



Manual

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SALUS Controls is a member of the Computime Group.

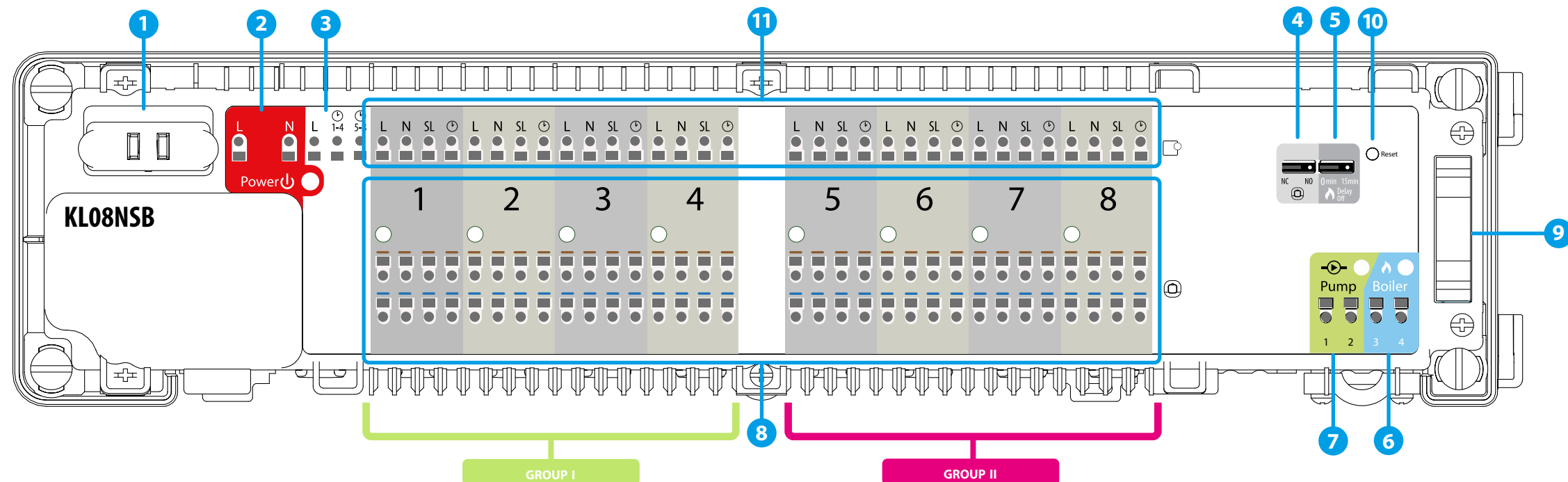
Maintaining a policy of continuous product development SALUS Controls plc reserve the right to change specification, design and materials of products listed in this brochure without prior notice.

Wiring centre description

1. Cartridge fuse 5 x 20 mm 12 A
2. Power supply
3. NSB function terminals
4. NC/NO jumper (actuator type)

5. Delay jumper
6. Boiler control output
7. Pump control output
8. Actuators connection

9. Serial connector for the KL04NSB extension
10. Reset button
11. Thermostats connection



Introduction

The KL08NSB wiring centre forms the heart of a Underfloor Heating controls system. It allows easy and quick connection of thermostats and actuators. It has integrated pump and boiler control module and overload protection. KL08NSB wiring centre is adapted to work with NC and NO type actuators (normally closed and normally open). Up to 8 thermostats can be connected to the KL08NSB, while KL04NSB extension allows to connect additional 4 thermostats (12 in total).

Product compliance

This product complies with the essential requirements and other relevant provisions of the following EU Directives: EMC 2014/30/EU, Low Voltage Directive LVD 2014/35/EU, RoHS directive 2011/65/EU. The full text of the EU Declaration of Conformity is available at the following internet address: www.saluslegal.com.

Safety information

Use in accordance with national and EU regulations. Device is intended for indoor use only in dry conditions. Product for indoor use only. Installation must be carried out by a qualified person in accordance to national and EU regulations.

