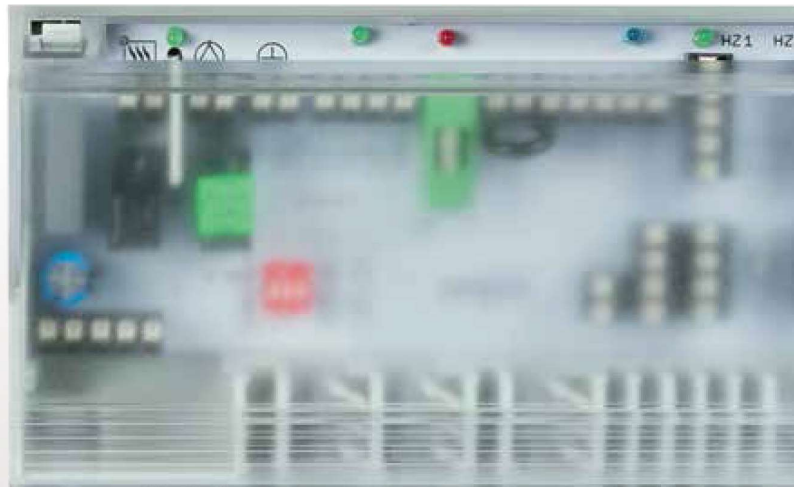


## The new generation of a favourite product

A perfect solution for all new builds and modernisation projects.  
Top quality features, installation and user-friendliness.



# OEM ALPHA direct: System

Simply well-connected

→ [www.moehlenhoff.de](http://www.moehlenhoff.de)

# OEM Alpha direct: System

Classic room-by-room temperature control that makes no compromises



A range of different factors influence people's feeling of well-being. Optimum distribution of heat plays a major role in making homes feel cosy. The majority of people like the radiant heat emitted by panel heating systems which ensure perfect distribution of heat. To function well, room-by-room temperature control needs to be highly precise and energy-efficient. It also has to offer a high degree of precision in order to adjust heating and cooling functions to people's needs as best as possible.

The OEM Alpha direct: System is a new room-by-room, wired temperature control system by Möhlenhoff in a modern design. All components in this traditionally wired room-by-room temperature control unit can be used independently or as part of a system. The control types and basic designs can be combined into one room-by-room temperature control system. The result is a response to simple as well as complex requirements for heating and cooling applications that tick all the boxes.

Coordinated in a consistent design with the wireless/bus solution of Möhlenhoff's OEM Alpha 2: System and the smart home system Alpha IP, the OEM Alpha direct: System gives you a comprehensive, ideal product range and ensures a consistent market presence.



#### **OEM Alpha Room thermostat direct**

- For heating and cooling applications
- A slender, high-quality design
- A broad range of devices for different applications
- User-friendly and intuitive to operate
- Easy to install

**24 V / 230 V**

#### **OEM Alpha Base station direct**

- 24 V and 230 V versions, optionally with 6 or 10 zones
- Pump relay/boiler relay directly on-board
- Suitable for heating and cooling
- Tried-and-tested, easy installation

#### **OEM Actuator 5**

- 24 V and 230 V, normally closed (NC) or normally open (NO)
- Power consumption just 1 watt
- 100 % waterproof regardless of installation angle (360°)
- Established adaptor system for 99 % of all valves

