ENGINEERING
TOMORROW

User Guide

Danfoss Ally™

zigbee certified product

www.danfoss.com

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1. Danfoss Ally™ introduction

The Danfoss Ally™ gives you all the benefits of a full-blown smart heating system – in a simple easy-to-use app. With the Danfoss Ally™ you get full control of your radiator and floor heating as well as your heating bill. From virtually anywhere and at any time whether you're at home or on the go. You can even control your heating system with your voice as the Danfoss Ally™ speaks with many your other IoT friends.

The intuitive app user interface is designed to make your everyday life as simple and comfortable as possible. The app guides you through the quick set-up. Lets you fit your home heating to your daily routines. And gives you the complete overview and control at all times.

The Danfoss Ally™ is Zigbee 3.0 certified. This means that it speaks the same wireless language as tons of other smart home devices around the globe. Allowing you to connect the Danfoss Ally™ to your existing smart home setup. And to make your smart home even smarter.

1.1 Key features

- The Full control of the radiator and underfloor heating via the app on your smartphone
- A higher level of comfort and energy efficiency by adapting room temperature to a daily schedule
- Easy to use and install with the intuitive app control
- Designed to bridge form and functionality
- Remote control from everywhere
- Up to 30% energy savings
- Fits all valves
- A maintenance-free thermostat – the battery lasts up to two years
- Works with Amazon Alexa, Google Assistant, Apple Voice Control
- Excellent temperature control
- EPBD compliant
- Open API
- Zigbee 3.0 certified

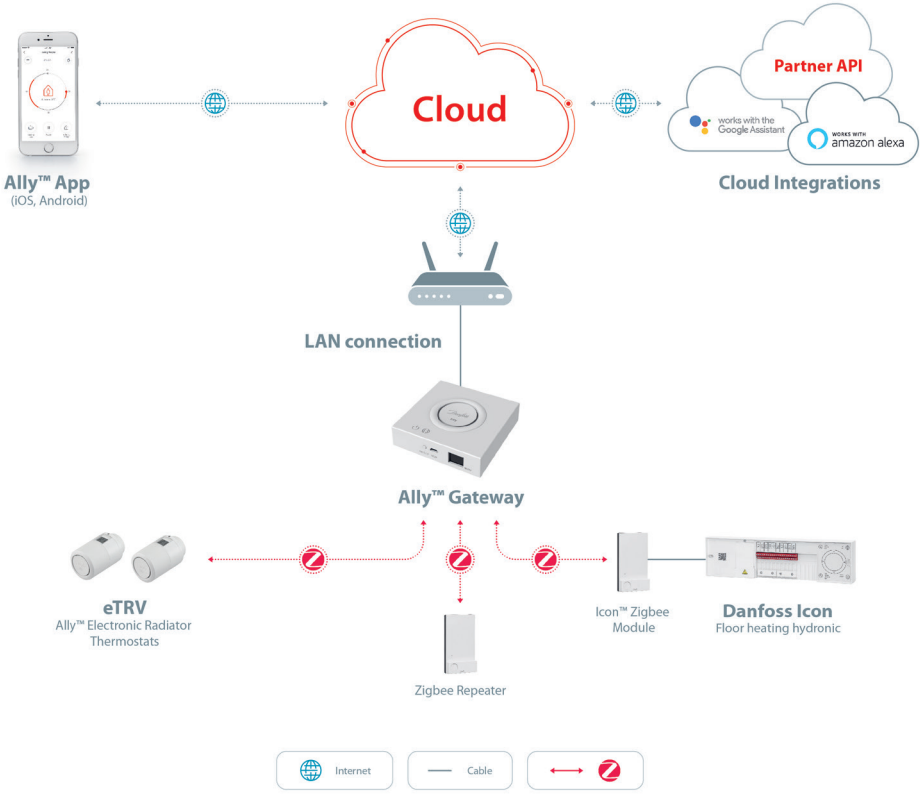
1.2 Identify your Danfoss Ally™

Product	Installation Guide - Languages	Code no.
Danfoss Ally™ Gateway	EN, DE, DA, FR, IT, PL, CS	014G2400
Danfoss Ally™ Starter Pack	EN, DE, DA, FR, IT, PL, CS	014G2440

1.3 Danfoss Ally™ components and communication map

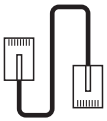
We know how inter connectivity is the secret behind a truly smart home. Where devices are flawlessly connected in an intelligent network. In a smart ecosystem that allows you to control your world in your way.

