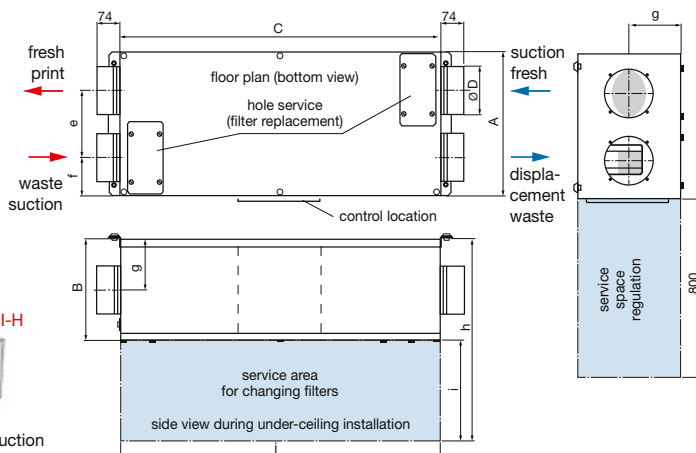
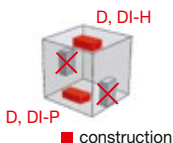


ROVENTO evo



RAL7016



Recuperation



maximum efficiency regeneration



rotational exchanger

Type	A [mm]	B [mm]	C [mm]	Ø D [mm]	e [mm]	f [mm]	g [mm]	h [mm]	i [mm]	j [mm]
ROVENTO 220	450	314	1000	150	210	120	157	714	400	1000
ROVENTO 320	550	414	1050	180	260	145	207	864	450	1050
ROVENTO 520	650	524	1050	225	330	159	261	1074	550	1050

Technical parameters

The cabinet

is frameless, made of sandwich panels, 20 mm thick, with thermal and noise insulation. The inlet and outlet connections are round necks fitted with a sealing rubber sleeve.

Fan with

backward curved blades in special shaped spiral housing with EC electric motor. Protection IP44, insulation class B.

Electric heater

The heating spirals of the heater are made of stainless steel. The heater is equipped with an operating thermostat with a temperature of 60°C and a non-automatic thermal fuse at 120°C.

Regeneration

The rotary heat and moisture transfer heat exchanger has a thermal efficiency of up to 81–83% at nominal air flow. The sealing of the impeller around the perimeter and in the dividing plane ensures a high tightness of the wheel against the housing. The heat exchanger is accessible after opening the

front cover. The flexibly mounted rotor drive is realized by a motor with a front gearbox with an output of 6 W and a supply voltage of 230 V/50 Hz.

Filters

There are ZLW cassette filters of filtration class G4 (ISO Coarse 60%) on the outlet and inlet. Alternatively, you can choose an M5 (ISO Coarse 90%) or F7 (ISO ePM10 50%) filter on the inlet. Another variant of the supply filter is the use of a G4 filter (ISO Coarse 60%) in combination with a carbon filter UF2 limiting the transmission of odors.

Electrical connection

is a mains cord with a terminal for 230V/50Hz power supply. There is also a service switch on the casing of the unit for the possibility of easy disconnection from the power supply.

Regulation

Built-in Neoreg digital regulation for PLUG & PLAY connection. Easy to connect wired CP-TFT color touch controller. The temperature sensors are located and connected inside the unit. The free cooling function

is solved by turning off the rotation of the rotary regenerative exchanger. Communication with the unit takes place via a remote control with the option of setting the unit's performance, the desired operating state, the desired temperature and the weekly program of operation. Shut-off dampers are not part of the unit's delivery, but it is possible to control external dampers directly from the Neoreg control system. CO₂/VO₂/RH sensors with 0–10 V output can be connected to the unit for continuous control of the unit's performance.

Construction

In a horizontal position on the floor or ceiling with side-by-side nozzles. When installing the unit, it is necessary to have a handling space around the unit for removing the filters and for carrying out periodic revisions.

Noise

Listed in the tables are the acoustic power levels at the individual throats of the unit with weight filter A correction and the acoustic power level of the unit casing with weight filter A correction.

