

INSTRUCTIONS FOR INSTALLATION

The floor heating system consists of:

- Master regulator CFM
- Slave regulator CFS (if > 8 heat circuits)
- Room thermostats CFR
- Zone regulator CFZ (optional)

Master regulator CFM

This regulator governs the individual heat circuits via wireless communication with the associated room thermostats. Connection of 8 heat circuits is enabled. If more heat circuits are required, connect one or max. two **slave regulators CFS**, each with connection for 8 circuits. This allows max. 24 heat circuits to be governed.

The master/slave is to be fitted immediately above the distributor pipe on the wall or in a distribution cabinet. Easy access to plugs and terminals should be ensured. See instruction drawing on the opposite page.

If two slave regulators are connected, move the jumper in "slave 2" to position 2. See instruction drawing.

The connection cable for the slave regulator is 1 m. Cable lengths of up to 100 m are enabled (available from your electrical items wholesaler)

If the master regulator is located in a metal cabinet, an **external antenna** must be fitted outside the cabinet to ensure proper reception.

The distance to metal parts must be min. 35 cm. (Order no. 088H0093)

Alarm

There are 2 options with respect to alarms given by the master regulator:

- -Integral acoustic signal can be selected by moving the jumper marked "buzzer" from OFF to ON. See installation drawing.
- -External alarm generator can be connected to the output marked *△*.

Technical data

Max. ambient temperature 60°C. Voltage 24 AC at 60 Hz Enclosure IP40

Room thermostat CFR

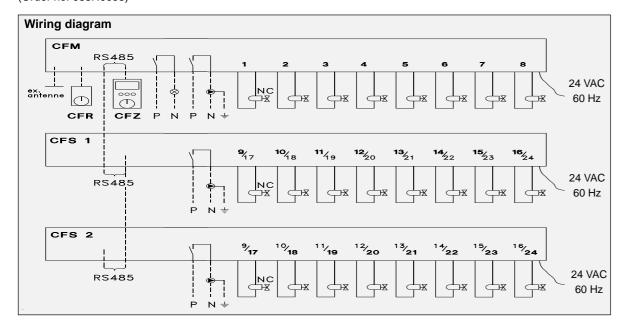
Before fitting the room thermostat, register the master regulator.

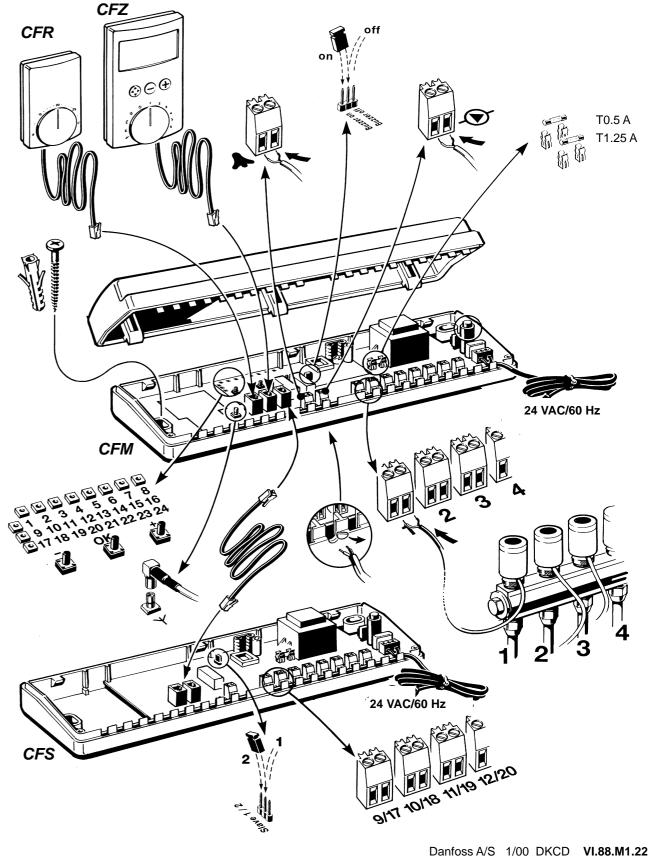
See the instructions that come with the room thermostat. It is important to mark the room thermostat, e.g. with room or number, to know where in the dwelling it belongs. Labels are supplied for this purpose.

