

# RIS H EKO



**NEW!**

AHU with heat recovery

Centrales de traitement d'air avec récupération de chaleur

Lüftungsgeräte mit wärmerückgewinnung

AHU med varmegenvinding



AHU with cross-counterflow plate heat exchanger. Air handling units RIS H EKO 3.0 have high efficiency counterflow heat exchanger. AHU is used for ventilation of houses and other heated areas.

- Energy saving and low noise EC fans.
- Efficiency of heat exchanger up to 94%.
- Integrated electrical heater or optional water/DX heating/cooling.
- Controlled air flow.
- Motorizes by-pass damper.
- Anti-freeze protection of the heat exchanger.
- Low noise level.
- Acoustic insulation of the walls – RIS 700 H EKO 3.0 - 30mm and RIS 1200-5500 H EKO 3.0 - 50 mm.
- RIS 700H - 5500H EKO 3.0 all versions can be controlled with Flex, Stouch remote control devices.
  - Easy mounting.
  - Full integrated plug & play control system.
  - RIS 1900H - 5500H EKO 3.0 optional SIEMENS Climatix controller.
  - Integrated pressure switch for filter pollution (not 700H EKO 3.0).
  - Electrical heater control 0 - 10V.
  - Optional CO<sub>2</sub>, pressure or airflow transmitter.
  - RIS 1900H - 5500H EKO 3.0 optional roof and outlet cover.
  - RIS 3500H EKO 3.0- delivered in three sections and RIS 5500H EKO 3.0 in two sections.



Lüftungsgeräte RIS H EKO 3.0 mit hocheffizientem Gegenstromwärmetauscher. WRG sind für Lüftung von Häusern und anderen beheizten Räumen bestimmt.

- Wirtschaftliche und sparsame EC - Ventilatoren.
- Wirkungsgrad von Wärmetauscher bis zu 94%.
- Elektro- oder Warmwasserheizregister.
- Regelbarer Luftstrom.
- Regelung nach Zulufttemperatur.
- Motorisierte Bypass-Klappe.
- Frostschutz von Wärmetauscher.
- Niedriges Geräuscheneveau.
- Alle RIS 700H - 5500H EKO 3.0 werden mittels Fernbedienung Flex, Stouch gesteuert.
- Schall-und Wärmedämmung - RIS 700H EKO 3.0 - 30 mm, 1200H - 5500H EKO 3.0 - 50 mm.
- Leicht montierbar.
- Vollständig integrierte Plug & Play-Steuerung.
- RIS 1900H - 5500H EKO 3.0 optional mit SIEMENS Climatix Controller lieferbar.
- Eingebaute Druckdifferenzschalter für Filterüberwachung (nicht 700H EKO 3.0).
- Optional CO<sub>2</sub>, Druck- oder Luftstromfühler.
- RIS 1900H - 5500H EKO 3.0 optional Dach und Ausblashaube lieferbar.
- RIS 3500H EKO 3.0 in drei Teile und RIS 5500H EKO 3.0 in zwei Teile lieferbar.



Les centrales de traitement d'air RIS H EKO 3.0 sont équipées d'un échangeur de chaleur à plaques à flux opposés efficace. Ces centrales de traitement d'air avec la récupération de chaleur sont utilisées pour la ventilation des locaux chauffés.

- Ventilateurs EC économies en énergie et silencieux.
- Échangeur de chaleur à plaques à flux opposés efficace, dont le rendement thermique fait jusqu'à 94%.
- Batterie électrique intégrée et batterie à eau chaude / batterie à détente directe / batterie à eau glacée en option.
- Possibilité d'inverser le flux d'air.
- Réglage de la température de l'air soufflé.
- Clapet de dérivation à servomoteur.
- Protection antigel de l'échangeur.
- Faible niveau de bruit.
- Isolation acoustique des parois – RIS 700 H EKO 3.0 – 30 mm et RIS 1200 - 5500 H EKO 3.0 - 50 mm
- RIS 700H - 5500H EKO 3.0 peuvent être commandées à l'aide des boîtiers de commande Flex, Stouch.
  - Installation facile et rapide.
  - Pré équipement « Plug & play » et carte de contrôle automatique entièrement intégrée.
  - Possibilité de commander le contrôleur SIEMENS Climatix pour le RIS 1900H - 5500H EKO 3.0.
  - Contrôle de la batterie électrique 0-10V.
  - Possibilité de connecter les convertisseurs de pression, de CO<sub>2</sub> ou d'humidité.
  - Auvent et manchon en option pour les RIS 1900H - 5500H EKO 3.0.
  - RIS 3500H EKO 3.0 – est fournie en trois, RIS 5500H EKO 3.0 – en deux sections.



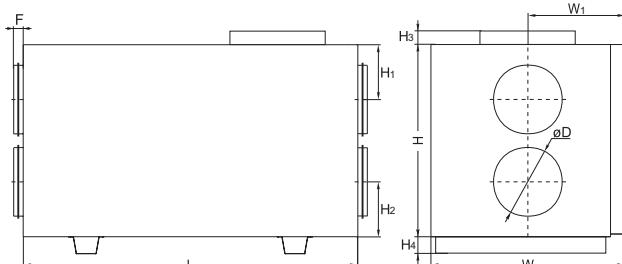
AHU med modstrømsveksler. Ventilationsaggregatet RIS H EKO 3.0 har en særlig effektiv modstrømsvarmeveksler. AHU anvendes til ventilation af huse og andre opvarmede områder.

- Energibesparende, støjsvage EC-ventilatører.
- Virkningsgrad op til 94%.
- Integreret elvarmer eller valgfri vandvarmer / DX varme/køl.
- Regulerbar luftmængde.
- Regulerbar indblæsnings-temperatur.
- Motoriseret by-pass spjæld.
- Anti-frost beskyttelse af varmveksleren.
- Lavt støjniveau.
- Støjdæmpende isolering af kabinetet, RIS 700H EKO 3.0 – 30mm / RIS 1200-5500H EKO 3.0 - 50mm.
- Alle varianter af RIS 700H – 5500H EKO 3.0 kan styres med Flex, Stouch fjernbetjening.
- Nem montering.
- Integreret "plug & play" kontrolsystem.
- Mulighed for Siemens Climatix/REGIN kontrolsystem (RIS 1900H – 5500H EKO 3.0).
- Filter overvågning (ikke 700H EKO 3.0).
- Elektrisk varme-kontrol 0-10V.
- Mulighed for tag og udendørs riste (RIS 1900H – 5500H EKO 3.0).
- RIS 3500H EKO 3.0 leveres som 3 sektioner, RIS 5500H EKO 3.0 leveres som 2 sektioner.

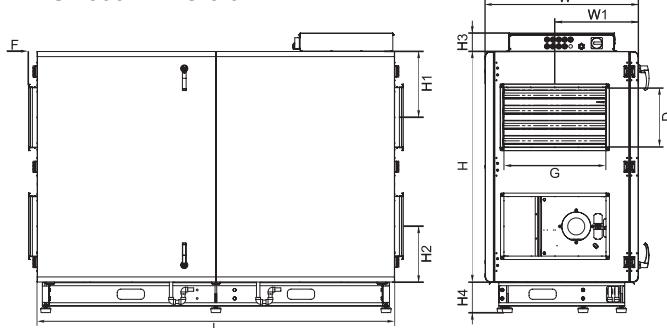
## Accessories

Control panel	Sensor controller	Pressure transmitter	CO2 sensors	Duct humidity sensor	Circular duct silencer	Heating coil	Circular duct water cooler
Flex p. 178	Stouch p. 179	S-1141 p. 181	S-RC02-F2 p. 182	S-KFF-U p. 183	AKS p. 230	AVS p. 192	AVA p. 202

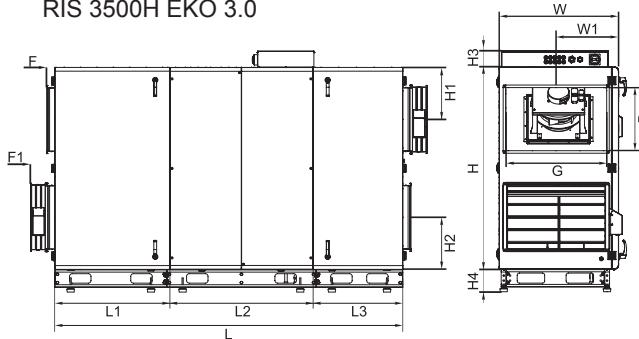
RIS 700H EKO 3.0 - RIS 1200H EKO 3.0  
and RIS 1900H EKO 3.0



