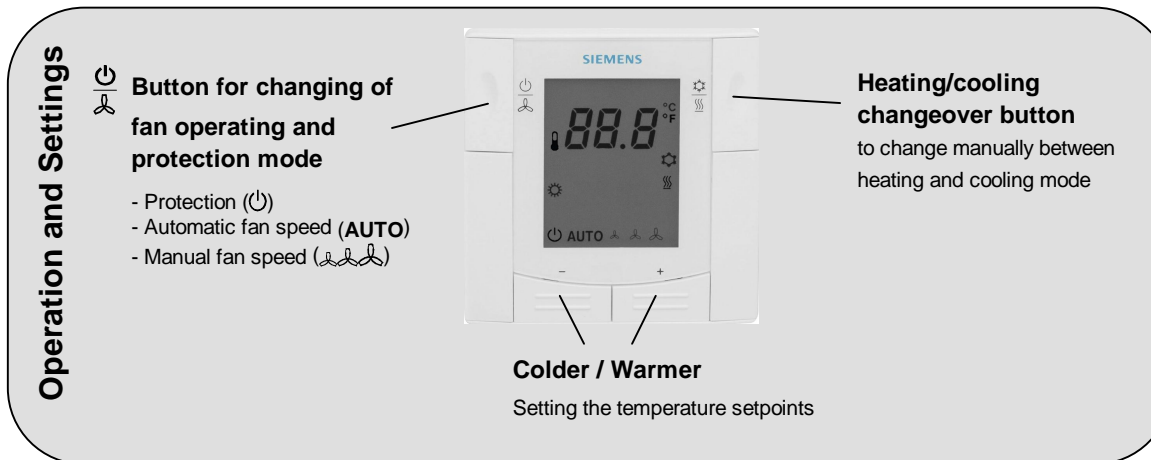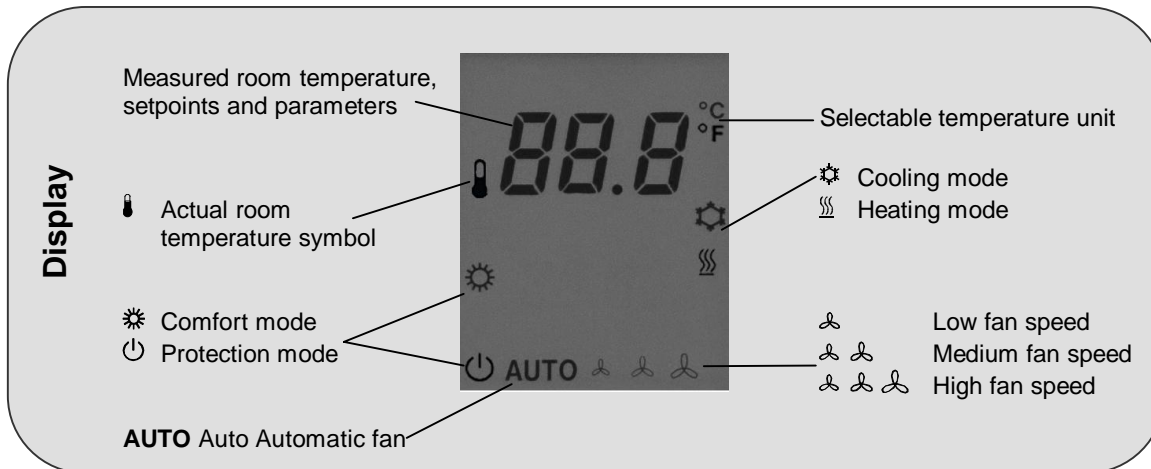# SIEMENS

**en** **Operating Instructions**                                    **RDF310.2/MM**

RDF310.2/MM – the thermostat that allows you to set the ideal room temperature you want. The thermostat provides both comfort mode and protection mode.

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.