Zone regulator CFZ

The zone regulator governs a maximum of 6 heat zones. For each heat zone, individual timing programmes can be connected. For reading and operating convenience, it is recommended to place the regulator at eye height.

The connection cable is 5 m. Cable lengths up to 100 m are permitted (available from your electrical items supplier).





Putting into operation

Registration of room thermostat with output(s)

- -Connect the room thermostat (fig. 1) and the CFM master regulator via the black installation cable. The first vacant output in the registration field will flash. Other vacant outputs will be lit. Outputs already registered are not on (fig. 2).
- -If OK is pressed **briefly**, the room thermostat has been registered with the output and the LED goes off (fig. 2).
- If the room thermostat is to be registered with more than one output, go to these outputs by means of the +/- keys and confirm by pressing OK briefly.

When the installation cable is removed, the red LED underneath the battery cover (fig. 1) will flash for at least one minute (Test mode).

Unregistration of room thermostat

The room thermostat and the master regulator may **not** be connected.

- -Press OK for 5 sec ...; the first LED in the row for registered room thermostat will flash (fig. 2). Other LEDs for registered room thermostats will flash.
- -Use the +/- keys to go to the room thermostat to be unregistered (it will flash).
- -Confirm unregistration by pressing OK for 5 sec.. The LED goes off.

Test of room thermostat

If a defect in a room thermostat is suspected, the following test may be carried out: -Set the thermostat to the highest temperature (EC).

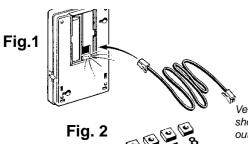
- -Move the function switch o the side of the room thermostat to a new position.
- -If the LED underneath the battery cover (fig. 1) flashes quickly for at least one minute, the room thermostat is in order.

Transmission interval

A room thermostat transmits regularly. When a signal is received from the master regulator, two quick flashes are sent. Subsequently, the normal operating mode is displayed.

Operation

During normal operation, the status of the master regulator outputs is shown. If the status of the outputs of the slave requlators is to be shown, scroll by means of the +/- keys. After approx. 10 sec. the system reverts to the output status of the master



LED row for outputs

LED for slave regulator 1

LED for slave regulator 1

LED for slave regulator 2 LED for master regulator

Vertical and horizontal LEDs show the operating mode of the outputs in combination.

Light: heat is added to the room.

No light: no heat is added to the

Example: When the 4th horizontal LED and the 1st vertical LED are lit, heat is supplied to room 4.

Operating disturbances are shown as:

- Acoustic alarm in master regulator (if activated)
- Flashes in the registration field of the master regulator
- Alarm symbol in the zone regulator display (if used)

Trouble shooting Registration field shows (Zone regulator shows)	Mode	Cause of error	Outputs
LED for master/slave regulator flashes and LED for output flashes. (Alarm symbol in zone regulator flashes)	There has been no connection the room thermostat for more than 90 min.	 Defective battery in room thermostat Defective room thermostat Too long transmission distance to room thermostat Present room temperature is below 4°C 	Frost protection: Output 15 min. open; 45 min. closed. Present output is open.
LED for slave regulator and all room thermostats flashes. (Alarm symbol in zone regulator flashes)	No connection to slave regulator	 Bus cable defective or disconnected. Slave regulator defective. Two slave regulators are installed as "slave 1" and "slave 2". 	
(No display in zone regulator display)	No connection to zone regulator	Bus cable defective or disconnected. Zone regulator defective.	
(Display shows "Connection broken")	Master regulator does not react	- Defective fuse - Defective circuit	

Acoustic alarm is disconnected by pressing +/- or pressing OK in the registration field.

FCC ID: XXXTYPE.CFR

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

"This device complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."