for each conductor through two connection possibilities of the neutral conductor (N).



Safety function

The top unit of the room temperature controller is protected against unintentional placing on the underplaster unit of a Gira blinds control system.

When used incorrectly the room temperature controller displays the text **FAIL** flashing.

Failure at the external sensor

With use of an external sensor, this is tested for correct functionality. If the sensor is defective or the supply cable is interrupted or short-circuited, **FAIL** appears in the display.

For more accurate error determination please control the value in the parameter menu "Temperature at the external sensor (F)" (see page 7):

- with a temperature below + 3.5 °C, a short-circuit has occurred in the sensor line or the sensor itself.
- with a temperature above + 85 °C, the supply cable has been interrupted or the sensor is broken.

Important information on changes in the parameter menu

Changes in this menu should only be carried out by qualified persons since incorrect settings may result in proper control operation no longer being possible.

In order to change to the parameter menu:

1. Keep the **SET** and **PROG** buttons pressed simultaneously for longer than 5 seconds in the normal display.

The parameters required for commissioning can be defined in this menu.

The works settings are preset to values which ensure proper operation even without adaptations in the parameter menu. However, if certain control parameters have to be adapted, these settings can be carried out here.

The following parameters can be set or read:

n (normal)	Normal display (time, setpoint temperature, actual temperature)
b (operation)	Operating mode: internal sensor, external sensor or internal sensor with limit
d (diff)	Differential gap = Hysteresis
G (limit)	Limiting temperature
F (sensor)	Temperature at the external sensor
t (time)	Minimum ON period in seconds [s]
o (offset)	Sensor offset in order to compensate constructional influences
E (early)	Heating optimisation

r (ramp)	Gradient of the heating optimisation in minutes per Kelvin [min/K]
S (Summertime)	Specification which summertime regulation (Central European or GB) is to be used for calculation
U (clock)	Correction value for accuracy in seconds per day [s/d]
-	Software version



To improve clarity the respective character listed above is displayed in the top left of the display. The corresponding value is displayed on the right in the four large numerals.

The respective parameter is opened for modification when the see button is pressed. The parameter value is displayed flashing.

When a parameter has been modified and confirmed with sea, the parameter menu changes automatically to the next parameter.

The **prog** button can be used at any time to return to the normal time program.

Modifications in the parameter menu

Modifications to the parameters are implemented immediately! The parameter is regarded as modified, irrespective of whether the menu is exited with second or whether the system returns automatically to the normal display after 1 Minute.

Normal display (n)

This parameter is used to select the normal display of the controlling device. This information is always displayed on the display whenever no menu has been selected and no holiday settings are active.

- The and buttons can be used to change to one of the operating modes listed below.
- 2. SET activates it.

Normal display	Display
Current time of day	Clock *
Current setpoint temperature	SETPOINT
Current actual temperature	Actual

* Preset in our works

Operating mode (b)

This parameter allows individual selection of the function for the room temperature controller. This is used to specify the sensor selection for temperature controlling, the mode of operation (heating/cooling) and the limiting function.

- 1. The and buttons can be used to change to one of the operating modes listed below.
- 2. SET activates it.

Reference variable	Operating mode	Floor temperature limit	Display
Internal sensor	Heating		I.H*
Internal sensor	Cooling	External sensor	IE.C
External sensor	Cooling		E.C
Internal sensor	Cooling		I.C
Internal sensor	Heating	External sensor	IE.H
External sensor	Heating		E.H

* Preset in our works

Differential gap (d)

This parameter defines the differential gap (hysteresis) of the controlling function.

1. The
∎ and
∎ buttons can be used to select the value.

2. SET activates the value.

The relay is switched off if the current temperature lies over the setpoint temperature by the value set here (Heating operating mode).

The relay is activated again if the actual temperature lies below the setpoint value by the value set here (Heating operating mode).

The switching difference is set in our works to ±0.2 °C

Limiting temperature (G)

This parameter allows the setting of an individual limitation of the floor temperature. If the limiting function is activated (operating mode with limiting function selected), the relay is deactivated as soon as the temperature measured at the external sensor exceeds the temperature set here (heating).

In cooling mode the relay is deactivated as soon as the measured temperature lies below the set limiting temperature.

- 1. The
 ∎ and
 buttons can be used to set the limitation.
- 2. SET activates the limitation.

The setting range amounts to +5 °C to +55 °C. The limiting temperature is set in our works to +45 °C

The limiting function does not have a differential gap, so that switching is carried out immediately if the value exceeds the upper or lower limit.

Temperature at the external sensor (F)

If an operating mode which requires an external sensor is selected, the current temperature value is displayed under this menu item.

No change can be carried out at this value.

If an operating mode which only operates with the internal sensor is selected, "----" is displayed.

Minimum ON period (t)

In order to prevent frequent relay switching, this parameter can be used to specify the minimum ON period. This period specifies the minimum amount of time for which the relay is to remain on when a request has activated the relay.

