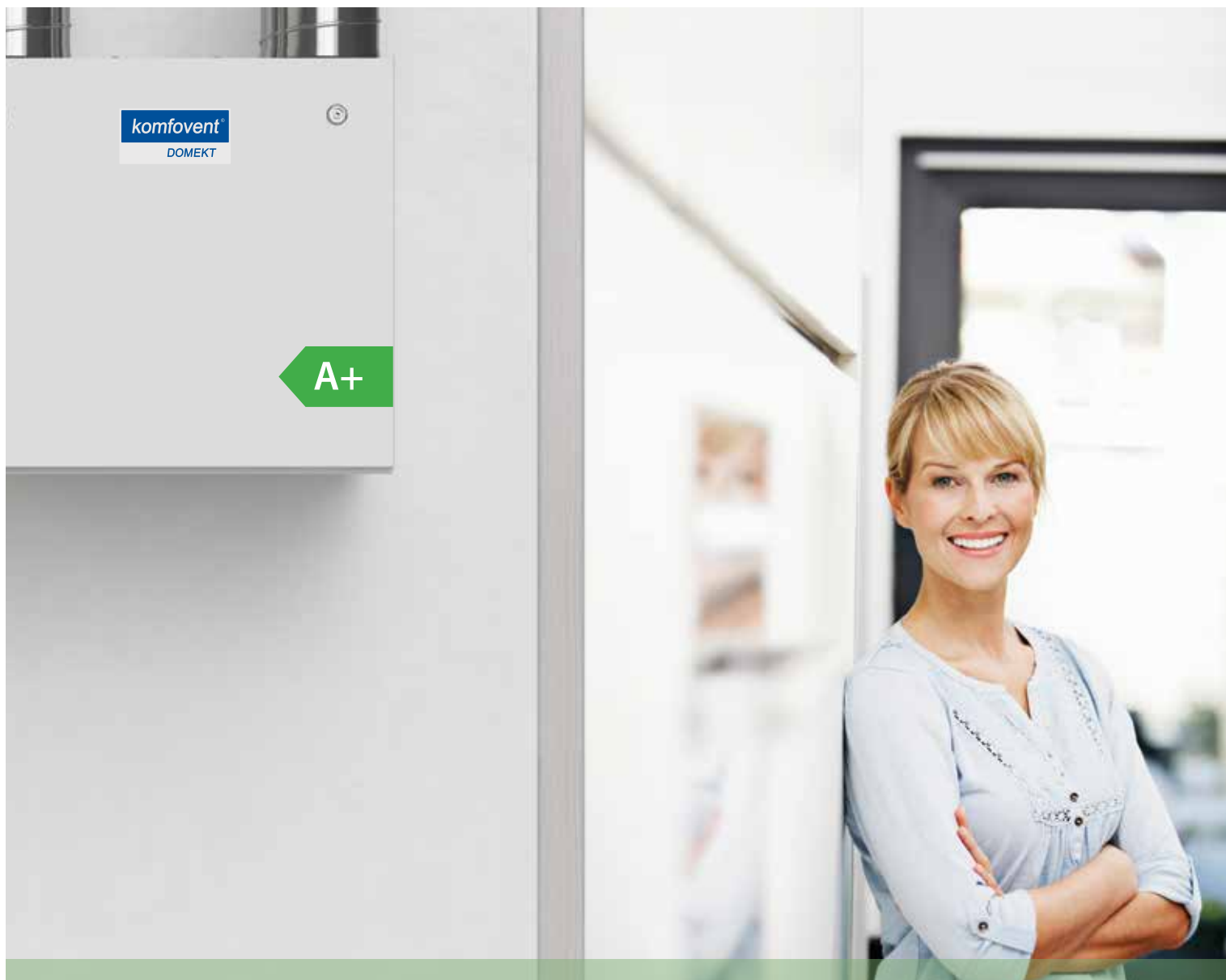


**komfovent®**



# DOMEKT

Residential ventilation units



# KOMFOVENT DOMEKT ventilation system – comfort, fresh air and energy saving

Capacity  
50 - 800 m<sup>3</sup>/h

Control system  
C6 SMART HOME

Selection software  




## High energy efficiency standards

All components and parts are accurately selected and assembled to achieve the best efficiency. An advanced control system optimizes the unit's performance.



## Reliability and durability

Double protection from corrosion – the housing of the units is made from 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.