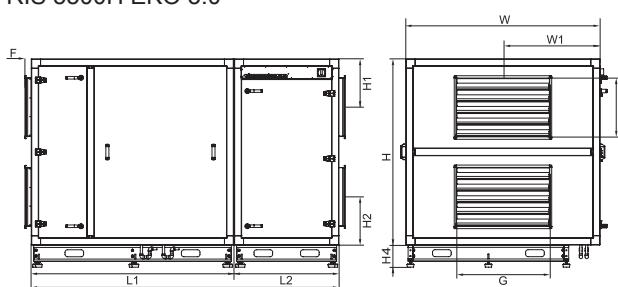
RIS 2500H EKO 3.0



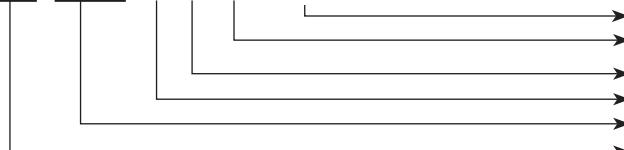
RIS 3500H EKO 3.0



RIS 5500H EKO 3.0



RIS 1200 H W EKO 3.0



- Equipped with new PRV V2.2 control board
- AHU with EC motors and efficient cross - counter flow heat exchanger
- Heater type (E - integrated electrical heater; W - optional water heater)
- Housing type (V - vertical, H - horizontal, P - under - ceiling)
- AHU size according to air flow range m³/h
- AHU with plate heat-exchanger

Type	Dimensions [mm]															
	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	W	W <sub>1</sub>	ØD	G	D	H	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	H <sub>4</sub>	F	F <sub>1</sub>
RIS 700HE/HW EKO 3.0	1200	-	-	-	670	335	250	-	-	780	210	210	65	126	40	-
RIS 1200HE/HW EKO 3.0	1500	-	-	-	760	380	315	-	-	1000	269	269	70	141	40	-
RIS 1900HE/HW EKO 3.0	1800	-	-	-	800	400	400	-	-	1245	331	331	106	141	70	-
RIS 2500HE/HW EKO 3.0	2100	-	-	-	900	490	-	600	350	1355	387	327	108	180	50	-
RIS 3500HE/HW EKO 3.0	2756	909	1132	709	946	494	-	800	500	1600	413	413	129	180	65	192
RIS 5500HE/HW EKO 3.0	2644	1740	900	-	1670	835	-	800	500	1600	415	415	-	180	55	-

## Accessories

Mounting clamp	Shut-off damper	Actuator for dampers	Thermic water valve actuator	Mixing point	2 and 3 way valves	Water heater coil
AP p. 229	SKG p. 226	SP p. 188	SSB p. 184	RMG p. 185	VVP/VXP p. 186	SVS p. 198

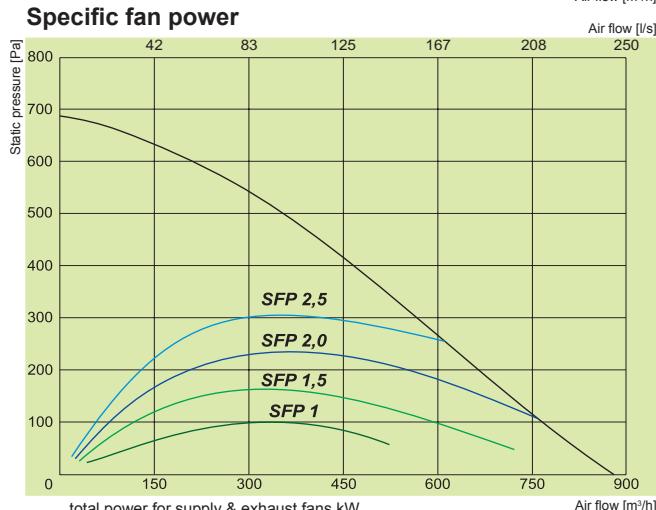
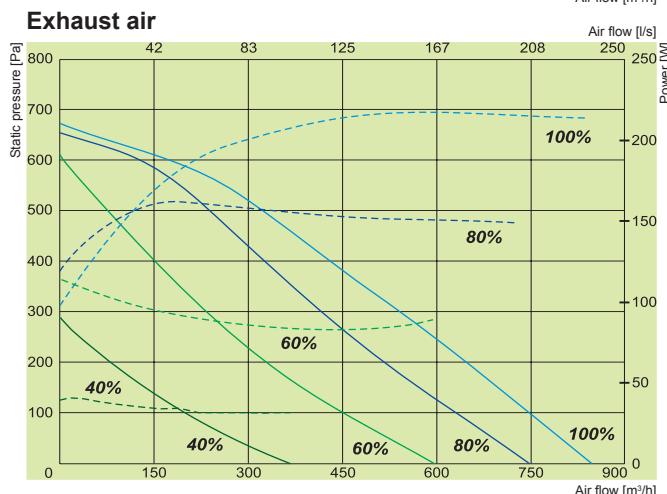
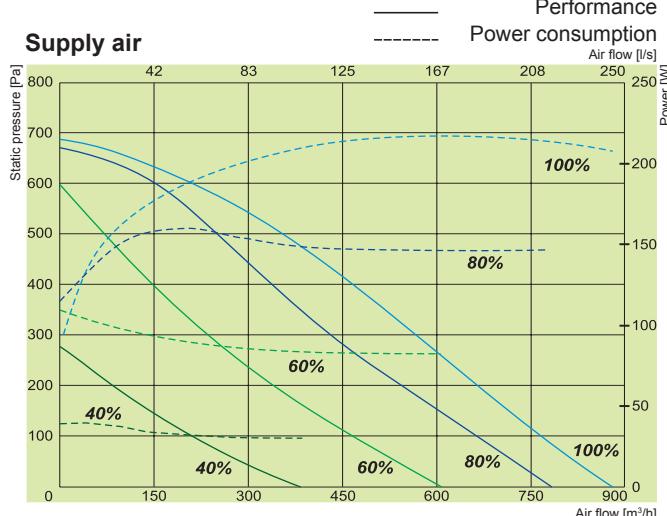
Type	Accessories						
	Flex Stouch	S-1141 S-RC02-F2 S-KFF-U	AKS SKG AP	SKS SVS	AVA	AVS	SP
RIS 700HE EKO 3.0	+	+	250	-	250	250	LM230A-TP
RIS 700HW EKO 3.0	+	+	250	-	250	250	TF230
RIS 1200HE EKO 3.0	+	+	315	-	315	315	LM230A-TP
RIS 1200HW EKO 3.0	+	+	315	-	315	315	LF230
RIS 1900HE EKO 3.0	+	+	400	-	400	400	SM230A-TP
RIS 1900HW EKO 3.0	+	+	400	-	400	400	SF230A
RIS 2500HE EKO 3.0	+	+	-	600x350	-	-	int
RIS 2500HW EKO 3.0	+	+	-	600x350	-	-	int
RIS 3500HE EKO 3.0	+	+	-	800x500	-	-	int
RIS 3500HW EKO 3.0	+	+	-	800x500	-	-	int
RIS 5500HE EKO 3.0	+	+	-	800x500	-	-	int
RIS 5500HW EKO 3.0	+	+	-	800x500	-	-	int

Type	Accessories							
	SSB Heating	SSB Cooling	RMG 80/60°C	RMG 60/40°C	VVP/VXP 80/60°C	VVP/VXP 60/40°C	Comfort Box	Roof Outlet cover
RIS 700HE EKO 3.0	-	81	-	-	-	-	-	-
RIS 700HW EKO 3.0	61	81	3-1,0-4	3-0,63-4	45.10-1,1	45.10-0,63	-	-
RIS 1200HE EKO 3.0	-	81	-	-	-	-	-	-
RIS 1200HW EKO 3.0	61	81	3-0,63-4	3-0,63-4	45.10-0,63	45.10-0,63	-	-
RIS 1900HE EKO 3.0	-	81	Heaters, coolers and RMG/VVP/VXP data online selection program: <a href="http://www.salda.it">www.salda.it</a>					400
RIS 1900HW EKO 3.0	61	81						400
RIS 2500HE EKO 3.0	-	81						600x350
RIS 2500HW EKO 3.0	61	81						600x350
RIS 3500HE EKO 3.0	-	81						800x500
RIS 3500HW EKO 3.0	61	81						800x500
RIS 5500HE EKO 3.0	-	81						800x500
RIS 5500HW EKO 3.0	61	81						800x500

## Accessories

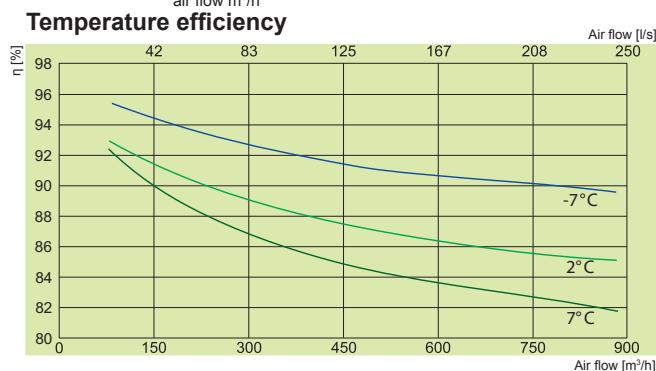


## RIS 700H EKO 3.0



SFP = total power for supply & exhaust fans kW  $\times 3600$

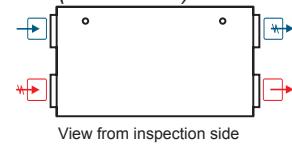
air flow m³/h



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



**RIS 700H EKO 3.0  
(convertible) ver.**



Article No.	Version
GAGRIS1791_0036A	700HE EKO 3.0 Integrated electrical heater.
GAGRIS1972_0037A	700HW EKO 3.0 Optional water heater.

