

AIR HANDLING UNITS CATALOGUE



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CONTENT

Our Company	4
Standards	5
Brief characteristics	6
Components	7
Services	8
VentiAir assembly units	.10
VentiAir compact units	12
Overview of basic types	12
P-TYPE K	.14
P-TYPE R	15
K-TYPE R	16
K-TYPE K	17
T-TYPE	.18
REKU-TYPE	19
R-TYPE	20
Units with integrated heat pump	21
Unit variability	.22





VENTIAIR AIR CONDITIONING UNITS FROM CZECHIA

Our company is a leading Czech manufacturer of air conditioning units. One of the goals of our company is the complexity of delivery. That is why we have built a production company with a complete portfolio of units which, at the same time, remains flexible in solving individual customer requirements. Thanks to this, we manufacture and supply units to many, not only European, countries.

We place great emphasis on minimizing operating costs, and therefore we approach each order very carefully and always propose individual solutions tailored to the needs of the project. We supply ventilation units also including measurement and control systems. That is why we have managed to build a strong position on the European ventilation unit market.

Our facilities are installed in various projects such as office buildings, schools, hotels, hospitals, sports facilities, banks, production halls, shopping centres, private and public swimming pools.

We strive for the team of our company to be composed of professionals who are able to address the needs of our customers to their maximum satisfaction. We are aware of the importance of a quality relationship between the supplier, the installation company and the designer and so we approach the business. We approach each order very carefully and always propose individual solutions tailored to the needs of the project.

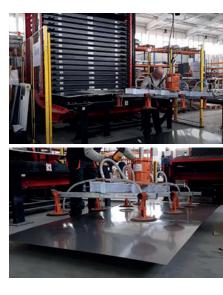
7

years on the market



7700

delivered air conditioning units







CERTAINTY FOR YOU AND YOUR PARTNERS

Our units go through a complex product certification process from several certification authorities.

Among the main ones, we can name an authorized person 227 – RESEARCH INSTITUTE OF BUILDINGS – CERTIFICATION COMPANY and then laboratories of the internationally recognized TÜV standard.

Part of the certification is also the verification of the actual parameters of the products and comparison with the stated characteristics.

CERTIFICATION INCLUDES:

- Measurement of air performance of the device and comparison of measured values with the parameters specified by the manufacturer
- Measurement and control of parameters according to
 EN 1886 and EN 13053
- Measurement of noise characteristics and comparison of measured values with parameters specified by the manufacturer according to EN 13053
- Comparison of technical data with valid legislation
- Regular annual supervision in production, repeated measurements











BRIEF CHARACTERISTICS

OF VENTIAIR AIR CONDITIONING UNITS

CONSTRUCTION

- Skeletal structure consisting of aluminium profiles, plastic corners and sandwich panels
- Panel filling **polyurethane** (PUR) or **mineral wool**
- Panel cladding galvanized or stainless steel, RAL according to customer requirements
- Service access from side (as standard), from bottom (under-ceiling design), or according to requirements and options
- The exterior design is equipped with a full-area roof with overlaps, material galvanized sheet metal, dampers including actuators inside the chambers, intake and exhaust rain shutters on request







ADVANTAGES OF THE USED CONSTRUCTION

- Reduction of energy losses minimization of thermal bridges
- High rigidity and durability of the structure
- Elimination of moisture condensation
- Elimination of moisture absorption
- Insulating material with a very long degradation time
- Smooth inner sheathing surfaces easy to maintain hygiene
- Lightweight inspection panels simple operation
- High resistance to external atmospheric influences

Data according to EN 1886 for PUR panel 45 mm

Data according to EN 1000 for Pok panel 45 min	Value
Working conditions	–40 to +90 °C
Heat transfer coefficient for cladding K=0,67 W/m²K	T2
Coefficient of thermal bridges	TB2
Mechanical resistance of the casing: -2500 Pa to +2500 Pa < 2 mm	DI
Sheath tightness -400 Pa – 0,06 l/m²	LI
Filter tightness	F9
Panel thickness – PUR	25, 45 mm
Panel thickness – mineral wool	50, 60 mm
Sheet thickness – PUR panel	0,6 mm
Sheet thickness – mineral wool panel	0,8 mm
Thermal conductivity coefficient PPU	0,022 W/mK
Fire resistance of cladding	Fire resistant material (NRO)
Moisture absorption	0,04 %
PPU density	42 kg/m ³
Panel weight	10 kg/m²
Corrosion protection – weight of galvanic coating	275 g/m²
Material / thickness of outer safety coating	Polyester 25 µm



Value



COMPONENTS

The individual components of the VentiAir series are supplied by reputable manufacturers

Fans

Ziehl-Abegg, EBM (free impeller, speed control by frequency converter, EC), motors IE2, IE3, IE4

Heat exchangers

Klingenburg, Heatex, Hoval, Roen, Recutech, DBM

Control system

EL-Piast, UCS, CAREL, Siemens, Plum

Frequency converters Danfoss, EURA Drives



DELIVERY

On the frame: according to the customer's request, the whole unit on one frame. Availability depends on dimensions, unit weight and destination. The advantage is fast installation, minimization of time needed for installation on site.

