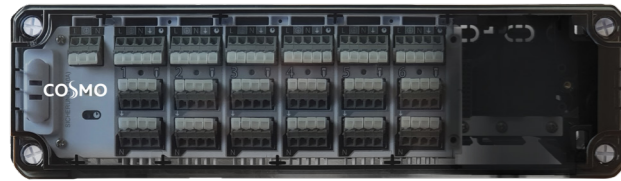


Wiring Centre 230V

Model: **CKL6230N**



Quick Guide

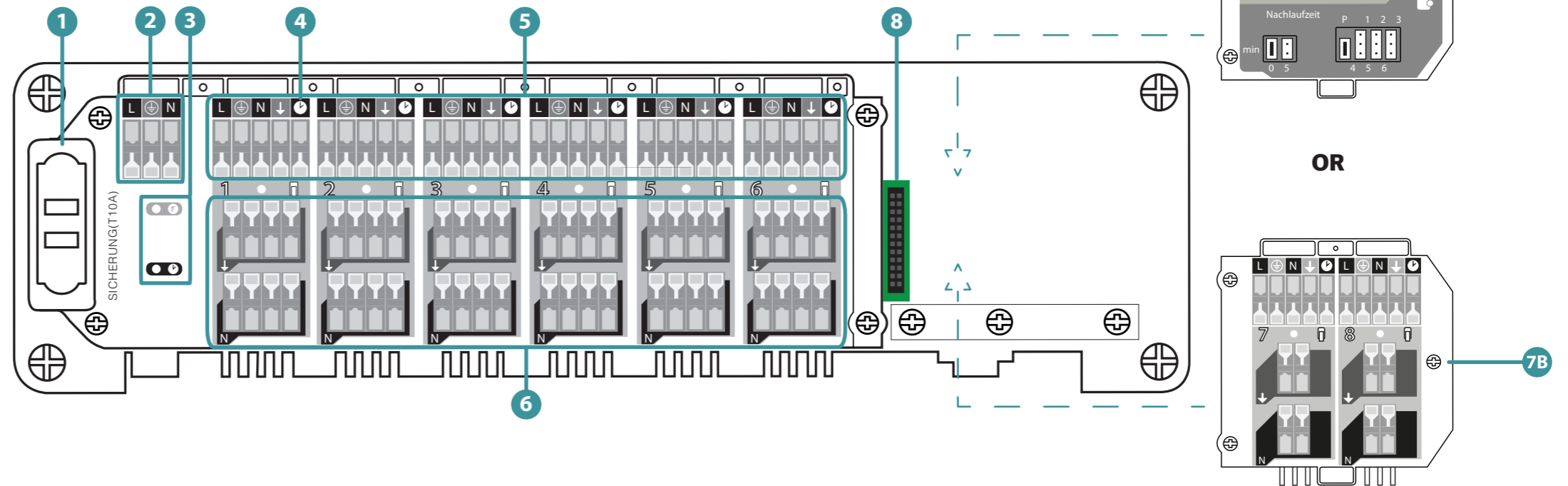
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V003



WIRING CENTRE DESCRIPTION

1. Cartridge fuse 5 x 20 mm 10 A
2. Power Supply
3. LED Diodes
4. NSB (Night Set Back reduction) function
5. Thermostats connection
6. Actuators connection
- 7A. **CKPL** - pump logic module (optional)
- 7B. **CKZM** - 2-zone extension module (optional)
8. Serial connector for **CKPL** and **CKZM** modules



INTRODUCTION

The **CKL6230N** wiring centre allows easy and quick connection of thermostats and actuators due to screwless, push type terminals.

It has a serial connector for additional modules (sold separately):

- **CKPL** Pump Logic Module
- **CKZM** 2-Zone Extension Module

The **CKL6230N** wiring centre is adapted to work with all type of thermal (e.g. **CTS230**) and electronic (e.g. **STH230**) actuators and maximum 6 thermostats.

PRODUCT COMPLIANCE

This product complies with the essential requirements and other relevant provisions of Directives: EMC 2014/30/EU, LVD 2014/35/EU and RoHS 2011/65/EU.