### 700HE / HW EKO 3.0

Water heater (optional) HW ver.	AVS 315
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] 0,21 / 1,6
	fan speed [min⁻¹] 2930
supply	power/current [kW/A] 0,23 / 1,7
	fan speed [min⁻¹] 2930
Thermal efficiency up to*	90%
Motorized by-pass	+
Max power consumption	[kW/A] 1,64 / 8,51 0,44 / 3,30
Control board	PRV V2.2
Filter class	exhaust/supply M5/M5
Housing insulation, mineral wool	[mm] 30
Colour	RAL white 9016
Weight (net, without packing)	[kg] 105
Comply with ERP	2013; 2015
Operation	indoors
Fresh air temperature limits**	°C -5 - +40
Housing protection class	IP 34

\* Calculated according EN 13141-7.

\*\*For temperatures lower than recommended use electrical pre-heater to ensure balanced operation.

700HE 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	73	65	67	65	64	66	63	54
Extract	61	54	55	57	49	46	41	40
Surrounding	56	45	49	54	45	43	40	37

Measured at 760 m³/h, 101 Pa

Temperature efficiency (balanced mass flow) EN 13141-7:  
Extract air = 20°C/60%RH  
Outdoor air = -7°C / 2°C / 7°C

### Certifications

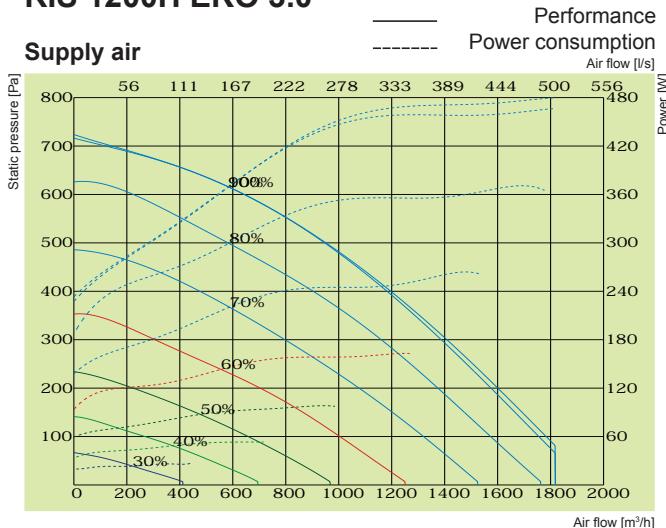
EUROVENT certified counter flow heat exchanger performance



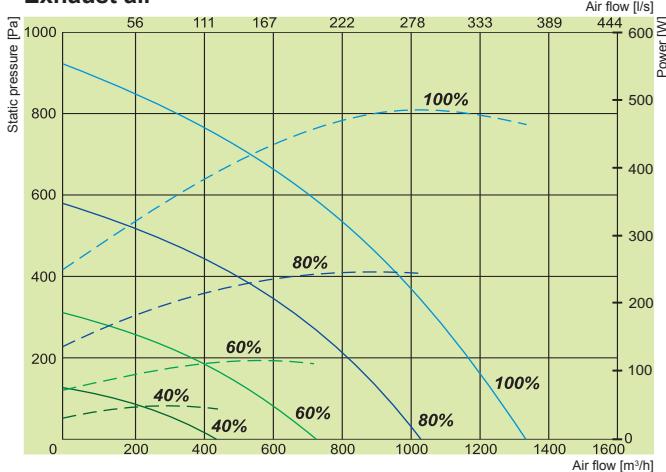
# RIS H EKO

## RIS 1200H EKO 3.0

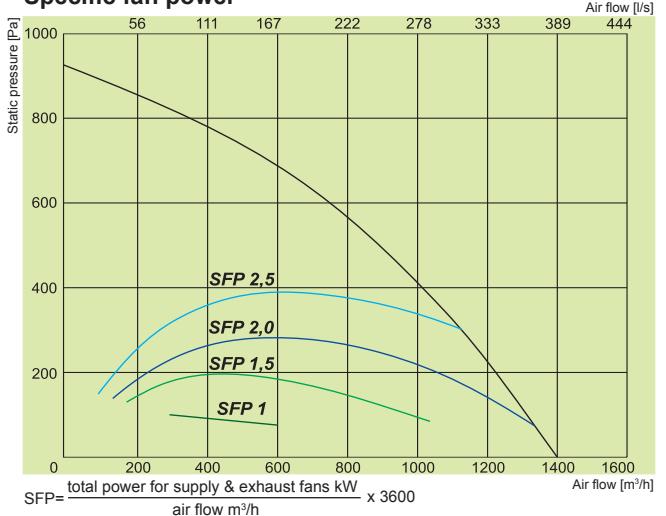
### Supply air



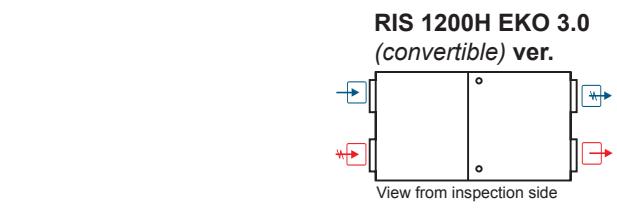
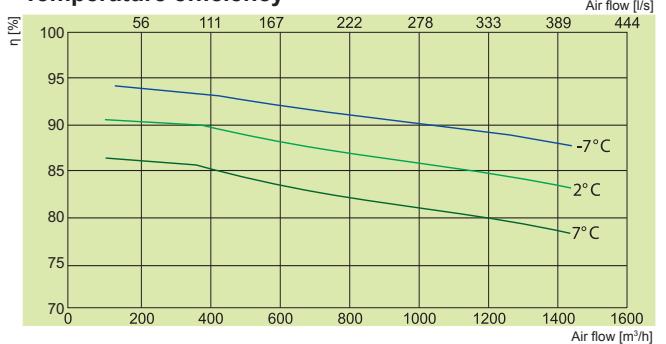
### Exhaust air



### Specific fan power



### Temperature efficiency



Article No. GAGRIS1740\_0006A 1200HE EKO 3.0 Integrated electrical heater.  
GAGRIS1767\_0030A 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]
	[kW] ~1, 230
EC fans	phase/voltage [50Hz/VAC]
exhaust	power/current [kW/A] 0,42 /2,72
	fan speed [min⁻¹] 3400
supply	power/current [kW/A] 0,4 /2,61
	fan speed [min⁻¹] 3400
Thermal efficiency up to*	90%
Motorized by-pass	+
Max power consumption HE/HW	[kW/A] 2,82/14,07 0,82 /5,37
Control board	PRV V2.2
Filter class	exhaust/supply M5/F7
Housing insulation, mineral wool	[mm] 50
Colour	RAL grey 7040
Weight (net, without packing) HE/HW	[kg] 171/173
Comply with ERP	2013; 2015
Operation	indoors/outdoors
Fresh air temperature limits**	°C -5 - +40
Housing protection class	IP 34

\* Calculated according EN 13141-7.

\*\*For temperatures lower than recommended use electrical pre-heater to ensure balanced operation.