In blocks (by chambers): suitable for engine rooms inside buildings, ideal for larger and heavier pieces, individual blocks are connected by the assembly company according to the written instructions into a functional unit directly at the installation site.

In whole or in blocks for disassembly: advantageous for reconstruction of buildings. Complete chambers or equipment are delivered without glued joints (not sealed). It is thus possible to disassemble the components and transport the individual components (motors, fans, recuperation units, exchangers, panels) to the destination separately. Subsequently, the unit is folded back to its original state and sealed.

The price of delivery includes the delivery of both individual chambers which are connected to a functional unit on the construction site as well as accessories – sleeves, dampers, frequency converters.

Measurement and control: depending on the customer's requirements, VentiAir units can be equipped with integrated Plug & Play control - ideal for compact units that do not connect multiple chambers into a functional unit. In case of modular units, a completely fitted switchboard and other components are supplied separately for installation on site. Hygienic design: VentiAir-TYPE units meet the requirements for air conditioning in all types of clean rooms, including healthcare, from a material, constructional and operational point of view.

Explosion-proof design zone II: the design of the units allows the installation of explosion-proof motors and fans.

Above-standard equipment of VentiAir air conditioning units: hinges with the possibility of turning left / right, sight glasses, epoxy coatings for swimming pool design, chemical operations, stainless steel design, surface treatment in RAL according to customer requirements, chamber lighting, etc.



TOP LEVEL SERVICES



AFTER SALES SERVICE

VentiAir provides both warranty and post-warranty service for our air handling units and the measurement and control systems we supply. The headquarters in Adolfovice near Jeseník has a fully stocked warehouse of components and spare parts. We thus respond flexibly to any customer request whether it is an accident or a possible completion of the original delivery by a new product.

Our service technicians are real professionals and have technical knowledge supported by regular training.



DESIGN SOFTWARE

Since 2020, access to the original VentiAir design software developed by our staff has been released for designers and our other partners. After a few steps, the user has the possibility to create a technical offer for compact air handling units, which include K-TYPE, P-TYPE and REKU-TYPE units. For these most common and best-selling types of units, the user obtains all technical information, parameters and graphic outputs very quickly. This includes the 3D model REVIT.

The software is thus constantly modified according to new knowledge and suggestions, both from our customers and, above all, from colleagues from the production plant. Thanks to this, we respond flexibly to all new requirements, which are so quickly reflected in the technical properties of the manufactured air handling units.



LASER BURNING

The headquarters in Adolfovice near Jeseník is equipped with a modern and powerful CNC laser system. This device can use a laser beam to quickly, efficiently and silently cut any profile into a metal material up to 15 mm thick with extreme precision. We therefore offer additional service beyond our production program. It is thus possible to order the processing of almost any type of material that is suitable for laser machining.



SUPPLIES OF PERIPHERALS

VentiAir can be proud of its partnership with many renowned European manufacturers of peripheral components for air conditioning systems. Thanks to this, almost any component of the air distribution system and measurement and control can be ordered from our company **without any worries**. The basic and bestselling components include air quality sensors, fire smoke detectors, digital pressure sensors, gas heaters, condensing units, etc.

VENTIAIR Fresh air from Jeseníky



VENTIAIR ASSEMBLY UNITS



S-TYPE - WIDE UNITS

- Air conditioning unit for rooms with a requirement for reduced installation height or installation
 on the roof
- Preferred design in combination with rotary recuperation units the exchanger does not deviate from the profile of the unit
- Chamber cross-section ratio 1:2 (HxW), the resulting cross-section of the bi-directional unit is
 a square
- stable frame construction, basic frame height 100 mm taller or adjustable legs on request
- 12 size ranges, any device configuration according to project requirements, air output of the unit from 1 000 m³/h
- In this type, two or three fans are preferably placed in parallel in one chamber
- Plug-in fans with frequency converters or energy-saving EC motors
- PUR panel or mineral wool 25 mm, 45 mm, 50 mm, 60 mm, profiles with elimination of thermal bridges



