

ENGINEERING TOMORROW

Modern heating technology for social housing providers

# Increase the energy efficiency of your multi-family building

Energy-efficient and reliable heating solutions.





As a resident, I expect **affordable** living with plenty of comfort

> Affordable rent and utilities with no surprises

Individual temperature zones – anytime, everywhere

Modern building services – that I don't have to worry about

No noises from the heating system – and all the radiators give off heat!

*Modern heating technology that gives the environment a break* 

Accurate billing

### As the owner I expect profitability and **satisfied** tenants

Stable costs during the planning and implementation of renovation and new-build projects

> Lowest possible investment with rapid payback

Long-term value retention: easy to rent, easy to sell

Satisfied tenants: no complaints due to noise or undersupply to individual radiators

> Reliable heating technology – easy to operate and easy to bill



**Radiator Thermostats** 

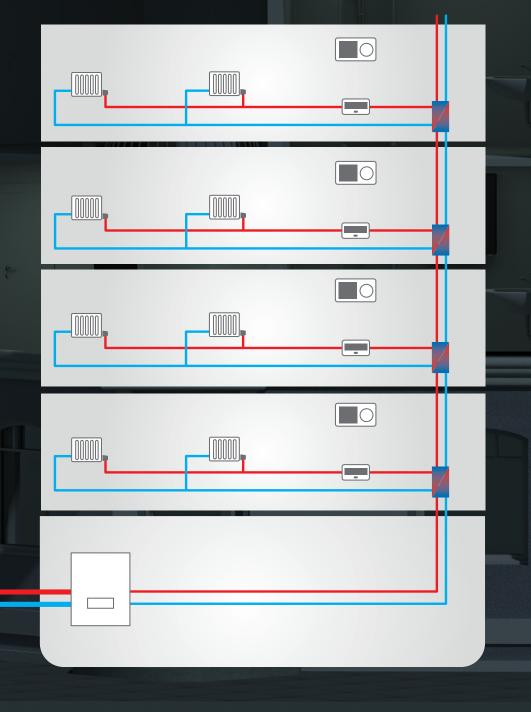


Programmable room thermostats



SonoSelect/Safe Energy Meters

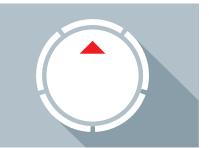
Communal heating with accurate billing in each property, programmable room thermostat and TRVs for individual room control.



### More comfort, less effort with intelligent temperature control



Independent tests have shown that lowering the home comfort temperature by just one degree can reduce energy consumption by as much as 10%.



### Room temperature control and intelligent heating

#### Upgrade your building

Modern temperature control enhances the living comfort of your property, improving your chances of renting or selling it at an attractive price.

#### **Renovate with ease**

Defective or missing thermostats can lead to tenants withholding rent. Replacing or installing thermostats is easily done, even when residents are at home.



I want an attractive, easily rented property with satisfied residents who feel good in their homes.



Ensure constant differential pressure in all risers with ASV <sup>1)</sup>.



Ensure design flow per radiator with RA-N pre-setting valves.



Ensure constant differential pressure and design flow per radiator with *Dyna<u>mic Valve</u>™*.

# Automatic balancing solution Automatic balancing with riser-mounted ASV and solution with radiatorradiator-mounted RA-N valves. mounted *Dynamic Valve*™. **P H**ROOO

## Noise-free heated radiators thanks to hydronic balancing





The most common complaints from residents concern flow noise and under- or over-heated radiators. Both are typically caused by a poorly balanced heating system. Automatically balanced heating systems eliminate the main cause of these complaints.

Depending on your heating system, you can choose between riser-mounted automatic balancing valves combined with pre-setting radiator valves, or radiator mounted presetting valves with a built-in differential pressure controller.

#### Hydronic balancing of heating systems

#### No complaints

Heating systems that have undergone precision hydronic balancing avoid both annoying flow noises and undersupply of individual radiators, letting everyone sleep soundly.

#### **Reduce utility costs**

Heating systems with effective hydronic balancing via controlled pumps, differential pressure controllers and presettable thermostatic valves also consume less energy. This reduces heating and utility costs.



I don't want any complaints due to flow noise or undersupply of individual radiators.

l expect every radiator to emit heat and l don't want annoying noises from the system keeping me awake at night.



District heating substations with electronic controllers

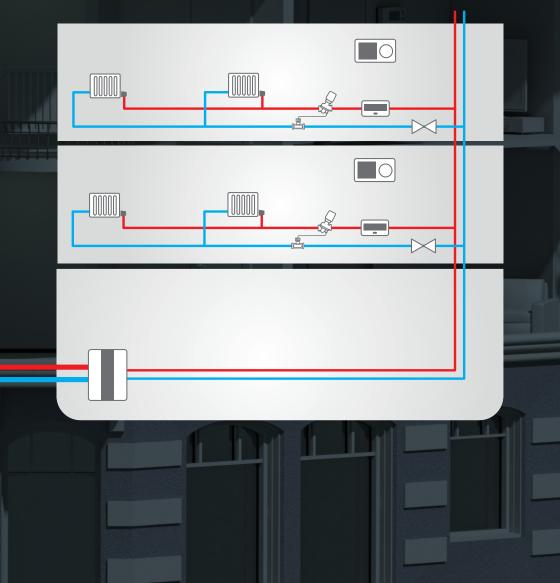


Thermostatic radiator valves and electronic room controls



SonoSelect/Safe Energy Meters

Heat network connected system with automatic balancing solution in each property, accurate billing, programmable room thermostat and TRVs for individual room control.



