

BUILDING AUTOMATION  
CONTROL TECHNOLOGY  
SENSOR TECHNOLOGY

alre



## RADIO CONTROLLERS

Intelligent solutions  
for intelligent buildings.

b@home  
by alre



Radio-controlled transmitters

for "superflat" surface-mounted installation – Design Berlin 1000



| Technical data     |   |
|--------------------|---|
| Operating voltage: | batteries, 2 x Micro AAA, 1.5 V / 1,000 mAh   |
| Type:              | several different versions (Pictured: FTRFB-280.119)  |
| Indicators (LEDs): | for "learn" mode and battery empty indication   |
| Equipment:         | mechanical range suppression, temperature decrease (4 K fixed), without reference temperature setting for averaging or central control, "Comfort / ECO" switch  |
| Application:       | Radio-controlled room thermostat for recording and setting temperatures in home, office and hotel rooms with normal levels of cleanliness. Can be used with alre radio-controlled "heating / cooling" receiver strips to achieve single-room temperature control for heating and / or cooling |

Radio-controlled transmitter with time

For surface-mounted installation – Design Berlin UP



| Technical data     |   |
|--------------------|---|
| Operating voltage: | 230 V ~, 50 Hz  |
| Type:              | several different versions (pictured: FTRFUD-210.123#21)  |
| Indicators (LEDs): | illuminated, graphics-capable display   |
| Equipment:         | holiday and party functions, selectable "Heating", "Cooling", or "Heating and Cooling", separate timer programme for cooling function, valve protection function, correction of measured values, power reserve, 8 different languages, selection of display content, key lock, master for master-slave operation                      |
| Application:       | Radio-controlled room temperature sensor for measuring temperature in home, office and hotel spaces with normal levels of cleanliness. Matches all current switch ranges. Can be used with alre "heating / cooling" radio-controlled multi-channel receivers to achieve single-room temperature control for heating and / or cooling. |

For surface-mounted installation – Design Berlin 2000



| Technical data     |   |
|--------------------|---|
| Operating voltage: | batteries, 2 x Micro AAA, 1.5 V / 1,000 mAh   |
| Type:              | several different versions (Pictured: FTRFB-080.120)  |
| Indicators (LEDs): | for "learn" mode and battery empty indication   |
| Equipment:         | mechanical range suppression, temperature decrease (4 K fixed), without reference temperature setting for averaging or central control, "Comfort / ECO" switch  |
| Application:       | Radio-controlled room thermostat for recording and setting temperatures in home, office and hotel rooms with normal levels of cleanliness. Can be used with alre radio-controlled "heating / cooling" receiver strips to achieve single-room temperature control for heating and / or cooling |

For surface-mounted installation – Design Berlin 3000



| Technical data     |   |
|--------------------|---|
| Operating voltage: | batteries, 2 x Micro AAA, 1.5 V / 1,000 mAh   |
| Type:              | FTRFBu-180.121/V2 (Pict.) / FTRFBu-180.117/V2   |
| Indicators (LEDs): | LC display, learn mode / battery empty indicator (LED)  |
| Equipment:         | mechanical range suppression, direct dial "ON / OFF" buttons, holiday setting, party setting, operating mode and information retrieval for displaying all settings. Selectable "Heating", "Cooling" or "Heating and Cooling" modes, separate timer programme for cooling function, temperature setting dial with °C scale. Temperature / time display, automatic switching between summer / winter mode, child lock, valve protection and self-learning function (can be activated for "Heating"), "Berlin 3000" housing, master for master-slave mode, backlit (FTRFBu-180.121/V2) |
| Application:       | Radio-controlled room thermostat for recording and setting temperatures in home, office and hotel rooms with normal levels of cleanliness. Can be used with alre radio-controlled "heating / cooling" receiver strips to achieve single-room temperature control for heating and / or cooling   |