W-TYPE - STANDARD SQUARE UNITS

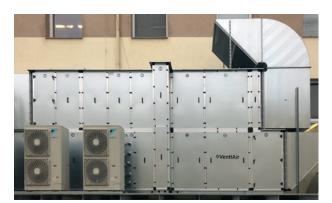
- Assembly air conditioning unit with square cross-section chambers
- Vertical or horizontal design the unit can also be hung under the ceiling
 - Minimum requirements for servicing space
- Air output of the unit from 1 000 m³/h
- Stable frame construction, basic frame height 100 mm taller or adjustable legs on request
- 13 size ranges, any device configuration according to project requirements
- PUR panel or mineral wool 25 mm, 45 mm, 50 mm, 60 mm
- Profiles with elimination of thermal bridges



P-TYPE - FLAT UNITS

- Ventilation unit in a very low design, usually as an under-ceiling one
- Low height of units, according to size from 350 mm
- Highly efficient counter-current recuperation exchangers as standard equipment
- Insulation sandwich PUR panel 25 mm, 45 mm or 50 mm mineral wool
- Free-impeller fans controlled by frequency converters, EC fans
- Possibility of integrated measuring and control system









PE-TYPE – DUCT SYSTEM

- Pipeline modular ventilation system
- Individual components can be installed in the pipeline
- High adaptability in case of complex constructions / reconstructions
- Possibility of installation in any position
- Low weight, easy connection and easy handling without technical demands
- In terms of operation and maintenance, it is a comparable device with conventional air conditioning units



K-TYPE - UNITS WITH CHIMNEY NECK SYSTEM

- Ventilation unit designed for installation in confined spaces
- The pipe connection is only from the top of the unit side by side, air output of the unit from 500 m³/h
- The units are only intended for two-way air exchange with recuperation
- Insulation sandwich PUR panel 25 mm, 45 mm or 50 mm mineral wool
- Plug-in fans with frequency converters or energy-saving EC motors
- Units as standard as one transport unit, if required, can be produced in several sections
- Stable frame design, basic frame height 100 mm taller or adjustable legs on request

If you have not found the variant you requested, do not hesitate to ask us. Our team will analyze your requirement and try to find a solution that meets the required parameters.

D	E	H	O	P
Outdoor design	Epoxy design	Hygienic design	Integrated heat pump	Plastic design
 Design for outdoor / roof operation The units have shut-off dampers inside, a roof and optionally an intake and exhaust shutter You can choose from S-TYPE, W-TYPE, K-TYPE, P-TYPE K configurations 	 Design suitable for areas with chemically aggressive environments or for operations requiring thorough cleaning of internal components with water All elements of the unit are treated with epoxy resin to prevent corrosion In this design, units for swimming pools, electroplating plants, etc. 	 Units intended primarily for hospitals The inner surfaces of the unit are treated with epoxy resin or are made of stainless steel The internal construction of the unit is further designed to effectively clean any part of the unit. Sight-glasses into important chambers of the unit. 	 The units are equipped with a complete heat pump circuit with compressor They are especially suitable for ventilation of swimming pool halls to reduce humidity They can also be used for all types of rooms where it is necessary to heat or cool with minimal costs and there is no space for a separate condensing unit 	 The units are designed for highly aggressive environments. Ideal for ventilation of galvanizing plants, where the air is removed directly from the production technology The unit also includes a durable plastic heat exchanger

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flow [m³/h]

Air

OVERVIEW OF BASIC TYPES

OF VENTIAIR AIR CONDITIONING UNITS



The overview is used for your quick reference. Our sales and technical consultant will be happy to prepare a specific unit design for your project.

74000 15000 9000 10000 11000 12000 13000 16000 8000 6000 1000 4000 5000 2000 2000 0 W-TYPE 30 5 * O H M 920 x 920 1 25 (M) ★ 0 0 ★ K 1253×712 P 40 S-TYPE 70 5 * 🛇 H M 1180 x 640 | 25 55 X O O K 995x730 P 40 W-TYPE 20 5 * O H M 920 x 650 1 25 S-TYPE 50 4 * O H M 980 x 540 25 S ★ 0 0 € K 730 × 730 P 40 W-TYPF 10 4 * O H M 650 x 650 25 S-TYPE 40 4 * O H M 850 x 470 25 55 X O O 55 K 730 × 500 P 40 W-TYPE 0 4 * 🛇 H M 650 x 435 1 25 55 * O O 5 K 925 x 407 P 40 S-TYPE 30 4 * 🛇 H M 850 x 330 25 1330 x500 P 40 P-TYPE 40 5 * O H M 1250 x 430 1 25 *** O O * K** 1330 x 420 **P** 40 P-TYPE 30 5 * O H M 1250 x 340 1 25 55 * 0 0 5 K 1080 × 420 P 40 P-TYPE 20 5 * 🛇 H M 1000 x 340 1 25 P-TYPE 10 5 * O H M 660 x 340 25 K-TYPE 40 5 * O H M 435 x 1 570 25 K-TYPE 30 4 * O H M 435 x 920 25 55. * O O EC K KOMPAKT P 40 1 25 K-TYPE 20 5 * O H M 435 x 920 M R310 x 980 K-TYPE 10 5 * O H M 400 x 650 M R310 x 850 55 * 0 0 5 K KOMPAKT P 40 1 25 K-TYPE 0 5 * O H M 400 x 650 M R310 x 770 2000 12000 13000 24000 15000 1000 16000 000, 000, 000, 000, 000, 000, 000 0 2000 4000 4000

