INSTRUCTIONS

Intelligent Room Sensor - Wired

67338 02/15 (HKT)



- English

English

Product programme
REH TA3 Room sensor with temperature adjustment
REH TM3 Room sensor with temperature adjustment and mode switch (Auto, Day, Night, Frost Protection)
REH TD3 Room sensor with temperature adjustment, mode switch (Auto, Day, Night, Frost Protection) and floor limit sensor

Mounting of sensor (figs 1 and 2)
The unit is used for comfort temperature control in rooms. The unit should be mounted on an internal wall approx. 1.4-1.7 metres above the floor in such a way as to allow free air circulation around it. Draughts and direct sunlight or other heat sources must be avoided.

Fig. 1 Removing the front cover

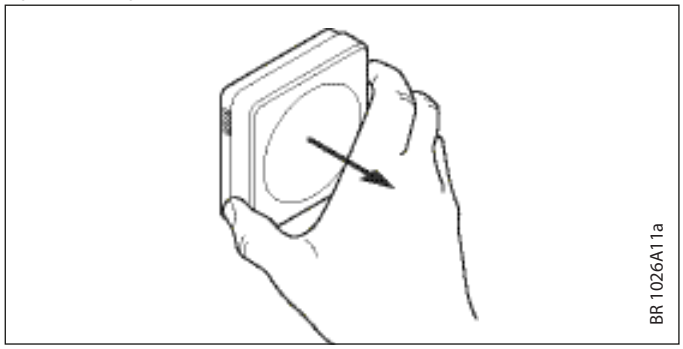
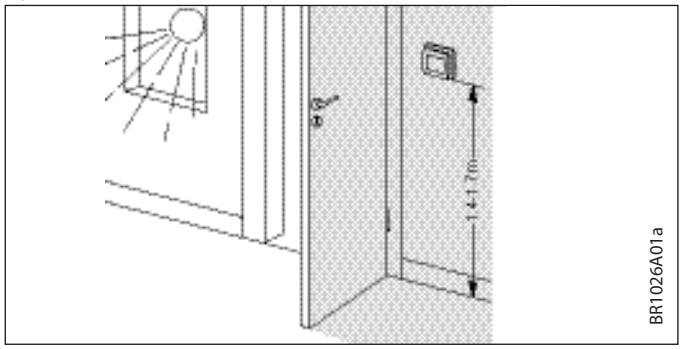


Fig. 2



Room sensors - bus connection (figs 3 and 4)
Only REHAU units which are suitable for two-wire communication can be used. Standard installation cable of minimum 2 x 0.25 mm^2 can be used. Units can be connected in conventional star formation or in bus mode (daisy chain). The master has four sets of terminals marked SENSOR/CONTROLLER BUS that can be used for connecting the 2-core signal cable from the unit.

Any unit can be connected to any pair of terminals. The total length of the 2-wire system can be up to 300 m with a maximum length of 100 m between any two units. For further information see the table below. Remember to connect + to + and – to – .

Fig. 3 Sensors connected in star formation

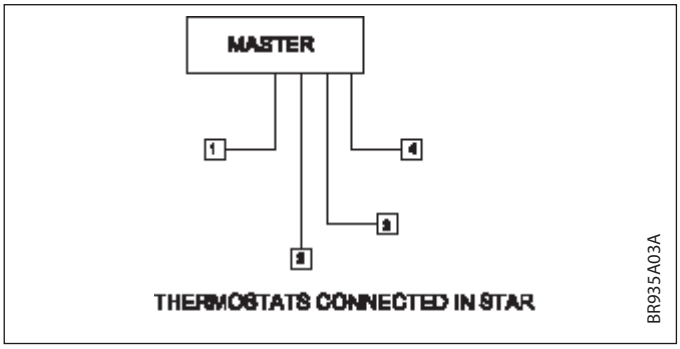
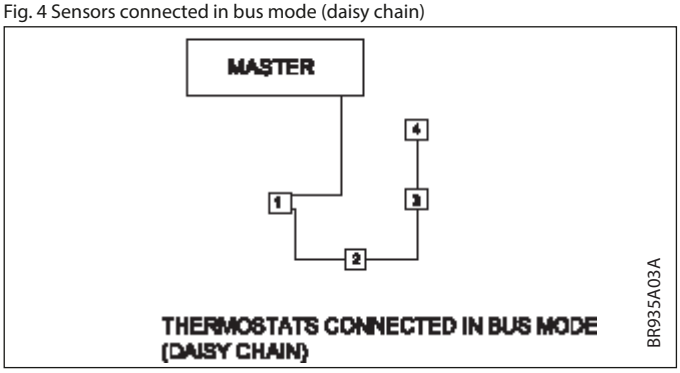


Fig. 4 Sensors connected in bus mode (daisy chain)

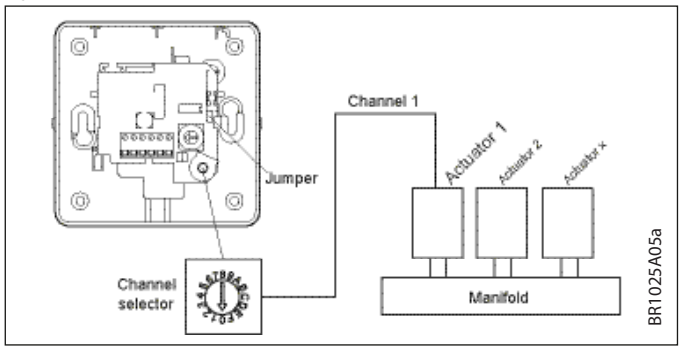


Setting up which room sensor is paired with which thermal actuator (fig. 5)
Each unit can be set to operate a specific output which in turn controls a thermal actuator on the manifold. A selector can be accessed under the front cover of the unit where the number of its output (i.e. its channel no.) can be set with a screwdriver.

