

ENGINEERING  
TOMORROW

*Danfoss*

Welcome to Danfoss Heating

**Grow your business**  
and discover the value of  
working **with one partner**

**One**

point of access to  
expertise, tools  
and solutions  
– for one complete  
project delivery.

[heating.danfoss.com](http://heating.danfoss.com)

**Danfoss Heating covers far more than you may think. With the industry's leading range of products, application expertise, technical knowledge and project experience, there is not limit to what we can achieve together.**

## Working together to beat the toughest challenges

The commercial environment for successfully realizing heating projects has never been more competitive than it is today.

### Energy efficiency

Increasing political focus on energy efficiency, use of renewable resources, and reducing emission levels has led to even tighter regulations.

### Higher demands from building owners

At the same time, owners and end-users are demanding increased comfort while expecting lower energy bills.

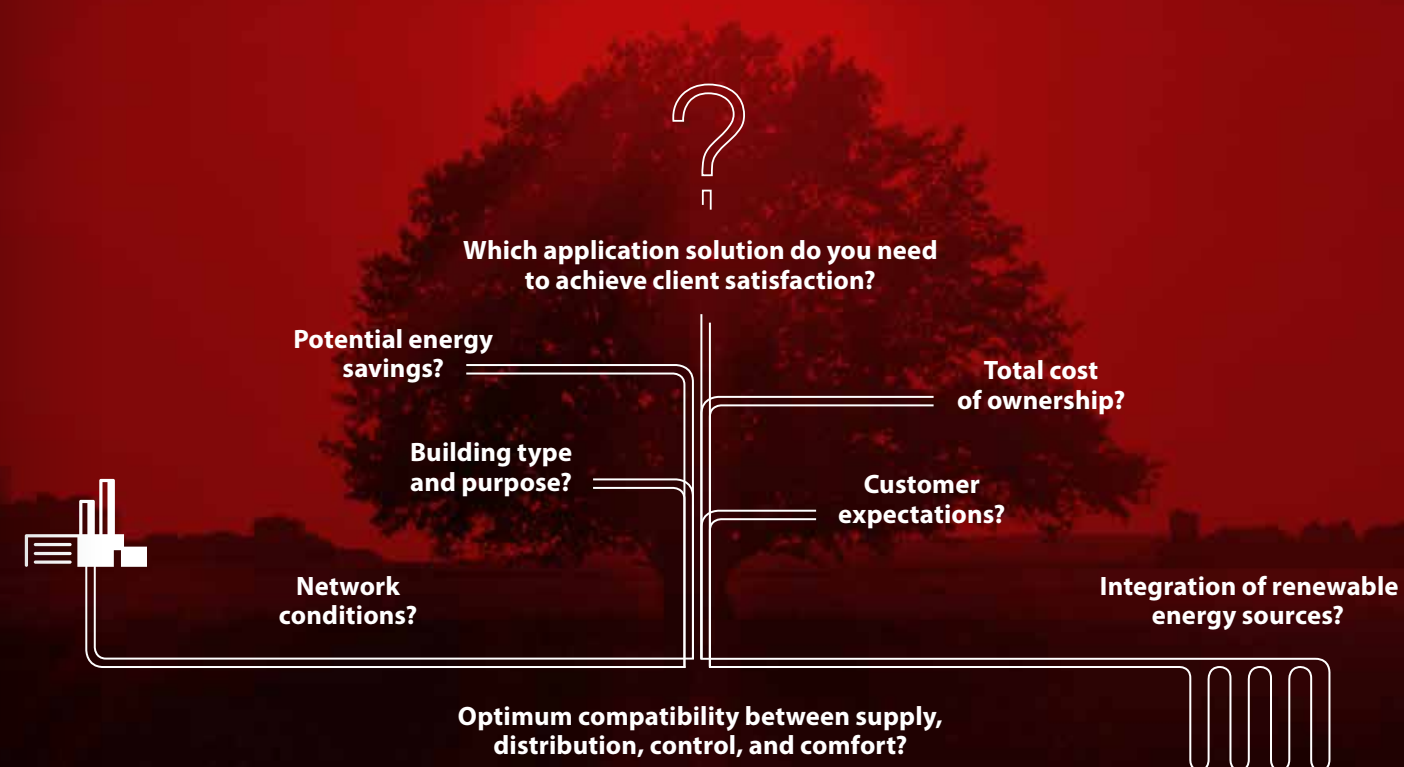
### Return on investment

Added to that are the commercial pressures of achieving a rapid return on investment, which means that renovations and new buildings need to be operational faster than ever before.

Against this background, we can provide you with a decisive competitive and commercial advantage. From the earliest tendering stages to technical specification, commissioning, and after-sales support, we offer you an unrivalled level of expertise under one roof.