Working range [m³/h]



Unit with plate recuperation heat exchanger Unit with rotary recuperation heat exchanger Supply unit with heating

in V_{max}

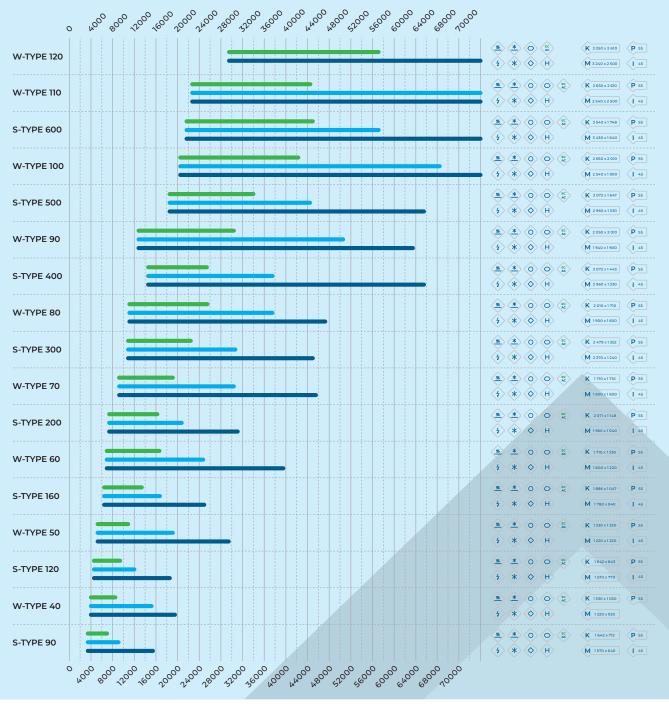
The tables show the approximate working ranges of our assembly units with regard to compliance with the Ecodesign 2018 standard.

For K-TYPE units, variants of only supply units with heating are not available – this type is intended exclusively for two-way ventilation.

P-TYPE units in their basic design do not allow the installation of a rotary heat exchanger. It is only available for the compact design - see next pages of the catalogue.



- We also supply all assembly units with a gas heating module.
- W-TYPE units can also be supplied in a **horizontal design** with chambers next to each other.
- ATEX fans can be supplied for all types of units (except S-TYPE 30)
- The units can be fitted with various types of filters: cassette, pocket, metal (grease), carbon, electrostatic. Filtration classes EU3-EU9 (or HEPA).
- The basic design of the panel is made of galvanized sheet 0.6 mm on both sides and PUR filling. There is also a choice of mineral wool, or a thicker layer of insulation (available 25, 45, 50, 60 mm the chart above shows the basic minimum size).



Explanations



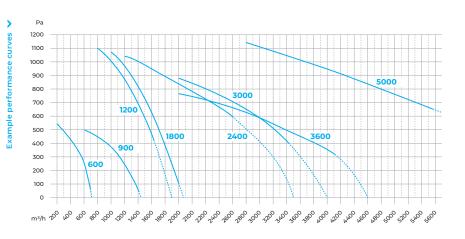
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P-TYPE K

SUSPENDED, VERTICAL AND FLOOR UNIT

- Compact air conditioning unit with heat recovery
- Counter-current recuperation exchanger with high efficiency
- Minimum dimensions, ceiling, floor and vertical design
- Variant for outdoor operation
- For ventilation of offices, shops, schools, restaurants, etc.
- Integrated by-pass damper, mixing damper option
- Low noise design, 8 sizes
- Integrated control system
 - Digital controller, calendar, manual control, off-set
 - Inputs for CO₂, hygrostat, external max. speed switching
 - MODBUS RTU, Ethernet control via internet
- Filtration class standard F7/M5 other variants possible
- Possibility of heating (internal) and cooling (external)
- Constant pressure and constant flow control









