

ENGINEERING TOMORROW

Danfoss Link heating control

## **Simply** smarter heating

Giving your customers the ultimate integrated heating experience has never been easier. With *Danfoss Link* each individual element, from floor heating control to electronic radiator thermostats, has been meticulously engineered to function as one seamless system – making it as easy to love as it is to work with. *Danfoss Link* simply is smarter heating.





Link up to **30** radiators from one central point.

### **Danfoss Link** The logical next step



#### Smart heating solution

Danfoss Link<sup>™</sup> CC can control living connect® radiator thermostats, floor heating – both electrical and hydronic – and the on/off switches in a house. And with the Danfoss Link<sup>™</sup> App you can control your home heating from anywhere.







## Installation **Done**

Installing a fully intelligent heating system has never been this easy. Because all *Danfoss Link* components have been developed and fine-tuned to work perfectly together, installing and commissioning the *Danfoss Link*<sup>™</sup> *CC* panel is as simple as it can be.

And when you've done that, our video guide and Helpdesk are ready and waiting to help your customers set up wifi and app control. **Simple. Easy. Done.** 



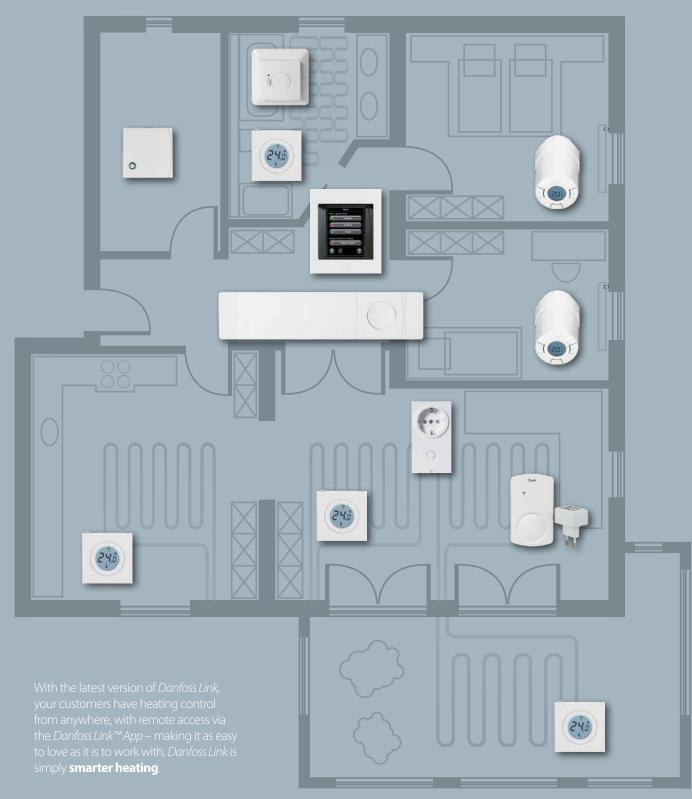


## One job One **system**

Intelligent energy efficiency and full heating system control – all at the touch of a smartphone. *Danfoss Link* is the ultimate heating system experience. Simple to use and beautiful to look at. And with one completely integrated system, recommending, installing and servicing the perfect solution will be just as simple for you.



# The ultimate integrated **heating experience**



## **Danfoss Link** Smart heating solution

From a single location, *Danfoss Link* wirelessly regulates heating throughout the house – perfect for customers who value the ultimate in convenience and modern technology. All system components are fully compatible and home heating can be remotely controlled through the *Danfoss Link* App.

#### **Simple installation**

Danfoss Link<sup>™</sup> CC is easy to install using either a PSU (in-wall power supply) or an NSU (net supply). Two-way wireless technology means that there is no need for either a PC or a cable to link components. Large, intuitive icons and easily readable texts guide you through the programming process and make installation a breeze.

#### **Programmed energy savings**

Complete weekly schedules can be programmed with the desired temperature settings using the factory setting. This enables perfect individualization and immediate energy and cost savings.

#### **Easy system expansion**

*Danfoss Link* is also designed for effortless future expansion. This is ideal when additional components need to be integrated into the system. For example, thermostats in other rooms or extra applications such as outdoor lighting control.



