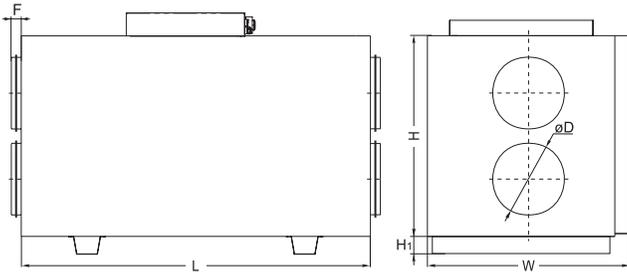


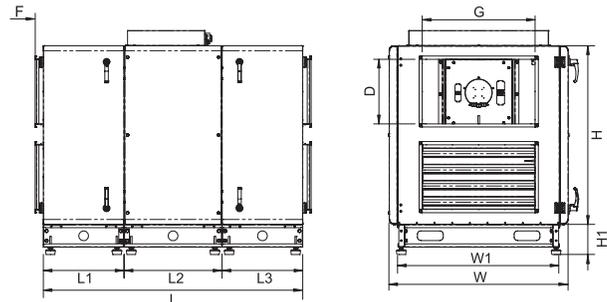
AIR HANDLING UNITS

Application	Ventilation of houses, small public buildings, offices or other heated premises (classrooms, apartments, conference rooms, etc.).
Description	<p>RIRS H EKO 3.0 is a range of heat recovery units with high-efficiency rotor heat exchangers. The units are designed for horizontal placement in auxiliary heated or non-heated premises (basements, boiler rooms, etc.) or outdoors (with roofing).</p> <p>There are 7 sizes (airflow interval 430-6000 m³/h) with separate heaters available for different climate zones. RIRS H 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 H EKO 3.0 units are fully equipped with automatic controls. Optional external sensors for CO₂ and humidity and the summer mode feature will guarantee the highest comfort (demand-level control).</p> <p>RIRS H EKO 3.0 units are service-friendly and easy to mount. Filter pollution may be identified by timers or contamination controls (RIRS 1200-5500 H EKO 3.0). Rotor fault indicator is included in every AHU. All units are supplied tested and ready to install.</p>
Controls	<p>Three remote control options are available:</p> <ol style="list-style-type: none"> 1. Flex, Stouch or Ptouch remote controllers. 2. Building management system connections. 3. Remote control via PC MB-Gateway.
The main Features	<ul style="list-style-type: none"> › Efficient rotor heat exchanger with up to 85% heat recovery. › Water/electrical heating options. › Easy and quick mounting. › Controlled airflow. › Fully integrated plug-and-play control system. › Outdoor versions and convertible inspection side.
Rotor	<ul style="list-style-type: none"> › Eurovent certified. › Plate gap 1,4-1,9 mm. › Rotor fault indicator. › Minimal airflow mixing. › Appropriate "Purge sector" size (for RIRS 2500, 3500 and 5500 H EKO 3.0).
Construction	<ul style="list-style-type: none"> › Frameless construction from double-skinned steel, with powder coated paint, panels. › Acoustic and thermal wall insulation – 50 mm. › Hinged door with locks grants easy access to internal components. › Separate compartment on the side of the unit grants quick access to the control board (plug-and-play). › Three sensors for fresh, supply and extract air temperatures. › Anti-vibration pads (optional for RIRS 400-1900 H EKO 3.0; standard for RIRS 2500-5500 H EKO 3.0). › Integrated electrical heater or optional water heater/cooler (on duct). › Water heater with frost protection kit available. › Low pressure drop filters: F7/M5. › RIRS 1200-5500 H EKO 3.0 optional roof and outlet covers for outdoor placement. › RIRS 2500-5500 H EKO 3.0 delivered in three sections › RIRS 2500-5500 H EKO 3.0 integrated motorized dampers for fresh and exhaust air. › Integrated pressure switch for filter pollution alarm (RIRS 1200-5500 H EKO 3.0). › RHX versions (rotor speed control, using stepper motor and driver).

RIRS 400 - 1900H EKO 3.0



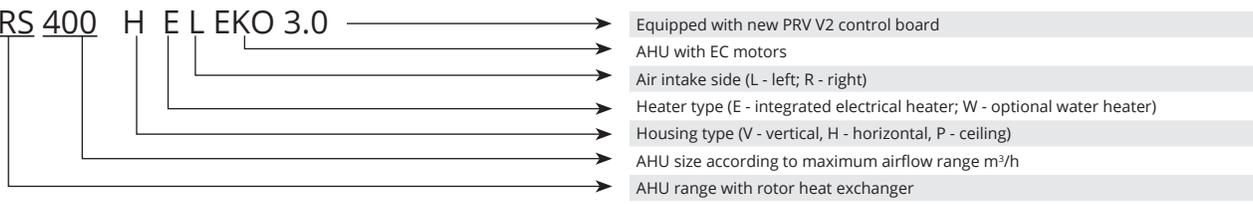
RIRS 2500 - 5500H EKO 3.0



Dimensions [mm]

Unit	L	L1	L2	L3	W	W1	H	H ₁	ØD	G	D	F
RIRS 400HE/HW EKO 3.0	1000	-	-	-	560	560	610	40	200	-	-	30
RIRS 700HE/HW EKO 3.0	1100	-	-	-	654	653	700	40	250	-	-	40
RIRS 1200HE/HW EKO 3.0	1350	-	-	-	855	853	900	70	315	-	-	40
RIRS 1900HE/HW EKO 3.0	1350	-	-	-	855	853	900	70	315	-	-	40
RIRS 2500HE/HW EKO 3.0	1608	500	606	500	1110	1000	1105	190	-	700	400	50
RIRS 3500HE/HW EKO 3.0	1900	630	628	630	1040	1205	1300	190	-	700	400	50
RIRS 5500HE/HW EKO 3.0	1908	600	700	600	1404	1394	1485	190	-	800	500	50

RIRS 400 H E L EKO 3.0



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	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	Heating coil AVS p. 185	Circular duct water cooler AVA p. 193	Rectangular duct silencer SKS p. 215	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 VVP/VXP p. 197	Electrical duct pre-heater EKA NV PH p. 201	Electrical duct pre-heater EKS NV PH p. 203		

Unit	Optional accessories									
	Flex Stouch Ptouch MB-Gateway	S-1141 S-RC02-F2 S-KFF-U	AKS SKG AP	AVS AVA	SKS	SVS	Comfort Box	SP Supply	SP Exhaust	TJP 10P CO4C***
RIRS 400HE EKO 3.0	+	+	160	160	-	-	-	CM230-1-F-L	CM230-1-F-L	-
RIRS 400HW EKO 3.0	+	+	160	160	-	-	-	TF230	CM230-1-F-L	incl
RIRS 700HE EKO 3.0	+	+	250	250	-	-	-	CM230-1-F-L	CM230-1-F-L	-
RIRS 700HW EKO 3.0	+	+	250	250	-	-	-	TF230	CM230-1-F-L	incl
RIRS 1200HE EKO 3.0	+	+	315	315	-	-	-	LM230A-TP	LM230A-TP	-
RIRS 1200HW EKO 3.0	+	+	315	315	-	-	-	LF230	LM230A-TP	incl
RIRS 1900HE EKO 3.0	+	+	315	315	-	-	-	LM230A-TP	LM230A-TP	-
RIRS 1900HW EKO 3.0	+	+	315	315	-	-	-	LF230	LM230A-TP	incl
RIRS 2500HE EKO 3.0	+	+	-	-	700x400	-	600x350	int		-
RIRS 2500HW EKO 3.0	+	+	-	-	700x400	700x400	600x350	int		incl
RIRS 3500HE EKO 3.0	+	+	-	-	700x400	-	800x500	int		-
RIRS 3500HW EKO 3.0	+	+	-	-	700x400	700x400	800x500	int		incl
RIRS 5500HE EKO 3.0	+	+	-	-	800x500	-	800x500	int		-
RIRS 5500HW EKO 3.0	+	+	-	-	800x500	800x500	800x500	int		incl

