Regulus

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Installation and Maintenance Manual | **EN**
RCD2 ROOM UNIT
for AHC 40 actuator with weather compensation controller

RCD2

CONTENTS

1. Introduction

The RCD2 room unit allows easy and comfortable operation of a heating system. For clear data display it is equipped with a large LCD display with automatic backlighting adjusting to the room lighting. In addition to room temperature, it also measures relative humidity and air pressure. It then displays a weather forecast based on the measured air pressure. It is designed to be mounted on a wall.

2. Basic Features

- Display of current and desired temperature.
- Display of temperatures measured by the controller.
- Relative humidity display.
- Display of error messages and excessive temperature warnings.
- Display of air pressure and weather forecast.
- Additional operating modes ECO, PARTY and HOLIDAY.
- Weekly timer.

3. Technical Data

Power supply	From the connected controller (conductor cross section 0.25 to 0.5 mm^2)
Consumption	Max. 0.02 W
Clock power supply	CR2032 battery
IP rating	IP 20
El. protection class	III
Ambient temperature	0 to 40 °C
Storage temperature	-20 to 65 °C
Weight	140 g

4. Description, Control

1. **LCD display**
2. **Increase of value / move to the next value**
   Pressing for 10 s unlocks or locks the setting - see parameter S1.9.
3. **Browsing the measured values**
   Press for 2 seconds to change the parameters listed in the table at the end of the manual.
4. **Ambient light sensor**
5. **Switching heating mode on/off**
   Pressing for 2 s turns the heating off or on.
   Pressing for 20 s switches between heating and cooling.
6. **Decrease of value / step back**
   Pressing for 10 s unlocks or locks the keypad - see parameter S1.10.
7. **Switching PARTY mode On/Off**
   Temporarily increased temperature until the set time.
   When the button is held for 10 s, the fireplace function is activated and the room temperature is ignored for the time set in parameter S1.13.
8. **Switching ECO mode On/Off**
   Temporarily reduced temperature until the set time.
   When the button is held down for 20 s, the device switches to holiday mode.
9. **Activation of one-time hot water heating and Switching On/Off hot water mode.**

Setting the desired day and night temperature and hot water temperature is only possible in heating mode, if the PAIRS, ECO or HOLIDAY modes are not active.

Meaning of the symbols on the display

Warning
If an error occurs in the heating controller, the room unit will beep twice and the symbol will flash. When the error stops, the symbol remains lit until the error is read in the error list.

Activation of the safety function of the heating controller.
The room unit beeps once long and the symbol starts flashing. When the error stops, the symbol lights up until the error is read in the error list.

Low temperature in the thermal store.
The room unit beeps twice briefly and the symbol starts flashing. When the error stops, the symbol lights up until the error is read in the error list.

Low temperature in the boiler.
The room unit beeps twice briefly and the symbol starts flashing. If the temperature drops below the minimum temperature, the unit beeps 3 times briefly and the symbol lights up.
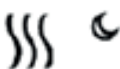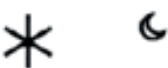
Warning of low pellet supply.
The room unit beeps 3 times briefly and the symbol starts flashing.

Keyboard lock.

The alarm sound is repeated at 20:00 if alarms or warnings are still present. (See settings P1.8 and P1.9.)

§§§   Heating mode.

✳   Cooling mode.

§§§✳   Heating to day temperature.

§§§ ☾   Heating to night temperature.

✳ ✳   Cooling to day temperature.

✳ ☾   Cooling to night temperature.

§§§ AUTO OFF   Automatic heating switch-off - summer mode.

🍸   PARTY function is active.

ECO   ECO function is active.

🧳   HOLIDAY function is active.

🚰   Hot water heating.

🚰 ON   DHW heating permanently on.

1x 🚰   One-time DHW heating.

🚰 LEG   Active protection against Legionella.

⏻   Heating circuit switched off. (Frost protection can be activated.)

⌂ OFF   Manual boiler shutdown.

