

# RIRS H EKO



**NEW!**



AHU with heat recovery  
Rekuperatoriniai įrenginiai

Centrale wentylacyjne z odzyskiem ciepła

Вентиляционные агрегаты с рекуперацией тепла



Air handling units RIRS H EKO have high efficiency rotor heat exchanger. AHU is used for ventilation of houses and other heated areas.

- Energy saving and low noise EC fans.
- Efficiency of rotor heat exchanger up to 80%.
- Integrated electrical heater optional water heating/cooling.
- Electrical heater control 0 - 10V (RIRS 1200 – 5500 EKO 2.0).
- Controlled air flow.
- Supply air temperature control.
- Convertible inspection side.
- RIRS H EKO versions can be controlled with UNI, PRO and TPC.
- Acoustic insulation of the walls – 50mm.
- Housing: powder coated painting RAL 7040.
- Low noise level.
- Easy mounting.
- Full integrated plug & play control system.
- Integrated pressure switch for filter pollution (RIRS 400 - 5500 EKO 2.0).
- Optional CO<sub>2</sub> pressure or airflow transmitter (RIRS 400 – 5500 V EKO).
- RIRS 1200 – 5500 H EKO optional roof and outlet cover.
- RIRS 2500 – 5500 H EKO – can be supplied in three sections.
- RIRS 2500 – 5500 H EKO integrated motorized dampers for fresh and exhaust air.



Urządzenia wentylacyjne RIS H EKO wyposażone w wydajny wirnikowy wymiennik ciepła. Rekuperatory przeznaczone są do wentylacji ogrzewanych pomieszczeń.

- Energooszczędne i cicho pracujące wentylatory EC.
- Wydajny wirnikowy wymiennik ciepła, zwracający do 80% ciepła.
- Zintegrowany grzejnik elektryczny i opcjonalny kanałowy wodny grzejnik/schładzacz.
- Sterowanie grzejnikiem elektrycznym 0-10V (RIRS 1200 – 5500 EKO).
- Zmienny strumień powietrza.
- Sterowanie temperatury dostarczanego powietrza.
- Zmienne strony obsługi.
- Można sterować za pomocą pilotów UNI, PRO i TPC.
- Izolacja przeciwaślasowa ścianek – 50mm.
- Obudowa malowana metodą proszkową RAL 7040.
- Niski poziom hałasu.
- Szybki i łatwy montaż.
- Przygotowanie „Plug & play” i całkowicie zintegrowana automatyka sterowania.
- Zintegrowany miernik zanieczyszczenia filtrów.
- Opcjonalnie przetwornik CO<sub>2</sub>, ciśnienia lub wilgotności.
- Opcjonalnie zamawiany okap i króciec (RIRS 1200 – 5500 EKO).
- RIRS 2500 - 5500H EKO – dostarczany w trzech sekcjach.
- RIRS 2500 - 5500H EKO – zintegrowane zasuwki dostarczanego i usuwanego powietrza z silnikiem.



Védinimo įrenginiai RIS H EKO pagaminti su efektyviu rotoriniu šilumokaičiu. Rekuperatoriai montuojami vėdinti šildomas patalpas.









- Energiją taupantys ir tyliai dirbantys EC ventiliatoriai.
- Efektyvus rotorinis šilumokaitis, kurio grąžinama šiluma iki 80%.
- Integruotas elektrinis šildytuvas ir papildomai komplektuojamas kanalinis vandenis šildytuvas/aušintuvas.
- Elektrinio šildytuvo valdymas 0-10V (RIRS 1200 – 5500 EKO).
- Keičiamas oro srautas.
- Tiekiamo oro temperatūros valdymas.
- Keičiamos aptamavimo pusės
- Galima valdyti su UNI, PRO and TPC pulteliais.
- Sienulių triukšmo izoliacija – 50mm.
- Mitteliniui būdu dažytas korpusas RAL 7040
- Žemas triukšmo lygis.
- Greitas ir lengvas montavimas.
- „Plug & play“ paruošimas ir pilnai integruota valdymo automatyka.
- Integruotas filtrų užterštumo matuoklis.
- Papildomai komplektuojamas CO<sub>2</sub>, slėgio ar drėgmės keitiklis.
- Papildomai užsakomas stogas ir atvamzdis (RIRS 1200 – 5500 EKO).
- RIRS 2500 - 5500H EKO – tiekiamas trijomis sekcijomis.
- RIRS 2500 - 5500H EKO – integruotos motorizuotos tiekiamo ir šalinamo oro sklendės.



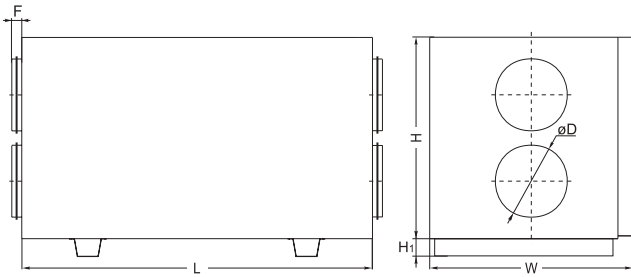
Установки с рекуперацией тепла RIRS EKO очищают, нагревают и подают свежий воздух. Установки RIS EKO извлекают тепло у выходящего воздуха и передают его поступающему воздуху.

- Экономные и бесшумные вентиляторы EC.
- Пластинчатый теплообменник, эффективность теплоотдачи до 80 %.
- Встроенный электрический нагреватель или опция водяных охладителей/нагревателей.
- Интегрирован электрический подогреватель 0-10 V (RIRS 1200 - 5500 EKO 2.0)
- Регулируемый воздушный поток.
- Регулируемая температура приточного воздуха.
- Меняемая сторона обслуживания.
- RIRS H EKO версии с интегрированными возможностями управления с помощью пультов UNI, PRO и TPC.
- Акустическая изоляция стенок -50мм.
- Корпус: окрашенный RAL 7040.
- Низкий уровень шума.
- Легко монтируются.
- Интегрированная полная система управления агрегата "plug & play".
- Установлен датчик давления для фильтра загрязнения в RIRS 400 - 5500 EKO.
- Опциональная контроль: CO<sub>2</sub>, давление в системе и трансмитер приточного воздуха для RIRS 400 - 5500 H EKO.
- RIRS 1200H – 5500H EKO опция козырька и крышка розетки.
- RIRS 2500H – 5500H EKO разделяется на 3 секции.
- RIRS 2500H – 5500H EKO установлены моторизованы клапона для приточного и вытяжного воздуха.

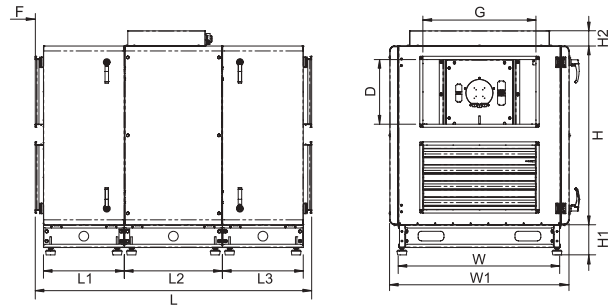
## Accessories

Remote controller	Programmable controller	Programmable controller	Pressure transmitter	CO2 transmitter	Duct humidity sensor	Circular duct silencer	Shuft-off damper
							
UNI p. 190	PRO p. 189	TPC p. 188	1141 p. 191	RC02-F2 p. 192	KFF-U p. 193	AKS p. 236	SKG p. 232

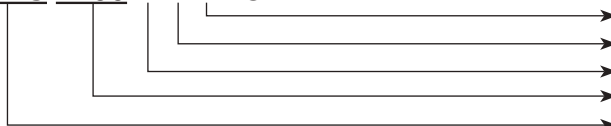
RIRS 400H EKO - 1900H EKO 2.0



RIRS 2500H - 5500K EKO



RIRS 1200 H E EKO



- Unit with EC fans
- Heater type (E - electrical; W - water)
- Housing type (H - horizontal)
- Air flow m<sup>3</sup>/h
- AHU with rotor heat-exchanger

Type	Dimensions [mm]					
	L	W	H	øD	F	H <sub>1</sub>
RIRS 400HE/HW EKO 2.0	1000	560	610	200	30	40
RIRS 700HE/HW EKO 2.0	1100	653	700	250	40	40
RIRS 1200HE/HW EKO 2.0	1350	853	900	315	40	70
RIRS 1900HE/HW EKO 2.0	1350	853	900	315	40	70
RIRS 2500HE/HW EKO	1608	1110	1105	700x400	50	140
RIRS 3500HE/HW EKO	2005	1205	1433	700x400	50	140
RIRS 5500HE/HW EKO	1908	1394	1485	800x500	50	140

Type	Accessories														
	UNI PRO TPC	1141 RC02-F2 KFF-U	AKS SKG AP	AVS AVA	SKS	SVS	Comfort Box	SP	TJP 10P CO4C***	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 2.0	+	+	160	-	-	-	-	*	-	-	-	-	-	-	-
RIRS 400HW EKO 2.0	+	+	160	160	-	-	-	**	int	61	81	3-0,63-4	3-0,63-4	45.10-0,63	45.10-0,63
RIRS 700HE EKO 2.0	+	+	250	-	-	-	-	*	-	-	-	-	-	-	-
RIRS 700HW EKO 2.0	+	+	250	250	-	-	-	**	int	61	81	3-1,0-4	3-0,63-4	45.10-1,0	45.10-0,63
RIRS 1200HE EKO 2.0	+	+	315	-	-	-	-	*	-	-	-	-	-	-	-
RIRS 1200HW EKO 2.0	+	+	315	315	-	-	-	**	int	61	81	3-1,0-4	3-0,63-4	45.10-1,0	45.10-0,63
RIRS 1900HE EKO 2.0	+	+	315	-	-	-	-	*	-	-	-	-	-	-	-
RIRS 1900HW EKO 2.0	+	+	315	315	-	-	-	**	int	61	81	3-1,0-4	3-0,63-4	45.10-1,0	45.10-0,63
RIRS 2500HE EKO	+	+	-	-	700x400	-	600x350	int	-	-	-	-	-	-	-
RIRS 2500HW EKO	+	+	-	-	700x400	700x400	600x350	int	+	61	81	+	+	+	+
RIRS 3500HE EKO	+	+	-	-	700x400	-	800x500	int	-	-	-	-	-	-	-
RIRS 3500HW EKO	+	+	-	-	700x400	700x400	800x500	int	+	61	81	+	+	+	+
RIRS 5500HE EKO	+	+	-	-	800x500	-	800x500	int	-	-	-	-	-	-	-
RIRS 5500HW EKO	+	+	-	-	800x500	700x400	800x500	int	+	61	81	+	+	+	+

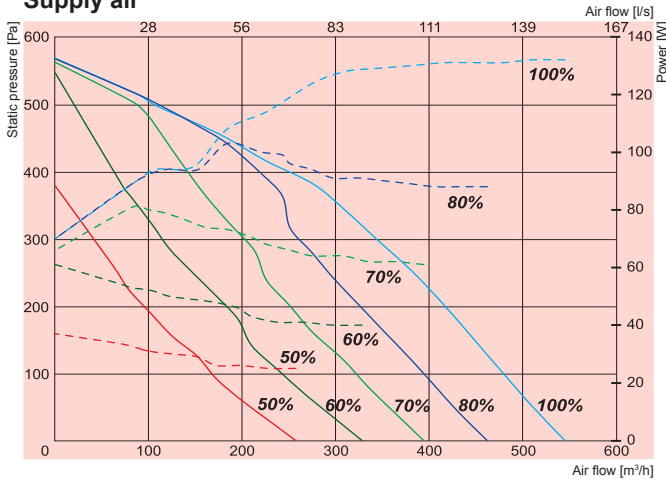
\* - LM230A-TP for the fresh air dampers  
 \*\* - NF230A  
 \*\*\* - anti-frost thermostat  
 int - already integrated into the unit