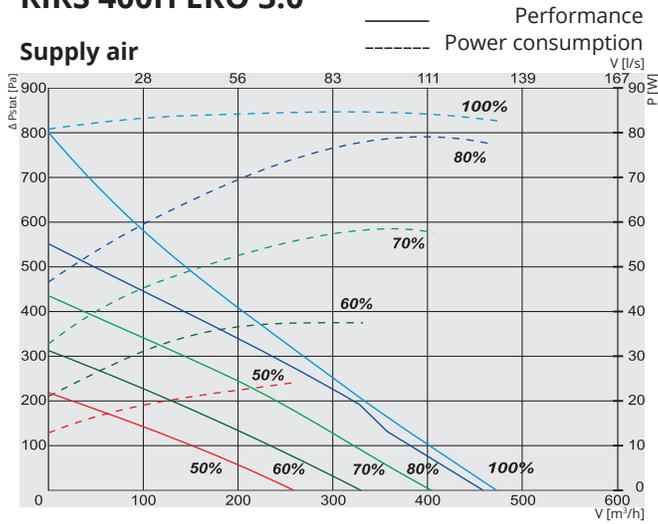
*** - anti-frost thermostat
incl - included

Unit	Optional accessories							
	EKA NV PH	EKS NV PH	SSB Heating	SSB Cooling	RMG 80/60°C	RMG 60/40°C	VVP/VXP 80/60°C	VVP/VXP 60/40°C
RIRS 400HE EKO 3.0	160	-	-	81	-	-	-	-
RIRS 400HW EKO 3.0	160	-	61	81	3-0,63-4	3-0,63-4	45.10-0,63	45.10-0,63
RIRS 700HE EKO 3.0	250	-	-	81	-	-	-	-
RIRS 700HW EKO 3.0	250	-	61	81	3-1,0-4	3-0,63-4	45.10-1,0	45.10-0,63
RIRS 1200HE EKO 3.0	315	-	-	81	-	-	-	-
RIRS 1200HW EKO 3.0	315	-	61	81	3-1,0-4	3-0,63-4	45.10-1,0	45.10-0,63
RIRS 1900HE EKO 3.0	315	-	-	81	-	-	-	-
RIRS 1900HW EKO 3.0	315	-	61	81	3-1,0-4	3-0,63-4	45.10-1,0	45.10-0,63
RIRS 2500HE EKO 3.0	-	-	-	-	-	-	-	-
RIRS 2500HW EKO 3.0	-	700x400	61	81	+	+	+	+
RIRS 3500HE EKO 3.0	-	700x400	-	-	-	-	-	-
RIRS 3500HW EKO 3.0	-	700x400	61	81	+	+	+	+
RIRS 5500HE EKO 3.0	-	800x500	-	-	-	-	-	-
RIRS 5500HW EKO 3.0	-	800x500	61	81	+	+	+	+

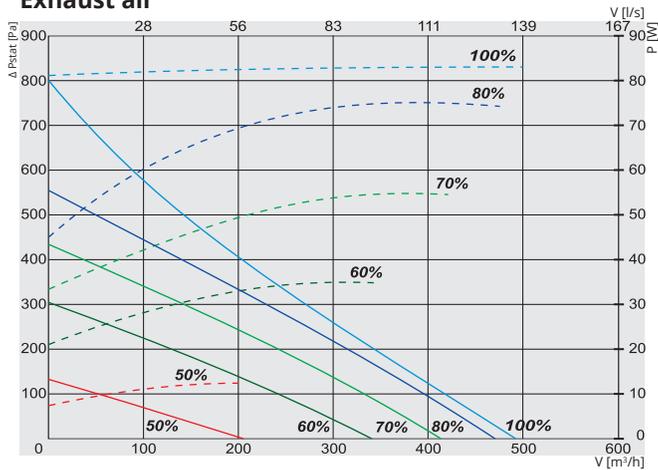
*** - anti-frost thermostat
incl - included

RIRS 400H EKO 3.0

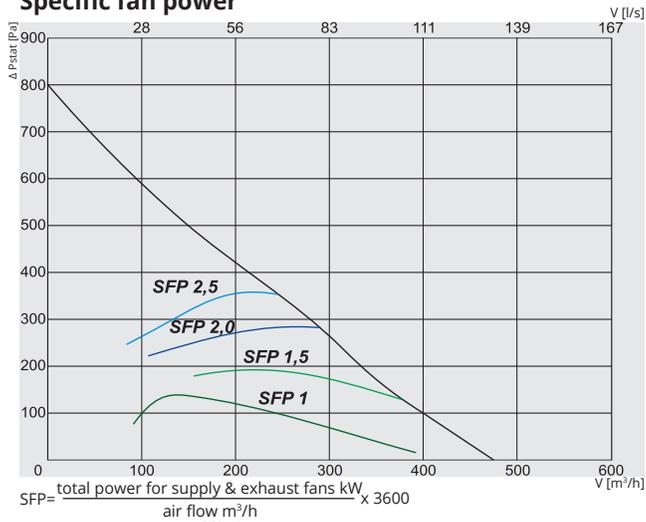
Supply air



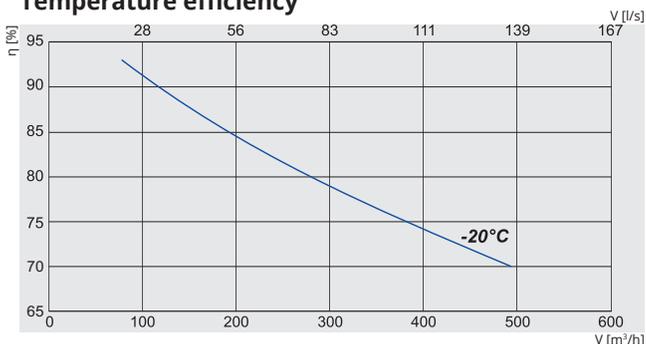
Exhaust air



Specific fan power



Temperature efficiency



RIRS 400H EKO 3.0

Air supply side (R - right default, convertible)



➡ Exhaust air
 ➡ Extract air
 ➡ Outdoor air
 ➡ Supply air

Article No.	Version
GAGRIRS1749_0022A	400HE EKO 3.0 Integrated electrical heater.
GAGRIRS1750_0023A	400HW EKO 3.0 Optional water heater.

400HE / HW EKO 3.0

Water heater (optional) HW ver.		AVS 160
Electrical heater HE 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 ⁻¹]	3200
supply	power/current [kW/A]	0,085/0,75
	fan speed [min ⁻¹]	3200
Thermal efficiency up to*		75%
Max power consumption HE/HW	[kW/A]	1,38/6,80
Control board		PRV V2
Filter class	exhaust/supply	M5/F7
Housing insulation, mineral wool	[mm]	50
Colour	RAL	white
Weight (net, without packing) HE / HW	[kg]	9016
Weight (net, without packing) HE / HW		72
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

