



AHU with heat recovery

Centrales de traitement d'air
avec récupération de chaleur

Lüftungsgeräte mit wärmerückgewinnung

Вентиляционные агрегаты с
рекуперацией тепла



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

Rotor heat exchanger with efficiency 71-80%.

Electrical or water heater.

Efficient and low-noise fans.

Controlled air flow.

Supply air temperature control.

External-rotor motors.

Convertible inspection side for RIRS 400HE - 1500HE and 1500HW.

RIRS 400H - 1500H with integrated control and monitoring capabilities, using UNI, PRO and TPC remote control devices.

Acoustic insulation of the walls - 50 mm.

RIRS 400H - 1500H housing: powder coated painting RAL 7040.

Low noise level.

Easy mounting.



Rekuperator-Einrichtungen RIRS säubern, erwärmen und liefern frische Luft. RIRS-Einrichtungen nehmen Wärme aus der ausgestoßenen Luft auf und leiten sie in die gelieferte Luft weiter.

Rotorwärmetauscher.

Hoher Wärmerückgewinnungsgrad 71-80%.

Elektrische oder Wasser-Erwärmungseinrichtung.

Leistungsfähige und leise funktionierende Ventilatoren.

Regelung des Luftstromes.

Regelung der Temperatur der gelieferten Luft.

Motoren mit Außenrotor.

Wechselbare Bedienungsseite RIRS 400HE - 1500HE und 1500HW.

RIRS 400H - 1500H mit integrierten Steuerungs- und Überwachungsmöglichkeiten mithilfe von UNI, PRO und TPC Steuerpulten.

Akustische Isolation der Wände - 50mm.

RIRS 400H - 1500H das Gehäuse: gestrichen RAL 7040.

Niedriges Geräuschniveau.

Leicht montierbar.



Les centrale de traitement d'air avec récupération de chaleur RIRS filtrent, chauffent et fournissent de l'air frais. Les installations RIRS prennent la chaleur de l'air extrait et la transfère dans l'air neuf.

Échangeur de chaleur rotatif.

Rendement thermique élevée : 71-80%.

Batterie électrique ou à eau chaude.

Ventilateurs efficaces et silencieux.

Débit d'air réglable.

Régulation de la température de l'air insufflé.

Moteurs du rotor extérieur.

Partie de l'entretien échangeable RIRS 400HE - 1500HE et 1500HW.

RIRS 400H - 1500H avec fonction de commande et de contrôle intégrée en utilisant les boîtiers de commande UNI, PRO et TPC.

Isolation acoustique des parois de 50 mm.

Enveloppe RIRS 400H - 1500H : peinte avec RAL 7040.

Faible niveau de bruit.

Montage facile.



Установки с рекуперацией тепла RIRS очищают, нагревают и подают свежий воздух. RIRS устройства извлекают тепло из выходящего воздуха и передают его в поступающий.

Роторный теплообменник.

Высокоэффективная отдача тепла - 71-80 %.

Электрический или водяной нагреватель.

Производительные и бесшумные вентиляторы.

Регулируемый воздушный поток.

Регулируемая температура подаваемого воздуха.

Двигатели с наружными ротором.

Возможность менять сторону обслуживания в RIRS 400HE - 1500HE и 1500HW.

RIRS 400H - 1500H с интегрированными возможностями управления и наблюдения с помощью пультов управления UNI, PRO и TPC.

Акустическая изоляция стенок - 50 мм.

RIRS 400H - 1500H корпус: окрашенный RAL 7040.

Низкий уровень шума.

Легко монтируются.

Accessories



SKG
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AKS
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SSP
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AP
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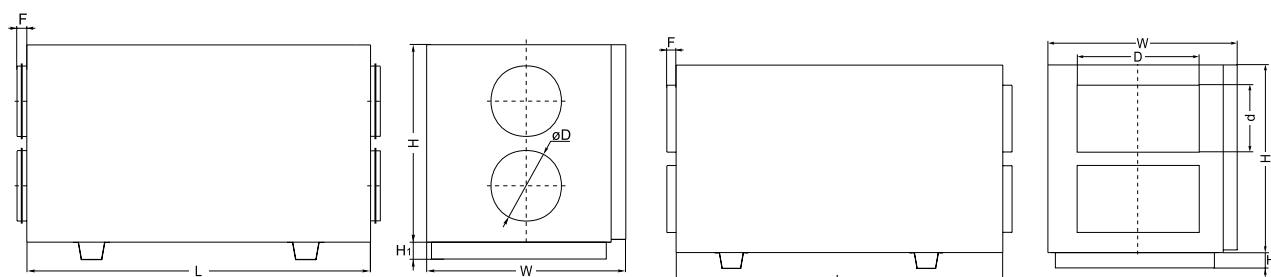
SSK
p. 216



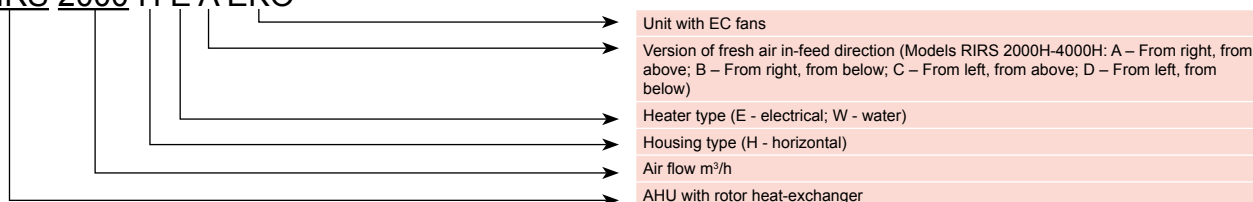
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RIRS 400H - 3000H

