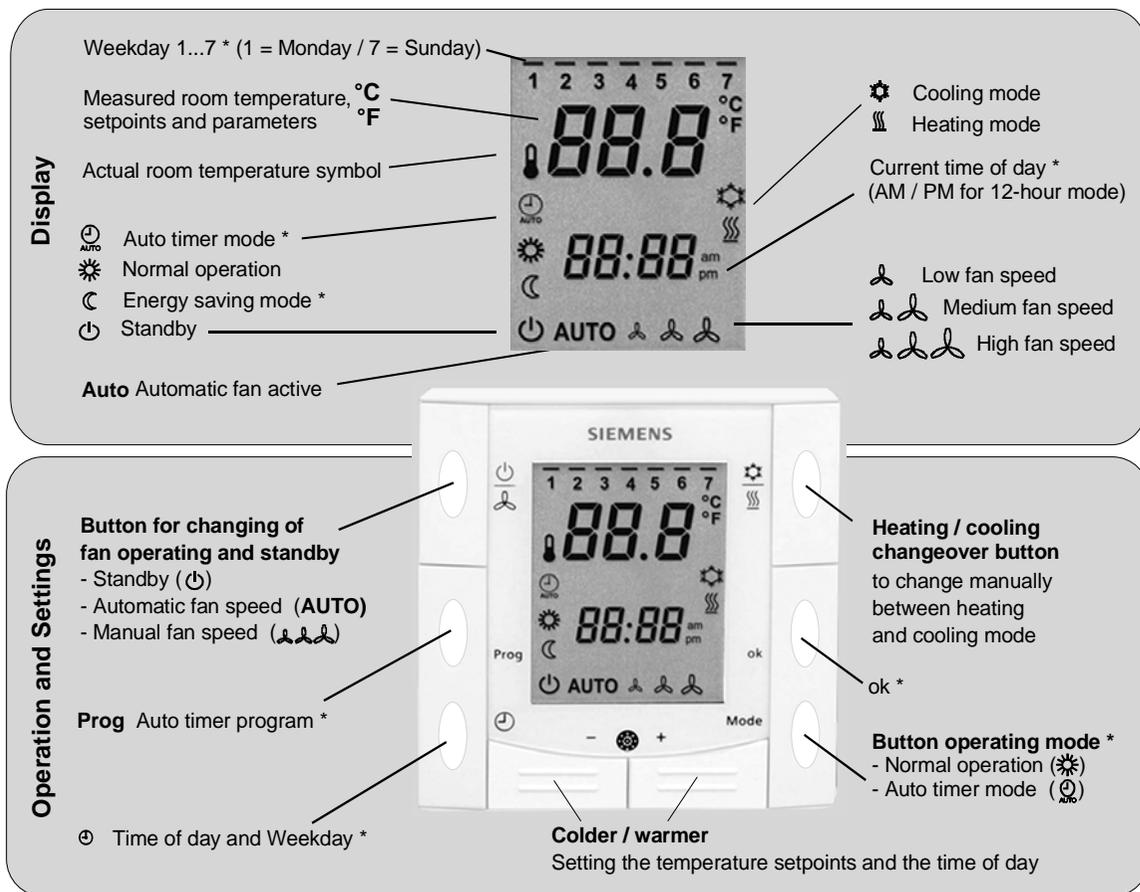


en Operating Instructions

RDF310..., RDF410...

RDF310/410... – the temperature controller that allows you to set the ideal room temperature you want. The controller provides normal operation, standby and additionally with RDF410...an auto timer mode with 8 programmable timers. The fan operates either in automatic mode or at the selected speed when using manual mode. You can either rely on the factory settings or make adjustments that suit your individual needs.



(* Only with RDF410...)

Setting the time of day and the weekday (only with RDF410...)

