

OEM Basis Heating/Cooling with Pump and Boiler Control B HK 4032 / B HK 2032

The OEM Basis Heating / Cooling serves as a connection unit in order to interconnect room thermostats (OEM Thermostats HK) and valve drives (e. g. OEM Actuators) in an easy and comfortable way. The unit has connections for the activation of a pump and a boiler or for further electrical consumers. The unit can be adapted to NC or NO systems by means of jumpers. Due to the possibility of an external change-over by means of a CO signal, this regulation system is appropriate for heating and cooling in single circuit systems.

The OEM Basis Heating / Cooling is appropriate for new constructions, as well as for the re-fitting of residential and commercial buildings with already existing surface heating / cooling systems. It is preponderantly used in the vicinity of heating circuit distributors.



Features

- OEM design
- 24 V and 230 V versions
- Screwless plug-in/clamping connection technique
- Clearly structured connections
- NC and NO operation selectable for switching contacts
- CO input for heating/cooling function
- Control of a pump and another electrical consumer, e. g. a boiler, integrated
- Follow-up times for the pump contact can be set
- Pump protection circuit
- Large labelling field
- Perfect price-performance ratio
- System integration with OEM Thermostats and OEM Actuators
- Integrated strain relief
- High functional security
- Maintenance-free

General Information

Scope of delivery (Standard)

Version OEM Basis Heating / Cooling 24 V:
1 x OEM Basis HK 24 V
1 x installation instruction in 11 languages

Version OEM Basis Heating / Cooling 230 V:
1 x OEM Basis HK 230 V
1 x installation instruction in 11 languages

Type designation

B HK 4032: Version 24 V without transformer
B HK 2032: Version 230 V

Accessories

- Transformer for 24 V version (AB ST 4000 N)
- Timer for automatic temperature setback (DS 1000)

Connection recommendations

Version "normally closed" (NC)

- OEM Thermostats 24V: R HK 4012 2
230V: R HK 2012 2
- OEM Actuators 24V: A 4004
230V: A 2004

Version "normally open" (NO)

- OEM Thermostats 24V: R HK 4112 2
230V: R HK 2112 2
- OEM Actuators 24V: A 4104
230V: A 2104

Customer-specific version

Customer-specific versions are available on request.

Ordering information

Our staff will be glad to assist you in finding the OEM Basis fitting your application.

Call us under: +49 (0) 53 41 - 84 75 - 0

Application

The OEM Basis Heating / Cooling is used for the single room control of surface heating systems, or, in case of a corresponding installation layout, of single circuit surface cooling systems.

Function

The OEM Basis Heating / Cooling is designed for direct wall installation in the heating circuit distribution cabinet. The operating voltage for the connected devices is provided via the OEM Basis Heating / Cooling. The connection of 6 room thermostats (e. g. OEM Thermostats) and a total of 12 valve drives (e. g. OEM Actuators) is possible.

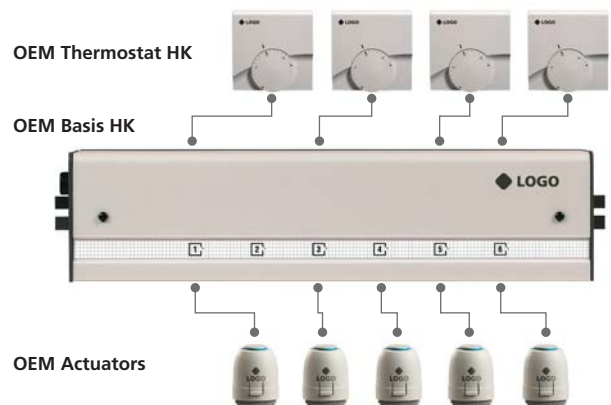
The screwless connection technique (plug-in/clamping connections) allows simple and quick installation. All electrical lines are secured with cable grips.

The system can change between the heating and the cooling mode by means of a CO signal.

Automatically reduced operation with two separate heating programs can be realised by means of a timer signal (e. g. from the digital timer DS 1000) in conjunction with the OEM thermostats.

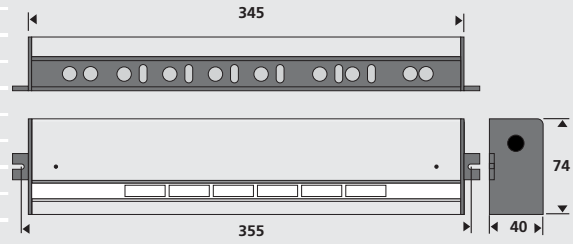
2 potential-free contacts allow the control of a heating pump and another electrical consumer, e. g. a boiler. A follow-up time of max. 15 minutes can be set for the pump contact. Both contacts can be adapted to the operating modes NC and NO by means of parametrisation.

The OEM System



Technical Data

| Type | B HK 4032 | B HK 2032 |
|---|----------------------------|----------------------------|
| Operating voltage | 24VAC 50...60 Hz, +/- 10 % | 230VAC 50 Hz, +/- 10 % |
| Max. power input | 50 W | 50 W |
| Fuse | T 2A | T 4A H |
| Max. number of thermostats | 6 | 6 |
| Max. number of valve drives (about 2 W) | 12 | 12 |
| Heating programs, optional | 2 | 2 |
| Protection class | II | III |
| Schutzart | IP 20 | IP 20 |
| Ambient temperature | 0 to +60°C | 0 to +60°C |
| Storage temperature range | -25 to +70°C | -25 to +70°C |
| Relative humidity | 80% max. ¹⁾ | 80% max. ¹⁾ |
| Weight | 450 g | 400 g |
| Dimensions (mm) H / W / L | 74 / 40 / 345 | 74 / 40 / 345 |
| Pump module: | | |
| Switching voltage / switching current of pump | 230VAC, 5A / 24VDC, 1A | 230VAC, 5A / 24VDC, 1A |
| Pump protection circuit | 24h / 5min | 24h / 5 min |
| normally closed / normally open | adjustable | adjustable |
| Coasting delay | 0-5-10-15 min | 0-5-10-15 min |
| Applicable wire sections | | |
| solid wire ²⁾ | 0.25 – 1.5 mm ² | 0.25 – 1.5 mm ² |
| flexible wire | 0.25 – 1.5 mm ² | 0.25 – 1.5 mm ² |



¹⁾ not condensing
²⁾ We recommend 5-wire lines (e.g. 5 x 1.5 mm² NYM) as a minimum for the electric connection of the thermostats.