RIRS 4000H



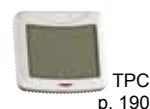
RIRS 2000 H E A EKO

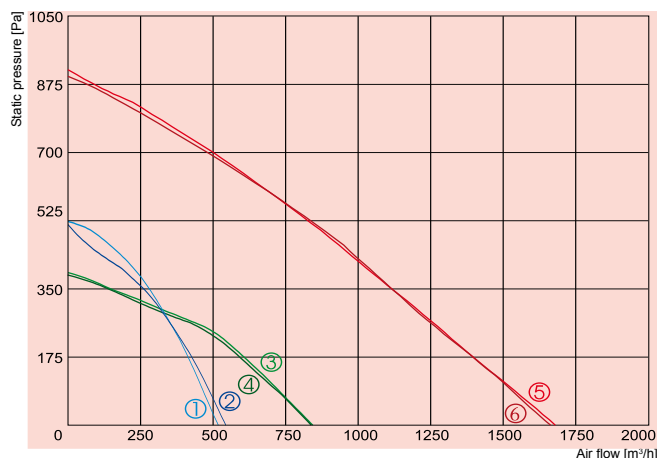


Type	Dimensions [mm]					
	L	W	H	øD	F	H ₁
RIRS 400HE EKO	1000	553	580	160	30	40
RIRS 400HW EKO	1000	553	580	160	30	40
RIRS 400HE	1000	553	580	160	30	40
RIRS 400HW	1000	553	580	160	30	40
RIRS 700HE EKO	1100	653	700	250	40	40
RIRS 700HW EKO	1100	653	700	250	40	40
RIRS 700HE	1100	653	700	250	40	40
RIRS 700HW	1100	653	700	250	40	40
RIRS 1500HE EKO	1350	853	900	315	40	70
RIRS 1500HW EKO	1350	853	900	315	40	70
RIRS 1500HE	1350	853	900	315	40	70
RIRS 1500HW	1350	853	900	315	40	70
RIRS 2000HE	1800	906	900	400	65	120
RIRS 2000HW	1800	906	900	400	65	120
RIRS 3000HE	2100	1205	1200	400	65	120
RIRS 3000HW	2100	1205	1200	400	65	120

Type	L	W	H	D	d	F	H ₁
RIRS 4000HE	2100	1205	1200	800	500	65	120
RIRS 4000HW	2100	1205	1200	800	500	65	120

Accessories





① — supply
② — exhaust

RIRS 400HE EKO

③ — supply
④ — exhaust

RIRS 700HE EKO

⑤ — supply
⑥ — exhaust

RIRS 1500HE EKO

		400HE EKO	700HE EKO	1500HE EKO
Heater	-phase/voltage [50Hz/VAC]	~1, 230	~1, 230	~3, 400
	-power consumption [kW]	1,2	2,0	4,5
Fans	-phase/voltage [50Hz/VAC]	~1, 230	~1, 230	~1, 230
	exhaust -power/current [kW/A]	0,173/1,28	0,173/1,30	0,518/3,25
	-fan speed [min ⁻¹]	2520	1740	3580
	supply -power/current [kW/A]	0,175/1,31	0,173/1,29	0,524/3,30
	-fan speed [min ⁻¹]	2520	1740	3580
Motor protection class		IP-44	IP-44	IP-54
Thermal efficiency		75%	74%	74%
Max power consumption [kW/A]		1,55/7,82	2,35/11,36	5,56/13,20
Automatic control		integrated	integrated	integrated
Filter class	-exhaust	EU5	EU5	EU5
	-supply	EU5	EU5	EU5
Thermal insulation [mm]		50	50	50
Weight [kg]		70,0	96,0	159,0

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

Designed for operation indoors only

Thermal efficiency of RIRS 400HE EKO was measured at 400m³/h at temperature range from -20°C to +20°C

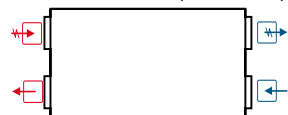
Thermal efficiency of RIRS 700HE EKO was measured at 700m³/h at temperature range from -20°C to +20°C

Thermal efficiency of RIRS 1500HE EKO was measured at 1500m³/h at temperature range from -20°C to +20°C

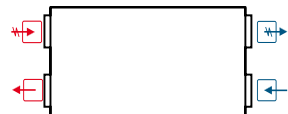
RIRS 400HE EKO (convertible) ver.



RIRS 700HE EKO (convertible) ver.



RIRS 1500HE EKO (convertible) ver.



