HCV 4 - HCV 5 - HCH 5 - HCH 8

RESIDENTIAL VENTILATION WITH HEAT RECOVERY
IMPROVE YOUR INDOOR CLIMATE AND SAVE ENERGY

Dantherm®
CONTROL YOUR CLIMATE

DANTHERM RESIDENTIAL VENTILATION WITH HEAT RECOVERY

FOR HEALTHY INDOOR AIR QUALITY, FUNCTIONALITY AND ENERGY EFFICIENCY

The indoor climate is important
A good indoor climate is all about health and wellbeing for the whole family. It is also about protecting the home against damage from moisture that can easily occur in highly insulated and airtight buildings.

With Dantherm's range of highly efficient and energy-saving mechanical residential ventilation solutions with heat recovery, suitable for new-build as well as for renovating, you will get the best possible indoor climate and even reduce your heating bill, as up to 96 % of the heat is recovered.

WHY CHOOSE DANTHERM RESIDENTIAL VENTILATION?

- 50 years' experience in the design and manufacture of ventilation systems
- Danish design and quality – made in Denmark
- Ventilation experts
- Cost and energy-efficient solutions
- Wall or loft models
- Easy to install and easy to use solutions
- Various control options, from simple wired control panels to advanced remote control

ADVANTAGES

- Contributes to the energy efficiency of the home
- Reduces the risk of asthma and allergy
- Reduces surface moisture condensation
- Improves indoor air quality
- Eliminates mould and mildew
- Removes bad smell
- No need to open windows

NO MORE WORRYING ABOUT THE INDOOR CLIMATE

GET A HEALTHY INDOOR CLIMATE

DANTHERM MVHR SYSTEMS ARE ENERGY-EFFICIENT AND ECONOMICAL

How MVHR systems work
The ventilation system extracts air from the wet rooms (kitchen, bathrooms, toilets and utility room) on a continual basis. A counterflow heat exchanger with thermal efficiency of up to 96 % recovers the heat from the extract air that would otherwise have been lost, and transfers it to the supply air.

Fresh, heated supply air then flows into the living rooms. Supply air and extract air are totally separated from each other in order to keep the supply air clean.

Energy efficiency class A and A+
HCV/HCH are rated as energy efficiency class A. With an optional CO2 sensor and an HAC 1 accessory control, the HCV/HCH units will obtain energy efficiency class A+.

HCV

HCH

KEY BENEFITS OF HCV/HCH

- Energy class A or A+
- High heat recovery efficiency – up to 96 %
- Demand-controlled ventilation with integrated humidity sensor
- EC motors with low energy consumption (SFP)
- PHI, DIBt approved. SAP appendix Q listed
- Frost protection of heat exchanger
- Can be integrated in BMS systems
- Can be connected to fire/smoke alarm system
- Meet building regulations
- Bypass cooling
- Installer-friendly adjustment of air volumes on the unit
- Easy filter change

HEATING AND COOLING IN ONE UNIT

WITH DANTHERM RESIDENTIAL VENTILATION YOU WILL BE COMFORTABLE ALL YEAR ROUND

Energy-efficient technology
All Dantherm residential ventilation units fulfil the market's high demands for low energy consumption and noise levels. Demand control combined with low-noise EC fan motor technology ensure high energy efficiency and contributes to low SFP (Specific Fan Power) values.

Cooling features with residential ventilation
Dantherm residential ventilation units cannot provide active cooling like in an air conditioning unit, where the air change rate is up to 8 times per hour.

In a MVHR unit the rate of air change is normally approx. 0.5 times per hour. However, Dantherm residential ventilation units can provide a cooling effect in the warm season by means of bypass dampers or bypass shunt.

Bypass cooling
In units with a bypass module, cold outdoor air is used to cool the house after a hot summer's day. The bypass damper opens for direct supply of cold outdoor air, which enters the house without passing through the heat exchanger. Bypass cooling is controlled by the indoor and outdoor temperature sensors.