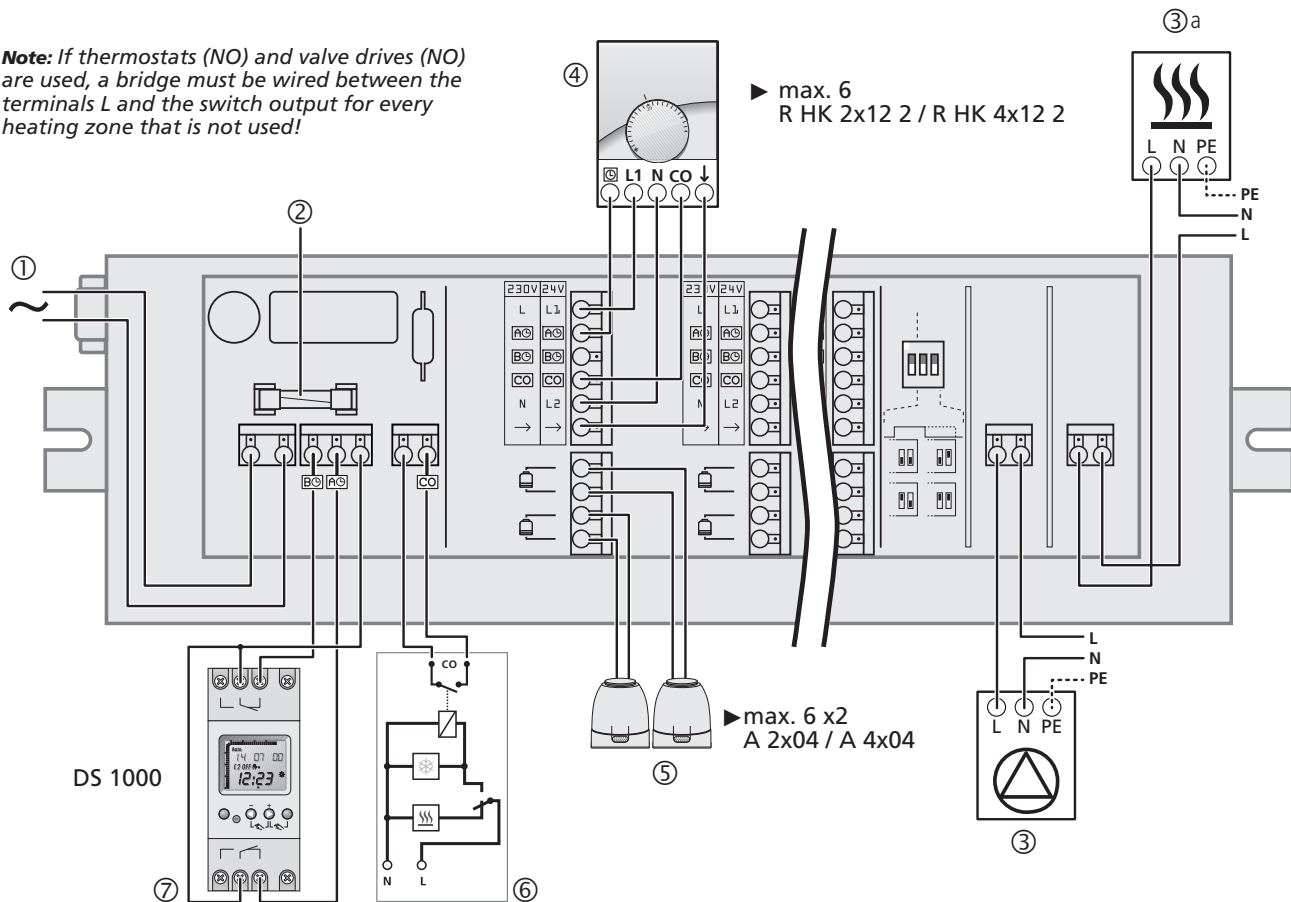


Installation Notes

The connection terminals are prepared for single-core and multicore copper wires with a section of 0.24 – 1.5 mm² for a stripping length of 8 - 9 mm. Insertion is performed without tools, removal is performed by pressing down with a flat screwdriver.

- Power supply connection for the 24 V system. For the 230 V system, a factory-mounted mains cable with Euro plug is provided already.
- Microfuse: T4AH for 230 V, T2A for 24 V
- Here you can connect a pump and/or another electrical consumer, e.g. a boiler (3a). The activation is performed by parallel connection from all thermostats.
- In this manner, connect a maximum of 6 thermostats to the B HK x032 (according to the figure).
- In this manner, connect a maximum of 12 valve drives, 2 per circuit.
- If you connect a potential-free contact (make contact), you can switch between heating and cooling operation.
- Here you can connect the potential-free contact of a timer.

Note: If thermostats (NO) and valve drives (NO) are used, a bridge must be wired between the terminals L and the switch output for every heating zone that is not used!



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