The Danfoss Ally™ is Zigbee 3.0 certified. This means that it speaks the same wireless language as tons of other smart home devices around the globe. Allowing you to connect the Danfoss Ally™ to your existing smart home setup. And make your smart home even smarter.



2. In the package

The Danfoss Ally™ Gateway are supplied with the Quick Guide, LAN cable, Power supply cable.

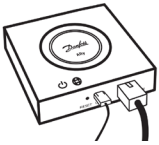
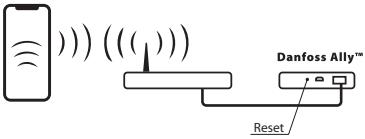
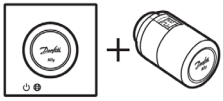
			
Danfoss Ally™ Gateway	*Quick Guide*	*LAN cable*	*Power supply cable*

3. Technical specifications

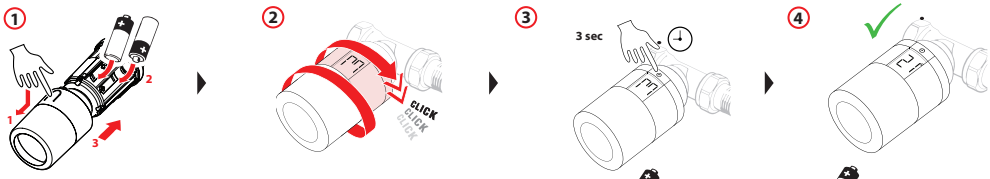
Danfoss Ally™ Gateway	
Device Function	Smart Home Gateway
Recommended Use	Residential indoor (pollution degree 2)
Application	Radiators, water-based floor heating
LED Indicators (green)	Power/Status, Network Connection
Button	Press Reset Button for 5 sec. to perform factory reset
Power Supply	5 VDC
Adaptor	110 V ~ 240 VAC, 5V 1A DC
Power Consumption / Standby	< 5 W / < 2 W
Wired Communication	10/100M Ethernet Port (RJ45, LAN)
Wireless Communication	Zigbee / IEEE 802.15.4
Transmission Frequency / Power	2.4 GHz / < 20 dBm (79 mW)
Wide Open Transmission Distance	300 m outdoor line-of-sight
Firmware Update	Support for over the air updates
Operation Temperature	-10 °C to 55 °C
Storage Temperature	-20 °C to 60 °C
Size	95 mm x 95 mm x 23 mm
IP class	20
Integrations	Amazon Alexa, Google Assistant, Partner API
Approval, markings etc.	CE zigbee IEEE

4. Download and install the Danfoss Ally™ App. The first use.

The Danfoss Ally™ gives you all the benefits of a full-blown smart heating system – packed in a simple easy-to-use app. No more control unit – now your smartphone is all you need to control and monitor all your radiators and floor heating.
In this way, you're always in control of your home heating. Whether you're at home or on the road. You simply get more flexibility and comfort without the need for complicated hardware.

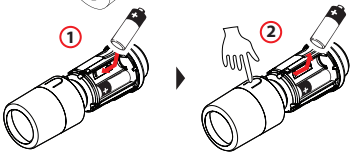
Step 1. Download the Danfoss Ally™ App from Google play or App Store	Download on the App Store GET IT ON Google Play Danfoss Ally™ ally.danfoss.com
Step 2. To enable smartphone control, your Danfoss Ally™ Gateway needs to be connected to the mains power and the Ethernet use the cables provided with the Ally™ Gateway.	
Step 3. Connect your Danfoss Ally™ Gateway to the network. ***Make sure your mobile device is connected to Wi-Fi from the same router as the gateway is connected to with cable.*** ***In case of unsuccessful connection, press and hold "Reset" button for 5 seconds until the LEDs start blinking, then release the button and repeat connection.***	
Step 4. Finalise system setup by adding the subdevices.	