## Modern heat supply – flexible, reliable, and future-proof



Central supply with one or more energy sources

#### **District heating**

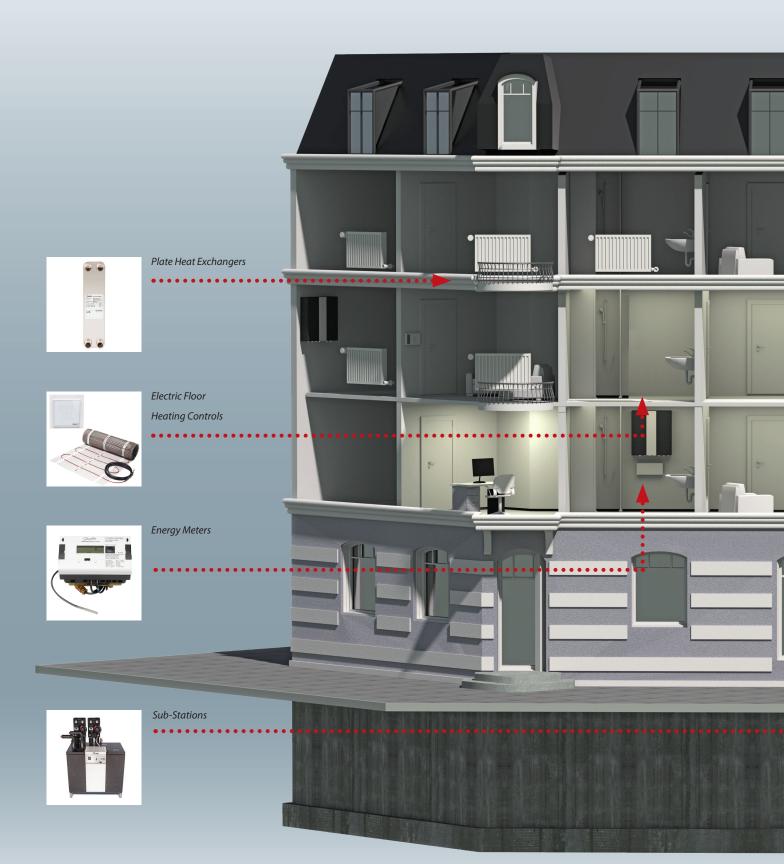
District heating is an environmentally friendly source of energy. It does not emit exhaust fumes or pollutants at the point of use. It doesn't require a gas tank, oil tank, boiler or heater. All it needs is a substation. This separates the supply network and the building installation and efficiently transmits the district heating.

Individual time and temperature control in properties with programmable room thermostats, accurate billing with energy meters, and FJVR to meet strict requirements for return temperature in these kinds of systems.



I want to be flexible in my choice of energy sources so that I can react to price changes and fulfill both legislative requirements and the wishes of my residents.

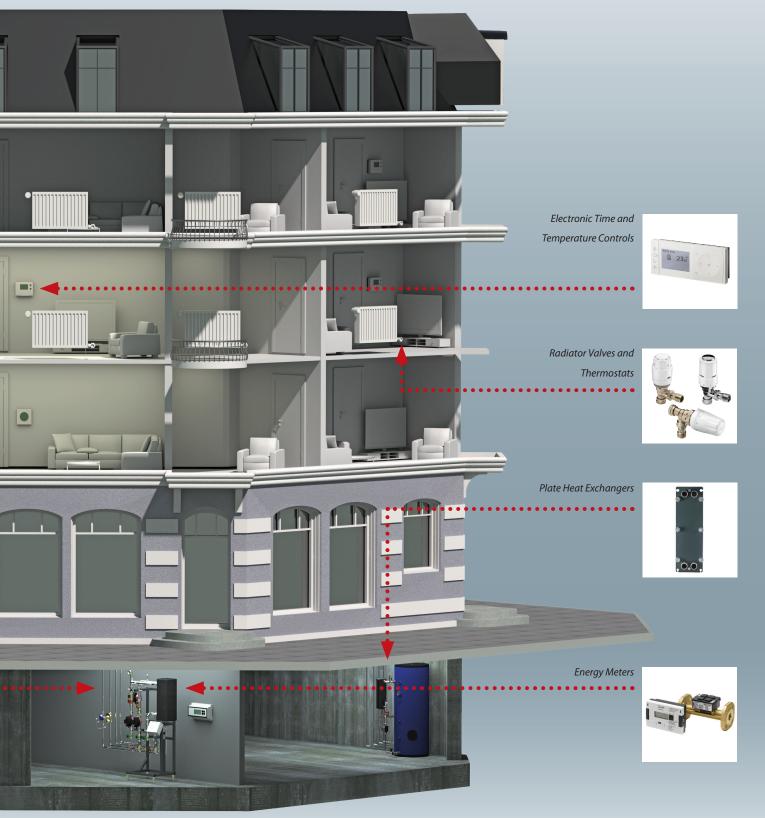
For the sake of my family's future, I want to use affordable and environmentally friendly heating sources at all times. We offer energy-efficient solutions for all common heating systems, including radiator-based and floor heating systems for all new-build and renovation projects. We offer a full range of products to accurately meet the requirements of any specific system, some of which are shown here. Find out more at www.heating.danfoss.co.uk Please contact us to have a Danfoss expert advisor assist you in planning your project.



## **Sample applications** for new buildings and renovations



#### Proven solutions for your system





ENGINEERING TOMORROW

Danfoss Ltd · Ampthill Road · Bedford · MK42 9ER Tel: 01234 364621 · Fax: 01234 219705 · Email: ukheating@danfoss.com · Website: www.heating.danfoss.co.uk

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 subsequent 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.