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	75	62	65	71	70	65	63	53
Extract	57	51	49	52	51	45	40	32
Surrounding	53	44	43	48	47	43	40	33

Measured at 1271 m³/h, 119 Pa

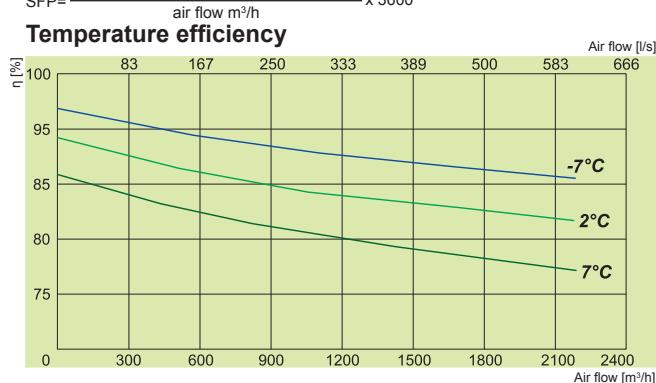
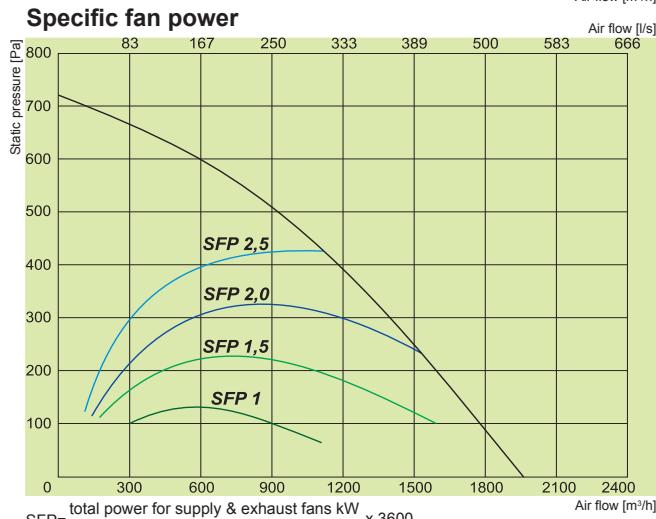
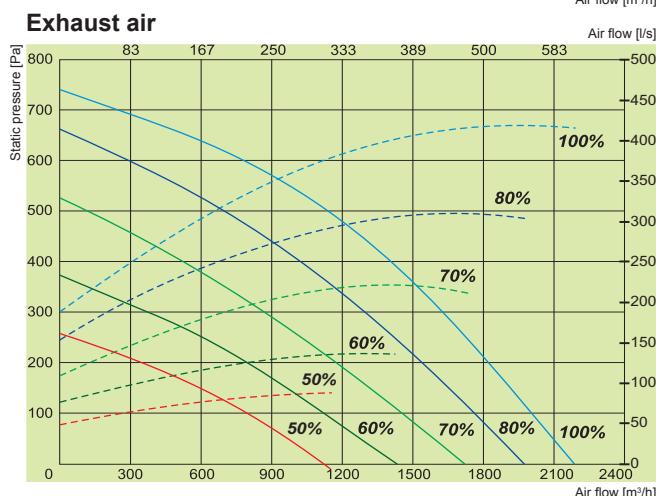
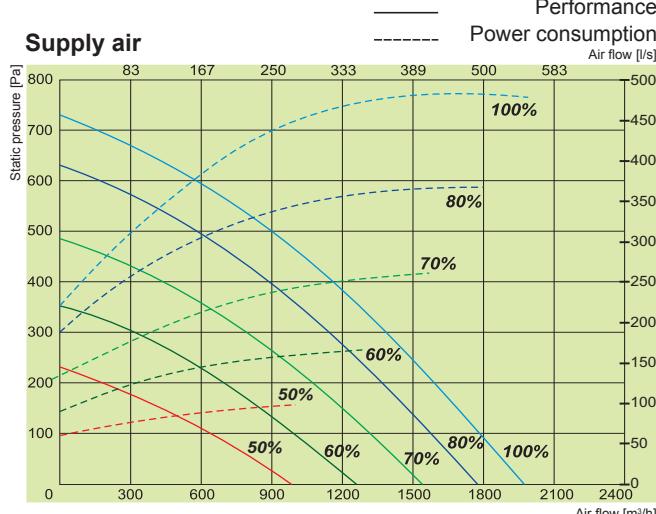
Temperature efficiency (balanced mass flow) EN 13141-7:  
Extract air = 20°C/60%RH  
Outdoor air = -7°C / 2°C / 7°C

### Certifications

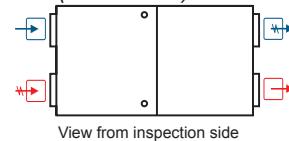
EUROVENT certified counter flow heat exchanger performance



## RIS 1900H EKO 3.0



### RIS 1900HE EKO 3.0 (convertible) ver.



Article No.	Version
GAGRIS1789_0046A	1900HE EKO 3.0 Integrated electrical heater.
GAGRIS1790_0047A	Optional water heater.

### 1900HE / HW EKO 3.0

Water heater (optional) HW ver.	AVS / Comfort Box 400
Electrical heater HE ver.	phase/voltage [50Hz/VAC] ~1, 230 [kW] 3,0
EC fans	phase/voltage [50Hz/VAC] ~1, 230 exhaust power/current [kW/A] 0,505 / 3,2 fan speed [min⁻¹] 2600
	supply power/current [kW/A] 0,48 / 3,1 fan speed [min⁻¹] 2600
Thermal efficiency up to*	90%
Motorized by-pass	+
Max power consumption	[kW/A] 3,99 / 19,32 0,99 / 6,32
Control board	PRV V2.2
Filter class	exhaust/supply M5/F7
Housing insulation, mineral wool	[mm] 50
Colour	RAL grey 7040
Weight (net, without packing)	[kg] 260
Comply with ERP	2013; 2015
Operation	indoors/outdoors
Fresh air temperature limits**	°C -5 - +40
Housing protection class	IP 34

\* Calculated according EN 13141-7.

\*\*For temperatures lower than recommended use electrical pre-heater to ensure balanced operation.

1900H 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	58	71	72	73	71	65	62
Extract	67	49	58	60	59	58	57	44
Surrounding	60	41	51	55	53	52	49	42

Measured at 2016 m³/h, 100 Pa

Temperature efficiency (balanced mass flow) EN 13141-7:  
Extract air = 20°C/60%RH  
Outdoor air = -7°C / 2°C / 7°C

### Certifications

EUROVENT certified counter flow heat exchanger performance



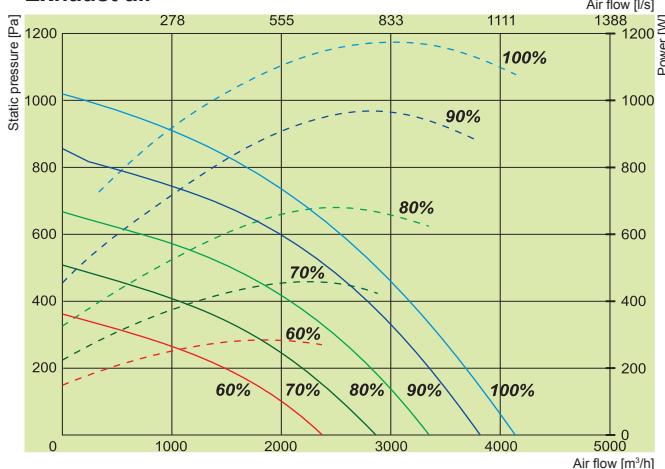


## RIS 3500H EKO 3.0

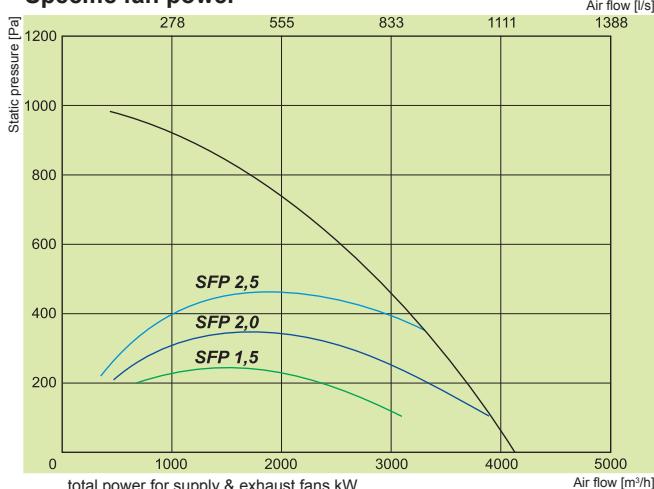
### Supply air



### Exhaust air

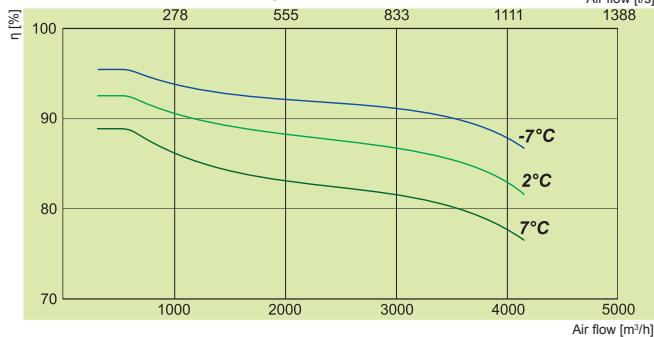


### Specific fan power



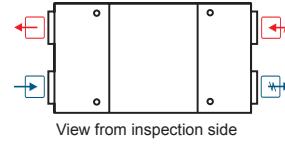
SFP = total power for supply & exhaust fans kW  
air flow m³/h x 3600

### Temperature efficiency



### RIS 3500HL EKO 3.0

Air intake side (L - left)



Article No.	Version
GAGRIS1781_0052B	3500HEL EKO 3.0 Left-hand maintenance version with integrated electrical heater.
GAGRIS1782_0053A	3500HWL EKO 3.0 Left-hand maintenance version prepared for optional water heater.

