



# Energy efficient ventilation equipment





## FACTORIES

### LITHUANIA



more than 300



30 000 m<sup>2</sup>

### RUSSIA



more than 60



5 000 m<sup>2</sup>

### LATVIA



more than 30



3 000 m<sup>2</sup>

# KOMFOVENT – Energy Efficient Air Handling Units

KOMFOVENT stands for comfort, healthy indoor climate, efficiency and productivity. We are responsible for high quality and reliable operation of our products. The most efficient solutions are achieved with our contemporary manufactured production and we ensure – KOMFOVENT WORKS PROPERLY.

KOMFOVENT is a constantly growing European company. More than 20 years we are dedicating all our energy to create and offer innovative products which could satisfy the most demanding customers. We are proud of employing 500 people and owning of 30 000 m<sup>2</sup> of advanced, modern and brand new automated production area. High level of quality, a deep respect to the environment with a trust for a better and cleaner world and occupational health and safety – that is the target our company adheres to.

Located in the Northern part of Europe, KOMFOVENT company got perfect experience from Scandinavian countries, which have long professional history in the ventilation field. KOMFOVENT is actively applying and refers to mostly requestive and strict quality standards for the produced

ventilation equipment offering only energy efficient ventilation solutions. Komfovent VERSO and KLASIK units is Eurovent certified, TÜV approved and confirms all required EU norms and regulations. Passive House Institute Certificate is also available for some range of the units. KOMFOVENT is the member of German Association of ventilation equipment producers RLT and company operational system complies with requirements of the quality and environment standards ISO 9001 and ISO 14001.

Every year the investments are being made for the acquisition of the new modern machinery, tools, and personnel training with the main goal – to produce and offer only high quality products. Using knowledge and skills of our local engineers and specialists together with gained different experience from our foreign partners give us possibilities to offer the best technical solutions.

For us growing is about moving forward together with our customers, sharing the same values, meeting their needs and expectations. Together with our partners we are going towards new and more ambitious goals.



# KOMFOVENT network



## Projects

KOMFOVENT energy efficient air handling units are being exported to 30 countries. Wide range of the units and their functional possibilities allow applying the equipment in different type of the projects: residential, public, hospitals, shopping malls, industrial buildings.

KRISTAL KULE FINANSBANK  
Istanbul, Turkey

The Four Courts  
Dublin, Ireland



THERMAL  
POWER STATION  
Lidköping,  
Sweden





LONDON MORPETH school  
London, UK



Hospital TILKKA  
Helsinki, Finland



Apartment houses  
Tallinn, Estonia



Shopping mall  
FORNEBU SENTER  
Ostend, Norway

Hotel  
SPINETTA  
MARENGO  
Alessandria, Italy

Sport complex  
ŠIAULIŲ ARENA  
Šiauliai, Lithuania



# Wide range

## DOMEKT

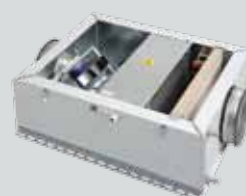
50 – 1 000 m<sup>3</sup>/h



Domekt R



Domekt CF



Domekt S

## RHP

150 – 25 000 m<sup>3</sup>/h



RHP Standard



RHP Pro

## VERSO

1 000 – 40 000 m<sup>3</sup>/h



VERSO Standard



VERSO Pro

## KLASIK

1 000 – 90 000 m<sup>3</sup>/h



# Komfovent software

## Selection software

Equipment is selected using an informative and useful software, available to be downloaded to your PC from our website: [www.komfovent.com](http://www.komfovent.com).

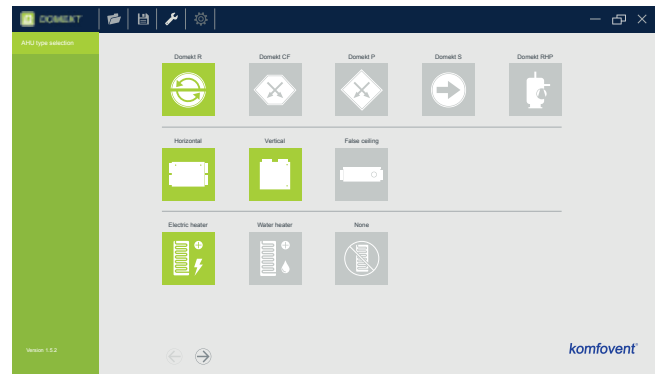
Technical data sheets present important technical parameters at a specified working point of the selected unit: efficiency, SFP, acoustics and other required data.