Accessories

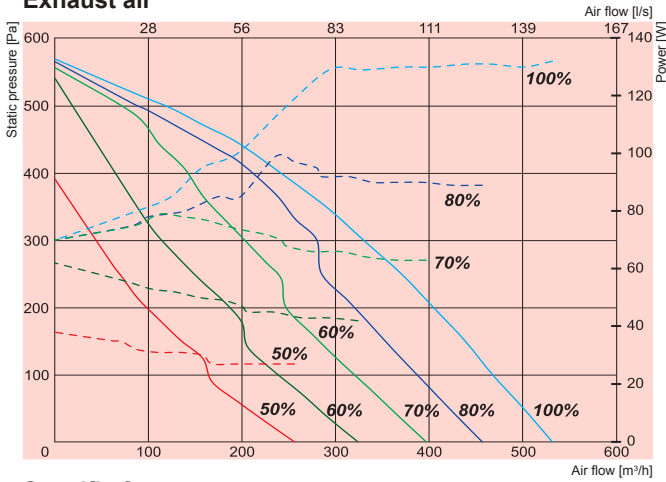


# RIRS H EKO

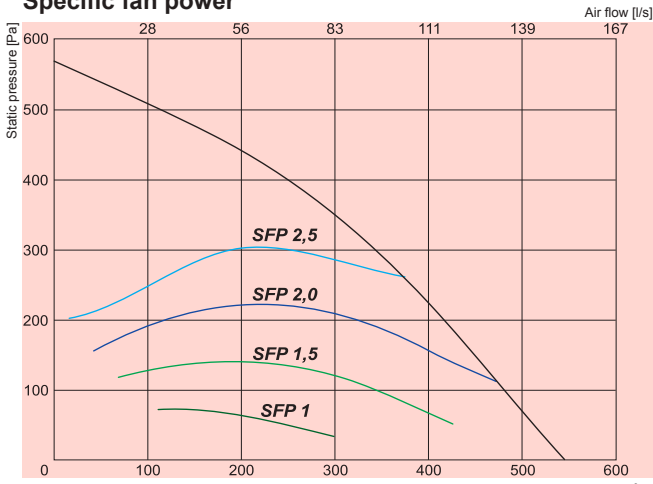
## Supply air



## Exhaust air

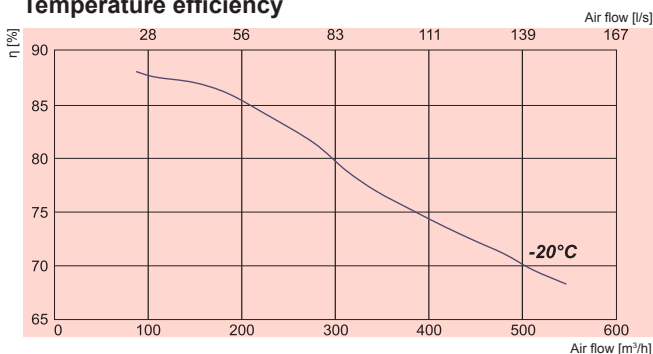


## Specific fan power



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

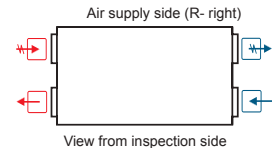
## Temperature efficiency



**NEW!**

**RIRS 400HE EKO 2.0**  
Performance  
Power consumption

### RIRS 400HE EKO 2.0



Exhaust air    Extract air    Fresh air    Supply air

### 400HE EKO 2.0

Heater	-phase/voltage [50Hz/VAC]	~1, 230
	-power consumption [kW]	1,2
EC Fans	-phase/voltage [50Hz/VAC]	~1, 230
exhaust	-power/current [kW/A]	0,132/1,16
	-fan speed [min <sup>-1</sup> ]	3490
supply	-power/current [kW/A]	0,132/1,2
	-fan speed [min <sup>-1</sup> ]	3490
Motor protection class		IP-44
Thermal efficiency		75%
Max power consumption	[kW/A]	1,47/7,66
Automatic control		integrated
Filter class	-exhaust	F5
	supply	F7
Thermal insulation	[mm]	50
Weight	[kg]	70,0
Comply with ERP 2013		+

Air flow temperature range from -20°C to +40°C  
Designed for operation indoors only

400HE EKO 2.0	Lwa total, dB(A)	LWA, 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 445 m³/h, 124 Pa

Extract air = 20°C/60% RH - Outdoor air = -7°C/90% RH  
Balance between supply air/exhaust air = 1.0

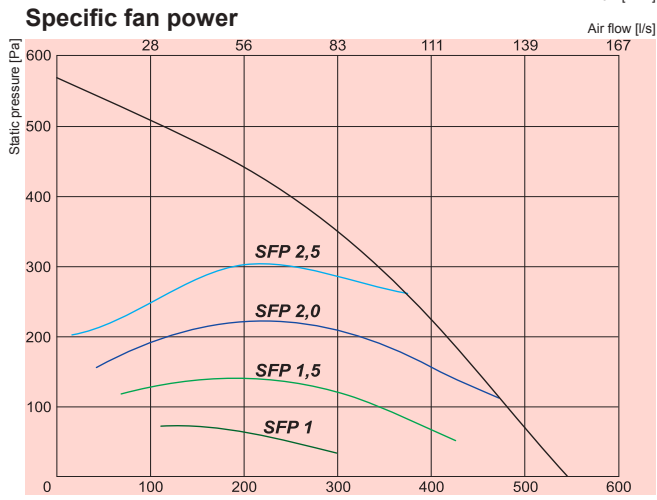
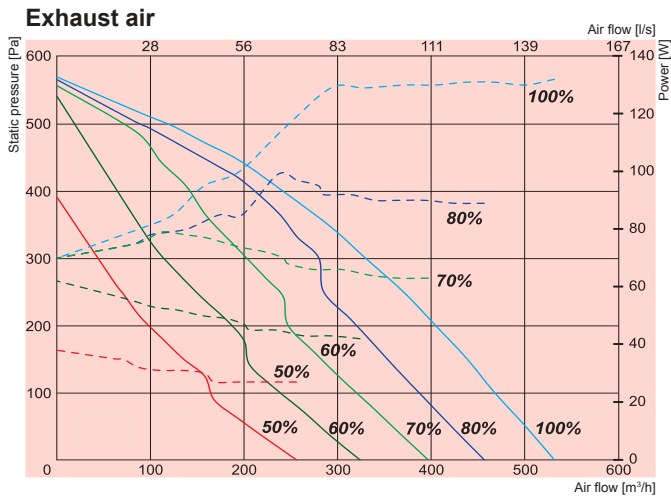
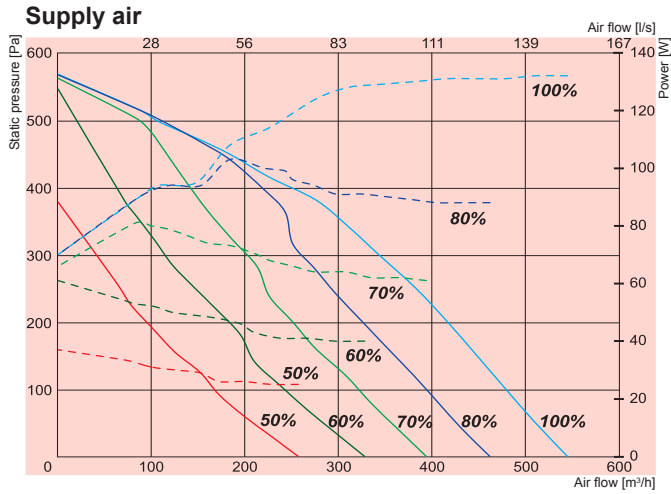
Temperature efficiency calculated according EN 308.

# RIRS H EKO

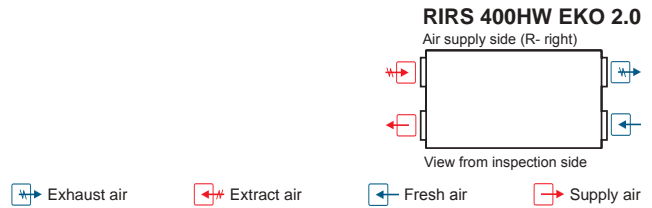
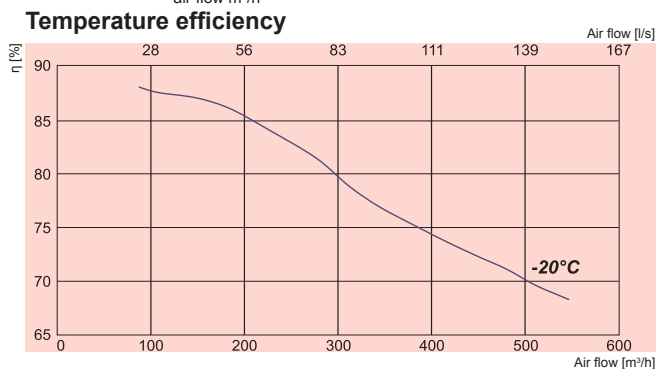
**NEW!**

## RIRS 400HW EKO 2.0

Performance  
Power consumption



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



### 400HW EKO 2.0

Water heater	-power	[kW]	
	-water . T <sub>in</sub> /T <sub>out</sub>	[°C]	AVS 200
	-water flow rate	[l/s]	
	-water pressure drop	[kPa]	
EC Fans	-phase/voltage	[50Hz/VAC]	~1, 230
exhaust	-power/current	[kW/A]	0,132/1,16
	-fan speed	[min <sup>-1</sup> ]	3490
supply	-power/current	[kW/A]	0,132/1,2
	-fan speed	[min <sup>-1</sup> ]	3490
Motor protection class			IP-44
Thermal efficiency			75%
Max power consumption		[kW/A]	0,27/2,46
Automatic control			integrated
Filter class	-exhaust		F5
	supply		F7
Thermal insulation		[mm]	50
Weight		[kg]	70,0
Comply with ERP 2013			+

Air flow temperature range from -20°C to +40°C  
Designed for operation indoors only

400HW EKO 2.0	Lwa total, dB(A)	LWA, 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 445 m³/h, 124 Pa

— Extract air = 20°C/60% RH - Outdoor air = -7°C/90% RH  
Balance between supply air/exhaust air = 1.0

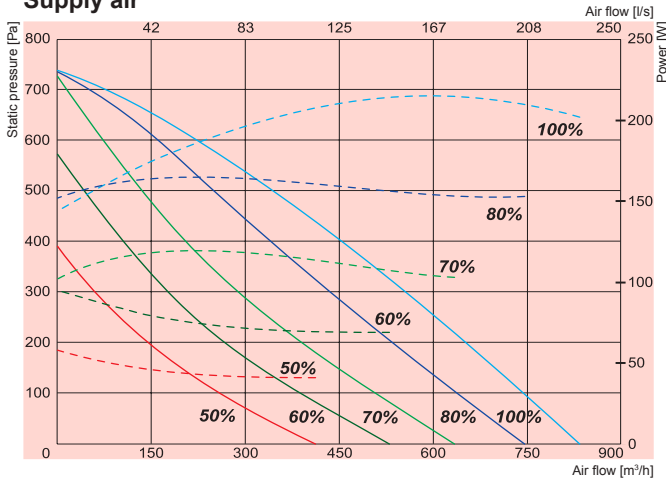
Temperature efficiency calculated according EN 308.

**SALDA**

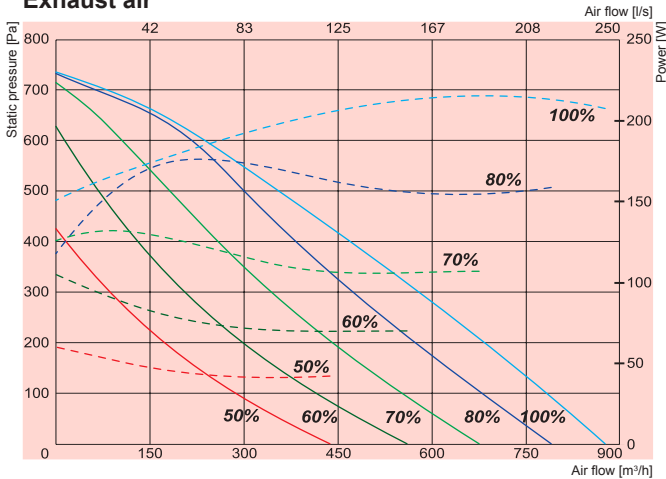
AIR HANDLING UNITS

# RIRS H EKO

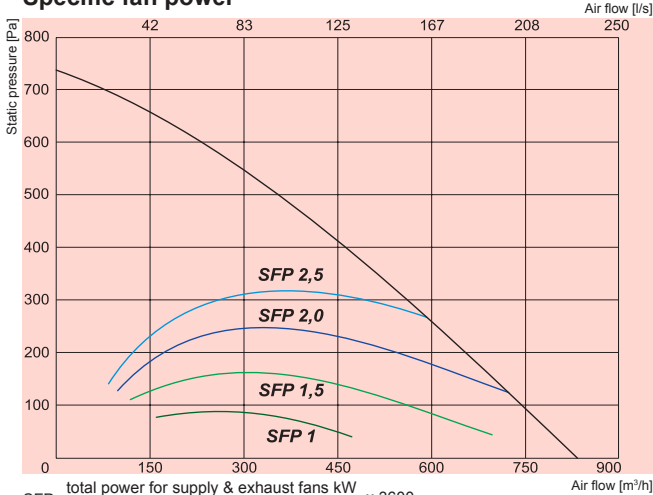
## Supply air



## Exhaust air

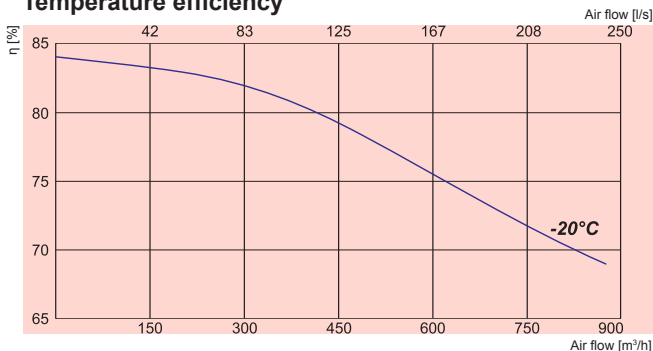


## Specific fan power



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

## Temperature efficiency

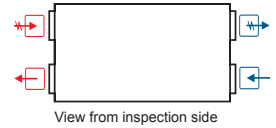


**NEW!**

**RIRS 700HE EKO 2.0**  
Performance  
Power consumption

## RIRS 700HE EKO 2.0

Air supply side (R- right)



