

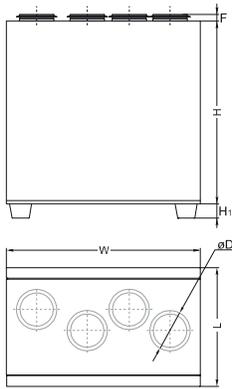
AIR HANDLING UNITS

<b>Application</b>	Ventilation of houses, small public buildings, offices or other heated premises (classrooms, apartments, conference rooms, etc.).
<b>Description</b>	<p>RIRS V EKO 3.0 is a range of heat recovery units with high-efficiency rotor heat exchangers. Units are designed for vertical placement in auxiliary non-heated premises (basements, boiler rooms, etc.). There are 7 sizes (airflow interval 420-5600 m³/h) with separate heaters available for different climate zones. RIRS V EKO 3.0 units have high overall energy savings due to the highly efficient heat recovery (up to 85%), quiet and economical EC fans, effective low pressure drop filters and top-level of air tightness. All RIRS V EKO 3.0 units are fully equipped with automatic controls. Optional external sensors for CO<sub>2</sub> and humidity and so the summer mode feature will guarantee the highest comfort (demand-level control). RIRS V EKO 3.0 units are service-friendly and easy to mount. Filter pollution may be identified by timers or contamination controls (RIRS 1200-5500 V EKO 3.0). Rotor fault indicator is included in every AHU. All units are supplied tested and ready to install.</p>
<b>Controls</b>	<p>Three remote control options are available:</p> <ol style="list-style-type: none"> <li>1. Flex, Stouch or Ptouch remote controllers.</li> <li>2. Building management system connections.</li> <li>3. Remote control via PC MB-Gateway.</li> </ol>
<b>The main Features</b>	<ul style="list-style-type: none"> <li>› Efficient rotor heat exchanger with up to 85% heat recovery.</li> <li>› Water/electrical heating options.</li> <li>› Easy and quick mounting.</li> <li>› Controlled airflow.</li> <li>› Fully integrated plug-and-play control system.</li> <li>› Outdoor versions and convertible inspection side.</li> </ul>
<b>Rotor</b>	<ul style="list-style-type: none"> <li>› Eurovent certified.</li> <li>› Plate gap 1,4-1,9 mm.</li> <li>› Rotor fault indicator.</li> <li>› Minimal airflow mixing.</li> <li>› Appropriate "Purge sector" size (for RIRS 2500, 3500 and 5500 V EKO 3.0).</li> </ul>
<b>Construction</b>	<ul style="list-style-type: none"> <li>› Frameless construction from double-skinned steel, with powder coated paint, panels.</li> <li>› Acoustic and thermal wall insulation – 50 mm.</li> <li>› Hinged door with locks grants easy access to internal components.</li> <li>› Separate compartment on the side of the unit grants quick access to the control board (plug-and-play).</li> <li>› Three sensors for fresh, supply and extract air temperatures.</li> <li>› Anti-vibration pads (optional for RIRS 400-1900 V EKO 3.0; standard for RIRS 2500-5500 V EKO 3.0).</li> <li>› Water heater with frost protection kit available.</li> <li>› Low pressure drop filters: F7/M5.</li> <li>› Integrated electrical heater or optional water heater/cooler (on duct).</li> <li>› Outdoor versions (RIRS 2500, 3500, 5500 V EKO 3.0).</li> <li>› RHX versions (rotor speed control, using stepper motor and driver).</li> <li>› Integrated pressure switch for filter pollution alarm (RIRS 1200 - 5500 V EKO 3.0).</li> </ul>

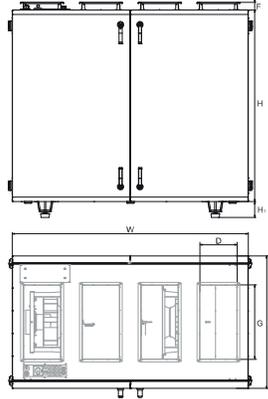
The company reserves the right to make changes of technical data without prior notice

# RIRS V EKO

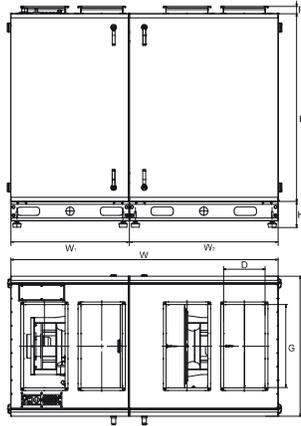
RIRS 400-700V EKO 3.0



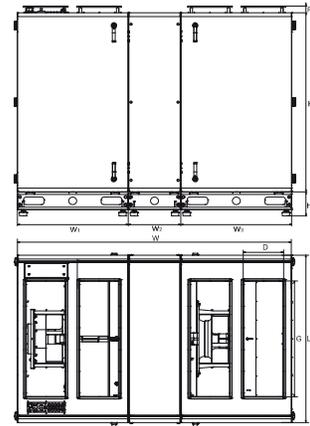
RIRS 1200-2500V EKO 3.0



RIRS 3500V EKO 3.0



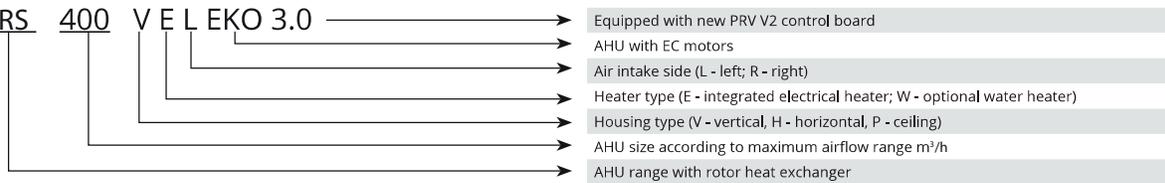
RIRS 5500V EKO 3.0



\* The view from the top is only indicative.  
For exact information, see the specific product technical description.

Unit	Dimensions [mm]										
	W	W <sub>1</sub>	W <sub>2</sub>	W <sub>3</sub>	L	H	H <sub>1</sub>	øD	D	G	F
RIRS 400VE/VW EKO 3.0	900	-	-	-	560	850	40	160	-	-	30
RIRS 700VE/VW EKO 3.0	1100	-	-	-	655	980	40	250	-	-	40
RIRS 1200VE/VW EKO 3.0	1500	-	-	-	855	1150	70	315	-	-	40
RIRS 1900VE/VW EKO 3.0	1500	-	-	-	855	1150	70	315	-	-	40
RIRS 2500VE/VW EKO 3.0	1600	-	-	-	900	1300	110	-	250	500	50
RIRS 3500VE/VW EKO 3.0	1930	850	1075	-	1010	1355	190	-	300	600	50
RIRS 5500VE/VW EKO 3.0	2120	855	400	855	1310	1400	190	-	300	900	50

## RIRS 400 V E L EKO 3.0



AIR HANDLING UNITS

### Accessories

Remote controller  Ptouch p. 175	Control panel  FLEX p. 177	Remote controller  Stouch p. 176	Net module  MB-Gateway p. 178	Pressure transmitter  S-1141 p. 179	CO2 sensor  S-RC02-F2 p. 180	Duct humidity sensor  S-KFF-U p. 181	Thermic water valve actuator  SSB p. 195
Circular duct silencer  AKS p. 216	Mounting clamp  AP p. 219	Shut-off damper  SKG p. 212	Damper for rectangular duct  SSK p. 213	Flexible connection  LJ/PG p. 221	Flange adapter  STP p. 220	Water heating coil  SVS p. 190	Comfort Box  CB p. 183
Actuator for dampers  SP p. 210	Temperature sensor  TJP-10K p. 182	Mixing point  RMG p. 196	2 and 3 way valves  VWP/VXP p. 197	Rectangular duct silencer  SKS p. 215	Electrical duct pre-heater  EKA NV PH p. 201	Electrical duct pre-heater  EKS NV PH p. 203	