For air handling units:

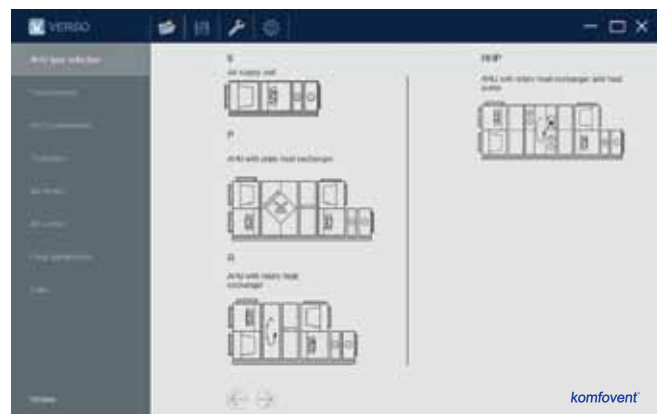
- DOMEKT
- VERSO
- RHP
- KLASIK

For ventilation systems components:

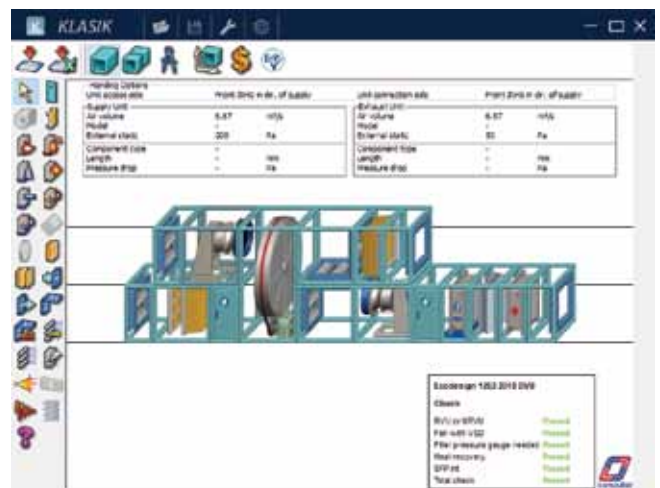
- Pipework Packages
- Rotary Heat Exchangers
- Water Coils and DX Coils
- Sound Attenuators



DOMEKT selection software



VERSO and RHP selection software



KLASIK selection software



# DOMEKT

## residential ventilation units

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### Simple & convenient selection

Detailed information on all units can be found in the DOMEKT selection software or on our website [komfovent.com](http://komfovent.com), where you can quickly select the unit tailored to your needs.



### Wide range

Depending on your installation plans, you can choose the most appropriate model: horizontal, vertical or flat. Non-freezing rotary or high efficiency counterflow plate heat exchangers are available. All units are equipped with electrical heaters. Water heater is available as an option.



### Plug & Play

DOMEKT ventilation units require minimum maintenance – an intelligent automation C6 which is integrated in all ventilation units does all the work for you. Factory settings are fully tested and predefined – just turn on and use. An advanced user can change all the settings according to individual preferences.



### Reliability and durability

The housing of the units is made of galvanized steel with a powder coated finish. Fan motors are protected from moisture and dust, and equipped with long life bearings.



### Low noise level

Only perfectly balanced fans with unique geometry are used in DOMEKT units. All of the unit's components are aerodynamically matched. Housings padded with mineral wool and the use of special composite materials ensure silent operation of these units.



### Energy recovery

DOMEKT series are equipped with only the most efficient EC (electronically commutated) fans, high efficiency rotary and counter flow plate heat exchangers, filters with huge filtering area and intelligent automation C6. All these components dramatically reduce energy consumption while maintaining a comfortable indoor climate.



### Integration to BMS

All KOMFOVENT air handling units have fully implemented Modbus and BACnet protocols, which allows seamless integration with any desired Building Management Systems.