#### Central controller Danfoss Link™ CC

#### **Key features:**

- Control heating from one central point
- Group rooms in a Living Zone
- Simple user interface
- Color touchscreen
- Weekly heating schedule
- Manual schedule option
- At home and Vacation modes
- Pause heating mode
- Wi-Fi to connect to home network
- Integrated help function
- Personalized settings
- Quick heating regulation functions

#### Danfoss Link<sup>™</sup> App

#### Key features:

- Control heating from anywhere
- Includes heating control functionality from *Danfoss Link*<sup>™</sup> *CC*
- Simple and intuitive user interface
- Full home status at a glance
- High level of data security
- Available for Android and iOS

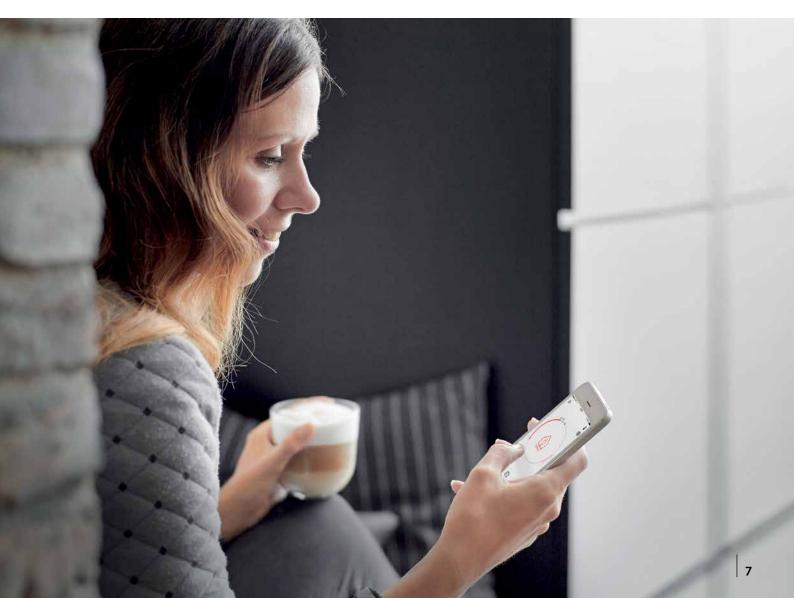
#### Important:

The *Danfoss Link*<sup>™</sup> *App* requires access to homeowners Wi-Fi network.



Scan to download the app





## **Danfoss Link** and radiator heating

#### System elements

The Danfoss Link<sup>m</sup> CC Central Controller electronically controls the living connect<sup>®</sup> radiator thermostats. Communication between the central controller and the thermostats is based on the latest wireless technology.

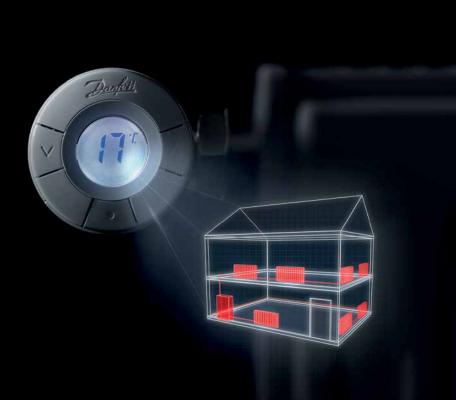
#### **Full compatibility**

Fitted with two AA alkaline batteries, the *living connect*<sup>®</sup> radiator thermostats fit Danfoss RA, RAV, RAVL and RTD valve housings as well as valve housings with M30x1.5 and M28 connectors.

#### Cost-saving comfort heating

Reduced heating costs and high comfort levels in one. Programming a weekly schedule with day and night setback and the corresponding temperature settings, allows the system to be effortlessly adapted to the rhythms of life. Another energy-saving feature is the 'vacation' function.

Based on the results of independent studies, replacing old thermostats with the *living connect*<sup>®</sup> achieves up to 30% energy savings. Visit the case story section at smartheating.danfoss.com to see how different families achieved energy savings with *Danfoss Link*.





## Radiator thermostat *living connect*<sup>®</sup>

#### **Key features:**

- Pause heating
- 'Valve exercise' function
- PID contre
- Battery lifetime up to two years
- Warnings: 'low battery' and 'no signa
- Variable setback in s
- Max./min. limitation
- Child loc
- 'Open-window' detection
- Backlit display
- Not suitable for return valves



*living connect*® is the world's first electronic radiator thermostat to achieve eu.bac certification.

212200

## **Danfoss Link** and hydronic floor heating

A floor heating system controlled via the *Danfoss Link*<sup>™</sup> *CC* Central Controller offers optimum reliability and functionality. It is also simple to install and operate.

