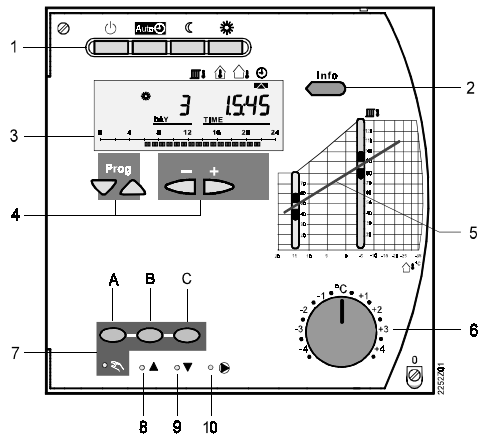


Operating Instructions




Heating Controller SIGMAGYR® RVL47







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Overview - what is where?





- 1 Operating mode buttons; button of the current operating mode is lit
- 2 Info button (arrow  indicates the displayed value)
- 3 Display
- 4 Buttons for selecting and readjusting values
- 5 Heating curve adjustment
- 6 Knob for readjustment of room temperature
- 7 Buttons for manual operation:
A = manual operation ON (LED lit)
B = valve OPENS
C = valve CLOSES
- 8 LED for valve OPENS, or 1st burner stage ON
- 9 LED for valve CLOSES, or 2nd burner stage ON
- 10 LED for pump ON

Meaning of symbols in the display

	NORMAL heating
	REDUCED heating
ECO	No heating required (according to prevailing outside temperature)
	Holidays mode
	Heating OFF (frost protection ensured)
ERROR	Fault in the plant
	One of the maximum limitations is active
	One of the minimum limitations is active
BUS	Controller is connected to data bus








You want to obtain information

Press  button several times for the display of:

-  Time of day
-  Outside temperature
-  Room temperature (only if a detector is used)
-  Flow temperature



The info selected last will be continuously displayed.


The individual operating modes

-  Heating OFF
-  Automatic heating up and setback according to the heating program - Heating automatically OFF during the entered holiday period - Heating automatically OFF if permitted by the prevailing outside temperature (ECO function)
-  Continuously REDUCED heating
-  Continuously NORMAL heating
-  Frost protection ensured in all operating modes.
-  Remote operation with a room unit only possible in AUTO mode.
If the  button flashes, the room unit overrides the controller's heating program.

In AUTO mode, the RVL47 is a fully automatic controller throughout the year.

You want to switch the heating on

- Is heating plant ready to operate? Check position of main switch.
- Press  button several times until the weekday (1 = Monday, 2 = Tuesday, etc.) and the time of day appear in the display. Correct if necessary (refer to section "You want to set the clock" on page 17).
- Check time of day and date. Correct if necessary (refer to section "You want to set the clock" on page 17).
- Press  button for AUTO mode.

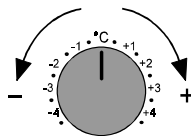
 Verifying the date: Check lines 16 and 17 (Procedure: refer to pages 11 and 17)

During commissioning, practice-oriented and proven values were entered!

The room temperature is not correct

If the room temperature is never right, that is, neither in mild nor in cold weather, make a readjustment with the setting knob:

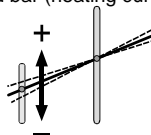
- Room temperature too low:
Turn setting knob towards +
- Room temperature too high:
Turn setting knob towards -



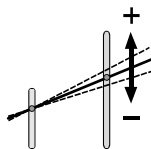
The knob's scale gives the room temperature readjustment in °C .

If the room temperature is not correct, either in mild weather only or in cold weather only, make readjustments with the sliders of the orange-coloured bar (heating curve)

- Room temperature not correct in mild weather:
Use slider on the left and readjust by about 5 °C
 - If too cold: upward
 - If too warm: downward






- Room temperature not correct in cold weather:
Use slider on the right and readjust by about 5 °C.
 - If too cold: upward
 - If too warm: downward



After a readjustment, wait two days - the control system requires a certain time to adapt!



You don't want to heat according to the heating program




- No REDUCED heating:
Press the  button to select the NORMAL mode.
- Maintaining REDUCED heating:
Press the  button to select the REDUCED mode.

 Don't forget to return to the normal heating program!

The controller operates according to the heating program only when in AUTO mode.





How to readjust the setting values







- Press  or  to access the setting level.


- The settings are assigned to 17 lines:
 - ▽ Select next line below
 - △ Select next line above
- Readjustment of values:
 - ◀ Reduce
 - ▶ Increase
- Values are adopted by selecting the next line or when leaving the setting level
- Leaving the setting level: Press the  button.
-  The setting level is left automatically after 30 minutes.
-  For list of lines, refer to the last page.

To “practise“, reset the time of day - refer to section “You want to set the clock“ on page 17.

You want to select other room temperature setpoints

Selecting lines: press  or 
Readjusting values: press  or 

- On line , change the setpoint of NORMAL heating (display ).
Standard setting is **20 °C**.
- On line , change the setpoint of REDUCED heating (display ).
Standard setting is **16 °C**.
- On line , change the setpoint of frost protection and holidays mode (display ).
Standard setting is **10 °C**.

Leaving setting level: press the  button

Don't forget temperature-sensitive objects like plants!