# RIRS V EKO

Unit	Optional accessories									
	Flex Stouch Ptouch MB-Gateway	S-1141 S-RC02-F2 S-KFF-U	AKS AP SKG	SSK SKS LJ/PG	STP	SVS CB AVS*	SP Supply	SP Exhaust	EKA NV PH	EKS NV PH
RIRS 400VE EKO 3.0	+	+	160	-	-	-	CM230-1-F-L	CM230-1-F-L	160	160
RIRS 400VW EKO 3.0	+	+	160	-	-	160*	TF230	CM230-1-F-L	160	160
RIRS 700VE EKO 3.0	+	+	250	-	-	-	CM230-1-F-L	CM230-1-F-L	250	250
RIRS 700VW EKO 3.0	+	+	250	-	-	250*	TF230	CM230-1-F-L	250	250
RIRS 1200VE EKO 3.0	+	+	315	-	-	-	LM230A-TP	LM230A-TP	315	315
RIRS 1200VW EKO 3.0	+	+	315	-	-	315*	LF230	LM230A-TP	315	315
RIRS 1900VE EKO 3.0	+	+	315	-	-	-	LM230A-TP	LM230A-TP	315	315
RIRS 1900VW EKO 3.0	+	+	315	-	-	315*	LF230	LM230A-TP	315	315
RIRS 2500VE EKO 3.0	+	+	-	500x250	500x250-400	500x250	LM230A-TP	LM230A-TP	500x250	500x250
RIRS 2500VW EKO 3.0	+	+	-	500x250	500x250-400	500x250	LF230	LM230A-TP	500x250	500x250
RIRS 3500VE EKO 3.0	+	+	-	600x300	600x300-500	600x300	LM230A-TP	LM230A-TP	600x300	600x300
RIRS 3500VW EKO 3.0	+	+	-	600x300	600x300-500	600x300	LF230	LM230A-TP	600x300	600x300
RIRS 5500VE EKO 3.0	+	+	-	800x500*	900x300-800x500	800x500*	LM230A-TP	LM230A-TP	800x500*	800x500*
RIRS 5500VW EKO 3.0	+	+	-	800x500*	900x300-800x500	800x500*	LF230	LM230A-TP	800x500*	800x500*

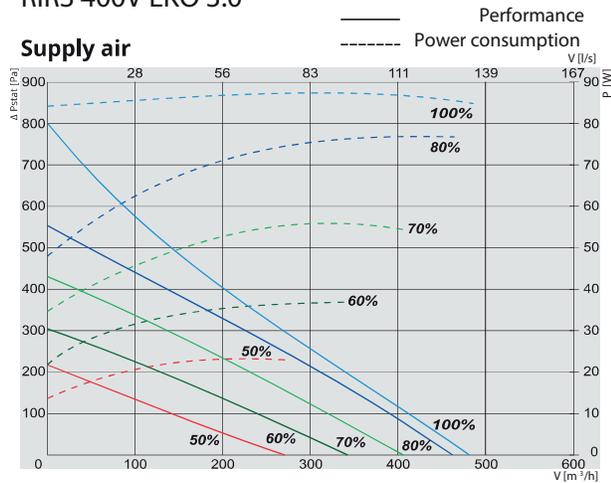
\*\* flange adapter STP is required.

Unit	Optional accessories									
	AVS	AVA	TJP 10K CO4C ***	SSB Heating	SSB Cooling	RMG 80/60 °C	RMG 60/40 °C	VVP/VXP 80/60 °C	VVP/VXP 60/40 °C	
RIRS 400VE EKO 3.0	-	160	-	-	81	-	-	-	-	
RIRS 400VW EKO 3.0	160	160	int	61	81	3-0,63-4	3-0,63-4	45.10-0,63	45.10-0,63	
RIRS 700VE EKO 3.0	-	250	-	-	81	-	-	-	-	
RIRS 700VW EKO 3.0	250	250	int	61	81	3-1,0-4	3-1,0-4	45.10-1,0	45.10-1,0	
RIRS 1200VE EKO 3.0	-	315	-	-	81	-	-	-	-	
RIRS 1200VW EKO 3.0	315	315	int	61	81	3-1,0-4	3-1,0-4	45.10-1,0	45.10-1,0	
RIRS 1900VE EKO 3.0	-	315	-	-	81	-	-	-	-	
RIRS 1900VW EKO 3.0	315	315	int	61	81	3-1,0-4	3-1,0-4	45.10-1,0	45.10-1,0	
RIRS 2500VE EKO 3.0	-	-	-	-	81	Heaters, coolers and RMG/VVP/VXP data online selection program: <a href="http://www.salda.it">www.salda.it</a>				
RIRS 2500VW EKO 3.0	-	-	int	61	81					
RIRS 3500VE EKO 3.0	-	-	-	-	81					
RIRS 3500VW EKO 3.0	-	-	int	61	81					
RIRS 5500VE EKO 3.0	-	-	-	-	81					
RIRS 5500VW EKO 3.0	-	-	int	61	81					

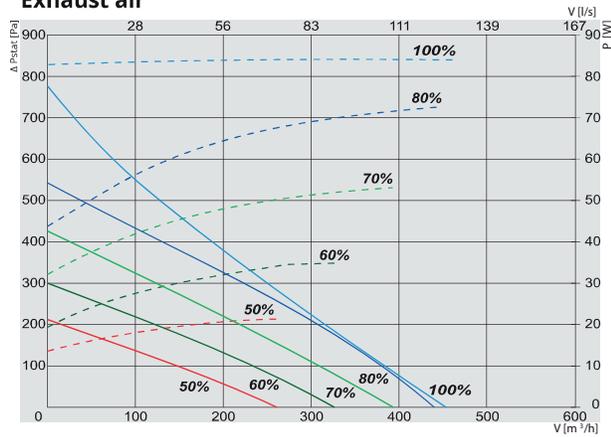
\*\*\* anti-frost thermostat

## RIRS 400V EKO 3.0

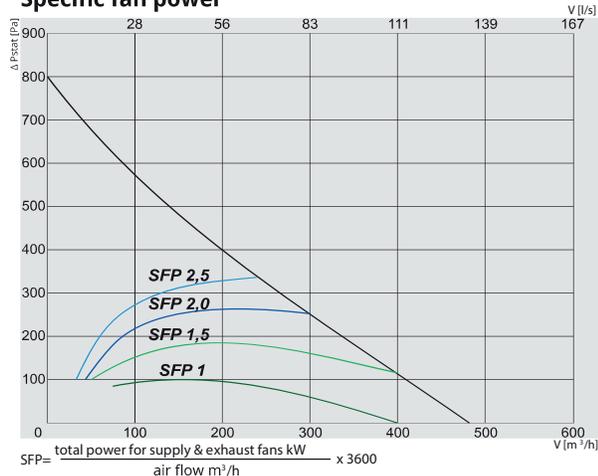
### Supply air



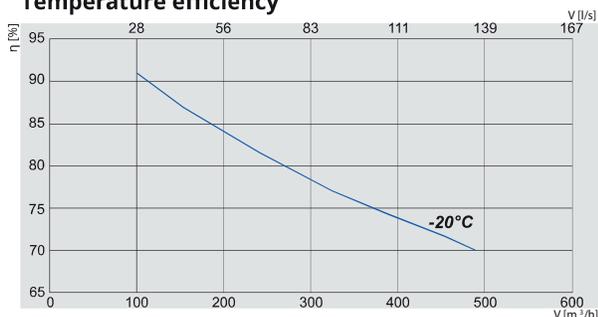
### Exhaust air



### Specific fan power



### Temperature efficiency



RIRS 400VL EKO 3.0

Air intake side (L-left)



View from inspection side

RIRS 400VR EKO 3.0

Air intake side (R-right)



View from inspection side

🏠 Exhaust air   
 🏠 Extract air   
 🏠 Outdoor air   
 🏠 Supply air

Article No.	Version
GAGRIRS1759_0037A	400VEL EKO 3.0 Left-hand maintenance version with integrated electrical heater
GAGRIRS1760_0039A	400VWL EKO 3.0 Left-hand maintenance version prepared for optional water heater
GAGRIRS1757_0036A	400VER EKO 3.0 Right-hand maintenance version with integrated electrical heater
GAGRIRS1758_0038A	400VWR EKO 3.0 Right-hand maintenance version prepared for optional water heater

### 400VE / VW EKO 3.0

Water heater (optional) VW ver.	AVS 160
Electrical heater VE ver.	phase/voltage [50Hz/VAC] ~1, 230
	[kW] 1,2
EC fans	phase/voltage [50Hz/VAC] ~1, 230
exhaust	power/current [kW/A] 0,085/0,75
	fan speed [min <sup>-1</sup> ] 3200
supply	power/current [kW/A] 0,085/0,75
	fan speed [min <sup>-1</sup> ] 3200
Thermal efficiency up to*	75%
Max power consumption VE / VW	[kW/A] 1,38/5,94 0,18/1,60
Control board	PRV V2
Filter class	exhaust/supply M5/F7
Housing insulation, mineral wool	[mm] 50
Colour	RAL white 9016
Weight (net, without packing)	[kg] 79,5
Comply with ERP	2016; 2018
Operation	indoors
Housing protection class	IP 34

\* Calculated wet efficiency.