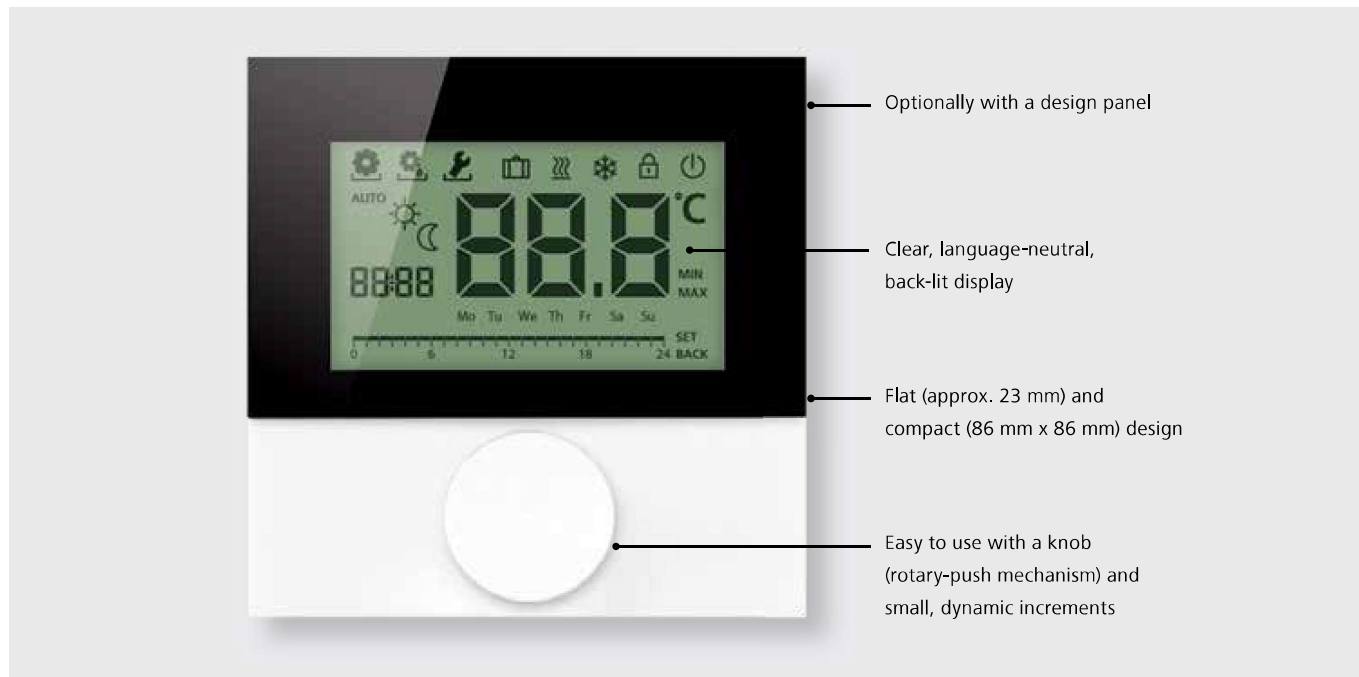
## Specifications at a glance



- 24 V or 230 V, 6 to 10 zones – to comply with your requirements and system
- 21 connections for up to 18 valve actuators per base or 5 per room thermostat
- Very good value
- Standardised, certified components
- As a system or stand-alone solution
- Intelligent and very precise control
- Smart Start/Smart Stop technology for even greater energy efficiency
- Intuitive and easy to install
- Out-of-the box functionality
- Easy to operate
- Standardised, modern design series with OEM Alpha 2:System wireless and bus
- Lower warehousing and handling costs

# OEM Alpha Room thermostat direct Display

## High-precision control in a modern design



### Alpha Room thermostat direct Display

Alpha Room thermostat direct Display is Möhlenhoff's new generation of high-quality room temperature controls with displays. With its restrained, timeless design, as well as generous, language-neutral LC display and practical knob with precise dynamic increments, the control looks impressive. The intuitive concept takes the user through the menu structure and allows easy navigation with a rotary-push mechanism. This allows direct access to func-

tions like operating mode and holiday. The integrated weekly time switch allows programming of customised temperature profiles. This guarantees people's day-to-day comfort and energy-efficient heating and cooling.

### Smart Start/Smart Stop

Smart Start/Smart Stop technology is another highlight. Based on each room's ambient conditions, it recognises when it's time to start heating or cooling and adjusts itself exactly

to the required temperature at the right time. And during the process it only uses as much energy as necessary.

### A versatile device

The control is designed to handle any situation – as a stand-alone control with up to 5 valve actuators connected, or in a system with the Alpha Base station direct. It comes in various designs.