Bypass shunt
For units without the bypass module (HCV 4), fitting the ventilation unit with a bypass shunt is recommended in order to avoid heat recovery when the indoor temperature rises above an acceptable level and where a lower outdoor temperature can still meet normal comfort demands.

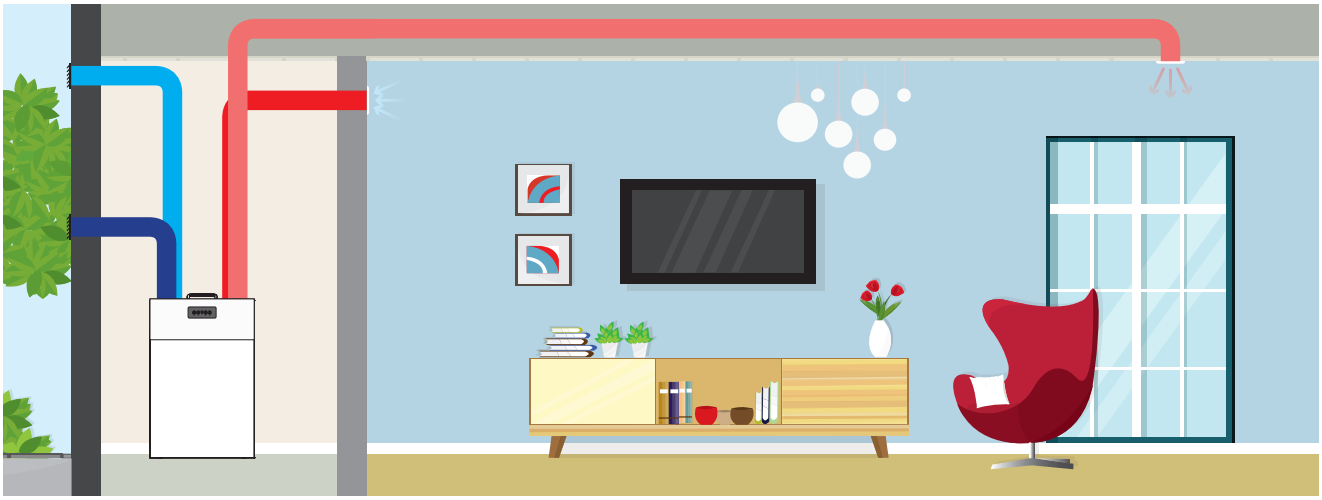
The bypass shunt has to be mounted onto the heat exchanger manually.

Using the bypass shunt supplies fresh and filtered outdoor air to the house, thus improving the indoor climate.

Certificates
Dantherm's residential ventilation units are certified by Passivhaus Institute in Darmstadt and Deutsches Institut für Bautechnik in Berlin. Furthermore, they are SAP Appendix Q listed and certified by BCCA.

CERTIFIED COMPONENT
Passive House Institute

Deutsches Institut für Bautechnik DIBt



MANY OPTIONAL FEATURES

A WIDE RANGE OF ACCESSORIES AND EASY MAINTENANCE GIVE YOU A PERFECT VENTILATION SOLUTION

Frost protection
The intelligent control system of Dantherm MVHR systems units ensures that the heat exchanger does not ice up in winter. However, in areas with outdoor temperatures lower than -6°C, we recommend mounting heating coils to pre-heat the outside air before it enters the heat exchanger.

Heating coils
Pre and post-heating coils for electricity or water are available as optional extras. Pre-heating coils prevent ice building up in the heat exchanger at low temperatures, especially if the built-in frost protection is not sufficient in regions with cold temperatures. Post-heating coils can be used to increase the supply air temperature.

Filters
All Dantherm residential ventilation units are fitted with G4 filters as standard for both supply air and extract air. This filter will meet the majority of air cleaning needs. F7 pollen and dust filters are available as optional accessories. F7 filters will ensure that allergens do not enter the house through the ventilation system.