Exhaust air Extract air Fresh air Supply air

## 700HE EKO 2.0

Heater	-phase/voltage [50Hz/VAC]	~1, 230
	-power consumption [kW]	2,0
EC Fans	-phase/voltage [50Hz/VAC]	~1, 230
exhaust	-power/current [kW/A]	0,214/1,76
	-fan speed [min <sup>-1</sup> ]	3380
supply	-power/current [kW/A]	0,217/1,88
	-fan speed [min <sup>-1</sup> ]	3380
Motor protection class		IP-44
Thermal efficiency		75%
Max power consumption	[kW/A]	2,44 /12,44
Automatic control		integrated
Filter class	-exhaust	F5
	supply	F7
Thermal insulation	[mm]	50
Weight	[kg]	96,0
Comply with ERP 2013		+

Air flow temperature range from -20°C to +40°C  
Designed for operation indoors only

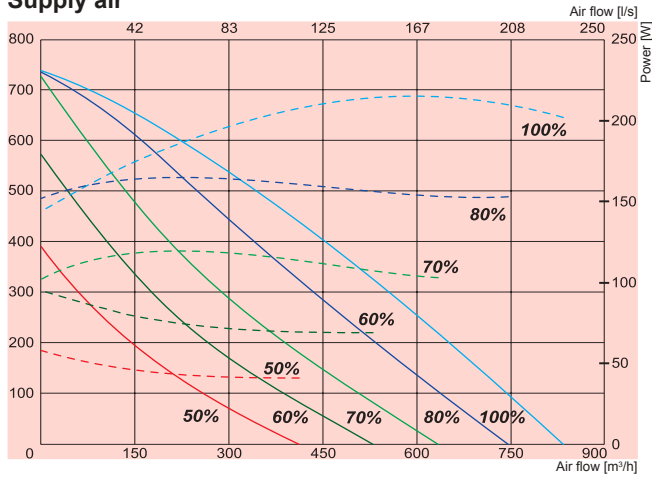
700HE EKO 2.0	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	78	67	68	74	72	71	65	63
Extract	65	54	62	63	53	52	48	36
Surrounding	55	48	49	51	49	46	44	43

Measured at 657 m³/h, 200 Pa

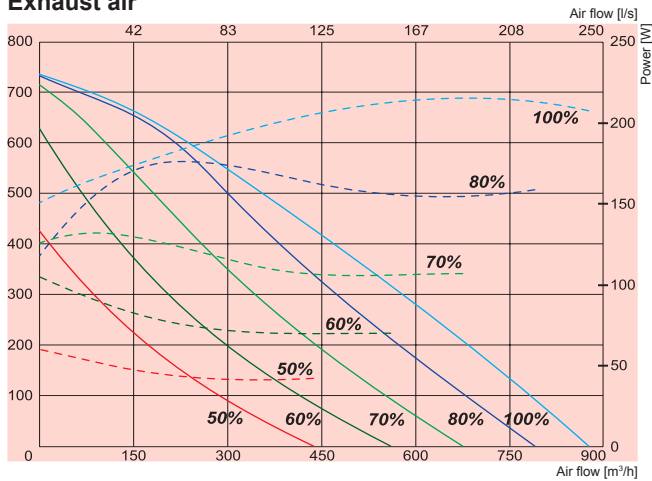
Extract air = 20°C/60% RH - Outdoor air = -20°C/90% RH  
Balance between supply air/exhaust air = 1.0

Temperature efficiency calculated according EN 308.

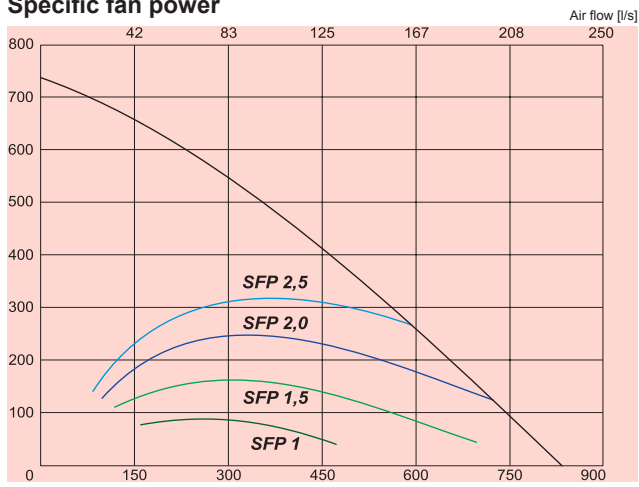
## Supply air



## Exhaust air

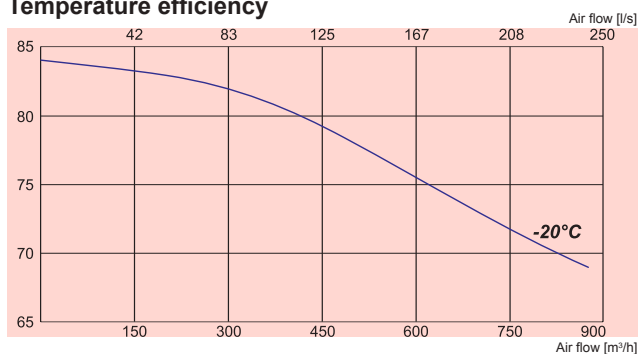


## Specific fan power



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

## Temperature efficiency



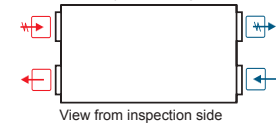
**NEW!**

## RIRS 700HW EKO 2.0

Performance  
Power consumption

### RIRS 700HW EKO 2.0

Air supply side (R- right)



Exhaust air Extract air Fresh air Supply air

### 700HW EKO 2.0

Water heater	-power	[kW]	
	-water . T <sub>in</sub> /T <sub>out</sub>	[°C]	AVS 250
	-water flow rate	[l/s]	
	-water pressure drop	[kPa]	
EC Fans	-phase/voltage	[50Hz/VAC]	~1, 230
exhaust	-power/current	[kW/A]	0,214/1,76
	-fan speed	[min <sup>-1</sup> ]	3380
supply	-power/current	[kW/A]	0,217/1,88
	-fan speed	[min <sup>-1</sup> ]	3380
Motor protection class			IP-44
Thermal efficiency			75%
Max power consumption	[kW/A]		0,44 / 3,74
Automatic control			integrated
Filter class	-exhaust		F5
	supply		F7
Thermal insulation	[mm]		50
Weight	[kg]		96,0
Comply with ERP 2013			+

Air flow temperature range from -20°C to +40°C  
Designed for operation indoors only

700HW EKO 2.0	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

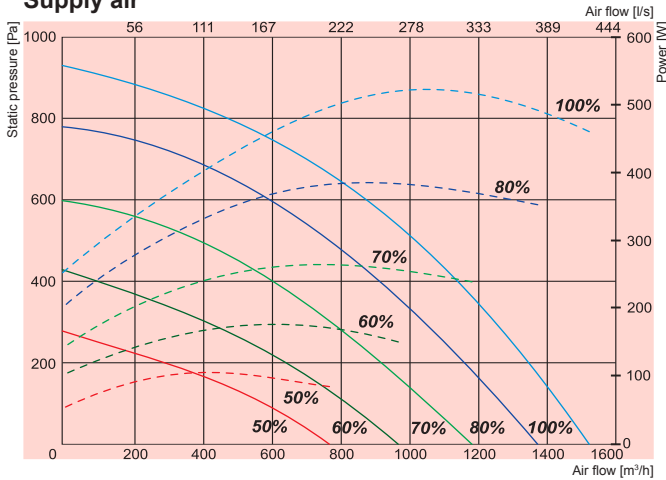
Measured at 657 m³/h, 200 Pa

Extract air = 20°C/60% RH - Outdoor air = -20°C/90% RH  
Balance between supply air/extract air = 1.0

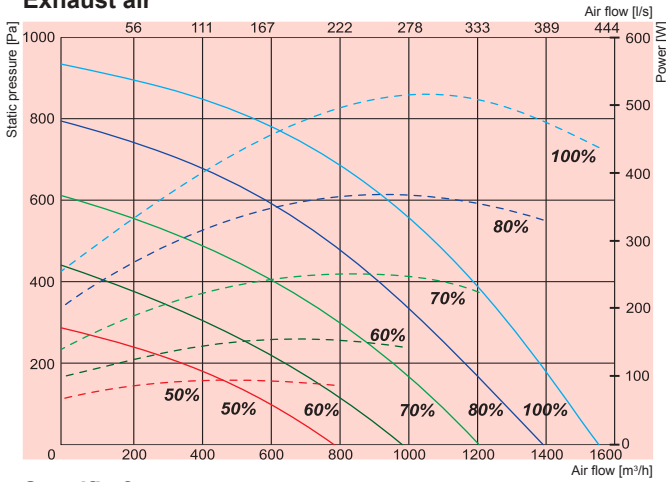
Temperature efficiency calculated according EN 308.

# RIRS H EKO

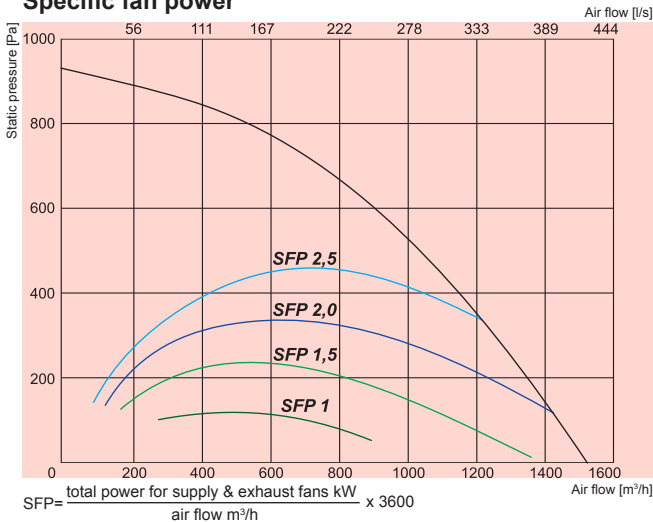
## Supply air



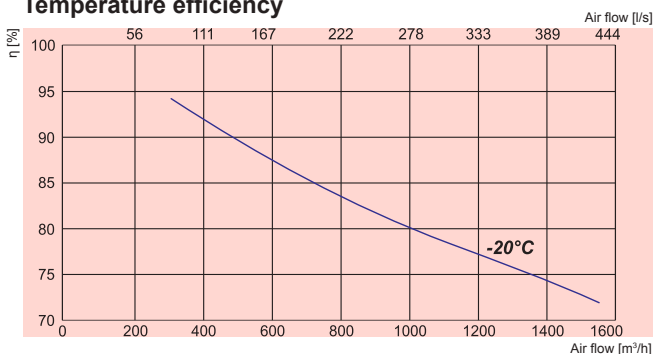
## Exhaust air



## Specific fan power



## Temperature efficiency



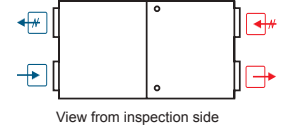
**NEW!**

## RIRS 1200HE EKO 2.0

Performance  
Power consumption

### RIRS 1200HE EKO 2.0

Air supply side (R- right)