Characteristics meeting the requirements of Reg. 1253/2014

Characteristics outside the requirements of Reg. 1253/2014

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Basic characteristics

	600	900	1200	1800	2400	3000	3600	5000
Air flow [m ³ /h]	600	900	1200	1800	2400	3000	3600	5000
Ac. pressure [dB(A)]*	41	41	45	53	45	47	52	43
Efficiency dry (max.) [%]	76(84)	80(84)	81(86)	81(86)	80(84)	80(84)	80(84)	83(86)
Exchanger type	AL	AL	AL	AL	AL	AL	AI	Al
Control system	Integrated							
Filters (intake/exhaust)	F7/M5							
Ceiling design	Yes							
Vertical design	Yes							
Horizontal design	Indoor/outdoor							
Heating	W/EI 1,8kW	W/EI 2,6 kW	W/El 9 kW	W/EI 13,5 kW	W/EI 13,5 kW	W/EI 13,5 kW	W/EI 18 kW	W/EI 18 kW
Cooling	W/DX							
Voltage (fans) [V]	230	230	230	230	230	230	230	400
Fan [kW]	2x0,17	2x2x0,17	Max. 2x0,75	Max. 2x0,75	Max. 2x1,35	Max. 2x1,35	Max. 2x1,35	Max. 2x2,5
Protect. w/o heater [A]	1x4	1x8	1x6	1x6	1x10	1x15	1x15	3x13
Dimensions [mm]**	1224x730x395	1224x1224x395	1550x1300x420	1550x1600x420	1700x1600x500	1700x2000x500	2100x1700x650	2850x1545x1100
Connection [mm]	250x340	460x315	500x340	660x340	650x435	850x435	700x560	700x560
Weight [kg]	75	90	150	220	250	300	320	550

Flow rates and other parameters may vary according to the specific unit configuration, the characteristic is valid for the reference configuration with electric heating and filters F7/M5, ex. pressure 200 Pa, component performance values are maximum – less powerful component variants are possible.

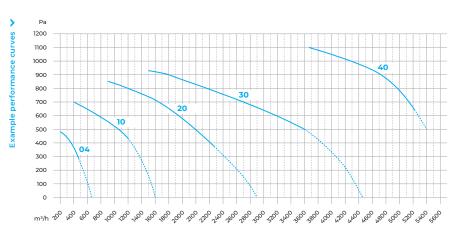
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Basic characteristics

P-TYPE R

UNDER-CEILING, VERTICAL AND FLOOR UNIT

- Compact air conditioning unit with heat recovery
- Two high-efficiency rotary heat exchangers
- Minimum dimensions, ceiling and vertical design
- Variant for outdoor operation
- For ventilation of family houses, offices, shops, restaurants, etc.
- Mixing damper option
- Low noise design, **5 sizes**
- Integrated control system
 - Digital controller
 - Calendar, manual control, off-set
 - Inputs for CO₂, hygrostat, external max. speed switching
 - MODBUS RTU, Ethernet control via internet
- Filtration class standard F7/M5 other variants possible









Characteristics meeting the requirements of Reg. 1253/2014

Characteristics outside the requirements of Reg. 1253/2014

	04	10	20	30	40
Air flow (mom.) [m ³ /h]	400	1000	2000	3000	4000
Ac. pressure [dB(A)]*	40	38	42	48	44
Efficiency dry (max.) [%]	79(83)	79(86)	78(84)	78(84)	82(85)
Exchanger type	Rotary	Rotary	Rotary	Rotary	Rotary
Control system	Integrated	Integrated	Integrated	Integrated	Integrated
Filters (intake/exhaust)	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5
Ceiling design	Yes	Yes	Yes	Yes	Yes
Vertical design	Yes	Yes	Yes	Yes	Yes
Floor horizontal design	Yes	Indoor/outdoor	Indoor/outdoor	Indoor/outdoor	Indoor/outdoor
Heating	W/EI 2,2 kW	W/EI 6 kW	W/EI 12 kW	W/EI 18 kW	W/EI 27 kW
Cooling	Ne	W/DX	W/DX	W/DX	W/DX
Voltage (fans) [V]	230	230/400	230/400	230/400	230/400
Fan [kW]	0,17	0,38	0,5	0,78	Max. 1,35
Protect. w/o heater [A]	4	3,5	5	9	14
Dimensions [mm]**	1150x706x350	1500x1300x500	1650x1400x615	1650x1500x731	1800x1600x845
Connection [mm]	200	500x430	550X540	600x650	650x770
Weight [kg]	130	190	240	290	330

Flow rates and other parameters may vary according to the specific unit configuration, the characteristic is valid for the reference configuration with electric heating and filters F7/M5, ex. pressure 200 Pa, component performance values are maximum – less powerful component variants are possible.



