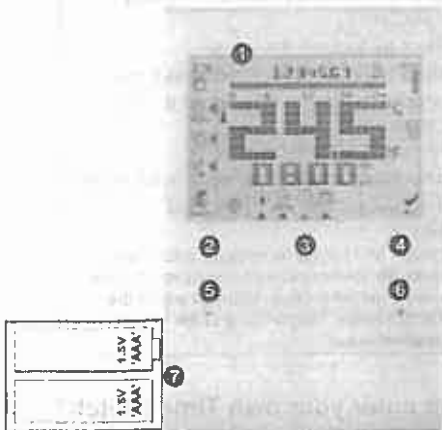# SIEMENS

RDE100.1RFS consists of a wireless thermostat RDE100.1RF, and a RCR100RF receiver.
These units allow you to set the ideal room temperature at the time you want.
There are several switching patterns available that can be set to your specific needs.

RDE100.1RF

1. Display

▭	Indicates that batteries need to be replaced	**0 8:0 0**	Display of time
⏻	Frost protection (heating) is active	am	Morning: 12-hour format
		pm	Afternoon: 12-hour format
⏰ AUTO	Auto timer mode	✔ ALL	Confirmation
AUTO	View and set auto time switch	°F	Room temperature in degrees Fahrenheit
☀	Comfort mode	°C	Room temperature in degrees Celsius
☾	Economy mode	🔒	Button lock activated
⬛ mode	Escape	**245**	Display of room temperature, setpoint, etc
↩	External input enabled		Display of the zone (Default is 1)
⏱	Permanent setpoint setting	♨	Heating ON
🕐	Day and time setting	1234567	Weekday 1 = Monday / Weekday 7 = Sunday
🧳	Holiday mode setting		Timer bar
		🌡	Current room temperature

2. Change operating mode
3. Set
4. Ok
5. Decrease value
6. Increase value
7. Battery holder

RCR100RF

8. Indicates the data transmission and working status (LED)
9. Initialize the wireless communication with transmitter (Learn button)

Do you want to adjust the time and day?

set	Proceed as follows:
ok	• Press **set** and select 🕐
+	• Press **ok** and the time flashes for setting
−	• Press **+** or **−** to adjust the time
mode	• Press **ok** to confirm
	• The weekday flashes, press **+** or **−** to select the desired day
	• Press **ok** to save the value
	• Press **mode** to exit or wait for the program to exit automatically

Are your rooms too warm/too cold?

+ — ok set mode	Press + or – to increase or decrease the room temperature setpoint in increments of 0.5 °C / 1 °F. Proceed as follows: • Press + or – to adjust the setpoint temporarily. This adjustment is reset as soon as the operating mode changes. • Press ok, set or mode to save the value or wait for the program to exit automatically • To lock the setpoints, use parameters P06 and P08.

Do you want to change the operation mode?

Mode	The thermostat provides Comfort mode, Economy mode, and Auto mode. Changeover between the operating modes can be made manually by pressing mode. ☼ Comfort mode is the permanent (24 h) selection of Comfort. Select this mode to maintain Comfort temperature permanently without any time switch. It is used during occupancy periods, for example. ☾ Economy mode is the permanent (24 h) selection of Economy. Select this mode to maintain the Economy temperature permanently without any time switch. It is used during non-occupancy periods, for example at night. ⏲ AUTO In Auto timer mode, operating modes (Comfort, Economy) are changed automatically according to the time switch set. **Note:** Frost protection is a function always active in the background. As soon the room temperature falls below 5 °C, the unit automatically activates the heating icon ♨.

Do you want to set permanent temperature setpoints?

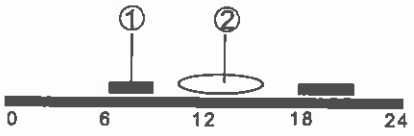|	
set ok + — Mode	• Press set and select ⏱ • Press ok to confirm • Press mode to choose an operating mode, Comfort or Economy mode • Press + or – to adjust the setpoint permanently • Press ok to confirm • Press mode to exit or wait for a timeout to exit automatically **! Note:** This permanent setpoint is used during Auto timer mode.

