BUILDING AUTOMATION
CONTROL TECHNOLOGY
SENSOR TECHNOLOGY

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RADIO CONTROLLERS

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for intelligent buildings.

b@home by alre

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Radio-controlled sensor

Room temperature sensor with setpoint adjuster - surface mounted installation „superflat“

Technical data	
Operating voltage:	batteries, 2 x Micro AAA, 1.5 V
Type:	FTRFB-280.119
Indicators (LEDs):	for “learn” mode and battery empty indication
Equipment:	setpoint adjuster, mechanical range suppression
Application:	radio-controlled room sensor for recording and setting temperatures in home, office and hotel rooms with normal levels of cleanliness. Can be used with alre multi-channel actuators “heating/cooling” receiver strips to achieve single-room temperature control for heating and/or cooling.

Room temperature sensor with setpoint adjuster and „Comfort/ECO“ switch - surface mounted installation „superflat“

Technical data	
Operating voltage:	batteries, 2 x Micro AAA, 1.5 V
Type:	FTRFB-280.120
Indicators (LEDs):	for “learn” mode and battery empty indication
Equipment:	setpoint adjuster, mechanical range suppression, 4 K fixed reduction, “Comfort/ECO” switch
Application:	wireless room temperature sensors for recording temperature in rooms at home, in the office and in hotels with normal levels of cleanliness. Can be used with alre multi-channel actuators „heating/cooling“ receiver strips to achieve single-room temperature control for heating and/or cooling.

Room temperature sensor - surface mounted installation „superflat“

Technical data	
Operating voltage:	batteries, 2 x Micro AAA, 1.5 V
Type:	FTRFB-280.101
Indicators (LEDs):	for “learn” mode and battery empty indication
Equipment:	without setpoint adjuster for averaging or central control
Application:	wireless room temperature sensors for recording temperature in rooms at home, in the office and in hotels with normal levels of cleanliness.

Radio-controlled sensor with time

For surface-mounted installation – Design Berlin UP

Technical data	
Operating voltage:	230 V ~, 50 Hz
Type:	several different versions (pict. 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 actuators 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
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 sensors for recording and setting temperatures in home, office and hotel rooms with normal levels of cleanliness. Can be used with alre multi-channel actuators “heating/cooling” receiver strips to achieve single-room temperature control for heating and/or cooling.

Radio repeater

Technical data	
Operating voltage:	230 V ~, 50 Hz
Type:	MRCOA-014.201
Displays (LED):	learn mode, loss of connectivity
Features:	schuko outlet adapter housing - outlet remains useable to 13 (3) A
Application:	range expansion between sensors and actuators (except HTFMA-180.161 and FTRCUd-210.021) of an alre radio system, no installation work and simplest handling because it works at any outlet, up to 16 sensors/channels can be trained

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Radio-controlled actuators

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
Equipment:	2-colour LED
Application:	single-channel wireless temperature actuator for surface-mounted installation/ wall mounting, which can be used in conjunction with alre radio-controlled room temperature sensor 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, 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 (pict. 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 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 sensors per channel + 1 transmitter for master-slave operation), central control (KTFRx)

Radio-controlled actuators

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 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 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 with Schuko adapter designed especially for mobile radiators

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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