## Display

Measured room temperature, setpoints and parameters

**88.8** °C °F

Selectable temperature unit

Actual room temperature symbol

☼ Cooling mode
♨ Heating mode

☀ Comfort mode
⏻ Protection mode

Low fan speed
Medium fan speed
High fan speed

**AUTO** Auto Automatic fan

## Operation and Settings

**Button for changing of fan operating and protection mode**

- Protection (⏻)
- Automatic fan speed (**AUTO**)
- Manual fan speed (♨♨♨)

SIEMENS

**88.8** °C °F

**Heating/cooling changeover button**

to change manually between heating and cooling mode

**Colder / Warmer**

Setting the temperature setpoints

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**Are your rooms too warm or too cold?**

| ☀ + / - | Only applicable in Comfort mode. |
|---|---|
| | Pressing the **+** or **−** button to increase or decrease the current room temperature setpoint for Comfort mode in increments of 1.0 °C. The setting range is from 5...40 °C, unless it is limited by parameters P05 and P06. |

**Do you want to set your controller to protection mode?**

| ⏻ | Press the button and the ⏻ symbol shows, indicating that protection mode is selected. |
|---|---|
| ⏻ | In protection mode ⏻, the controller maintains the lower setpoint of heating for frost protection via parameter P03 or the higher setpoint of cooling for moldy resistance according to parameter P04. **Important:** If the setpoint of protection is set to **OFF,** the thermostat will not be activated in protection mode. |
| ⚠ | **Risk of frost!** |

**Do you want to change the fan mode?**

| ⏻ AUTO | Press the button until you have selected the desired fan mode. |
|---|---|
| | 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?**

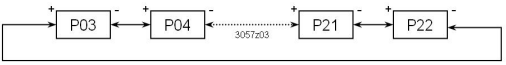| ☼/♨ | When pressing the ♨ button, the controller changes from heating to cooling or vice versa. |
|---|---|
| ♨/☼ | If the controller is commissioned *cooling only* or *heating only*, no changeover is possible (please see parameter P22: factory setting *manual H/C changeover*) |

**Do you want to calibrate the displayed room temperature?**

If the displayed room temperature does not match the actual temperature, the temperature sensor can be calibrated by modifying parameter P07.

| | Proceed as described under "Changing the control parameters" and follow steps 1 through 3 to select parameter P07. |
|---|---|
| | In step 4, modify the displayed room temperature to match the actual temperature. |
| | Each pressing of the **+** or **-** button changes the temperature in increments of 0.5 °C and up to a range of ±3 °C. |
| | In step 7, the calibration is automatically stored 10 seconds after the last readjustment. |

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## Changing the control parameters

To optimize the control performance, you can use local HMI to adjust a number of control parameters. Proceed as follows to change the control parameters (see the table of "Commissioning by qualified HVAC staff" for factory settings):

1. Set the thermostat to protection mode ⏻.

2. Press and hold down the **+** and **−** buttons simultaneously for 3 seconds. Release them and, within 2 seconds, press and hold down the **+** button for 3 seconds. The display shows **P03**.

3. Select the required parameter by pressing the **+** or **−** button as follows:



4. Press the **+** and **−** buttons simultaneously. The current value of the selected parameter displays on the screen. Press the **+** or **−**.button to change the value.

5. You can either press the **+** and **−** buttons simultaneously to confirm the change, or wait for 5 seconds to have the change saved automatically.

6. Repeat step 3 through 5 to change more parameters.

7. 10 seconds after the last display, all changes are saved and it returns to protection mode.

8. Press the ⏻ button to switch to Comfort mode ☀.

## Commissioning (by qualified HVAC staff)

| Para-meter | Description | | Factory setting | Setting range | Adj. ✎ |
|---|---|---|---|---|---|
| P03 | Setpoint of heating in protection ⏻ | (Wheat$_{Stb}$) | 8 °C | OFF, 5 °C…Wcool$_{Stb}$ | |
| P04 | Setpoint of cooling in protection ⏻ | (Wcool$_{Stb}$) | OFF | OFF, Wheat$_{Stb}$ …40 °C | |
| P05 | Minimum setpoint limitation in Comfort mode | (Wmin$_{Norm}$) | 5 °C | 5 °C…Wmax$_{Norm}$ | |
| P06 | Maximum setpoint limitation Comfort mode | (Wmax$_{Norm}$) | 35 °C | Wmin$_{Norm}$…40 °C | |
| P07 | Sensor calibration | | 0 K | -3…3 K | |
| P08 | Switching differential heating SDH | | 1 K | 0.5…4 K | |
| P09 | Switching differential cooling SDC | | 1 K | 0.5…4 K | |
| P14 | Dwelling time of auto fan speeds | | 2 min. | 1…5 minutes | |
| P17 | Selection of °C or °F | | °C | °C or °F | |
| P18 | Display of room temperature or setpoint | | ON | OFF: Setpoint ON: Room temperature | |
| P21 | Fan control in normal operation (Comfort mode) | | 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 | |

✎ **Please record all changes you make.**