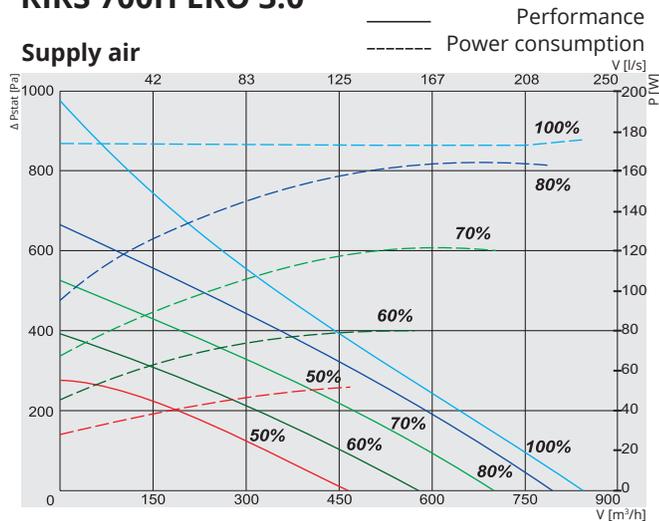
400H EKO 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	78	70	68	72	72	70	64	65
Extract	63	53	57	61	49	45	40	32
Surrounding	55	43	44	53	48	45	44	41

Measured at 380 m³/h, 124 Pa

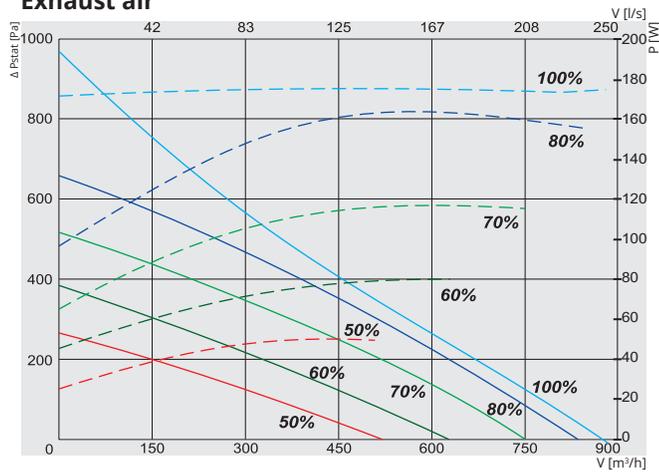
RIRS H EKO

RIRS 700H EKO 3.0

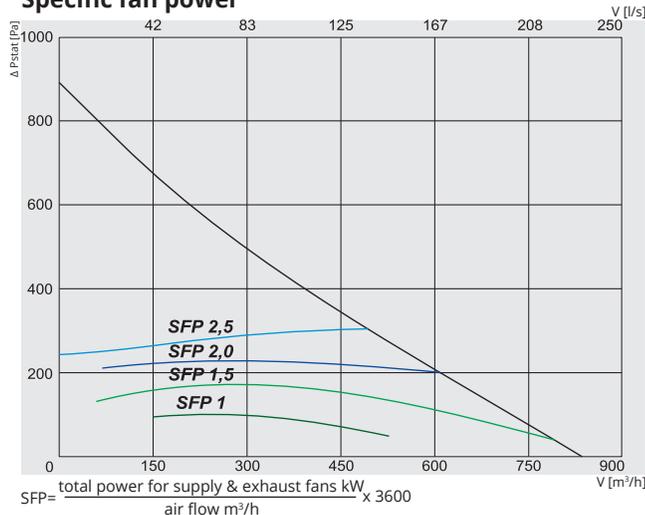
Supply air



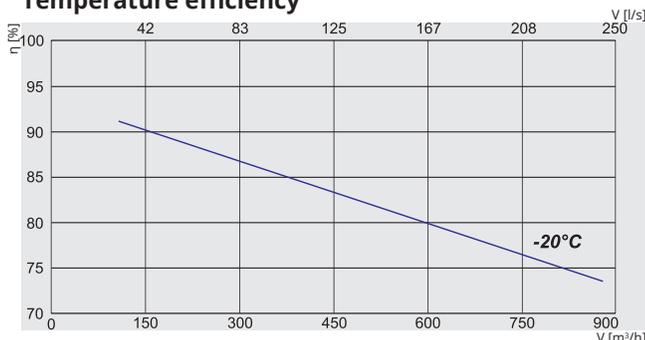
Exhaust air



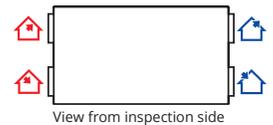
Specific fan power



Temperature efficiency



RIRS 700H EKO 3.0
Air supply side (R - right default, convertible)



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

Article No.	Version
GAGRIRS1662_0013A	700HE EKO 3.0 Integrated electrical heater.
GAGRIRS1697_0014A	700HW EKO 3.0 Optional water heater.

700HE / HW EKO 3.0

Water heater (optional) HW ver.	AVS 250	
Electrical heater HE 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 ⁻¹]	3230
supply	power/current [kW/A]	0,168/1,4
	fan speed [min ⁻¹]	3230
Thermal efficiency up to*	75%	
Max power consumption HE / HW	[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]	96
Comply with ERP	2016; 2018	
Operation	indoors	
Housing protection class	IP	34

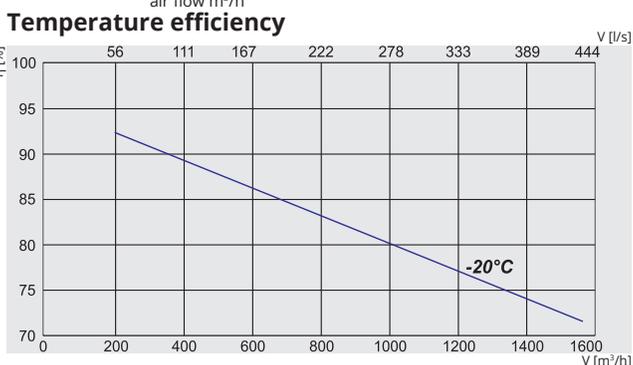
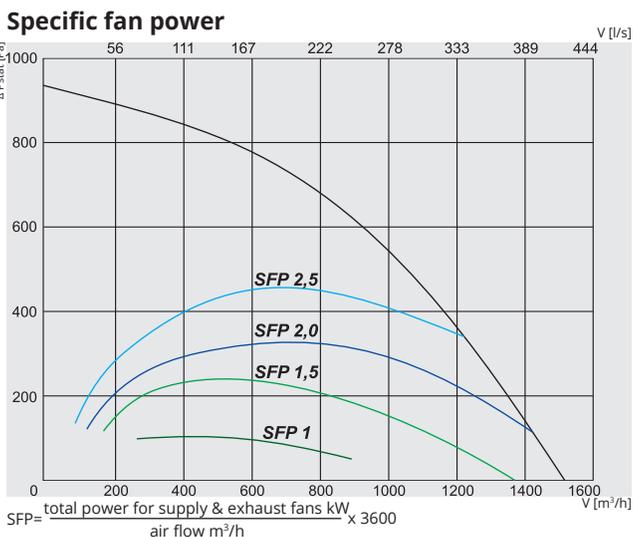
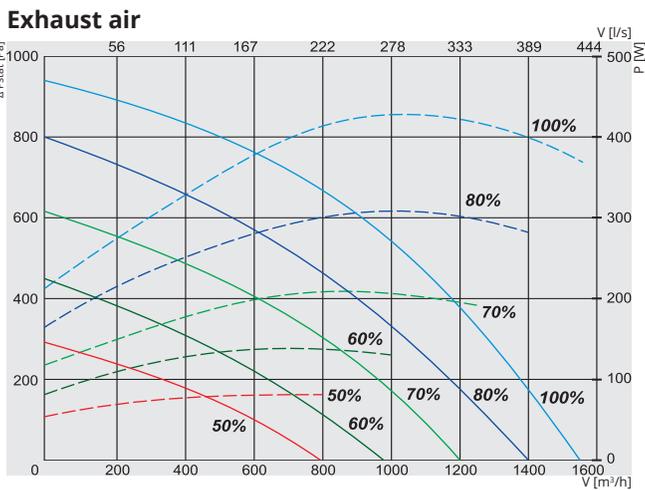
* Calculated wet efficiency.