# Meeting regulations and tough customer requirements takes serious consideration ...and wise choices



## Huge business potential in choosing integrated solutions

The current mega-trend in reducing energy use and creating more sustainable national infrastructures is opening up enormous commercial opportunities. From single domestic new builds to major renovations of former industrial sites, every project offers potential for innovative heating solutions.

The key to exploiting these opportunities is having a partner at

your side with the expertise, integrated solutions and sheer scale to enable you to react quickly.

**Millions of apartments worldwide** are renovated every year. Improved heating and cooling systems, insulation on roofs and facades, new windows and doors can reduce the energy requirements of an apartment building by up to 83%. Achieving

energy savings of this scale – including potentially integrating renewable energy sources – requires innovative integrated energy concepts for both renovations and new buildings.

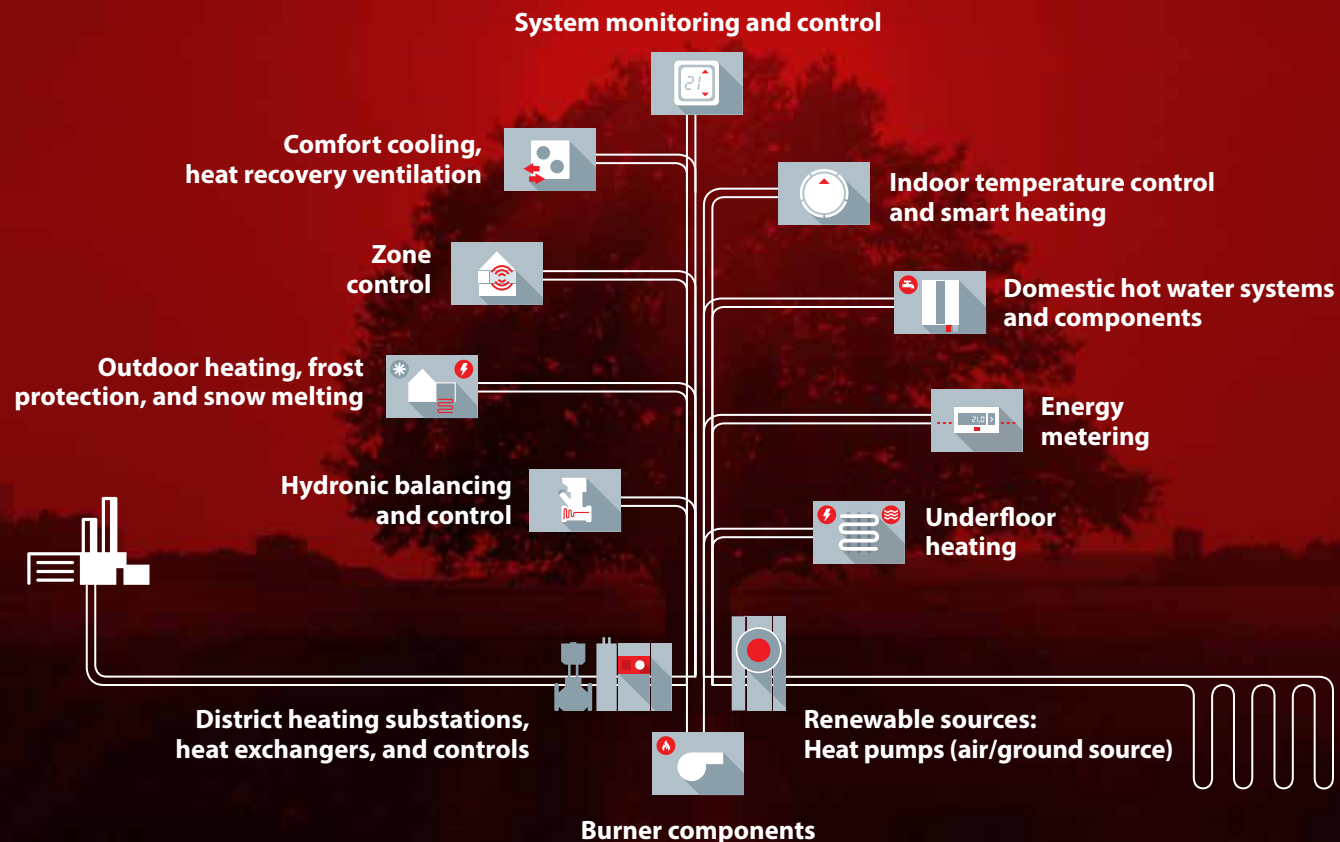
*Source: DENA/The German Energy Agency*



# You tell us what you need.

## Our application expertise and product portfolio **make it a reality**

Heating and cooling systems in a building are like a tree. The system applications are connected from the deepest root to the tip of the smallest leaf.