SAFETY INFORMATION

Use in accordance with the regulations. Indoor use only. Keep your device completely dry. Disconnect your device before cleaning it with a dry cloth. This accessory must be fitted by a competent person, and installation must comply with the guidance, standards and regulations applicable to the city, country or state where the product is installed. Failure to comply with the relevant standards could lead to prosecution.

Before any of operation related to power supply (connecting wires, installing the device, etc.), make sure that **CKL6230N** is not connected to any power source. Incorrect connection of the wires may cause damage to the wiring centre. The **CKL6230N** cannot be used in conditions of water vapor condensation neither exposed to water.

TECHNICAL INFORMATION

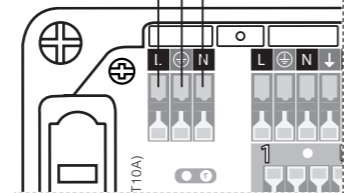
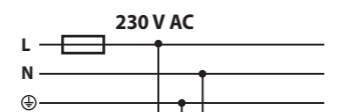
| | |
|-----------------|---------------------------------|
| Power Supply | 230 V AC 50 Hz |
| Max load | 10 A |
| Outputs | Terminals for actuators (230 V) |
| Dimensions [mm] | 330x92x65 |

1. FUSE

Note: Fuse replacement should be done when the wiring centre is disconnected from power supply 230 V AC.

The mains fuse is located under the housing cover, next to main terminals and protects the wiring centre and devices powered by it. Use cartridge slow blow type (5 x 20 mm) with nominal max current 10 A. To remove the fuse, lift the socket with a flat screwdriver and pull out the fuse.

2. POWER SUPPLY



Power supply for wiring centre is 230 V - 50Hz.

- Features:
- three-wire installation,
 - made in accordance with applicable regulations.

3. LED DIODES

- green LED diode indicates power supply connection (230 V AC)
- yellow LED diode indicates NSB function being activated

4. NSB (NIGHT SET BACK REDUCTION) FUNCTION

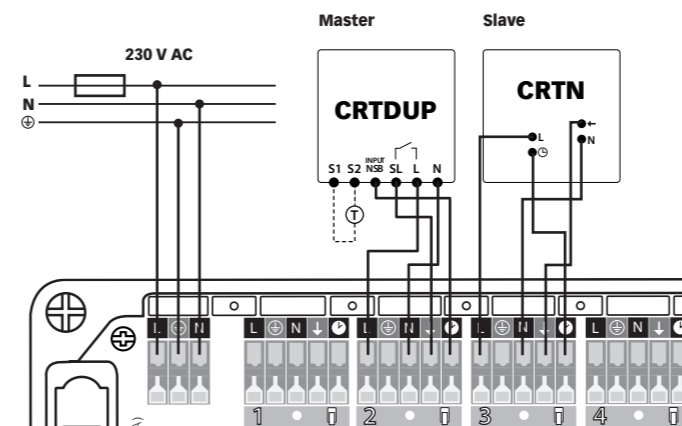
NSB function is activated in non-programmable **Cosmo** thermostats via external signal. NSB 230 V signal (night-time temperature reduction) is sent via an external timer or programmable thermostat connected to the **CKL6230N** wiring centre. Non-programmable thermostats are receiving NSB signal and reducing setpoint temperature (by switching to eco mode). All thermostats have to be connected using a 4-wire cable (min. 4 x 0,75 mm², max. 4 x 1,5 mm²).

Additionally, this connector can be used to handle the CO-input signal coming from the heatpump. Wire up the thermostats with CO-Contact (e.g. **CRTDAP**) and there will be automatic switch from Heating to Cooling:
CO Signal 0V -> Heating Control
CO Signal 230V -> Cooling Control

