#### **Technical Information**

# OEM Thermostat

# OEM LCD Thermostat: 24 V - 230 V Comfort NC RD 61112 K

The OEM Thermostat: 24 V - 230 V Comfort NC is a digital room thermostat for controlling the room temperature of floor heating systems. The thermostat can be applied universally in the operating voltage range of 24 V - 230 V.

The OEM Thermostat 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 increments. The sensor buttons allow the setting of the desired operating mode DAY, NIGHT or AUTOMATIC. If the thermostat is not operated, the current ACTUAL temperature is displayed permanently.

Installation may be performed on a flush-type box as well as to the wall. Connection and installation are installation-friendly.



# **Features**

- OEM Design
- LC Display (42 mm x 27 mm)
- Handling via three sensor buttons
- Temperature selection in 0.5 degree steps
- Permanent display of the current room temperature
- Operating mode menu for Day, Night, Automatic
- Valve protection function
- Antifreeze function 8 °C
- Version "normally closed" (NC)
- Adjustment of temperature reduction 2-6 K
- Precise control response
- Wall installation/installation to flush-type box

# **Application**

• Individual room control, specially adapted to concealed, radiator and convector heating systems.

## **General information**

Type designation RD 61112 K: OEM LCD Thermostat 24 V - 230 V Comfort NC

Scope of supply

1 x RD 61112 K

1 x Installation instructions (11 languages)

1 x Manual for the LC display (6 language packages with 2 languages

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

Connection recommendations	230 V	120 V	24 V
OEM Actuator	A 2004	A 1004	A 4004
OEM Basis without pump control	B 2012		B 4012
OFM Basis with nump control	B 2022		R 4022

Due to the wide voltage range of 24 V - 230 V it is important to consider the correct selection of devices to be connected.

# **Customer-specific version:**

Customer-specific versions are available on request

**Ordering information** 

Our staff will be glad to assist you in finding the OEM Thermostat fitting your application.

Call us under: 0 53 41 - 84 75 - 0

# **Functions**

The LCD Thermostat Control is a PI thermostat for the control of thermoelectric actuators (e. g. OEM Actuator). The output voltage is switched on or off depending on the difference between the room temperature measured by the thermostat (actual value) and the desired temperature (set value). The bigger the difference is between set value and actual value, the longer are the switching cycles. When the room temperature approaches the set temperature, the switching cycles of the output voltage are reduced and find their balance at an almost constant value corresponding to the heating power for this room.

#### 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  $\,$ only regulates according to the set energy saving times/Night (memory "M").

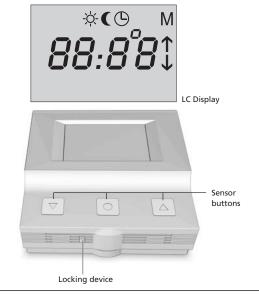
#### Valve protection function

If an actuator is not triggered during more than 14 days of normal operation, the electronic system switches the actuator for 6 minutes once every 14 days. This prevents the thermostat valves from clogging outside the heating season.

# Antifreeze protection

In order to prevent the installation from freezing during absence, the thermostat is switched to stand-by mode; this sets a target value of 8 °C.

### **Operating panels**



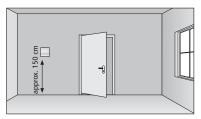


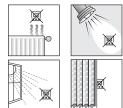
Technical data					
Туре	RD 61112 K				
Operating voltage	24 V (- 10 %) to 230 V (+ 10 %), 50/60 Hz	<b>A</b>			
Contact rating	max. 5 OEM Actuators of 2 W each				
Switched current	0,9 A at cosφ= 1; 0,5 A at cosφ= 0,5	_			
Contro range (heating zone)	8 to 30°C	78 mm			
Temperature reduction (heating zone)	2 - 6 K (adjustable)	78			
Max. target value deviation	±0,5 K				
Hunting	< 0,3 K		$\nabla$		$\Delta$
Storage temperature	-25 to +65 °C				
Relative humidity	max. 80%			78 mm	•
Degree of protection	IP 20				1
Protection class	II	_			
CE conformity according to	EN 60730				
Housing	ABS	30 mm	3:=:::		95
Housing colour	Upper part: pure white, lower part: grey	30			-
Dimensions of LC display (in mm)	42 x 27	_			
Weight	approx. 100 g				
Dimensions (H/W/L in mm)	78 / 78 / 30				

# Installation

# Place of installation

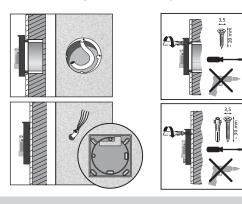
In order to ensure a flawless and optimum control operation, a room thermostat should be installed in an untroubled zone free from environmental influences as e. g. draught, exposure to direct sunlight or other sources of heat, and humidity. Otherwise it may happen that the set room temperature will be exceeded or not achieved, depending on the environmental influences.



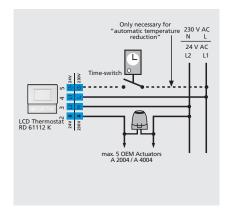


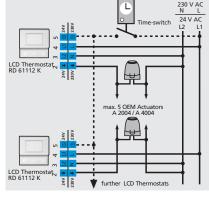
# Installation notes

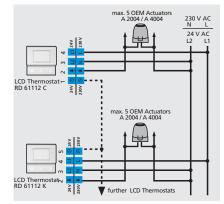
Unlatch the lock by means of a small screwdriver and remove upper part of casing. Align the lower part of the casing at its mounting position and tighten the screws by hand.



# **Electric installation**



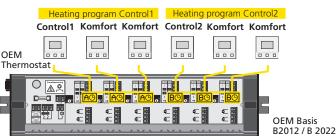




Circuit for automatic temperature reduction with OEM LCD Thermostat Comfort and Control.

admissible with our approval.

124654 1050, Reprint, including partial reprint, only



Wiring at the connection unit OEM Basis (e. g. B 2012) in combination with four OEM LCD Thermostats Comfort and two **OEM LCD Thermostats Control.** 