### Connectivity to WEB

The units can be controlled not only with the control panel, but also remotely via a web browser on your computer or mobile devices. "Komfovent Home" application was specially developed for more convenient control.

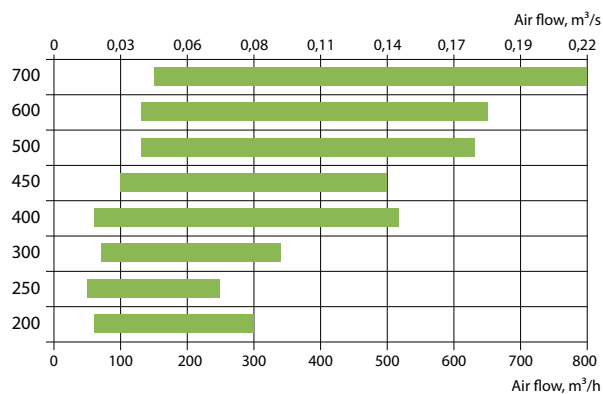


**ErP 2018**  
**EcoDesign**

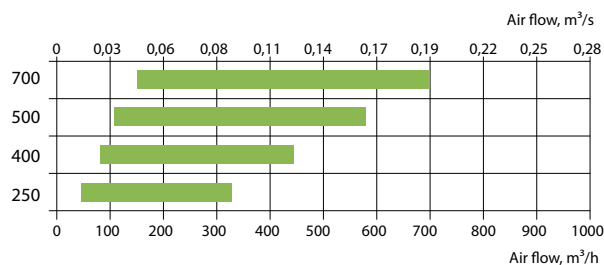


Capacity range from  
50 to 1 000 m³/h

Sizes of Domekt R units



Sizes of Domekt CF units



### Rotary heat exchanger

- High thermal and latent efficiency
- Not freezing
- Humidity is transferred to supply air – a lower power humidifier may be needed
- No drainage is necessary – easy unit installation
- Very compact in size
- Cooled air may be recovered that results in the reduced energy consumption for air cooling
- According to tests carried out by independent laboratory, mixing of the air flows does not exceed one percent



### Counter flow plate heat exchanger

- High temperature efficiency up to 95%
- 100% by-pass
- Additional antifrost protection;
- Insured comfort temperature with integrated pre-heater and after-heater
- Enthalpy heat exchanger as option
- Minimal mixing of air flows
- Less moving parts



# VERSO

## commercial ventilation units



### Wide range

VERSO units are designed for efficient ventilation and are suitable for various types of projects. You can choose unified unit from VERSO Standard series, or VERSO Pro which can be specifically tailored to meet your requirements. Large number of configurations (vertical, horizontal, flat and universal type, with rotary or plate heat exchangers) allows you to always select optimal and most efficient solution.



### Plug & Play – all included

All units are assembled and tested at the factory, therefore installation and commissioning work is significantly simplified. Integrated intelligent automation requires minimum user input. Factory predefined settings – simply “Plug and Play”. The user can change every setting according to individual preferences. Units can be monitor and controlled remotely via the Internet.



### Intelligent control

Smart algorithms in the integrated automation ensure reliable and efficient operation of the unit and minimizes operating costs.



### Eurovent certified

VERSO units are tested on a regular basis at the Eurovent climatic laboratory in Germany. Parameters such as performance, efficiency, noise level, tolerances and others are tested.



### Energy saving technology

Units are equipped with the most efficient and advanced technical solutions: high efficiency PM/EC fans, non-freezing rotary heat exchangers, high efficiency counter flow heat exchangers, high surface area air filters. All of these solutions greatly reduce operational costs and shortens payback time.



### Energy recovery

Non-freezing rotary heat exchangers efficiently recover heat and cold, control humidity and provide comfort throughout the year.



### PM motors

*Ultra Premium* efficiency IE5 class PM fan motors minimize power consumption and ensure durability of the unit.





**ErP 2018**  
EcoDesign

Capacity range from  
1 000 to 40 000 m<sup>3</sup>/h

## Professional and convenient selection with Eurovent certified software

- Simple and intuitive selection program generating digital models of equipment for the REVIT design program.
- Accurate and detailed information. The report contains all details according to Eurovent, RLT and Ecodesign requirements.
- The program is constantly updated and enhanced with new features.



