

Operating Instructions

RDD310, RDE410

RDD310 / RDE410 – the temperature controllers that allow you to accurately maintain the room temperature you require. The controller provides Comfort, Energy Saving and Frost Protection mode. With the RDE410, you will also have an Auto Timer mode with 8 programmable time switches. You can either rely on the factory settings or make adjustments that suit your individual needs.

Display

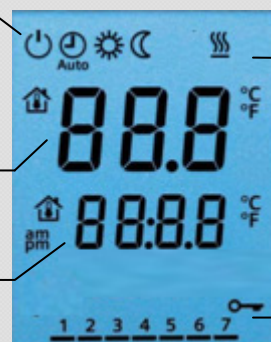
- Frost Protection mode
- Comfort mode
- Energy Saving mode
- Auto Timer mode*

Measured room temperature, setpoints and parameters

Symbol when current room temperature is displayed

Current time of day *

* RDE410 only



Heating demand

Buttons locked

Weekday 1...7 (1 = Monday / 7 = Sunday)*

Operation and settings

Selection of operating mode

- Frost Protection mode ()
- Comfort mode ()
- Energy Saving mode ()**



Colder / Warmer

Selection of operating mode

- Auto Timer mode ()
- Comfort mode ()
- Energy Saving mode ()**



Colder / Warmer

View and set Auto Timer programs

Frost protection / system ON

Time of day and weekday

Confirmation of settings

** When configured by your HVAC installer

Are your rooms too warm or too cold?

+ / -



Press + or - to increase or decrease the current room temperature setpoint in steps of 0.5 °C for Comfort mode. 5 seconds after the last push, the room temperature setpoint is automatically saved. The display stops flashing and shows the room temperature currently measured. The maximum setting range is 5...40 °C, unless it is limited by parameters P09 and P10.

Do you require continuous Comfort mode?



Press the operating mode button to switch to Comfort mode . The room temperature setpoint is continuously maintained at the comfort level. The RDE410 has a dedicated button for selecting the operating mode.

Do you want to set your controller to Frost Protection mode?



Press the operating mode button several times until the display shows the icon to indicate that Frost Protection mode is selected.

The RDE410 has a dedicated button to set the system either to Frost Protection mode or to switch it on.

In Frost Protection mode , the room temperature setpoint is continuously maintained at 8 °C (factory setting), unless your HVAC installer has made some other setting.

Changes made by the installer

☐ Frost protection: °C

Do you want to change to Energy Saving mode?



When Energy Saving mode is enabled (see parameter P02), press the operating mode button to select Energy Saving mode . The room temperature setpoint is continuously maintained at the energy saving level. The preset room temperature setpoint in Energy Saving mode is 16 °C (see parameter P11).

The RDE410 has a dedicated button to select the desired operating mode.

Do you want to change to Auto Timer mode? (RDE410 only)



Press the button to select Auto Timer mode . In Auto Timer mode, the controller will automatically switch over between Comfort mode and Energy Saving mode according to the 8 preprogrammed timer settings.

Setting the time of day and the weekday (RDE410 only)



+ / -



+ / -



1. Keep the button depressed until the time digits start to flash, then press + or - to set the time of day. If the current time format is the 24-hour format and you wish to change to the 12-hour format, keep + depressed to pass 23:59, or keep - depressed to pass 00:00. Vice versa to go back to the 24-hour format.
2. Confirm the time of day by pressing . The weekday indicator starts to flash.
3. Press + or - to set the current weekday.
4. Confirm the current weekday by pressing .






Do you want to set the timers? (RDE410 only)

	To set the timers, keep the button depressed for 3 seconds to go to the timer setting mode (Auto Timer). This mode is indicated by "Ax" appearing on the display (x = Auto Timer 1...8) and the time xx:xx flashing. For each timer, proceed as follows:
A..	1. The and icons are displayed. Press + or - to set the Comfort mode start time and confirm by pressing .
+ / -	2. The and icons are displayed. Press + or - to set the Comfort mode end time (or Energy Saving mode start time) and confirm by pressing .
✓	3. Icon flashes. Press + or - to select or deselect each day and advance to the next day. Confirm setting for the actual timer by pressing and advance to the next timer.
A..	The controller leaves the timer setting mode automatically after 20 seconds when no button is pressed. All changes made after the last press of will not be saved !
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Do you want to view the timer settings? (RDE410 only)

	Press the button to sequentially review all 8 Auto Timers.
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Do you want to reload the default timer settings? (RDE410 only)

<div><div><div>⏻</div><div>+ / - / </div></div><div></div></div>	<div><div>1. Set the controller to Frost Protection mode .</div><div>2. Press + and – simultaneously for 3 seconds. Release the buttons and, within 2 seconds, press twice the  button.</div></div>		
Default settings	Day/s	Time of day when controller is in Comfort mode 	
	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)	
		<div><div>- In the remaining time, the RDE410 is in Energy Saving mode </div><div>- Timers A5...A8 have no default settings</div></div>	

Commissioning (by qualified HVAC installer)

To adapt the controller to your system and optimize the control performance, a number of control parameters can be set. This can also be made during operation without opening the controller.

Recalibrating the temperature sensor

	If the room temperature displayed by the controller does not accord with the temperature effectively measured, the temperature sensor can be recalibrated. Using parameter P05, the temperature can be adjusted by pressing + or - in steps of 0.5 °C. The maximum recalibration range is +/- 3 °C.
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Energy Saving mode

	If you want to change the factory-set temperature setpoint (16 °C for heating), parameter P11 must be adjusted.
	Important: The setpoint of Energy Saving mode can be set to OFF . This means that the controller will be deactivated ! Risk of frost , i.e. no protective heating function.

Control parameters

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

	1. Set the controller to Frost Protection mode .
+ / -	2. Press + and - simultaneously for a minimum of 3 seconds. Release the buttons and, within 2 seconds, press + again for 3 seconds. The display will show "P01".
+ / -	3. Select the required parameter by repeatedly pressing + or - .
+ / -	4. Press + and - simultaneously. The current value of the selected parameter starts to flash. Adjust the parameter by pressing + or - .
+ / -	5. Press + and - simultaneously again to display the next parameter.
	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 leave the parameter setting mode.

Parameter	Controller's factory-set parameters:		Setting range	
P02	Mode selection by operating mode button	1 = Frost Protection – Comfort mode	1 = Frost Protection – Comfort mode 2 = Frost Protection – Comfort – Energy Saving mode	
P04	Selection of °C or °F	°C	°C or °F	
P05	Temperature sensor calibration	0.0 °C	-3 ... 3 °C	
P06	Standard temperature display	0 = room temperature	0 = room temperature 1 = setpoint	
P08	Comfort basic setpoint	20 °C	5 ... 40 °C	
P09	Min. setpoint limitation in Comfort mode (Wmin _{Comf})	5 °C	5 ... 40 °C	
P10	Max. setpoint limitation in Comfort mode (Wmax _{Comf})	35 °C	5 ... 40 °C	
P11	Heating setpoint in Energy Saving mode	16 °C	OFF, 5...18 °C	
P14	Button lock (Press the operating mode button for 7 seconds to lock or unlock the buttons)	0 = disabled	0 = disabled 1 = auto lock 2 = manual lock	

Please write down all changes you make !

(All temperature settings can be made in increments of 0.5 °C)

Energy saving tips without sacrificing comfort:

	<ul style="list-style-type: none"> Never allow room temperatures to exceed 21 °C Set the controller to Energy Saving mode (or Frost Protection mode), even if you are absent for short periods of time only Air out the rooms briefly, but with windows wide open
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