

## 1. Utilisation purpose

This product is for...

- The connection of a maximum of 14 actuators and 12 room thermostats, one timer, one pump, one boiler, one CO signaling unit, and one humidity sensor with potential-free contact
- The use in surface heating or surface cooling systems in new constructions as well as for the refitting of residential and commercial buildings,
- Exclusively stationary installations near the heating circuit distributor.

## 2. Technical data

Nominal voltage	230V/50Hz $\pm$ 10%
Thermostat types	CRCA-00/06; CRCA-00/07
Valve drive types	CHVZ-01/01
Protection type	IP20
Protection class	II
Power input	50VA max
Dimensions (H/W/L)	40 x 74 x 326 mm
Pump switching output	230 V / 200 W
Fuse	T4AH
Dew point sensor input	Connection for potential-free contact

## 3. Conformity

This product corresponds to the protection requirements from the guidelines

- 2004/108/EG "Electromagnetic Compatibility"
- 2006/95/EG "Electrical Equipment"

Increased protection requirements may exist for the overall installation. The installer is responsible for complying with these.

## 4. Personnel-related preconditions

These instructions requires **special knowledge** corresponding to an officially acknowledged degree in one of the following professions:

- **Electrical equipment installer or Electronics engineer**
- **Systems mechanic for sanitary, heating and air condition technology**

## 5. Safety notes

In order to avoid danger of accidents and danger of life by electric shocks, as well as to avoid system damage:

- **De-energise the complete installation** before you perform any work on it. Unexpected dangers could arise, in particular due to **external voltage** from the installation!
- Never operate or consign the finished installation without the **cover securely fixed** with screws Lay the cables in the connection unit in a way that the cover can be closed in any way.
- Only use a **dry cloth for cleaning** the connection unit. Never clean it with water or solvents.

## 6. Installation

The connection unit is designed for direct wall mounting:

- Fix the device as desired, horizontally or vertically, in the heating circuit distribution cabinet.

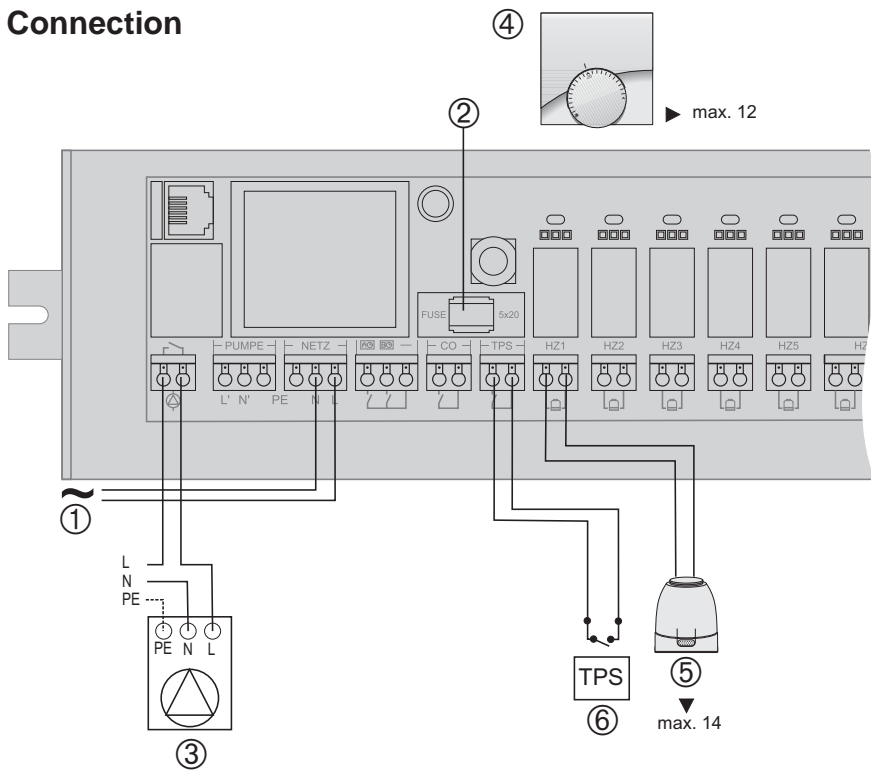
## 7. Electrical connection

The **connection terminals** are prepared for single-core and multicore copper wires with a section of 0.25 - 1.5 mm<sup>2</sup> for a stripping length of 8 - 9 mm.