## Intelligent control C6

Smart controller algorithms provide a wide range of functional capabilities. The units can be controlled by control panel, via web browser and mobile devices or both. Due to the protocols implemented the units are easily integrated into any desired BMS.



## Energy recovery

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



## Plug & Play solution

All units are completely prewired and have an integrated automatic control.

## 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. Detailed information on all units can be found in the DOMEKT selection software.

## Types of the units



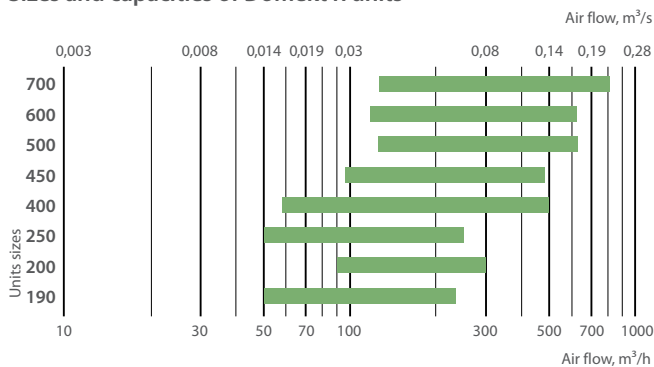
## Types of the heat exchangers

**Domekt R** | with rotary heat exchanger

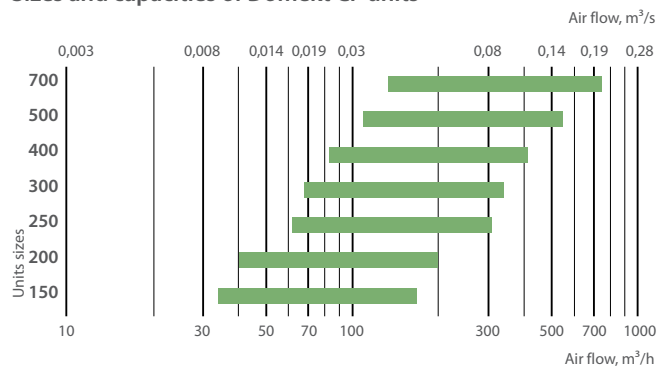
**Domekt CF** | with counter flow heat exchanger



### Sizes and capacities of Domekt R units



### Sizes and capacities of Domekt CF units



### Advantages




























- Effectively recovers the heat in low temperatures. (Even at -30°C outdoors).
- Non-freezing.
- Efficiently saves coolness in the summer by reducing the cost for conditioning.
- Controls the humidity in the room while maintaining the optimal comfort level.
- Advanced design ensures minimal mixing of the air flows.
- No drainage is necessary – easy unit installation.
- No primary heater is needed as there is no risk of freezing.
- There is a possibility to choose a sorption rotary heat exchanger, which is more efficient in humidity control.

### Advantages

- Thermal efficiency up to 92%.
- Air flows do not mix.
- Effective performance and longevity is ensured by high-quality design.
- Perfect solution for premises with high humidity, as it effectively eliminates humidity in the cold seasons.
- Two types available: condensing or enthalpy.
- Quality approved by Eurovent, TÜV, VDI and RLT.



# DOMEKT air handling units. Specifications

Unit size		150	190	200		250		300	400		
AHU type		Domekt CF	Domekt R	Domekt R	Domekt CF	Domekt R	Domekt CF	Domekt CF	Domekt R	Domekt R	
Heat exchanger type											
Duct connection											
SEC											
Reference flow rate	m <sup>3</sup> /s	0,030	0,036	0,05	0,039	0,049	0,057	0,062	0,056	0,082	
	m <sup>3</sup> /h	108	128,1	180	140	175	207	224	201	295	
Maximal air flow at 100 Pa		m <sup>3</sup> /h	158	183	258	202	250	295	319	287	422
Dimensions	B, mm	560	325	325	630	602	604	630	495	515	
	H, mm	294	625	625	790	310	294	790	547	565	
	L, mm	1100	600	600	600	842	1250	600	600	650	
Unit weight		kg	29	42	42	42	40	52	42	50	45
Duct diameters		mm	∅ 160 (4x)	∅ 125 (6x)	∅ 125 (6x)	∅ 160 (4x)	∅ 125 (1x) ∅ 160 (4x)	∅ 160 (4x)	∅ 160 (4x)	∅ 125 (1x) ∅ 160 (4x)	∅ 160 (4x)
Thermal efficiency of heat recovery		%	92	83	82	92	80	86	88	86	84
Max. operating current with electric air heater		A	6,1	3,3	4,7	8,3	6,1	8,3	8,3	5,5	6,3
Electric power input of the fan drive at reference flow rate		W	11	15	27	15	40	32	34	23	55
Electric power input of the fan drive at maximum flow rate		W	31	41	66	37	90	89	91	71	126
Electric air heater capacity		kW	0,5/0,75	0,5	0,8	0,5/1	1,0	0,5 / 1	0,5/1,5	1,0	1,0