- 1. The and buttons can be used to set this parameter in a range of 20 seconds to 500 seconds (8.3 minutes) in steps of 10 seconds.
- 2. SET is used to save the set value.

A minimum ON period of 20 seconds is set in our works.

Sensor offset (o)

The measured actual temperature can be displaced by ± 3.0 Kelvin by means of this parameter. This correction can be used to compensate the measuring deviations which arise though the unfavorable placing of the room temperature controller.

- 1. The \blacksquare and \blacksquare buttons can be used to set the parameter.
- 2. **SET** saves the parameter.

The value set here is always applied to the respective active sensor (external or internal temperature sensor, depending on the operating mode selected) which is used for the temperature control.

The sensor offset is set to 0.0 Kelvin in our works.

Heating optimisation (E)

The heating optimisation determines the temporal behaviour of the room on the basis of the past heating processes and calculates the required derivative action time which is necessary in order to reach the desired setpoint temperature on time.

The automatic heating optimization can be activated (**On**) and deactivated (**OFF**) here. If the heating optimisation is deactivated, switching is carried out exactly as specified in the time program.

- 1. The button can be used to set the heating optimisation to **On** and the button to **OFF**.
- 2. SET saves the setting.

The heating optimisation is activated (**On**) in our works

Gradient for heating optimisation (r)

The current gradient which is used to calculate the derivative action time can be checked under this menu item. The time required to heat the room by one Kelvin (1K) is displayed here in minutes.

If the heat optimisation is activated, this gradient is always recalculated during a transition from a lowering phase to a comfort phase.

The heating optimisation is set to a gradient of 15 minutes per Kelvin in our works.

Summertime regulation (S)

The summertime regulation with which the changeover from normal to summertime and vice versa is to be calculated can be selected here. The room temperature controller differentiates between Central Europe and Great Britain.

- 1. The and buttons can be used to change to one of the operating modes listed below.
- 2. **SET** activates it.

Regulation for	Summertime beginning	Summertime end	Display
Central Europe	Last Sunday in March from 2:00 h to 3:00 h	Last Sunday in October from 3:00 h to 2:00 h	EUr*
Great Britain	Last Sunday in March from 2:00 h to 3:00 h	Fourth Sunday in October from 3:00 h to 2:00 h	Gb
Off			OFF

* Preset in our works

1 Information on the summertime function

If the summertime function is deactivated (OFF), an automatic changeover of the time is not carried out. Note that the time has to be changed over manually in this case.

Accuracy (U)

Here a correction value is entered at the factory, which ensures the greatest possible precision of the clock function.

The value represents the correction amount in seconds per day and cannot be modified.

Software version (-)

The currently installed software version can be interrogated here.

i

Specifying the software version

When reporting technical problems or unwanted side-effects always specify the version of the software installed in the controlling device.

Resetting all the settings (Reset)

You can delete all the parameter settings and programming and reset the device to the standard factory values:

- 1. Keep the and buttons pressed simultaneously for longer than 10 seconds in the normal display.
- ✓ The controlling device then carries out its display test and offers the clock setting for commissioning.

Technical data

Туре	GIRA room tempe	rature controller	
Temperature ranges	+ 10 + 40 °C + 5 + 15 °C + 5 + 55 °C Increment 0.5 K ea	(comfort and lowering temperature) (anti-freeze temperature) (limiting temperature) ach	
Temp. differential gap	± 0.1 ± 1.3 K, adjustable Increment 0.1 K		
Sensor	Semiconductor se Internal or externa	nsor (KTY) I or internal + external	
Other settings	Menu control with four buttons		
Time function	Electronic time delay switch with week program, automatic summertime/normal time changeover		
Program slots	32, can be freely c increment 10 minu	listributed across the week, utes	
Power reserve	At least 4 hours vi battery)	a Gold Cap (capacitor, no	
Operating voltage	230 V AC, 50 Hz		
Power consumption	Approx. 3.7 VA		
Contact type	1 NO contact, with contact)	n equipotential bonding (relay	
Max. permissible switched current	8 A (cos φ = 1), 4 A (cos φ = 0.6)		

Electrical endurance	Min. 5 x 10 ⁴ switching cycles
Minimum ON period	20 s to 500 s Increment 10 s
Deadlock protection	After 7 days of non-operation of the relay at 10:00 o'clock on the following day
Electrical connections	Screwed terminals with slotted screws
Type of action	1.C (no limitation type of action)
Impulse withstand level	4.0 kV
Pollution severity	2
Permissible ambient temperature	0 +50 °C
Housing: Fastening Protection type Protection class Weight	Wand mounting in/on the flush-mounting box IP 30 II (if mounted properly) Approx.180 g

Warranty

We provide a warranty as provided for by law.

Please send the unit postage free with a description of the defect to our central customer service via your specialised dealer:

Gira Giersiepen GmbH & Co. KG Service Center Dahlienstraße 12 42477 Radevormwald Federal Republic of Germany

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