Exhaust air Extract air Fresh air Supply air

1200HE EKO 2.0			
Heater	-phase/voltage [50Hz/VAC]		~2, 400
	-power consumption [kW]		4,0
EC Fans	-phase/voltage [50Hz/VAC]		~1, 230
exhaust	-power/current [kW/A]		0,44/2,8
	-fan speed [min <sup>-1</sup> ]		3400
supply	-power/current [kW/A]		0,44/2,9
	-fan speed [min <sup>-1</sup> ]		3400
Motor protection class			IP-44
Thermal efficiency			74%
Max power consumption	[kW/A]		4,9/15,9 /12,44
Automatic control			integrated
Filter class	-exhaust		F5
	supply		F7
Thermal insulation	[mm]		50
Weight	[kg]		162,0
Comply with ERP 2013			+

Air flow temperature range from -20°C to +40°C

Designed for operation indoors only

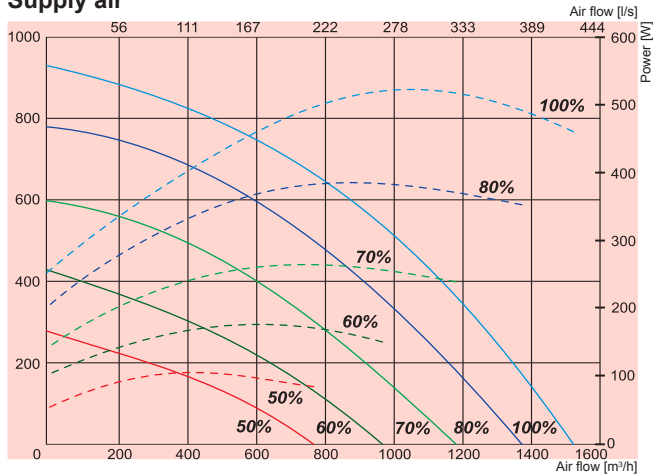
1200HE EKO 2.0	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	77	66	73	71	70	66	62	53
Extract	68	63	64	62	56	46	41	31
Surrounding	57	52	53	47	44	41	35	33

Measured at 1437 m³/h, 102 Pa

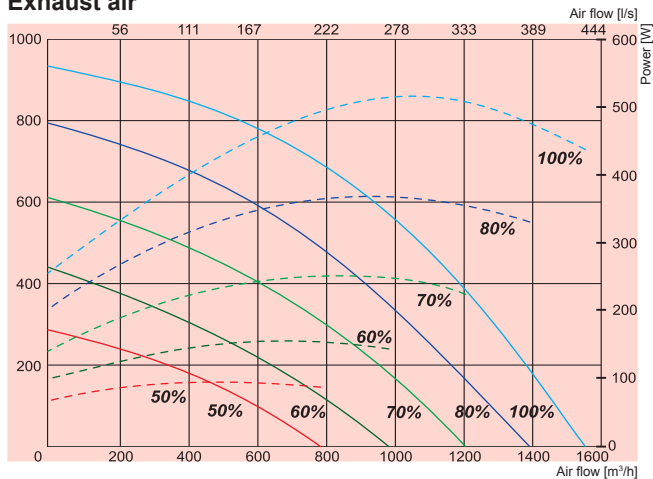
Extract air = 20°C/60% RH - Outdoor air = -20°C/90% RH  
Balance between supply air/exhaust air = 1.0

Temperature efficiency calculated according EN 308.

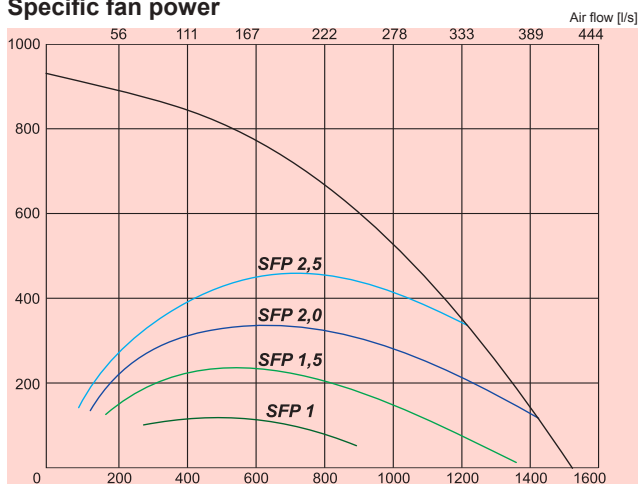
## Supply air



## Exhaust air

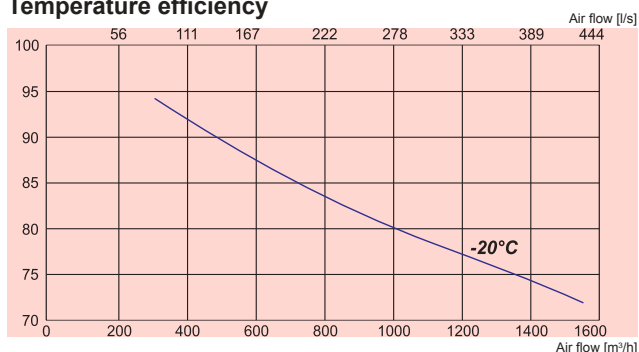


## Specific fan power



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

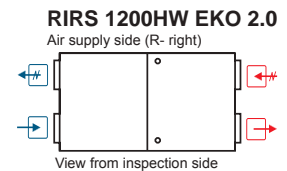
## Temperature efficiency



**NEW!**

## RIRS 1200HW EKO 2.0

— Performance  
- - - Power consumption



Exhaust air    Extract air    Fresh air    Supply air

### 1200HW EKO 2.0

Water heater	-power	[kW]	
	-water . T <sub>in</sub> /T <sub>out</sub>	[°C]	
	-water flow rate	[l/s]	AVS 315
	-water pressure drop	[kPa]	
EC Fans	-phase/voltage	[50Hz/VAC]	~1, 230
exhaust	-power/current	[kW/A]	0,44/2,8
	-fan speed	[min <sup>-1</sup> ]	3400
supply	-power/current	[kW/A]	0,44/2,9
	-fan speed	[min <sup>-1</sup> ]	3400
Motor protection class			IP-44
Thermal efficiency			74%
Max power consumption		[kW/A]	0,89/5,87
Automatic control			integrated
Filter class	-exhaust		F5
	supply		F7
Thermal insulation		[mm]	50
Weight		[kg]	162,0
Comply with ERP 2013			+

Air flow temperature range from -20°C to +40°C  
Designed for operation indoors only

1200HW EKO 2.0	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 m<sup>3</sup>/h, 102 Pa

— Extract air = 20°C/60% RH - Outdoor air = -20°C/90% RH  
Balance between supply air/exhaust air = 1.0

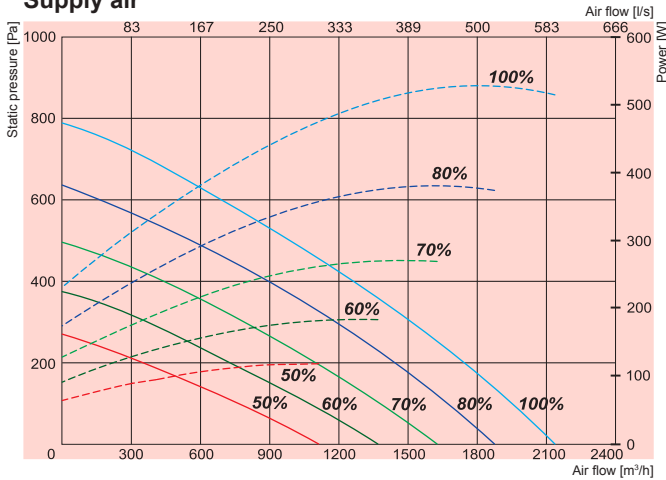
Temperature efficiency calculated according EN 308.



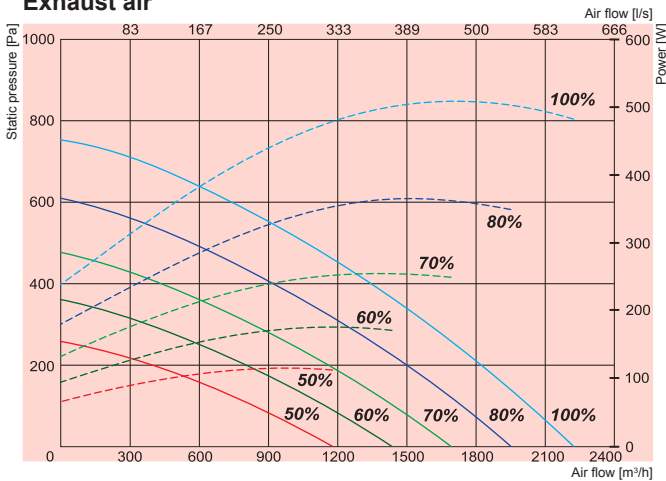
# RIRS H EKO

AVAILABLE FROM 2013 AUTUMN

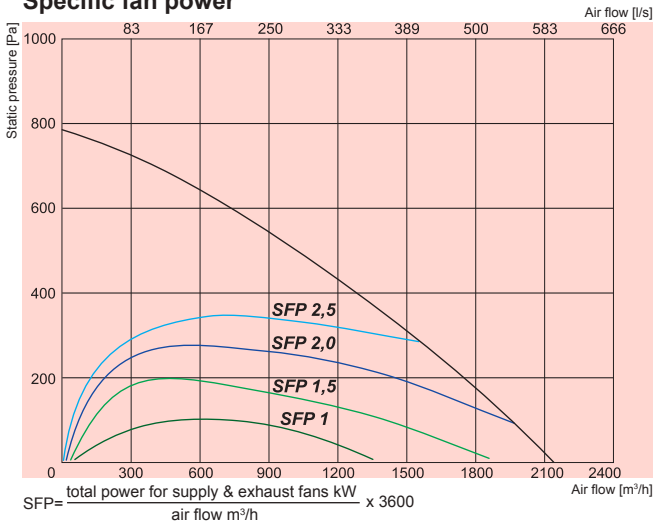
## Supply air



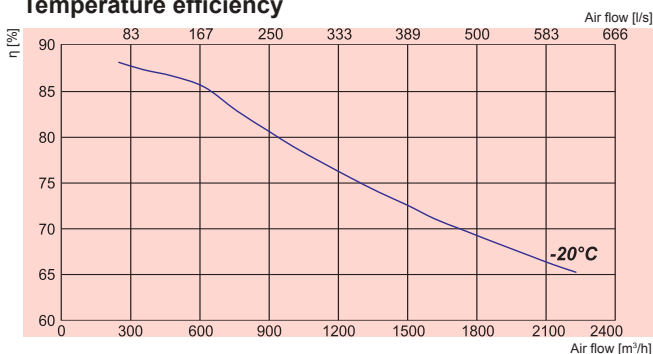
## Exhaust air



## Specific fan power



## Temperature efficiency

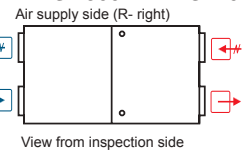


**NEW!**

## RIRS 1900HE EKO 2.0

Performance  
Power consumption

### RIRS 1900HE EKO 2.0



Exhaust air Extract air Fresh air Supply air

1900HE EKO 2.0			
Heater	-phase/voltage [50Hz/VAC]		~3, 400
	-power consumption [kW]		9
EC Fans	-phase/voltage [50Hz/VAC]		~1, 230
exhaust	-power/current [kW/A]		0,565/2,56
	-fan speed [min <sup>-1</sup> ]		2600
supply	-power/current [kW/A]		0,586/2,6
	-fan speed [min <sup>-1</sup> ]		2600
Motor protection class			IP-54
Thermal efficiency			68%
Max power consumption	[kW/A]		10,2/18,3
Automatic control			integrated
Filter class	-exhaust		F5
	supply		F7
Thermal insulation	[mm]		50
Weight	[kg]		162,0
Comply with ERP 2013			+

Air flow temperature range from -20°C to +40°C

Designed for operation indoors

1900HE EKO 2.0	Lwa total, dB(A)	LWA, 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

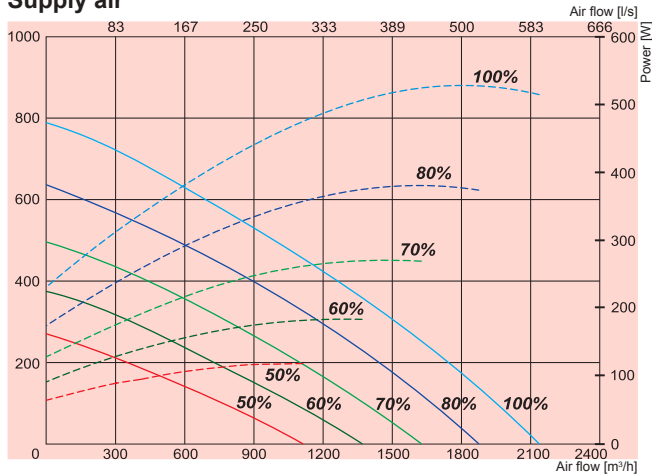
Extract air = 20°C/60% RH - Outdoor air = -20°C/90% RH  
Balance between supply air/exhaust air = 1.0

Temperature efficiency calculated according EN 308.