5. Location Selection

Place the room unit (using the screws provided) on a wall in the reference room to a height of about 150 cm. Avoid installing in areas where the sensed temperature is undesirably affected as indicated in the fig.:
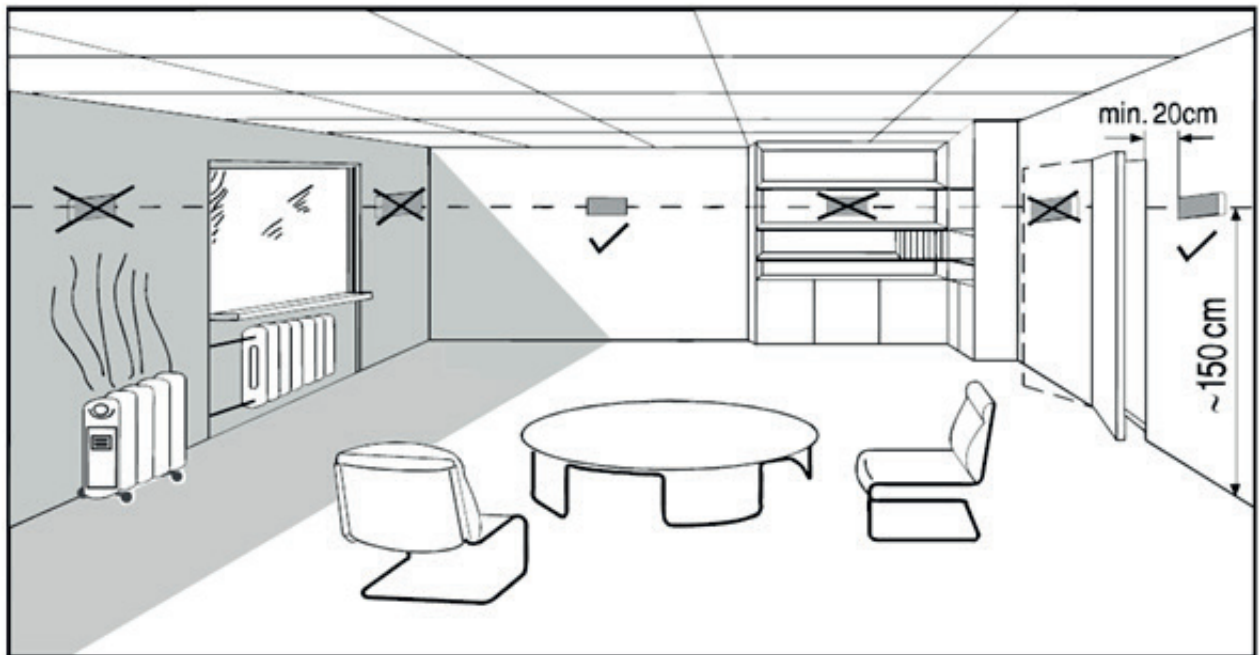
6. Dimensions
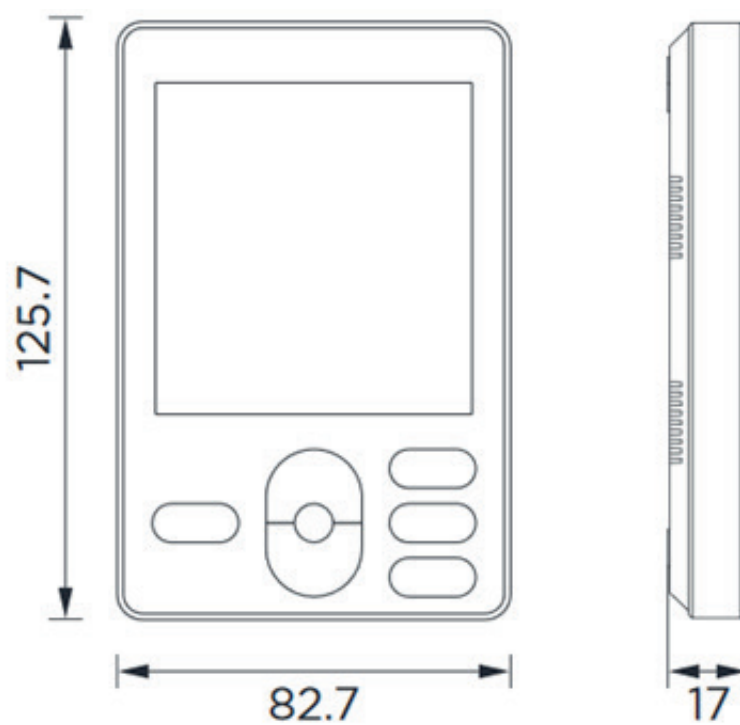
7. Connection to AHC 40 actuator

To connect the RCD2 room unit to the AHC 40 actuator, a two-core cable **with a white and red wire** is used.