### 3500HE / HW EKO 3.0

SVS / Comfort Box 800x500

Electrical heater HE ver.	phase/voltage [50Hz/VAC]	~3,400 [kW]
EC fans exhaust	power/current [kW/A]	1,173 / 5,43
	fan speed [min⁻¹]	2390
supply	power/current [kW/A]	1,16 / 5,4
	fan speed [min⁻¹]	2390
Thermal efficiency up to*		90%
Motorized by-pass		+
Max power consumption HE / HW	[kW/A]	8,34 / 19,59 2,34 / 10,95
Control board		PRV V2.2
Filter class	exhaust/supply	M5/F7
Housing insulation, mineral wool	[mm]	50
Colour	RAL	grey 7040
Weight (net, without packing)	[kg]	627
Comply with ERP		2013; 2015
Operation		indoors/outdoors
Fresh air temperature limits**	°C	-5 - +40
Housing protection class	IP	34

\* Calculated according EN 13141-7.

\*\*For temperatures lower than recommended use electrical pre-heater to ensure balanced operation.

3500H 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	86	68	82	78	80	77	70	68
Extract	72	66	66	65	64	58	49	45
Surrounding	69	59	65	62	62	59	52	58

Measured at 3746 m³/h, 181 Pa

Temperature efficiency (balanced mass flow) EN 13141-7:  
Extract air = 20°C/60%RH  
Outdoor air = -7°C / 2°C / 7°C

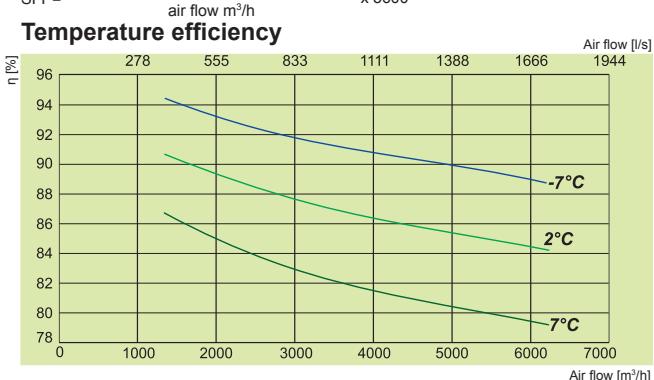
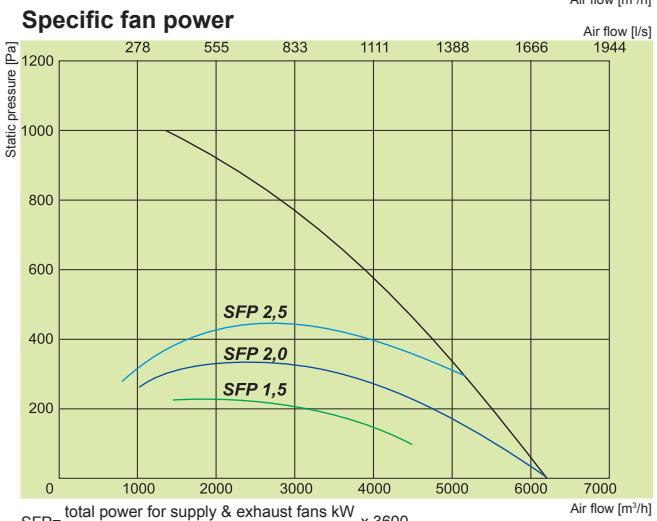
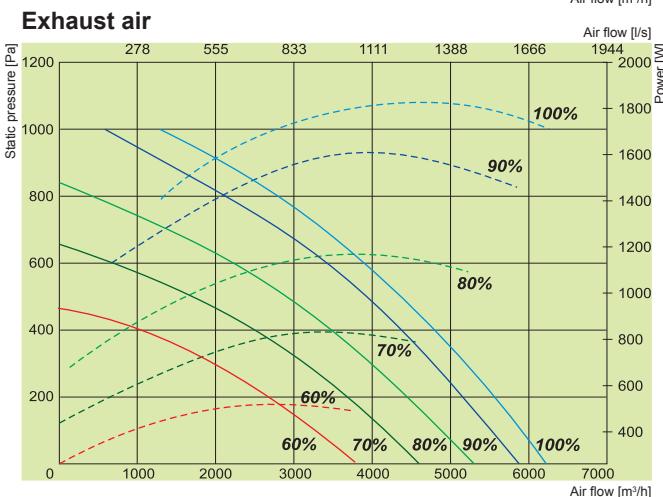
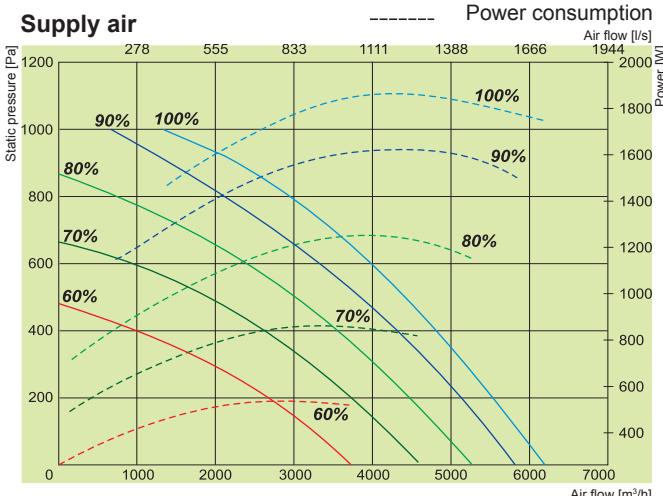
### Certifications

EUROVENT certified counter flow heat exchanger performance



# RIS H EKO

## RIS 5500H EKO 3.0



## RIS 5500HR EKO 3.0

Air intake side (R - right)



View from inspection side

Article No.	Version
GAGRIS1773_0054B	5500HER EKO 3.0 Right-hand maintenance version with integrated electrical heater.
GAGRIS1774_0055B	5500HWR EKO 3.0 Right-hand maintenance version prepared for optional water heater.

## 5500HE / HW EKO 3.0

SVS / Comfort Box 800x500

Electrical heater HE ver.	phase/voltage [50Hz/VAC]	~3, 400
	[kW]	12
EC fans	phase/voltage [50Hz/VAC]	~3, 400
exhaust	power/current [kW/A]	1,84/2,88
	fan speed [min⁻¹]	2180
supply	power/current [kW/A]	1,87/3,06
	fan speed [min⁻¹]	2180

Thermal efficiency up to\* 90%

Motorized by-pass +

Max power consumption HE/HW [kW/A] 15,71/23,38 3,72/6,04

Control board PRV V2.2

Filter class M5/F7

Housing insulation, mineral wool [mm] 70

Colour RAL grey 7040

Weight (net, without packing) HE / HW [kg] 788 768

Comply with ERP 2013; 2015

Operation indoors/outdoors

Fresh air temperature limits\*\* °C -5 - +40

Housing protection class IP 34

\* Calculated according EN 13141-7.

\*\*For temperatures lower than recommended use electrical pre-heater to ensure balanced operation.

