## Alpha-Thermostat Wireless 868 MHz Standard
## AR 4070 SF2

The Alpha-Thermostat Wireless 868 MHz Standard is a thermostat which, in combination with the Alpha-Basis Wireless as receiver and the OEM-Actuator 24 V as valve controller, offers individual room temperature control.

The system components of the Alpha-Thermostat Wireless are made with modern, safe, and intelligent 868 MHz technology that provides greater range with less interference.

The installation allows for individual placement choice through the simple plug-in system of the Mounting Base.

## Features

**Alpha-Thermostat Wireless**
• Wireless communication between the Alpha-Basis and Alpha-Thermostat
• 868 MHz technology
• Temperature dial with ¼ degree soft settings
• Limitation of set temperature range
• Precise control response
• Functional design
• Cable free, battery operation
• Simple installation concept

**Alpha-System Wireless**
• Receiver and transmitter function on 868 MHz band
• Protective functions in case of a failure of a Wireless Thermostat, e.g. weak battery (frost protection mode)
• Automatic release of the first-open function after start-up
• Error display in case of missing radio signal, weak battery, or weak reception signal
• Display for function control
• Radio transmission test for transmitter and receiver for assisting in the start-up installation
• Appropriate for use in 2-line HK installations, with heating/cooling extension module AB HK 4000

## Applications

• Single room temperature control ideally suited for panel, radiator, and convector heating systems.
• The advantage of cable-free system is the high flexibility provided for new buildings, as well as modernisation projects. The installation is simple since there is no need for laying cables.
• Heating and cooling with a single system when combined with the HK Module of the Alpha-Basis. Single room temperature control ideally suited for panel heating applications, such as minimum floor temperature (e.g. bathrooms)

## General information

**Type**
AR 4070 SF2 – Version Wireless Standard

**Scope of supply**
1 x Alpha-Thermostat AR 4070 SF2
1 x Wireless Mounting Base
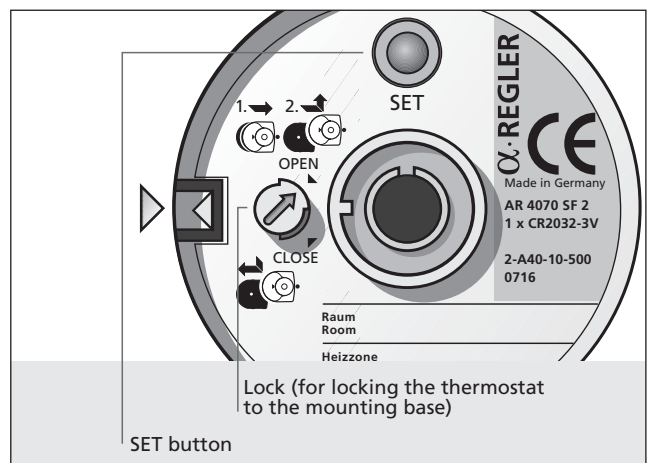1 x Battery (CR2032, 3 V)
1 x User Manual

**Versions of the Wireless System 868 MHz**
AR 4070 KF2 – Version Wireless Comfort
AR 4070 KF2E – Version Wireless Comfort with remote sensor
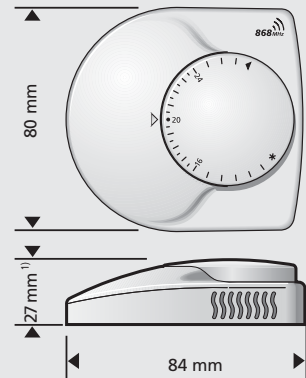
**Ordering information**
Our staff will be glad to assist you in finding the Alpha-Thermostat fitting your application. Call us at: +49 (0) 53 41 - 84 75 - 0
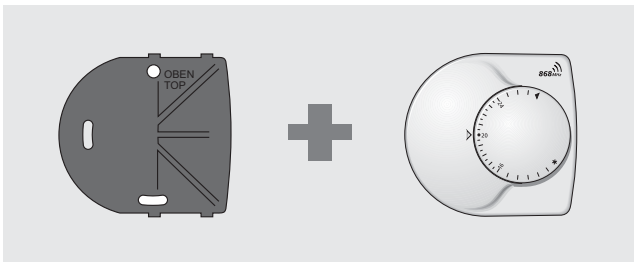
## Functions

The Alpha-Thermostat Wireless 868 MHz Standard provides individual room temperature control. Through a battery operated wireless transmitter, it transmits operation mode, current room temperature, and desired temperature to the Alpha-Basis Wireless 868 MHz for heating circuit control.