🍃 Energy saving tips without sacrificing comfort

• Select Auto timer mode during the heating period, and set the time switch according to your normal habits at home

• Select Economy mode or Holiday mode during long periods of non occupancy and during summer period

Do you want to set your Holiday mode?

set ok + — mode	Use the Holiday mode to set the thermostat to a constant temperature while absent. • Press set and select 🧳 • Press ok to confirm • Press + or – to adjust the temperature setpoint • Press ok to confirm • Press + or – to adjust the number of days for holidays (Note: 0 = Holiday mode OFF) • Press ok to save the value • When Holiday mode is activated, the remaining days are displayed on the screen
!	**Note:** If you press mode while Holiday mode is active, the function is turned off and the 🧳 symbol disappears. If the Comfort and Economy setpoint values are both locked, the lowest locked setpoint value is the Holiday mode setpoint value. You can adjust the setpoint temperature from 5 °C up to the lowest locked setpoint value.

Do you want to enter your own Time switch?

Option 1: Time switch with individual day selection (P11=0)

set ok + — mode	You can select Comfort mode or Economy mode at 15 minute intervals throughout the day. The 0:00 to 24:00 hour time bar allows you to set the operating mode for the selected day(s). Example: ① Visible bars: Control to Comfort temperature ② Invisible bars: Control to Economy temperature When Auto timer mode is enabled, changeover between the operating modes is automatic after the settings are saved. Proceed as follows: 1) Press set and select ⏲ AUTO. 2) Press ok to confirm. 3) Time switch for day Mon(1) is displayed. 4) Press + or – to select the day, from Mon (1) to Sun (7). 5) Press ok to confirm the selection and initiate time programming. During programming step: 6) Press mode to select an operating mode, (Comfort or Economy) or 7) Press + or – to adjust the time setpoint by 15 minutes for the selected mode. 8) Press ok to save the time switch. 9) Repeat steps 4-8 for all remaining days (if required); or 10) Press mode or wait for the program to exit automatically..

Option 2: Time switch with the same 7 day selection (P11=1)

set ok + — mode	You can set all the 7 day time switches at the same time. Example:

① Visible bars: Control to Comfort temperature
② Invisible bars: Control to Economy temperature

Proceed as follows:

1) Set the parameter (P11=1). Please refer to the section **"Do you want to change parameters"**.
2) Press set and select ⏲ AUTO.
3) Press ok to confirm.
4) Time switch for period Mon (1) - Sun (7) is displayed.
5) Press ok to initiate time programming.

During programming step:

6) Press **mode** to select an operating mode, (Comfort or Economy) or
7) Press **+** or **—** to adjust time setpoint by 15 minutes for the selected mode.
8) Press **ok** to save the time switch.
9) Press **mode** or wait for the program to exit automatically.

Option 3: Time switch with 5-2 day selection (P11=2)

set ok + — mode	You can set Monday - Friday time switch at once and Saturday - Sunday time switch at once. Example:

① Visible bars: Control to Comfort temperature
② Invisible bars: Control to Economy temperature

Proceed as follows:

1) Set the parameter (P11=2). Please refer to the section **"Do you want to change parameters"**.
2) Press set and select ⏲ AUTO.
3) Press ok to confirm.
4) Time switch for period Mon(1) - Fri(5) is displayed.
5) Press **+** or **—** to select the period, Mon (1) - Fri(5) or Sat (6) - Sun (7).
6) Press ok to confirm the selected period and initiate time programming.

During programming step:

7) Press **mode** to select an operating mode, (Comfort or Economy) or
8) Press **+** or **—** to adjust the time setpoint by 15 minutes for the selected mode.
9) Press **ok** to save the time switch.
10) Repeat the steps 5-9 for the other period if necessary; or
11) Press **mode** or wait for the program to exit automatically.

Factory default of 7-day time switch

Default value	Day/s	Comfort mode	Economy mode
	Mo (1) – Fr (5)	6:00 – 8:00 hr 17:00 – 22:00 hr	22:00 – 6:00 hr 8:00 – 17:00 hr
	Sa (6) – Su (7)	7:00 – 22:00 hr	22:00 – 7:00 hr

Do you want to pair transmitter and receiver?