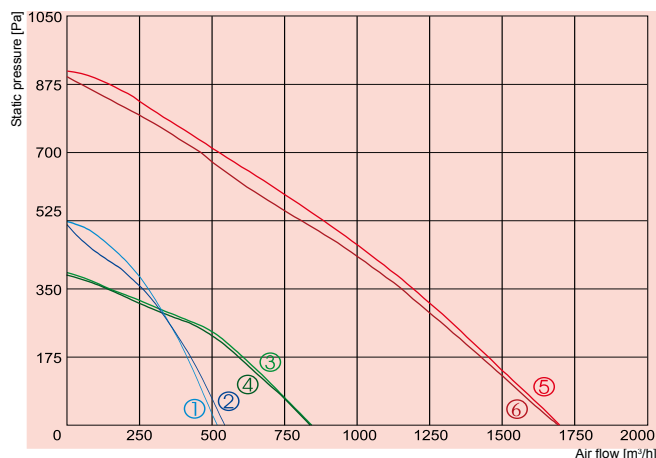
View from inspection side

Exhaust air

Extract air

Fresh air

Supply air



① supply
② exhaust

RIRS 400HW EKO

③ supply
④ exhaust

RIRS 700HW EKO

⑤ supply
⑥ exhaust

RIRS 1500HW EKO

		400HW EKO	700HW EKO	1500HW EKO
Water heater	-power [kW]			5,45
	-water . T_{in}/T_{out} [°C]			80/60
	-water flow rate [l/s]	AVS 160	AVS 250	0,07
	-water pressure drop [kPa]			2,3
	-kvs value [m³/h]			1,7
Fans	-phase/voltage [50Hz/VAC]	~1, 230	~1, 230	~1, 230
exhaust	-power/current [kW/A]	0,173/1,28	0,173/1,30	0,509/3,21
	-fan speed [min⁻¹]	2520	1740	3580
supply	-power/current [kW/A]	0,175/1,31	0,173/1,29	0,521/3,26
	-fan speed [min⁻¹]	2520	1740	3580
Motor protection class		IP-44	IP-44	IP-44
Thermal efficiency		75%	74%	74%
Max power consumption [kW/A]		0,35/2,61	0,35/2,67	1,05/6,63
Automatic control		integrated	integrated	integrated
Filter class	-exhaust	EU5	EU5	EU5
	supply	EU5	EU5	EU5
Thermal insulation [mm]		50	50	50
Weight [kg]		70,0	96,0	165,0

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

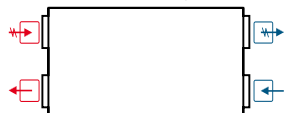
Designed for operation indoors only

Thermal efficiency of RIRS 400HW EKO was measured at 400m³/h at temperature range from -20°C to +20°C

Thermal efficiency of RIRS 700HW EKO was measured at 700m³/h at temperature range from -20°C to +20°C

Thermal efficiency of RIRS 1500HW EKO was measured at 1500m³/h at temperature range from -20°C to +20°C

RIRS 400HW EKO (convertible) ver.



RIRS 700HW EKO (convertible) ver.



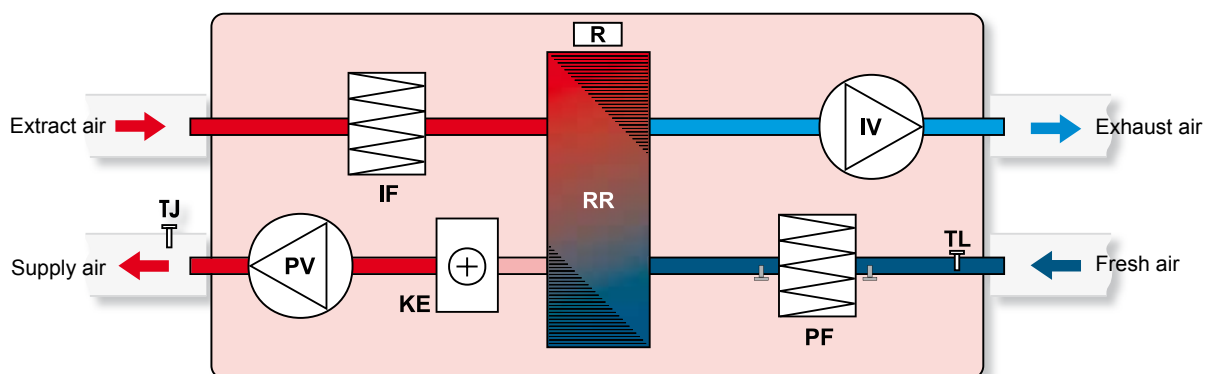
RIRS 1500HW EKO (convertible) ver.



View from inspection side

Used water outlet
 Hot water inlet
 Exhaust air
 Extract air
 Fresh air
 Supply air