Radio-controlled ECO contact

For surface-mounted installation – Design Berlin 2000



| Technical data     |  |
|--------------------|--|
| Operating voltage: | batteries, 2 x Micro AAA, 1.5 V / 1,000 mAh  |
| Type:              | FKRFB-080.151  |
| Indicators (LEDs): | for "learn" mode and battery empty indication  |
| Equipment:         | external contact switchable NO / NC, setting ranges ECO-Temperatur 5 ... 20 °C absolute or -3 ... -15 K relativ (Internal setting)               |
| Application:       | Radio-controlled ECO contact for switching an alre radio-controlled system between ECO and Comfort modes via telephone contact or window contact |

Radio repeater



| Technical data     |   |
|--------------------|---|
| Operating voltage: | 230 V ~, 50 Hz  |
| Type:              | MRCOA-014.201   |
| Displays (LED):    | Learn mode  |
| Features:          | Schuko outlet adapter housing - outlet remains useable to 13 (3) A  |
| Application:       | Range expansion between transmitters and receivers of an alre radio system, no installation work and simplest handling because it works at any outlet |

Radio-controlled receivers

Radio-controlled room temperature regulator – Design Berlin 2000



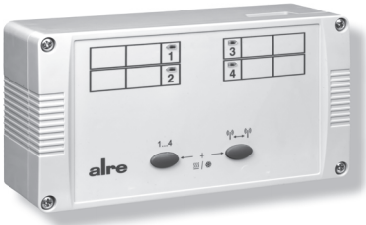
| Technical data     |  |
|--------------------|--|
| Operating voltage: | 230 V ~, 50 Hz   |
| Schaltvermögen:    | NO contact 13 (3) A for up to 3,000 W (heating), NO contact 10 (2) A for up to 2,300 W (cooling)   |
| Type:              | Heating: HTFRB-010.101, Cooler: CTFRB-010.101  |
| Equipment:         | 2-colour LED   |
| Application:       | Single-channel radio-controlled heating or cooling regulators (receivers) for surface-mounted installation / wall mounting, which can be used in conjunction with alre radio-controlled room temperature transmitters to regulate the temperature in an individual room. Application mainly in renovation projects or enhancements to existing heating systems (e.g. warm water floor heating, single channel or electric storage heating or marble heating, etc.), with central control |

Radio-controlled actuator for radiator valves



| Technical data     |  |
|--------------------|--|
| Operating voltage: | 2 x AA, 1.5 V / 2,300 mAh batteries  |
| Type:              | HTFMA-180.161  |
| Equipment:         | 2-colour LED, M 30 x 1.5 connector (adapters available for many valve types), actuating force max. 100 N (depending on valve), low-noise, automatic valve protection, IP40 protection rating |
| Application:       | 1-channel radio-controlled actuator for radiator valves, screw adapter for easy installation and simple operation  |

Radio-controlled multi-channel room temperature regulator



| Technical data      |  |
|---------------------|--|
| Operating voltage:  | 230 V ~ / 50 Hz  |
| Switching capacity: | 4 or 8 relay contacts NO 5 (1) A, up to 4 actuators can be directly connected per channel (a total of up to 16 or 32 actuators), including pump module (180 VA)  |
| Type:               | several different versions (Pictured: KTFRL-214.140)   |
| Equipment:          | IP20 or IP65, one 3-colour LED or 4-colour LED per reception channel, integrated antenna (external housing antenna with 1.0 m cable can be supplied – suitable for feed-out from distribution box if necessary)  |
| Application:        | 4-channel or 8-channel radio-controlled temperature regulators (receivers) for installation in a heating circuit distributor, applications: Heating (HTFRx-xxx.xxx) or Heating / Cooling (KTFRx-xxx.xxx), master-slave operation, emergency mode, averaging (can recognise up to 8 transmitters per channel + 1 transmitter for master-slave operation), central control (KTFRx) |

Radio-controlled receivers

Radio-controlled room temperature regulator – flush-mounted



| Technical data      |  |
|---------------------|--|
| Operating voltage:  | 230 V ~, 50 Hz   |
| Switching capacity: | up to 30 °C ambient temperature: max. 2,300 W (max. 10 A)  |
| Type:               | HTFRU-110.124  |
| Equipment:          | 2-colour LED   |
| Application:        | Single-channel radio-controlled temperature regulators (receivers) for flush installation in a distribution box. Can be used in conjunction with a radio-controlled room temperature sensor with reference temperature setting to control an (electric) floor heating system. An external floor sensor can optionally be connected, with the following possible modes: floor temperature control or room temperature control with floor monitoring and direct or central reference temperature setting (central control). Can be used without remote sensor as room temperature controller with direct or central reference temperature setting (central control). |