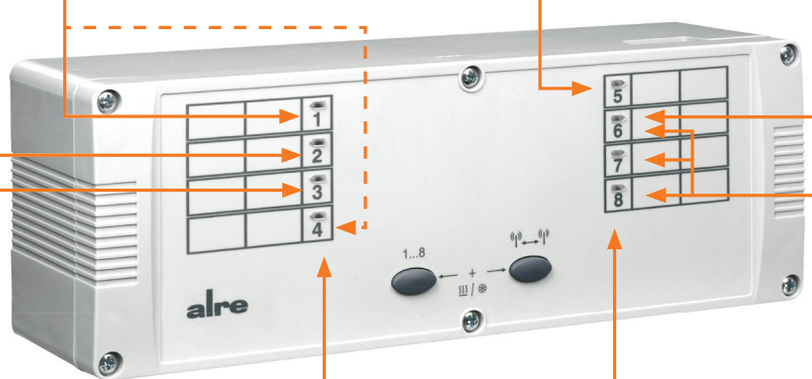
FTRFB-280.119

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

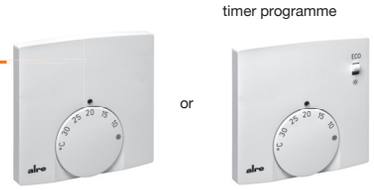


Single-room regulation
with individual timer programme

FTRFUd-210.123#21

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 sensor 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, sensors can be “taught” to work in conjunction with several multi-channel actuators (for example, in a master-slave system).
- Loss of connectivity automatically activates emergency mode, meaning that temperature regulation is not interrupted.
- The multi-channel actuator‘s removable control panel makes it easy to “teach” it the locations of all the sensors.
- The clock sensor 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

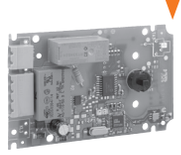
FTRFB-280.119

CTFRB-010.101

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

FTRFB-280.119

HTFRU-010.101



Installation radio actuator

Customer-specific applications e.g. electric heating

HTFRU-110.124

Optional: remote sensor for regulating floor or monitoring

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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 web PC/notebook browser. The intuitive, simple operation can access rooms individually or centrally, and can optimise energy consumption.

On completion of a one-time registration process on the b@home portal, the user will have secure access to the radio system from any location. Access is also possible without an Internet connection using a local home network. The b@home gate is the interface between the alre radio system and the WLAN-/LAN-router.

The optional b@home control unit offers centralised access to the settings for all channels and heating/cooling zones.
It can also be used as a room temperature sensor with a timer, and as a control unit. It is compatible with all standard switch programmes.

1 Radiator

2 Underfloor warm-water heating

3 Underfloor electrical heating

4 Infrared heating

5 Cooling ceiling

6 mobile Radiator

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

Die b@home-App: gratis für iOS und Android verfügbar

b@home-control panel

Type: diverse variants (pict. FTRCUd-210.021#21)
Function: radio room temperature sensor 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)

Sensor

Type: FTRFB-280.101
Function: radio sensor to record the room temperature, surface-mounted super flat, batteries included in delivery

Type: FTRFB-280.119
Function: Radio sensor to record the room temperature, surface-mounted super flat, batteries included in delivery

Actuators

Type: diverse Variants (pict. 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: diverse Variants (pict. KTFRL-315.125)
Function: multi-channel radio temperature controller (Heating/Cooling) for installation in the heating circuit manifold, 4-channel or 8-channel, includingpump 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: HTFRB-010.101
Function: 1-channel wireless temperature controller, surface-mounted, 3000W switching capacity (e.g. electric heating systems), 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: HTFRU-010.101
Function: 1-channel wireless temperature controller for e.g. natural stone heaters, fllush-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~

Repeater

Type: MRCOA-014.201
Function: repeater to directly increase range between sensors, actuators and b@home gate (except HTFMA-180.161 and FTRCUd-210.021), no installation effort and simplest handling by operating at any socket

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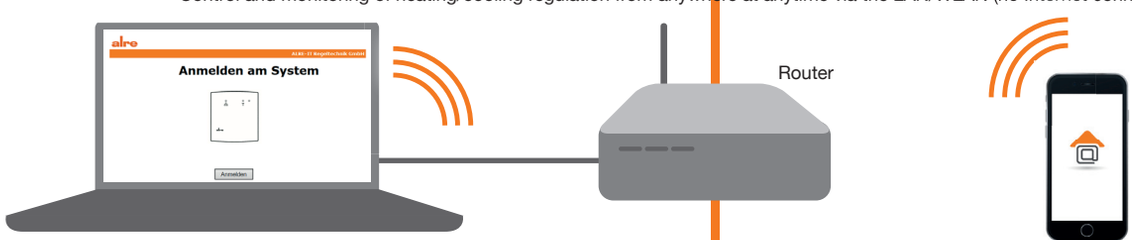
Control and monitoring of heating/cooling regulation from anywhere at anytime via the Internet

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



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 ofreset/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 sensors and alre radio actuators.

b@home-control panel

Flush-mounted installation – Design Berlin UP

Technical data	
Operating voltage:	230 V ~, 50 Hz
Type:	different possible variants (pict. FTRCUd-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 FTRCUd-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 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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E/03-2018/500