5500HW 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	88	65	82	81	83	81	78	69
Extract	75	64	72	70	66	60	55	50
Surrounding	77	54	71	72	71	68	65	58

Measured at 5819 m³/h, 120 Pa

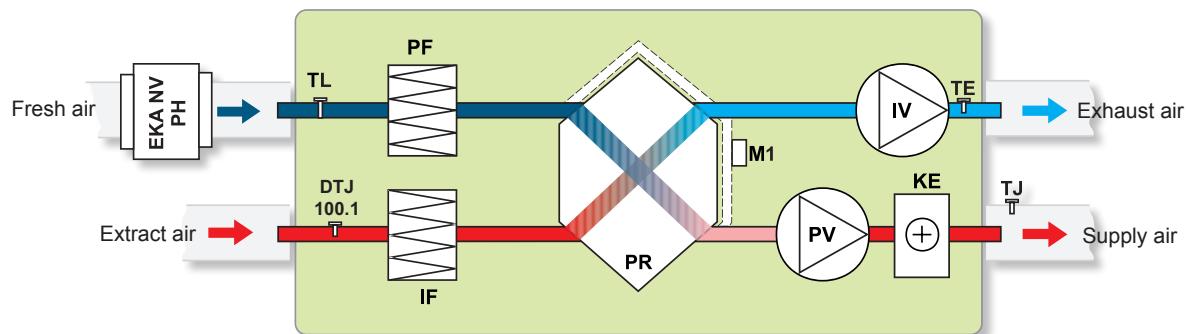
Temperature efficiency (balanced mass flow) EN 13141-7:  
Extract air = 20°C/60%RH  
Outdoor air = -7°C / 2°C / 7°C

## Certifications

EUROVENT certified counter flow heat exchanger performance



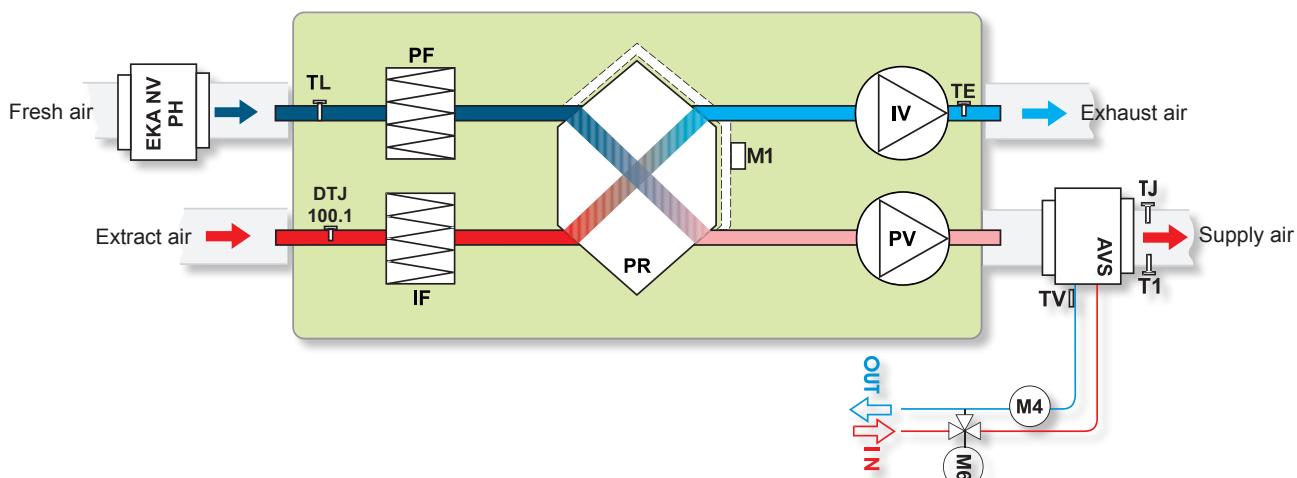
## RIS 700HE EKO 3.0 version with electrical heater



**IV** - exhaust air fan  
**PV** - supply air fan  
**PR** - plate heat exchanger  
**KE** - electrical heater  
**PF** - filter for supply air (class M5)  
**IF** - filter for extract air (class M5)

**TJ** - temperature sensor for supply air  
**TL** - temperature sensor for fresh air  
**TE** - temperature sensor for exhaust air  
**M1** - actuator of by-pass damper  
**DTJ 100.1** - humidity + temperature sensor  
**EKA NV PH** - optional fresh air pre-heater

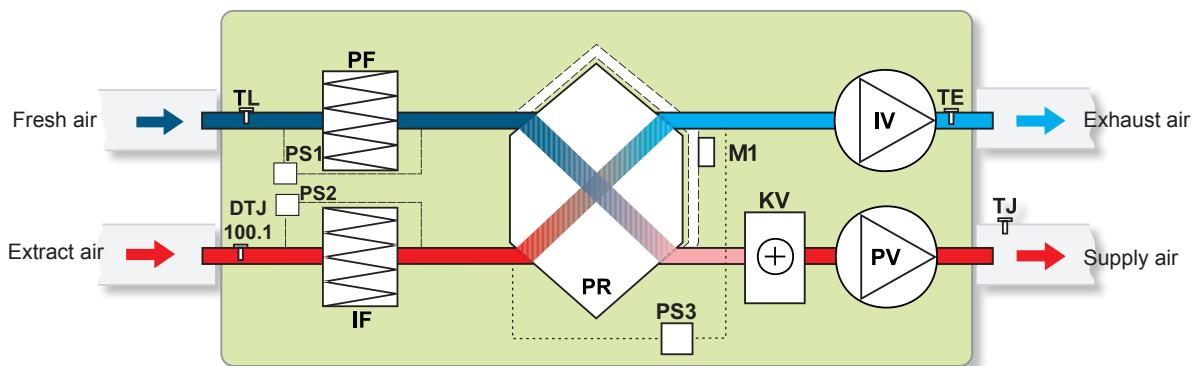
## RIS 700HW EKO 3.0 version with optional water heater



**AVS** - optionally supplied water heater  
**IV** - exhaust air fan  
**PV** - supply air fan  
**PR** - plate heat exchanger  
**PF** - filter for supply air (class M5)  
**IF** - filter for extract air (class M5)  
**TJ** - temperature sensor for supply air  
**TL** - temperature sensor for fresh air  
**TE** - temperature sensor for exhaust air

**TV** - antifrost sensor  
**T1** - antifrost thermostat  
**DTJ 100.1** - humidity + temperature sensor  
**M1** - actuator of by-pass damper  
**M6** - optionally supplied mixing valve and motor  
**M4** - water heater circulator pump  
**EKA NV PH** - optional fresh air pre-heater

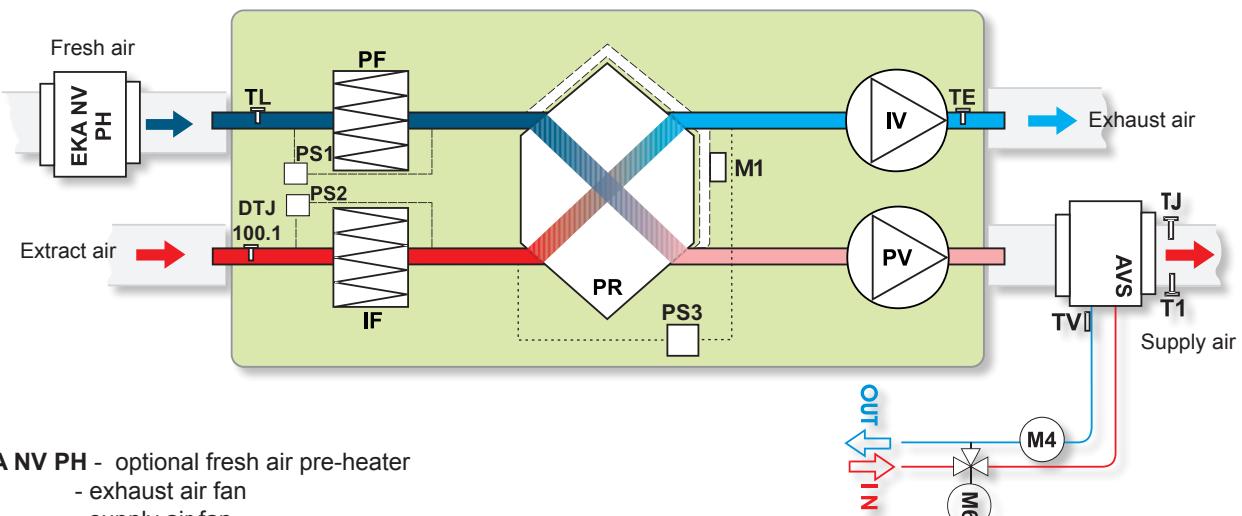
## RIS 1200HE EKO 3.0 version with electrical heater



**IV** - exhaust air fan  
**PV** - supply air fan  
**PR** - plate heat exchanger  
**KE** - electrical heater  
**TE** - temperature sensor for exhaust air  
**PF** - filter for supply air (class F7)  
**IF** - filter for extract air (class M5)

**TJ** - temperature sensor for supply air  
**TL** - temperature sensor for fresh air  
**M1** - actuator of by-pass damper  
**PS1** - supply air differential pressure switch  
**PS2** - extract air differential pressure switch  
**PS3** - heat exchanger antifrost pressure switch  
**DTJ 100.1** - humidity + temperature sensor

