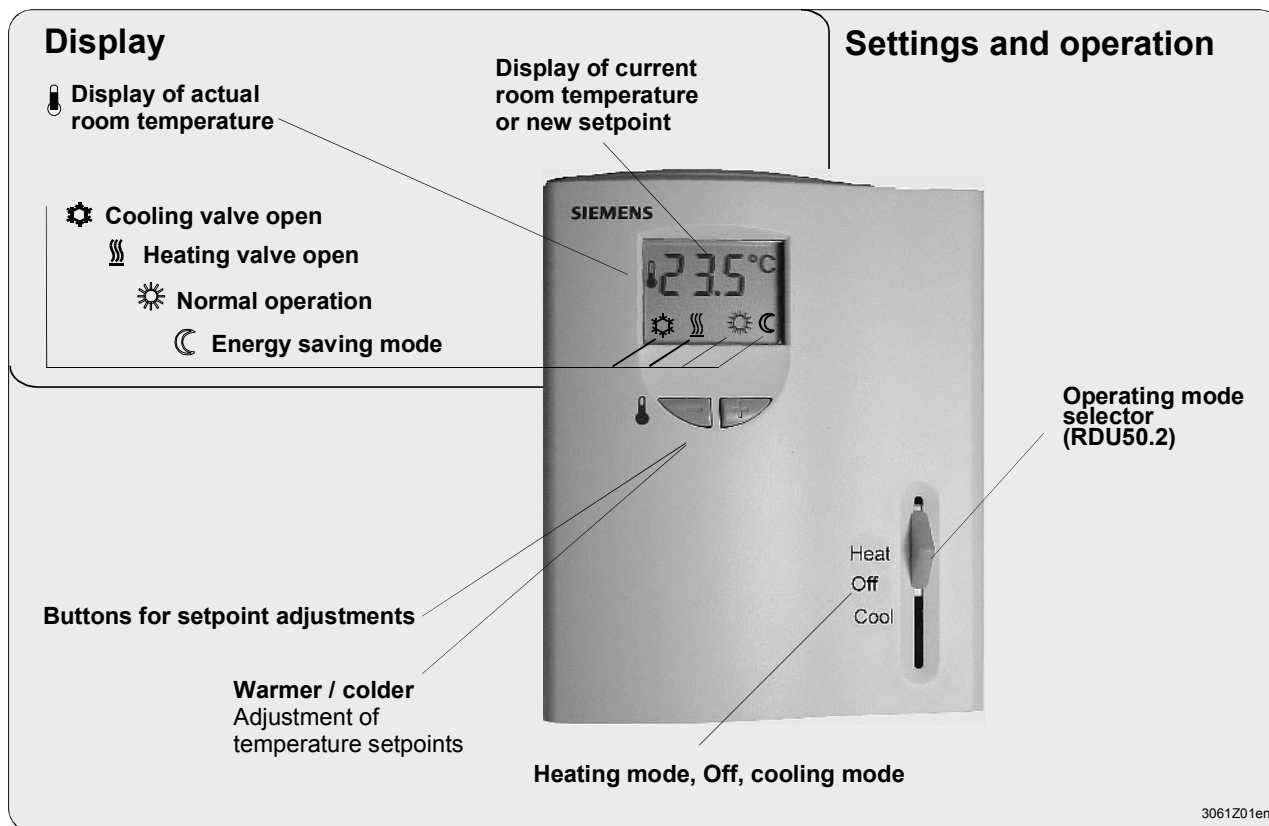






en Operating Instructions

RDU...





RDU... – the temperature controller that allows you to easily set the room temperature you want. You have 2 choices. You can either rely on the factory settings or make adjustments that suit your individual needs.






Changing from heating to cooling mode

 / 	Automatic changeover With the RDU50.2, manual changeover modes selector from heating mode, Off to cooling mode. Off = out of operation.
	Display shows that the heating output is active
	Display shows that the cooling output is active




Changing from normal operation to energy saving mode

 / 	Changeover from normal operation to energy saving mode takes place automatically via an external contact (window switch / remote operation switch, etc.). (Exception with type RDU50.2 in Off mode)
	Display shows normal operation.
	Display shows energy saving mode.

Energy saving mode

	If you want to change the factory-set temperature setpoints (16 °C for heating and 28 °C for cooling), follow the procedure given below ("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 the parameter display shows Off .
	Risk of frost!

Are your rooms too warm or too cold?

	<p>Normal operation</p> <p>The + / - buttons allow you to increase or decrease the current room temperature setpoint in steps of 0.5 °C. To do this, proceed as follows:</p> <ul style="list-style-type: none"> Press  or  once → The setpoint display starts flashing Press the buttons again to change the room temperature setpoint 10 seconds after the last press, the new temperature setpoint will automatically be stored. The display stops flashing.
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Commissioning (by qualified HVAC staff)

Parameter	Controller's parameter factory settings:	Setting range (all settings can be made in increments of 0.5 K)	RDU20	RDU50	RDU50.2	
P01	Setpoint of heating in energy saving mode (operating mode changeover switch activated)	16 °C				
P02	Setpoint of cooling in energy saving mode (operating mode changeover switch activated)	28 °C				
P03	Minimum setpoint limitation in normal mode	5 °C				
P04	Maximum setpoint limitation in normal mode	35 °C				
P05	Heat-cool changeover switching point cooling	16 °C			X	
P06	Heat-cool changeover switching point heating	28 °C			X	
P07	Sensor calibration	0 K				
P08	P-band in heating mode	2 K				
P09	P-band in cooling mode	1 K				
P10	Integral action time	5 min.	1...10 min. (increments of 1 min.)	X		
	Integral action time (only with modulating PI control, DIP switch no. 2 is set to ON)				X	X
P11	Minimum output limitation in cooling mode (normal operation)	0 %	0...100 % (increments of 10 %)	X		
	Actuator running time (only with modulating PI control, DIP switch no. 2 is set to ON)	150 s	50...150 s (increments of 10 s)		X	X
P12	Active temperature sensor (no setting, display only)	-	1: room temperature sensor active 2: return air temperature sensor active			
P13	Value of current room temperature reading (no setting, display only)	-	0...49 °C = current temperature value			
P14	Value of current heat-cool changeover temperature reading including indication of current mode (⚙️, 🌡️) (no setting, display only)	-	100 = input open (no sensor connected, heating mode (🌡️)) 0...49 °C = current temp. value 00 = input bridged, cooling mode (⚙️)			
P15	Test mode for checking the actuator direction (note that this parameter can be quit only if the setting is back at "---" and by pressing buttons + and - simultaneously)	---	"---" = no signal on outputs Y1 and Y2 OPE = output Y1 forced open CLO = output Y2 forced open		X	X




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.

Do you want to change the control parameters of the heating and / or cooling setpoints in the normal or energy saving mode? Or do you want to increase / decrease the switching differential in heating and cooling mode?

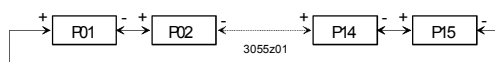
Then, proceed as follows:

(For factory settings, see above under "Commissioning")

	1. Normal operation mode
	2. Press the + and - buttons simultaneously for a min. of 3 and a max. of 5 seconds. Release them and within 2 seconds, press the + button again for 3 seconds. The display will show "P01".
	
	



3. Select the required parameter by repeatedly pressing the + or - button:



4. Press the + and - buttons simultaneously, the current value of the selected parameter appears, which can be changed by repeatedly pressing the + or - button.

5. By pressing buttons + 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 will be stored.

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.

Legend to table

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