

# RIRS V EKO



**Heat recovery ventilators with rotating exchanger, automatic control and EC motor, designed for vertical ducts and installation in technical room.**



FLEX panel included in all models

## Common characteristics:

- Efficient low-noise EC adjustable fans.
- Maintenance switch – disconnecter incorporated.
- Thermal efficiency of up to 80%.
- Sound insulation 50mm thick for low noise level.
- Large access doors for correct maintenance.
- Tray for collecting condensation with drainage.

## PRV 3.0 control functions incorporated:

- Free cooling function.
- Fan speed control by manual selection or optional external sensors (CO2 or pressure).
- Frost protection built-in.
- Built-in control system with FLEX remote control panel (including 13 m cable).
- ON/OFF and speed control available through panel or external switches.
- Control of external DX coolers.

- Built-in temperature and humidity sensors.
- Filter condition control through built-in pressure switches.
- Management of fire alarms and equipment failure alarms.
- Compatible with MODBUS RTU.

## Finish:

- Silver/Ral 7040 paint.

## Versions:

- Environmental: Renewal of air without supplying heat (S).
- Electric: With heating supplied by single-stage electrically heated coils (E).
- Water battery: With heating supplied by water coils external to the machine (W).



## On request:

- Boxes with special filters.
- Adiabatic module.

## Order code

RIRS	—	3500	—	V-EKO	—	E	—	D	—	F7
Heat recovery ventilators with rotating exchanger, automatic control and EC motor, designed for installation in technical room		Size		Vertical ducts and high efficiency		S: No battery or water coils E: Electrical battery W: External water coil		Side on which the fresh air enters the machine, as seen from the maintenance access. D: Right-hand side (standard) K: left-hand side		F7 filter (air supply filter)

## Characteristics, depending on size

	RIRS-400	RIRS-1900	RIRS-2500	RIRS-3500
Standard filters (supply/extraction)	F7/M5	F7/M5	F7/M5	F7/M5
Free cooling function 100% of flow	YES	YES	YES	YES
Side for maintenance access can be changed (D↔K)	-	-	YES	YES
Version availability according to maintenance access side (versions D or K)	D/K	D/K	K	D/K

**Technical characteristics**

Model	Fans			Maximum flow F7 (m3/h)	Thermal efficiency (%)	LpA radiated 3m dB(A)	Total voltage (V)	Total current (A)	Total power (kW)	Weight (Kg)	According ErP
	Speed (r/min)	Current (A)	Power (kW)								
RIRS-400-V-EKO-S	3490	2x1.20	2x0.13	500	75	54	1x230	2.66	0.35	79	2018
RIRS-400-V-EKO-E	3490	2x1.20	2x0.13	500	75	54	1x230	6.84	1.50	79	2018
RIRS-400-V-EKO-W	3490	2x1.20	2x0.13	500	75	54	1x230	2.66	0.35	87	2018
RIRS-1900-V-EKO-S	2600	2x3.15	2x0.50	2000	74	60	1x230	6.50	1.00	178	2018
RIRS-1900-V-EKO-E	2600	2x3.15	2x0.50	2000	74	60	3x400	19.50	10.00	180	2018
RIRS-1900-V-EKO-W	2600	2x3.15	2x0.50	2000	74	60	3x400	6.50	1.00	194	2018
RIRS-2500-V-EKO-S	2800	2x3.30	2x0.75	2800	80	62	1x230	7.00	1.55	270	2018
RIRS-2500-V-EKO-E	2800	2x3.30	2x0.75	2800	80	62	3x400	20.00	10.50	280	2018
RIRS-2500-V-EKO-W	2800	2x3.30	2x0.75	2800	80	62	3x400	7.00	1.55	278	2018
RIRS-3500-V-EKO-S	2390	2x6.00	2x1.35	4300	80	64	1x230	12.00	2.70	370	2018
RIRS-3500-V-EKO-E	2390	2x6.00	2x1.35	4300	80	64	3x400	29.30	14.70	380	2018
RIRS-3500-V-EKO-W	2390	2x6.00	2x1.35	4300	80	64	3x400	12.00	2.70	380	2018

**Erp. (Energy Related Products)**

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

**Technical characteristics of models with electrically heated coil**

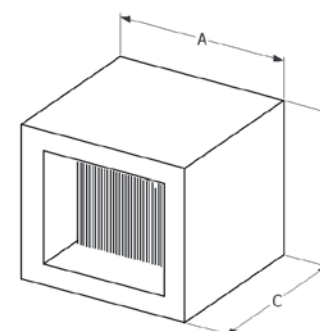
Model	Voltage (V)	Power (kW)
RIRS-400-V-EKO-E	1X230	1.2
RIRS-1900-V-EKO-E	3X400	9
RIRS-2500-V-EKO-E	3X400	9
RIRS-3500-V-EKO-E	3X400	12