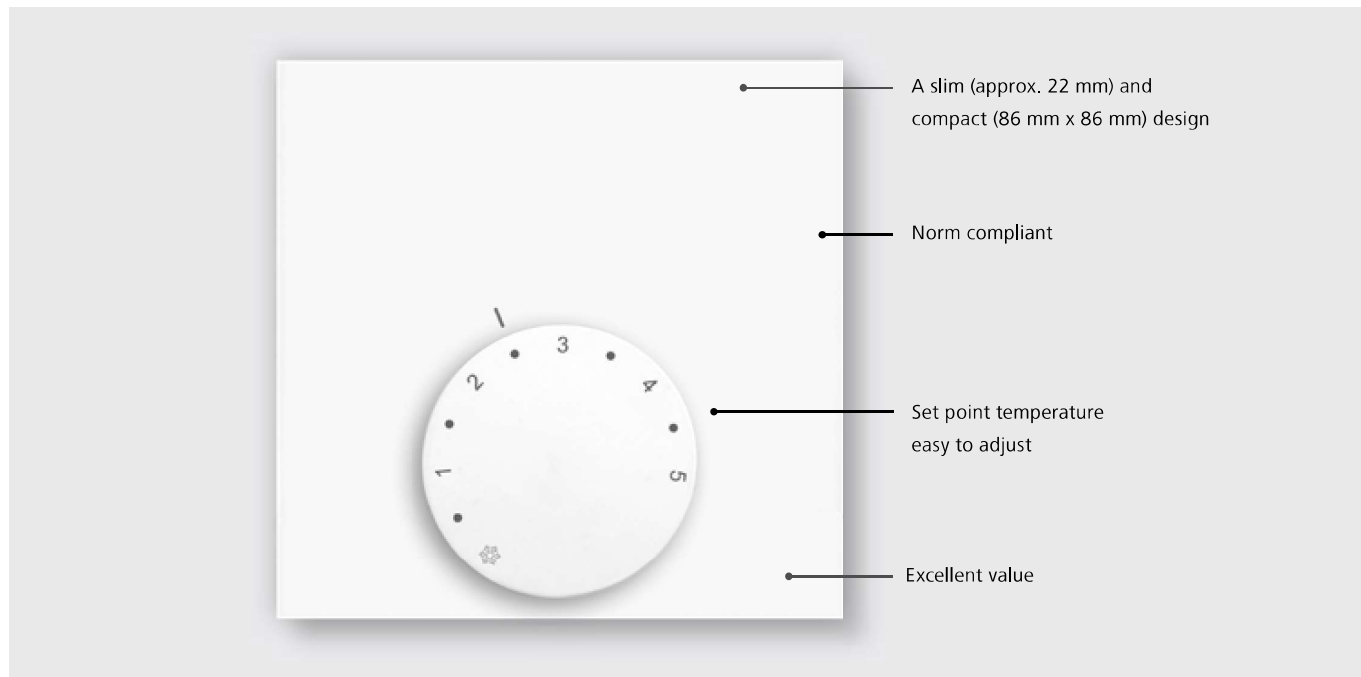
	Standard	Comfort	Control
<div>24 V / 230 V</div>			
Display showing actuators' operating status	•	•	•
Setpoint limiter	•	•	•
Internal weekly time switch	–	–	•
Adjustable temperature reduction	–	•	•
Heating/cooling (change over)	–	•	•
Control direction NC/NO selectable	–	•	•
Smart Start/Stop function	–	–	•
Timer output	–	–	•

## Highlights at a glance

- Type of control: PI
- Compliant with DIN EN 60730-1
- Smart Start/Smart Stop function
- Control algorithm to match heating system
- Adjustment of set point/actual value
- Cooling can be prevented
- Target temperature adjustable in 0.5 K increments
- Temperature range 5...30°C
- Frost and valve protection function
- Wall mounted/fitted on a flush-mounted box
- Easy, intuitive installation
- Intuitive user navigation and operation
- As a stand-alone version or as a system
- 2-day power reserve
- Heating and cooling program settings exact to the day

# OEM Alpha Room thermostat direct Analog

Reduced to the max



## OEM Alpha Room thermostat direct Analog

In the heating and heating/cooling types, the room-temperature control OEM Alpha Room thermostat direct Analog has been reduced to the max. This adds up to temperature control that's highly precise. The slim, modern design integrates superbly with any interior. Due to its excellent value, the various versions of the OEM Alpha Room thermostat direct Analog round off any product range to perfection.

The set-point temperature is adjusted by a convenient rotatable knob with easy-to-read numbers. An actuator to adjust the set value and an optional actuator to limit the set point are located below the rotatable knob. When the user is absent, the control temperature is cut by 2 K via the timer input.

As a stand-alone device the OEM Alpha Room thermostat direct Analog can also control up to 5 valve actuators, or is used as part of a system with the OEM Alpha Base station direct.