Temperature efficiency (balanced mass flow):  
 Extract air = 20°C/60%RH  
 Outdoor air = -20°C

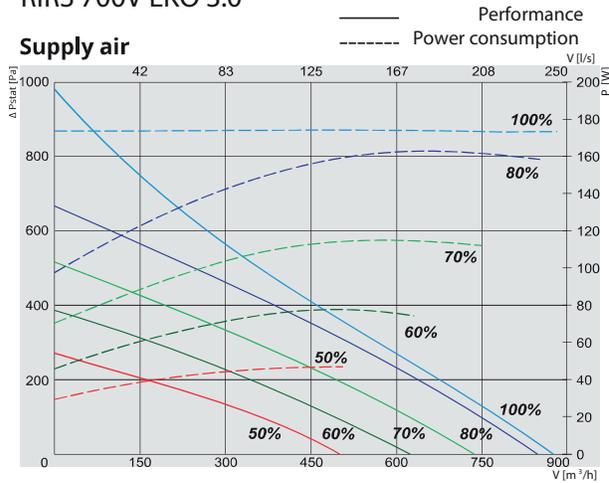
400V EKO 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	70	64	59	61	66	63	54	52
Extract	61	55	57	57	49	43	34	30
Surrounding	54	51	48	41	42	43	33	28

Measured at 375 m³/h, 120 Pa

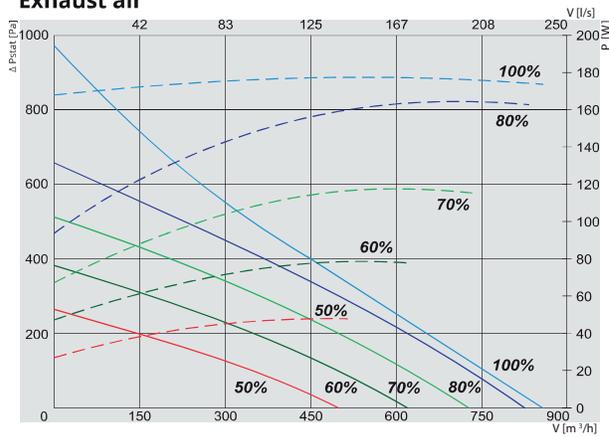
# RIRS V EKO

## RIRS 700V EKO 3.0

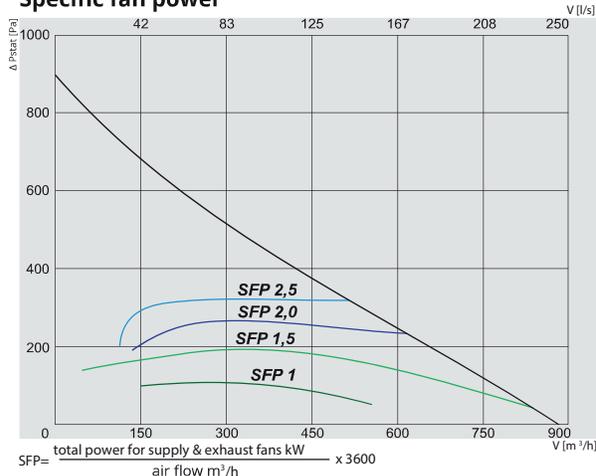
### Supply air



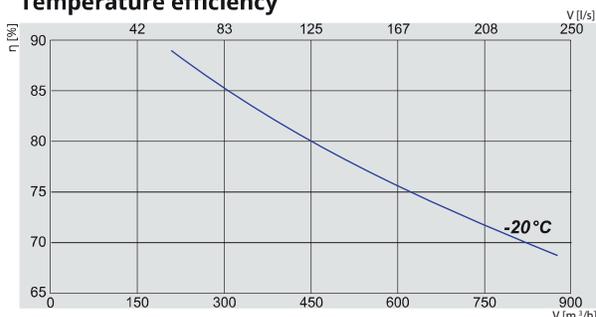
### Exhaust air



### Specific fan power



### Temperature efficiency



RIRS 700VL EKO 3.0

Air intake side (L- left)



View from inspection side

RIRS 700VR EKO 3.0

Air intake side (R- right)



View from inspection side

🏠 Exhaust air   
 🏠 Extract air   
 🏠 Outdoor air   
 🏠 Supply air

Article No.	Version
GAGRIRS1770_0033A	700VEL EKO 3.0 Left-hand maintenance version with integrated electrical heater
GAGRIRS1771_0035A	700VWL EKO 3.0 Left-hand maintenance version prepared for optional water heater
GAGRIRS1766_0032A	700VER EKO 3.0 Right-hand maintenance version with integrated electrical heater
GAGRIRS1768_0034A	700VVR EKO 3.0 Right-hand maintenance version prepared for optional water heater

### 700VE / VW EKO 3.0

Water heater (optional) VW ver.	AVS 250
Electrical heater VE ver.	phase/voltage [50Hz/VAC] ~1, 230
	[kW] 2,0
EC fans	phase/voltage [50Hz/VAC] ~1, 230
exhaust	power/current [kW/A] 0,168/1,4
	fan speed [min <sup>-1</sup> ] 3230
supply	power/current [kW/A] 0,168/1,4
	fan speed [min <sup>-1</sup> ] 3230
Thermal efficiency up to*	75%
Max power consumption VE / VW	[kW/A] 2,34/11,60 0,34/2,90
Control board	PRV V2
Filter class	exhaust/supply M5/F7
Housing insulation, mineral wool	[mm] 50
Colour	RAL white 9016
Weight (net, without packing)	[kg] 108 104
Comply with ERP	2016; 2018
Operation	indoors
Housing protection class	IP 34

\* Calculated wet efficiency.

Temperature efficiency (balanced mass flow):  
 Extract air = 20°C/60%RH  
 Outdoor air = -20°C

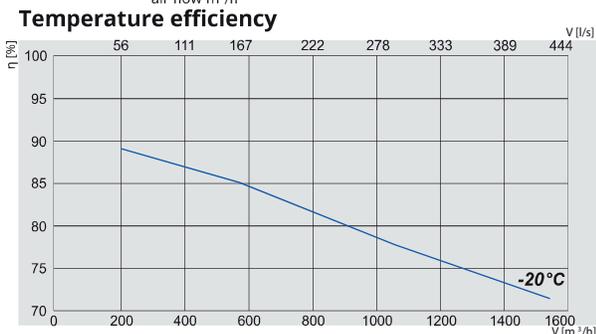
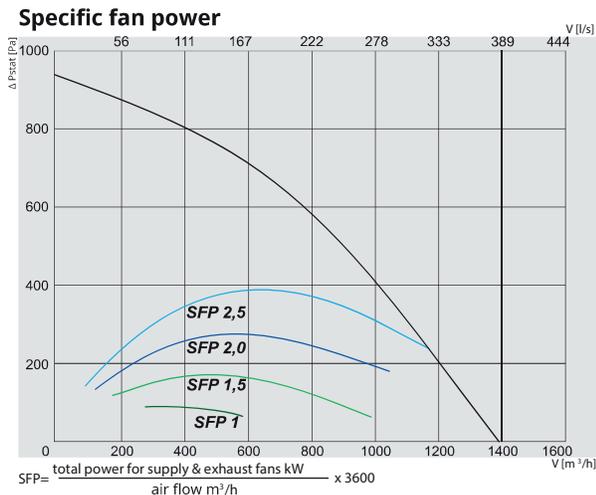
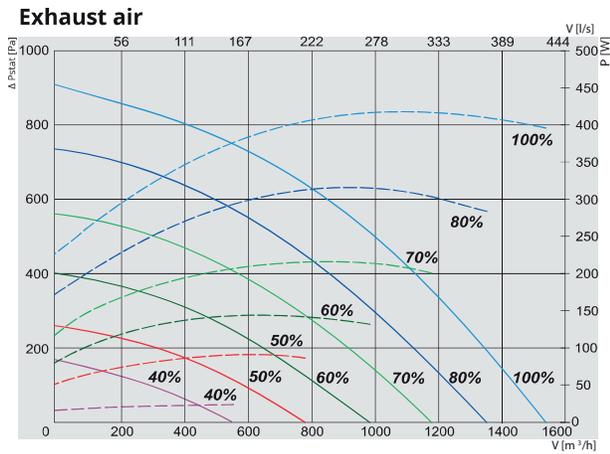
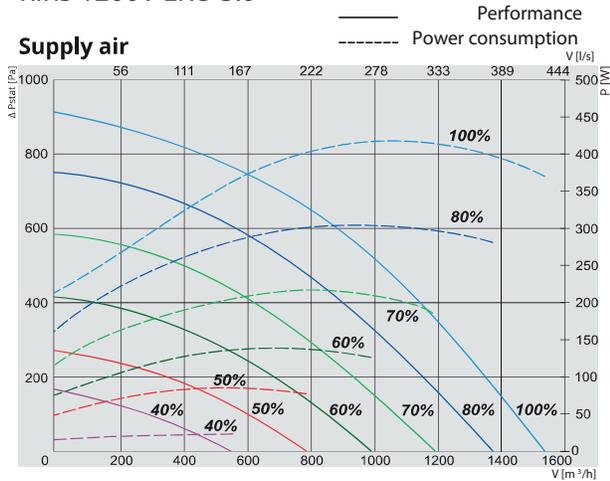
700V EKO 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	76	67	69	70	69	68	63	62
Extract	63	52	60	58	47	44	38	35
Surrounding	55	47	50	49	44	43	39	39