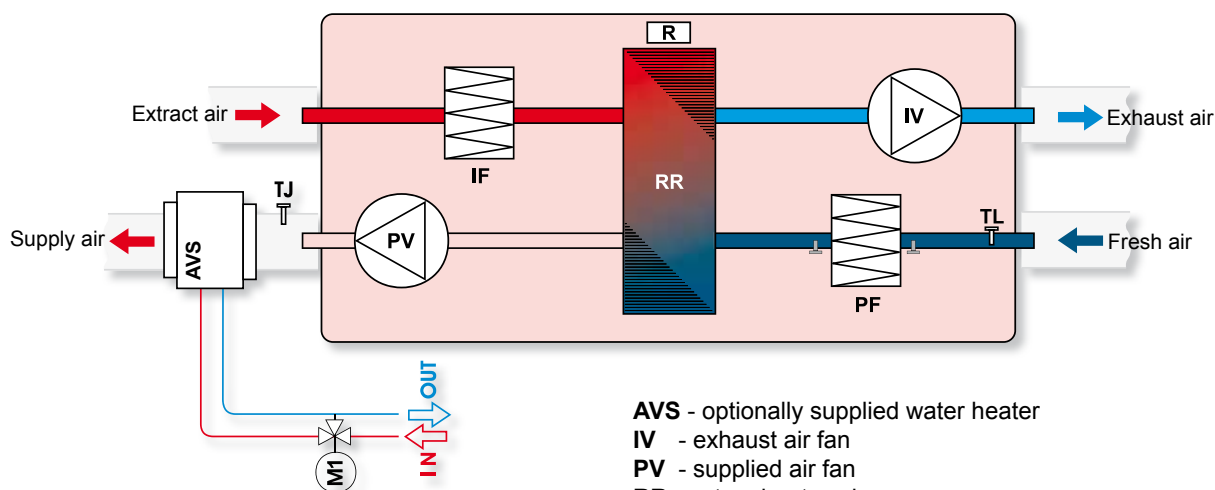
RIRS 400HE EKO; 700HE EKO; 1500HE EKO (horizontal) versions with electrical heater *



- IV - exhaust air fan
- PV - supplied air fan
- RR - rotary heat exchanger
- R - rotor motor
- KE - electrical heater
- PF - fresh air filter (class EU5)
- IF - extract air filter (class EU5)
- TJ - air temperature sensor *
- TL - air temperature sensor *

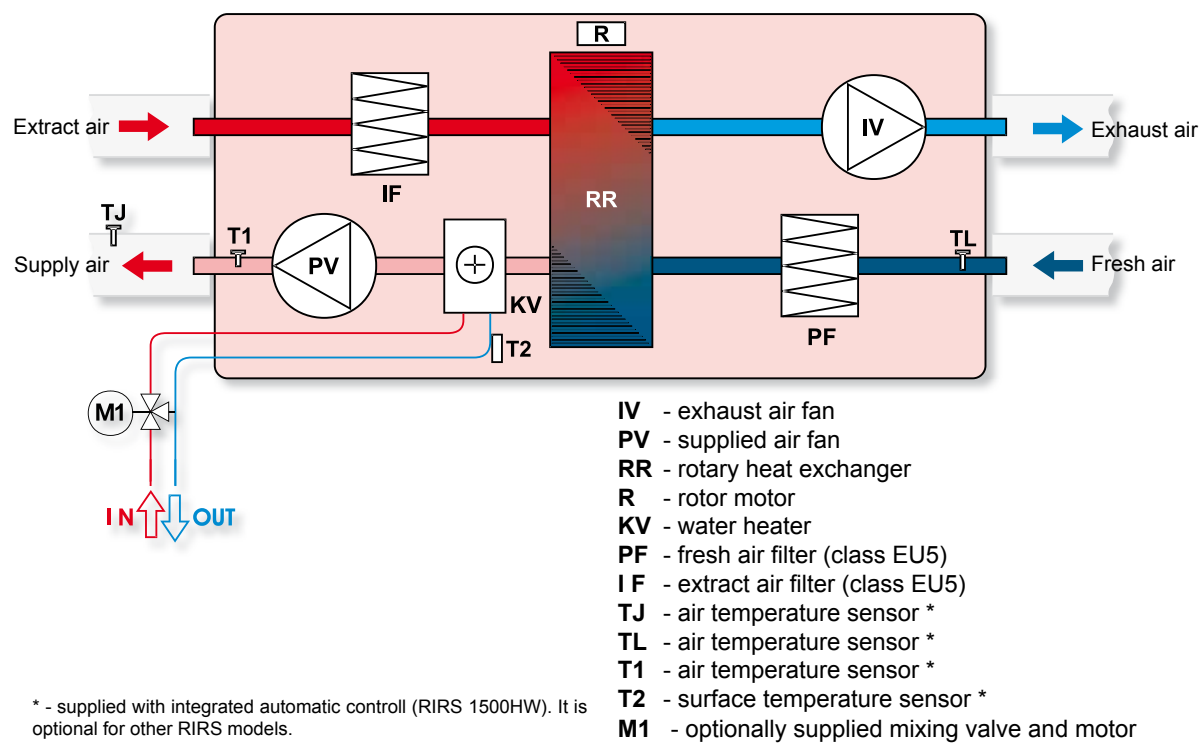
* - supplied with integrated automatic control (RIRS 400HE, RIRS 700HE, RIRS 1500HE). It is optional for other RIRS models.

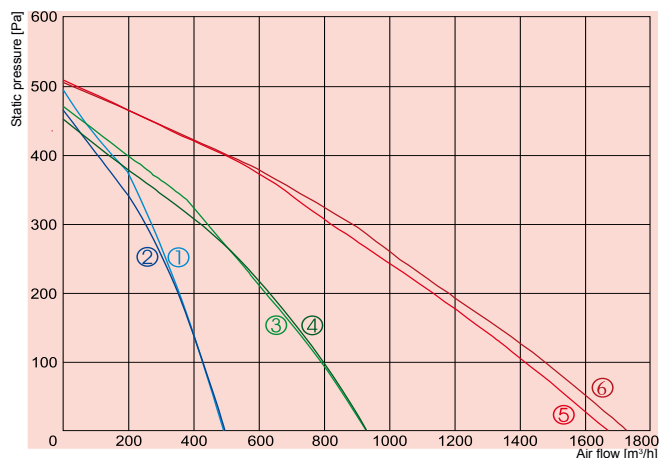
RIRS 400HW EKO; 700HW EKO (horizontal) versions with water heater