How to mount the thermostat. Remove the battery cover as shown in the diagram and insert two AA batteries. Make sure the batteries are correctly oriented. Screw the Danfoss Ally™ Radiator Thermostat onto the mounted adapter until a click sound appears. Press and hold the button for 3 seconds. The temperature set point will show on the screen once the Danfoss Ally™ Radiator Thermostat is mounted.

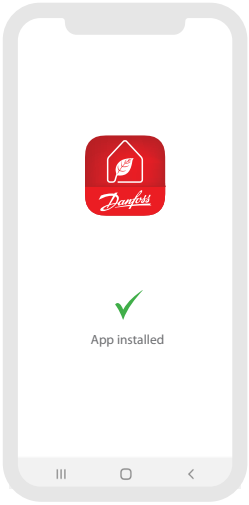


How to reset the thermostat.

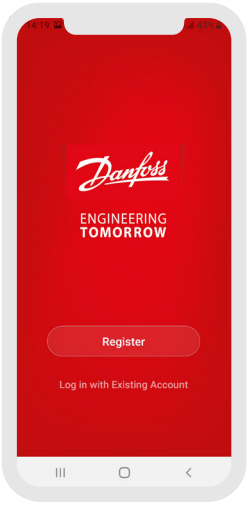
1. Remove the cover and take out one battery.
2. Press and hold ●, Keep holding while reinserting the battery. The screen will go blank after approximately 3 seconds.



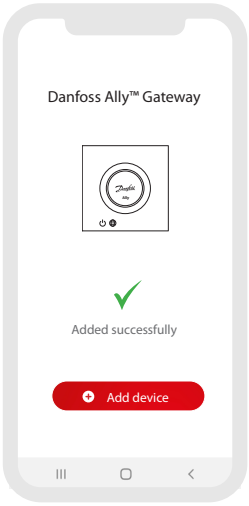
① Install the Danfoss Ally™ app on your smartphone



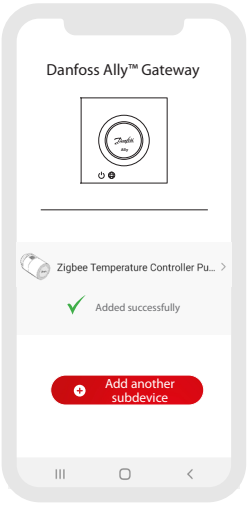
② Open the App and register your account



③ Add Your Danfoss Ally™ Gateway

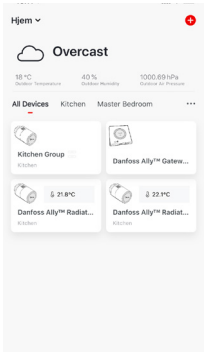
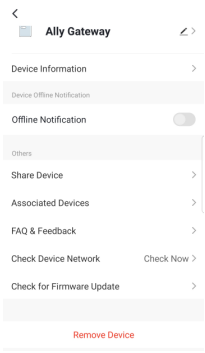
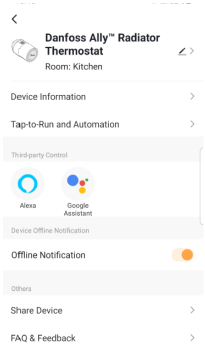