Before attempting to setup and install, make sure that KL08NSB is not connected to any power source. Installation must be carried out by a qualified person. Incorrect installation may cause damage to the wiring centre. The KL08NSB should not be installed in areas where it may be exposed to water or damp conditions.

Technical Information

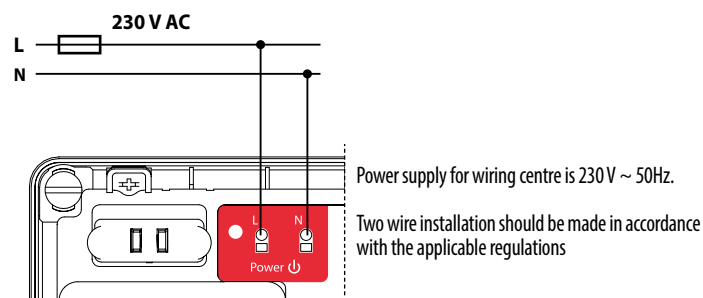
Power Supply	230 V AC 50 Hz
Total Load Max	5 A
Pump / Boiler Relay Load Max	3 A
Inputs	External clock (230 V)
Outputs	Pump control (NO/ COM) Boiler control (NO/COM) Terminals for actuators (230 V)
Dimensions [mm]	355x 85x 67

1. Fuse

Note: Replace the fuse only when the wiring centre is disconnected from power supply (230 V ~).

Main fuse is located under the housing cover next to power supply terminals and secures the wiring centre and the devices connected to it. Use ceramic tube fast blow 250 V ROHS fuses (5x20 mm) with nominal max current 12,5 A. To replace fuse remove the fuse holder with a flat screwdriver and pull out the fuse.

2. Power Supply

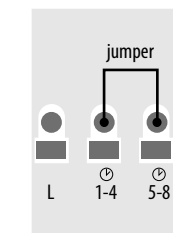


3. NSB (Night Set Back reduction) function and thermostats grouping

NSB function is activated in non-programmable Salus thermostats of the Expert NSB, HTR, BTR series via external signal. NSB 230 V signal (night-time temperature reduction) is sent via an external timer or programmable thermostat connected to the KL08NSB 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).

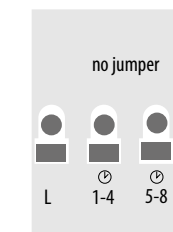
NSB function application in combination with thermostats grouping.

• OPTION 1



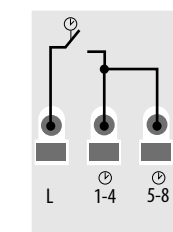
One Master thermostat which is common for thermostats from Group 1 and Group 2 (one programmable thermostat e.g. VS30, other thermostats are non-programmable e.g. VS35).

• OPTION 2



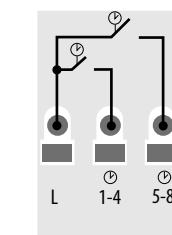
Two Master thermostats. One for Group 1 and one for Group 2 (two programmable thermostats e.g. VS30, other thermostats are non-programmable e.g., VS35).

• OPTION 3



One external clock which is common for thermostats from Group 1 and Group 2 (one external clock + daily regulators e.g. VS35).

• OPTION 4



Two external clocks. One for Group 1 and one for Group 2 (two external clocks + non-programmable regulators e.g. VS35).

4. NC/NO jumper



Select the type of the thermoelectric actuator connected to the wiring centre:
NC – actuator normally closed
NO – actuator normally opened

Note: Jumper position change must be refreshed in the memory by pressing the Reset button (short press).