- AVS - optionally supplied water heater
- IV - exhaust air fan
- PV - supplied air fan
- RR - rotary heat exchanger
- R - rotor motor
- PF - fresh air filter (class EU5)
- IF - extract air filter (class EU5)
- TJ - air temperature sensor
- TL - air temperature sensor
- M1 - optionally supplied mixing valve and motor

RIRS 1500HW EKO (horizontal) versions with water heater *





① supply
② exhaust

RIRS 400HE

③ supply
④ exhaust

RIRS 700HE

⑤ supply
⑥ exhaust

RIRS 1500HE

		400HE	700HE	1500HE
Heater	-phase/voltage [50Hz/VAC]	~1, 230	~1, 230	~3, 400
	-power consumption [kW]	1,2	2,0	4,5
Fans	-phase/voltage [50Hz/VAC]	~1, 230	~1, 230	~1, 230
	exhaust -power/current [kW/A]	0,190/0,84	0,300/1,31	0,390/1,71
	-fan speed [min ⁻¹]	1850	2050	2750
	supply -power/current [kW/A]	0,190/0,84	0,300/1,31	0,390/1,71
	-fan speed [min ⁻¹]	1850	2050	2750
Motor protection class		IP-44	IP-44	IP-44
Thermal efficiency		75%	74%	74%
Max power consumption [kW/A]		1,59/6,91	2,61/11,39	5,30/10,07
Automatic control		integrated	integrated	integrated
Filter class	-exhaust	EU5	EU5	EU5
	-supply	EU5	EU5	EU5
Thermal insulation [mm]		50	50	50
Weight [kg]		79,0	104,0	170,0

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

Designed for operation indoors only

Thermal efficiency of RIRS 400HE was measured at 400m³/h at temperature range from -20°C to +20°C

Thermal efficiency of RIRS 700HE was measured at 700m³/h at temperature range from -20°C to +20°C

Thermal efficiency of RIRS 1500HE was measured at 1500m³/h at temperature range from -20°C to +20°C

RIRS 400HE (convertible) ver.



RIRS 700HE (convertible) ver.



RIRS 1500HE (convertible) ver.



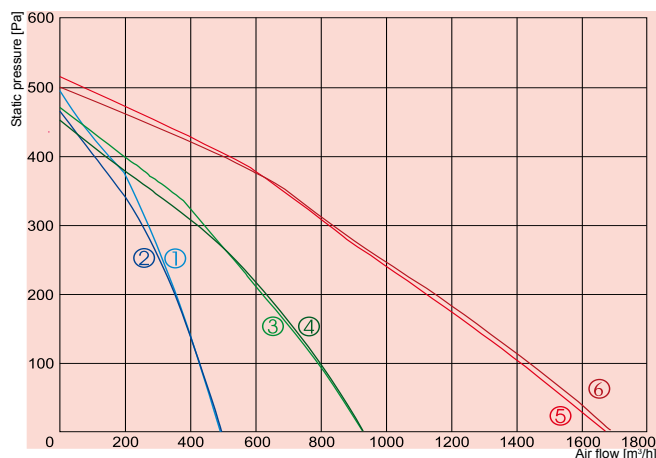
View from inspection side

Exhaust air

Extract air

Fresh air

Supply air



① supply
② exhaust

RIRS 400HW

③ supply
④ exhaust

RIRS 700HW

⑤ supply
⑥ exhaust

RIRS 1500HW

		400HW	700HW	1500HW
Water heater	-power			5,45
	-water T_{in}/T_{out}			80/60
	-water flow rate	AVS 160	AVS 250	0,07
	-water pressure drop			2,3
	-kvs value			1,7
Fans	-phase/voltage	~1, 230	~1, 230	~1, 230
	exhaust -power/current	0,190/0,84	0,300/1,31	0,390/1,71
	-fan speed	1850	2050	2750
	supply -power/current	0,190/0,84	0,300/1,31	0,390/1,71
	-fan speed	1850	2050	2750
	Motor protection class	IP-44	IP-44	IP-44
Thermal efficiency		75%	74%	74%
Max power consumption		0,39/1,70	0,61/2,70	1,4/6,2
Automatic control		integrated	integrated	integrated
Filter class	-exhaust	EU5	EU5	EU5
	supply	EU5	EU5	EU5
Thermal insulation		50	50	50
Weight		70,0	96,0	165,0

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

Designed for operation indoors only

Thermal efficiency of RIRS 400HW was measured at 400m³/h at temperature range from -20°C to +20°C

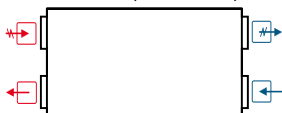
Thermal efficiency of RIRS 700HW was measured at 700m³/h at temperature range from -20°C to +20°C

Thermal efficiency of RIRS 1500HW was measured at 1500m³/h at temperature range from -20°C to +20°C

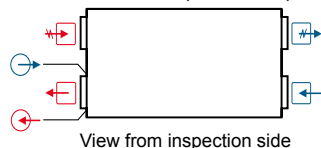
RIRS 400HW (convertible) ver.



