

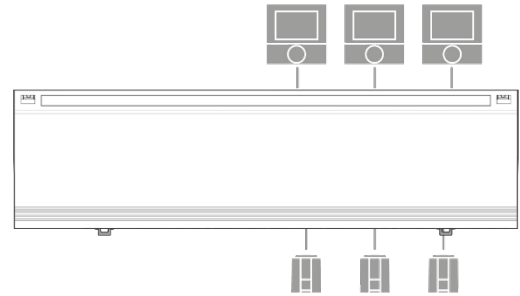
OEM Alpha direct Balance

The OEM Alpha direct Balance Base Station is the intelligent room-by-room temperature control for the future, ensuring maximum comfort and energy efficiency for surface heating.

The OEM Alpha direct Balance Base Station with integrated, TÜV-certified "automatic hydraulic adjustment" performs the adjustment completely independently and without the connection of additional hardware. Due its control characteristics, the system ensures automatic balancing of the flow rate in the connected circuits.

Furthermore, the OEM Alpha direct Balance Base Station also offers cooling by inverting the input signals of standard heating thermostats. Commercially available 230 V heating thermostats can be connected. The system recognizes the requirements of the thermostat and automatically adjusts to them. Thus, special heating/cooling thermostats are not necessary. Standard thermal actuators in 230 V NC design are used as actuating elements.

The system meets the requirements of both the GEG and the BAFA and is therefore eligible for subsidies in Germany. According to the TÜV certificate, it is at least equivalent to manual hydraulic adjustment.



1.1 Features

- High-quality, modern OEM design
- OEM differentiation of appearance and function
- Version in 230V 8 zones/thermostat
- Integrated TÜV-certified "automatic hydraulic adjustment"
- Meets the requirements of the Building Energy Act (GEG).
- Eligible for subsidies by the Federal Office of Economics and Export Control (BAFA)
- Automatic recognition of connected thermostats
- simple, intuitive installation and operation, without flow and return sensors
- Status signaling by LEDs
- Connection of a maximum of 17 actuators
- Initial status NC
- Pump and boiler control
- Connection for dew point sensor and setback input
- proven cable guide and strain relief
- Screwless plug-in/clamping connection technique
- Clearly structured connection terminals
- High functional security
- Maintenance-free
- No initialization or calibration necessary
- Blocking of cooling possible zone by zone

1.2 Variants

In the basic version, the OEM Alpha direct Balance Base is delivered as neutral device without logo and in grey, with transparent cover. The subsequent list shows the available versions.

Type	Version	Operating voltage	Zones	Equipment	Scope of supply
B 21902-08N2	Balance	230 V	8	Heating/cooling, pump and boiler control, status signalling	<ul style="list-style-type: none"> • OEM Alpha direct Balance in individual packaging • Instructions in 2 languages

1.3 Optional extensions or differentiations to the basic version

Differentiation possibilities

Packaging	Packaging can be manufactured and printed individually according to requirements.
Imprint on casing	Laser marking of the company logo and the individual type designation and your device designation
Casing	Bottom – adaptation of color, Casing cover – completely overlapping casing cover, individual color, transparency and shape

Please contact us if you have further wishes.

Extension options

DIN rail	The scope of delivery is extended by a DIN rail for installation in the heating circuit distributor
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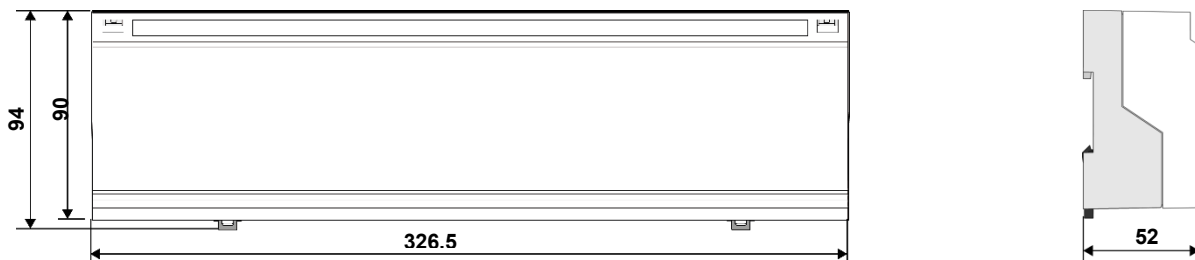
2 Technical data

Type	B 21902-08N2
Operating voltage	230 V ±10%, 50 Hz
Power input (without pump/boiler)	Max. 50 VA
Power consumption (idle)	<1 W
Fuse	5 x 20 mm, T4AH
Number of heating zones (HZ)	8
Switching power per heating zone	Max. 1 A
Max. number of actuators	17 (1x5 + 1x4 + 2x2 + 4x1)
Switching current per actuator:	Max. 500 mA
Nominal load of actuators	Max. 24 W
Pump connection	Closing contact (monopolar switching)
Lead time/follow-up time	2 minutes
Switching power	2 A, 200 VA inductive
Boiler connection	Closing contact (monopolar switching)
Lead time/follow-up time	-
Switching power	2 A, 200 VA inductive
pump protection function	3 days / 5 min
Control direction normally closed (NC)/normally open (NO)	NC
Ambient temperature	0 – 50 °C
Storage/transport temperature	-20 °C – +70 °C
Ambient humidity	5 to 80%, not condensing
ERP class acc. to EU 811/2013	1=1 %
Contamination degree	2
Protection class	II
Protection type	IP20
Function	Type 1 / Type 1.C
Outer dimensions	90 x 326.5 x 52 mm
Weight	600 g
Switching element design	Relay
Overcharge protection	Current limitation via device fuse
Setback input	Switchable via potential-free contact
CO input	Switchable via potential-free contact
Temperature limiter or dew point sensor	Switchable via potential-free normally closed contact
Cover latch	Double latching of cover on casing, not to be opened without tools
Valve protection function	16 days / 5 min
Connection terminals	
Line cross-section: massive	0.2 to 1.5 mm ²
Conductor cross section fine-stranded	0.2...1.5 mm ²
Conductor cross-section fine-stranded ADH	0.2...1 mm ²
Conductor cross-section fine-stranded ADH insulated	0.2...0.75 mm ²
Wire stripping length	8 to 9 mm
Temperature for cone pressure test	550 °C
Standards and regulations	EN 60730-1 / EN60730-2-9 / ElektroG resp. RoHS compliant
Mains connection design	NYM connection terminals 3 x 1.5 mm ²
Strain relief	Integrated
Casing material	ABS
Type of installation	Wall installation/DIN rail (TS35/35 x 7.5 mm)
Casing color	RAL7035 (light grey)
Color of cover	Transparent, polished in the area of the LEDs

Displays	
Heating zones LED	green (one LED per HZ)
Fuse LED	red
Power LED	green
Pump LED	green
Boiler LED	green
Heating/cooling LED	blue

2.1 Dimensions

2.1.1 8 zone Base Station



All indications in mm

2.2 Approvals & certificates

All Möhlenhoff products are extensively tested and certified by independent testing institutes.



The CE identification documents that the products that the products placed on the market comply with the applicable requirements of the EU Directives.



The product is certified by TÜV Süd.