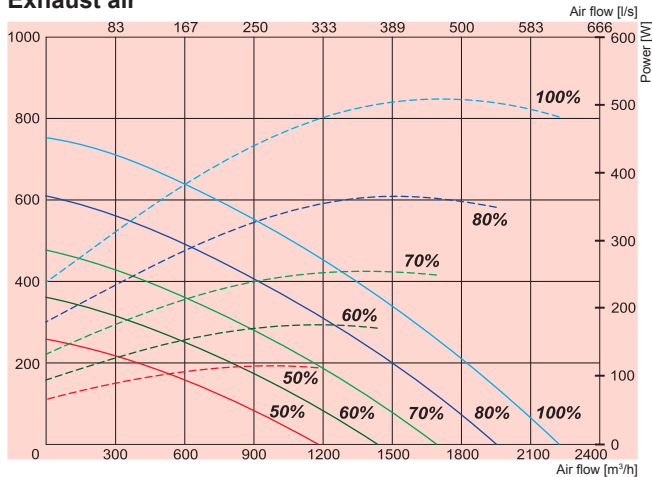
# RIRS H EKO

AVAILABLE FROM 2013 AUTUMN

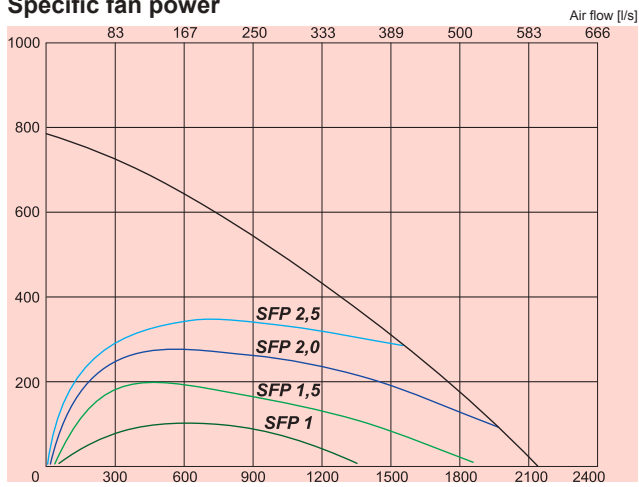
## Supply air



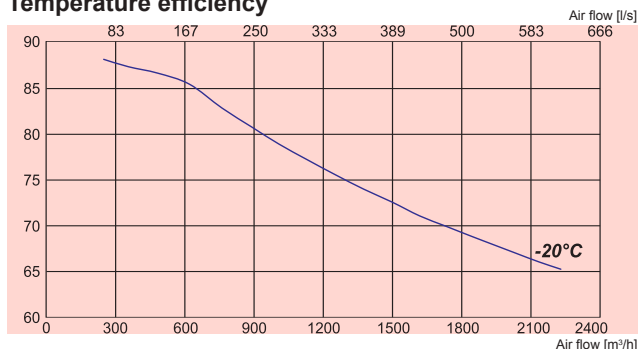
## Exhaust air



## Specific fan power



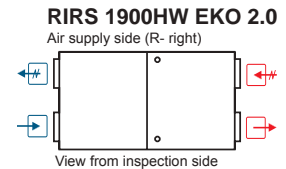
## Temperature efficiency



**NEW!**

## RIRS 1900HW EKO 2.0

— Performance  
- - - Power consumption



Exhaust air Extract air Fresh air Supply air

### 1900HW EKO 2.0

Water heater	-power	[kW]	
	-water . T <sub>in</sub> /T <sub>out</sub>	[°C]	AVS 315
	-water flow rate	[l/s]	
	-water pressure drop	[kPa]	
EC Fans	-phase/voltage	[50Hz/VAC]	~1, 230
exhaust	-power/current	[kW/A]	0,565/2,56
	-fan speed	[min <sup>-1</sup> ]	2600
supply	-power/current	[kW/A]	0,586/2,6
	-fan speed	[min <sup>-1</sup> ]	2600
Motor protection class			IP-54
Thermal efficiency			68%
Max power consumption		[kW/A]	1,17/5,33
Automatic control			integrated
Filter class	-exhaust		F5
	supply		F7
Thermal insulation		[mm]	50
Weight		[kg]	168,0
Comply with ERP 2013			+

Air flow temperature range from -20°C to +40°C  
Designed for operation indoors

1900HW EKO 2.0	Lwa total, dB(A)	LWA, 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

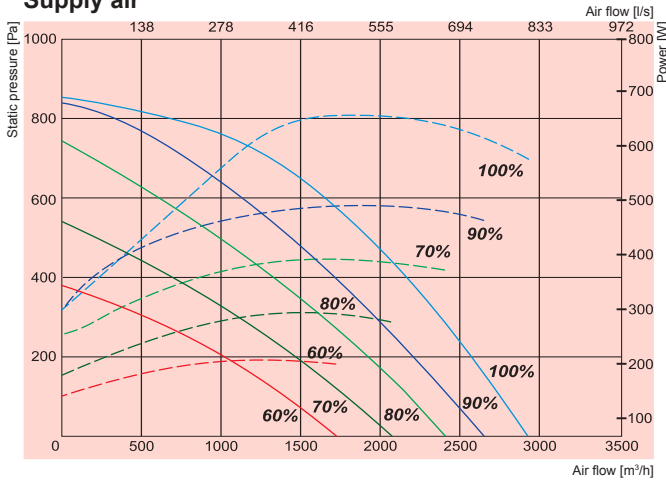
Measured at 1906 m³/h, 100 Pa

— Extract air = 20°C/60% RH - Outdoor air = -20°C/90% RH  
Balance between supply air/exhaust air = 1.0

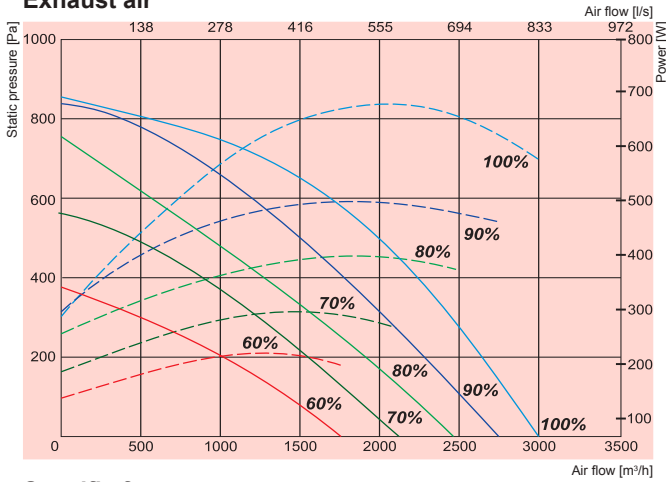
Temperature efficiency calculated according EN 308.

# RIRS H EKO

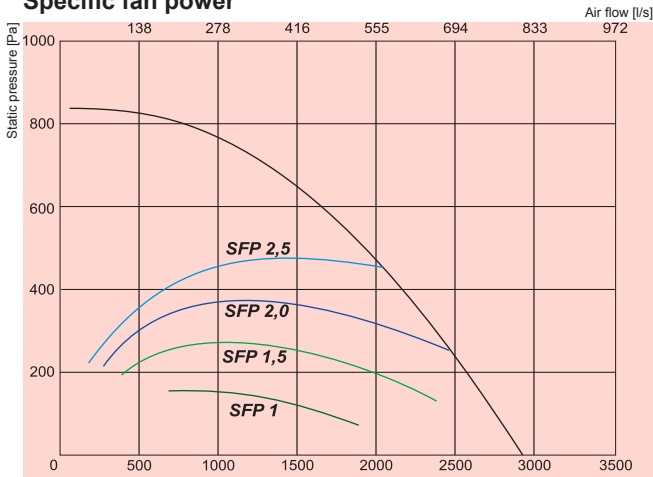
## Supply air



## Exhaust air

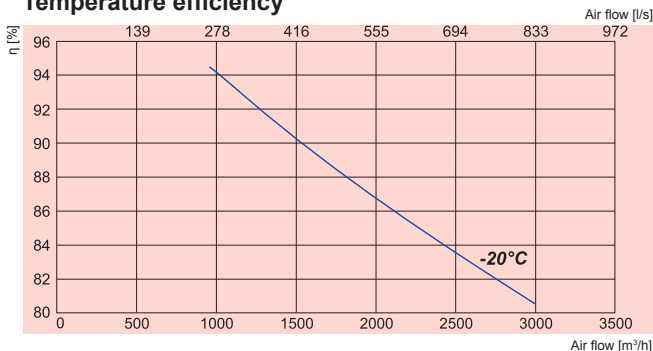


## Specific fan power



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

## Temperature efficiency

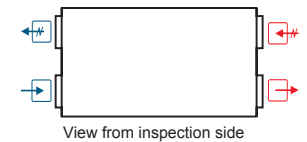


## RIRS 2500HE EKO

Performance  
Power consumption



## RIRS 2500HE EKO (convertible) ver.



Exhaust air Extract air Fresh air Supply air

		2500HE EKO
Heater	-phase/voltage [50Hz/VAC]	~3, 400
	-power consumption [kW]	9
EC Fans	-phase/voltage [50Hz/VAC]	~1, 230
exhaust	-power/current [kW/A]	0,712/3,19
	-fan speed [min <sup>-1</sup> ]	2800
supply	-power/current [kW/A]	0,749/3,35
	-fan speed [min <sup>-1</sup> ]	2800
Motor protection class		IP-54
Thermal efficiency		80%
Max power consumption	[kW/A]	10,5/20
Automatic control		integrated
Filter class	-exhaust	F5
	supply	F7
Thermal insulation	[mm]	50
Weight	[kg]	350
Comply with ERP 2013		+

Air flow temperature range from -20°C to +40°C  
Designed for operation indoors and outdoors

2500HE EKO	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

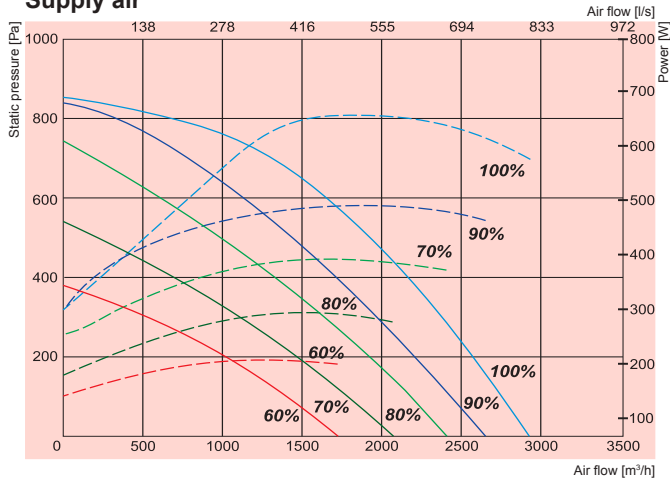
Measured at 2599 m³/h, 180 Pa

Extract air = 20°C/60% RH - Outdoor air = -20°C/90% RH  
Balance between supply air/exhaust air = 1.0

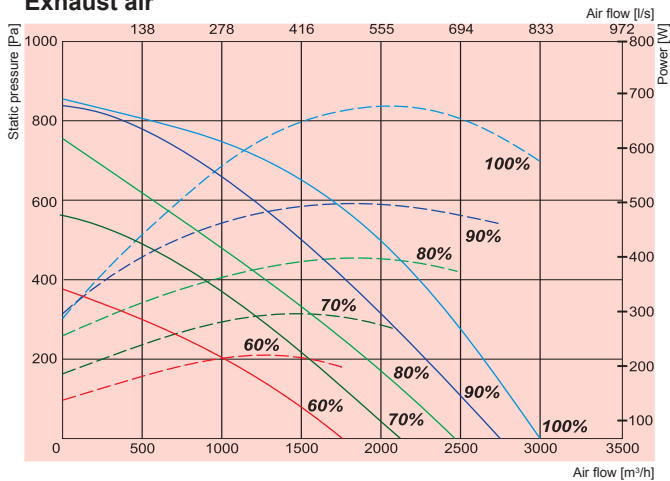
Temperature efficiency calculated according EN 308.