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

700H EKO 3.0	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	78	67	68	74	72	71	65	63
Extract	65	54	62	63	53	52	48	36
Surrounding	55	48	49	51	49	46	44	43

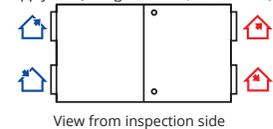
Measured at 657 m³/h, 200 Pa

RIRS 1200H EKO 3.0



RIRS 1200H EKO 3.0

Air supply side(R - right default, convertible)



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

Article No.	Version
GAGRIRS1671_0015C	1200HE EKO 3.0 Integrated electrical heater.
GAGRIRS1672_0016A	1200HW EKO 3.0 Optional water heater.

1200HE / HW EKO 3.0

Water heater (optional) HW ver.	AVS 315
Electrical heater HE ver.	phase/voltage [50Hz/VAC] ~2, 400
	[kW] 4,0
EC fans	phase/voltage [50Hz/VAC] ~1, 230
exhaust	power/current [kW/A] 0,444/2,9
	fan speed [min ⁻¹] 3400
supply	power/current [kW/A] 0,435/2,8
	fan speed [min ⁻¹] 3400
Thermal efficiency up to*	75%
Max power consumption HE / HW	[kW/A] 4,9/15,87 0,9/5,87
Control board	PRV V2
Filter class	exhaust/supply M5/F7
Housing insulation, mineral wool	[mm] 50
Colour	RAL grey 7040
Weight (net, without packing) HE / HW	[kg] 162
Comply with ERP	2016; 2018
Operation	indoors/outdoors**
Housing protection class	IP 34

* Calculated wet efficiency.

**Under covered area or with roof.

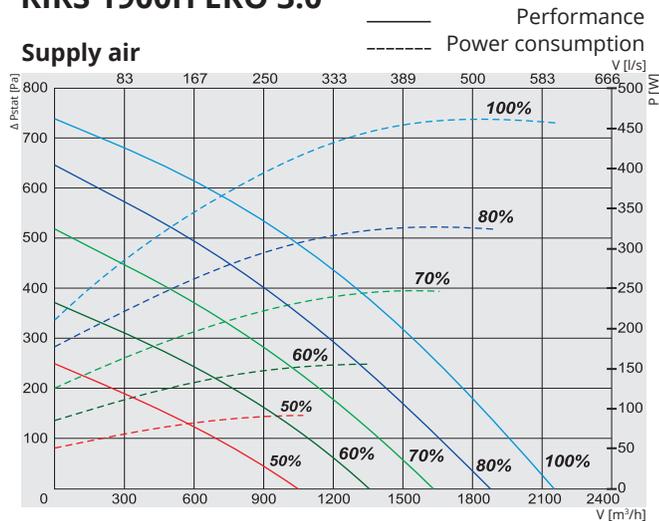
1200H EKO 3.0	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	77	66	73	71	70	66	62	53
Extract	68	63	64	62	56	46	41	31
Surrounding	57	52	53	47	44	41	35	33

Measured at 1437 m³/h, 102 Pa

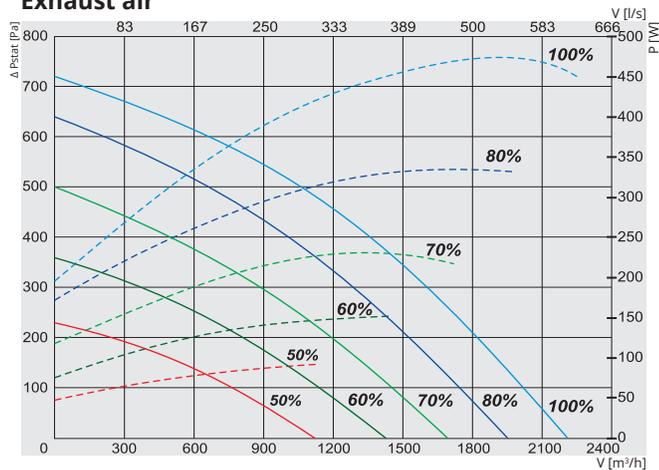
RIRS H EKO

RIRS 1900H EKO 3.0

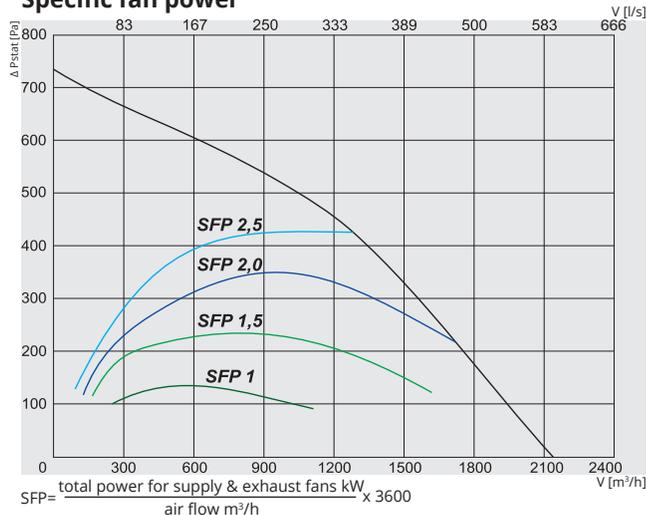
Supply air



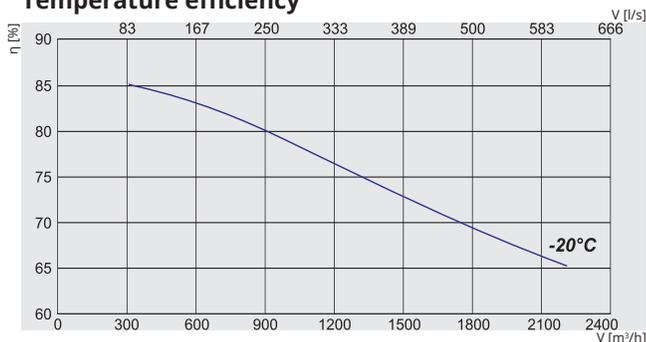
Exhaust air



Specific fan power



Temperature efficiency



RIRS 1900H EKO 3.0

Air supply side (R - right default, convertible)



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

Article No.	Version
GAGRIRS1719_0017B	1900HE EKO 3.0 Integrated electrical heater.
GAGRIRS1720_0019A	1900HW EKO 3.0 Optional water heater.

1900HE / HW EKO 3.0

Water heater (optional) HW ver.	AVS 315
Electrical heater HE ver.	phase/voltage [50Hz/VAC] ~3, 400
	[kW] 9,0
EC fans	phase/voltage [50Hz/VAC] ~1, 230
exhaust	power/current [kW/A] 0,49/3,2
	fan speed [min ⁻¹] 2540
supply	power/current [kW/A] 0,5/3,25
	fan speed [min ⁻¹] 2540
Thermal efficiency up to*	68,4%
Max power consumption HE / HW	[kW/A] 10/19,62 1/6,62
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] 162
Comply with ERP	2016; 2018
Operation	indoors/outdoors**
Housing protection class	IP 34

* Calculated wet efficiency.