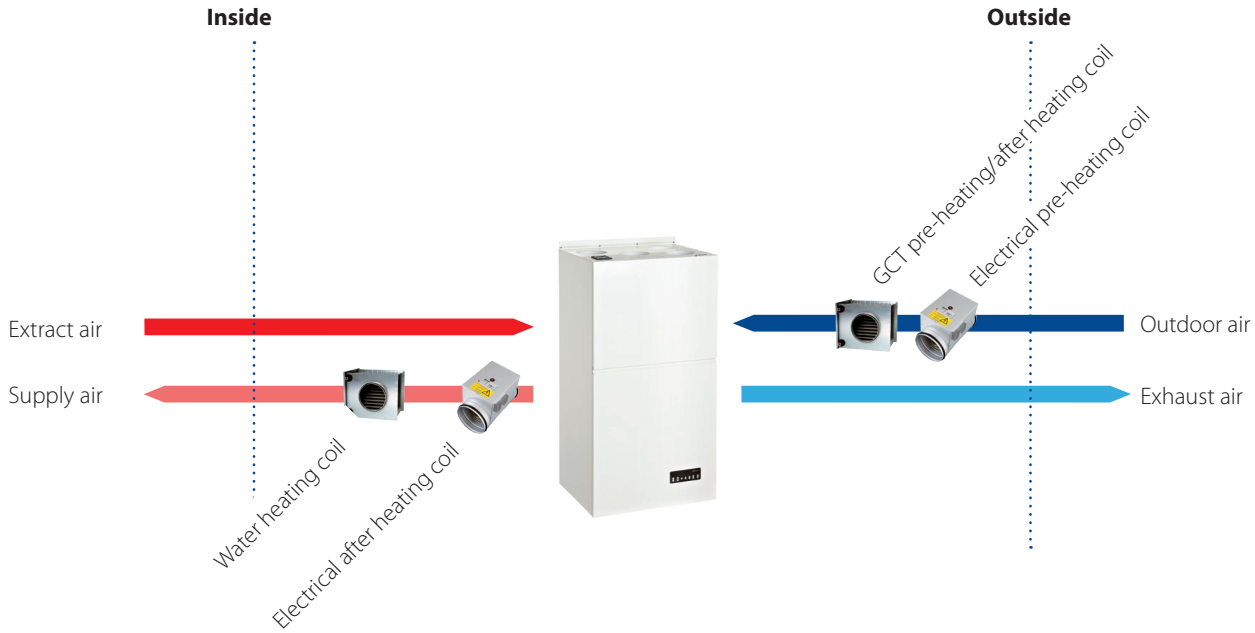
Condensate drain
All Dantherm residential ventilation units come with a drainage feature for condensate water, prepared for connection of a drain hose.

Maintenance
Dantherm residential ventilation units are virtually maintenance-free. We recommend filters to be changed twice a year to maintain optimum performance. An alarm will indicate when the filters need to be replaced with new ones. Apart from changing the filters and cleaning the outside of the unit, any other form of service has to be carried out by qualified personnel.

Dantherm service partners can offer you an annual service where we will check/change the filters and ensure your system is working efficiently, providing a healthy living environment.

A video showing how to change the filters can be found on our website www.dantherm.com or on YouTube.

Accessories



ADVANCED DEMAND CONTROL

WITH A SIMPLE CONTROL PANEL OR AN ADVANCED WIRELESS REMOTE CONTROL

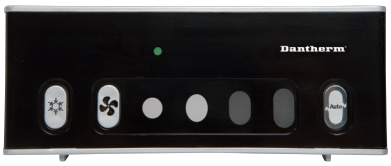
Wired control panel, HCP 4
HCV/HCH residential ventilation units come with a wired control panel with demand-controlled automation and integrated humidity sensor as standard. This automatic demand control is based on average considerations that can ensure a comfortable indoor climate under all conditions.