# RIRS H EKO

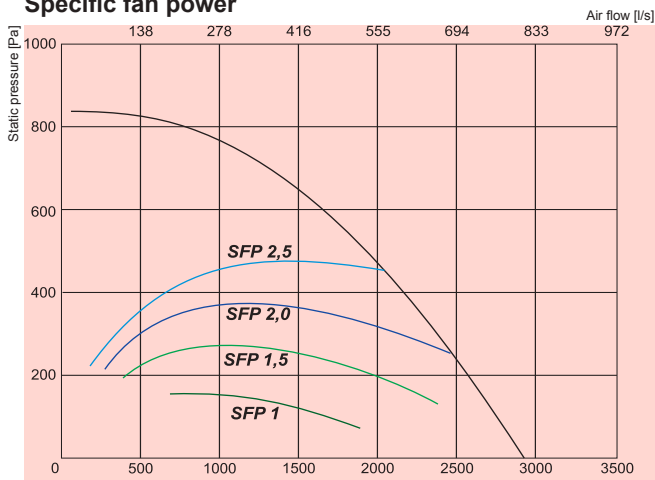
## Supply air



## Exhaust air

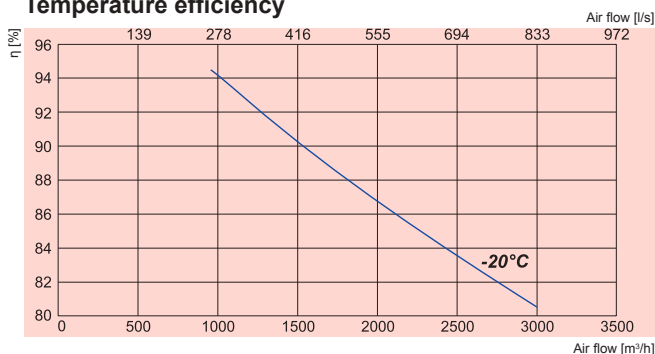


## Specific fan power



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

## Temperature efficiency

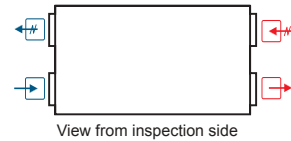


## RIRS 2500HW EKO

Performance  
Power consumption



## RIRS 2500HW EKO (convertible) ver.



Exhaust air, Extract air, Fresh air, Supply air

## 2500HW EKO

Water heater	-power	[kW]	Comfort Box 600x350
Fans	-phase/voltage	[50Hz/VAC]	~1, 230
exhaust	-power/current	[kW/A]	0,712/3,19
	-fan speed	[min <sup>-1</sup> ]	2800
supply	-power/current	[kW/A]	0,749/3,35
	-fan speed	[min <sup>-1</sup> ]	2800
Motor protection class			IP-54
Thermal efficiency			80%
Max power consumption		[kW/A]	1,5/6,95
Automatic control			integrated
Filter class	-exhaust		F5
	supply		F7
Thermal insulation		[mm]	50
Weight		[kg]	350
Comply with ERP 2013			+

Air flow temperature range from -20°C to +40°C  
Designed for operation indoors and outdoors

2500HW EKO	Lwa total, 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

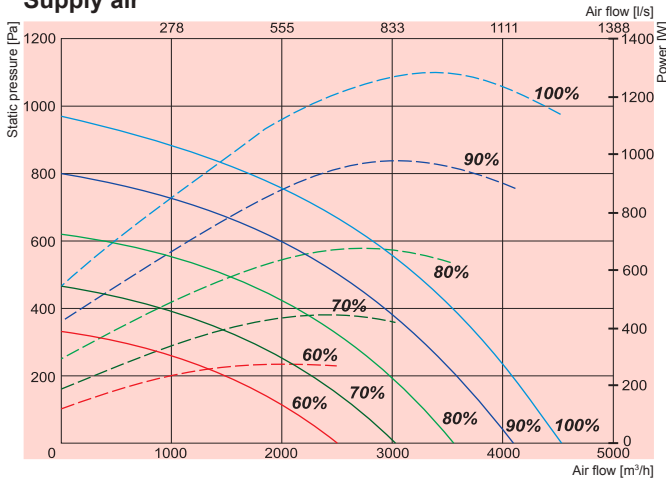
Measured at 2599 m³/h, 180 Pa

Extract air = 20°C/60% RH - Outdoor air = -20°C/90% RH  
Balance between supply air/exhaust air = 1.0

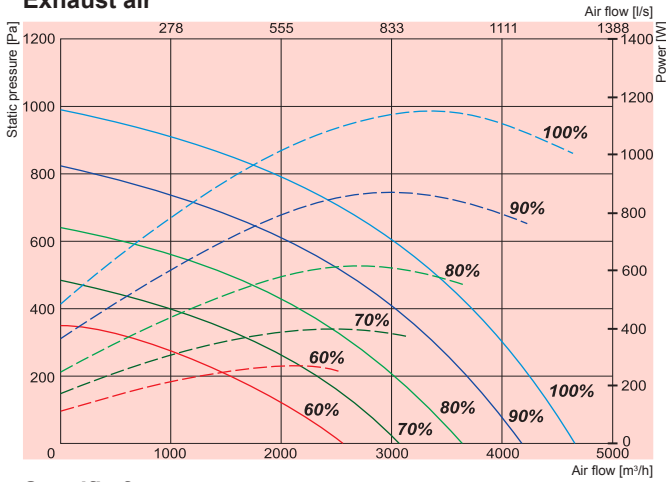
Temperature efficiency calculated according EN 308.

# RIRS H EKO

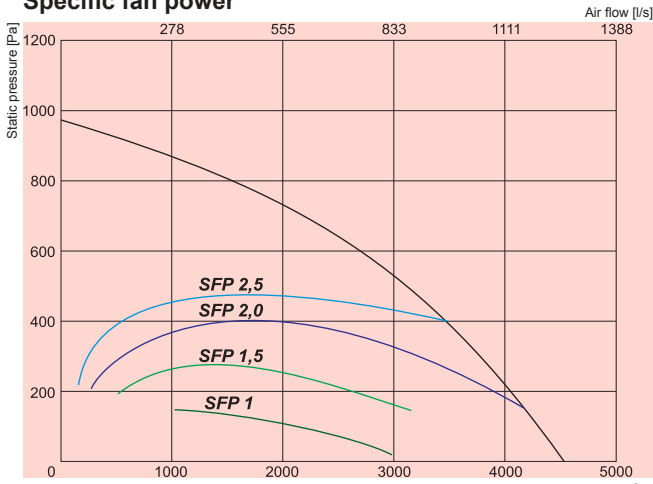
## Supply air



## Exhaust air

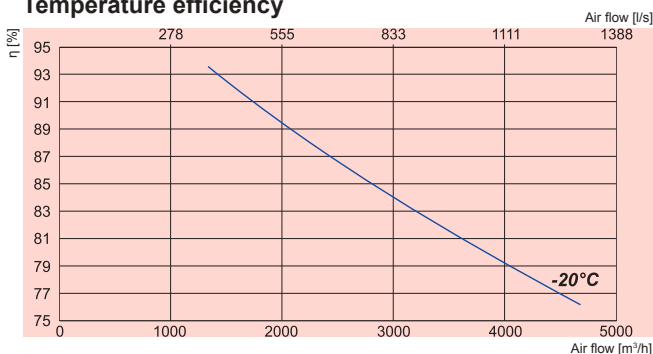


## Specific fan power



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

## Temperature efficiency

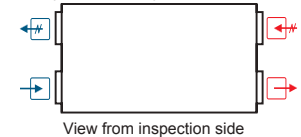


## RIRS 3500HE EKO

Performance  
Power consumption



### RIRS 3500HE EKO (convertible) ver.



Exhaust air Extract air Fresh air Supply air

### RIRS 3500HE EKO

Heater	-phase/voltage [50Hz/VAC]	~3, 400
	-power consumption [kW]	12
EC Fans	-phase/voltage [50Hz/VAC]	~1, 230
exhaust	-power/current [kW/A]	1,300/5,75
	-fan speed [min <sup>-1</sup> ]	2390
supply	-power/current [kW/A]	1,340/6
	-fan speed [min <sup>-1</sup> ]	2390
Motor protection class		IP-54
Thermal efficiency		80%
Max power consumption	[kW/A]	14,7/29,43
Automatic control		integrated
Filter class	-exhaust	F5
	supply	F7
Thermal insulation	[mm]	50
Weight	[kg]	492
Comply with ERP 2013		+

Air flow temperature range from -20°C to +40°C  
Designed for operation indoors and outdoors

3500HE EKO 2.0	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

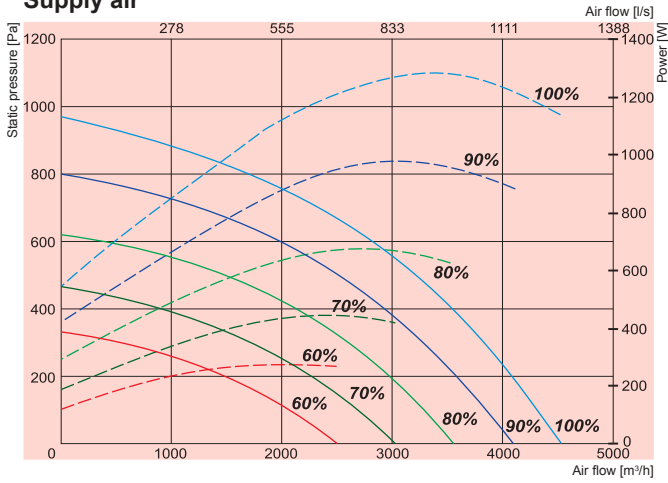
Measured at 4055 m³/h, 225 Pa

Extract air = 20°C/60% RH - Outdoor air = -20°C/90% RH  
Balance between supply air/exhaust air = 1.0

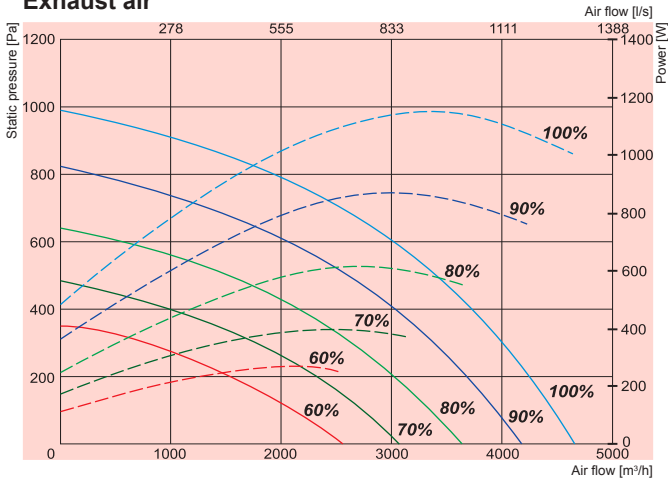
Temperature efficiency calculated according EN 308.