Measured at 700 m<sup>3</sup>/h, 152 Pa

AIR HANDLING UNITS

# RIRS V EKO

## RIRS 1200V EKO 3.0



RIRS 1200VL EKO 3.0

Air intake side (L-left)



View from inspection side

RIRS 1200VR EKO 3.0

Air intake side (R-right)



View from inspection side

- Exhaust air
- Extract air
- Outdoor air
- Supply air

Article No.	Version
GAGRIRS1678_0003C	1200VEL EKO 3.0 Left-hand maintenance version with integrated electrical heater
GAGRIRS1679_0004A	1200VWL EKO 3.0 Left-hand maintenance version prepared for optional water heater
GAGRIRS1675_0001C	1200VER EKO 3.0 Right-hand maintenance version with integrated electrical heater
GAGRIRS1677_0002A	1200VWR EKO 3.0 Right-hand maintenance version prepared for optional water heater

### 1200VE / VW EKO 3.0

Water heater (optional) VW ver.	AVS 315
Electrical heater VE ver.	phase/voltage [50Hz/VAC] -2, 400
	[kW] 4,0
EC fans	phase/voltage [50Hz/VAC] -1, 230
exhaust	power/current [kW/A] 0,408/2,71
	fan speed [min <sup>-1</sup> ] 3400
supply	power/current [kW/A] 0,415/2,81
	fan speed [min <sup>-1</sup> ] 3400
Thermal efficiency up to*	75%
Max power consumption VE/VW	[kW/A] 4,84/15,69 0,84 /5,69
Control board	PRV V2
Filter class	exhaust/supply M5/F7
Housing insulation, mineral wool	[mm] 50
Colour	RAL grey 7040
Weight (net, without packing)	[kg] 192
Comply with ERP	2016; 2018
Operation	indoors
Housing protection class	IP 34

\* Calculated wet efficiency.

Temperature efficiency (balanced mass flow):  
 Extract air = 20°C/60%RH  
 Outdoor air = -20°C

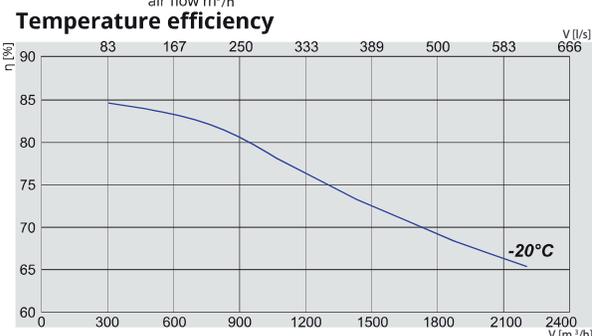
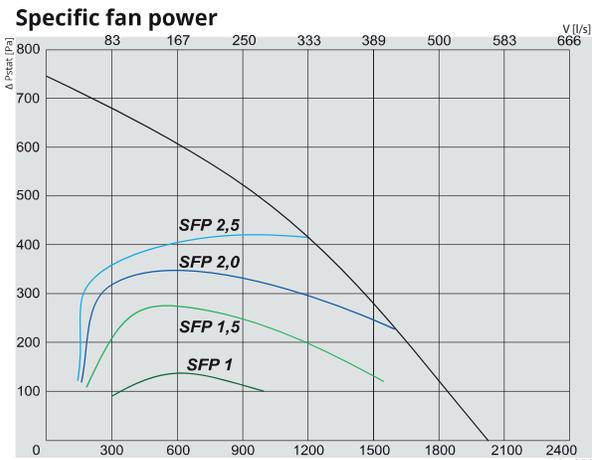
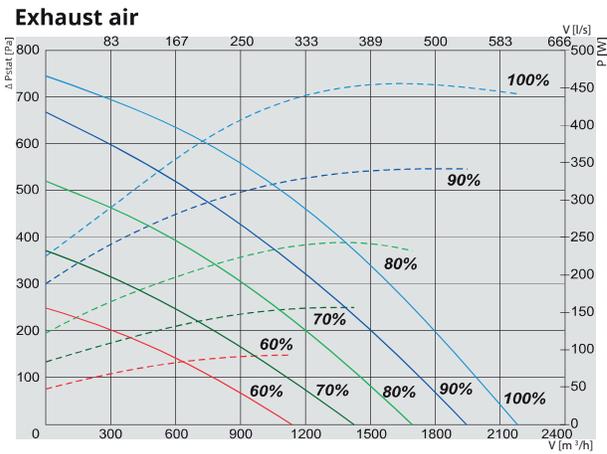
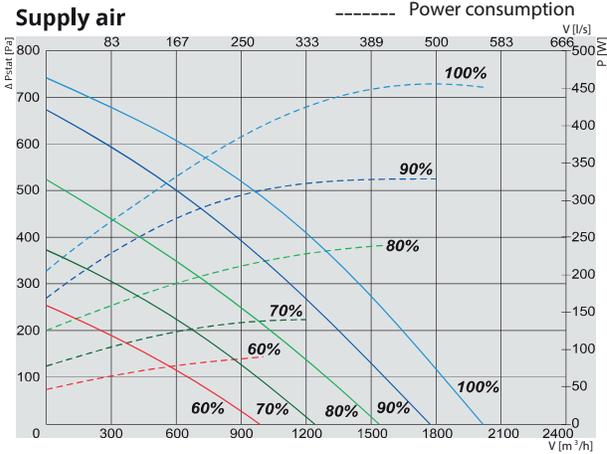
1200V EKO 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	78	63	74	71	70	69	64	55
Extract	67	57	63	56	52	53	51	37
Surrounding	57	47	54	49	47	49	46	36

Measured at 1351 m³/h, 181 Pa

AIR HANDLING UNITS

# RIRS V EKO

## RIRS 1900V EKO 3.0



RIRS 1900VL EKO 3.0

Air intake side (L-left)



View from inspection side

RIRS 1900VR EKO 3.0

Air intake side (R-right)



View from inspection side

Exhaust air Extract air Outdoor air Supply air

Article No.	Version
GAGRIRS1712_0011B	1900VEL EKO 3.0 Left-hand maintenance version with integrated electrical heater
GAGRIRS1713_0012A	1900VWL EKO 3.0 Left-hand maintenance version prepared for optional water heater
GAGRIRS1708_0009B	1900VER EKO 3.0 Right-hand maintenance version with integrated electrical heater
GAGRIRS1711_0010A	1900VVR EKO 3.0 Right-hand maintenance version prepared for optional water heater

### 1900VE / VW EKO 3.0

Water heater (optional) VW ver.	AVS 315
Electrical heater VE ver.	phase/voltage [50Hz/VAC] ~3, 400
	[kW] 9,0
EC fans	phase/voltage [50Hz/VAC] ~1, 230
exhaust	power/current [kW/A] 0,47/3,1
	fan speed [min <sup>-1</sup> ] 2540
supply	power/current [kW/A] 0,47/3,1
	fan speed [min <sup>-1</sup> ] 2540
Thermal efficiency up to*	75%
Max power consumption VE / VW	[kW/A] 9,96/19,37 0,96/6,37
Control board	PRV V2
Filter class	exhaust/supply M5/F7
Housing insulation, mineral wool	[mm] 50
Colour	RAL grey 7040
Weight (net, without packing)	[kg] 180 178
Comply with ERP	2016; 2018
Operation	indoors
Housing protection class	IP 34