## STANDARD SPECIFICATIONS:

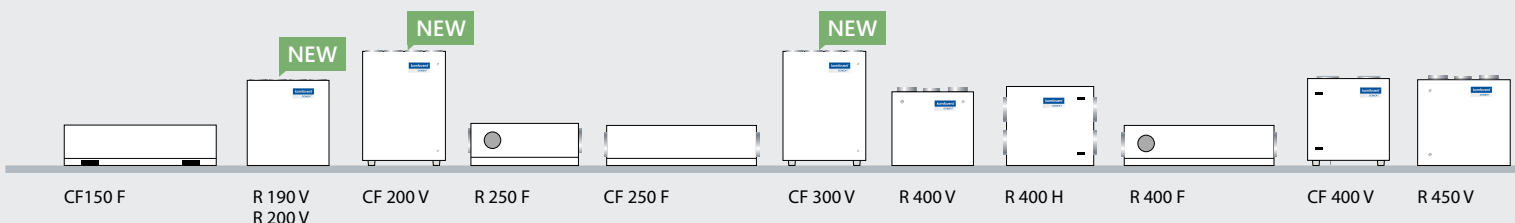
Standard filter class (supply/exhaust) – ePM1 55% / ePM10 50% (F7/M5)








































Heater type: electric

Supply voltage: 1~230 V

C6 control system is integrated in all DOMEKT units, except Domekt R 190 V, Domekt R 200 V where C4 control is used

## DOMEKT units



400		450	500		600	700						
Domekt R	Domekt CF	Domekt R	Domekt R	Domekt CF	Domekt R	Domekt R	Domekt R	Domekt R	Domekt CF	Domekt CF	Domekt CF	
												
												
												
0,092	0,071	0,092	0,123	0,101	0,114	0,149	0,135	0,133	0,124	0,127	0,14	
330	256	330	441	365	409	535	487	480	446	456	504	
472	366	472	629	521	584	764	696	686	637	651	720	
700	600	535	645	1045	570	645	647	854	495	494	875	
330	800	615	950	295	600	950	700	420	1220	790	344	
1170	598	680	1070	1400	1130	1070	930	1240	1020	1500	1365	
67	54	60	113	93	80	114	87	93	100	115	81	
∅ 125 (1x) ∅ 200 (4x)	∅ 160 (4x)	∅ 125 (1x) ∅ 160 (4x)	∅ 125 (1x) ∅ 250 (4x)	∅ 200 (4x)	∅ 125 (1x) ∅ 200 (4x)	∅ 125 (1x) ∅ 250 (4x)	∅ 125 (1x) ∅ 250 (4x)	∅ 125 (1x) ∅ 250 (4x)	∅ 200 (4x)	∅ 250 (4x)	∅ 250 (4x)	
81	93	85	85	87	83	83	84	83	88	88	82	
7,3	10,5	7,2	7,3	11,7	7,3	11,7	11,7	11,7	11,7	11,7	11,7	
72	33	72	47	67	77	73	89	76	73	72	70	
165	91	170	107	171	179	179	176	176	179	178	177	
1,0	0,5 / 1,5	1,0	1,0	0,5 / 1,5	1,0	2,0	2,0	2,0	0,5 / 1,5	0,5 / 1,5	0,5 / 1,5	

**LEGEND:**

Heat exchanger type:



rotary



counterflow

Duct connection:



