

# Base station 24V 8 zones HEATING



BS-N1

# Description

BS-N1L is the central connection unit of a room-by-room temperature control for the surface temperature adjustment of heating systems, it can be adapted either on a DIN rail or directly on a wall.

BS-N1L allows to connect up to 8 room thermostats with its actuators of 24 V DC, and it also control s the boiler or heat pump through an voltage free output.

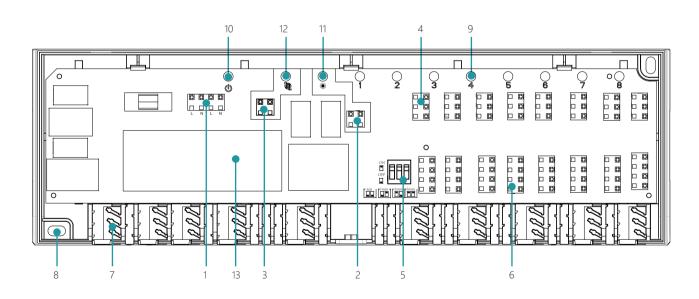
- ✓ Connects up to 8 room thermostats
- ✓ Forced start-pump
- ✓ Control over the boiler and circulating pump
- ✓ Shut-down delay

- $\checkmark$  Easy wiring and installation
- ✓ DIN rail installation
- ✓ LED working indicator
- ✓ 120s delay start for heat pump and water pump

## Technical Data

Input Voltage:AC230V±10%	Work Temp. :0 °C – 50°C
Output Voltage:DC24V±10%	Work Humidity :80%
Material:ABS+PC flame retardant	Max number of thermostat connections:8pcs
Max Load:3A Total/Each zone max. 2A	Max number of actuator connections to 1 zone: 5pcs
Fuse:5 Amp, 20mm	Approvals :CE
Control Direction:normally close	Protection Class: Class II + IP20
Boiler/Heat pump Output:Dry contact	Dimension(L*W*H): 332mm*102mm*51mm
Storage Temp. :-20°C – 70°C	Weight: 600g

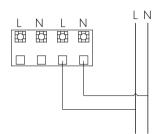
### Device overview



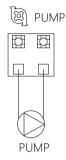
- 1. Supply 24V connection ports
- 2. Boiler/Heat pump connection ports
- 3. Circulating pump connection ports
- 4. Thermostat connection ports
- 5. Shut-down delay via dip switch
- 6. Thermal actuator connection ports
- 7. Cable trough
- 8. Easy to inistall with screw
- 9. Indicator for thermostat
- 10. Indicator for the power
- 11. Indicator for heating
- 12. Indicator for circulating pump
- 13. Transformer

# Electrical wiring diagram

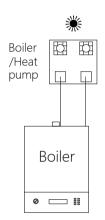
#### Power supply wiring

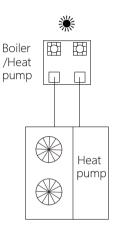


#### Pump connection



#### Boiler or heatpump connection



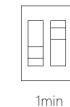


#### Shut-down delay

This function means that when the thermostats have no output in all zones, the water pump and boiler will be shut down with a delay.



30S







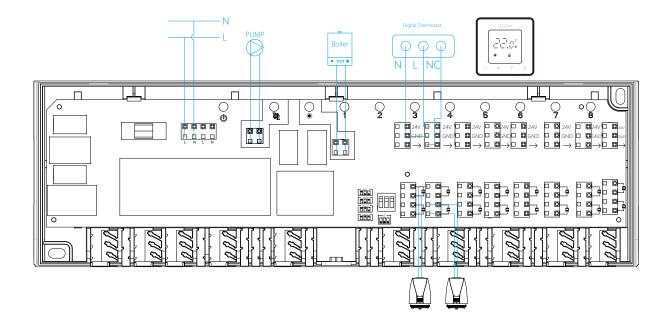
5min

#### Forced start-Pump

When the thermostats of all zones have no output within 24 hours, Base station will force the water pump to work for one minute. This function is to prevent the water pump from getting stuck when it is often not used in the non-heating season.

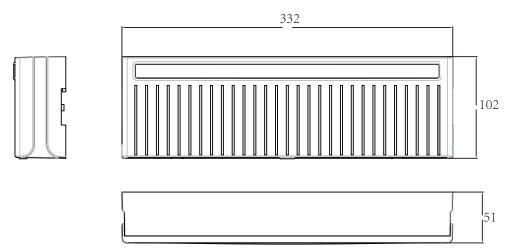


# System wiring diagram



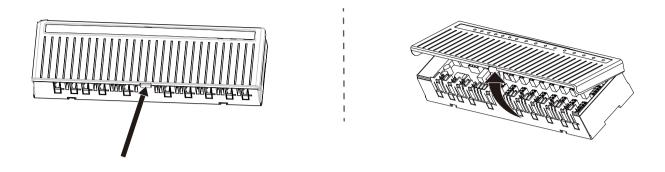
## Dimensions

unit: mm

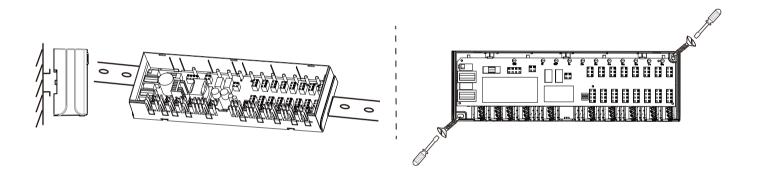


## Installation

1 Press the button to open box cover to both sides.



Base station can mount directly to the wall using the two screw holes in the back, or it can be DIN rail mounted as shown below.



3 Use cable size 0,5-1,3 mm<sup>2</sup> for solid core cable. The wires lengths should be measured according to the distance of the terminals from the cable clamp. After fixing the wires in the relative terminals, screw the screws of the cable clamp to lock the cable.

		U
	- Leisisisis	
	Ι	

4 Put the upper cover into the base along the edge of the shell and press the upper cover to make them fit well.