The preset coding of the Alpha-Thermostat Wireless guarantees an exclusive communication with the defined channel of the Alpha-Basis Wireless.

The Alpha-Thermostat Wireless provides maximal comfort for an individual room thermostat and helps save energy when combined with the Alpha-Basis Timer Module.

## Control panel



Lock (for locking the thermostat to the mounting base)

SET button

![Möhlenhoff logo]

## Technical data

| Type | AR 4070 SF 2 |
|---|---|
| Settable temperature range | 10°C – 28°C |
| Battery type | CR 20323 V |
| Battery service life | approx. 5 years |
| Radiated power | < 10 mW |
| Transmitting interval | 9 – 10 min |
| Ambient temperature | 0°C to 50°C |
| Storage temperature range | -25°C to +60°C |
| Relative humidity | max. 80%, not condensing |
| Dimensions (mm) H / W / L | 80 / 84 / 27 |

| Wireless Alpha-System | |
|---|---|
| Transmission frequency | 868 MHz |
| Range inside buildings | approx. 30 m. |
| Radio test according to | ETS 300220-3 |
| EMC conformity according to | EN 301489-3 |
| Hunting | approx. 0.2 K |
| Valve protection function | 6 min / 24 h |
| Heating programs (optional) | 2 |
| Temperature difference for reduced operation in energy-saving mode | 2 K (can be configured in a range of 2- 6 K in increments of 0.1 K with RC Inspector) |



80 mm
27 mm [1)]
84 mm

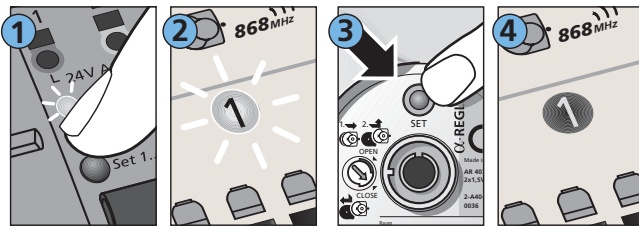[1)] with Alpha Mountingbase + 3mm

## Planning and installation notes

### Installation note



Installation and electric connection are only possible using the Wireless Mounting Base. The Wireless Mounting Base is included in the scope of supply and does not need to be ordered separately.

### Recommended installation place



ca. 30cm
ca.150cm

**Note!**
In order to ensure a trouble-free and thus optimum control operation, a thermostat with a remote sensor should be installed in a quiet zone - free from environment influence such as humidity, direct sunlight exposure or other sources of heat. Otherwise it may occur that the set temperature is exceeded or not achieved, depending on the respective environment influence.
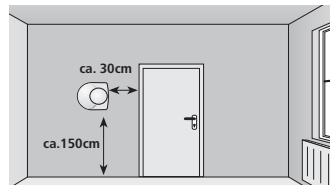
### Assigning zones



**1** Press SET button for 3 seconds

**2** When the LED of channel 1 flashes quickly (every 0.15 sec.), release SET button (LED will flash for 3 minutes).

**3** The desired thermostat (room) is assigned to the channel of the Alpha-Basis by briefly pressing the SET button on the Alpha-Thermostat Wireless within three minutes.
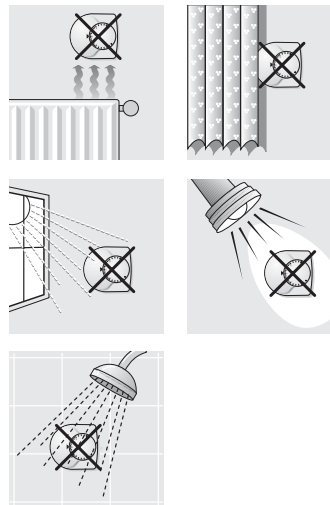
**4** The LED stops flashing when the assignment is complete.
**Press SET button several times if required.**

**Example of Allocation:**



AB 4071-6

Möhlenhoff Wärmetechnik GmbH
Museumstraße 54a
DE-38229 Salzgitter - Germany

Telephone +49 (0) 53 41·8475-0
Fax +49 (0) 53 41·8475-99

E-Mail: contact@moehlenhoff.de
Internet: www.moehlenhoff.com

**Möhlenhoff**