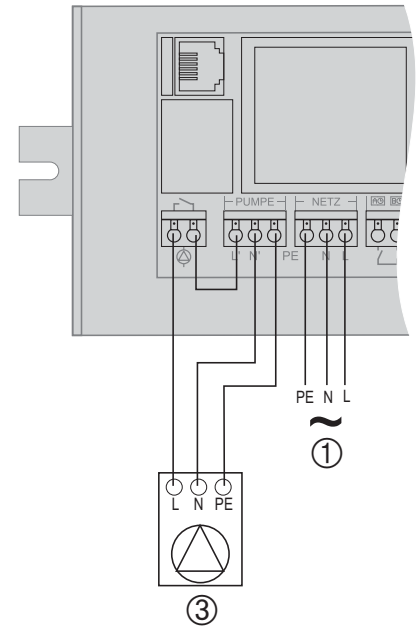
**Insertion** is performed without tools, **removal** is performed by pressing down with a flat screwdriver.

- ① Connect the **voltage supply** here. The supply line must be connected directly for the 230 V system.
- ② **Microfuse:** T4AH
- ③ With this contact you can switch a **pump** or another **electrical consumer**, e.g. a boiler. Activation can be performed equally from each room (OR logic).
- ④ You can assign a **maximum of 12 Room controllers** to the connection unit.
- ⑤ Connect a **maximum of 14 valve** drives in this manner; zones 1 to 5 and 8 to 12 with one valve drive each. The zones 6 and 7 are prepared for the connection of 2 actuators each.
- ⑥ You can connect **dew point sensors** with potential-free contact. With the contact closed, no output is activated during cooling operation. Observe the installation notes of the sensor manufacturer.
- ⑦ If necessary, and depending on the structure of the installation, an **external receiver** (CKOZ-00/12) can be connected here.

## Connection



### Connection variant pump (only 230V)

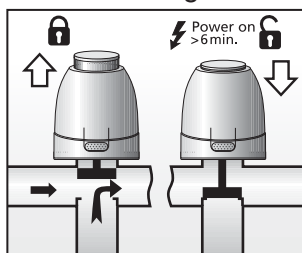


## 8. Fuse change

**Fuse ②** is located in line before the entire voltage distribution. De-energise the complete installation prior to changing the fuse.

## 9. Start up

After applying the operating voltage, all heating zones are switched on simultaneously for 8 minutes. During this time, the first-open function of the connected actuators is unlocked (all LEDs light up). Already now, the wireless connection unit is ready for the assignment of the heating zones.



## 9.1 Assignment of Room controllers in Basic Mode

1. Keep the programming button pressed for five seconds in order to bring the heating actuator to the programming mode,
2. Until the LED of zone 1 flashes rapidly, then release the pushbutton
3. You can choose the desired zone by pressing (<0.5s) the programming button again.
4. The programming mode of the selected zone is active for 3 minutes
5. Press the ECO button on the Room controller (from moon to sun) within 3 minutes in order to send the assignment signal. After a successful

assignment, the flashing stops and the room changes to normal operation / regulation mode.

6. If no assignment signal will be received by the heating actuator within 3 minutes the programming mode will be closed automatically.
7. Repeat steps 1 to 5 in order to assign more Room controllers.

## 9.2 Delete a Room controller selective in Basic Mode

1. Keep the programming button pressed for five seconds in order to bring the heating actuator to the programming mode,
2. Until the LED of zone 1 flashes rapidly, then release the pushbutton
3. You can choose the desired zone by pressing ( $<0.5s$ ) the programming button again
4. The programming mode of the selected zone is active for 3 minutes
5. Press the ECO button on the Room controller (from sun to moon) to delete the assignment of the Room controller to the selected zone. After a successful deleting of the assignment, the flashing stops
6. If no deletion signal will be received by the heating actuator within 3 minutes the programming mode will be closed automatically.
7. Repeat steps 1 to 5 in order to delete more Room controllers.