## KOMFOVENT HUB – digital drawings library for REVIT users

Digital drawings of VERSO Standard units can be imported to REVIT using KOMFOVENT HUB library or by downloading the drawing from the KOMFOVENT webpage.

VERSO Pro units' drawings are generated in VERSO selection software.

Using KOMFOVENT HUB for REVIT affords you the following advantages:

- saves team time;
- faster changes;
- exact quantities.



**Verso R**  
units with a rotary  
heat exchanger



**Verso CF**  
units with a counterflow  
plate heat exchanger



**Verso P**  
units with a plate  
heat exchanger



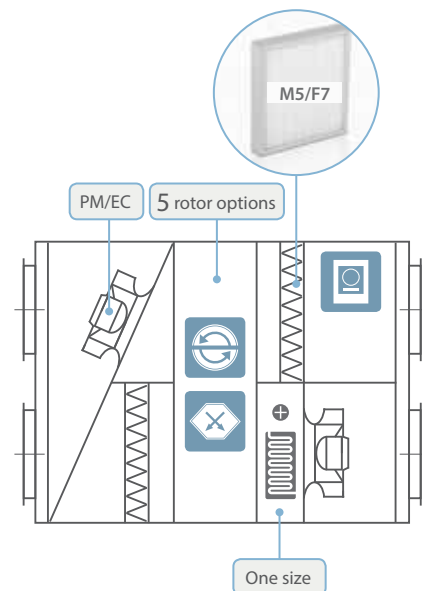
**Verso S**  
supply air  
units

# VERSO Standard

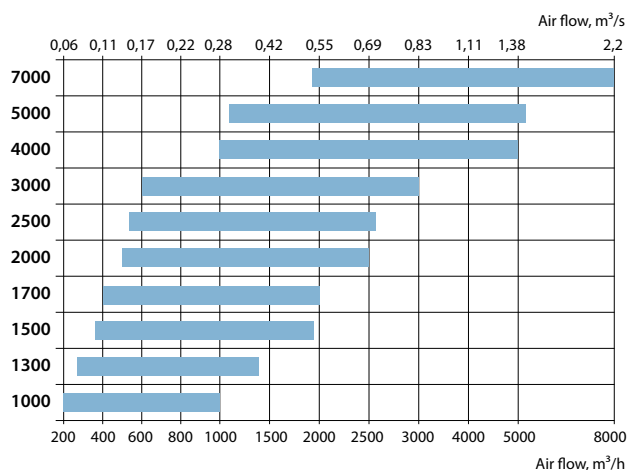
Capacity range from  
1 000 to 8 000 m<sup>3</sup>/h



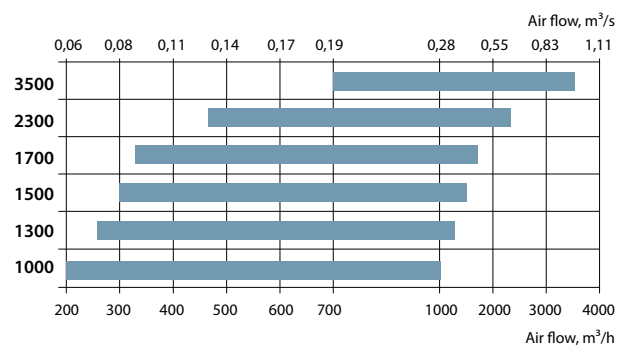
- Wide range of units – vertical, horizontal, flat or universal application.
- Compact design.
- Universality – vertical & horizontal and heating & cooling in one.
- Intelligent control – fully integrated multi functional control with BMS connectivity.
- Fast choice – available in technical catalogue.
- Exact selection – possible with selection software.
- Quick delivery – unified design allows to shorten production terms.
- REVIT models.