Type	ventilator			heater			Motor ROV	power unit			mass [kg]
	Tension [V]	input power [W]	current [A]	Tension [V]	input power [W]	current [A]	input power [W]	Tension [V]	input power [W]	current [A]	
ROVENTO 220 D	230	136	0,59	–	–	–	6	230	142	0,62	45,5
ROVENTO 220 DI	230	136	0,59	230	400	1,7	6	230	542	2,30	46,5
ROVENTO 320 D	230	196	0,80	–	–	–	6	230	202	0,88	60,0
ROVENTO 320 DI	230	196	0,80	230	700	3,0	6	230	902	3,90	61,0
ROVENTO 520 D	230	340	1,48	–	–	–	6	230	346	1,50	79,5
ROVENTO 520 DI	230	340	1,48	230	1200	5,2	6	230	1546	6,70	80,5

■ Unit order code

ROVENTO 220 DI-H-L G4 / G4 evo
1 2 3 4 5

1 – unit size: **220, 320, 520**

2 – variant resolution with or without heater:

D – without an additional heater in the supply part of the unit

DI – with an additional electric heater in the supply part of the unit

3 – installation position of the unit:

H – horizontal under the ceiling

P – horizontal on the floor

4 – side of the regulation location (see supplementary illustration):

L – left

P – right

5 – type of inlet and outlet filter:

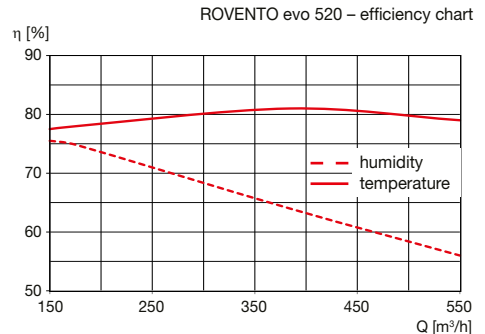
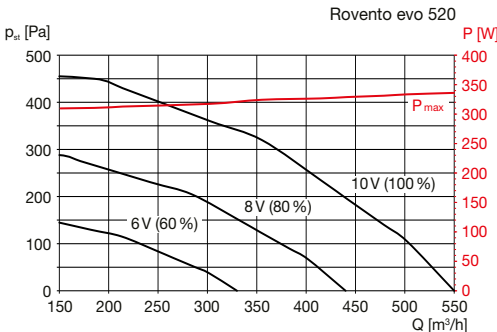
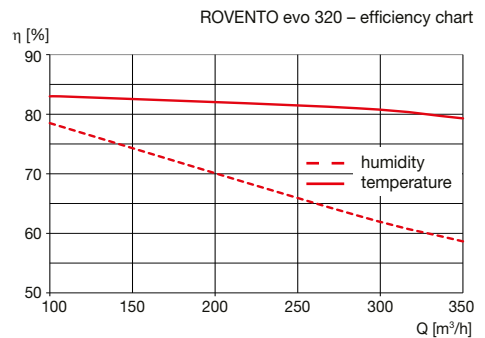
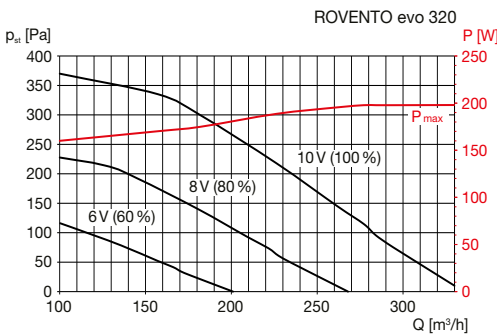
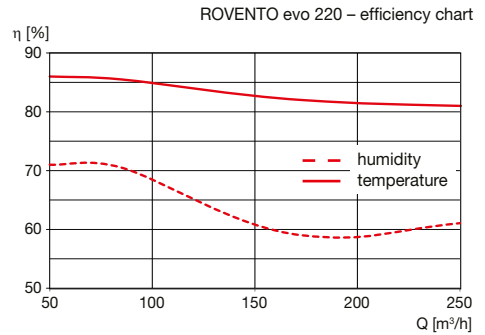
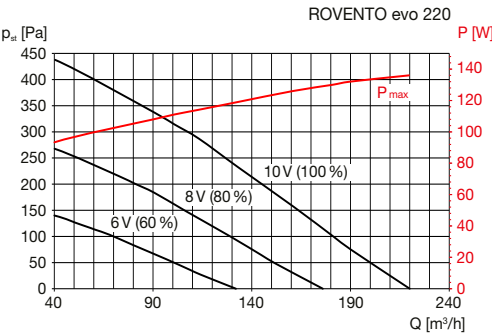
G4/G4 – inlet filter G4, outlet filter G4

M5/G4 – inlet filter M5, outlet filter G4

F7/G4 – input filter F7, output filter G4

G4UF2/G4 – inlet filter G4 with modification UF2, drain filter G4

Characteristics



Legend:

Q [m³/h] air flow, external
 p_{st} [Pa] static pressure of the unit
 P [W] maximum electrical input of fans (W)
 η (%) recovery efficiency

Characteristics of the ROVENTO unit measured for the version of the unit with G4/G4 filters.