### 9.3 Deleting all settings (set back to factory settings)

1. Keep the programming pushbutton pressed for 5 seconds

2. As soon as the LED of zone 1 flashes in the programming mode, release the pushbutton.
3. Press the programming button again and keep it pressed for 15 seconds
4. After 10 seconds the LEDs of all heating zones start flashing rhythmically. Another 5 seconds later, the LEDs go out.
5. Release the programming button. After successful deletion, the heating actuator is again in the status of delivery.

#### 9.4 Assignment in Comfort Mode

In the Comfort Mode you can assign Room controllers or central devices as the Room-/Home-Manager or the Communication interface to the heating actuator.

#### 10. Pump activation

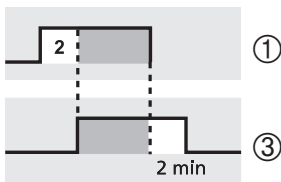
- OR logic with all outputs
- Suppression of switching impulses < 2 min in all operating modes
- Follow-up time of 2 min after the end of the activation

Impuls  $\text{—} \text{—} \text{—} < 2 \text{ min}$



- ① 1. Input impulse from the thermostat
- ② 2. No output signal from relay
- ③ 3. Relay output signal

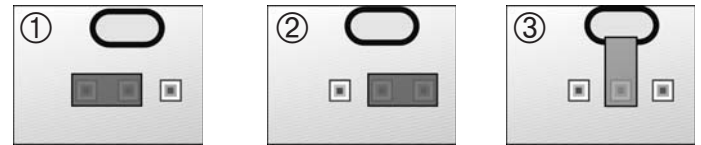
Impuls  $\text{—} \text{—} \text{—} \geq 2 \text{ min}$



#### 11. Blocking the heating or cooling operation

Only in single circuit systems is the heating/cooling application possible in conjunction with the radio system. It is possible to block individual rooms by means of jumpers.

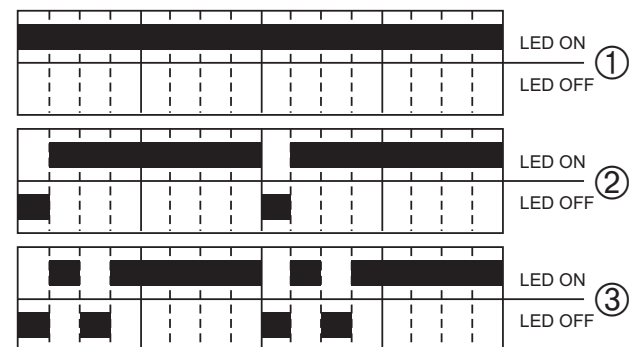
When programming a thermostat for several rooms, only the jumper position of the room with the lowest value is considered.



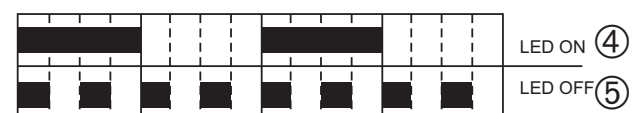
1. Cooling mode blocked
2. Heating mode blocked
3. The room participates in heating/cooling operation.

#### 12. Operation

##### LED operating statuses



##### LED ON / OFF



1. Normal operation:  
The LEDs of the zones are switched on and off according to the requirements, in the range of a few minutes.
2. Thermostat battery weak:  
The battery of the assigned Room controller is very weak. Please change the battery.
3. Weak reception signal:  
The field strength of the received signal from the Room controller is very low.  
The control may be faulty. Please change the position of the Room controller or connect an external receiver (CKOZ-00/12)
4. Emergency Mode:  
The thermostat did not receive any signals from the Room controller for at least 3 hours
5. Programming mode:  
The flashing zone is ready for the reception of a Room controller.