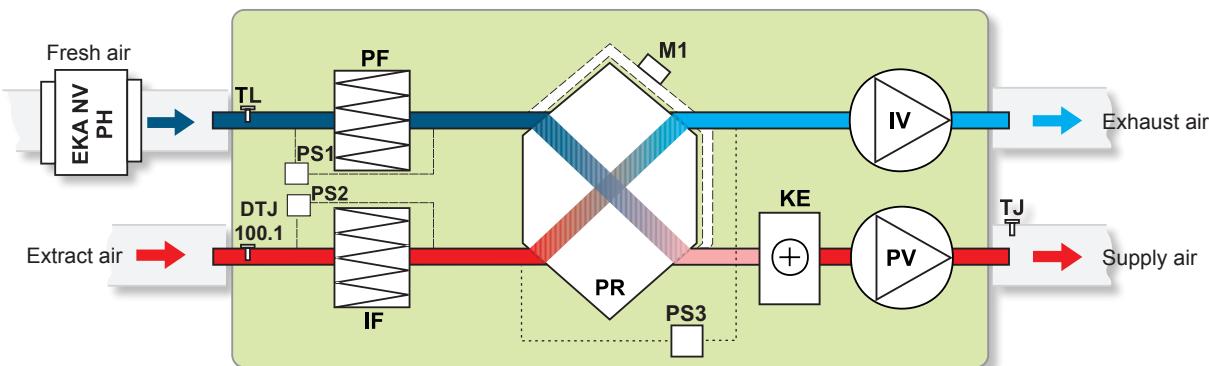
## RIS 1200HW EKO 3.0 version with water heater



**EKA NV PH** - optional fresh air pre-heater  
**IV** - exhaust air fan  
**PV** - supply air fan  
**PR** - plate heat exchanger  
**AVS** - water heater  
**PF** - filter for supply air (class M5)  
**IF** - filter for extract air (class M5)  
**TJ** - temperature sensor for supply air  
**M6** - optionally supplied mixing valve and motor  
**M4** - water heater circulator pump  
**TE** - temperature sensor for extract air

**TL** - temperature sensor for fresh air  
**TV** - antifrost sensor  
**T1** - antifrost thermostat  
**M1** - actuator of by-pass damper  
**PS1** - supply air differential pressure switch  
**PS2** - extract air differential pressure switch  
**PS3** - heat exchanger antifrost pressure switch  
**DTJ 100.1** - humidity + temperature sensor

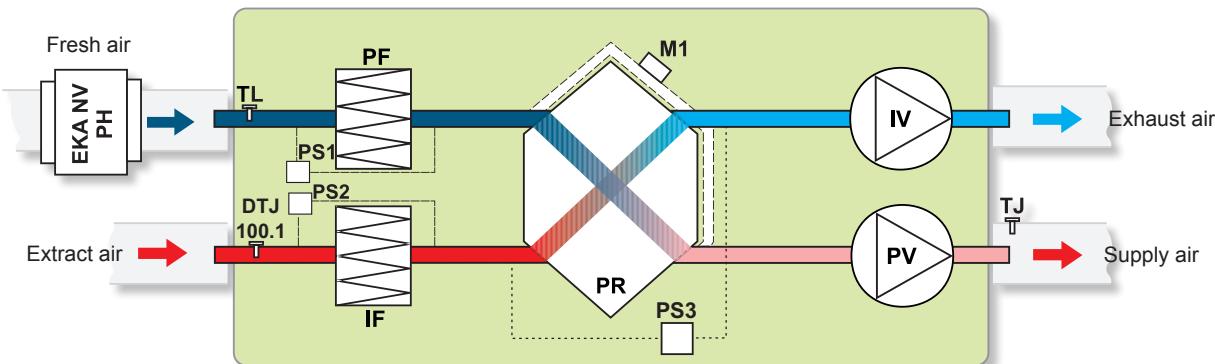
## RIS 1900HE EKO 3.0 version with electrical heater



**EKA NV PH** - optional fresh air pre-heater  
**IV** - exhaust air fan  
**PV** - supply air fan  
**PR** - plate heat exchanger  
**KE** - electrical heater  
**PF** - filter for supply air (class F7)  
**IF** - filter for extract air (class M5)

**TL** - temperature sensor for fresh air  
**TJ** - temperature sensor for supply air  
**M1** - actuator of by-pass damper  
**PS1** - supply air differential pressure switch  
**PS2** - extract air differential pressure switch  
**PS3** - heat exchanger antifrost pressure switch  
**DTJ 100.1** - humidity + temperature sensor

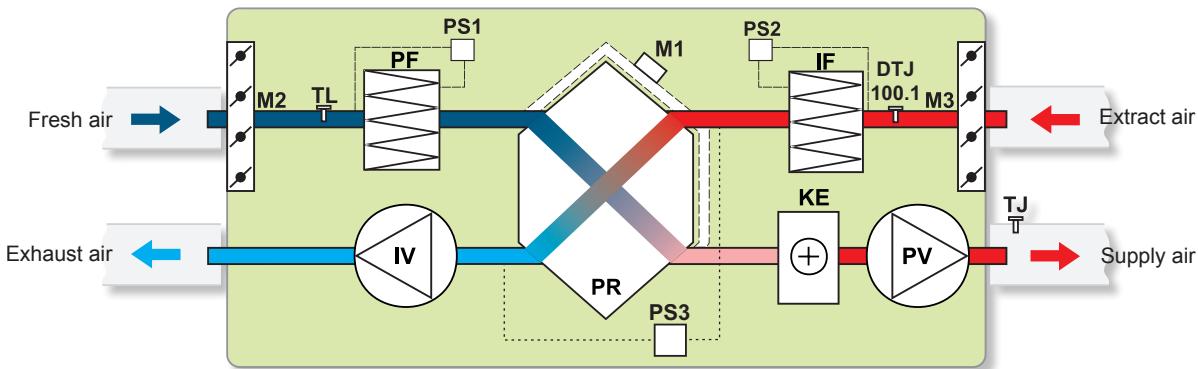
## RIS 1900HW EKO 3.0 version with optional water heater



**EKA NV PH** - optional fresh air pre-heater  
**IV** - exhaust air fan  
**PV** - supply air fan  
**PR** - plate heat exchanger  
**PF** - filter for supply air (class F7)  
**IF** - filter for extract air (class M5)

**TL** - temperature sensor for fresh air  
**TJ** - temperature sensor for supply air  
**M1** - actuator of by-pass damper  
**PS1** - supply air differential pressure switch  
**PS2** - extract air differential pressure switch  
**PS3** - heat exchanger antifrost pressure switch  
**DTJ 100.1** - humidity + temperature sensor

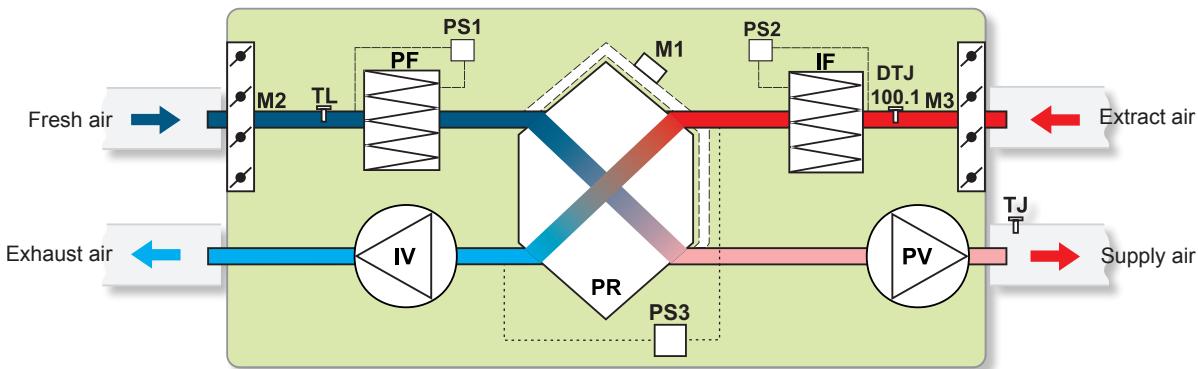
## RIS 2500HE EKO 3.0 version with electrical heater



**IV** - exhaust air fan  
**PV** - supply air fan  
**PR** - plate heat exchanger  
**KE** - electrical heater  
**PF** - filter for supply air (class F7)  
**IF** - filter for extract air (class M5)  
**DTJ 100.1** - humidity + temperature sensor

**TL** - temperature sensor for fresh air  
**TJ** - temperature sensor for supply air  
**M1** - actuator of by-pass damper  
**M2** - actuator of fresh air damper  
**M3** - actuator of extract air damper  
**PS1** - supply air differential pressure switch  
**PS2** - extract air differential pressure switch  
**PS3** - heat exchanger antifrost pressure switch