**Technical characteristics of models with water coil at 80/60 °C**

Model	Heat power (kW)	Water flow (l/s)	Head loss (kPa)	Air speed (m/s)	Max. temperature difference (°C)	Coil thread diam
RIRS-400-V-EKO-W	6.25	0.08	15.24	3.4	33.5	1/2"
RIRS-1900-V-EKO-W	18.2	0.22	12.5	3.8	30	1/2"
RIRS-2500-V-EKO-W	25	0.31	5.8	5	27.5	3/4"
RIRS-3500-V-EKO-W	31.9	0.39	9.86	5.5	26.25	3/4"

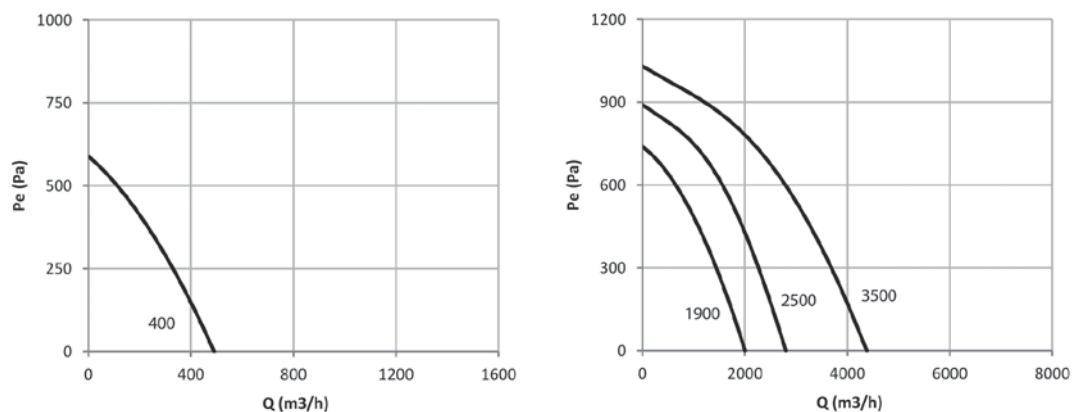
\* Data at 80/60°C, machine's maximum flow and outside temperature = 0°C

Model	A	B	C
RIRS-400-V-EKO-W	289	265	304
RIRS-1900-V-EKO-W	439	460	342
RIRS-2500-V-EKO-W	540	290	300
RIRS-3500-V-EKO-W	640	340	300



External water coils

## Characteristic Curves



## Acoustic features



The values specified are determined according to free field measurements of sound levels in dB(A) at a distance of no less than 3 m from the equipment.



Sound power Lw(A) spectrum in dB(A) via frequency band in Hz

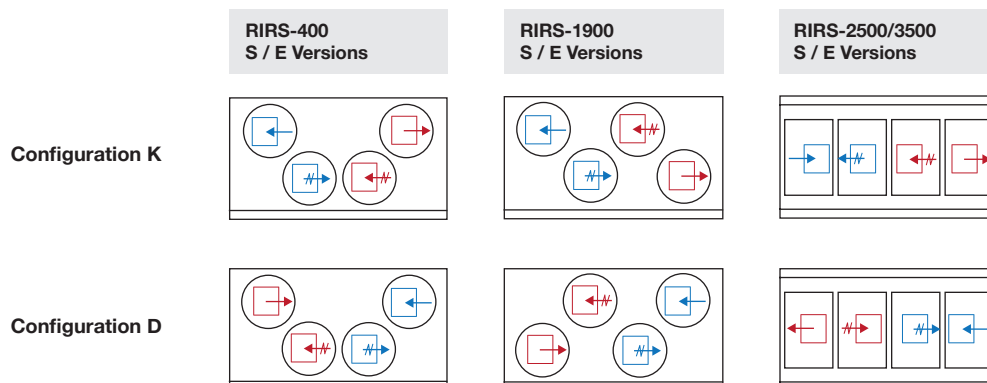
Model	63	125	250	500	1000	2000	4000	8000
RIRS-400	47	51	48	41	42	43	33	28
RIRS-1900	41	44	57	51	49	53	52	45
RIRS-2500	44	45	54	59	52	52	49	46
RIRS-3500	50	55	58	59	57	53	49	45