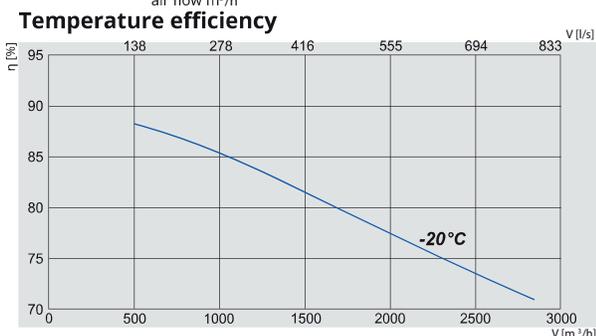
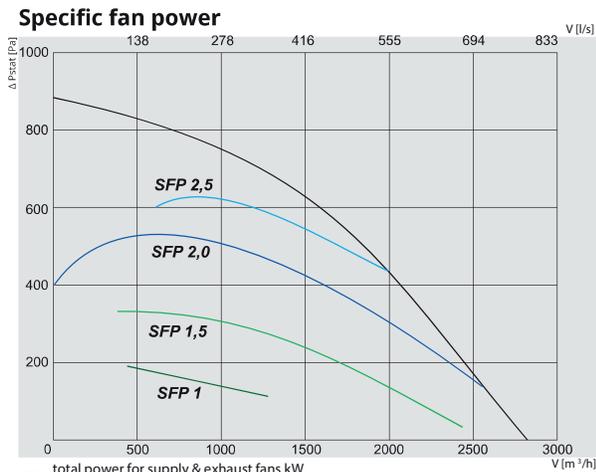
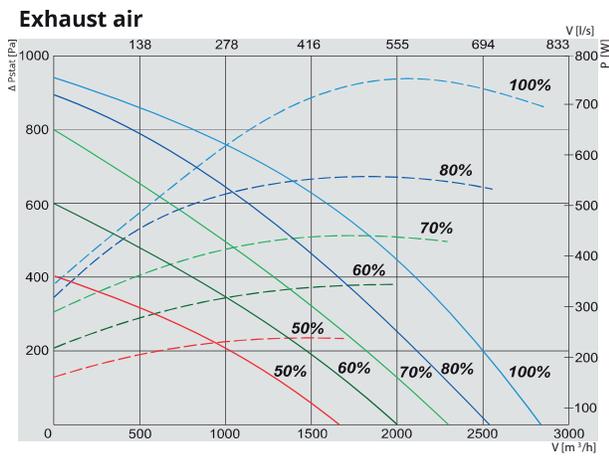
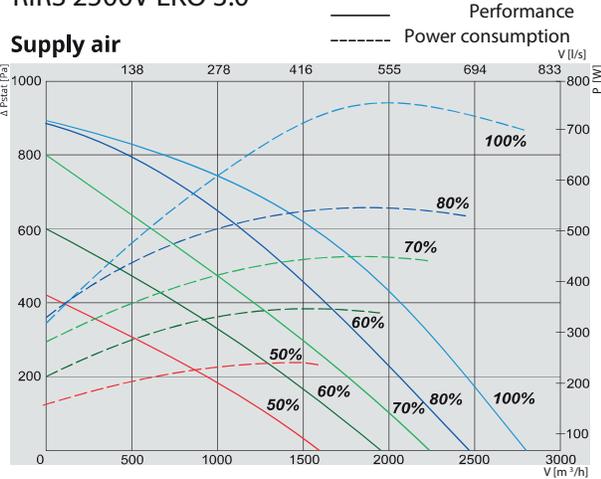
\* Calculated wet efficiency.

Temperature efficiency (balanced mass flow):  
Extract air = 20°C/60%RH  
Outdoor air = -20°C

1900V EKO 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	80	58	76	71	72	71	70	62
Extract	69	56	67	60	54	58	57	48
Surrounding	60	44	57	51	49	53	52	45

Measured at 1830 m<sup>3</sup>/h, 101 Pa

## RIRS 2500V EKO 3.0



RIRS 2500VL EKO 3.0  
Air intake side (L- left)



RIRS 2500VR EKO 3.0  
Air intake side (R- right)



🏠 Exhaust air   
 🏠 Extract air   
 🏠 Outdoor air   
 🏠 Supply air

Article No.	Version
GAGRIRS1883_0066B	2500VE EKO 3.0 Integrated electrical heater
GAGRIRS1887_0069A	2500VW EKO 3.0 Optional water heater
GAGRIRS1901_0074B	2500VE EKO 3.0-RHX Integrated electrical heater and 0-10 rotor
GAGRIRS1902_0075A	2500VW EKO 3.0-RHX Optional water heater and 0-10 rotor control

### 2500VE / VW EKO 3.0

Water heater (optional) VW ver.	SVS-V
Electrical heater VE ver.	phase/voltage [50Hz/VAC] ~3, 400 [kW] 9
EC fans	phase/voltage [50Hz/VAC] ~1, 230
exhaust	power/current [kW/A] 0,75/3,3 fan speed [min <sup>-1</sup> ] 2800
supply	power/current [kW/A] 0,76/3,32 fan speed [min <sup>-1</sup> ] 2800
Thermal efficiency up to*	75%
Max power consumption VE / VW	[kW/A] 10,55/19,97 1,55/6,97
Control board	PRV V2
Filter class	exhaust/supply M5/F7
Housing insulation, mineral wool	[mm] 50
Colour	RAL grey 7040
Weight (net, without packing)	[kg] 280,0 270,0
Comply with ERP	2016; 2018
Operation	indoors/outdoors**
Housing protection class	IP 34

\* Calculated wet efficiency.

\*\* Under covered area.

Temperature efficiency (balanced mass flow):  
Extract air = 20°C/60%RH  
Outdoor air = -20°C

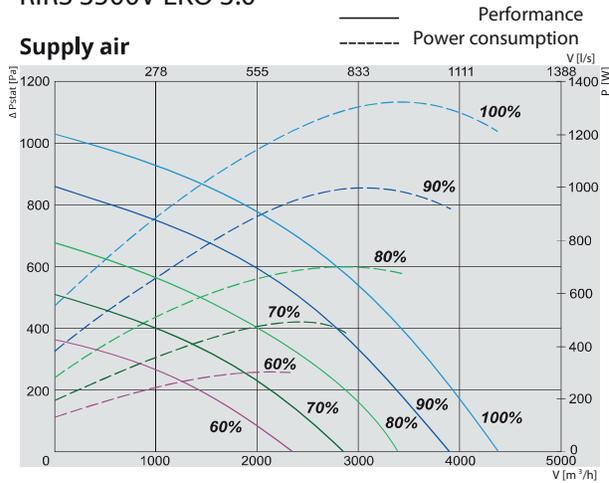
2500V EKO 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	LWA, dB(A)	1 kHz	2 kHz	4 kHz	8 kHz
Supply	78	61	68	72	73	70	64	62	
Extract	67	59	62	63	57	52	48	43	
Surrounding	62	45	54	59	52	52	49	46	