[www.heating.danfoss.com/products](http://www.heating.danfoss.com/products)

You can find all the information you need about our comprehensive range of components and complete systems on our website. We have individual products to suit the precise requirements of every scale of project, from a small domestic installation to the largest commercial construction.

**Discover the benefits of having Danfoss as your single provider.**

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## Residential 1-2 family house applications



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## Residential multi-family building applications



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## Commercial building applications



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## District energy network applications



## Your application or building type is key to our recommendations

Drawing on decades of experience and the industry's most comprehensive product portfolio, we design individually integrated solutions for every single project. We can also support you during the design, specification, and documentation stages, as well as providing ongoing technical support after commissioning. **All from a single partner.**





# Residential 1-2 family house applications

Whether client, homeowner, or building user, everyone benefits from increased comfort with reduced energy consumption. Our complete portfolio of residential heating component and systems allows you to integrate the right mix of energy-efficient products within the heating system. Designed to work seamlessly together, they create both comfort and economic value.



## System highlights

### Comfort options:



-  Heating control
-  Cooling and air conditioning control
-  System monitoring and weather compensation
-  Underfloor heating

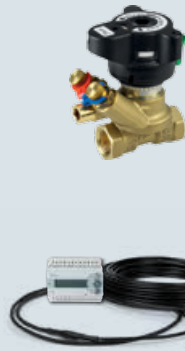


**Smart heating:**  
**Danfoss Link and living connect®**  
Danfoss Link CC™ can control living connect® radiator thermostats, floor heating – both electric and water based – as well as on-/off switches in a house. And with Danfoss Link™ App you can control the heating at home, wherever you are.

**Floor heating control (BasicPlus?) and manifolds**  
For new builds and renovations, in wired and wireless versions.

### Distribution options:




-  Hydronic balancing, flow and temperature control
-  Outdoor heating, frost protection, and snow melting



**Leno™ manual balancing valves**  
For balancing flow in heating, cooling and domestic hot water systems.

**Outdoor solutions**  
The ice and snow melting systems operates fully automatically. It automatically registers the need for ice and snow melting and it switches the heat on and off as required.

### Heat source options:

-  District heating
-  Renewable heating and cooling
-  Components for condensing boilers



**Substation**  
Enables efficient use of heat and domestic hot water in houses supplied by district heating.

**Heat pump (market specific)**  
Use ground or air source heat pumps to provide heating, hot water and cooling for your house.





# Residential multi-family building applications

Danfoss aims to bring the full benefits of efficient heating systems to everyone involved in apartment block living. This means achieving better return on investment, lower overall costs, greater comfort and safety, and reduced environmental impact. Multiple application design options are available for all types of projects, from renovations to new builds.



## System highlights

### Comfort options:

-  Heating control
-  Cooling and air conditioning control
-  Domestic hot water
-  Underfloor heating







**RA self-acting radiator thermostats**  
With TELL certificate for high energy efficiency and comfort.

**ECtemp™ Touch**  
Intelligent floor heating control, designed to provide optimum comfort, exactly when and where you need it.

**EvoFlat™ stations**  
For efficient heat distribution and hygienic safe production of domestic hot-water in new buildings.




### Distribution options:

-  Hydronic balancing, flow and temperature control
-  System monitoring and weather compensation
-  Outdoor heating, frost protection, and snow melting
-  Energy metering



**Dynamic or automatic balancing valves**  
Fitted in one- or two-pipe radiator heating systems in renovation projects, for balanced flow, improved indoor temperatures and energy efficiency.

### Heat source options:

-  District heating
-  Renewable heating and cooling
-  Components for condensing boilers



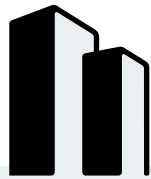
**Substation**  
Enables efficient use of heat and domestic hot water in buildings supplied by district heating.

**Heat pump (market specific)**  
Use energy in the air around a property to provide heating and hot water for your building.






# Commercial building applications

From offices, hotels, and public buildings to supermarkets and industrial facilities, commercial buildings serve a vast array of purposes. What they all share in common is the need for their HVAC systems to be specified and designed to be as efficient, versatile and economical as possible. Here are just some of our many specialist products for achieving optimum comfort, efficiency and economy.



## System highlights

### Comfort options:

-  Comfort heating, cooling, and air conditioning control
-  System monitoring and control for BMS
-  Domestic hot water





### NovoCon® and AB-QM

Digital actuator in combination with the pressure-independent AB-QM control valves. Designed to offer best-in-class hydronic performance combined with Building Management System (BMS) connectivity.

### ChangeOver<sup>6</sup>

For easy diversion of seasonal function between heating and cooling in four-pipe changeover systems.

### Distribution options:

-  Hydronic balancing, flow and temperature control
-  Outdoor heating, frost protection, and snow melting



### Control and on/off valves (MCV & AMD)




Control and on-off valves with electrical actuators for on/off or modulating control of air-handling units, ventilation, and heating systems.