RIRS 700HW (convertible) ver.

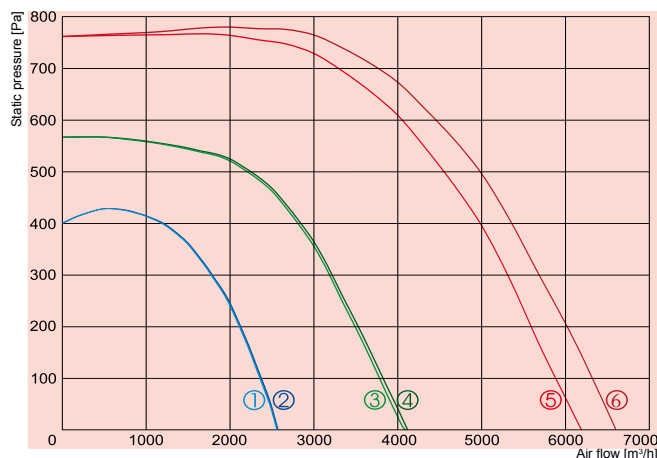


RIRS 1500HW (convertible) ver.



View from inspection side

Used water outlet
 Hot water inlet
 Exhaust air
 Extract air
 Fresh air
 Supply air



① — supply
② — exhaust

RIRS 2000HE

③ — supply
④ — exhaust

RIRS 3000HE

⑤ — supply
⑥ — exhaust

RIRS 4000HE

		2000HE	3000HE	4000HE
Heater	-phase/voltage [50Hz/VAC]	~3, 400	~3, 400	~3, 400
	-power consumption [kW]	9	15	18 (9+9)
Fans	-phase/voltage [50Hz/VAC]	~3, 400	~3, 400	~3, 400
	exhaust -power/current [kW/A]	1,5/2,6	2,5/4,1	3,7/6,0
	-fan speed [min ⁻¹]	1310	1300	1320
	supply -power/current [kW/A]	1,5/2,6	2,5/4,1	3,7/6,0
	-fan speed [min ⁻¹]	1310	1300	1320
Motor protection class		IP-54	IP-54	IP-54
Thermal efficiency		70%	77%	71%
Max power consumption [kW/A]		12,1/18,5	20,1/30,2	25,5/38,3
Automatic control		optional	optional	optional
Filter class	-exhaust	EU5	EU5	EU5
	-supply	EU5	EU5	EU5
Thermal insulation [mm]		50	50	50
Weight [kg]		260,0	410,0	490,0

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

Designed for operation indoors only

Thermal efficiency of RIRS 2000HE was measured at 2000m³/h at temperature range from -20°C to +20°C

Thermal efficiency of RIRS 3000HE was measured at 3000m³/h at temperature range from -20°C to +20°C

Thermal efficiency of RIRS 4000HE was measured at 4000m³/h at temperature range from -20°C to +20°C

RIRS 2000HEA ver.



RIRS 3000HEA ver.



RIRS 4000HEA ver.



RIRS 2000HEB ver.



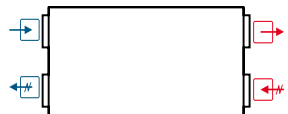
RIRS 3000HEB ver.



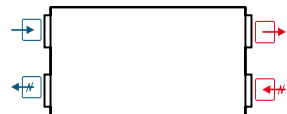
RIRS 4000HEB ver.



RIRS 2000HEC ver.



RIRS 3000HEC ver.



RIRS 4000HEC ver.



RIRS 2000HED ver.



RIRS 3000HED ver.



RIRS 4000HED ver.

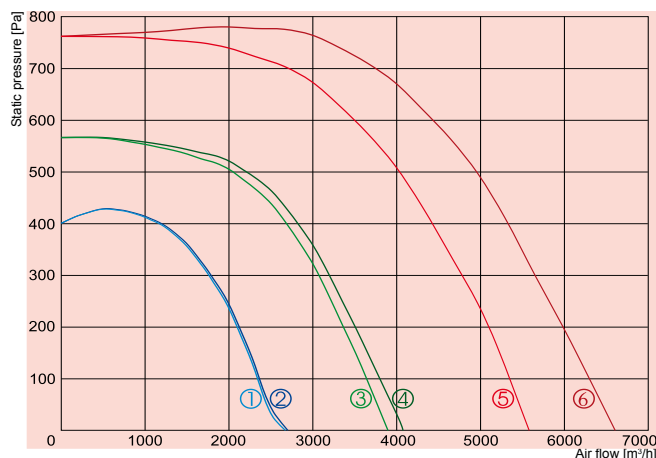


View from inspection side

View from inspection side

View from inspection side

→ Exhaust air → Extract air → Fresh air → Supply air



- ① supply **RIRS 2000HW**
② exhaust
- ③ supply **RIRS 3000HW**
④ exhaust
- ⑤ supply **RIRS 4000HW**
⑥ exhaust