+ — learn ⟳	RDD100.1RF communicates with RCR100RF on 433 MHz frequency.

To pair transmitter and receiver, proceeds as follows:

RCR100RF Receiver setting:

1) Press and hold the **learn** button on RCR100RF for at least 3 seconds and then release it.
2) Red and green LED flash alternatively to indicate RCR100RF is in learning mode.

RDD100.1/RF Transmitter setting:

3) On the transmitter, enter the parameter settings (See section on **Do you want to change parameters**).
4) Check that parameter P19 is not 0. 0 means the wireless function is disabled. By default, parameter P19 is 1.
5) Proceed to parameter P20. Press ⟳ and parameter P20 = 0 (OFF) flashes. Adjust the value by pressing **+** to change to P20 = 1 (ON), and then press ⟳ to confirm.
6) During the stages of wireless learning, the LCD displays "rF" and "Lrn". Wait for it to time out, and the transmitter exits the parameter setting mode.

Successful wireless learning:

7) The green LED on the RCR100RF flashes for 10 minutes to indicate that the RCR100RF has successfully completed the wireless learning.

Recommendation:

8) *Additional test to ensure the wireless signal is fine:* On the RDD100.1/RF, change the operating mode by pressing ⟳ or change the setpoint by pressing **+** or **—**. On the RCR100RF, the green LED should blink for 3 seconds before turning solid green. In parallel, observe your radiator, boiler or heater indication (if it has one) that it has changed the mode.
9) If step 7 or step 8 is working fine, this means you have successfully paired the units.

Unsuccessful wireless learning:

10) If RCR100RF fails to receive wireless data, the red LED starts to flash **. Repeat steps 1 to 8 until the pairing is successful.

! Note:

Always start the Receiver's learning before starting the pairing with the Transmitter.

The units must be placed in a way that ensures that Transmitter and Received signals have limited external wireless interference.

**In normal operation, if a drop in wireless may occurs due to unforseeable noise interference, just leave the receiver and it will recover automatically.

The pairs are saved even if there is a power shut down. The communication restarts automatically after several minutes without any user manipulation.

Does symbol ☐ appear on the display?

Symbol ☐ is displayed when the batteries are low.
Replace them with 2 new alkaline batteries type AAA.
Proceeds as follows:

- Get 2 new alkaline batteries type AAA
- Remove the battery holder, then the batteries, insert the new batteries and, within 1.5 minutes, replace the battery holder
- Ensure the exhausted batteries are disposed of correctly, in compliance with environmental requirements

Do you want to lock the keypad?

mode	Press and hold **mode** for at least 7 seconds to activate a button lock. Repeat to unlock.
	The unit operates normally when the buttons are locked, but no changes are possible while the buttons are locked.

Receiver LED's indication

RCR status	LED status
Power up (or reset)	The red and green LEDs flash alternatively for 5s, and then change to solid red. Note: If the receiver has been previously programmed, it shows immediately solid red.
Learning mode	The red and green LEDs flash alternatively.
Successful Learning mode	If RCR learning is successful, the green LED will flash for 10 minutes.
Signal OK and output status change	The green LED is solid on, and if the output status is changed, the green LED flashes for 3s and then changes back to solid green again.
Fail to receive wireless data	If RCR fails to receive wireless data, and after 125 minutes, the red LED will start to flash. If RCR signal is recovered, it will resume to the previous LED status.

Do you want to change the parameters?