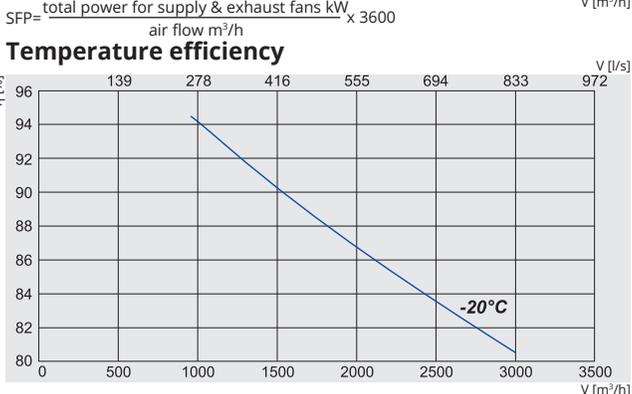
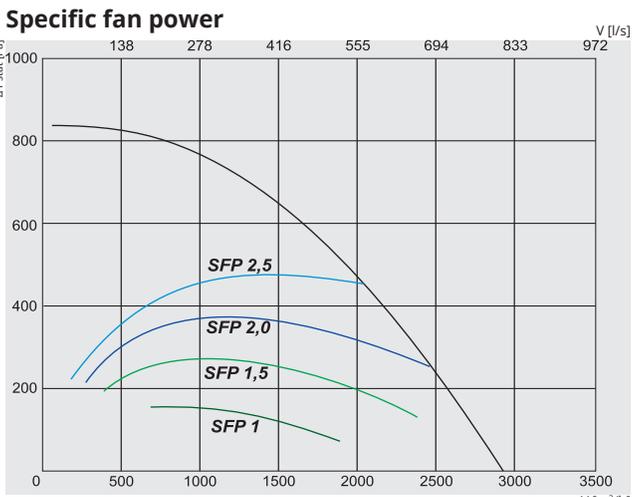
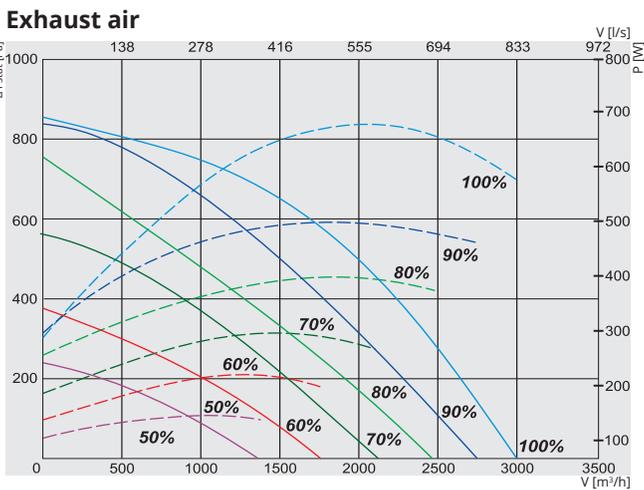
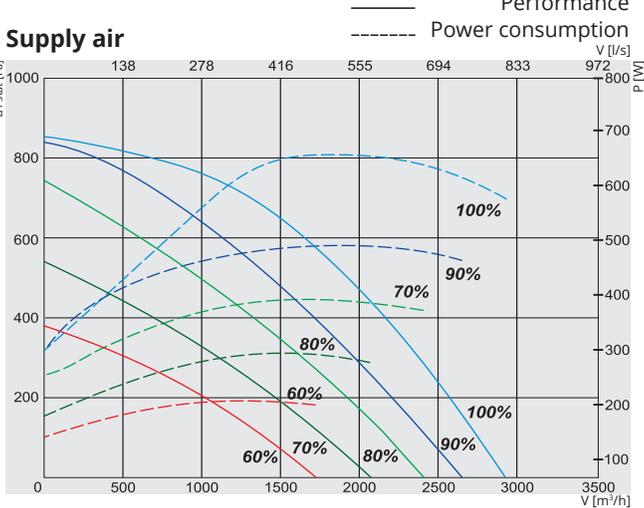
** Under covered area.

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

1900H EKO 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	79	55	70	70	71	75	72	63
Extract	67	53	65	60	53	54	50	36
Surrounding	61	44	58	53	51	53	50	48

Measured at 1906 m³/h, 100 Pa

RIRS 2500H EKO 3.0



RIRS 2500H EKO 3.0 (convertible) ver.



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

Article No.	Version
GAGRIRS1742_0026B	2500HE EKO 3.0 Integrated electrical heater.
GAGRIRS1772_0027A	2500HW EKO 3.0 Optional water heater.

2500HE / HW EKO 3.0

Water heater (optional) HW ver.	Comfort Box 600x350	
Electrical heater HE ver.	phase/voltage [50Hz/VAC]	~3, 400 [kW]
EC fans	phase/voltage [50Hz/VAC]	~1, 230
exhaust	power/current [kW/A]	0,71/3,19
	fan speed [min ⁻¹]	2800
supply	power/current [kW/A]	0,75/3,35
	fan speed [min ⁻¹]	2800
Thermal efficiency up to*	83,6%	
Max power consumption HE / HW	[kW/A]	10,5/19,95 1,5/6,95
Control board	PRV V2	
Filter class	exhaust/supply	M5/F7
Housing insulation, mineral wool	[mm]	50
Colour	RAL	grey 7040
Weight (net, without packing) HE / HW	[kg]	350
Comply with ERP	2016; 2018	
Operation	indoors/outdoors**	
Housing protection class	IP	34

* Calculated wet efficiency.

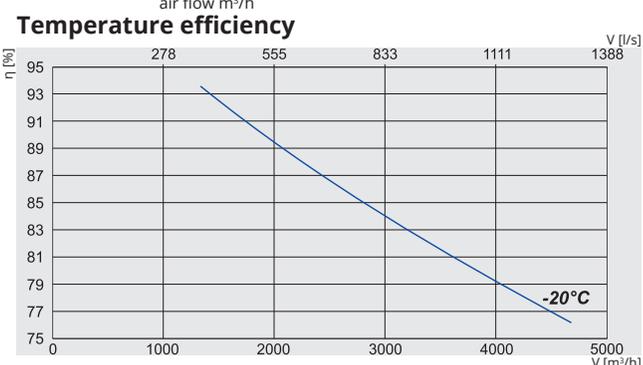
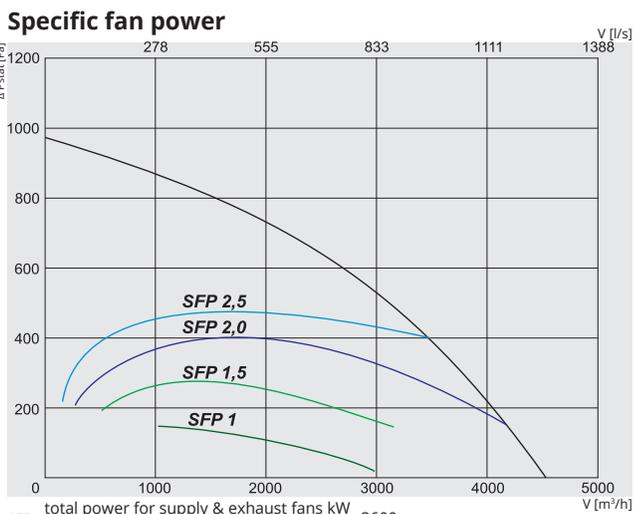
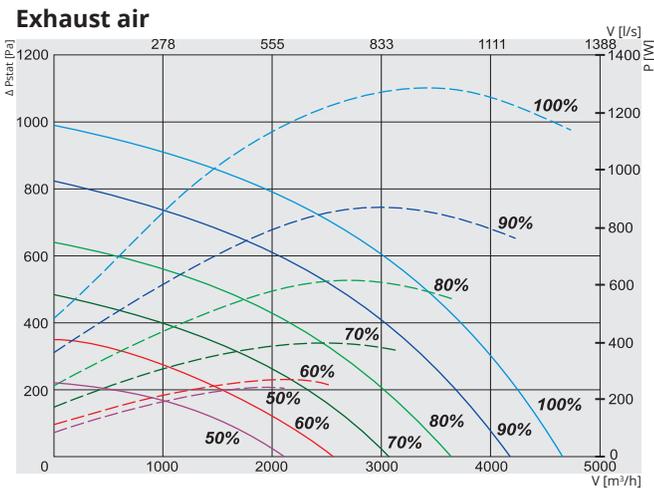
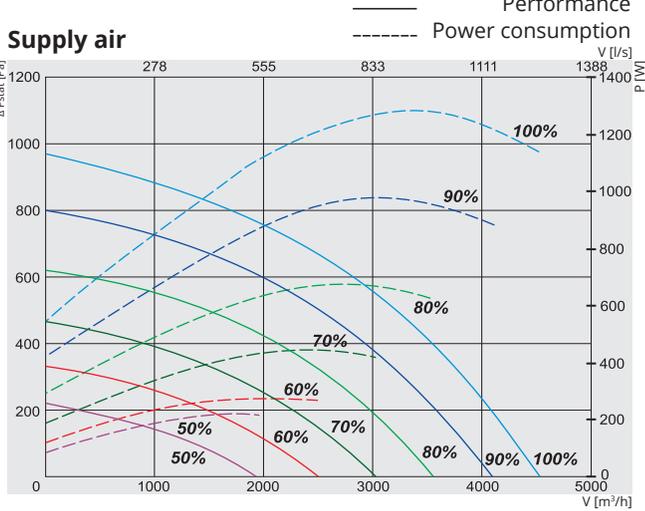
** Under covered area.