Sizes of **Verso R** units



Sizes of **Verso CF** units



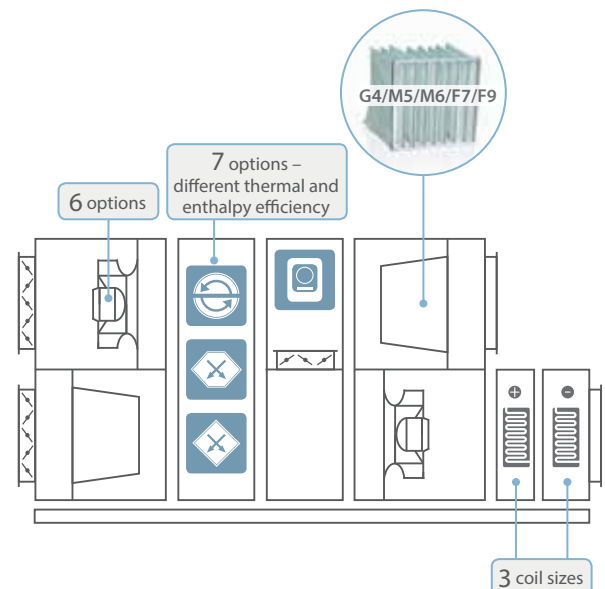


# VERSO Pro

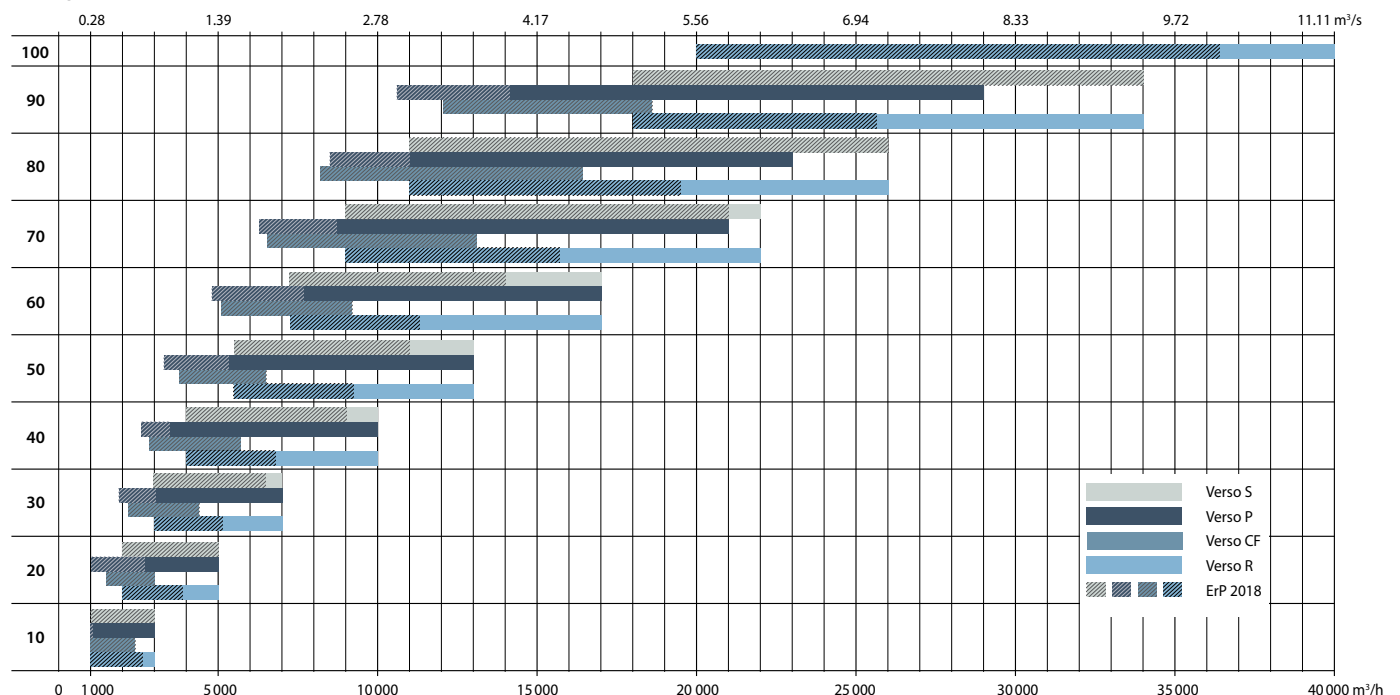
Capacity range from  
1 000 to 40 000 m<sup>3</sup>/h