5. Delay jumper

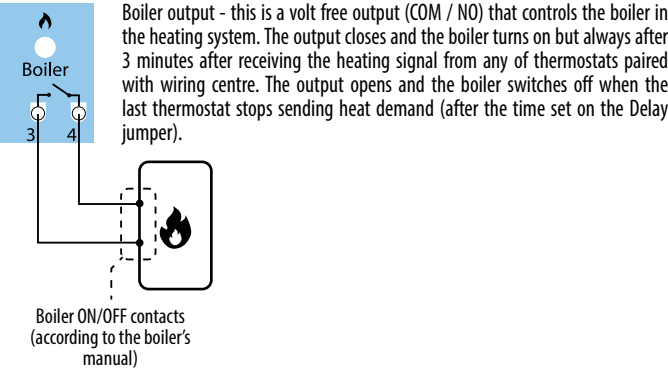


Boiler off delay time.

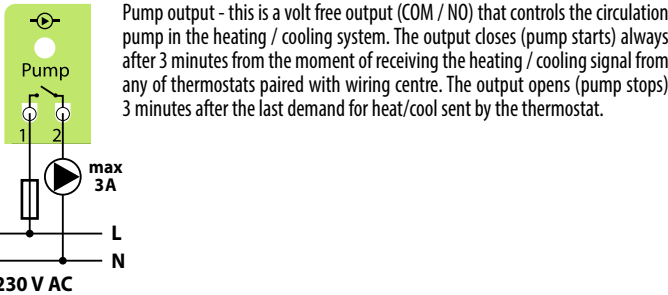
Note: Pump (Pump output) and boiler (Boiler output) always starts 3 minutes after receiving the heating signal from any thermostats connected to wiring centre. Pump stops 3 minutes after the last call for heating sent by the thermostat and the heat source (boiler) will turn off after the time set on Delay jumper.

Note: Jumper position change must be refreshed in the memory by pressing the Reset button (short press).

6. Boiler control output

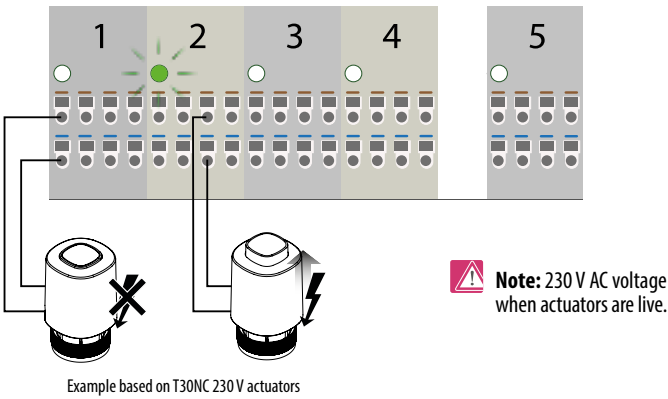


7. Pump control output



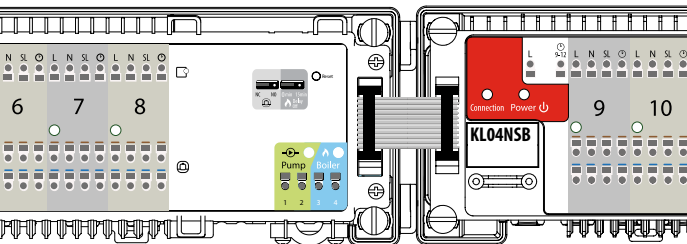
8. Actuators connection

The actuator wires should be secured with the self locking connectors in the appropriate zone. Up to 6 actuators with a load of up to 2 Watts each can be connected to a single zone. Should more than 6 actuators be required in a zone use an additional relay to relieve the output.



9. Serial connector for the KL04NSB extension

The Serial connector is used to connect the KL08NSN with the KL04NSB extension module to add functionality and support up to 12 zones.