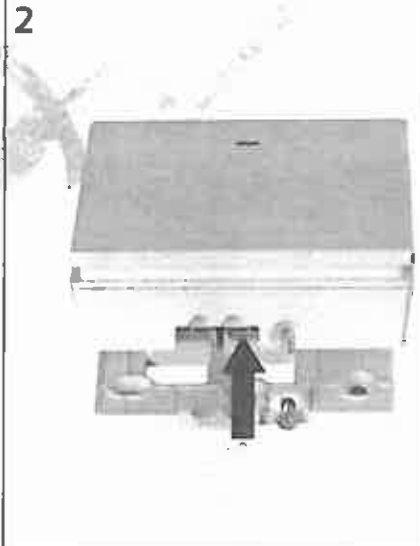| + — ok mode	If you want to change control parameters, proceed as follows:
	• Press **+** and **—** simultaneously for 5 seconds
	• Release them and parameter "P01" is displayed on the bottom segment
	• Press **+** or **—** to scroll to the parameter that needs to be adjusted
	• Press **ok** to select this parameter
	• Press **+** or **—** to adjust the value
	• Press **ok** to confirm the adjusted value
	• Press **mode** to exit the parameters without saving or wait for the program to exit automatically

Parameter list

Parameter No.	Description	Setting range (default)
P01	Time format	1 = 24:00 hours (default) 2 = 12:00 AM/PM
P02	Selection of °C or °F	1 = °C (default) 2 = °F
P03	Standard temperature display	1 = room temperature (default) 2 = setpoint
P04	Temperature sensor calibration	-3...3 °C Step 0.5 °C (-6...6 °F, step 1 °F) Default: 0 °C
P06	Comfort setpoint lock	0 = OFF (default) 1 = ON → locked according to setting in permanent temperature setpoint
P08	Economy setpoint lock	0 = OFF (default) 1 = ON → locked according to setting in permanent temperature setpoint
P09	Buzzer	0 = OFF 1 = ON (default)
P10	Show frost protection icon	0 = OFF (default) 1 = ON
P11	Time switch type for auto timer	0 = Individual days (default) 1= All 7 days 2= 5-2 days
P12	Periodic pump run	0 = OFF (default) 1 = ON
P14	X1 external input	0 = no input (default) 1 = external sensor 2 = digital input
P15	Temperature limitation	0 = OFF (default) 1 = ON;
P16	Max limitation temperature for underfloor heating	35...60 °C, step 1 °C or 95...140 °F, step 1 °F Default: 55 °C
P17	Window contact features	0 = normally open contact (default) 1 = normally closed contact
P19	Sequence number of room unit	0 = no display of zone (RF off) 1 = zone number 1 (for standard RF) (default) 6 = zone number 6
P20	RF learn	0 = OFF (default) 1 = ON
P21	Button scanning rate for the capacitive buttons	0.2 = 0.25 s 0.5 = 0.5 s 1.0 = 1.0 s (default) 1.5 = 1.5 s Note: a shorter scanning rate means shorter battery life.
P22	Reload factory settings	0 = OFF (default) 1 = reload
P23	Software version information	No adjustment possible

SIEMENS
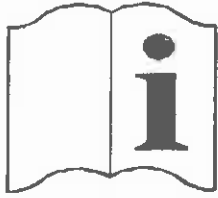
RDD100.1RFS
RDE100.1RFS
RDE100.1FPRFS

RCR100...

RDD100...

85
106
21.5
0.5
82.93
25.5
4.1 7.1
83.5
Ø80
Ø60
39.8

1	2	3

RDE100...