- 10 basic sizes for various combinations.
- Customized solution – accurate and fast unit selection with Eurovent certified program.
- Plug & Play – factory installed and tested automatic control.
- Efficient PM/EC fans – the best *Ultra Premium* IE5 or *Super Premium* IE4 fan motors.
- Low noise level – special materials and unique technical solutions.
- Flexibility – wide selection of components: heat exchanger, fan, heater/cooler.
- 3+1 antifrost solution – lower freezing probability and energy consumption.
- REVIT models.



## Air flow





# RHP

## ventilation units with a rotary heat exchanger and an integrated heat pump

All RHP units have integrated heat pump, this technology extends air handling unit's capabilities – the unit not only ventilates, but also heats and cools the premises. Implementation of such complex technical solution not only extends the application of the unit, but also ensures high efficiency due to two energy recovery stages (by rotary heat exchanger and heat pump).

**Complete control  
of the indoor climate:**

*5in1*



### Comfort heating

RHP units can efficiently heat the premises especially during a transitional period.



### Fresh air

RHP units provide the premises with fresh air consuming minimal power.



### Comfort cooling

RHP units provide the most efficient cooling during the summer.



### Clean Air

Fresh air supplying into room is cleaned from dust.



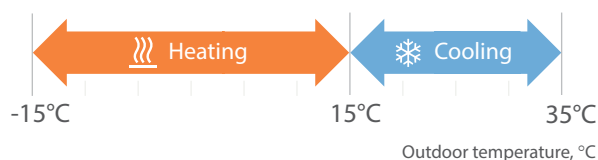
### Humidity control

RHP units in summer perform dehumidification (function) and in winter – regeneration of humidity.

### New possibilities with RHP:

- Plug & Play – all components are installed, aligned and tested at the factory.
- Device monitoring and management through the Internet and BMS.
- Simple designing, installing, operation and maintenance.
- Extremely high energy efficiency.
- Shortest payback time.
- Unified smart control, simplified management.
- No outdoor unit, no refrigeration specialists required.

### Operation range:



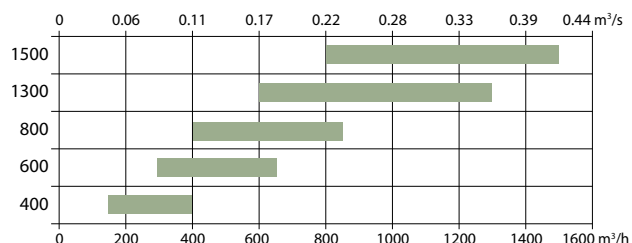
SCOP  
up to  
**17**



Capacity range from  
150 to 25 000 m³/h

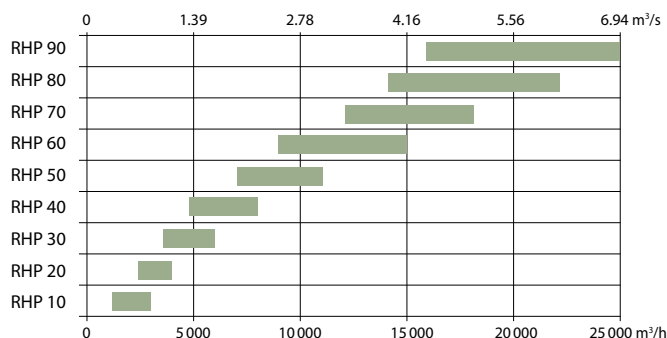
#### RHP Standard for smaller area premises

Air flow



#### RHP Pro for larger area premises

Air flow



#### Total comfort all year long:

reversible heating and cooling operation of heat pump ensures comfort indoor climate.



#### Extremely energy efficient and resource

**saving:** two step efficiency is provided by rotary heat exchanger recovery and post heating / cooling operated by heat pump.



#### Added value to indoor climate:

heating and humidity recovery in winter, cooling and dehumidifying in summer.



#### "All inclusive" solution:

no need for condensing unit, chiller, piping or additional work providing.