## Heating and cooling

The Alpha Control Unit Analog HK is mainly used for heating and cooling panels. The switch between the two operating modes is automatically carried out via the change-over input. If required, the cooling function on the device can be prevented for a particular room (e.g. a bathroom). In this version, the control has a frost and a valve protection function.

	Analog	Analog HK	Roomsensor	Roomsensor HK
<div>24 V / 230 V</div>				
Heating	•	•	•	•
Cooling	—	•	—	•
Set temperature reduction (2 K)	•	•	•	•
Timer input	•	•	•	•
Set value adjustment/ Set point limiter*	•	•	—	—
Valve protection function	—	•	—	•
Frost protection function	—	•	—	•

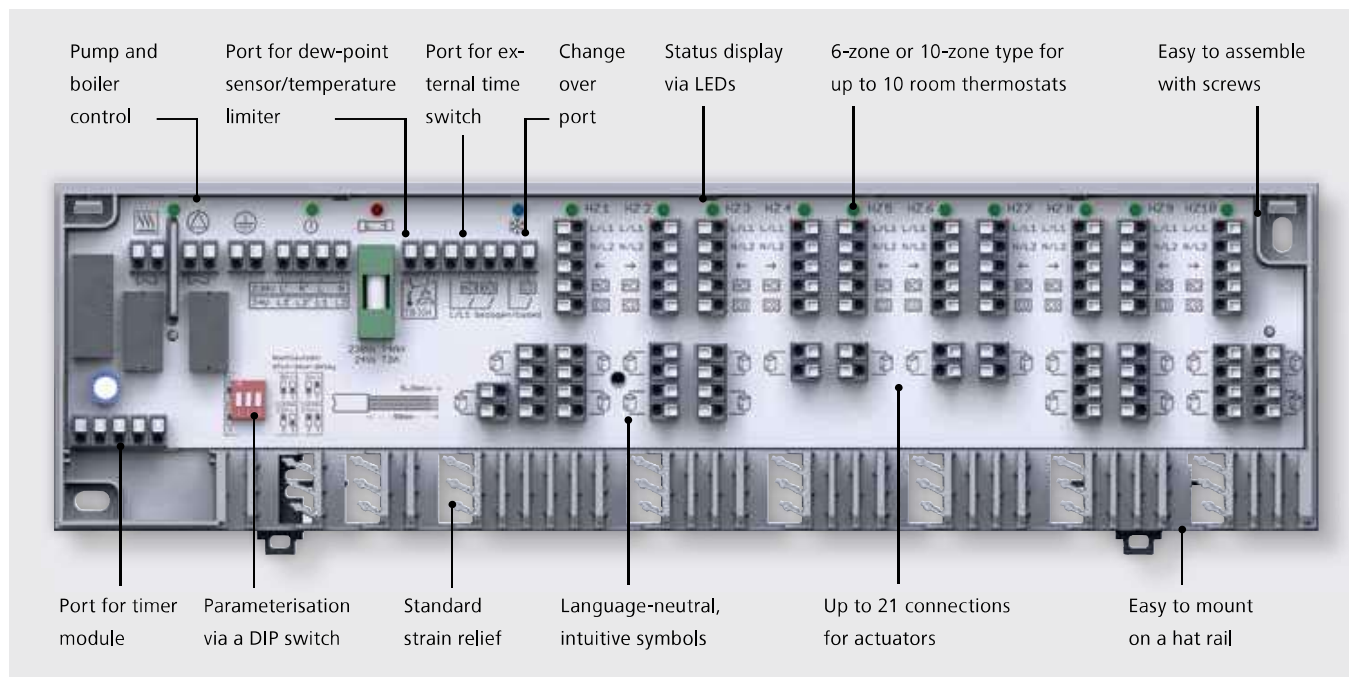
\* on request

## Highlights at a glance

- Type of control: PI
- Compliant with DIN EN 60730-1
- Cooling can be prevented
- Target temperature finely adjustable by 1/4 degrees
- Set value adjustment
- Frost and valve protection function
- Easy, intuitive installation
- Wall mounted/fitted on a flush-mounted box
- Optimum value