K-TYPE R CHIMNEY UNIT

- Compact air conditioning unit with heat recovery
- High-efficiency rotary heat exchangers ٠
- Minimum dimensions ٠

>

Basic characteristics

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Example performance curves

Pa 1200

1100 1000 900

800

700

> 100 0

m³/h

- Variant for outdoor operation ٠
- For ventilation of family houses, offices, shops, restaurants, etc. •
- Possibility of mixing damper
- Low noise design, **5 sizes**
- Integrated control system ٠
 - Digital controller
 - Calendar, manual control, off-set

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- Inputs for CO₂, hygrostat, external max. speed switching - MODBUS RTU, Ethernet - control via internet

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- Filtration class standard F7/M5 other variants possible
- ٠ ٠
- Possibility of integrated heating and cooling ٠







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950⁰





Characteristics meeting the requirements of Reg. 1253/2014

Characteristics outside the requirements of Reg. 1253/2014

> **Technical parameters**

	0	10	20	30	40
Air flow (nom.) [m³/h]	2000	3000	4500	5500	7500
Acoustic pressure [dB(A)]*	43	47	54	44	46
Efficiency dry (max.) [%]	82(85)	79(85)	78(85)	82(85)	83(85)
Exchanger type	Rotary	Rotary	Rotary	Rotary	Rotary
Control system	Integrated	Integrated	Integrated	Integrated	Integrated
Filters (intake/exhaust)	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5
Outdoor design	Yes	Yes	Yes	Yes	Yes
Heating	W/EI 9 kW	W/EI 18 kW	W/EI 18 kW	W/EI 18 kW	W/EI 54 kW
Cooling	W/DX	W/DX	W/DX	W/DX	W/DX
Voltage (fans) [V]	230	230	230	400	400
Fan [kW]	Max. 0,5	Max. 1,35	Max. 1,35	Max. 2x1,35	Max. 2x2,5
Protect. w/o heater [A]	4	14	14	8	16
Width x height [mm]**	2200x1150	2200x1250	2200x1350	2500x1550	2500x1700
Depth [mm]**	845	925	1049	1253	1642
Connection [mm]	330x770	330x850	330x980	435x1180	435x1570
Weight [kg]	275	420	460	610	740

Flow rates and other parameters may vary according to the specific unit configuration, the characteristic is valid for the reference configuration with electric heating and filters F7/M5, ex. pressure 200 Pa, component performance values are maximum - less powerful component variants are possible.

K-TYPE K

- Compact air conditioning unit with heat recovery
- Economical EC motors

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Basic characteristics

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Example performance curves

Pa 1200

1100 1000

> 900 800

> 700 600

> > 100 0

m³/h

- Counterflow heat recovery exchanger with high efficiency
- Designed for indoor use, outdoor version on demand
- For ventilation of family houses, offices, shops, restaurants, etc.
- Integrated control system
 - Digital controller
 - Calendar, manual control, off-set
 - Inputs for CO₂, hygrostat, external max. speed switching

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- MODBUS RTU, Ethernet control via internet
- Filtration class standard F7/M5 other variants possible
- Constant pressure and constant flow control
- Possibility of heating and cooling (water/electric/direct evaporation)
- 6 unit sizes for use in each project





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Characteristics meeting the requirements of Reg. 1253/2014

Characteristics outside the requirements of Reg. 1253/2014

	09	0	10	20	30	40
Air flow (nom.) [m³/h]	500	1000	2000	3500	5000	6000
Acoustic pressure [dB(A)] in 1 m	38	35	38	42	43	44
Efficiency dry (max.) [%]	83(87)	81(84)	84(88)	84(87)	84(87)	85(88)
Exchanger type	Counterflow	Counterflow	Counterflow	Counterflow	Counterflow	Counterflow
Control system	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Filters (intake/exhaust)	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5
Outdoor design	Yes	Yes	Yes	Yes	Yes	Yes
Heating	W/El 6 kW	W/EI 9 kW	W/El 18 kW	W/EI 18 kW	W/EI 24 kW	W/EI 36 kW
Cooling	W/DX	W/DX	W/DX	W/DX	W/DX	W/DX
Voltage (fans) [V]	230	230	400	400	400	400
Fan [kW]	Max. 0,78	Max. 0,78	Max. 2,5	Max. 2,5	Max. 3,3	Max. 3,3
Protect. w/o heater [A]	7	9	8	8	11	11
Width x height [mm]**	1500x900	2000x1100	2550x1550	2550x1550	2550x1550	2550x1550
Depth [mm]**	730	730	730	995	1253	1642
Connection [mm]	250	400x650	435x650	435x920	435x1180	435x1570
Weight [kg]	160	280	360	460	550	650

Flow rates and other parameters may vary according to the specific unit configuration, the characteristic is valid for the reference configuration with electric heating and filters F7/M5, ex. pressure 200 Pa, component performance values are maximum – less powerful component variants are possible.