⌚	1. Keep the ⌚ button pressed until the time digits start to flash and then press + or - to set the time of day. <i>If the current time is the 24-hour format and you wish to change to the 12-hour format, press + passing 23:59 or press - passing 00:00. Vice versa back to the 24-hour format.</i>
ok	2. Confirm the time of day by pressing ok and the weekday indicator starts to flash.
+-	3. Press + or - to set the current weekday.
ok	4. Confirm the current weekday by pressing ok .

Are your rooms too warm or too cold?

☀️ +-	Only applicable in normal operation. Pressing + or - allows you to increase or decrease the current room temperature setpoint for normal operation in increments of 0.5 °C. The maximum setting range is from 5...40 °C, unless it is limited by parameters P05 and P06.
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Do you want to set your controller to standby?

⏻	Press the ⏻ button several times until the display shows the ⏻ symbol to indicate that standby is selected.
⏻	In standby ⏻, the controller maintains the adjusted lower setpoint of heating (parameter P03) or the higher setpoint of cooling (parameter P04). Important: If the setpoint of standby is set to OFF (factory setting), the controller will not be active in standby.
⚠️	Risk of frost!

Do you want to change the fan mode?

⏻	Press the ⏻ button until you have selected the desired fan mode.
AUTO	In automatic mode, the fan speed is automatically selected by the controller and depends on the setpoint and the actual room temperature. When the room temperature has reached the setpoint, the fan either remains in fan speed low (factory setting) or switches off (parameter P21). In manual mode the fan operates independently and always runs at the same speed: Low, medium or high. The actual fan speed is indicated by the number of fan symbols.
🌀	Low fan speed
🌀🌀	Medium fan speed
🌀🌀🌀	High fan speed

Do you want to change from heating to cooling mode?

☀️	When pressing the ☀️ button, the controller changes from heating to cooling or vice versa.
☀️/🔥	If the controller is commissioned <i>cooling only</i> or <i>heating only</i> , no changeover is possible (see parameter P22: factory setting <i>manual H/C changeover</i>)

Do you want to change to auto timer mode? (only with RDF410)

Mode	Press the Mode button once to select auto timer mode 🕒. In auto timer mode, the controller will automatically change over between normal operation and energy saving mode according to the 8 preprogrammed timers.
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Energy saving mode (only with RDF410)

🌙	If you want to change the factory-set temperature setpoints (16 °C for heating and 28 °C for cooling), follow the procedure "Changing the control parameters". Important: The setpoint of energy saving mode can be set to OFF . This means that the controller is not active in energy saving mode and symbol AUTO will not appear.
⚠️	Risk of frost!

Do you want to set the programmable timer settings? (only with RDF410)

Prog	To adjust the time schedule, keep the Prog button pressed for 3 seconds to go to the programmable timer setting mode.
A..	This mode is indicated by displaying Ax (x= auto timer 1...8) and the time xx:xx flashing. For each auto timer, proceed as follows:
+ - ok	1. The and symbols are displayed. Press + or - to adjust the normal operation start time and confirm by pressing ok .
A..	2. The and symbols are displayed. Press + or - to adjust the normal operation end time or energy saving start time respectively and confirm by pressing ok .
A..	3. Symbol 1 will flash. Press + or - to select or deselect each day and advance to the next day. Confirm setting for actual timer by pressing ok and advance to the next timer
1	The controller will leave the programmable timer setting mode if no button is pressed within 20 seconds. All changes made after the last press of ok button will not be saved.

Do you want to view the programmable timer settings? (only with RDF410)

Prog	Press the Prog button to sequentially review the 8 auto timers.
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Do you want to reload the default timer settings? (only with RDF410)

	1. Set the controller to standby .		
+ -/Prog	2. Press + and - simultaneously for 3 seconds. Release them and, within 2 seconds, press 2 times Prog .		
Default settings	Day/s	Time when controller is in normal operation	
	Mo (1) – Fr (5)	06:30 – 08:30 (A1)	17:30 – 22:30 (A2)
	Sa (6)	08:00 – 23:00 (A3)	
	Su (7)	08:00 – 22:30 (A4)	
	- in the remaining time controller is in energy saving - timer A5...A8 are free, no default setting		

Changing the control parameters

To optimize the control performance, a number of control parameters can be adjusted. This can also be made during operation without opening the controller.

