

Barnsley S75 3SP, UK.







## www.salus-controls.com

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## Introduction

The KLO4NSB is an easy to connect four zone extension for the KLO8NSB wiring centre. It expands the system to up to 12 zones 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 and 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.

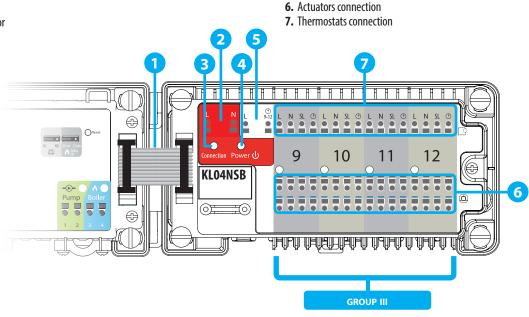
Before attempting to setup and install, make sure that the devices is not connected to any power source. Installation must be carried out by a qualified person. Incorrect installation may cause damage to the devices. The KLO4NSB should not be installed in areas where it may be exposed to water or damp. conditions.

#### **Technical Information**

Power Supply	230 V AC
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Total Load Max	3 A
Outputs	Terminals for actuators (230 V)
Dimensions [mm]	163 x 85 x 67

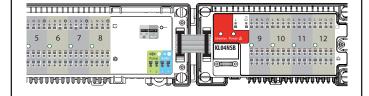
# Wiring centre description

- 1. Serial connector
- 2. Power supply
- 3. Connection indicator
- 4. Power indicator

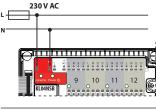


#### 1. Serial connector

The Serial connector is used to connect the KLO8NSN with the KLO4NSB extension module to add functionality and support up to 12 zones



## 2. Power Supply



Power supply for wiring centre is 230 V  $\sim$  50Hz.

Two wire installation should be made in accordance with the applicable regulations

## 3. Connection indicator



After successful connection of KLO8NSB with KLO4NSB extension module red LED will light up constantly.

#### 4. Power indicator

5. NSB function terminals



After connecting of KLO4NSB to the power supply, the Power red LED will light up.

## 5. NSB (Night Set Back reduction) function

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 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 mm<sup>2</sup>, max. 4 x 1,5 mm<sup>2</sup>).

#### OPTION 1



One Master thermostat which is common for thermostats from Group 1, Group 2 and Group 3 (one programmable thermostat e.g. VS30, other thermostats are nonprogrammable e.g. VS35).

#### OPTION 3



One external clock which is common for thermostats from Group 1, Group 2 and Group 3 (one external clock + daily regulators e.g. VS35).

#### OPTION 2



One for Group 1, one for Group 2 and one for Group 3 (three programmable thermostats e.g. VS30, other thermostats are nonprogrammable e.g., VS35).

Three Master thermostats.

#### OPTION 4



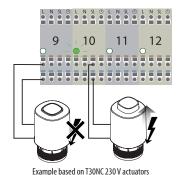
Three external clocks. One for Group 1, one for Group 2 and one for Group 3 (three external clocks + nonprogrammable regulators e.g. VS35).



**Note:** Terminals 1-4 and 5-8 are located in the KLO8NSB wiring centre, while terminals 9-12 are located in the KLO4NSB extension module.

#### 6. Actuators connection

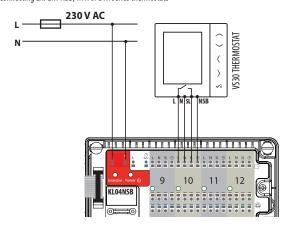
The actuator wires should be secured with the self locking connectors in the appropriate zone. Up to 6 actuators with a load of up to 2 Watts each can be connected to a single zone. Should more than 6 actuators be required in a zone use an additional relay to relieve the output.



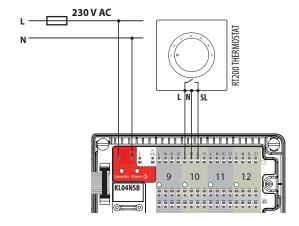
Note: 230 V AC voltage when actuators are live.

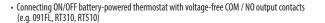
## 7. Thermostats connection

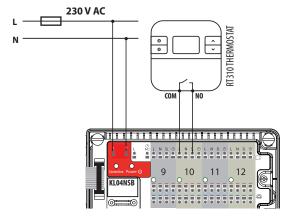
• Connecting EXPERT NSB, HTR or BTR series thermostats



• Connecting a 230 V thermostat (e.g. RT200)





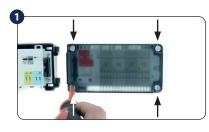


Note: In NSB, HTR, ERT, BTR product series follow interchangeable signifying:

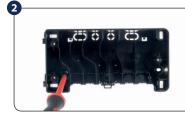
 $\uparrow$  = SL

(P) = NSB

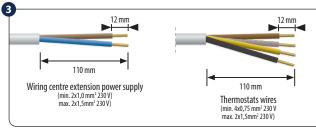
## INSTALLATION



Remove the top cover of the wiring centre extension and unscrew the main housing.



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 piece of insulation from the wires.



installation proces).









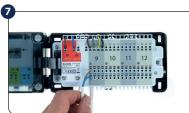
Thread the wires under the mounting belt in the back part of the wiring centre extension.



Thread the wires through the slots in the top part of the wiring centre extension and connect it to the terminals.



Adjust the wires and screw the main housing of the wiring centre extension to the rear housing.



Connect the thermoelectric actuators wires.



Connect the serial cable to the KLO8NSB and KLO4NSB connector.



Make sure that all the wires are properly connected, mount top cover and power up the wiring centre and wiring centre extension - "Power" and "Connection" red LED diodes will light up indicating the correct connection with the KL08NSB wiring centre.