T-TYPE

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Basic characteristics

SCHOOL UNIT FOR VENTILATION OF EACH CLASS

- Compact air conditioning unit with heat recovery
- Meets the high demand for low noise only 35 dB
- Easy to install to class
- Drainless condensate vessel
- Security against unauthorized entry into the unit and its control
- Standing and ceiling design
- Possibility to connect to the superordinate system
- Integrated by-pass damper
- Integrated CO₂ sensor
- Integrated control system
 - Digital controller
 - Calendar, manual control, off-set
 - MODBUS RTU, Ethernet control via Internet
- Filtration class standard F7/M5
- Possibility of heating
- Possibility UV air desinfection
- Colour version according to customer's request including decorative foils
- Laminated cladding with **wood decor** can be supplied
- External exhaust and intake element available (on request)



	400	600	850
Air flow (nom./max) [m³/h]	400/600	600/800	850/950
Acoustic pressure [dB(A)] in 1 m	35	35	35
Efficiency dry (max) [%]	81(85)	80(85)	80(85)
Exchanger type	Counterflow	Counterflow	Counterflow
Control system	Integrated	Integrated	Integrated
Filters (intake/exhaust)	F7/M5	F7/M5	F7/M5
Installation	Floor	Floor	Floor
Heating	El 1+1 kW	El 1+1 kW	El 1+1,5 kW
Cooling	Ne	Ne	Ne
Voltage [V]	230	230	230
Fan [kW]	2x0,17	2x0,17	2x2x0,17
Current [A]	12	12	16
Dimensions [mm]	660x660x1500	660x809x2040	660x809x2040
Connection [mm]	200	315	315
Weight [kg]	180	200	230



ErP

EC







REKU-TYPE V, H

SMALL RECUPERATION UNIT

- Compact air conditioning unit with heat recovery
- Economical EC motors ٠

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Basic characteristics

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Example performance curves

Pa

600

300 250

200 150 100

> 50 0

> > m³/h

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- Counterflow recuperation exchanger with high efficiency
- Chimney, under-ceiling and vertical design ٠
- Designed for indoor use
- For ventilation of family houses, offices, shops, restaurants, etc.
- Integrated control system
- Digital controller
 - Calendar, manual control, off-set
 - Inputs for CO₂, hygrostat, external max. speed switching
- MODBUS RTU, Ethernet control before the Internet
- Filtration class standard M5/M5 other variants possible

500V/600V

300V/400V

250

Possibility of heating and cooling (water/electric/direct evaporation) ٠

400

ď

600

٠ 8 unit sizes for use in each project





900







Characteristics meeting the requirements of Reg. 1253/2014

	250	300 V	400 V	400	500 V	600 V	600	900
Air flow (nom.) [m³/h]	200	300	400	400	500	600	600	900
Acoustic pressure [dB(A)]*	43	45	46	44	44	47	46	46
Efficiency dry (max.) [%]	79(88)	76(86)	77(88)	79(86)	76(84)	78(87)	79(84)	80(85)
Exchanger type	Counterflow	Counterflow	Counterflow	Counterflow	Counterflow	Counterflow	Counterflow	Counterflow
Control system	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Filters (intake/exhaust)	G4(M5)/G4	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5
Pipeline connection	Horizontal	Vertical	Vertical	Horizontal	Vertical	Vertical	Horizontal	Horizontal
Heating	Ext. El 0,3 kW	El 1,0 kW	El 1,0 kW	El 1,8 kW/Water	El 1,5 kW	El 1,5 kW	El 1,8 kW/Water	El 2,2 kW/Water
Cooling	N/A	N/A	N/A	W/DX	N/A	N/A	W/DX	W/DX
Voltage (fans) [V]	230	230	230	230	230	230	230	230
Fan [kW]	0,17	2x0,12	2x0,12	2x0,17	2x0,17	2x0,17	2x0,17	2x2x0,17
Current without heating [A]	1,6	2x0,85	2x0,85	2x1,75	2x1,03	2x1,33	2x1,75	2x2x1,75
Floor plan [mm]	667x665	970x510	970x510	556x1150	970x710	970x710	706x1150	1200x1150
Height [mm]	365	790	790	350	790	790	350	350
Connection [mm]	125	160	160	200	200	200	200	250
Weight [kg]	45	61	61	70	86	86	70	105

Flow rates and other parameters may vary according to the specific unit configuration, the characteristic is valid for the reference configuration with electric heating and filters M5/M5, ex. pressure 200 Pa (exc. REKU-TYPE 200), component performance values are maximum – less powerful component variants are possible. * Sound pressure at a distance of 1 meter.