With the control panel, the user can manually control the ventilation speed, activate bypass cooling, check alarms and filter status etc.

Wireless remote control, HRC 2
A wireless remote control with display is available as an accessory to all Dantherm residential ventilation units. It has been designed to make controlling the ventilation system simple for both the installer and the end user.

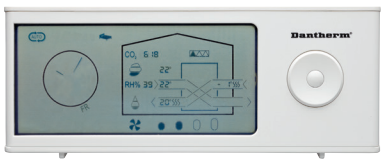
With the optional wireless control panel the end-user and the installer have access to various functions such as automatic demand control, manual operation, week program operation, away operation, night operation, fireplace operation, etc.

Wired control panel, HCP 4
(Included)



- Manual control of ventilation speed
- Automatic control of ventilation speed
- Manual bypass cooling

Wireless remote control, HRC 2
(Optional accessory)



- Automatic demand control
- Manual operation
- Week program operation
- Away operation
- Night operation
- Fireplace mode

PRODUCT SELECTOR

Model	HCV 4	HCV 5	HCH 5	HCH 8
				
Installation	**Cupboard/wall**	**Wall**	**Loft**	**Loft**
Energy class	A (A+ can be obtained with optional accessory kit)			
Max air flow (m^3/h)	275	375	375	530
Max. floor area (m^2)	200	260	280	350
Demand control (with RH)	✓	✓	✓	✓
W x H x D (mm)	530x1005x434	590x1055x584	580x600x1180	780x600x1180
Weight (kg)	32	45	52	70
Duct connection (mm)	ø125	ø160	ø160	ø250
Heat exchanger	Alu	Alu	Alu	Alu
G4 filter	✓	✓	✓	✓
F7 pollen filter	+	+	+	+
PHI certificate	÷	✓	✓	✓
SAP Appendix Q listed	÷	✓	✓	✓
Automatic bypass cooling	✓ (manual)	✓	✓	✓
Frost protection of heat exchanger	✓	✓	✓	✓
Week programs	+	+	+	+
Night mode	+	+	+	+
Holiday mode	+	+	+	+
Fireplace mode	✓	✓	✓	✓
Filter alarm	✓	✓	✓	✓
Connection of fire/smoke alarm system	+	+	+	+
Connection to geothermal collector	+	+	+	+
Wired control panel, HCP 4	✓	✓	✓	✓
Wireless remote control, HRC 2	+	+	+	+
Heating coils	+	+	+	+
CO2 sensor	+	+	+	+

✓ included + optional ÷ not available Performance Functionalities Accessories

ABOUT THE DANTHERM GROUP

Control your climate

The Dantherm Group is a leading provider of climate control products and solutions. The group companies have more than 60 years of experience in designing and manufacturing high-quality and energy-efficient equipment for heating, cooling, drying and ventilation for a wide range of mobile and fixed applications.

Every year, Dantherm Group uses significant resources on product development to stay in the forefront and is constantly adapting the products to changing market demands and legislation.

The Dantherm Group has a number of strong brands with well-established market positions in the mobile, pool, commercial/industrial and residential markets.

Dantherm Group customers benefit from our comprehensive knowledge base and the experience and expertise that we have gained from more than three million climate control products and solutions sold worldwide.

Global reach

The Dantherm Group is headquartered in Skive, Denmark and has its own market presence in Norway, Sweden, United Kingdom, Germany, Switzerland, Italy, Spain, Poland, Russia, China and United Arab Emirates.

In 2016 the Dantherm Group was acquired by the Swedish equity fund Procuritas Capital Investors V LP – a strong owner with the ambition to continue the development and growth of the company.

Dantherm A/S
Marienlystvej 65 | DK-7800 Skive
Tel. +45 96 14 37 00 | Fax +45 96 14 38 20
info@dantherm.com | www.dantherm.com

06.18 Residential-Ventilation-HCV4-5-HCH-5-8_EN