④ Add your Danfoss Ally™ battery and mains powered subdevices

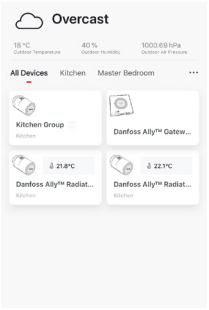


! Screens are different than actual the Danfoss Ally™ App

5. Main screen and menu overview

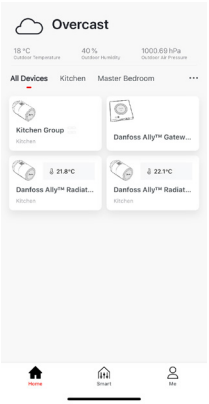
		
The At home screen provides general information about weather and device status in the tiles. Under each room name, all assigned devices to the particular room is shown, as well as heating status and current room temperature. * Weather function displays information in English language only. Data is provided by darksky.com	Press 'Smart Gateway' tile on the Home screen and tap on the pen upper right corner to get to 'Smart Gateway' menu. The menu contains: • 'Device information' about Virtual ID, IP and MAC address, Time Zone. • 'Share Device' for home members, 'FAQ & Feedback' to find answers or submit request. • 'Check for Firmware Update' for Main Module and Zigbee Module and 'Remove Device' with all related devices which was connected before.	Pressing 'Radiator Thermostat' tile on the Home screen and tap on the pen upper right corner to get to 'Radiator Thermostat' menu. The menu contains: • 'Device information' about Virtual ID, Time Zone. • 'Third-party Control' to connect system with Amazon Alexa and Google Assistant voice control. • 'Share Device' for home members. • 'FAQ & Feedback' to find answers or submit request. • 'Check for Firmware Update' for Zigbee Module and 'Remove Device' from current room.

5.1 Rooms with the several radiator thermostats

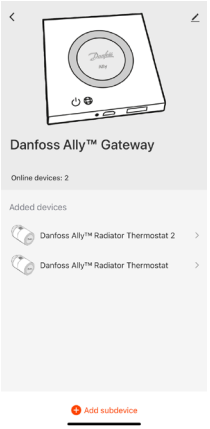


If several Radiator thermostats are assigned to the one room the Danfoss Ally™ App will automatically create a group. This is to ensure settings are synchronized between devices in the same room. It is recommended to always adjust a schedule and preferred temperatures from the group to ensure the most efficient performance.
If the settings are changed on the individual devices then data is not synchronized with the group. A result of this may be inefficient heating regulation.

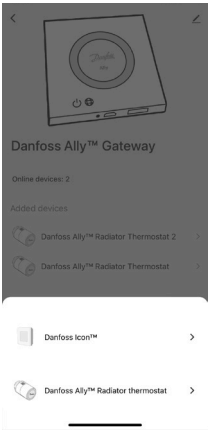
5.2 Add new devices to the existing system



Select the Danfoss Ally™ Gateway to add additional the Danfoss Ally™ Radiator Thermostats or the Danfoss Icon™ devices to the existing system.

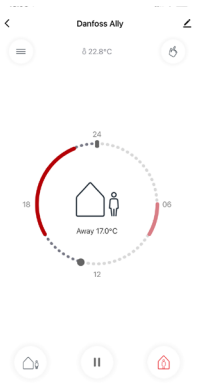


Select 'Add subdevice' and chose between the Danfoss Ally™ Radiator Thermostat or the Danfoss Icon™.



Chose between the Danfoss Ally™ Radiator Thermostat or the Danfoss Icon™. The app will guide through the installation flow.

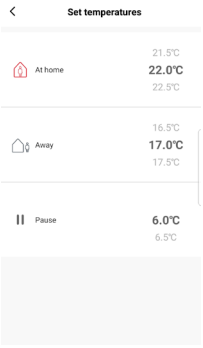
6. Functions and settings overview



23.0°C	Room temperature
	Manual mode
	Heating schedule
	Away mode
	Pause
	At home mode
	The Pre-Heat is used to ensure you have the right temperature when you want it. When the Pre-Heat symbol is showing it means that it is ramping up to the next scheduled At Home mode.

6.1 Setting temperatures

Set your own temperatures for your setback periods in the Danfoss Ally™ App.



For changing temperature press Menu button ≡ on the main screen ⟶ Settings ⟶ Set temperature.

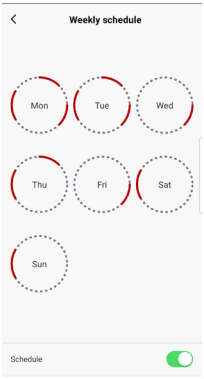
Scroll on temperatures to set your preferred permanent room temperature.

In case you need to set temporary temperature, just turn the thermostat wheel and choose desired value.
The temporary temperature changes are valid until the next scheduled temperature change.

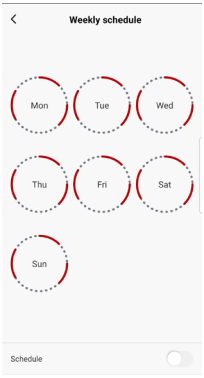
The Danfoss Ally™ can be set from 5 °C to 35 °C.

Danfoss recommend a difference between 'At Home' temperature and 'Away/Asleep' that does not exceed 4 degrees.