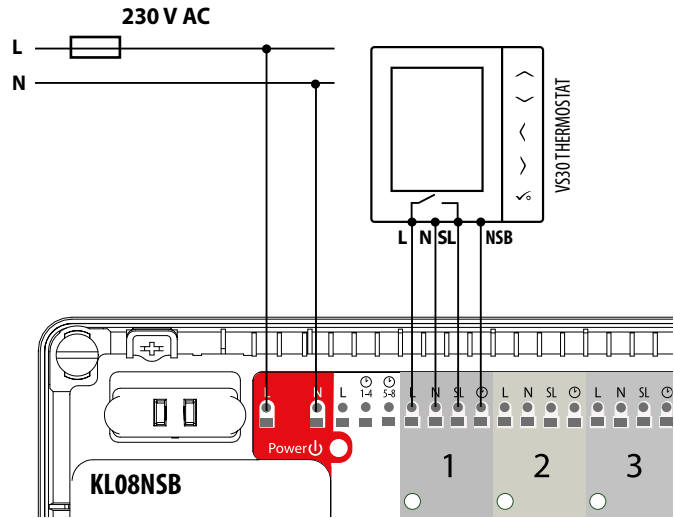


10. Reset button

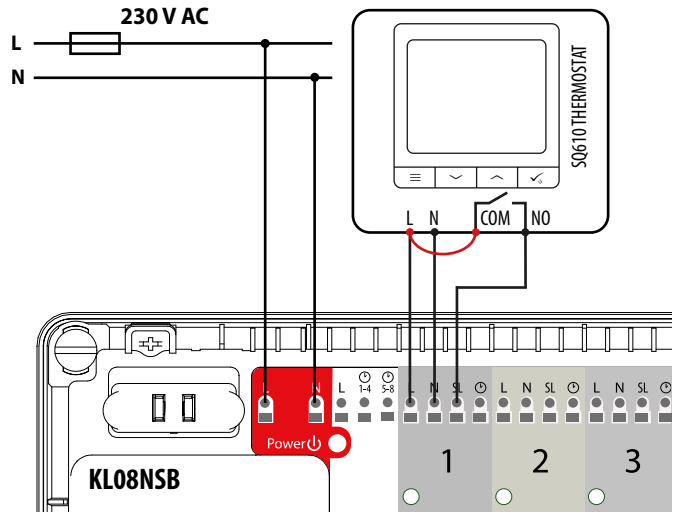
Reset - It is used to refresh the data, after switching jumpers 4 or 5.

11. Thermostats connection

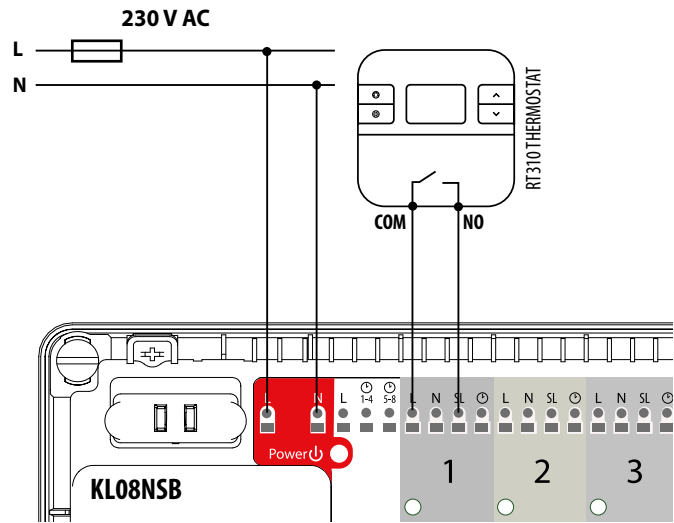
• Connecting EXPERT NSB, HTR or BTR series thermostats



• Connecting a 230 V thermostat to the KL08NSB wiring centre (e.g. SQ610)



• Connecting ON/OFF battery-powered thermostat with voltage-free COM / NO output contacts (e.g. 091FL, RT310, RT510)



L	230 V live terminal
N	Neutral
⌚	NSB function terminal
SL (↑)	230 V input signal

Note: In NSB, HTR, ERT, BTR product series follow interchangeable signifying:
↑ = SL
⌚ = NSB

INSTALLATION

