

MAKING MODERN LIVING POSSIBLE

Danfoss



living connect[®]
Installation and User Guide

Danfoss Heating Solutions

Thank you for buying a Danfoss product UK

Contents

1. System overview	5
2. Overview of display and control buttons	5
3. Installation - step by step	6
3.1 Preparation	6
3.2 Installation of <i>living connect</i> ®	6
3.3 Configuring Danfoss Link™ CC	7
3.4 Connecting to Danfoss Link™ CC	9
4. Technical settings	11
4.1 Reinstallation mode	11
4.2 Testing the connection	11
4.3 Adjustments for over/undersized radiators	12
4.4 Reset to factory settings	12
4.5 Technical data	13
5. Safety precautions	15
6. Removing <i>living connect</i> ®	15
7. Disposal	15
 User Guide	 16

1. System overview

living connect[®] is an electronic radiator thermostat for homes. It is controlled by a central device called a Danfoss Link™ CC. Danfoss Link™ CC can also control floor heating and on/off switches in the building.



Please refer to the separate Danfoss Link™ CC and room sensor Danfoss Link™ RS manuals for more information.

2. Overview of display and control buttons

See page 16.

3.1 Preparation

living connect® is supplied with adapters for Danfoss RA valves and valves with M30 x 1.5 (K) connections (014G0002), two alkaline AA batteries and a 2 mm Allen key.

Inserting the batteries

Remove the battery cover and insert the two batteries. Ensure that the batteries are correctly inserted.

▮ must flash on the display before installation, if this is not the case, see reinstallation mode page 10.



3.2 Installing *living connect*®

1. Start by mounting the adapter.		
2. Tighten RA adapter using the 2 mm Allen key. Hand-tighten K adapter (max. 5 Nm).		
3. Screw the thermostat onto the adapter and tighten by hand (max. 5 Nm).		
4. Press  for approx. 3 seconds to enter the function menu.		

3.3 Configuring Danfoss Link™ CC

For practical reasons, it is recommended that the Danfoss Link™ CC is connected to a battery pack (014G0262). This makes the device mobile, and it can then easily be positioned at a distance of up to 1.5 m from each radiator thermostat that is to be added to the system.

Remove the front cover from the Danfoss Link™ CC by carefully levering it off, starting with the bottom corners. Press and hold down the setup button using a ballpoint pen for approximately three seconds to start the installation menu (the start-up phase may take several minutes).



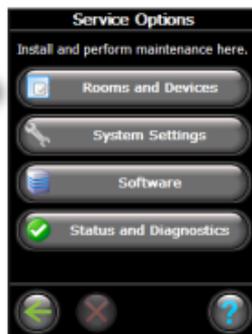
For Help, press **?** in the lower right corner.

For installation without a battery pack, please see
www.danfoss.com/living

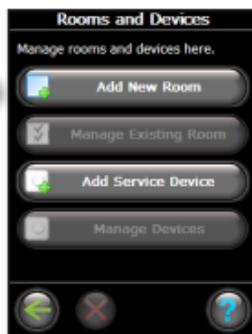
3. Installation - step by step

UK

1. Configure the rooms in which the radiator thermostats have been installed.



2. Add a new room.



3. Edit or enter the room name.

Press  to confirm.



Note: A list of common room names can be found using this button 

3.4 Connecting to Danfoss Link™ CC

Each thermostat must be connected to the Danfoss Link™ CC. This is best done by standing beside each thermostat with the Danfoss Link™ CC (connected to the recommended 014G0262 battery pack).

1. The “Configure room” menu is displayed - select “Room devices”.



2. Select “Add a device”.



3. Installation - step by step

UK

3. Press "Begin Registration", and then press and release  on the thermostat.



4. Repeat for each device.
5. Once all devices have been registered and the Danfoss Link™ CC is placed in its final position, perform a network test (see separate Danfoss Link™ CC manual).

4.1 Reinstallation mode

If the thermostat has been removed from the radiator and needs to be reinstalled (after being used), it is necessary to activate installation mode to prevent damage to the thermostat.

To enter installation mode:

Press  until  is displayed.

Press  to withdraw the spindle.  flashes.

Reinstall the thermostat on the valve.

Press  for approx. 3 seconds to exit.



Please also refer to section 6 regarding removal of the thermostat from the radiator valve.

4.2 Testing the connection

Press  for at least 3 seconds until  is displayed.

Press  until  is displayed.

Press  to make the connection.

 disappears when the connection is made.

If no connection can be made, the alarm and antenna symbols flash together.

Refer to FAQ at

www.danfoss.com/living



4.3 Adjustments for over/undersized radiators

The factory setting is $P2$.

Use $P1$ if the radiator appears oversized for the room.

Use $P3$ if it is undersized.*

Press \triangle for at least 3 seconds until \mathcal{M} is displayed.

Press ∇ until Pb is displayed. Press \triangle .

Select $P1$, $P2$ or $P3$ using the arrow keys, and exit using \triangle .

* The frequency of $P1$, $P2$ and $P3$ regulation varies to compensate for radiator over/under sizing.