		2000HW	3000HW	4000HW
Water heater	-power [kW]	9,5	11,21	16,29
	-water temp. T_{in}/T_{out} [°C]	80/60	80/60	80/60
	-water flow rate [l/s]	0,12	0,14	0,20
	-kvs value [m³/h]	2,1	1,9	2,1
	-water pressure drop [kPa]	4,5	7,5	11,85
Fans	-phase/voltage [50Hz/VAC]	~3, 400	~3, 400	~3, 400
exhaust	-power/current [kW/A]	1,5/2,6	2,5/4,1	3,7/6,0
	-fan speed [min ⁻¹]	1310	1300	1320
supply	-power/current [kW/A]	1,5/2,6	2,5/4,1	3,7/6,0
	-fan speed [min ⁻¹]	1310	1300	1320
Motor protection class		IP-54	IP-54	IP-54
Thermal efficiency		70%	77%	71%
Max power consumption	[kW/A]	3,1/5,5	5,1/8,5	7,5/12,3
Automatic control		optional	optional	optional
Filter class	-exhaust	EU5	EU5	EU5
	supply	EU5	EU5	EU5
Thermal insulation	[mm]	50	50	50
Weight	[kg]	260	410	490

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

Designed for operation indoors only

Thermal efficiency of RIRS 2000HW was measured at 2000m³/h at temperature range from -20°C to +20°C

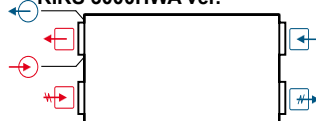
Thermal efficiency of RIRS 3000HW was measured at 3000m³/h at temperature range from -20°C to +20°C

Thermal efficiency of RIRS 4000HW was measured at 4000m³/h at temperature range from -20°C to +20°C

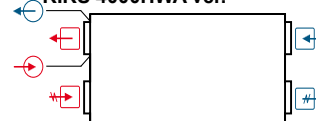
RIRS 2000HWA ver.



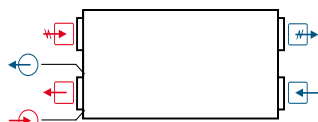
RIRS 3000HWA ver.



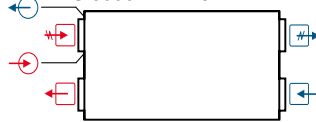
RIRS 4000HWA ver.



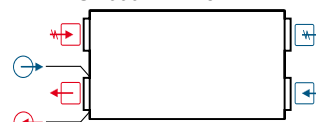
RIRS 2000HWA ver.



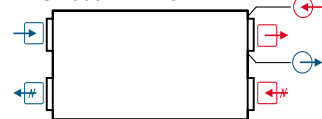
RIRS 3000HWA ver.



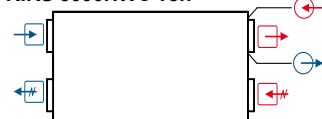
RIRS 4000HWA ver.



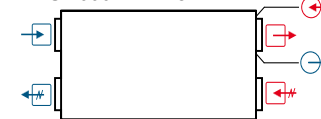
RIRS 2000HWA ver.



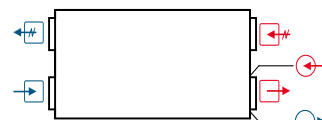
RIRS 3000HWA ver.



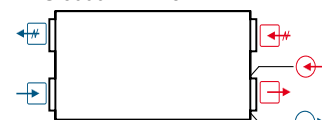
RIRS 4000HWA ver.



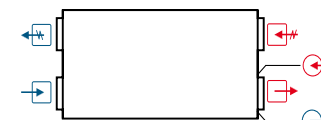
RIRS 2000HWA ver.



RIRS 3000HWA ver.



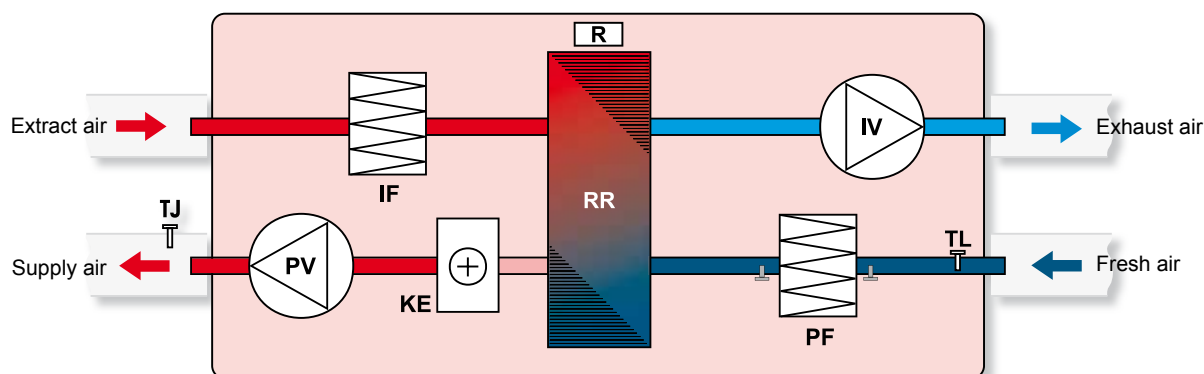
RIRS 4000HWA ver.