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

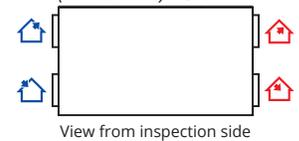
2500H EKO 3.0	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	79	61	69	71	75	71	65	64
Extract	68	60	61	65	56	51	46	41
Surrounding	62	45	52	60	54	52	48	43

Measured at 2599 m³/h, 180 Pa

RIRS 3500H EKO 3.0



RIRS 3500H EKO 3.0
(convertible) ver.



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

Article No.	Version
GAGRIRS1764_0020B	3500HE EKO 3.0 Integrated electrical heater.
GAGRIRS1765_0021A	3500HW EKO 3.0 Optional water heater.

3500HE / HW EKO 3.0

Water heater (optional) HW ver.	Comfort Box 800x500	
Electrical heater HE ver.	phase/voltage [50Hz/VAC]	~3, 400 [kW]
EC fans	phase/voltage [50Hz/VAC]	~1, 230
exhaust	power/current [kW/A]	1,3/5,75
	fan speed [min ⁻¹]	2390
supply	power/current [kW/A]	1,30/5,75
	fan speed [min ⁻¹]	2390
Thermal efficiency up to*	80%	
Max power consumption HE / HW	[kW/A]	14,64/29,18 2,64/11,88
Control board	PRV V2	
Filter class	exhaust/supply	M5/F7
Housing insulation, mineral wool	[mm]	50
Colour	RAL	grey 7040
Weight (net, without packing) HE / HW	[kg]	492
Comply with ERP	2016; 2018	
Operation	indoors/outdoors**	
Housing protection class	IP	34

* Calculated wet efficiency.

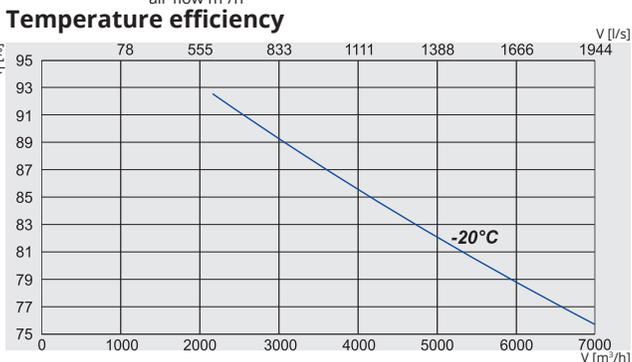
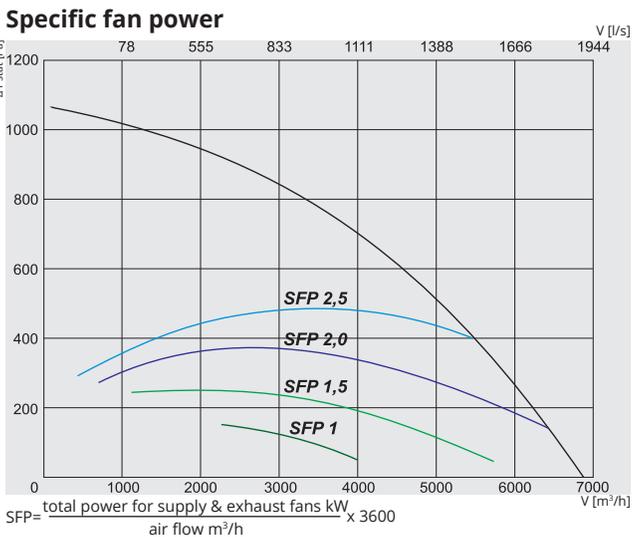
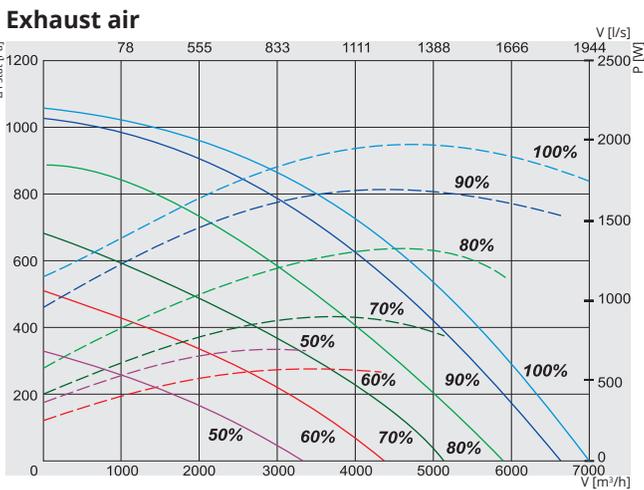
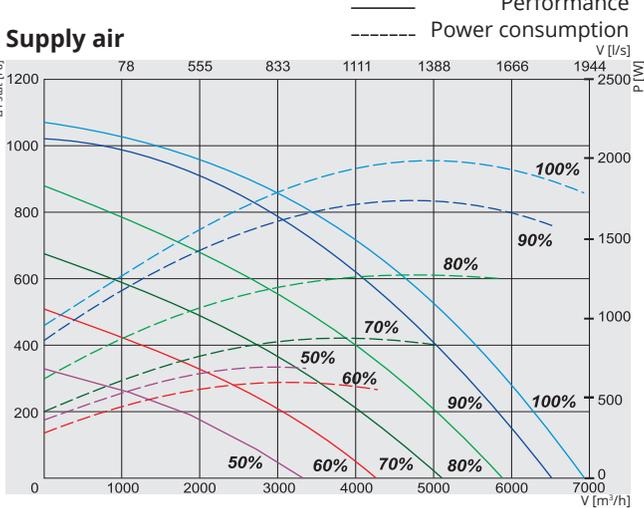
**Under covered area.

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

3500HW EKO 3.0	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	84	59	73	79	78	77	75	70
Extract	74	60	72	68	62	59	53	42
Surrounding	66	55	60	61	58	56	50	48

Measured at 4055 m³/h, 225 Pa

RIRS 5500H EKO 3.0



RIRS 5500H EKO 3.0 (convertible) ver.



View from inspection side

← Exhaust air
 → Extract air
 ← Outdoor air
 → Supply air

Article No.	Version
GAGRIRS1743_0030B	5500HE EKO 3.0 Integrated electrical heater.
GAGRIRS1761_0031B	5500HW EKO 3.0 Optional water heater.