#### Convenience and safety:

factory charged by refrigerant, no refrigeration knowledge is needed.



#### Eco-friendly and protected:

R410A and R134A refrigerant and one circuit charge limits < 10 kg.



#### Factory tested:

reliable and convenient plug & play installation, commissioning and exploitation.



#### Intelligent control:

clever automatics control algorithms and reliable components ensure safe and efficient equipment operation.

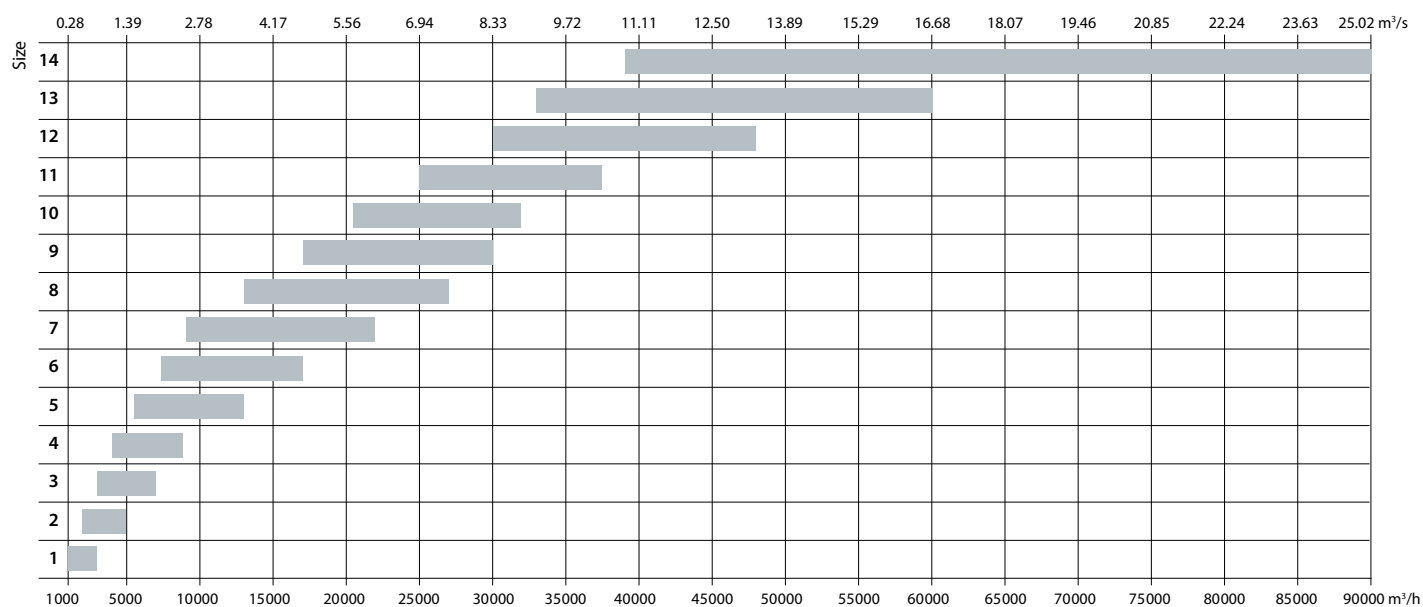
16 | [www.komfovent.com](http://www.komfovent.com)





Capacity range from  
1 000 to 100 000 m<sup>3</sup>/h

#### Air flow



**Klasik R**  
units with a rotary  
heat exchanger



**Klasik CF**  
units with a counterflow  
plate heat exchanger



**Klasik P**  
units with a plate  
heat exchanger



**Klasik S**  
supply air  
units



## Automatic control system KOMFOVENT

C5

C6

All controllers are easy in operation, have convenient user-friendly menu, LCD display enables to monitor various parameters, touch-sensitive buttons allow pleasant and convenient setting operation modes of the unit by soft touching.

AHU can be controlled via a web browser on your computer or mobile devices. Application softwares for Smartphones are specially developed for more convenient control. User-friendly interface enables clear and easy monitoring of air handling unit operation.

C5 control system is dedicated for professionals and includes various operating modes, a lot of useful functions and detailed information for the user. All this allows you to choose the most effective mode of operation of the unit.