Measured at 2355 m³/h, 214 Pa

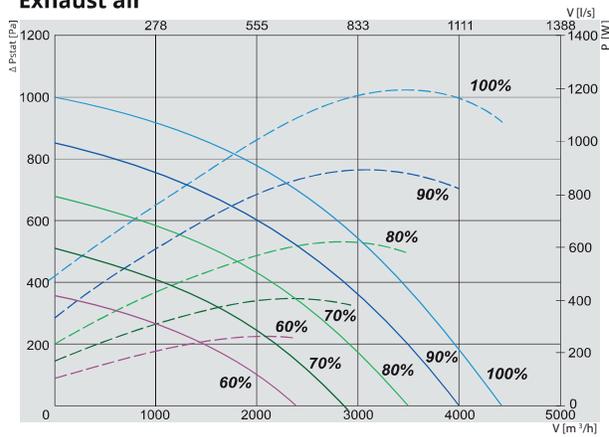
# RIRS V EKO

## RIRS 3500V EKO 3.0

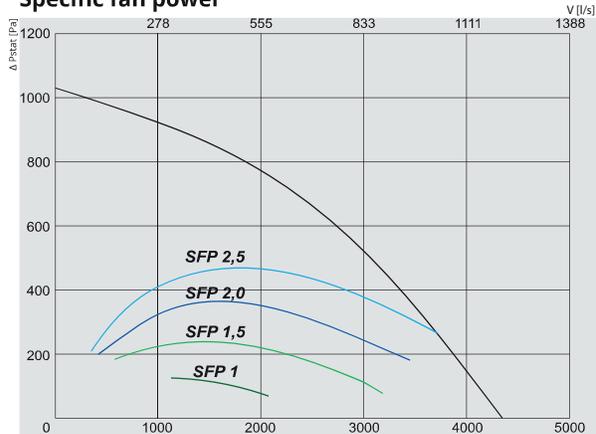
### Supply air



### Exhaust air

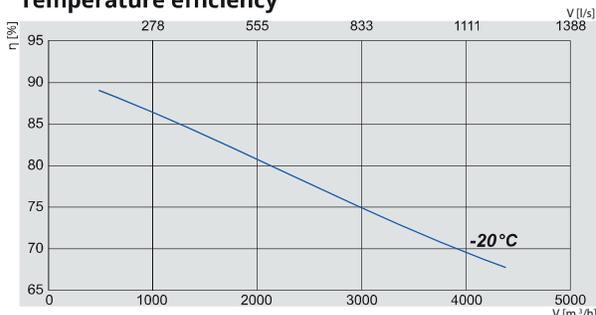


### Specific fan power



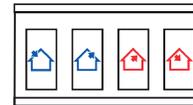
$$SFP = \frac{\text{total power for supply \& exhaust fans kW}}{\text{air flow m}^3/\text{h}} \times 3600$$

### Temperature efficiency



#### RIRS 3500VL EKO 3.0

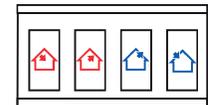
Air intake side (L- left)



View from inspection side

#### RIRS 3500VR EKO 3.0

Air intake side (R- right)



View from inspection side

🏠 Exhaust air   
 🏠 Extract air   
 🏠 Outdoor air   
 🏠 Supply air

Article No.	Version	
GAGRIRS1884_0067B	3500VE EKO 3.0	Integrated electrical heater
GAGRIRS1886_0070A	3500VW EKO 3.0	Optional water heater
GAGRIRS1897_0076B	3500VE EKO 3.0-RHX	Integrated electrical heater and 0-10 rotor
GAGRIRS1898_0077A	3500VW EKO 3.0-RHX	Optional water heater and 0-10 rotor control

#### 3500VE / VW EKO 3.0

Water heater (optional) VW ver.		SVS-V
Electrical heater VE ver.	phase/voltage [50Hz/VAC]	~3, 400
	[kW]	12
EC fans	phase/voltage [50Hz/VAC]	~1, 230
exhaust	power/current [kW/A]	1,35/6
	fan speed [min <sup>-1</sup> ]	2390
supply	power/current [kW/A]	1,33/5,7
	fan speed [min <sup>-1</sup> ]	2390
Thermal efficiency up to*		75%
Max power consumption VE / VW	[kW/A]	14,72/29,35
Control board		PRV V2
Filter class	exhaust/supply	M5/F7
Housing insulation, mineral wool	[mm]	50
Colour	RAL	grey 7040
Weight (net, without packing)	[kg]	380,0
Comply with ERP		2016; 2018
Operation		indoors/outdoors**
Housing protection class	IP	34

\* Calculated wet efficiency.

\*\* Under covered area.

Temperature efficiency (balanced mass flow):  
 Extract air = 20°C/60%RH  
 Outdoor air = -20°C

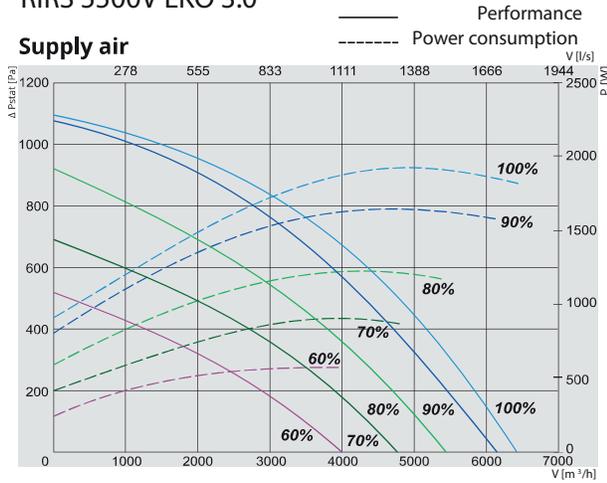
3500V EKO 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	82	60	74	75	76	75	73	68
Extract	72	58	70	66	60	57	51	43
Surrounding	64	55	58	59	57	53	49	45

Measured at 3728 m<sup>3</sup>/h, 242 Pa

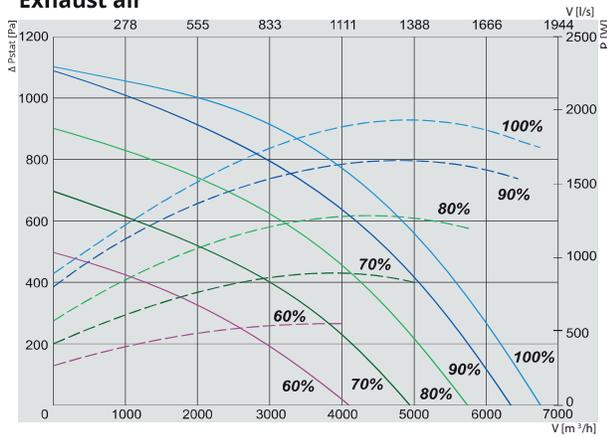
AIR HANDLING UNITS

## RIRS 5500V EKO 3.0

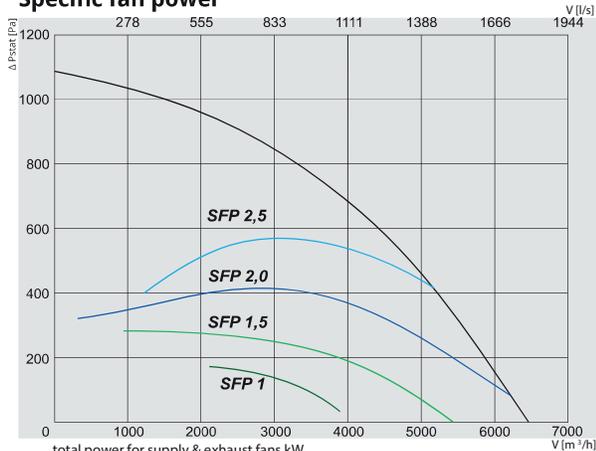
### Supply air



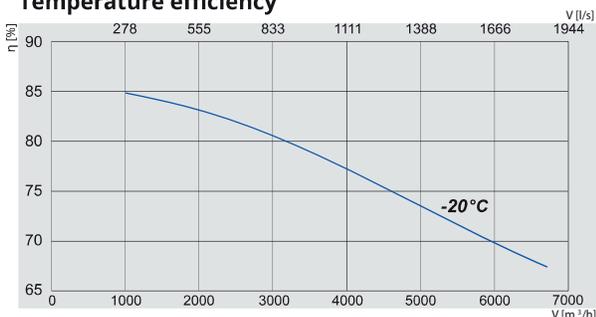
### Exhaust air



### Specific fan power

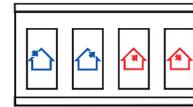


### Temperature efficiency



#### RIRS 5500VL EKO 3.0

Air intake side (L- left)



View from inspection side

#### RIRS 5500VR EKO 3.0

Air intake side (R- right)



View from inspection side

🏠 Exhaust air   
 🏠 Extract air   
 🏠 Outdoor air   
 🏠 Supply air

Article No.	Version
GAGRIRS1885_0068B	5500VE EKO 3.0 Integrated electrical heater
GAGRIRS1890_0071A	5500VW EKO 3.0 Optional water heater
GAGRIRS1895_0078B	5500VE EKO 3.0-RHX Integrated electrical heater and 0-10 rotor
GAGRIRS1896_0079B	5500VW EKO 3.0-RHX Optional water heater and 0-10 rotor control

#### 5500VE / VW EKO 3.0

Water heater (optional) VW ver.	SVS-V
Electrical heater VE ver.	phase/voltage [50Hz/VAC] ~3, 400 [kW] 18
EC fans	phase/voltage [50Hz/VAC] ~3, 400
exhaust	power/current [kW/A] 1,9/3,1 fan speed [min <sup>-1</sup> ] 2180
supply	power/current [kW/A] 1,9/3,1 fan speed [min <sup>-1</sup> ] 2180
Thermal efficiency up to*	75%
Max power consumption VE / VW	[kW/A] 21,84/32,55 3,84/6,55
Control board	PRV V2
Filter class	exhaust/supply M5/F7
Housing insulation, mineral wool	[mm] 50
Colour	RAL grey 7040
Weight (net, without packing)	[kg] 580,0 565,0
Comply with ERP	2016; 2018
Operation	indoors/outdoors**
Housing protection class	IP 34

\* Calculated wet efficiency.