5500HE / HW EKO 3.0

Water heater (optional) HW ver.	Comfort Box 800x500		
Electrical heater HE ver.	phase/voltage [50Hz/VAC]	~3, 400	
	[kW]	15,0	
EC fans	phase/voltage [50Hz/VAC]	~3, 400	
exhaust	power/current [kW/A]	2/3,17	
	fan speed [min ⁻¹]	2180	
supply	power/current [kW/A]	1,98/3,06	
	fan speed [min ⁻¹]	2180	
Thermal efficiency up to*	80%		
Max power consumption HE / HW	[kW/A]	19,02/28,35	4,02/6,65
Control board	PRV V2		
Filter class	exhaust/supply	M5/F7	
Housing insulation, mineral wool	[mm]	50	
Colour	RAL	grey	7040
Weight (net, without packing) HE / HW	[kg]	625	
Comply with ERP	2016; 2018		
Operation	indoors/outdoor**		
Housing protection class	IP	34	

* Calculated wet efficiency.

** Under covered area.

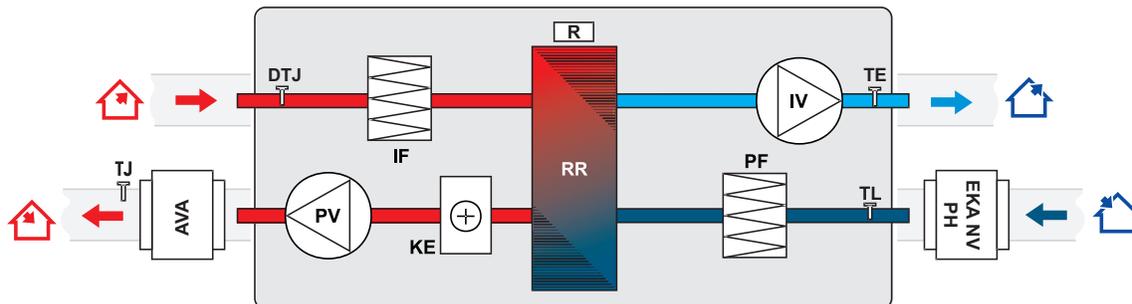
Temperature efficiency (balanced mass flow):
 Extract air = 20°C/60%RH
 Outdoor air = -20°C

5500H EKO 3.0	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	90	69	82	83	85	81	80	76
Extract	76	62	70	73	67	61	58	53
Surrounding	78	60	71	73	72	69	64	57

Measured at 6219 m³/h, 210 Pa

RIRS H EKO

RIRS 400HE EKO 3.0 / 700HE EKO 3.0 (horizontal) versions with electrical heater

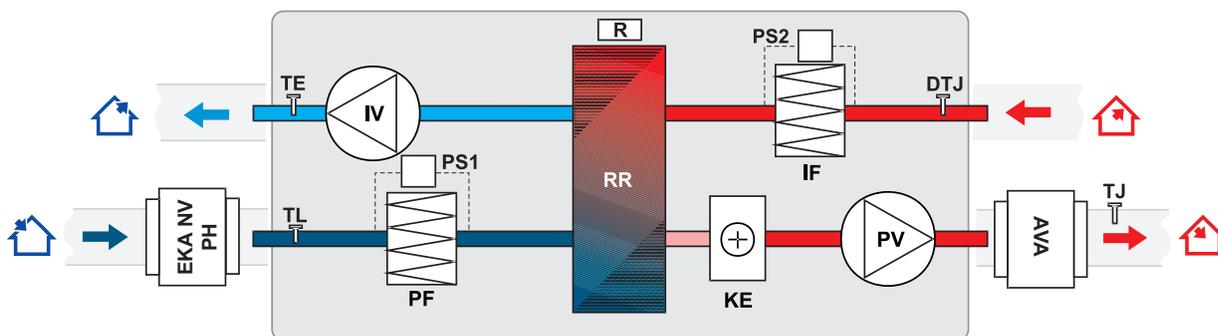


- IV** - exhaust air fan
- PV** - supply air fan
- RR** - rotary heat exchanger
- R** - rotor motor
- KE** - electrical heater
- PF** - fresh air filter (class F7)
- IF** - extract air filter (class M5)

- TJ** - temperature sensor for supply air
- TL** - temperature sensor for fresh air
- TE** - temperature sensor for exhaust air
- DTJ** - humidity + temperature sensor
- AVA** - optionally supplied water cooler
- EKA NV PH** - optional fresh air pre-heater

AIR HANDLING UNITS

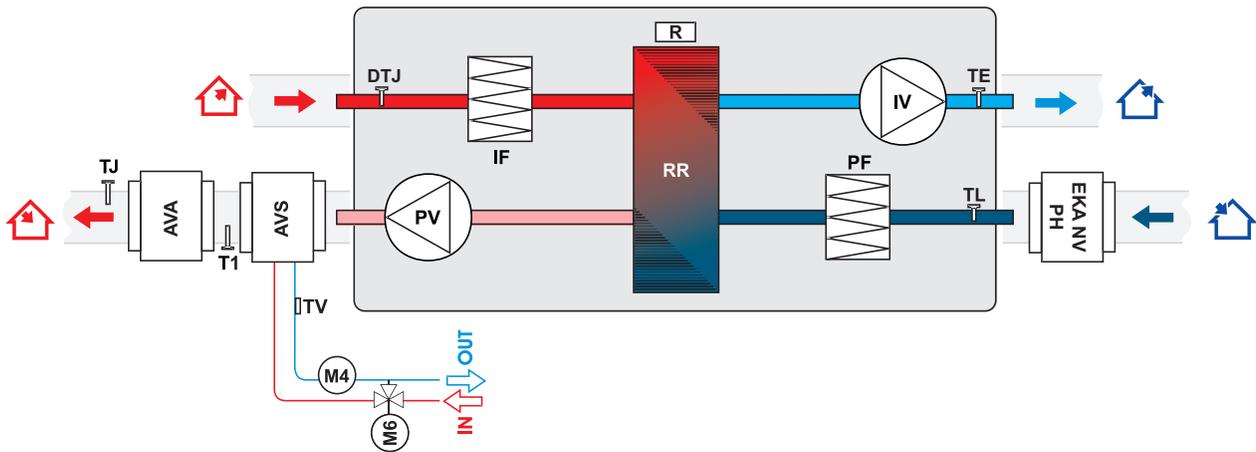
RIRS 1200HE EKO 3.0 / 1900HE EKO 3.0 (horizontal) versions with electrical heater



- 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)

- PS2** - extract air differential pressure switch
- PS1** - fresh air differential pressure switch
- TJ** - temperature sensor for supply air
- TL** - temperature sensor for fresh air
- TE** - temperature sensor for exhaust air
- DTJ** - humidity + temperature sensor
- AVA** - optionally supplied water cooler
- EKA NV PH** - optional fresh air pre-heater

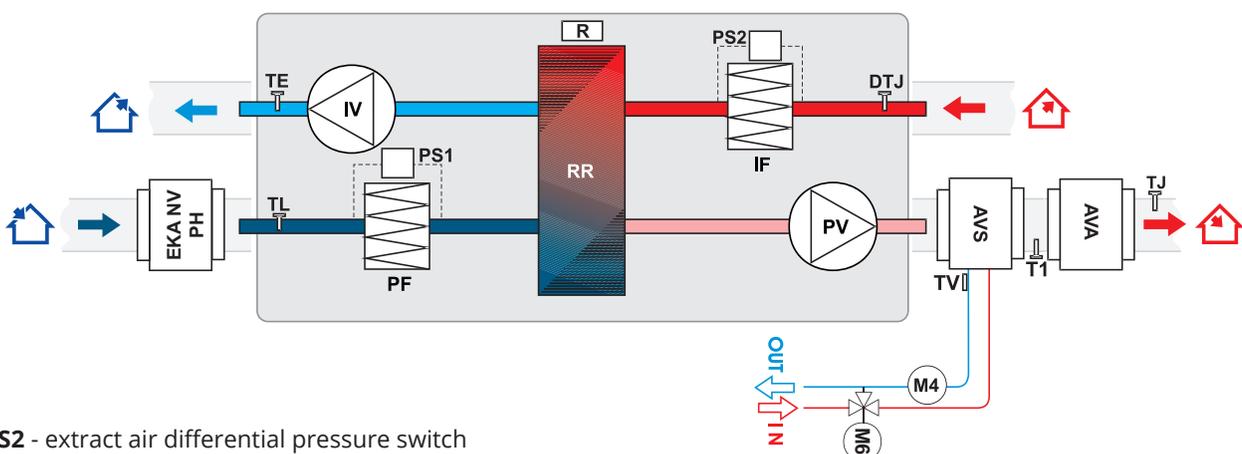
RIRS 400HW EKO 3.0 / 700HW EKO 3.0 (horizontal) versions with water heater