# RIRS H EKO

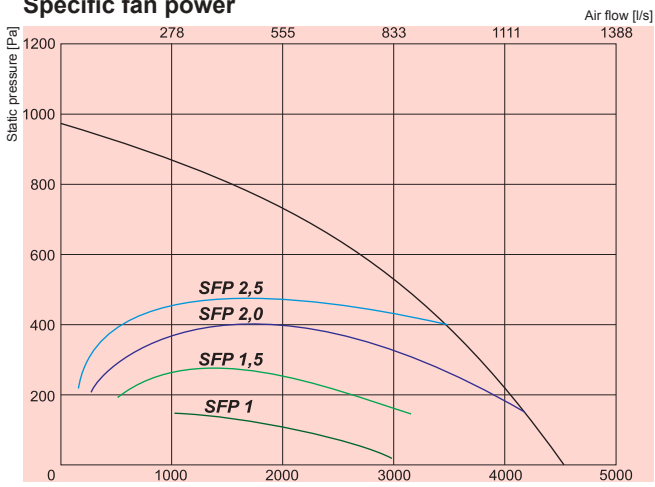
## Supply air



## Exhaust air

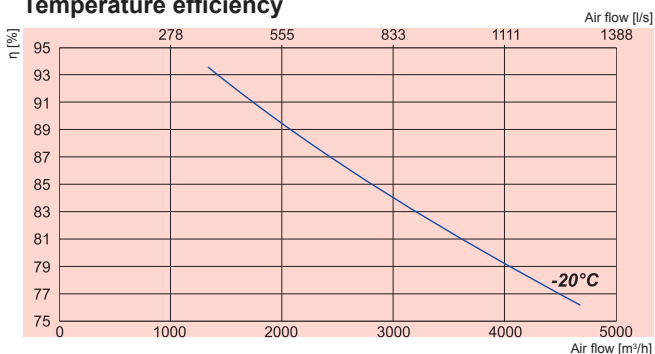


## Specific fan power



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

## Temperature efficiency

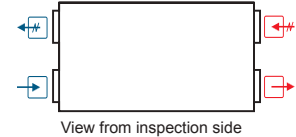


## RIRS 3500HW EKO

Performance  
Power consumption



## RIRS 3500HW EKO (convertible) ver.



Exhaust air    Extract air    Fresh air    Supply air

## RIRS 3500HW EKO

Water heater	-power	[kW]	Comfort Box 800x500
Fans	-phase/voltage	[50Hz/VAC]	~1, 230
exhaust	-power/current	[kW/A]	1,290/5,75
	-fan speed	[min <sup>-1</sup> ]	2390
supply	-power/current	[kW/A]	1,335/5,75
	-fan speed	[min <sup>-1</sup> ]	2390
Motor protection class			IP-54
Thermal efficiency			80%
Max power consumption		[kW/A]	2,67/11,91
Automatic control			integrated
Filter class	-exhaust		F5
	supply		F7
Thermal insulation		[mm]	50
Weight		[kg]	492
Comply with ERP 2013			+

Air flow temperature range from -20°C to +40°C  
Designed for operation indoors and outdoors

3500HW EKO 2.0	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

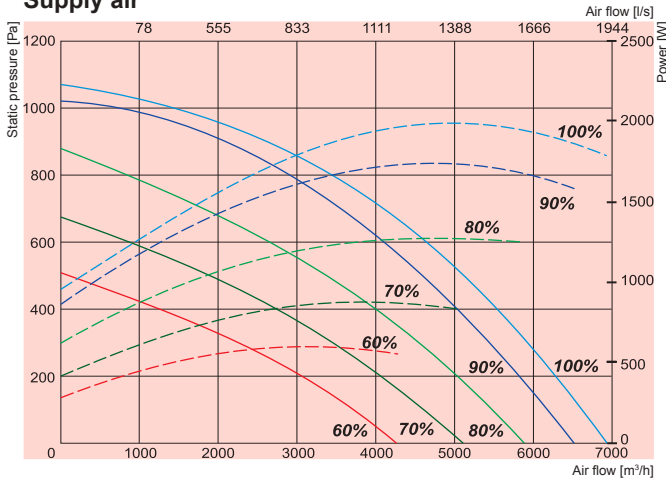
Measured at 4055 m³/h, 225 Pa

Extract air = 20°C/60% RH - Outdoor air = -20°C/90% RH  
Balance between supply air/exhaust air = 1.0

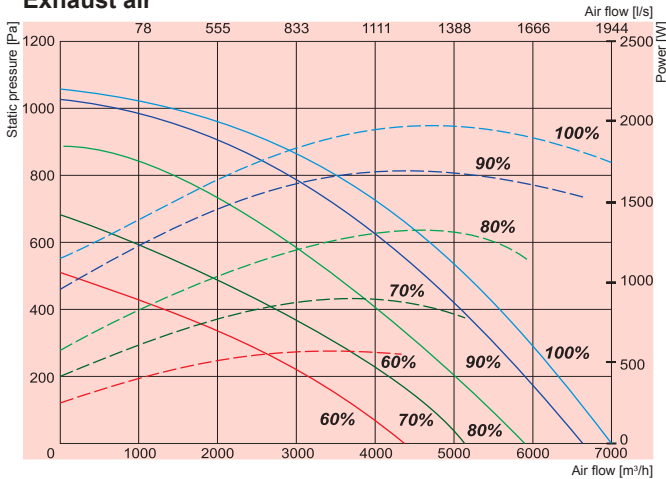
Temperature efficiency calculated according EN 308.

# RIRS H EKO

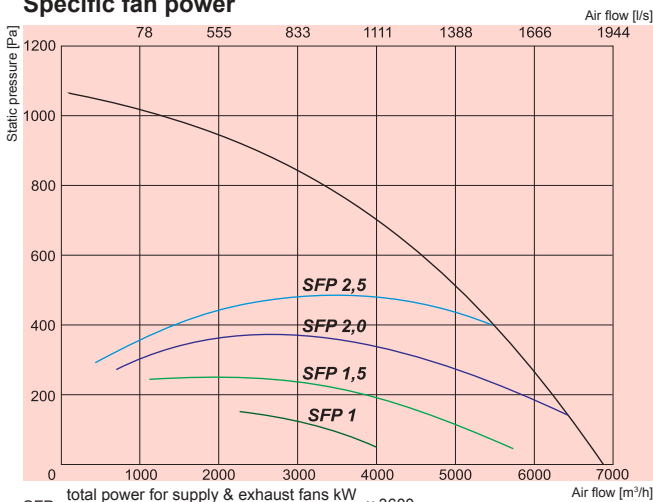
## Supply air



## Exhaust air

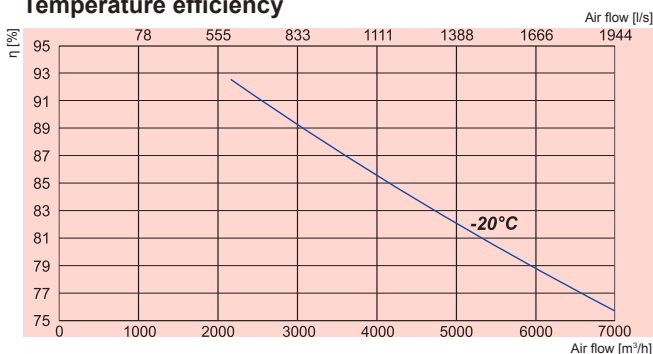


## Specific fan power



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

## Temperature efficiency

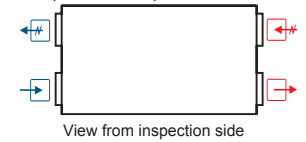


## RIRS 5500HE EKO

Performance  
Power consumption



## RIRS 5500HE EKO (convertible) ver.



Exhaust air, Extract air, Fresh air, Supply air

## RIRS 5500HE EKO

Heater	-phase/voltage [50Hz/VAC]	~3, 400
	-power consumption [kW]	15
EC Fans	-phase/voltage [50Hz/VAC]	~3, 400
exhaust	-power/current [kW/A]	2,000/3,17
	-fan speed [min <sup>-1</sup> ]	2180
supply	-power/current [kW/A]	1,980/3,06
	-fan speed [min <sup>-1</sup> ]	2180
Motor protection class		IP-54
Thermal efficiency		80%
Max power consumption	[kW/A]	19/28,35
Automatic control		integrated
Filter class	-exhaust	F5
	supply	F7
Thermal insulation	[mm]	50
Weight	[kg]	625
Comply with ERP 2013		+

Air flow temperature range from -20 °C to +40°C  
Designed for operation indoors and outdoors

5500HE EKO 2.0	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

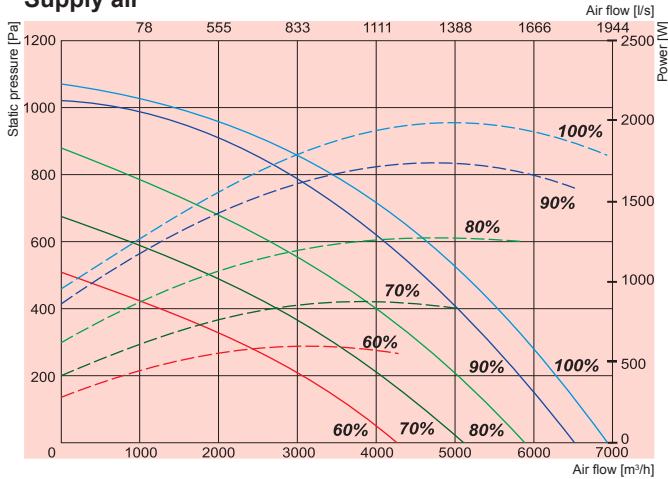
Measured at 6219 m³/h, 210 Pa

Extract air = 20°C/60% RH - Outdoor air = -20°C/90% RH  
Balance between supply air/exhaust air = 1.0

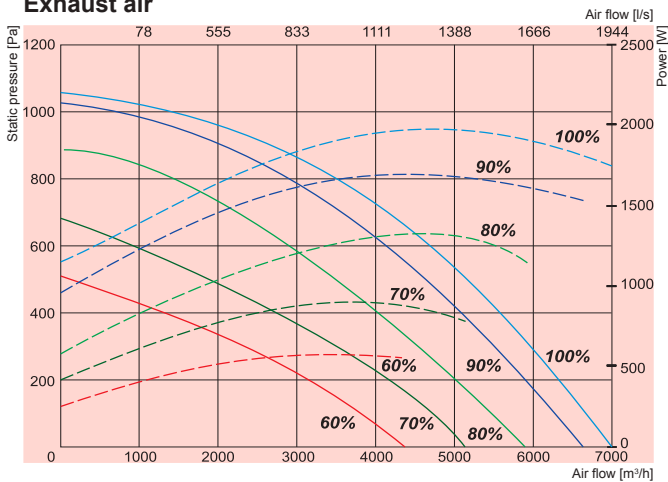
Temperature efficiency calculated according EN 308.

# RIRS H EKO

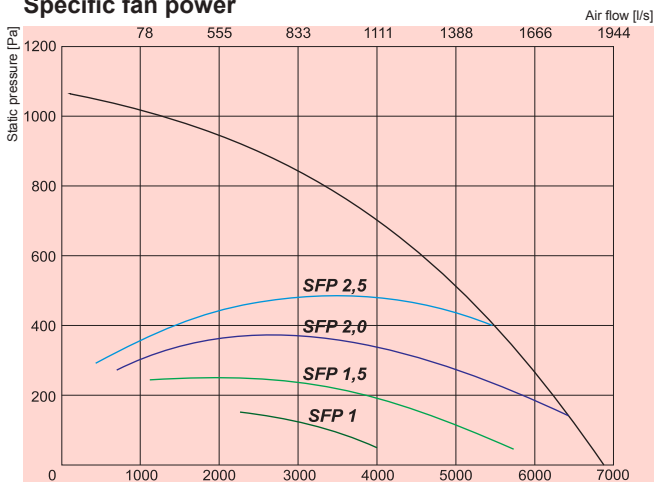
## Supply air



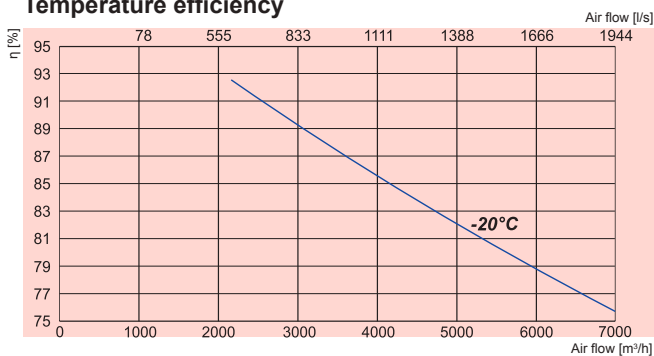
## Exhaust air



## Specific fan power



## Temperature efficiency

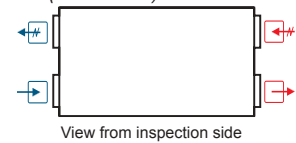


## RIRS 5500HW EKO

Performance  
Power consumption



## RIRS 5500HW EKO (convertible) ver.



Exhaust air, Extract air, Fresh air, Supply air

## RIRS 5500HW EKO

Water heater	-power	[kW]	Comfort Box 800x500
Fans	-phase/voltage	[50Hz/VAC]	~3, 400
exhaust	-power/current	[kW/A]	2,000/3,17
	-fan speed	[min <sup>-1</sup> ]	2180
supply	-power/current	[kW/A]	1,975/3,06
	-fan speed	[min <sup>-1</sup> ]	2180
Motor protection class			IP-54
Thermal efficiency			80%
Max power consumption		[kW/A]	4,2/6,64
Automatic control			integrated
Filter class	-exhaust		F5
	supply		F7
Thermal insulation		[mm]	50
Weight		[kg]	625
Comply with ERP 2013			+

Air flow temperature range from -20°C to +40°C  
Designed for operation indoors and outdoors

5500HE EKO 2.0	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

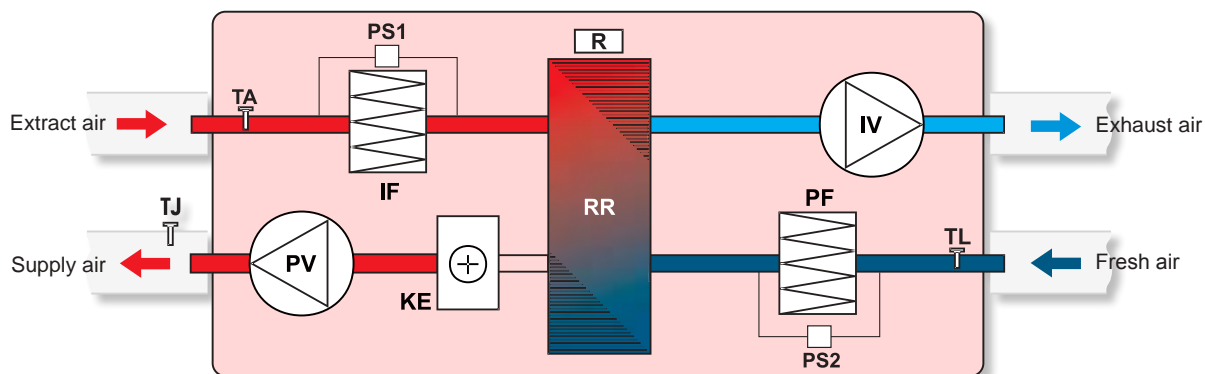
Extract air = 20°C/60% RH - Outdoor air = -20°C/90% RH  
Balance between supply air/exhaust air = 1.0

Temperature efficiency calculated according EN 308.



