OEM LCD Thermostat: Control Wireless 868 MHz RD 50112 CF

The OEM LCD Thermostat: Control Wireless 868 MHz is a room thermostat which serves - in conjunction with the OEM Basis Wireless as receiver unit and the OEM actuators as actuating elements - for the individual temperature control of heating systems and heating/cooling systems.

The Control Wireless has a display surface of 42 x 27 mm; it is operated via three sensor buttons. Temperature pre-selection via sensor buttons is in 0.5 degree steps. The sensor buttons allow the setting of the desired operating mode (DAY, NIGHT or AUTOMATIC). The energy saving times can be programmed in the memory "M". If the thermostat is not operated, the current ACTUAL temperature is displayed always.

The system component OEM Wireless Control is equipped with the modern, safe and innovative 868 MHz technology, enabling longer ranges and being less sensitive to interference.

Features

OEM LCD Thermostat Wireless
- LC display (42 mm x 27 mm)
- Handling via three sensor buttons
- Wireless communication to the OEM Basis
- 868 MHz technology
- Temperature selection in 0.5 degree steps
- Operating mode menu for Day, Night, Automatic, timer programming
- Precise control response
- Functional design
- Wireless, battery-operated
- Wall installation

Control functions
- Block-wise programming: Week, week day and weekend
- Daily programming (4 switching events per day)
- 28 memory locations (14 ON and 14 OFF switching events)
- The programming of the energy saving times is kept in memory

OEM System Wireless
- Narrowband receiver and transmitter
- Protective circuit in case of a failure of an OEM Thermostat Wireless, e. g. weak battery
- Automatic release of the First-Open function after switching on
- Error signal in case of missing radio signal, weak battery and weak reception signal
- LED for function monitoring

Application

- Individual room control, specially designed in connection with surface, radiator and convector heating systems.
- The advantage of this wireless system is the high flexibility during the new construction or the redevelopment of buildings. Installation is very easy as the thermostats do not require the laying of cables.
- Heating and cooling with a single system

General information

Type designation
RD 50112 CF Control Wireless 868 MHz

Scope of supply
1 x RD 50112 CF
1 x Battery: Button cell (CR2032, 3 V)
1 x Installation instructions (11 languages)
1 x Manual for the LC display (6 language packages with 2 languages each)

Note: Manuals in the languages: DEU, ENG, DAN, NOR, SWE, FIN, FRA, ITA, NLD, SPA, RUS

Ordering information
Our staff will be glad to assist you in finding the OEM Thermostat fitting your application.
Call us under: +49 (0) 53 41/84 75 – 0

Functions

The OEM LCD Thermostat: Control Wireless 868 MHz with LCD serves for individual room temperature control. It includes a battery-powered radio transmitter which transmits the operating data, the actual temperature and the set target temperature to the OEM Basis Wireless 868 MHz for control purposes.

The coding specified by the OEM Thermostats Wireless guarantees exclusive communication with the allocated channels of the OEM Basis Wireless.

Sensor buttons
The desired operating mode as well as the target temperature are selected with the three sensor buttons.

Operating modes
The normal operation "DAY", the mode "NIGHT" (e. g. for night operation), as well as the timer-controlled operating mode "AUTOMATIC" are available as operating modes. In the latter operating mode, the OEM Thermostat Wireless only regulates according to the set energy saving times/Night (memory "M"). Signals from external clocks connected to the OEM Basis Wireless will not be considered.

Control functions
When the battery is inserted, the device prompts the entry of the weekday and the time. The energy saving times (operating mode "AUTOMATIC") can be programmed per day, per week (Mo-Su), per weekday (Mo-Fr), or per weekend (Sa&Su).
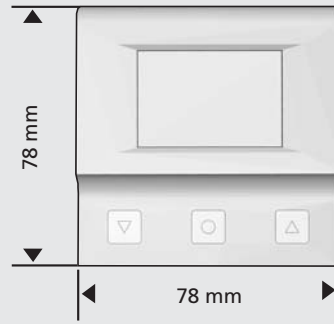