# OEM Alpha Base station direct

## Optimum connections



### Perfectly in tune

Alpha Base station direct is the central connecting unit and provides power for all Alpha System direct components. In a clear layout, actuators and controls are easily and conveniently connected with one another. The tried-and-tested wire management system and standard-compliant strain relief, as well as the screwless plug/clamp method guarantee reliable and fast wiring. The Alpha Base station direct is optionally available in a 6 or 10 heating-cooling-zone design. A maximum of 10 room thermostats and 18 actuators (21 connections) are supplied with power. In

the Komfort version the device has ports to connect a pump and a boiler, or another electrical device. Ports for external time switches which feature timer signals on room thermostats and (in the maximum configuration) a timer module in the lid of the housing allow time-controlled reduction of room temperature. A dip switch adapts the device to NC or NO systems and adjusts the pump's pre-run and overrun times. The CO input makes this control system suitable for heating and cooling. The switch variant allows a fully functional customer specific pre-configuration.

### Highlights at a glance

- Up to 5 connections for actuators/zones
- Change-over input for heating/cooling
- Wall-mounted or on a hat rail
- Easy, intuitive installation with a screwless clamping method
- Connections clearly laid out
- Automatic temperature reduction for 2 heating programs possible via an external digital time switch
- Standard transformer (optional), standby < 0.3 watts
- Standard DIN EN 60730-1 compliant strain relief

	Standard	Standard Plus	Komfort	Control	Switch
<div>24 V / 230 V</div>					
Timer bus	•	•	•	•	•
Heating	•	•	•	•	•
Cooling	–	•	•	•	•
Input for temperature limiter/dew-point sensor	–	•	•	•	•
Control direction NC/NO	NC/NO	NC	selectable	selectable	NC
Integrated timer module	–	–	–	•	–
Pump/boiler output	–/–	•/–	•/•	•/•	•/–
LED status displays	–	–	•	•	•

\* only internal

\*\*without pump controls also NO



## Advantages at a glance

### Vis à vis OEM partners



#### High-tech from a specialist

- Reliable technology with a good track record, developed and tested by Möhlenhoff
- Quality products compliant with standards



#### Best OEM service

- A distinctive look due to a range of different types/functions
- A consistent market presence



#### A coherent and compatible system

- A perfectly coordinated product range
- Future-proof
- Standardised design

### Vis à vis engineers



#### Ideal in new builds

- Excellent for new builds and refurbishment projects
- Easy to plan
- The right solution for any requirements



#### Easy to install

- Simple and convenient to install in just a few steps
- Safe to set up and operate



#### Expertise

- High-quality product
- Top support
- Satisfied customers from day one

### Vis à vis consumers



#### Energy and cost savings

- Saves up to 20% on heating energy
- Can be controlled to match personal levels of comfort and lifestyles



#### An attractive design

- Integrates well with today's and tomorrow's interiors
- Timeless, restrained design that pledges quality



#### Reliable and child's play to operate

- Reliable technology
- Convenient and intuitive to operate
- Safe to use

# The outlook for OEM partners

\* nur intern

\*\*ohne Pumpensteuerung auch NO



## Range of products and services


Providing application-driven advice and technical support for our products and systems are part of the services we deliver to our OEM customers. We also offer in-depth product information to assist in providing customised technical literature and advertising materials.

## Guarantee of quality

Möhlenhoff has recognised testing, inspection and simulation devices that make our high level of quality and innovation possible. We underpin this high standard by providing a modern management system. We also ensure our staff are quality-driven and have a strong environmental awareness.

## Tailored system modifications

We can offer different logos, casing designs, packaging or additional functions. Möhlenhoff's OEM solutions enable you to present a customised image to the market. As a result, you can create a distinctive product portfolio, adapted exactly to your customers' wishes. Contact us for advice on how to make your products stand apart.

  
**ALPHA  
TECHNIK**  
Der Garant für Funktionssicherheit,  
Kompatibilität und Freude am  
Produkt durch innovative Technologie  
*Innovative technology for reliable,  
compatible and excellent products*

## Your OEM partner

Möhlenhoff GmbH has been an established player on the international market for more than 3 decades. The company is a reliable, expert OEM that excels. These factors, combined with innovative ideas and a spirit of fairness in partnerships, have made it a very successful player worldwide for years. As an OEM, Möhlenhoff GmbH supplies products and complete systems for heating, ventilation and air-conditioning systems. As a specialist in control components and systems, the company offers its expertise to manufacturers worldwide. Möhlenhoff GmbH is a global market leader in thermal valve drives.



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