The cable has a connector at one end for connection to the **COM** port of the adapter that is also included in the actuator package.
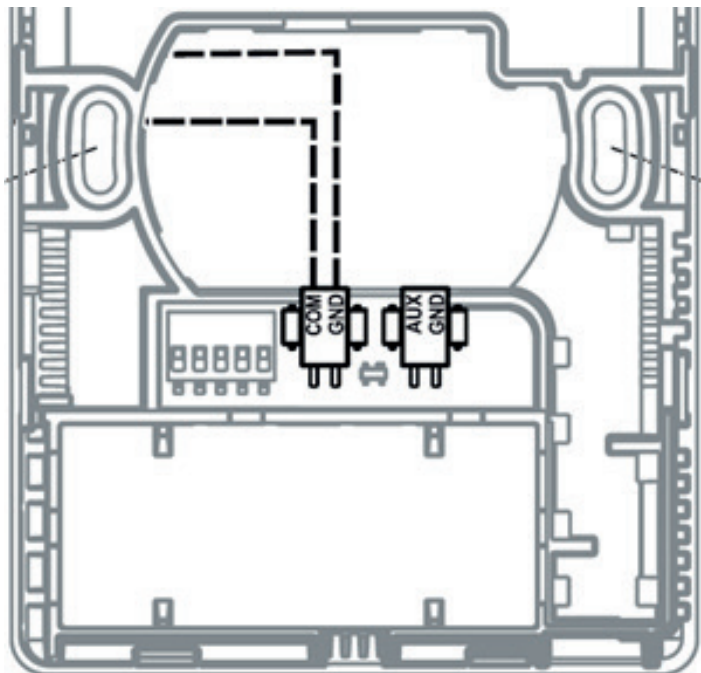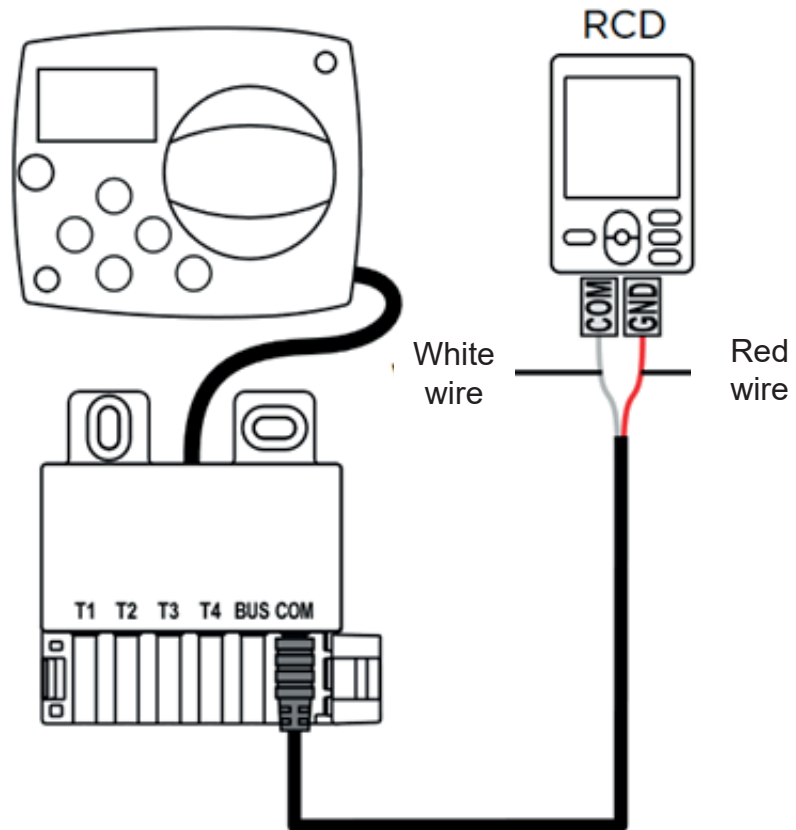
Connect the white and red wires to the **COM** and **GND** terminals of the RCD2 room unit from the rear of the unit.