\*\*Under covered area.

Temperature efficiency (balanced mass flow):  
Extract air = 20°C/60%RH  
Outdoor air = -20°C

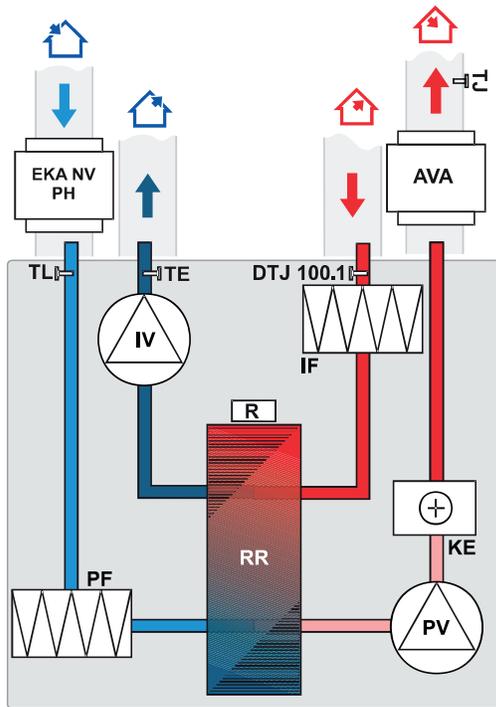
5500V EKO 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	87	68	80	81	82	78	77	74
Extract	75	63	69	72	66	63	58	55
Surrounding	74	58	66	69	68	65	51	54

Measured at 5652 m<sup>3</sup>/h, 246Pa

# RIRS V EKO

RIRS 400VE EKO 3.0 / RIRS 700VE EKO 3.0

(vertical) versions with electrical heater

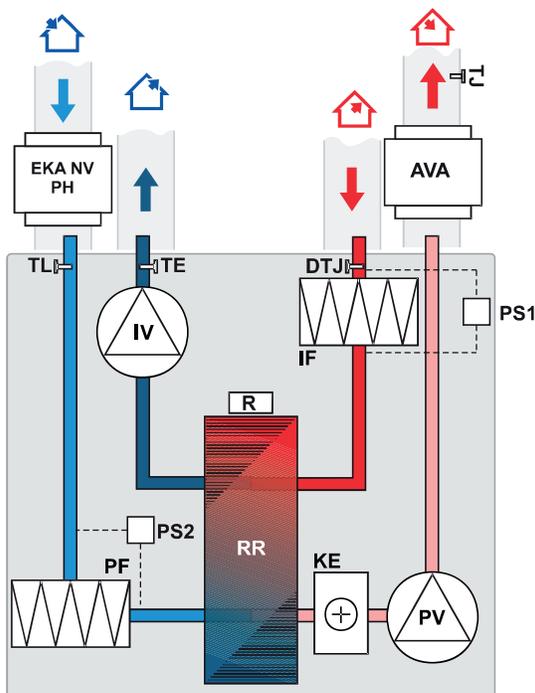


- IV - exhaust air fan
- PV - supply air fan
- RR - rotary heat exchanger
- R - rotor motor
- KE - electrical heater
- PF - fresh air filter (class F7)
- IF - extract air filter (class M5)
- TJ - temperature sensor for supply air
- TL - temperature sensor for fresh air
- TE - temperature sensor for exhaust air
- DTJ - humidity + temperature sensor for extract air
- EKA NV PH - optional fresh air pre-heater
- AVA - optionally supplied water cooler

AIR HANDLING UNITS

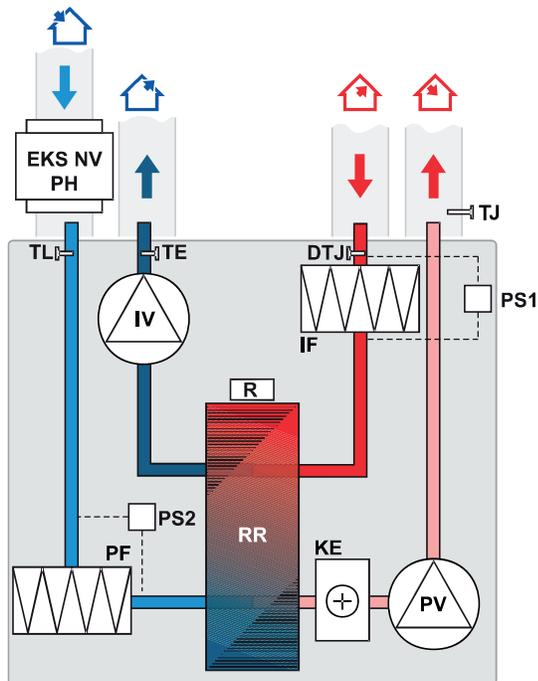
RIRS 1200VE EKO 3.0 / RIRS 1900VE EKO 3.0

(vertical) versions with electrical heater



- PS1 - supply air differential pressure switch
- PS2 - extract air differential pressure switch
- DTJ - humidity + temperature sensor
- IV - exhaust air fan
- PV - supplied air fan
- RR - rotary heat exchanger
- R - rotor motor
- KE - electrical heater
- PF - fresh air filter (class F7)
- IF - extract air filter (class M5)
- TJ - temperature sensor for supply air
- TL - temperature sensor for fresh air
- TE - temperature sensor for exhaust air
- EKA NV PH - optional fresh air pre-heater
- AVA - optionally supplied water cooler

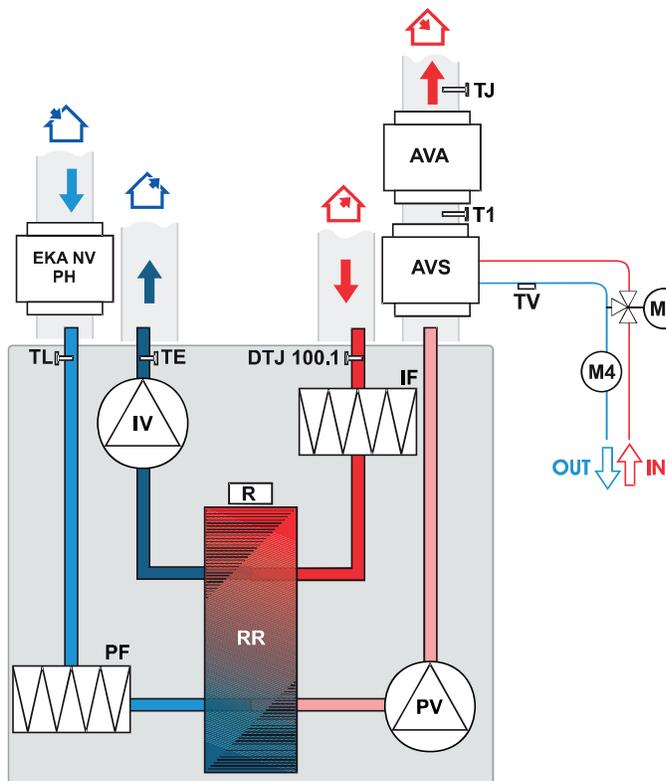
RIRS 2500VE EKO 3.0 / RIRS 3500VE EKO 3.0 / RIRS 5500VE EKO 3.0  
(vertical) versions with electrical heater



- PS1 - supply air differential pressure switch
- PS2 - extract air differential pressure switch
- DTJ - humidity + temperature sensor for extract air
- IV - exhaust air fan
- PV - supply air fan
- RR - rotary heat exchanger
- R - rotor motor
- KE - electrical heater
- PF - fresh air filter (class F7)
- IF - extract air filter (class M5)
- TJ - temperature sensor for supply air
- TL - temperature sensor for fresh air
- TE - temperature sensor for exhaust air
- EKS NV PH - optional fresh air pre-heater