Radio-controlled room temperature regulator – Design Berlin UP



| Technical data     |  |
|--------------------|--|
| Operating voltage: | 230 V ~, 50 Hz   |
| Schaltvermögen:    | up to 30 °C ambient temperature: max. 2,500 W (max. 11 A), from 30 °C ambient temperature: max. 1,700 W (max. 7.5 A)                             |
| Type:              | HTFRU-010.101  |
| Equipment:         | 2-colour LED   |
| Application:       | Single-channel radio-controlled temperature regulators (receivers) for flush installation with 50 x 50 cover, “Berlin” frame and central control |

Radio-controlled room temperature controller with Schuko adapter



| Technical data      |   |
|---------------------|---|
| Operating voltage:  | 230 V ~, 50 Hz  |
| Switching capacity: | NO contact 13 (3) A for up to 3,000 W (heating)   |
| Type:               | HTFRA-010.101   |
| Equipment:          | 2-colour LED  |
| Application:        | 1-channel radio-controlled temperature controller (receiver) with Schuko adapter designed especially for mobile radiators |





## Intelligent solutions for radio-controlled heating and cooling

### Single-room regulation also as part of a master-slave system



FTRFB-280.119 HTFMA-180.161

### Single-room regulation with central timer programme



FTRFBu-180.121/V2

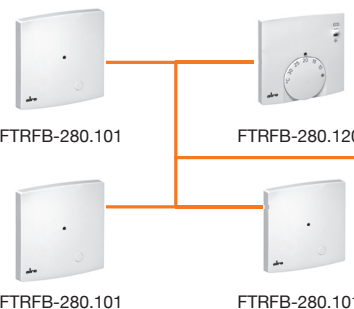
### Single-room regulation without timer programme



FTRFB-280.119

### Single-room regulation with averaging for up to 7 transmitters

ECO switch for manual  
energy-saving mode



FTRFB-280.101 FTRFB-280.120  
FTRFB-280.101 FTRFB-280.101

### Single-room regulation with individual timer programme



FTRFud-210.123#21

### Radio-controlled ECO contact for conventional telephone contact switches



HTFRA-010.101

### Master-slave regulation with central timer programme

ECO switch for  
manual override of  
timer programme



FTRFB-280.119

FTRFB-280.101

### Examples of different types and combinations of radio-controlled regulation

- The radio transmitters automatically “learn” the type of regulation required (individual room, average temperature, master-slave system or a combination of these).
- Each appliance has its own unique address. No confusion or influence from neighbouring control systems. If more than 8 channels are required, transmitters can be “taught” to work in conjunction with several radio-controlled strips (for example, in a master-slave system).
- Loss of connectivity automatically activates emergency mode, meaning that temperature regulation is not interrupted
- The multi-channel receiver’s removable control panel makes it easy to “teach” it the locations of all the transmitters.
- The clock transmitter as master offers additional convenience with holiday function, party function, on/off function, self-learning function, “Comfort / Eco / Automatic” mode switch, valve and pump protection, child lock, automatic switching between summer / winter time, display setting and much more.
- Easy programming with “electronic switch tappets”.

### Central control also possible with timer programme



FTRFB-280.101

ECO switch for manual energy-saving mode



FTRFB-280.120



FTRFB-280.101

### Cooling ceiling regulation



FTRFB-280.119



CTFRB-010.101

### Single-room regulation via one transmitter to any number of receivers



FTRFB-280.119

HTFRU-010.101



Installation radio receiver  
Customer-specific applica-  
tions e.g. electric heating

