

Energy efficient ventilation equipment





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 m² 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 Istambul, Turkey



The Four Courts Dublin, Ireland

THERMAL POWER STATION Lidkoping, Sweden





Hospital TILKKA Helsinki, Finland



LONDON MORPETH school

London, UK





Apartment houses Tallinn, Estonia



Shopping mall FORNEBU SENTER Ostend, Norway

Hotel SPINETTA MARENGO Alessandria, Italy



Sport complex ŠIAULIŲ ARENA Šiauliai, Lithuania

Wide range





Domekt R

Domekt CF



Domekt S









RHP Pro



KLASIK 1000–90 000 m³/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**.

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:

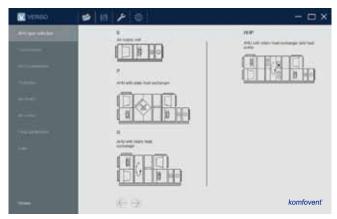
- DOMEKT
- VERSO
- RHP
- KLASIK

For ventilation systems components:

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



DOMEKT selection software



VERSO and RHP selection software

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KLASIK selection software



DOMEKT residential ventilation units



Simple & convenient selection

Detailed information on all units can be found in the DOMEKT selection software or on our website 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.

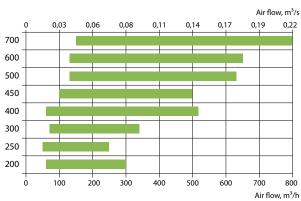


Connectivity to WEB

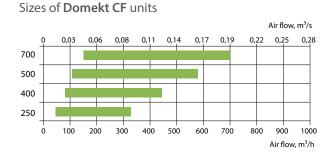
The units can be controlled not only with the control panel, but also remotely via a web browser on your computer or mobile devices. "Komfovent Home" application was specially developed for more convenient control.



Capacity range from 50 to 1 000 m³/h



Sizes of **Domekt R** units



6

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.



Inteligent 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.







Capacity range from 1000 to 40000 m³/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



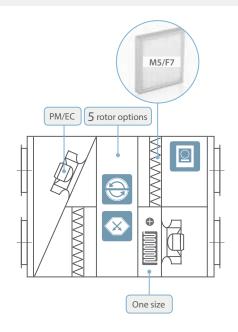
supply air

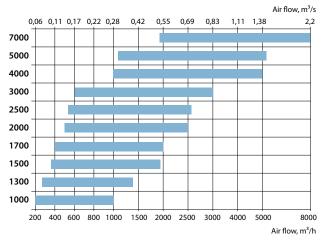
VERSO Standard

Capacity range from 1 000 to 8 000 m³/h



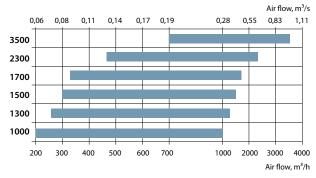
- Wide range of units vertical, horizontal, flat or universal application.
- Compact design.
- Universality vertical & horizontal and heating & cooling in one.
- Intelligent control fully integrated multi functional control with BMS connectivity.
- Fast choice available in technical catalogue.
- Exact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





Sizes of Verso R units

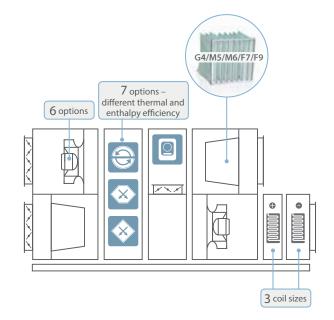
Sizes of Verso CF units

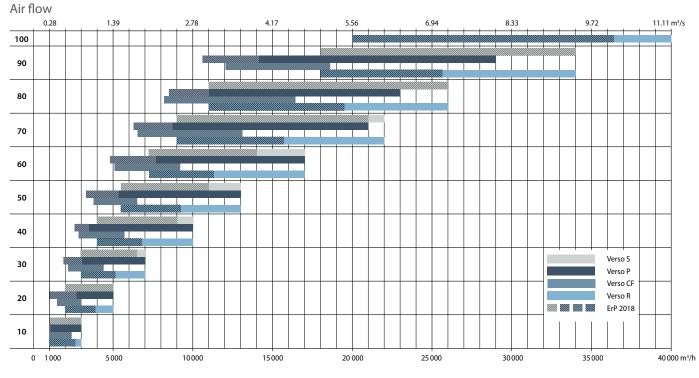


VERSO Pro



- 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.







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.

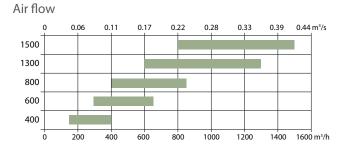
Operation range:



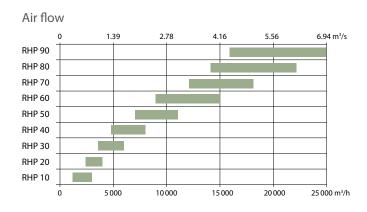


Capacity range from 150 to 25 000 m³/h

RHP Standard for smaller area premises



RHP Pro for larger area premises





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.

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"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.



KLASIK non residential ventilation units

KLASIK ventilation equipment is a bespoke type of AHUs, submitted in 14 sizes with a range of the air flow from 1 000 m³/h to 100 000 m³/h. Even bigger capacities (over 90 000 m³/h) are available and can be offered according to individual requests.

Wide range of KLASIK AHUs is applicable for the different type of projects that require more functional possibilities or other special solutions: public, industrial buildings, etc. Clean premise ventilation needs can be fulfilled by the hygienic version of the equipment.