#### System elements

- Danfoss Link<sup>™</sup> CC Central Controller for wireless control of the floor heating
- Danfoss Link<sup>™</sup> HC Hydronic Controller can communicate with up to 10 room thermostats. With up to three Danfoss Link<sup>™</sup> HC hydronic controllers per system, one Danfoss Link<sup>™</sup> CC can control as many as 30 room thermostats
- Danfoss Link™ RS Room Sensor for precise measurement and setting of temperature values in each room

#### Simple and secure installation

Two-way communication makes it possible to instantly check the status of the wireless connection to the thermostats. This offers high level of security during installation.

#### **One supplier – total functionality**

Both systems – floor and radiator heating – are controlled by the central *Danfoss Link*<sup>™</sup> *CC* unit. This works smoothly because all elements "speak the same language" and work together to save energy.



#### Hydronic controller *Danfoss Link*™*HC*

#### **Key features:**

- Wireless two-way communication, 868 MHz
- · 24V short-circuit protected outputs with LED
- Actuator outputs for various cable connections
- Easy wiring with stress relief and cable retainers
- Control PWM (pulse width modulation)
- Automatic self-diagnostic function with error message
- Switching relay for pump and boiler control
- Input (on/off) for heating/cooling

#### Room temperature sensor Danfoss Link ™RS

#### Key features:

- High flexibility free positioning and easy repositioning of room thermostats
- Backlit display (during operation)
- Built-in sensor for measuring room temperature
- Display of set and actual temperature
- Timeless modern design
- 2 x AA batteries
- Battery life up to 2 years
- Warnings: 'low battery' and 'no signal'

## **Danfoss Link** and electric floor heating

Danfoss Link<sup>M</sup>CC is the perfect solution for the control of electric floor heating or floor thermal regulation system. All heating elements are designed to be networked into a complete system, with two-way wireless communication.

#### System elements

- Danfoss Link™ CC Central Controller for the wireless control of electric floor heating
- Danfoss Link™ FT Floor Thermostat for floor electric heating switches the heating on and off. Optionally equipped with a sensor to easily and accurately measure floor temperature. The thermostat has a signal amplifier function for heaters installed some distance away from the central controller
- *Danfoss Link™ RS* Room Sensor for precise measurement and setting of room temperature values

#### Perfect comfort heating

Electric underfloor heat mats are often used as additional heating to radiators or, outside the main heating season, as the sole heat source. The system is very responsive and ensures pleasant ambient temperatures at any time of the day.



#### Room temperature sensor Danfoss Link ™RS



Floor thermostat Danfoss Link ™ FT

**Key features:** 

#### Key features:

- High flexibility through free
  positioning
- Backlit display
- Built-in sensor for temperature measurement
- Display of set and actual temperature
- Timeless modern design
- 2 x AA batteries
- Battery life up to 2 years
- Warnings: 'low battery' and 'no signal'





## **Danfoss Link** and electrical appliances

Even electrical appliances can be integrated into an overall system via the central controller. The end-users simply decide how they want to use the relay. Anything is possible, from an aquarium to outdoor lighting installations.

#### Danfoss Link™ PR – plug-in relay for electric on/off control

Danfoss offers a complete portfolio for special requests, allowing many electrical installations to be integrated into and controlled by the network. One handy Danfoss accessory is the plug socket relay for easy connection of electrical devices. It is activated and timed via an on/off switch at the *Danfoss Link*<sup>m</sup> *CC* Central Controller.

#### Danfoss Link<sup>™</sup> HR – hidden relay for electric on/off control

Communicates invisibly with *Danfoss Link*<sup>™</sup> CC.



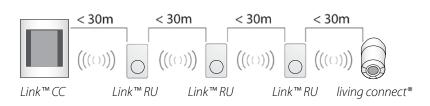


#### Repeater unit **Danfoss Link™RU**

Hidden relay **Danfoss Link™HR** 

Plug-in relay **Danfoss Link™PR** 





Using repeater units, the radio range between the central controller and the installations can be expanded. This may be necessary because of a weak radio link caused by widely spread installations, large distances, metal objects, special structural conditions, etc.



ENGINEERING TOMORROW



## Proven expertise that **simply works**

With more than 80 years' experince as supplier of complete systems, we engineer every single component and product ourselves. This enables us to supply you with a fully integrated system, in perfect balance. **It simply works. Why settle for less?** 

#### smartheating.danfoss.com



Scan to download the Danfoss Link™ App

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