ROVENTO evo

ROVENTO 220 – acoustic power level in octave bands (dB(A))

U=10V, n=3920 min⁻¹

f (Hz)	63	125	250	500	1000	2000	4000	8000	total
fresh (ODA)	36	46	57	57	53	51	45	36	61
supply (SUP)	42	52	64	66	66	69	63	50	73
L _{WA} towing (ETA)	36	46	57	57	53	51	45	36	61
waste (EHA)	42	52	64	66	66	69	63	50	73
plastic	37	49	59	54	45	41	34	18	61

U=6V, n=2352 min⁻¹

f (Hz)	63	125	250	500	1000	2000	4000	8000	total
fresh (ODA)	25	35	46	46	42	40	34	25	50
supply (SUP)	31	41	53	55	55	58	52	39	62
L _{WA} towing (ETA)	25	35	46	46	42	40	34	25	50
waste (EHA)	31	41	53	55	55	58	52	39	62
plastic	26	38	48	43	34	30	23	7	50

U=8V, n=3136 min⁻¹

f (Hz)	63	125	250	500	1000	2000	4000	8000	total
fresh (ODA)	31	41	52	52	48	46	40	31	57
supply (SUP)	37	47	59	61	61	64	58	45	68
L _{WA} towing (ETA)	31	41	52	52	48	46	40	31	57
waste (EHA)	37	47	59	61	61	64	58	45	68
plastic	32	44	54	49	40	36	29	13	56

Acoustic data were determined assuming laboratory conditions.
The tolerance of the given acoustic data is +/- 2dB.

ROVENTO 320 – hladina akustického výkonu v oktávových pásmech (dB(A))

U=10V, n=3275 min⁻¹

f (Hz)	63	125	250	500	1000	2000	4000	8000	total
fresh (ODA)	28	38	49	59	58	57	54	40	64
supply (SUP)	37	44	58	66	73	76	70	59	79
L _{WA} towing (ETA)	28	38	49	59	58	57	54	40	64
waste (EHA)	37	44	58	66	73	76	70	59	79
plastic	32	41	53	54	52	48	41	27	58

U=6V, n=1965 min⁻¹

f (Hz)	63	125	250	500	1000	2000	4000	8000	total
fresh (ODA)	17	27	38	48	47	46	43	29	52
supply (SUP)	26	33	47	55	62	65	59	48	68
L _{WA} towing (ETA)	17	27	38	48	47	46	43	29	52
waste (EHA)	26	33	47	55	62	65	59	48	68
plastic	21	30	42	43	41	37	30	16	47

U=8V, n=2620 min⁻¹

f (Hz)	63	125	250	500	1000	2000	4000	8000	total
fresh (ODA)	23	33	44	54	53	52	49	35	59
supply (SUP)	32	39	53	61	68	71	65	54	74
L _{WA} towing (ETA)	23	33	44	54	53	52	49	35	59
waste (EHA)	32	39	53	61	68	71	65	54	74
plastic	27	36	48	49	47	43	36	22	54

Acoustic data were determined assuming laboratory conditions.
The tolerance of the given acoustic data is +/- 2dB.

ROVENTO 520 – hladina akustického výkonu v oktávových pásmech (dB(A))

U=10V, n=2850 min⁻¹

f (Hz)	63	125	250	500	1000	2000	4000	8000	total
fresh (ODA)	33	46	57	59	56	51	45	37	63
supply (SUP)	43	56	68	72	72	68	63	57	77
L _{WA} towing (ETA)	33	46	57	59	56	51	45	37	63
waste (EHA)	43	56	68	72	72	68	63	57	77
plastic	38	53	63	60	51	40	34	25	65

U=6V, n=1710 min⁻¹

f (Hz)	63	125	250	500	1000	2000	4000	8000	total
fresh (ODA)	22	34	46	48	45	40	34	26	52
supply (SUP)	32	44	57	61	61	57	52	46	66
L _{WA} towing (ETA)	22	34	46	48	45	40	34	26	52
waste (EHA)	32	44	57	61	61	57	52	46	66
plastic	27	41	52	49	40	29	23	14	54