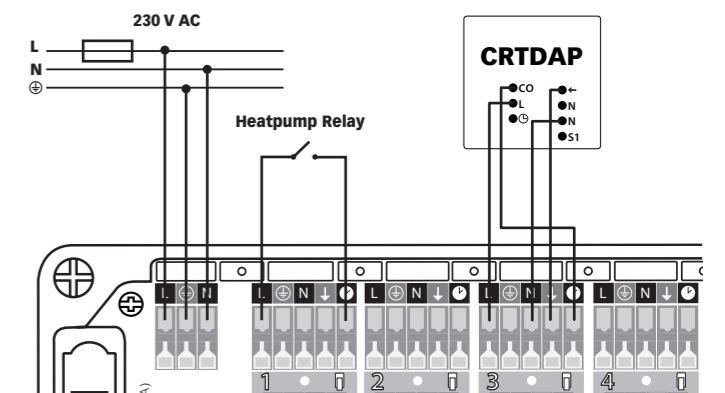
5. THERMOSTATS CONNECTION

Note: Interchangeable signifying: ↑ = SL
⊕ = NSB

CONNECTING CRTDUP

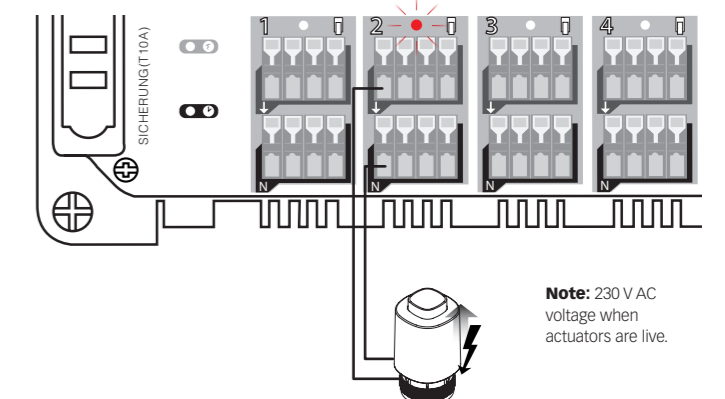


CONNECTING CRTDAP



6. ACTUATORS CONNECTION

The actuator wires should be secured with the self locking connectors in the appropriate zone. Up to 4 thermal or electronic actuators can be connected to a single zone. The ↓ pins are the actuator active control connection to thermostat output, while the N pins are the neutral connection to actuators.



Note: 230 V AC voltage when actuators are live.

7A. CKPL PUMP LOGIC MODULE (OPTIONAL)

CKPL module extends the functionality of the **CKL6230N** wiring centre. The module is used to control the pump using N / E / L contacts. It helps to save electrical power. Whenever there is no heat demand, the pump will be unpowered and not wasting any energy.

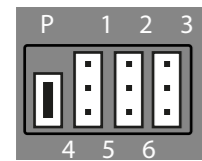
JUMPERS 0-5



These are used to set in minutes the delay time (overrun time). Default setting is „0“.

0-5 values specify the time in minutes. E.g. when jumper is set to value „0“, the module will turn off as soon as the thermostats stop calling for heat. If jumper will be set to the value „5“, the module will turn off 5 min after the thermostats stop calling for heat.

JUMPERS P, 1, 2, 3, 4, 5, 6

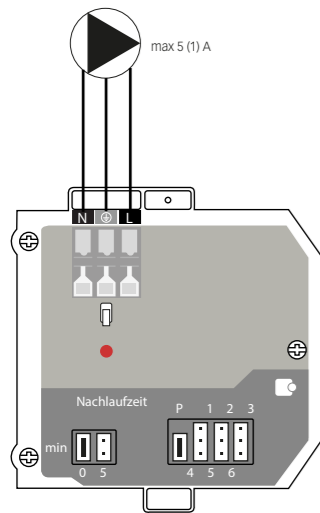


They are used to select the zone which turns on the module. Default setting is „P“.

P – all zones start the module

1, 2, 3, 4, 5, 6 – select the specific zone which turns on the module.

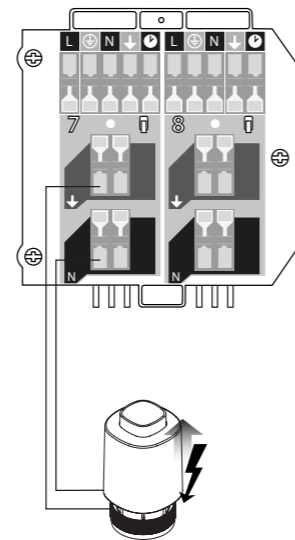
PUMP CONTROL



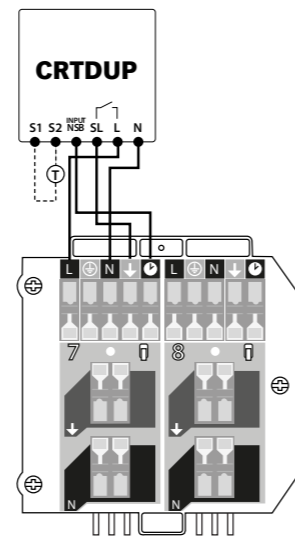
| | |
|-----------------|----------------------------------------|
| Power Supply | from the CKL6230N wiring centre |
| Max load | 5 (1) A |
| Dimensions [mm] | 80 x 80 x 20 |

ACTUATORS CONNECTION

Wires of the thermoelectric actuators should be plugged into the self-locking connectors in the appropriate zones. You can connect 2 actuators directly to one zone.