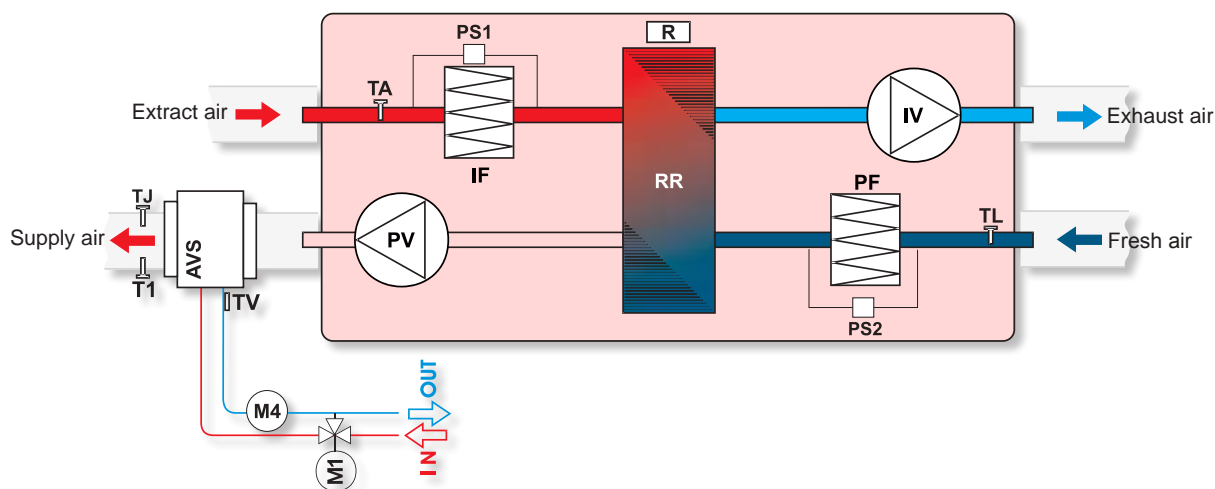
# RIRS H EKO

## RIRS 400HE EKO 2.0; 700HE EKO 2.0 (horizontal) versions with electrical heater



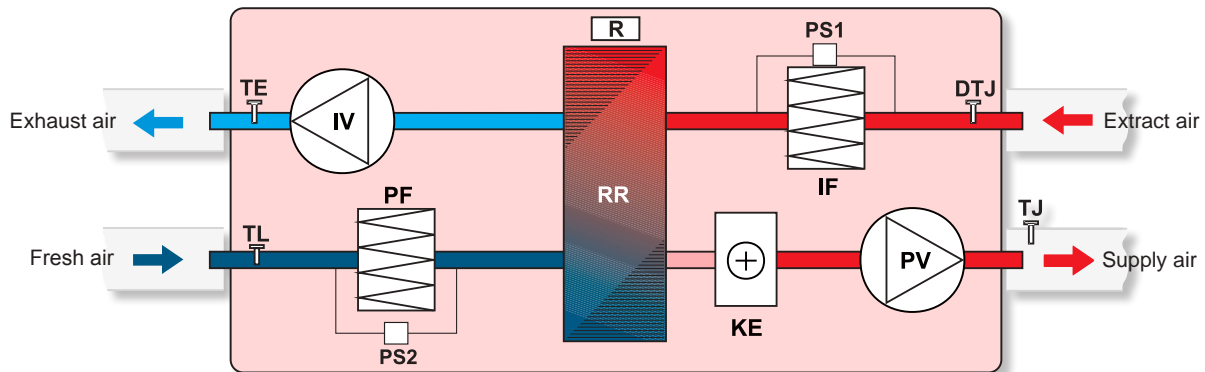
- IV - exhaust air fan
- PV - supply air fan
- RR - rotary heat exchanger
- R - rotor motor
- KE - electrical heater
- PF - fresh air filter (class F7)
- IF - extract air filter (class F5)
- TJ - temperature sensor for supply air
- TL - temperature sensor for fresh air
- TA - temperature sensor for extract air
- PS1 - extract air differential pressure switch
- PS2 - fresh air differential pressure switch

## RIRS 400HW EKO 2.0; 700HW EKO 2.0 (horizontal) versions with water heater



- PS1 - extract air differential pressure switch
- PS2 - fresh air differential pressure switch
- 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 F5)
- TJ - air temperature sensor for supply air
- TL - air temperature sensor for fresh air
- TA - temperature sensor for extract air
- M1 - optionally supply mixing valve and motor
- M4 - water heater circulatory pump
- T1 - antifrost thermostat
- TV - antifrost sensor

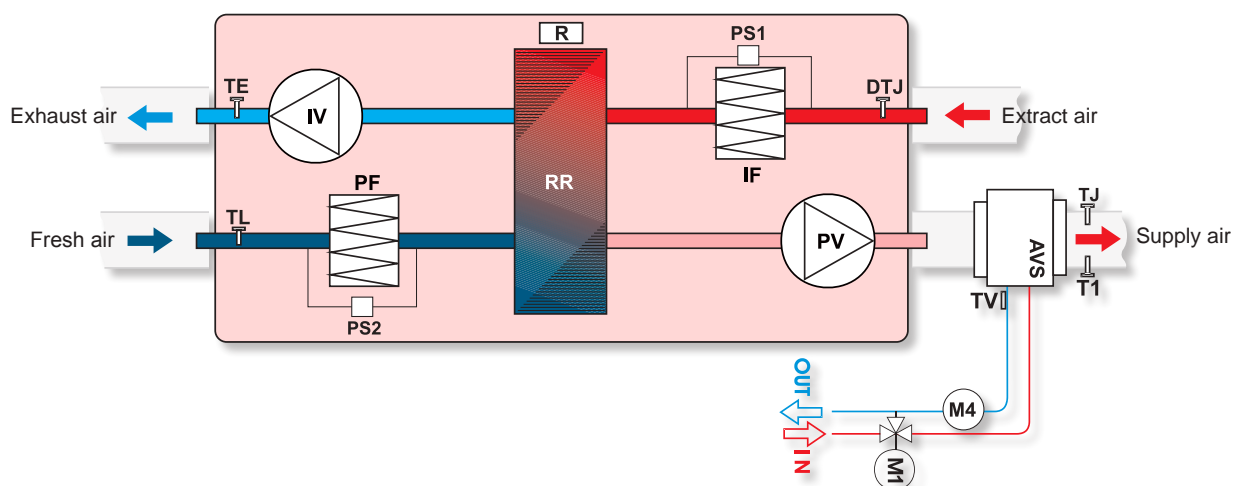
## RIRS 1200HE EKO 2.0; 1900HE EKO 2.0 (horizontal) versions with electrical heater



- 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 F5)

- PS1** - extract air differential pressure switch
- PS2** - 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 sensor

## RIRS 1200HW EKO 2.0, 1900HW EKO 2.0 (horizontal) versions with water heater

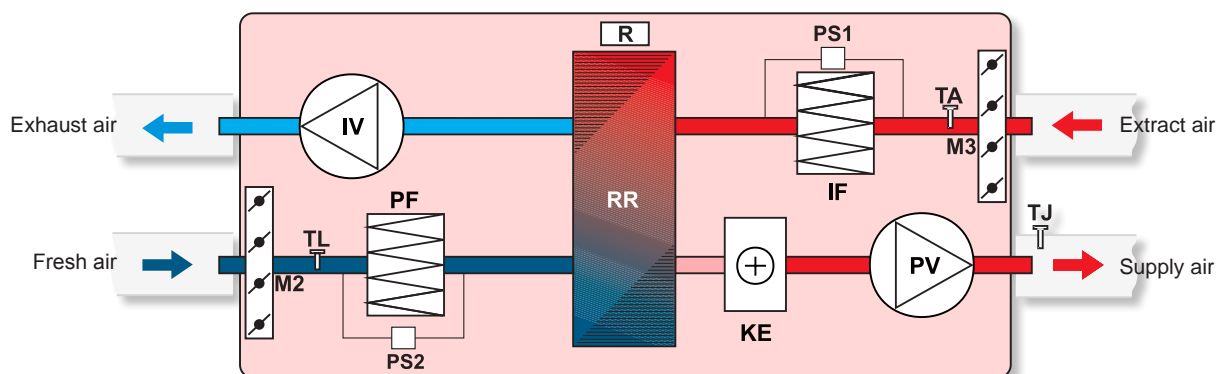


- PS1** - extract air differential pressure switch
- PS2** - fresh air differential pressure switch
- AVS** - optionally supplied water heater
- IV** - exhaust air fan
- PV** - supply air fan
- RR** - rotary heat exchanger
- R** - rotor motor
- PF** - fresh air filter (class F7)
- IF** - extract air filter (class F5)

- TJ** - air temperature sensor for supply air
- TL** - air temperature sensor for fresh air
- TE** - temperature sensor for exhaust air
- M1** - optionally supply mixing valve and motor
- M4** - water heater circulatory pump
- T1** - antifrost thermostat
- TV** - antifrost sensor

# RIRS H EKO

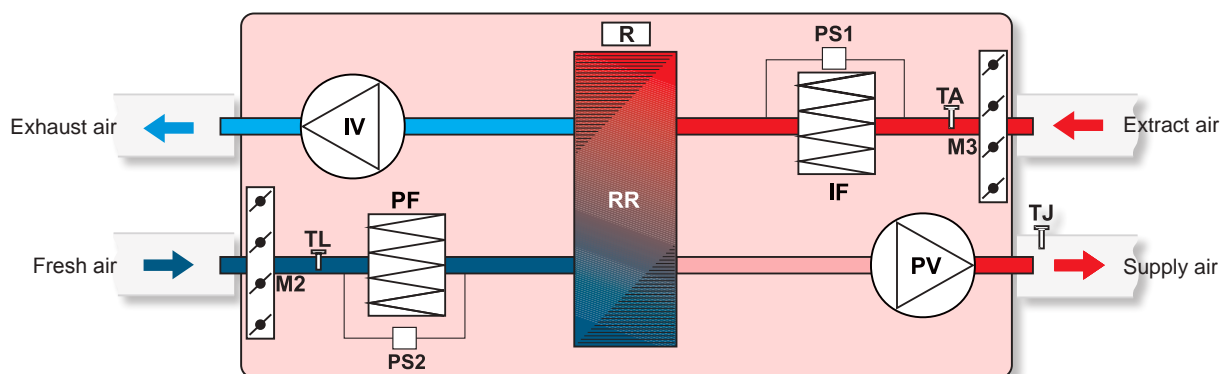
## RIRS 2500HE EKO; 3500HE EKO; 5500HE EKO (horizontal) versions with water heater



- 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 F5)

- TJ - temperature sensor for supply air
- TL - temperature sensor for fresh air
- TA - temperature sensor for extract air
- M2 - actuator for fresh air damper
- M3 - actuator for extract air damper
- PS1 - extract air differential pressure switch
- PS2 - fresh air differential pressure switch

## RIRS 2500HW EKO; 3500HW EKO; 5500HW EKO (horizontal) versions with 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 F5)

- TJ - temperature sensor for supply air
- TL - temperature sensor for fresh air
- TA - temperature sensor for extract air
- M2 - actuator for fresh air damper
- M3 - actuator for extract air damper
- PS1 - extract air differential pressure switch
- PS2 - fresh air differential pressure switch