U=8V, n=2280 min⁻¹

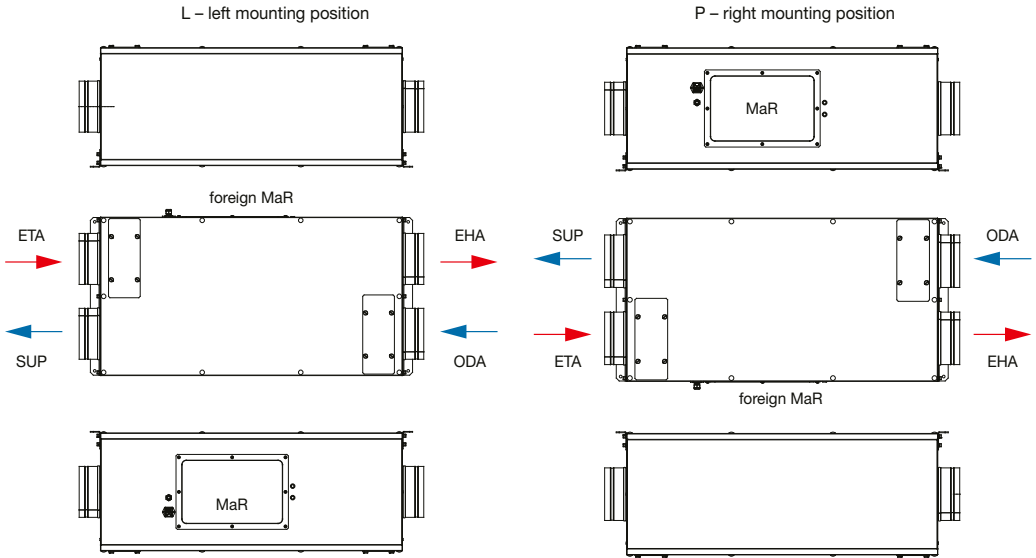
f (Hz)	63	125	250	500	1000	2000	4000	8000	total
fresh (ODA)	28	41	52	55	51	46	41	32	58
supply (SUP)	38	51	63	68	67	63	59	52	72
L _{WA} towing (ETA)	28	41	52	55	51	46	41	32	58
waste (EHA)	38	51	63	68	67	63	59	52	72
plastic	33	48	58	56	46	35	30	20	60

Acoustic data were determined assuming laboratory conditions.
The tolerance of the given acoustic data is +/- 2dB.

Supplementary image

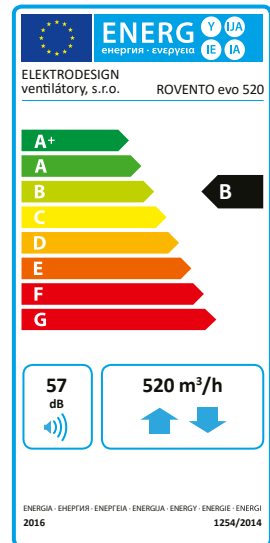
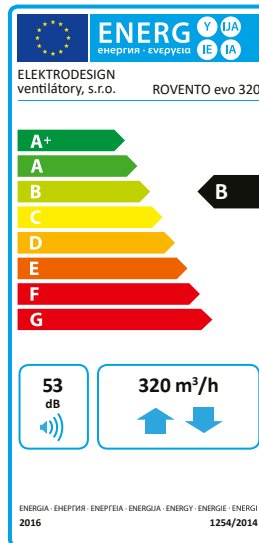
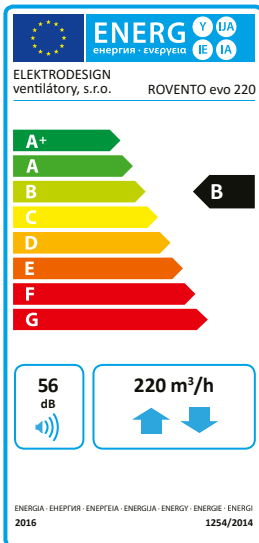
Control location

- ODA fresh air intake
- SUP displacement of fresh conditioned air
- ETA exhaust air intake
- EHA discharge of exhaust air into the outdoor environment



Recuperation

Unit energy labels



Accessories



Digireg® CP-TFT touch controller



horizontal combined facade grids EDF-VXZ



vertical combined facade grids EDF-VXY

Recuperation



AIRSENS-CO₂
CO₂ sensor



AIRSENS-VOC
air quality sensor



AIRSENS-RH relative
humidity sensor

ED FLEX® System