When the power to the valve is turned on, the display of a properly wired room unit will show „conn".

8. Error Messages, Default Settings

Error	Description
Er1	Room sensor error
Er2	Auxiliary sensor error
Er3	External sensor error
Er4	DHW sensor error
conn Err	Connection error

Press and hold the „i" button for 40 seconds to return to the default values. (The default values are marked in bold in the table.) Press the „i" button for 2 seconds to enter the parameter editing menu. Use the „**+**" and „**-**" buttons to make adjustments and confirm with the „i" button.

Parameter	Description	Range
P1.1	Temperature rounding	0 – 0,1°C 1 – 0,2°C **2 – 0,5°C** 3 – 1,0°C
P1.2	Automatic return to home screen time	3 – 180 s (**15**)
P1.3	Time to switch off display backlight	10 – 180 s (**30**)
P1.4	Display backlight operating mode	0 – 3 (**2**)
P1.5	Minimum display backlight	0 – 100 % (**5**)
P1.6	Maximum display backlight	0 – 100 % (**80**)
P1.7	Display contrast	1 - 8 (**6**)
P1.8	Sound signals	0 – none 1 – keys 2 – keys and warnings **3 – keys, warnings and alerts**
P1.9	Warnings	0 – none 1 – warnings **2 – warnings and alerts**
P1.10	Basic display	**1 – room temperature** 2 – outdoor temperature 3 – DHW temperature 4 – humidity 5 – air pressure 6 – auxiliary sensor 7 – air quality 11 to 22 - temperature sensors

Parameter	Description	Range
P1.11	The first value in the information line	0 – no display 1 – room temperature **2 – outdoor temperature** 3 – DHW temperature 4 – humidity 5 – air pressure 6 – auxiliary sensor 7 – air quality 11 to 22 - temperature sensors
P1.12	The second one	Identical to parameter P1.11 (**3**)
P1.13	The third one	Identical to parameter P1.11 (**4**)
P1.14	The fourth one	Identical to parameter P1.11 (**5**)
P1.15	The fifth one	Identical to parameter P1.11 (**0**)
P1.16	The sixth one	Identical to parameter P1.11 (**0**)
P1.17	The seventh one	Identical to parameter P1.11 (**0**)
P1.18	Number of information items on the home screen	1 – 9 (**1**)
P2.1	Unit address	**0 – automatic** 1 – 1 2 – 2
S1.2	Room temperature	0 – none **1 – built-in sensor** 2 – auxiliary sensor (AUX) 3 – built-in and auxiliary sensor
S1.3	Calibration of the built-in temperature sensor	-5.0 to 5.0 °C (**0,0**)
S1.4	Calibration of the auxiliary temperature sensor	-5.0 to 5.0 °C (**0,0**)
S1.5	Humidity sensor calibration	-10,0 to 10,0 °C (**0,0**)
S1.6	Air pressure sensor calibration	-100 to 100 mbar (**0,0**)
S1.7	Air quality sensor calibration	-1000 to 1000 (**0,0**)
S1.8	Light sensor calibration	0.5 – 2 (1)
S1.9	Parameter group setting lock	0 – no lock **1 – S1** 2 – P1, P2 a S1
S1.10	Keyboard lock	**0 – no lock** 1 – mode 2 – mode and functions
S1.11	Minimum adjustable room temperature	4 – 40 °C (**6**)
S1.12	Maximum adjustable room temperature	4 – 40°C (**30**)
S1.13	Room temperature ignoring time (Fireplace function)	1 – 12 h (**5**)
S1.14	Altitude (for more accurate weather forecast)	0 – 1999 m (**300**)

9. IMPORTANT INFORMATION ON DISPOSAL IN COMPLIANCE WITH THE EUROPEAN DIRECTIVE 2002/96/ES

Do not dispose of this product as unsorted municipal waste. Please dispose of this product by returning it to the point of sale or to your local municipal collection point for recycling.

Respecting these rules will help to preserve, protect and improve the quality of the environment, protect human health and utilize natural resources prudently and rationally.

The crossed out wheeled bin with marking bar, printed ether in the Manual or on the product itself, identifies that the product must be disposed of at a recycling collection site.

WEEE registration number:
02771/07-ECZ