AVS - optionally supplied water heater
IV - exhaust air fan
PV - supply air fan
RR - rotary heat exchanger
R - rotor motor
PF - fresh air filter (class F7)
IF - extract air filter (class M5)
AVA - optionally supplied water cooler
EKA NV PH - optional fresh air pre-heater

TJ - air temperature sensor for supply air
TL - air temperature sensor for fresh air
DTJ - humidity + temperature sensor
M6 - optionally supply mixing valve and motor
M4 - water heater circulatory pump
T1 - antifrost thermostat
TV - antifrost sensor
TE - temperature sensor for exhaust air

RIRS 1200HW EKO 3.0 / 1900HW EKO 3.0 (horizontal) versions with water heater

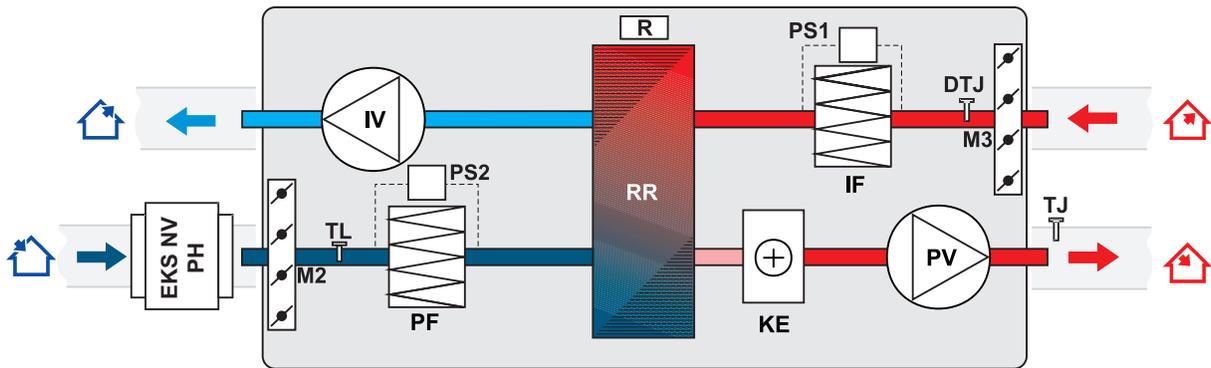


PS2 - extract air differential pressure switch
PS1 - fresh air differential pressure switch
AVS - optionally supplied water heater
AVA - optionally supplied water cooler
EKA NV PH - optional fresh air pre-heater
IV - exhaust air fan
PV - supply air fan
RR - rotary heat exchanger
R - rotor motor
PF - fresh air filter (class F7)
IF - extract air filter (class M5)

TJ - air temperature sensor for supply air
TL - air temperature sensor for fresh air
TE - temperature sensor for exhaust air
M6 - optionally supply mixing valve and motor
M4 - water heater circulatory pump
T1 - antifrost thermostat
TV - antifrost sensor
DTJ - humidity + temperature sensor

RIRS H EKO

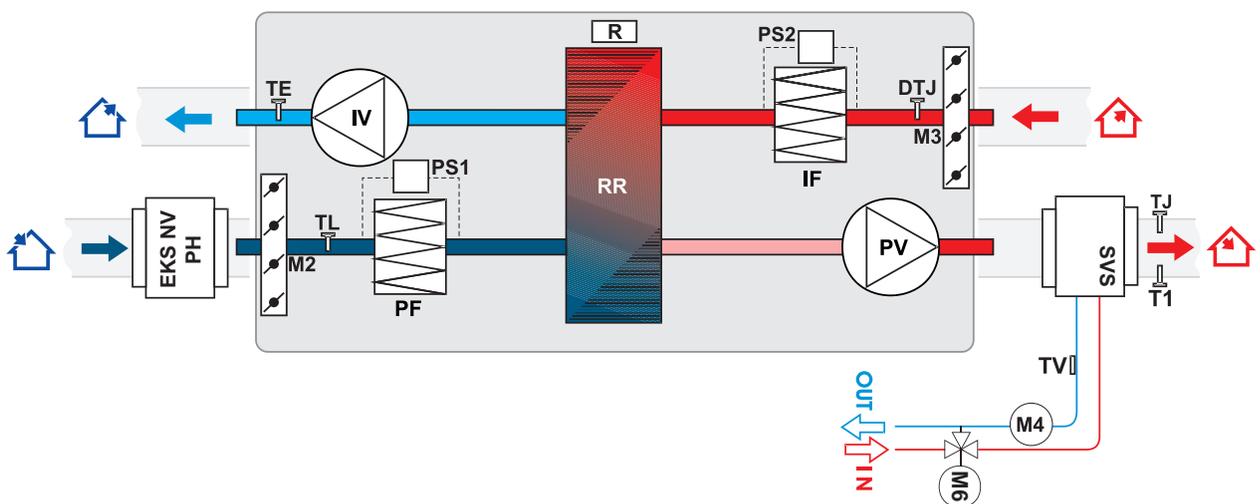
RIRS 2500HE EKO 3.0 / 3500HE EKO 3.0 / 5500HE EKO 3.0 (horizontal) versions with electrical heater



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)
EKS NV PH - optional fresh air pre-heater

PS2 - extract air differential pressure switch
PS1 - fresh air differential pressure switch
TJ - temperature sensor for supply air
TL - temperature sensor for fresh air
TE - temperature sensor for exhaust air
DTJ - humidity + temperature sensor
M2 - actuator for fresh air damper
M3 - actuator for extract air damper

RIRS 2500HW EKO 3.0 / 3500HW EKO 3.0 / 5500HW EKO 3.0 (horizontal) versions with water heater



EKS NV PH - optional fresh air pre-heater
IV - exhaust air fan
PV - supply air fan
RR - rotary heat exchanger
R - rotor motor
PF - fresh air filter (class F7)
IF - extract air filter (class M5)

PS2 - extract air differential pressure switch
PS1 - fresh air differential pressure switch
TJ - temperature sensor for supply air
TL - temperature sensor for fresh air
TE - temperature sensor for exhaust air
DTJ - humidity + temperature sensor
M3 - actuator for extract air damper
M2 - actuator for fresh air damper

FUNCTIONS			
Descriptions of the functions		PRV V2	
		RIRS EKO 3.0	
		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	✓	✓
	Manual air flow balancing	✓	✓
	CO ₂ level indication and reduction function	✓	✓
	Night cooling function	✓	✓
	Relative humidity (RH) level indication and reduction function	✓	✓
	Software and configuration update possibility	✓	✓
	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			
	On/Off / PWM control	✓	
	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			
	Control On/Off	✓	✓
Water cooler			
	Pulse-width modulation (PWM) valve actuator control		✓
	Control with three-positional valve actuator	✓	✓
Filter pollution monitoring			
	By pressure switch (NC)	✓	✓
	By filter timer	✓	✓
Rotor			
	Pulse-width modulation (PWM) (0-10VDC) motor control	✓	✓
	On/Off motor control	✓	✓
	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