THERMOSTATS CONNECTION: CRTDUP EXAMPLE



| | |
|-----------------|----------------------------------------|
| Power Supply | from the CKL6230N wiring centre |
| Max load | 0.5 A |
| Dimensions [mm] | 80 x 80 x 20 |

INSTALLATION

Note: Before installing the **CKL6230N** wiring centre, make sure it is disconnected from the main power.

- Remove the top cover of the wiring centre.
- Unscrew the main housing (see picture).
- Mount the back side of the housing to the wall. When mounting on a DIN rail, open the hooks on the back of the housing.
- Remove the appropriate pieces of insulation from the wires.

Wires for actuators
 (min. 2 x 0,75 mm² 230 V
 max. 2 x 1,5 mm² 230 V)

Wires for pump control and power supply
 (min. 3 x 1,0 mm² 230 V
 max. 3 x 1,5 mm² 230 V)

Thermostats wires
 (min. 4 x 0,75 mm² 230 V
 max. 4 x 1,5 mm² 230 V)
- Thread the wires under the mounting belt in the back part of the wiring centre.

Set includes supplementary accessories (to support installation proces).
- Thread the wires through the slots in the top part of the wiring centre and connect it to the terminals.
- Adjust the wires and screw the main housing of the wiring centre to the rear housing.
- Connect the thermoelectric actuators wires.
- Make sure that all the wires are properly connected, mount top cover and power up the wiring centre - the green „Power“ indicator LED will illuminate.

7B. CKZM 2-ZONE EXTENSION MODULE (OPTIONAL)

CKZM module extends the functionality of the **CKL6230N** wiring centre. The module consists of 2 additional zones with the possibility of connecting 2 actuators to each one.

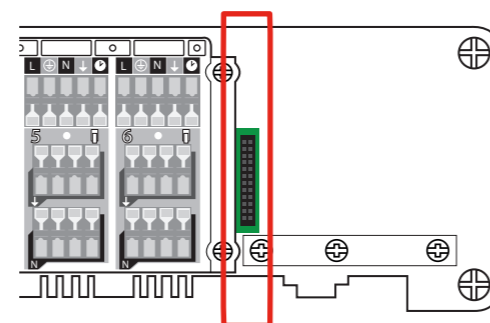
TERMINALS DESCRIPTION

| TERMINAL | DESCRIPTION |
|----------|---------------------------------------------------------|
| L | Live to thermostat |
| ⊕ | Earth connection to thermostat |
| N | Neutral to thermostat |
| ↓ | Thermostat load demand output |
| ⌚ | Night Set Back / CO contact |
| ↓ pins | Actuator active control connection to thermostat output |
| N pins | Neutral connection to actuators |

8. SERIAL CONNECTOR FOR CKPL AND CKZM MODULES

It provides communication between the **CKL6230N** wiring centre and the **CKPL / CKZM** modules. **CKL6230N** wiring centre + **CKPL** module increases functionality and additionally makes possible to control pump. **CKPL / CKZM** module is powered from the wiring centre.

Note: For safety reasons, the serial connector comes with a plastic cover on top of it. In all the images illustrating **CKL6230N** in this quick guide, the serial connector is shown with the plastic cover removed.



INSTALLATION OF THE ADDITIONAL MODULE CKPL OR CKZM: CKPL EXAMPLE

Note: Before connecting **CKPL / CKZM** module, disconnect the main power from the **CKL6230N** wiring centre.

- Remove the top cover of the wiring centre.
- Connect the **CKPL** or **CKZM** module to the serial connector.
- Make sure that all the wires are properly connected, mount top cover and power up the wiring centre - the green „Power“ indicator LED will illuminate.