RIRS 400VW EKO 3.0 / RIRS 700VW EKO 3.0

(vertical) versions with water heater

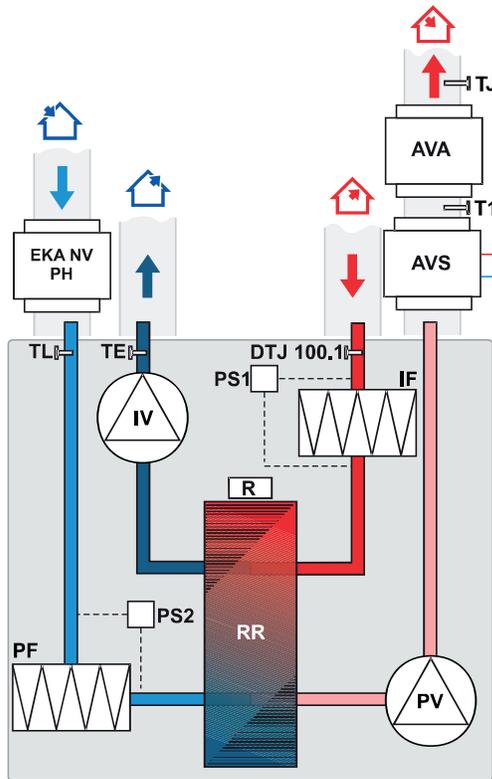


- AVS - optionally supplied water heater
- AVA - optionally supplied water cooler
- EKA NV PH - optional fresh air pre-heater
- IV - exhaust air fan
- PV - supplied air fan
- RR - rotary heat exchanger
- R - rotor motor
- PF - fresh air filter (class F7)
- IF - extract air filter (class M5)
- TJ - supply air temperature sensor
- TL - fresh air temperature sensor
- M1 - optionally supplied mixing valve and motor
- T1 - antifrost thermostat
- TV - antifrost sensor
- TE - temperature sensor for exhaust air
- DTJ - humidity + temperature sensor for extract air
- M6 - optionally supplied mixing valve and motor
- M4 - water heater circulation pump

# RIRS V EKO

RIRS 1200VW EKO 3.0 / RIRS 1900VW EKO 3.0

(vertical) versions with water heater

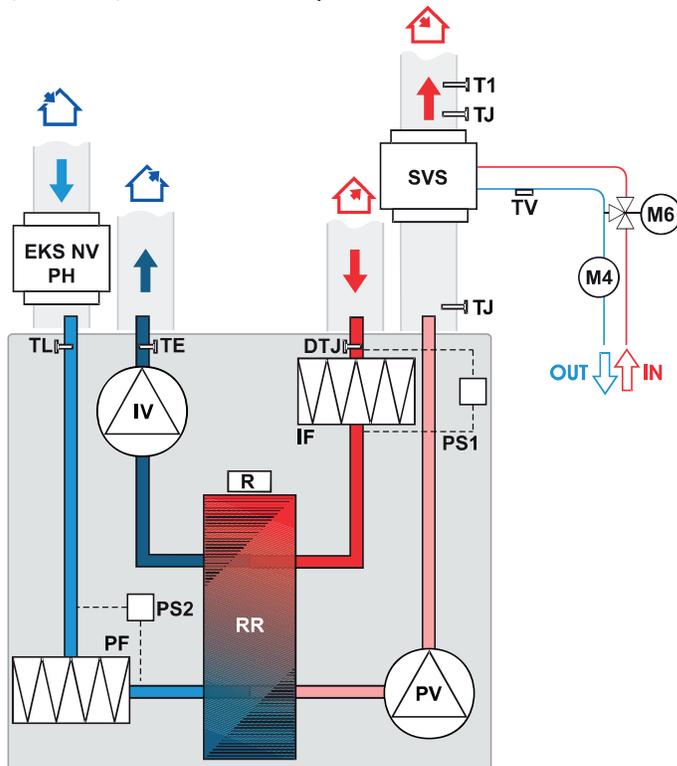


- PS1 - supply air differential pressure switch
- PS2 - extract air differential pressure switch
- AVS - optionally supplied water heater
- AVA - optionally supplied water cooler
- EKA NV PH - optional fresh air pre-heater
- DTJ - humidity + temperature sensor
- IV - exhaust air fan
- PV - supplied air fan
- RR - rotary heat exchanger
- R - rotor motor
- PF - fresh air filter (class F7)
- IF - extract air filter (class M5)
- TJ - air temperature sensor
- TL - air temperature sensor
- M6 - optionally supplied mixing valve and motor
- M4 - water heater circulation pump
- T1 - antifrost thermostat
- TV - supplied antifrost sensor
- TE - temperature sensor for exhaust air

AIR HANDLING UNITS

RIRS 2500VW EKO 3.0 / RIRS 3500VW EKO 3.0 / RIRS 5500VW EKO 3.0

(vertical) versions with optional water heater



- SVS - optionally supplied water heater
- PS1 - supply air differential pressure switch
- PS2 - extract air differential pressure switch
- DTJ - humidity + temperature sensor
- IV - exhaust air fan
- PV - supplied air fan
- RR - rotary heat exchanger
- R - rotor motor
- PF - fresh air filter (class F7)
- IF - extract air filter (class M5)
- TJ - air temperature sensor
- TL - air temperature sensor
- TE - temperature sensor for exhaust air
- M6 - optionally supplied mixing valve and motor
- M4 - water heater circulation pump
- T1 - antifrost thermostat
- TV - supplied antifrost sensor
- EKS NV PH - optional fresh air pre-heater

FUNCTIONS		PRV V2	
		RIRS EKO 3.0	
Description of the functions		E	W
Functions			
	Date and time settings	✓	✓
4 speeds for easy and user-friendly control	("Stop" – the unit is stopped; "Low", medium", and "High". Service menu allows adjusting each speed individually)	✓	✓
	BOOST function (Fans operate at highest speed)	✓	✓
	Comfortable air temperature function	✓	✓
	Cold/heat recovery	✓	✓
	Fire place function	✓	✓
	Dryness protection	✓	✓
	Weekly schedule	✓	✓
	Holiday schedule	✓	✓
	User and service control levels	✓	✓
	<b>Manual air flow balancing</b>	✓	✓
	CO <sub>2</sub> level indication and reduction function	✓	✓
	Night cooling function	✓	✓
	Relative humidity (RH) level indication and reduction function	✓	✓
	<b>Software and configuration update possibility</b>	✓	✓
	Supply air temperature control according to the extract air sensor	✓	✓
	Monitoring function (all sensors and I/O)	✓2	✓2
	Mode switch (start/stop)	✓	✓
	Extracted air relative humidity converter	✓	✓
	Manual components control	✓1	✓1
Functional units			
Fans			
	Soft start and stop	✓	✓
	Fan failure protection	✓	✓
	Speed synchronous/asynchronous 0-10V control	✓	✓
Electric heater			
	<b>On/Off / PWM control</b>	✓	
	Manual protection	✓	
	Overheat protection (additional protection software)	✓	✓
Water heater			
	Pulse-width modulation (PWM) valve actuator control		✓
	Protection using temperature sensor		✓
	Protection using thermostat (NC)		✓
	Circulation pump control		✓
	Return water temperature sensor		✓
DX cooler			
	<b>Control On/Off</b>		✓
Water cooler			
	Pulse-width modulation (PWM) valve actuator control		✓
	Control with three-positional valve actuator	✓	✓
Filter pollution monitoring			
	By pressure switch (NC)	✓	✓
	<b>By filter timer</b>	✓	✓
Rotor			
	Pulse-width modulation (PWM) (0-10VDC) motor control	✓	✓
	<b>On/Off motor control</b>	✓	✓
	Motor belt levers protection	✓	✓
Sensors			
	Supply air temperature sensor	✓	✓
	Fresh air temperature sensor	✓	✓
	Exhaust air temperature sensor	✓	✓
	Extract air temperature sensor	✓	✓
Emergency signals and inputs/outputs			
	Fire protection input	✓	✓
	Working indication output	✓	✓
	Alarm indication output	✓	✓
Remote controllers			
	Stouch	✓	✓
	Flex	✓	✓
	Ptouch	✓	✓
	MB-Gateway	✓	✓
1	With FLEX TEST remote controller	2	Only sensors

AIR HANDLING UNITS