Air handling units KLASIK consist of system of modules which quantity and their functional purpose depends on requirements of the customer and features of the project. Equipment may be offered with heat recovery or just as air supply or exhaust equipment. From the constructional point of view and depending on customer needs units may be monoblock (consisting of one common section in one level) and modular (consisting of several sections or modules). All units are designed and made according LST, EN (EN13053, EN13779, EN1886), VDI (VDI6022, VDI3803/1), RLT (RLT01) standards. Participate in Eurovent program for KLASIK selection software.

Features and benefits of KLASIK units:

- Unique solutions available.
- Flexible performance and functionality possibilities.
- Efficient operation ensured by reliable components.
- Tight and stable casing with perfect insulation.
- High efficiency and silent operation.
- Smart automatic control C5 with wide choice of functional possibilities.
- Integrated web server for clever control.
- Control via Smartphone available.

Klasik S Hg, RA Hg – ventilation equipment of hygienic purpose and clean premises ventilation

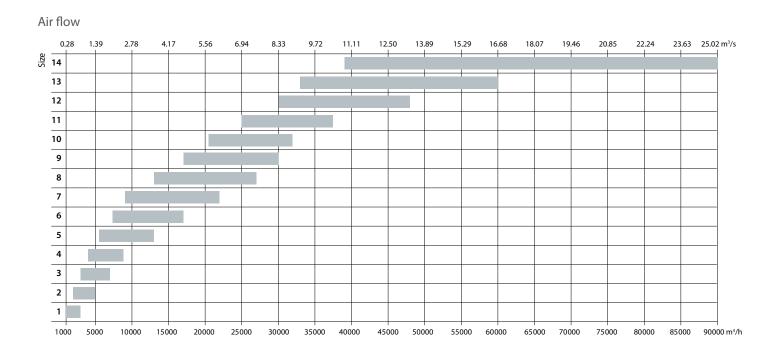
Internal surfaces of units S Hg, RA Hg are smooth, without protrusive elements and roughness to avoid and protect from accumulation of impurities and activators of illnesses. All connections are additionally sealed by dustproof sealant. The bottom of equipment (and in case of need – all internal walls) is produced from stainless steel that allows washing and cleaning of internal surfaces with disinfectants.

Units can be made according VDI and non extended RLT requirements.





Capacity range from 1 000 to 100 000 m³/h





Klasik R units with a rotary heat exchanger



Klasik CF units with a counterflow plate heat exchanger



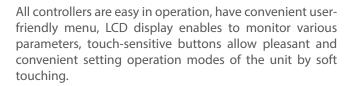
Klasik P units with a plate heat exchanger



Klasik S supply air units



Automatic control system KOMFOVENT



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. Userfriendly 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, userfriendly 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.

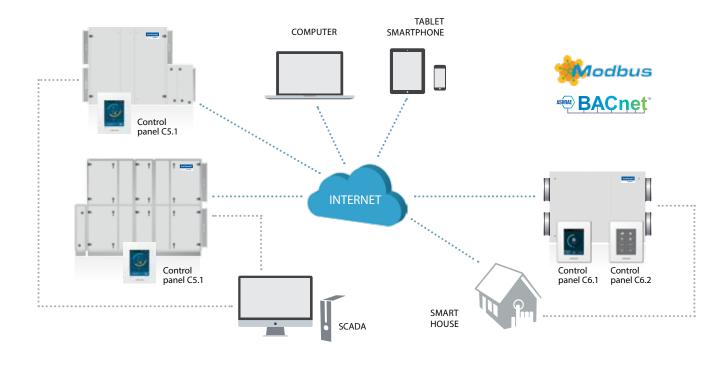






"Komfovent Home" application for units with integrated C6 control system.

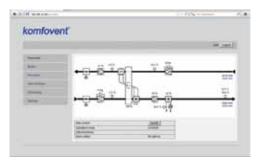




Integrated web server

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.

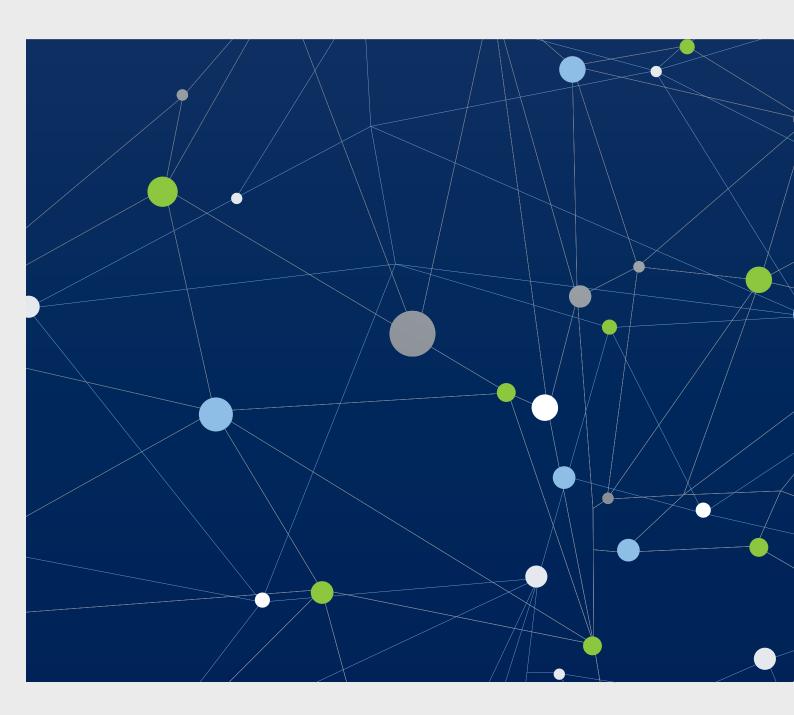




Unit's operation analysis

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.





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