R-TYPE

COMPACT ROOF UNITS FOR EASY INSTALLATION

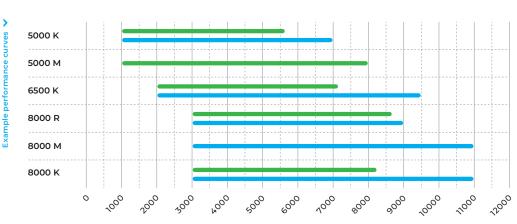
- Compact air conditioning unit with heat recovery
- Economical EC motors

>

Basic characteristics

- Designed for direct installation in the penetration of the roof
- High efficiency recovery exchangers
- Counterflow, rotary exchnager or mixing chamber
- For ventilation, especially of industrial, production and storage halls
- Integrated control system - Digital controller
 - Calendar, manual control, off-set

 - Inputs for CO₂, hygrostat, external max. speed switching
 - MODBUS RTU, Ethernet control before the Internet
- Filtration class standard F7/M5 other variants possible Possibility of heating and cooling (water/electric/direct) ٠
- Choice from 3 unit sizes





Characteristics meeting the requirements of Reg. 1253/2014

Characteristics outside the requirements of Reg. 1253/2014

	5000 K	5000 M	6500 K	8000 R	8000 M	8000 K
Air flow (nom.) [m³/h]	5000	5000	6500	8000	8000	8000
Acoustic pressure [dB(A)]*	73	73	75	70	80	80
Efficiency dry (max.) [%]	78(81)	-	74(80)	78(85)	-	74(79)
Exchanger type	Counterflow	Mixing chamber	Counterflow	Rotary	Mixing chamber	Counterflow
Control system	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Filters (intake/exhaust)	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5	F7/M5
Mixing	Yes	Yes	Yes	Yes	Yes	Yes
Heating	W/EI 45 kW	W/EI 45 kW	W/EI 36 kW	W/EI 36 kW	W/EI 36 kW	W/EI 36 kW
Cooling	W/DX	W/DX	W/DX	W/DX	W/DX	W/DX
Voltage (fans) [V]	230	230	230	230	400	400
Fan [kW]	2x0,78	2x1,35	2x1,35	2x1,35	2x2,5	2x2,5
Current w/o heating [A]	2x4	2x6,7	2x6,7	2x6,7	2x4	2x4
Floor plan [mm]	1290x2100	1290x2100	1680x2100	1680x2300	1680x2100	1880x2100
Height [mm]	1850+1750	1850+1750	1850+1750	1850+1500	1850+1750	1850+1750
Connection [mm]	900x900	900x900	1100x1100	1100x1100	1100x1100	1100x1100
Weight [kg]	500	350	600	760	400	500

EC

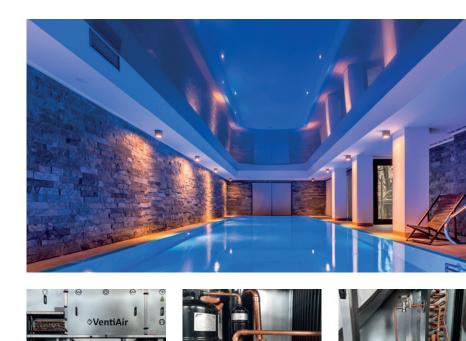
Flow rates and other parameters may vary according to the specific configuration of the unit, the characteristic is valid for the reference configuration with electric heating and filters F7/M5, ex. pressure 50 Pa, component power values are maximum - less powerful component variants are possible.

* Sound pressure at a distance of 1 meter.

UNITS WITH INTEGRATED HEAT PUMP

Units not only for swimming pools

- Air conditioning units combining plate or rotary recuperation heat exchangers and a heat pump circuit
- The delivery includes a complete compressor circuit, including all components
- Units are most often used for ventilation of pool halls in order to reduce humidity
- They are also preferably used for heating and cooling where it is not possible to place an external condensing unit
- Configuration is available for most models of our units
- Own measurement and control system











Limited transport routes? No problem!

- Especially during reconstructions, there is a situation where it is not possible to transport the units to the installation site in standard assembly units
- We can design the units so that each functional unit will have a separate chamber and in case that even this measure does not comply with ones needs, we can disassemble the units on site and reassemble at the installation site again
- The chief assembly service includes complete control of work on the construction site during disassembly of unit chambers and other parts and subsequent reassembly
- In compliance with the prescribed working procedures, all declared properties of the units are preserved as if they were assembled directly in the factory
- All standard warranties are kept as part of the delivery



MAXIMUM VARIABILITY

OF VENTIAIR AIR HANDLING UNITS

Each unit size can be designed in several configurations.

Unit type W-TYPE 20, 21 and 25 – i.e. chambers above each other, next to each other and next to each other in a low design.







Unit type P-TYPE 1200 in under-ceiling, vertical and roof horizontal version.





ARE YOU INTERESTED IN A UNIT FROM JESENÍKY? DO YOU HAVE A TECHNICAL QUESTION? DO YOU WANT TO APPLY FOR A PROJECT?

> DO NOT HESITATE TO CONTACT US: OFFICE@VENTIAIR.COM T: +420 737 805 399



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