85
127
21.5
0.5
82.93
25.5
4.1 7.1
83.5
Ø80
Ø60
39.8

RDD100.1RFS

AC 230 V

L

N

Q11

Q12 Q14 N2

AC 24...230 V

Y1

5(2) A
max

⚠ L–N AC 230 V

RDE100.1RFS

AC 230 V

L

N

X1 ⊥

Q11

Q12 Q14 N2

AC 24...230 V

Y1

5(2) A
Max.
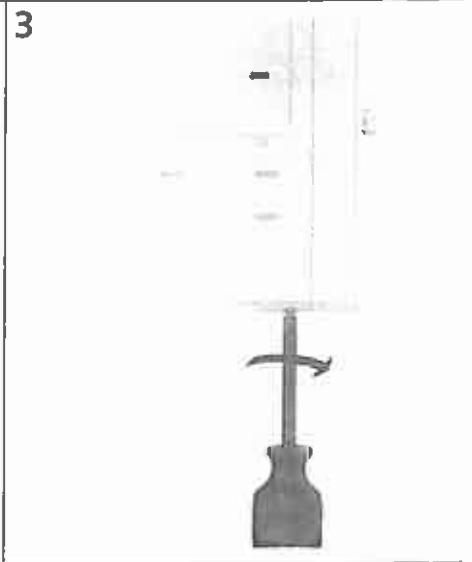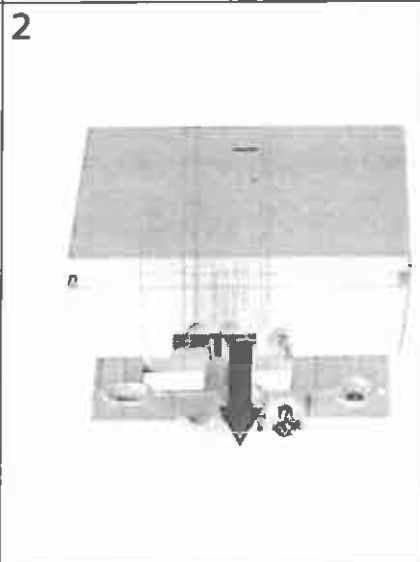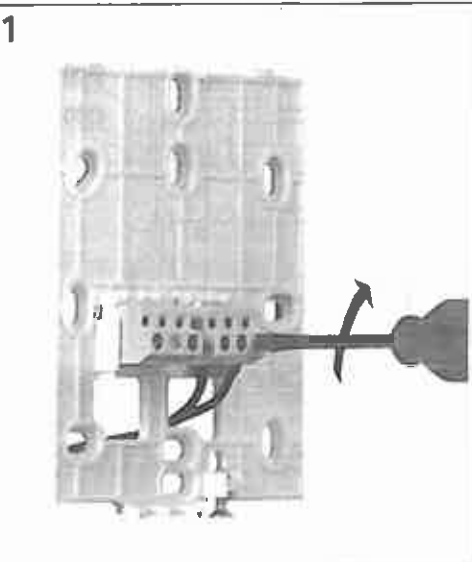