4.4 Reset to factory settings

Remove the battery cover and take out one battery.

Press \triangle and hold for approx. 5 seconds, while reinserting the battery.

Danfoss Link™ CC will then display "device removed". Press OK.

Note: If the thermostat is moved to another room, it is recommended it be reset to the factory default settings. The thermostat will be reset and disconnected from Danfoss Link™ CC.

4.5 Technical data

Actuator type	Electromechanical
Software classification	A
Safety classification	Type 1
Recommended use	Residential
Open window function	Yes
Synchronizing	Every 5 minute
Mechanical strength	70 N (max. force from valve)
Maximum water temperature	90°C
Movement type	Linear
Battery life	2 years
Spindle movement	2-3 mm on the valve
Maximum extension	4.5 mm
Temperature sampling	Measures temp. every minute
Speed of adjustment	1 mm/s
Power supply	2 x 1.5V AA alkaline, class III (SELV)
Power consumption	3 μ W in standby, 1.2 W when active
Ambient temperature	0° to 40°C
Transportation temperature range	-20 to 65°C

4. Technical settings

UK

Temperature setting range	4 to 28°C
Size (mm)	L: 91 Ø: 51 (RA)
Ball pressure test	75°C
Weight	177 g
Transmission frequency	868.42 MHz
IP class*	20

** This thermostat should not be used in hazardous installations or in places where it will be exposed to water.*

5. Safety precautions

The thermostat is not intended for children and must not be used as a toy.

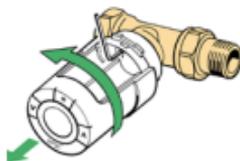
Please dispose of packaging materials in accordance with local regulations and ensure all packaging is kept away from children to prevent the possibility of injury.

Do not attempt to dismantle the thermostat as it contains no user-serviceable parts. Please return any defective thermostat to the distributor.

6. Removing *living connect*[®]

To remove the thermostat, insert an appropriate tool in the hole in the thermostat's battery chamber and in the hole in the black ring behind the chamber (see illustration).

Keeping the tool in position, turn the entire thermostat anticlockwise until it is completely unscrewed.



See section 4.1 regarding reinstallation mode.

7. Disposal

The thermostat must be disposed of as electronic waste.



Contents

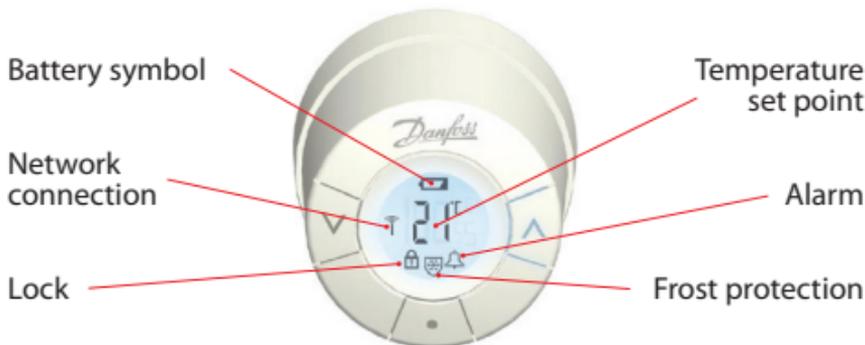
UK

1. System overview	16
2. Overview of display and control buttons	16
3. Changing the batteries	17
4. Temperature control and adjustment	17
5. Troubleshooting	18

1. System overview

See page 5.

2. Overview of display and control buttons



 Use these buttons to navigate within the menu and to adjust the temperature.

 Use this button to select the menu and confirm choices.

3. Changing the batteries

When the battery level is low, the alarm bell and battery icon will flash simultaneously.

If the battery goes flat, the system switches automatically to frost protection mode.

Remove the battery cover and insert two batteries. Ensure that the batteries are correctly oriented.

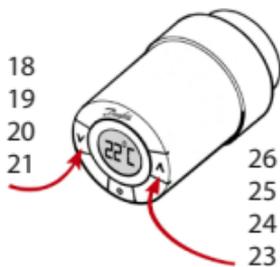
*Note: Rechargeable batteries **must not** be used - use only 1.5V AA alkaline batteries.*

4. Temperature control and adjustment

The temperature is usually controlled via Danfoss Link™ CC, but may be changed at any time using the thermostat's buttons. If this is done, the thermostat sends a message to Danfoss Link™ CC, instructing it to synchronise the other thermostats in the room.

The change only remains in effect until the next programmed period.

Temperature range 4-28°C.



Press   to change the temperature.

5. Troubleshooting

UK

Error code	Error
E1	Transmitter failure. Contact your local service technician.
E2	Malfunction in thermostat's front temperature sensor. Contact your local service technician.
E3	Malfunction in thermostat's rear temperature sensor. Contact your local service technician.
Antenna and alarm bell symbol flash together	No connection to Danfoss Link™ CC, follow the instructions at www.danfoss.com/living



Danfoss A/S

Haarupvaenget 11
DK-8600 Silkeborg
Denmark

Phone: +45 7488 8000

Fax: +45 7488 8100

Homepage: www.danfoss.com

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.