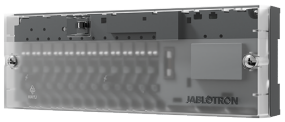
Module for controlling floor heating heads

Code: JB-128N



Unit for independent switching of up to 12 thermoelectric heads for hot water underfloor heating, heat sources and circulation pumps based on instructions from system thermostats. Easy installation directly into the floor manifold.

Product description:

Main specifications

245 x 90 x 50 mm

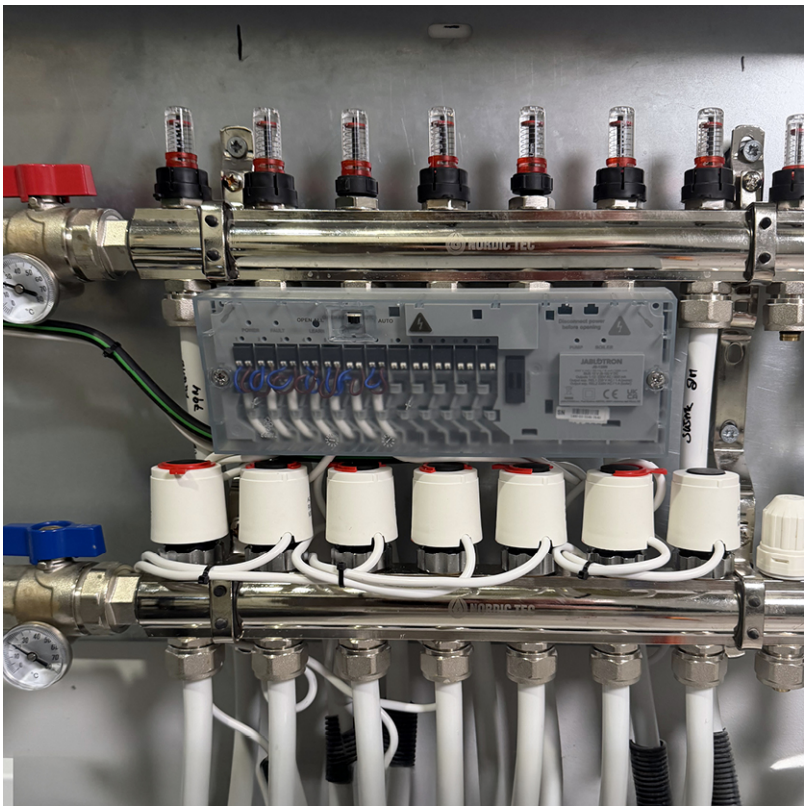
External power supply 230 V

6 mA nominal consumption from 12 V bus

1.8 A maximum consumption from 230 V

JA-103K, JA-107K

12 outputs for thermoelectric NC heads 230 V / up to 2 W
1x output for circulation pump 230 V / up to 1 A
1x output for NO control of heat source without potential (up to 230 V / 1 A)



Zone control made easy and quick

The module enables effective connection of JABLOTRON 100+ to a hot water heating system.

For the regulation of up to 12 independent circuits, 12 current-free, thermoelectric heads powered with 230 V, with a power consumption of up to 2W.

Optionally, the module can also control an auxiliary circulation pump and heat source. Both auxiliary outputs switch automatically if at least one of the circuits is heating.

Easy installation directly into the manifold

The module base is designed for easy installation using cable ties directly onto the pipes inside the underfloor heating manifold. Alternatively, it can also be mounted on a DIN rail or flat surface.

Screwless terminals and convenient fastening solutions help with efficient connection and organisation of power and communication cabling in the base. Then simply close the middle section with electronics containing output terminals for individual heads. After quickly connecting the heads with cable fastening using a labyrinth, just put on the top cover and you're done.

Jablotron schéma

Installation of JB-128N

Smart integrated functions facilitate settings

Individual outputs for heads are simply assigned to PG, which control individual thermostats when heating is required. Everything else is taken care of by the module's integrated functions:

- Adjustable delay and overlap are available for switching on the heating source and circulation pump, providing the delay necessary for opening and closing the heads. This function prevents unnecessary heating of the closed system and ensures that the circuit cools down during closure.
- To prevent the heads and circulation pump from freezing outside the heating season, the module automatically activates all outputs briefly at regular intervals.
- An external NC safety thermostat can be connected to the module, which automatically shuts down all outputs in the event of overheating of the heating water to prevent damage to the floors.
- The manual AUTO / ALL ON switch allows you to activate all outputs for manual operation even without a connected or activated control panel. This makes it possible, for example, to dry out a building or manually regulate the temperature before installing the rest of the system.

What to look out for when designing the system

As a non-alarm element, the module is not equipped with a tamper sensor. For installations requiring security grade 2 compliance according to EN 50131, the module must be connected to a dedicated control panel bus output or behind a JA-110T bus separator to protect the bus.

The module outputs are powered via the terminals of the safety NC thermostat (pair of red terminals). If the thermostat is not connected, the red terminals must be permanently connected, e.g. with a 1.5 mm² wire (up to 1 A at 230 V AC passes through the terminals) for the outputs to function.

The module requires both a system bus connection and an external 230 V power supply to operate. If the external power supply is interrupted, the module will stop communicating with the system.

To prevent current spikes, the outputs of the heads switch on gradually. When all assigned PGs are switched on together, some outputs are deliberately activated with a delay of several seconds.

Read more about construction preparation and connecting JABLOTRON 100+ to the heating system

Technical information:

Control unit:	
Supply voltage	230 V AC, 50 Hz
Power consumption of the device (without heads and pump)	max. 2.3 W / idle 0.8 W
Maximum supply current	1.8 A
Recommended protection (circuit breaker)	4A type B
Connection to the system	12 V DC (8 to 15 V) control panel bus
Thermoelectric heads	

Supply voltage	230 V AC, 50 Hz
Maximum power input	2 W
Maximum current consumption	300 mA after 200 ms
Output protection for headers	0.8 A, type T
Number of outputs	12
Safety thermostat	
NC contact load capacity	1 A / 250 V AC
Output for circulator:	
Maximum switching current	1 A / 230 V AC
Protection class	II
Mounting type	Wall / pipe / DIN rail
Dimensions	245 x 90 x 50 mm
Degree of protection IP	IP20
Environment	indoor general
Relative humidity	max. 85 % (non-condensing)
Operating temperatures (ambient)	5° C to +45 °C
In compliance with	EN 50130-4, EN 55032, EN 62368-1, EN IEC 63000, EN 60730-1