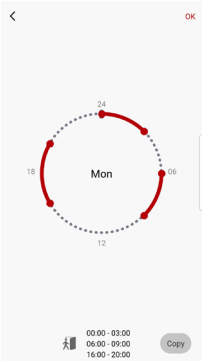
6.2 Create your own schedule



To make temperature ajustments go to the Menu ⟶ settings ⟶ Temperatures.
Within the Danfoss Ally™ App you can create your own schedule. You can choose any setback times within 24 hours and set up to 3 At Home periods per day.



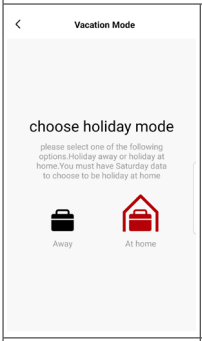
The weekly schedule shows the 'At Home' periods in red. The 'copy' functionallity allows to copy the schedule to other days.



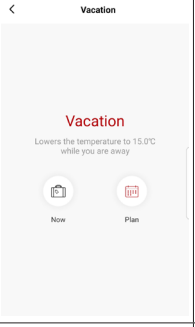
The Danfoss Ally™ App display shows both the 24 hour clock wheel, showing 'At Home' time in red and a summary of schedule, with the detailed times set. The minimum 'At Home' period is 30 minutes.

6.3 Vacation mode

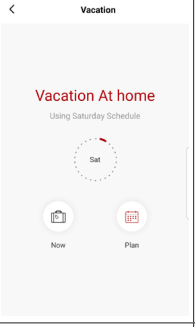
Use a Vacation programme to save energy, when you are away or at home. Vacation programme is set within the Danfoss Ally™ App.



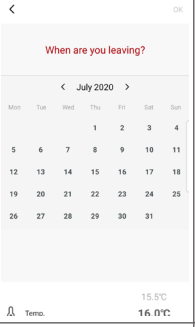
A Holiday mode Away or At Home can be planned or set straight away (Now).



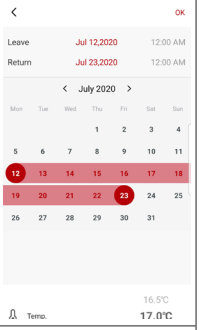
The Danfoss Ally™ App displays Vacation temperature where it can be adjusted.



The Danfoss Ally™ App display confirms your At Home vacation with options Now or by Plan.



Planned Vacations uses a calendar and time setting.



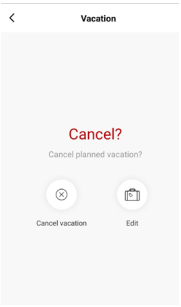
Schedule Vacation in the Danfoss Ally™ App.

6.4 Overrule a vacation

If returning earlier than expected you might wish to shift from the Vacation programme to your normal schedule.

When in 'Vacation' setting the Danfoss Ally™ App will give options to end the Vacation period or edit the dates and times.

6.5 Cancel an existing vacation programme



If the Vacation is planned for the future you can simply edit the dates or cancel the programme.

6.6 Pause mode

The Pause programme keeps the setback temperature until another programme is selected.

When the Danfoss Ally™ is turned down to a Min level manually, a notification banner is shown, and center icon switches to 'Pause'.
To exit the Pause click the centre icon on the Danfoss Ally™ App and return to the scheduled or manual setpoint.

8. Data security

The data security for of the Danfoss Ally™ Gateway and the Danfoss Ally™ App, that is paired to your smartphone is guaranteed.

Data encryption: The wireless connection to your Danfoss Ally™ Gateway is protected against threats from unknown devices with the latest encryption technology.

In addition to the security functions that ensure data protection at any point during the data transmission from your smartphone to the Danfoss Ally™ Gateway.

9. Safety precautions

SIMPLIFIED EU DECLARATION OF CONFORMITY
Hereby, Danfoss A/S declares that the radio equipment type Danfoss Ally™ is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.danfoss.com
The gateway is not intended for children and must not be used as a toy. Do not leave packaging materials where children may be tempted to play with them, as this is extremely dangerous. Do not attempt to dismantle the gateway as it contains no user-serviceable parts.

10. Disposal

The Danfoss Ally™ Gateway must be disposed of as an electronic waste.

Danfoss A/S
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