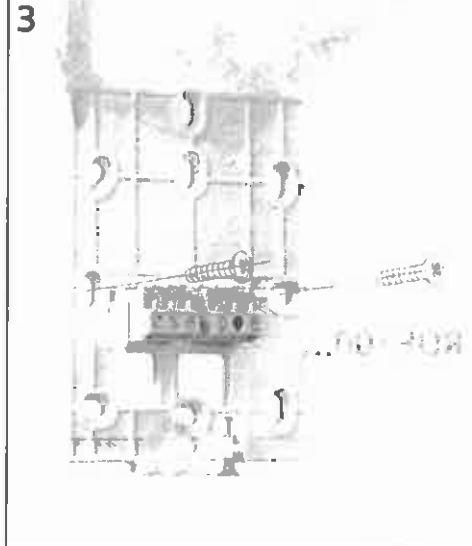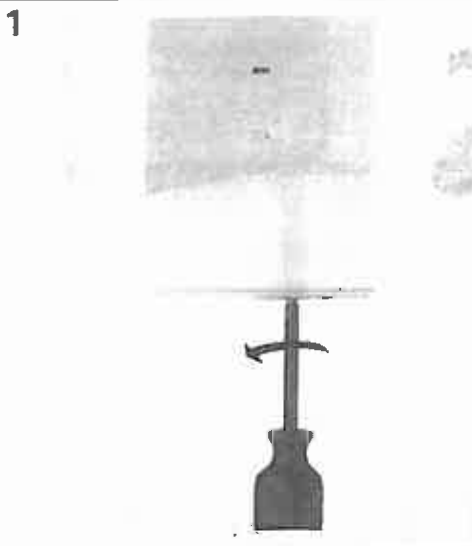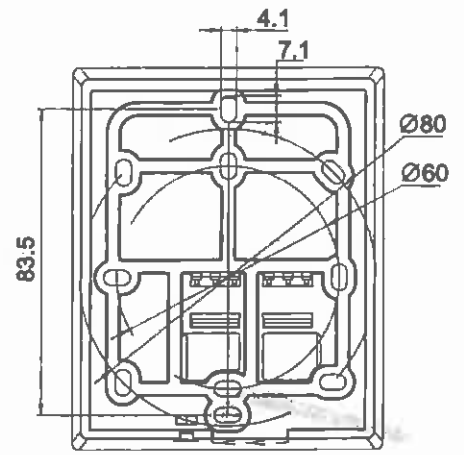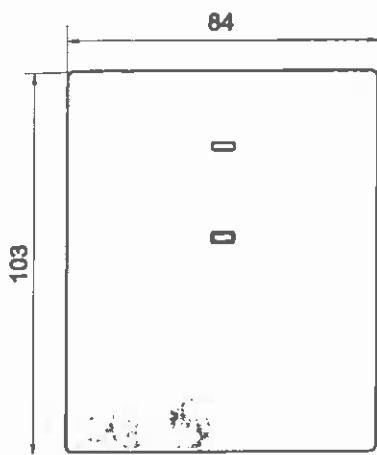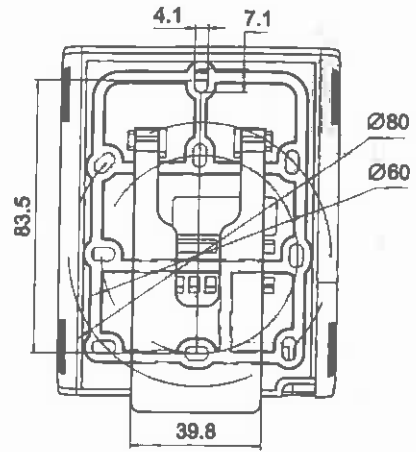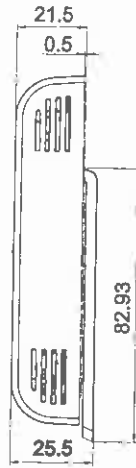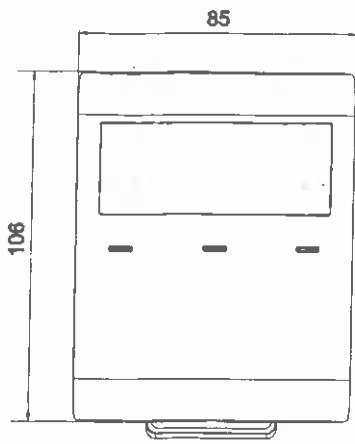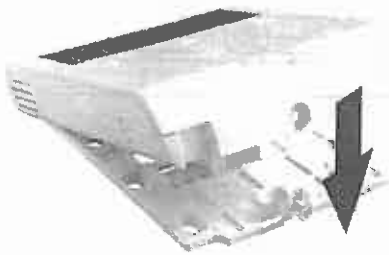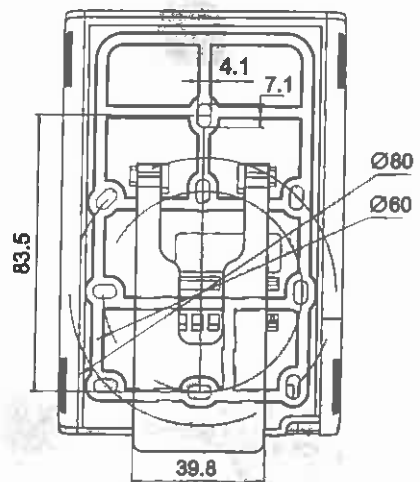