You want to enter your own heating program

You can enter a maximum of two heating periods per day. For each heating period, the following times must be entered:

- Start of NORMAL heating
- Start of REDUCED heating

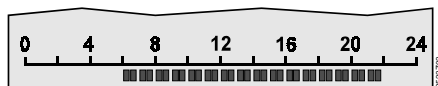
For the daily heating up and setback, the controller is supplied with a standard heating program:





- Monday to Friday: from 6:00 to 22:00: NORMAL heating
- Saturday: from 6:00 to 23:00: NORMAL heating
- Sunday: from 7:00 to 22:00: NORMAL heating

Remaining time: REDUCED heating

Example:


Program NORMAL heating for Monday to Friday



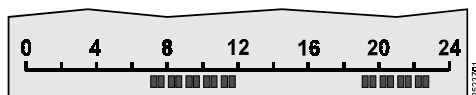
Selecting lines: press  or 
Readjusting values: press  or 

Proceed as follows:


1. On line , select the weekday whose times shall be changed:
1 = Monday, 2 = Tuesday, etc.
1-7 = valid for all weekdays
2. On line , set the time for the start of NORMAL heating.
3. On line , set the time for the start of NEDUCED heating.
4. If an additional daily heating period is required:
On lines and , enter the times required for the start and the end of the second heating period

Leaving setting level: press the  button

Example of a 24-hour program with two heating periods:







NORMAL heating from 7:00 to 12:00 and from 19:00 to 23:00

 To deactivate a heating period, change line or until --:-- appears.




If the entries for the weekend shall differ, first enter the times for the entire week (1-7), then change days 6 and 7 individually.


You want to enter your holidays




Selecting lines: press  und 

Readjusting values: press  und 

Proceed as follows to enter the data for one period:





- On line , enter the date of the first day of holiday.
- On line , enter the date of the last day of holiday (possible only when an entry was made on line !).





Leaving setting level: press the  button


-  A maximum of eight holiday periods can be entered.
-  To deactivate an entry, change line until --.-- appears.
-  At the end of a holiday period, its data will be cancelled.


Before making entries, prepare a holiday plan on a piece of paper.

You want to set the clock

Selecting lines: press  und 
Readjusting values: press  und 

- Uhrzeit einstellen:
Select  (time of day) and set the time.
- Use same procedure for weekday, date and year:
 - The weekday on line  (1 = Monday, 2 = Tuesday, etc.)
 - The date (day and month) on line 
 - The year on line 

Leaving setting level: press the  button

 The change from wintertime to summertime, and vice versa, is made automatically.

Saving tips without sacrificing comfort


- During the day, make certain that a room temperature of 21 °C will not be exceeded. Every degree above that level increases heating costs by 6 to 7 %.
- Renew air in the house quickly, but open windows fully.
- In unoccupied rooms, set the thermostatic radiator valves to their frost protection position.
- Walls and furniture store heat and emit it again.
- Radiators should not be covered by curtains, furniture, etc., as this reduces heat emission.
- Closed window shutters, blinds, etc., reduce heat losses.
- Check heating energy consumption at regular intervals.

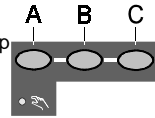
Tips to follow if something seems wrong


- The heating system does not work:
 - Check the display: if ECO (Economy) is shown, the heating is shut down by the ECO function!
- The heating system always maintains the same room temperature:
 - Check the operating mode (only AUTO mode reduces and heats up again!)
- The control has a room unit, but it cannot be operated:
 - Check controller's operating mode. To enable the controller to be operated from the room unit, it must be in AUTO mode
- The desired room temperature is reached either too early or too late:
 - Change the heating program

Faults and manual operation

- If you are uncertain:
 - Check the display: if ERROR is shown, line 50 displays an error code. The error codes have the following meaning:
 - 10 = fault outside detector
 - 30 = fault flow or boiler temperature detector
 - 40 = fault return temp. detector (primary circuit)
 - 42 = fault return temp. detector (secondary circuit)
 - 60 = fault room temperature detector
 - 61 = fault room unit
 - 81 = short-circuit on LPB bus
 - 140 = wrong controller address (LPB)
 - These error codes are helpful for service staff.
 - Is the plant switched on?
 - Are all fuses of the plant in order?
 - Is there sufficient fuel in the tank?
 - Has the controller been readjusted by unauthorized persons (time of day, setpoints, etc.)?

- If the controller uses a room temperature detector (room unit):
 - Is the room temperature detector affected by draughts, solar radiation, etc.?
 - Is the room temperature detector covered by furniture, curtains, or similar?
 - Are all thermostatic radiator valves in the "detector's room" in their fully open position?
- The control does not work:
 - If heat generator and circulating pump still operate:
 - press button A to select manual operation (LED  is lit)
 - **Plant with a valve:**
 - The valve can be manually operated by pressing button **B** (opening) or **C** (closing)
 - **Plant with no valve:**
 - The two buttons are inactive; the burner is always switched on



☞ Switch manual operation off again: press button A until LED  is off.

- The heat generator does not work:
 - The burner has gone to lockout. Press the reset button!
 - The circulating pump and/or the boiler pump do not operate. Check the fuses!
 - The coupling mechanism between actuator and valve is disengaged. Engage it again!

☞ If you cannot correct the cause of the trouble, call in your heating engineer!

Address and phone no. of your heating engineer:

Notes:

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- 1 Setpoint of NORMAL heating ☀
- 2 Setpoint of REDUCED heating ☾
- 3 Setpoint of holidays and frost protection mode ☀
- 4 Weekday, for entering the heating program (1 to 7)
- 5 1st heating period, start of NORMAL heating
- 6 1st heating period, start of REDUCED heating
- 7 2nd heating period, start of NORMAL heating
- 8 2nd heating period, start of REDUCED heating
- 12 First day of holiday (day.month) 📅
- 13 Last day of holiday (day.month) 📅
- 14 Time of day (hour:minute)
- 15 Weekday (1-7; 1 = Monday, etc.)
- 16 Date (day.month)
- 17 Year
- 50 Display of faults

} Settings
for yearly
time switch