## Configurations

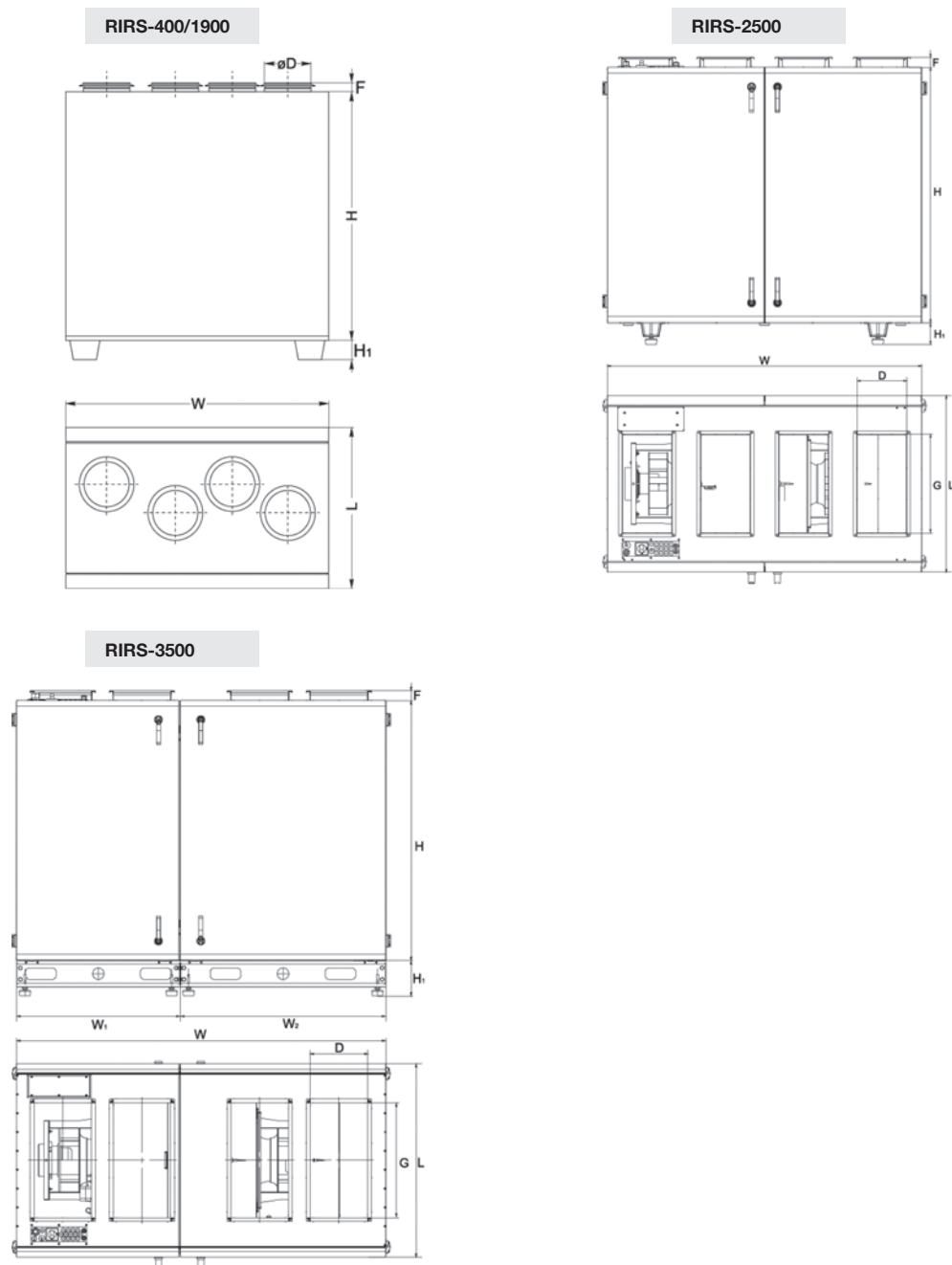
View of machine from the maintenance access side

 Air extracted from the premises  
 Air blown into the premises

 Stale air exiting  
 Clean air entering



### Dimensions in mm



Model	L	W	W1	W2	H	H1	øD	G	D	F
RIRS-400-V-EKO-S/E	553	900	-	-	850	40	160	-	-	30
RIRS-400-V-EKO-W	553	900	-	-	850	40	160	-	-	30
RIRS-1900-V-EKO-S/E	855	1500	-	-	1150	70	315	-	-	40
RIRS-1900-V-EKO-W	855	1500	-	-	1150	70	315	-	-	40
RIRS-2500-V-EKO-S/E	900	1600	-	-	1300	110	-	500	250	50
RIRS-2500-V-EKO-W	900	1600	-	-	1300	110	-	500	250	50
RIRS-3500-V-EKO-S/E	1010	1930	850	1075	1355	190	-	600	300	50
RIRS-3500-V-EKO-W	1010	1930	850	1075	1355	190	-	600	300	50

## CJFILTER/REC filter box configurations

**CJFILTER/REC — 300x600-250 — CA**

Air filter boxes for circular ducts equipped with different types of filter, depending on model



For more information, see CJFILTER/REC section.

Box size

Filters available  
F7  
F9  
CA (Active Carbon)  
H10  
H13

Filter box part numbers according to machine size and inlet/outlet cross-section

Model	Box size
RIRS-400-V-EKO	300x600-200
RIRS-1900-V-EKO	600x600-315
RIRS-2500-V-EKO	600x900-400x700
RIRS-3500-V-EKO	600x900-400x700

## Accessories

See accessories section



FILTERS



CJFILTER/REC



ADIABATIC BOX



PRESSURE SWITCH



CO2 PROBE