HTFRU-110.124  
Optional: remote sensor for  
regulating floor or monitoring

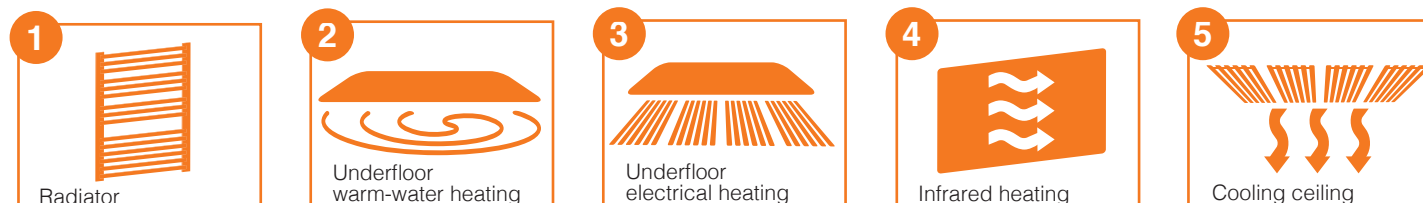
## Smart controlling with b@home

Intelligent remote control operation for heating and cooling systems

b@home - the clever way to control heating and cooling systems from anywhere and at any time through the new alre b@home Gate. alre wireless systems, both existing and yet to be set up, can be controlled via the internet or home network: simply using a free app (iOS/Android) or via standard PC/notebook browser. The intuitive, simple operation can access rooms individually or centrally, and can optimise energy consumption.

After a one-off registration on the b@home portal, the user can access the wireless system from anywhere via a https connection. This is also possible without an internet connection via WLAN/LAN. The b@home Gate is the interface between the alre wireless system and the WLAN/LAN router.

The wireless room temperature sensor FTRCUd-210.021 is the central access point to the settings of all channels or hot/cold zones. It can also be used as a room temperature sensor with clock and actuator, and works with all conventional switches.



### All options and advantages at a glance

- Secure control, monitoring and programming of the hot/cold system from any location
- Up to 32 rooms or hot/cold zones
- Fast and easy commissioning
- Intuitive operation
- Individual room control
- Suitable for all types of heating
- A variety of mobile terminal equipment usable
- An internet connection is not required for the control function
- Upgradeable in existing alre wireless systems\*
- Free apps, no follow-up costs such as monthly subscription fees

\* Except for clock transmitter FTRFBu-180.1xx and FTRFUD-210.123, since corresponding functions are realised using APP/radio nodes/web portal

## The remote controlled b@home components at a glance:

### b@home-Gate



**Type:** MGCBB-064.360

**Function:** The wireless room temperature management system, interface between alre radio system and WLAN / LAN router surface-mounted, network cable to connect to router and mains adapter for power supply are included in delivery



**The b@home app: available free for iOS and Android**

### b@home-control panel



**Type:** diverse variants (pictured FTRCUd-210.021#55)

**Function:** Radio transmitter with timer to record and set the room temperature including control panel for further active channels, changes made using with b@home app or b@home portal are displayed, flush-mounted 230V~, fits all common switch programmes thanks to diverse variants (50 x 50 mm, 55 x 55 mm, pure white, traffic white, pearl white, matt, glossy)

### Transmitter



**Type:** FTRFB-280.101

**Function:** Radio transmitters to record the room temperature, surface-mounted super flat, batteries included in delivery



**Type:** FTRFB-280.120

**Function:** Radio transmitters to record and set the room temperature, switch "Komfort / ECO", surface-mounted super flat, batteries included in delivery



**Type:** FTRFB-280.119

**Function:** Radio transmitters to record the room temperature, surface-mounted super flat, batteries included in delivery



**Type:** FKRFB-080.151

**Function:** Radio transmitter to switch alre radio receivers to the ECO mode using an external contact (e.g. window contact), surface-mounted, batteries included in delivery

### Transmitter



**Type:** diverse Variants (pictured HTFRL-214.140)

**Function:** Multi-channel radio temperature controller (Heating) for installation in the heating circuit manifold, 4-channel or 8-channel, including pump module, IP 20 or IP 65, 230V~



**Type:** HTFMA-180.161

**Function:** 1-channel wireless temperature controller for radiator valves, connection M30 x 1.5, adapter for Danfoss RA, RAV, RAVL and batteries included in delivery