### Electric heating systems

For outdoor areas, such as frost protection and snow melting systems to provide safety.

### Heat source options:

-  District heating and cooling supply
-  Renewable heating and cooling
-  Components for condensing boilers



### Substations and plate heat exchangers

Enable efficient energy transfer and use of heat, cooling and domestic hot water in buildings supplied by district heating and cooling networks.



### Commercial heat pump (market specific)

Use energy in the air and earth around a property to provide heating, hot water, and cooling.




# Quarters heating and district energy network applications

District heating and cooling is the ideal option for economically viable, climate-friendly heating and cooling of buildings in urban areas and city districts. Danfoss is the industry leader in this technology and offers you access to the expertise, application know-how, and products you need to successfully realize any scale of project.



## System highlights

### Comfort options:

-  Network monitoring and system temperature control
-  Domestic hot water production
-  Comfort heating



### Electronic ECL Comfort controllers



For temperature and weather compensation, ensuring comfort and convenience for heating, cooling and domestic hot water systems.



### ECL Portal

The effective turnkey SCADA tool for service personnel to streamline service, commissioning, maintenance and control tasks of the heating system.

### Distribution options:

-  Hydronic balancing, flow and temperature control in networks
-  Energy metering



### Self-acting pressure, flow and temperature controllers

Secure, safe and reliable operation of heating systems.

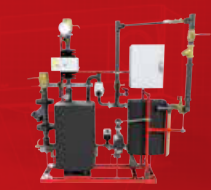


### Ultrasonic SONOMETER™ energy meters

Guarantee highly accurate and reliable measurement of energy consumption and performance of any heating, district heating or cooling system.

### Heat source options:

-  District heating and cooling supply



### Substation and DHW systems

Enables efficient use of heat and domestic hot water in buildings supplied by district heating networks in cities of any size.

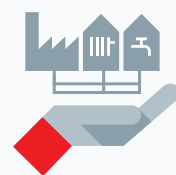


### Plate heat exchangers

For efficient transfer of heat or cooling water to buildings connected to district energy networks.

# Dedicated support

## One-point



### Expert knowledge and support to devise the optimum solution to your challenges.

- Comprehensive commercial and technical consultancy at all levels:
  - Sales engineers, product and application experts
  - Design support centers
- Application expertise based on recommended application designs
- Proof-of-concept: application designs are supported by references and case studies from various markets, enabling you to evaluate total cost of ownership (OPEX, CAPEX) based on actual projects



### Unique solution based on experience: innovative systems and components.

- Industry novelty examples:
- Thermostatic radiator valves
  - Smart heating: *Danfoss Link™ App*
  - Dynamic Valve™
  - NovoCon® and AB-QM
  - MicroPlate™ heat exchangers

**All from one partner**

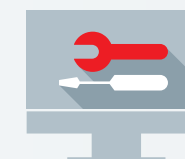
# center resources

## of access to:



### Efficient services to support the successful completion of your project.

- Easy ordering via eCommerce platform (market-specific)
- Just-in-time deliveries according to project phases
- Track-and-trace for your shipments
- Complete product documentation from a single supplier
- Efficient quality testing and customer claim handling processes
- Service support related to installation, commissioning, warranty, and repair (market-specific)



### Fast and accurate documentation when preparing your projects.



Technical documentation of multiple types



Complete product information and data for ordering



Catalogs and price lists



Tender text



Software, dimensioning and selection tools



2D/3D drawings for project documentation



Application design, product specification examples



Training material, FAQ, and "how-to" guides

**– Danfoss Heating**

# Discover the benefits

## at [www.heating.danfoss.com](http://www.heating.danfoss.com)

Our website offers you a comprehensive range of support resources. These tools will help you identify and select the most suitable products for all your projects, check dimensions and specifications, and make your job on site easier. You can also access the latest technical knowledge, explore different case stories, watch training films, **and much more.**

# 1 click

is all it takes.  
Expand your toolbox,  
increase your  
knowledge, and  
keep learning at  
[heating.danfoss.com](http://heating.danfoss.com)

## What you will find:



### Documentation

Our comprehensive collection of commercial and technical documentation will help you explain our products and solutions to your customers and identify the best products for specific projects.

You will find a wide range of useful and informative leaflets, case stories, technical datasheets, and instructions.



### Tools

Videos and educational animations help build your knowledge of our products and the technologies behind them. Calculation tools and software help you prepare the on-site commissioning process.



### Social media

Follow us on social media. For example you will find all our videos on our YouTube channel at [www.youtube.com/DanfossHeating](http://www.youtube.com/DanfossHeating).

## Danfoss quality management system certifications:

✓ ISO9001

✓ ISO14001

✓ PED

✓ TS 16949 compliant

We also comply with all EU directives and product approvals

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