LC display

Operating panels

Sensor buttons

Locking device

![Möhlenhoff logo] **Möhlenhoff**

Technical data

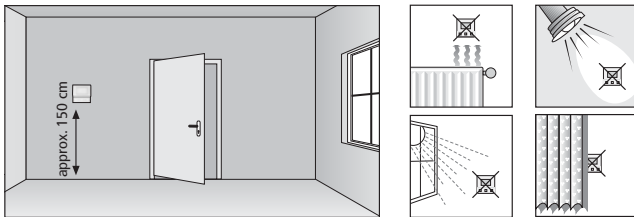| Type	RD 50112 CF
Temperature setting range	8 °C to 30 °C
Battery type	CR 2032, 3V
Battery lifetime	approx. 2 years
Radiated power	< 1 mW
Operating modes	DAY, NIGHT, AUTOMATIC
Transmitting interval	9 – 10 Min.
Temperature measurement	+/- 0,5 K at 17-24°C
Ambient temperature	0 °C to 50 °C
Storage temperature range	-25 °C to +65 °C
Relative humidity	max. 80%, not condensing
Protection type	IP 20
Casing material	ABS
Housing colour	Upper part: pure white, lower part: grey
Dimensions LC display (in mm)	42 x 27
Memory locations	4 per day
Weight	82 g
Dimensions (H/W/D in mm)	78 / 78 / 30

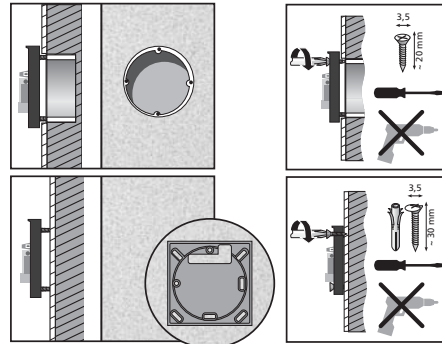| OEM System Wireless	
Transmitting frequency	868.3 MHz band
Coverage inside buildings	approx. 30 m
Radio test	ETS 3002 20-3
EMC test	EN 301489-3
Hunting	approx. 0.2 K
Receiver sensitivity	-107 dbm
Heating programs (optional)	2
Adjustable temperature difference for reduced operation	4 K (can be configured with RC Inspector)
Operation in Economy mode	from 2 K to 6 K in 0.1 K)

78 mm

78 mm

30 mm

Installation

Place of installation

Note!
In order to ensure a trouble-free and thus optimum control operation, a room thermostat should be installed in a quiet zone - free from environment influence as draught, humidity, direct sunlight exposure or other sources of heat. Otherwise it may occur that the set room temperature is exceeded or not achieved, depending on the respective environment influence.

approx. 150 cm

Installation note

Unlatch the lock by means of a small screwdriver and remove upper part of casing. Align the lower part of the casing at its mounting position and tighten the screws by hand.

3,5 ~20 mm

3,5 ~30 mm

Assignment of heating zones

1 Press the Set button at the OEM Basis Wireless for 3 seconds.

2 When the heating zone 1 LED flashes quickly (every 0.15 sec.), release push-button. (LED will flash for 3 minutes).
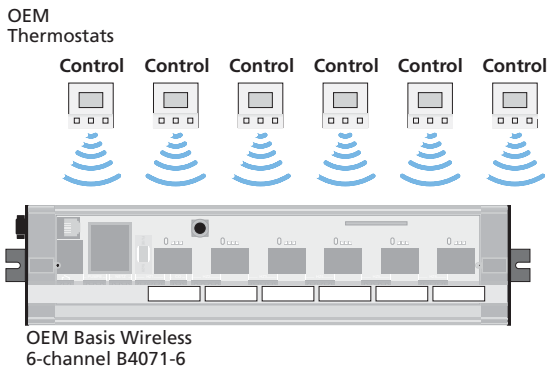
3 SET — The selected thermostat (room) will be assigned to the heating zone of the OEM Basis by shortly pressing the SET button on the circuit board of the OEM Thermostat Wireless.

4 The LED stops flashing when the assignment is complete. Press pushbutton several times if required.

Example of assignment

OEM Thermostats

Control	Control	Control	Control	Control	Control

OEM Basis Wireless
6-channel B4071-6

Assignment example in case of external clock

OEM Thermostats

Heating Program K2   Heating Program K1

Control	Komfort	Komfort	Komfort	Komfort	Komfort

OEM Basis Wireless
6-channel B4071-6

K1
K2

DS 1000