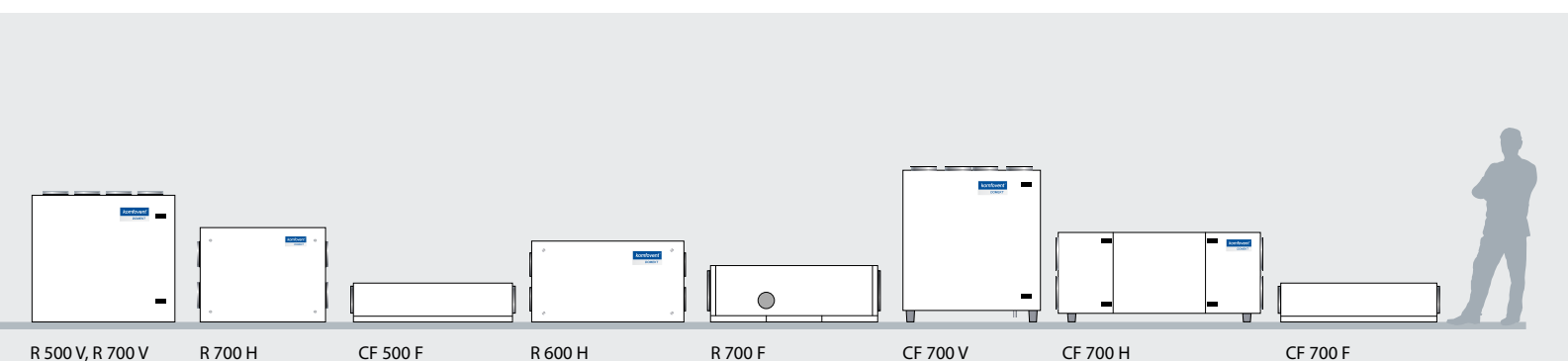
horizontal



vertical



flat



R 500 V, R 700 V

R 700 H

CF 500 F

R 600 H

R 700 F

CF 700 V

CF 700 H

CF 700 F

# The latest technological and engineering solutions implemented in DOMEKT units



## ✓ Sorption rotary heat exchanger – the highest comfort

The surface of the rotor has a zeolite coating, which improves the moisture exchange up to 90%, so this rotor effectively controls humidity – humidifies the supply air in the winter and dries it in the summer. The optimal comfort is maintained all year long, without the need for additional humidifiers and dehumidifiers.

## ✓ Enthalpy heat exchanger – higher comfort

Patented enthalpy heat exchanger, manufactured from a special membrane achieves the best results in heat and humidity regeneration. The exchanger is very hygienic and durable. Outlet air humidity is recovered to inlet air through a special patented membrane, which does not allow outside dirt and bacteria to get into the premises.

## ✓ New casing technology EPP

The EPP (expanded polypropylene) technology is applied in the newest DOMEKT units. The casing is produced from a special thermo-insulating sound absorbing material, which improves the casing's technical characteristics. Advantages: no thermal bridges, no condensation, improved thermal insulation, better aerodynamics and tightness, reduced weight, hydrophobic.

## ✓ Renewed multi-functional sensors

The new sensors measure airflow in real time, and therefore automatic system accurately maintains the specified performance and adjusts the airflow balance independently of changing conditions. Modulated heat exchanger control allows you to maintain the desired temperature more accurately. Updating reduces the power consumption of the unit.

## ✓ Air filters

Compact filters are characterized by longevity and a large filtering area. KOMFOVENT filters complies with EN ISO 16890 standard. Filters have low-pressure losses which reduces power consumption. Made from synthetic fabric with a moisture-resistant cardboard frame. Environmentally friendly materials do not cause problems of utilization.

## ✓ EC fans

EC fans of *Super Premium* IE4 efficiency ensure minimum power consumption. Statically and dynamically balanced fans and their special design guarantee a quiet and harmonious operation of the unit.

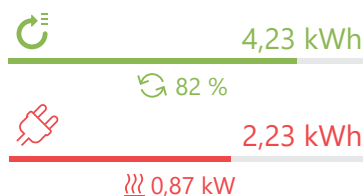
# Automatic control system C6 SMART HOME

- Intuitive control
- Ready for home use
- Integrated power meter
- Integrated web server
- Only 1 W in standby mode



## Unit energy counters

- Efficiency of recovery and power consumption indication gives the possibility to monitor and set up unit operation in a proper way.
- Energy counters helps to determine operation costs of the air handling unit and additional heater.



## Various operation modes

- 8 operation modes are pre-set for all situations.
- Intelligent energy saving mode ensures minimum power consumption.
- Automatic air quality control selects the most appropriate mode and ensures the comfort conditions in the room.