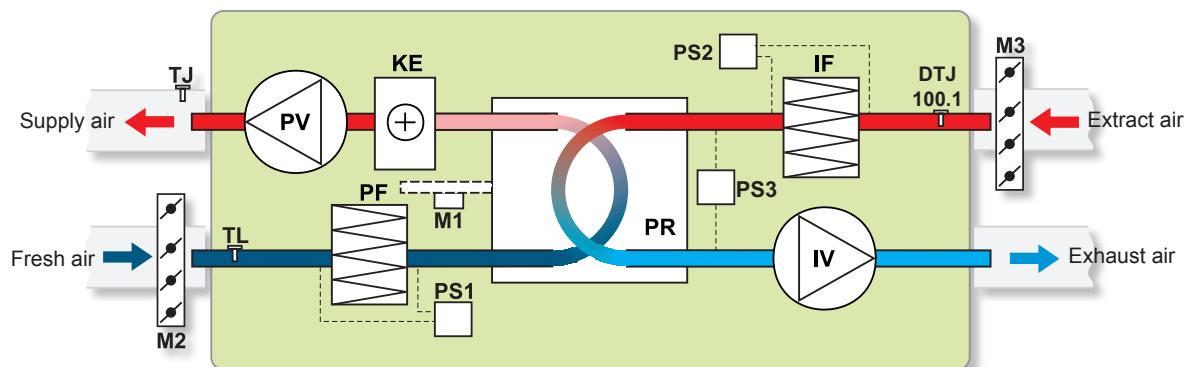
## RIS 2500HW EKO 3.0 version with optional water heater



**IV** - exhaust air fan  
**PV** - supply air fan  
**PF** - filter for supply air (class F7)  
**IF** - filter for extract air (class M5)  
**PR** - plate heat exchanger  
**DTJ 100.1** - humidity + temperature sensor  
**TL** - temperature sensor for fresh air

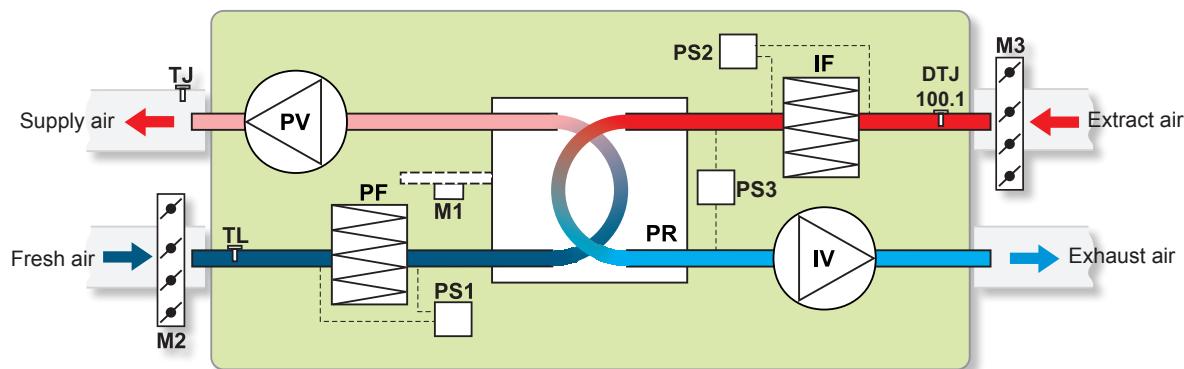
**TJ** - temperature sensor for supply air  
**M1** - actuator of by-pass damper  
**M2** - actuator of fresh air damper  
**M3** - actuator of extract air damper  
**PS1** - supply air differential pressure switch  
**PS2** - extract air differential pressure switch  
**PS3** - heat exchanger antifrost pressure switch

## RIS 3500HE EKO 3.0 version with electrical heater



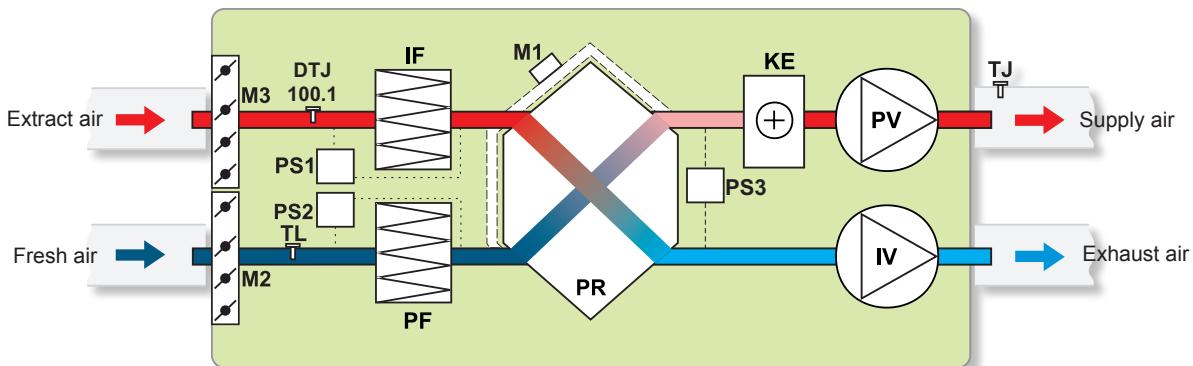
IV	- exhaust air fan	TJ	- temperature sensor for supply air
PV	- supply air fan	M1	- actuator of by-pass damper
PR	- plate heat exchanger	M2	- actuator of fresh air damper
KE	- electrical heater	M3	- actuator of extract air damper
PF	- filter for fresh air (class F7)	PS1	- supply air differential pressure switch
IF	- filter for extract air (class M5)	PS2	- extract air differential pressure switch
DTJ 100.1	- humidity + temperature sensor	PS3	- heat exchanger antifrost pressure switch
TL	- temperature sensor for fresh air		

## RIS 3500HW EKO 3.0 version with optional water heater



IV	- exhaust air fan	TJ	- temperature sensor for supply air
PV	- supply air fan	M1	- actuator of by-pass damper
PR	- plate heat exchanger	M2	- actuator of fresh air damper
PF	- filter for supply air (class F7)	M3	- actuator of extract air damper
IF	- filter for extract air (class M5)	PS1	- supply air differential pressure switch
DTJ 100.1	- humidity + temperature sensor	PS2	- extract air differential pressure switch
TL	- temperature sensor for fresh air	PS3	- heat exchanger antifrost pressure switch

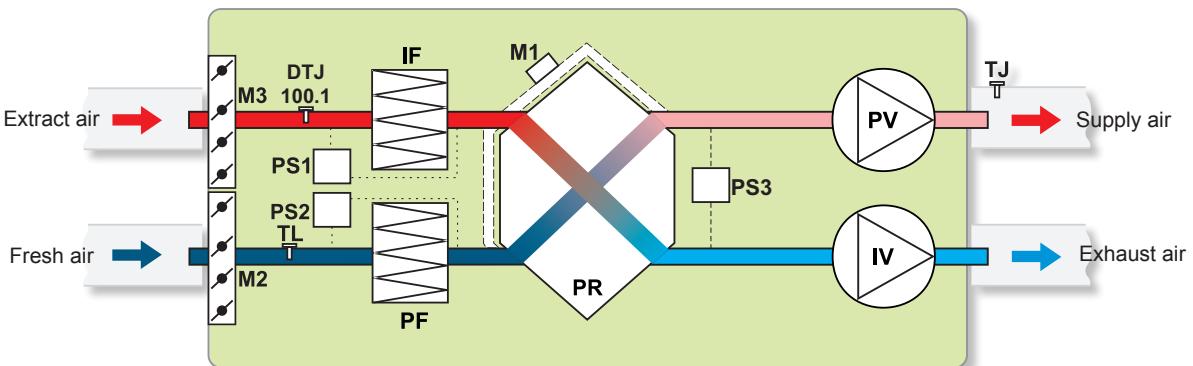
## RIS 5500HE EKO 3.0 version with electrical heater



**IV** - exhaust air fan  
**PV** - supply air fan  
**PR** - plate heat exchanger  
**KE** - electrical heater  
**PF** - filter for supply air (class F7)  
**IF** - filter for extract air (class M5)  
**DTJ 100.1** - humidity + temperature sensor  
**TL** - temperature sensor for fresh air

**TJ** - temperature sensor for supply air  
**M1** - actuator of by-pass damper  
**M2** - actuator of fresh air damper  
**M3** - actuator of extract air damper  
**PS1** - supply air differential pressure switch  
**PS2** - extract air differential pressure switch  
**PS3** - heat exchanger antifrost pressure switch

## RIS 5500HW EKO 3.0 version with optional water heater



**IV** - exhaust air fan  
**PV** - supply air fan  
**PR** - plate heat exchanger  
**PF** - filter for supply air (class F7)  
**IF** - filter for extract air (class M5)  
**DTJ 100.1** - humidity + temperature sensor  
**TL** - temperature sensor for fresh air

**TJ** - temperature sensor for supply air  
**M1** - actuator of by-pass damper  
**M2** - actuator of fresh air damper  
**M3** - actuator of extract air damper  
**PS1** - supply air differential pressure switch  
**PS2** - extract air differential pressure switch  
**PS3** - heat exchanger antifrost pressure switch