View from inspection side

- Used water outlet
 Hot water inlet
 Exhaust air
 Extract air
 Fresh air
 Supply air

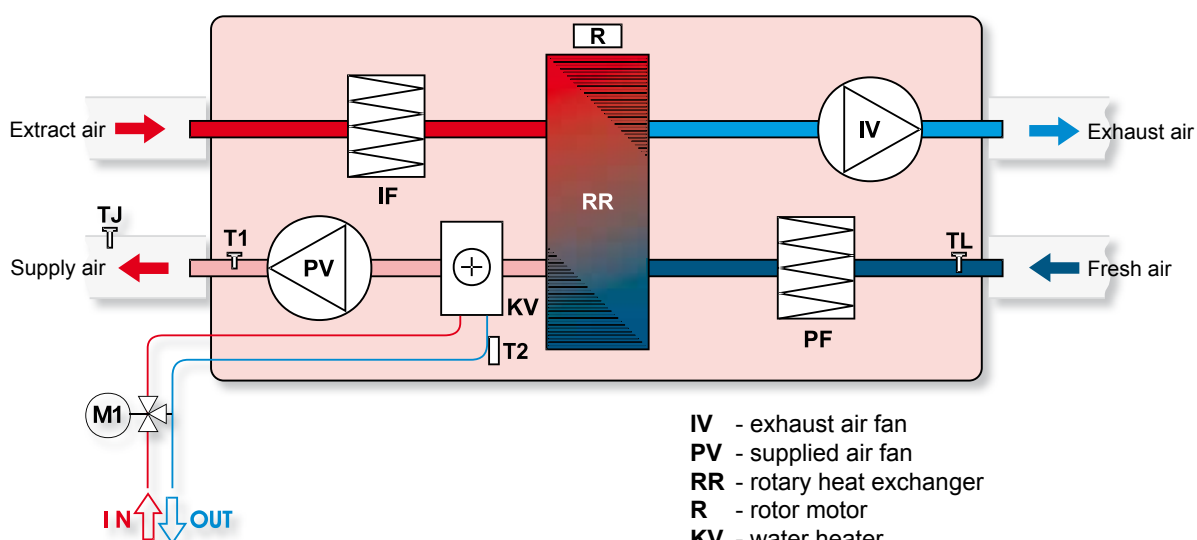
RIRS 400HE; 700HE; 1500HE; 2000HE; 3000HE; 4000HE (horizontal) versions with electrical heater *



- IV - exhaust air fan
- PV - supplied air fan
- RR - rotary heat exchanger
- R - rotor motor
- KE - electrical heater
- PF - fresh air filter (class EU5)
- IF - extract air filter (class EU5)
- TJ - air temperature sensor *
- TL - air temperature sensor *

* - supplied with integrated automatic control (RIRS 400HE, RIRS 700HE, RIRS 1500HE). It is optional for other RIRS models.

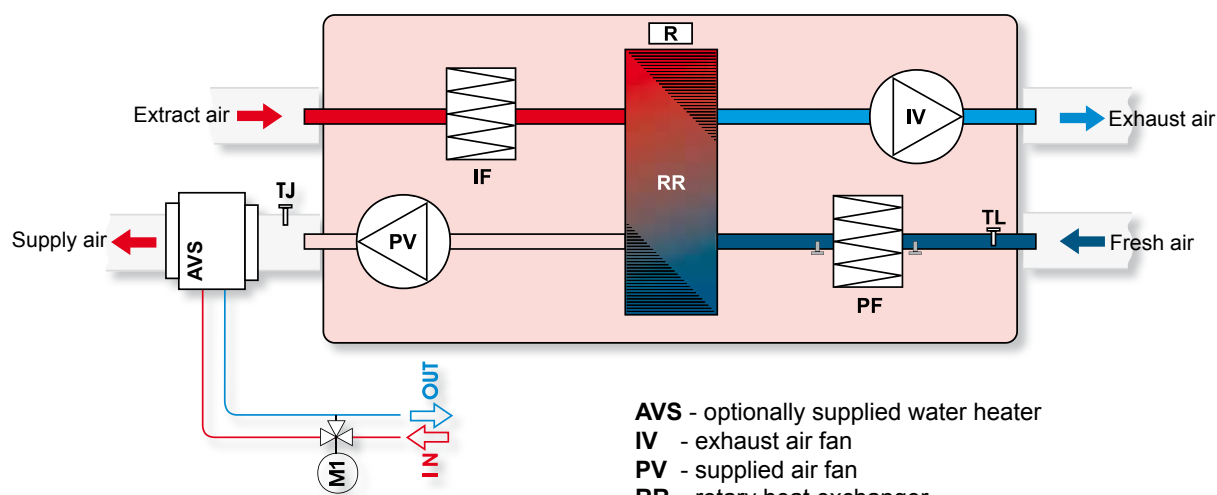
RIRS 1500HW; 2000HW; 3000HW; 4000HW (horizontal) versions with water heater *



- IV - exhaust air fan
- PV - supplied air fan
- RR - rotary heat exchanger
- R - rotor motor
- KV - water heater
- PF - fresh air filter (class EU5)
- IF - extract air filter (class EU5)
- TJ - air temperature sensor *
- TL - air temperature sensor *
- T1 - air temperature sensor *
- T2 - surface temperature sensor *
- M1 - optionally supplied mixing valve and motor

* - supplied with integrated automatic control (RIRS 1500HW). It is optional for other RIRS models.

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



AVS - optionally supplied water heater

IV - exhaust air fan

PV - supplied air fan

RR - rotary heat exchanger

R - rotor motor

PF - fresh air filter (class EU5)

IF - extract air filter (class EU5)

TJ - air temperature sensor

TL - air temperature sensor

M1 - optionally supplied mixing valve and motor