If you want to change the control parameters, proceed as follows:

(For factory settings, see table on the right-hand side)

	1. Set the controller to standby .
+ / -	2. Press + and - simultaneously for a minimum of 3 seconds. Release them and, within 2 seconds, press the + again for 3 seconds. The display will show "P01".
+ / -	3. Select the required parameter by repeatedly pressing the + or - button:
+ / -	4. Press + and - simultaneously. The current value of the selected parameter will appear, which can be changed by repeatedly pressing + or - .
+ / -	5. By pressing + and - simultaneously again or 5 seconds after the last press of a button, the last parameter will be displayed again.
+ / -	6. If you wish to display and change additional parameters, repeat steps 3 through 5.
+ / -	7. 10 seconds after the last display or setting, all changes are stored and the controller will return to standby.
	8. Switch to normal operation with the button.

Recalibrating the sensor

If the room temperature displayed by the controller does not agree with the temperature effectively measured, the temperature sensor can be recalibrated. For that purpose parameter P07 must be changed.

	Proceed as described under "Changing the control parameters" and follow steps 1 through 3 to select parameter P07. With step 4, the room temperature displayed can now be matched to the temperature effectively measured. Each push of the + or - button changes the temperature by + or - 0.5 °C up to a maximum of + / - 3 °C. With step 7, the recalibration is automatically stored 10 seconds after the last readjustment.
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Commissioning (by qualified HVAC staff)

(all temperature settings can be made in increments of 0.5 K)

Parameter	Controller's parameter factory settings:			Setting range	RDF310...	RDF410...
P01	Setpoint of heating in energy saving mode	(Wheat _{Eco})	16	OFF, 5 °C...Wcool _{Eco}	X	
P02	Setpoint of cooling in energy saving mode	(Wcool _{Eco})	28	OFF, Wheat _{Eco} ...40 °C	X	
P03	Setpoint of heating in standby	(Wheat _{Stb})	OFF	OFF, 5 °C...Wcool _{Stb}		
P04	Setpoint of cooling in standby	(Wcool _{Stb})	OFF	OFF, Wheat _{Stb} ...40 °C		
P05	Minimum setpoint limitation in normal operation	(Wmin _{Norm})	5 °C	5 °C...Wmax _{Norm}		
P06	Maximum setpoint limitation in normal operation	(Wmax _{Norm})	35 °C	Wmin _{Norm} ...40 °C		
P07	Sensor calibration		0 K	-3...+3 K		
P08	Switching differential heating SDH		2 K	0.5...+4K		
P09	Switching differential cooling SDC		1 K	0.5...+4K		
P10	Switching differential fan speed 2 in heating operation mode SDH2		1 K	0.5...+4K		
P11	Switching differential fan speed 2 in cooling operation mode SDC2		1 K	0.5...+4K		
P12	Switching differential fan speed 3 in heating operation mode SDH3		1 K	0.5...+4K		
P13	Switching differential fan speed 3 in cooling operation mode SDC3		1 K	0.5...+4K		
P14	Dwelling time of auto fan speeds		2 min.	1...5 minutes		
P15	Minimum output on-time (Y11)		1 min.	1...10 minutes		
P16	Minimum output off-time (Y11)		1 min.	1...10 minutes		
P17	Selection of °C or °F		°C	°C or °F		
P18	Display of temperature or setpoint		ON	OFF: Setpoint ON: Room (or return air) temperature		
P20	Fan control in energy saving mode		OFF	OFF in dead zone ON in dead zone	X	
P21	Fan control in normal operation		ON	OFF in dead zone ON in dead zone		
P22	Heating / cooling mode		3:Manual H/C changeover	0: Heating only 1: Cooling only 3: Manual h/c changeover		
P25	Infrared receiver (only with RDF..10.21)		1	0: Disabled 1: Enabled		

Legend to table

Adjustable: Please record all changes you make	X Not adjustable / no display
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