Please note that channels 10 to 14 are marked as A through E on the selector.

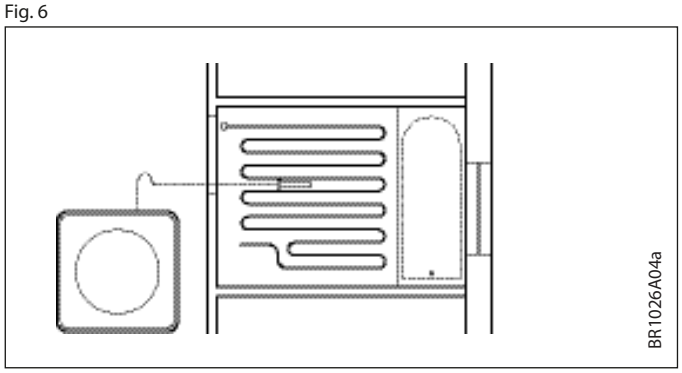
A unit set to CH1 will activate the thermal actuator connected to output 1 on the master. The channel number can be set before power is connected to the system.
The channel set on the unit can be subsequently changed if needed.
If two units are placed in the same room and set to the same channel, temperature will be controlled by the average of the temperature recorded by both units.

Fig. 5



Mounting of floor limit sensor (fig. 6)
REH TD3: Floor limit sensor
Units with floor limit sensor have a mechanical jumper on the printed circuit board allowing limits to be set for MIN. or MAX. temperature regulation. If set for MAX., the limit setting will be 27°C. If set for MIN., the limit setting will be 17°C. These temperatures are fixed when used with REHAU BA3 masters unless the unit has been allocated to a zone group controlled by a REH CT3 room controller. In this case, the limit settings can be increased or decreased via the room controller. The limits then set will apply to all relevant room sensors with floor limit sensor belonging to that group. If a REHAU FC-BMS3 master is used, the limit settings can be changed using the programming buttons on the master.

Fig. 6



Jumper connected: max. limitation
Jumper removed: min. limitation
Jumper location, see fig. 5.

Max. temperature limitation is used to prevent the floor from becoming too warm. This may be required if special floor surfaces (e.g. solid wood) are used. The sensor should be positioned where it can read the true temperature of the floor and should always be within the heated area. Min. temperature limitation is used to keep the floor surface warm, irrespective of room temperature. In tiled bathrooms or pool areas, for example, water will dry more quickly if the floor surface is kept warm. The sensor should be positioned where it can read the true temperature of the floor and should always be within the heated area.

To ease replacement, we recommend that all floor sensors are mounted in a tube positioned between two heating pipes. The inner end of the tube should be sealed, and the floor sensor cable led back to the bottom of the wall. If required, the sensor cable can be extended up to 30 m with standard installation cable.
REH TM3: Use of external room sensor
A remote room sensor can be used instead of the built-in sensor by connecting the jumper across the two-pin bridge on the printed circuit board beneath the room sensor cover. From the factory, the jumper is "parked" on one pin. Jumper location, see fig. 5.

Jumper connected: External room sensor
Jumper removed: Built-in room sensor

See the Installation Manual for further instructions.

Maintenance
The unit is maintenance free.

Keep the air vents (openings) on the unit clean and unobstructed at all times.

Certifications

CE marking
REHAU Limited hereby declares that the product conforms with the following Directives of the European Parliament and of the Council:

- CE marking: 1993/68/EEC
- EMC - electromagnetic compatibility: 2004/108/EC
- RoHS - restriction on the use of certain hazardous substances: 2011/65/EU
- WEEE - waste electrical and electronic equipment: 2012/19/EU

Applied standard(s)
EN 61000-6-2, EN 61000-6-3

Disposal and recycling

Recycling of packaging
Protect the environment by disposing of the packaging in accordance with local regulations for waste processing.

Disposal of the product
Equipment containing electrical components must not be disposed of together with domestic waste.
It must be collected separately along with other electrical and electronic waste according to local and currently valid legislation.

Technical Specifications

Purpose of control	Wired electronic room sensor for controlling hydronic floor heating and cooling
Connection type	2-wire, 5 V, communication bus
Cable type	Standard installation cable ≥0.25 mm²
Cable length	Up to 300 m with max. 100 m between two units
Control principle	PI or ON/OFF
Ambient operating temperature	0/+40°C
Floor limit sensor	Max. 30 m
Power drain	<1 mA
Temperature adjustment	±4°C
Functions REH TA3	None
Functions REH TM3, REH TD3	Auto, comfort, setback, frost protection
Room sensor	Internal
Floor limit sensor	
REH TA3, REH TM3	None
REH TD3	Incl. floor sensor
Mounting method	For mounting direct on wall or in wall socket
Enclosure rating	IP 21
Dimensions	H/86.0, W/86.0, D/25.5 mm

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