**Type:** CTRFB-010.101

**Function:** 1-channel wireless cooling controller for e.g. cooling ceilings, surface-mounted, 230V~



**Type:** HTFRU-110.124

**Function:** 1-channel wireless temperature controller for flush-mounting in junction box, optional external sensor for floor temperature control or floor temperature monitoring, 230V~



**Type:** diverse Variants (pictured KTFRL-315.125)

**Function:** Multi-channel radio temperature controller (Heating/Cooling) for installation in the heating circuit manifold, 4-channel or 8-channel, including pump module, IP 20 or IP 65, 230V~



**Type:** HTFRB-010.101

**Function:** 1-channel wireless temperature controller, surface-mounted, 3000W switching capacity (e.g. electric heating systems), 230V~



**Type:** HTFRU-010.101

**Function:** 1-channel wireless temperature controller for e.g. natural stone heaters, flush-mounted, 230V~



**Type:** HTFRA-010.101

**Function:** 1-channel wireless temperature controller with Schuko adapter for mobile heaters, 3000W switching capacity (e.g. electric heating systems), 230V~

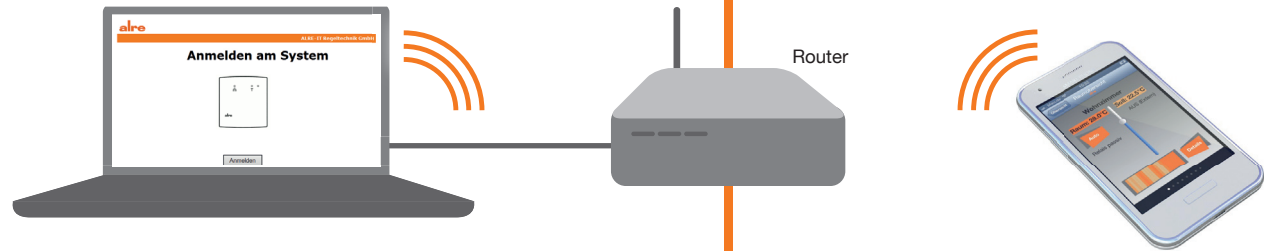




Control and monitoring of heating/cooling regulation from anywhere at anytime via the Internet



Control and monitoring of heating/cooling regulation from anywhere at anytime via the LAN/WLAN (no Internet connection required)



Gate  
b@home  
by alre



## b@home - Gate

For surface-mounted installation – Design Berlin 2000



| Technical data     |   |
|--------------------|---|
| Operating voltage: | + 5VDC (MicroUSB wall power supply unit included in delivery)   |
| Type:              | MGCBB-064.360   |
| Equipment:         | Acknowledgement key, lamp "learning mode/connection control/ Connection loss of / reset / empty battery status", lamp "network status/ authentication / reset", network cable(CAT5) / cable length 3m, MicroUSB power supply unit / cable length 1.8m, direct surface / wall installation with screws |
| Application:       | Radio room temperature management system – remote controllable individual room temperature regulation is realised via Internet or smartphone in conjunction with alre radio transmitters and alre radio receivers.  |

## b@home-control panel

Flush-mounted installation – Design Berlin UP



| Technical data     |  |
|--------------------|--|
| Operating voltage: | 230 V ~, 50 Hz   |
| Type:              | different possible variants (Picture FTFCUd-210.021#21)  |
| Indicators:        | illuminated, graphic capable display   |
| Equipment:         | digital actual value display, display "ECO"; display "On / Off", automatic summer / winter time change, ECO function, ECO value adjustable, power reserve (approx. 3 days), backlight, actual value correction/ measured value correction, child lock, learning function, party setting, pilot function, holiday setting, valve protection, outside setting, operated using direct selector switch, sensor NTC internal (optional external), can be adapted for almost all switch programs |
| Application:       | The bi-directional b@home control panel FTFCUd-210.021 provides central access to the setting of further channels in conjunction with the b@home Gate MGCBB-064.360 and can be used as a room temperature sensor with clock and as a control console. Changes that are made using b@home app or PC / notebook are displayed on the graphic display   |





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