C6 control system is dedicated for the end users, user-friendly interface enables intuitive navigation and simplified control of the unit.

Scan the QR codes below and download mobile applications:

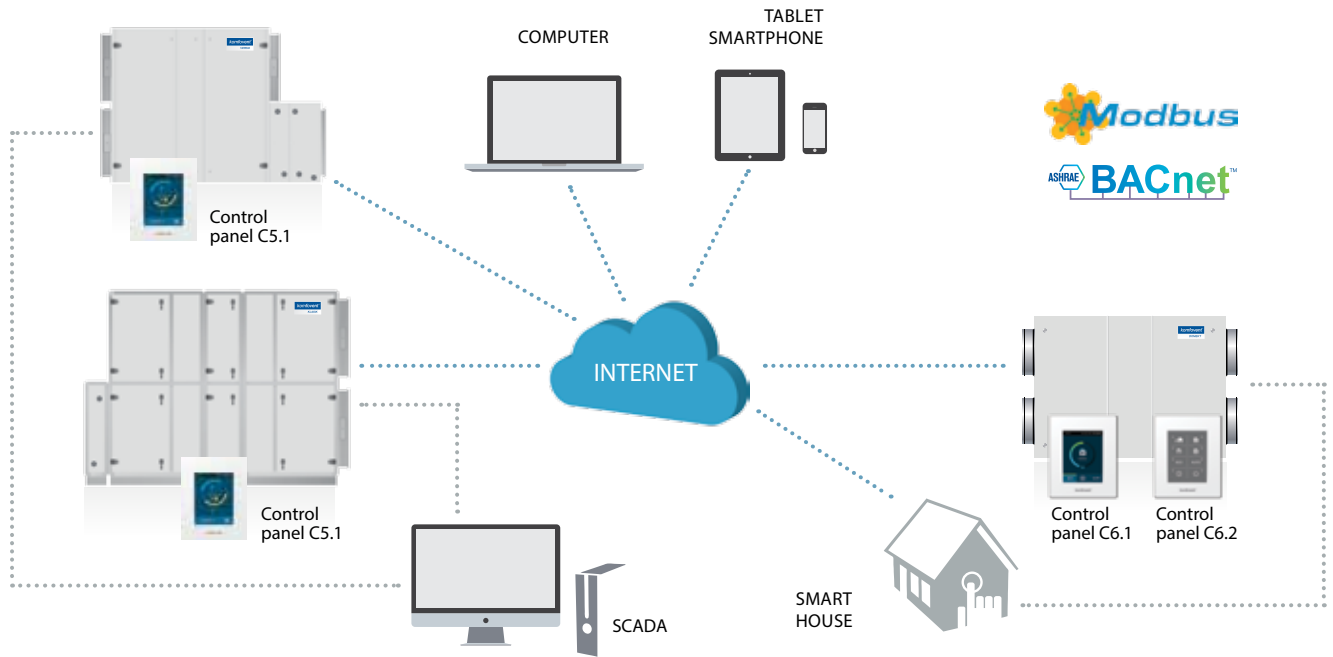


"Komfovent" application for units with integrated C5 control system.



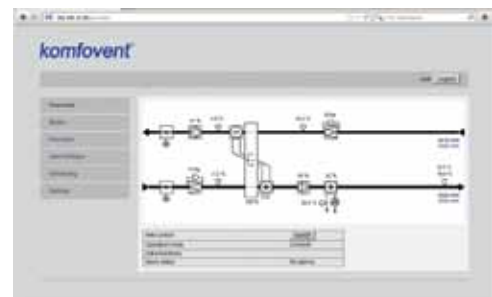
"Komfovent Home" application for units with integrated C6 control system.





### Integrated web server

KOMFOVENT air handling unit operation maybe monitored and controlled via web browser. Implemented Modbus and BACnet protocols allow easy integration of air handling units to any desired Building Management Systems.



### Unit's operation analysis

The computer program "Komfovent LogPlotter" has been designed to analyze the unit's operation history of the last 7 days. Unit's operation with C5 can be monitored not only in real-time from now on. The program can be downloaded from [www.komfovent.com](http://www.komfovent.com).