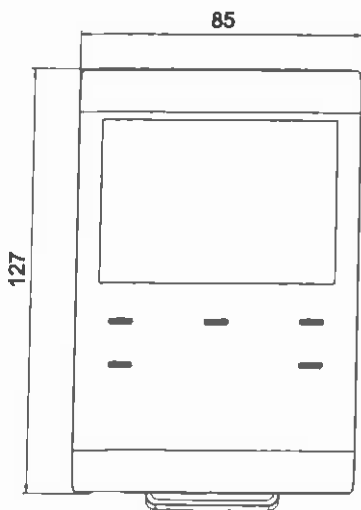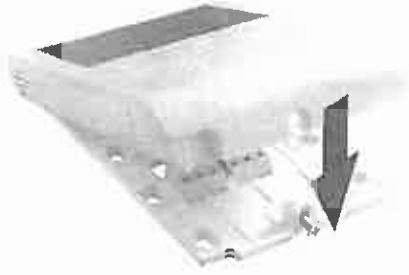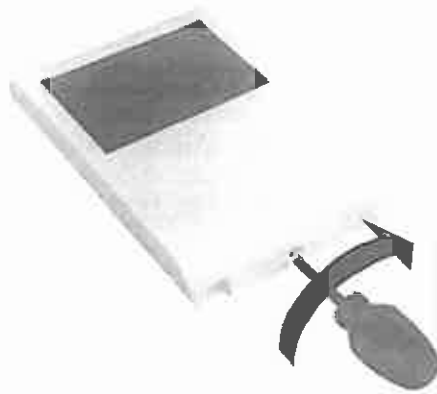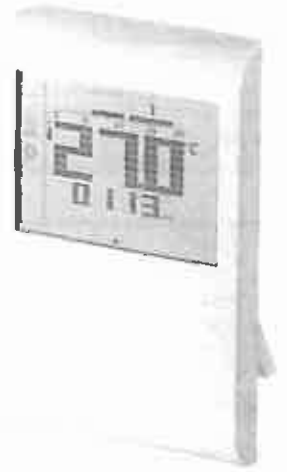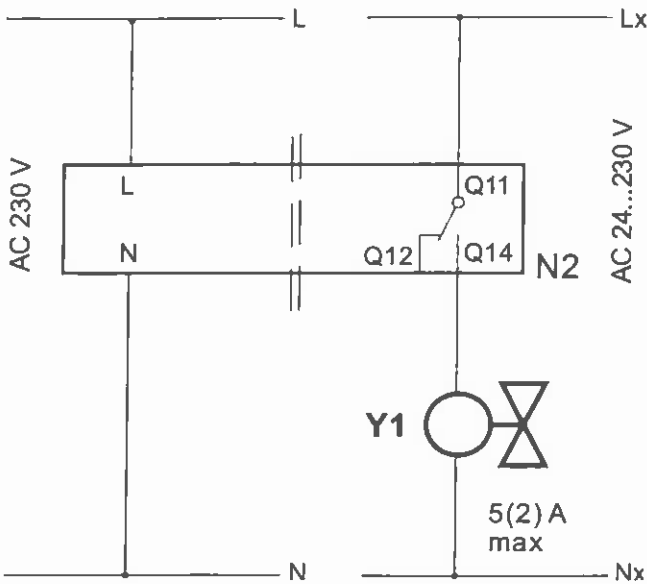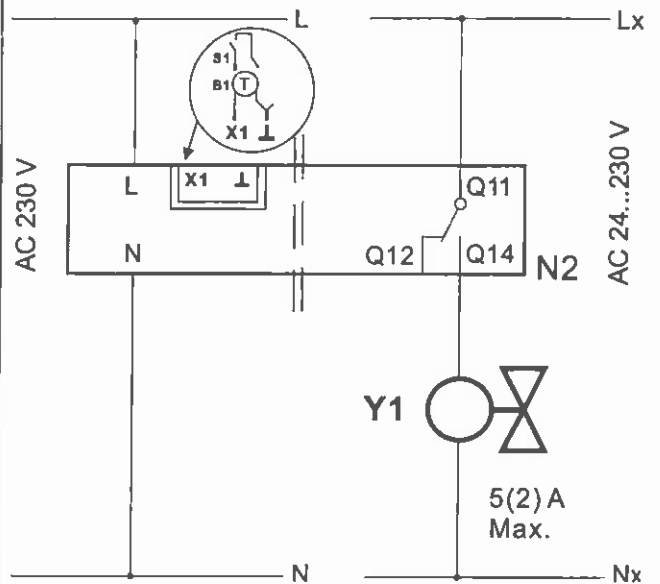
⚠ Lx–Nx 24...230 V

RDE100.1FPRFS (Fil Pilote)

Fil Pilote

Convecteur(s)

1 2 3   L N

L N

⚠ Lx–Nx 24...230 V

Max. 1.5 min