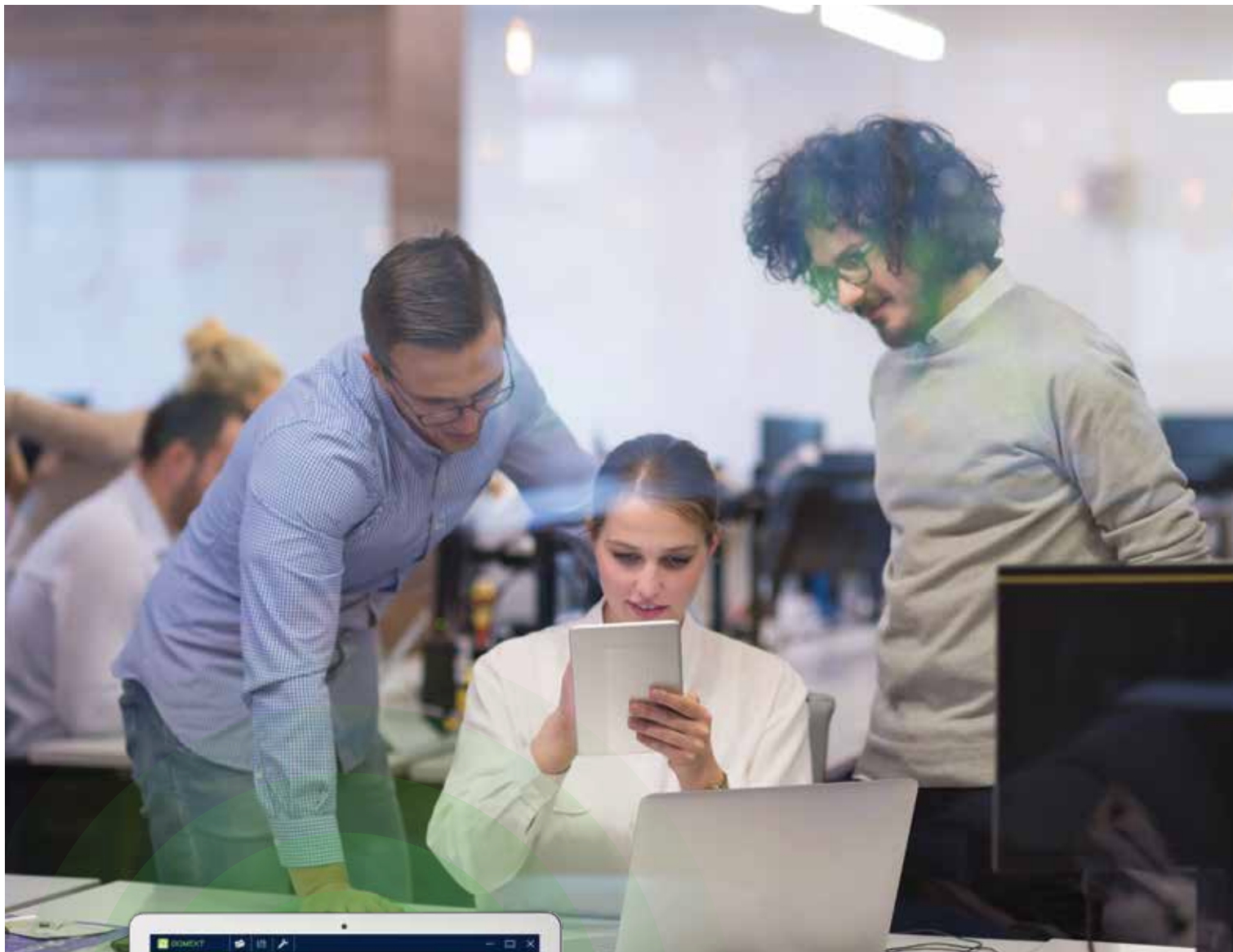
## Remote control

- Full monitoring of the parameters, energy consumption, air quality results and a lot of other useful information is available in the user friendly web interface.

- **Komfovent Control** application replicates control panel possibilities and allows to control your home ventilation from any place, wherever you are.







## **D** DOMEKT

### selection software

- For DOMEKT units with capacity from 50 to 800 m<sup>3</sup>/h.
- Parameters are calculated for specific climate and operating conditions.
- Selection of units accessories.
- Comparison of the units.
- Integrated DOMEKT 3D models library – KOMFOVENT HUB.

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