



Rekuperatoriniai įrenginiai

AHU with heat recovery

Lüftungsgeräte mit wärmerückgewinnung

Вентиляционные агрегаты с рекуперацией тепла

AHU with heat recovery



Rekuperatoriniai įrenginiai valo, šildo ir tiekia šviežią orą. Įrenginiai paima šilumą iš išmetamo oro ir perduoda ją į tiekiamą.

Našūs ir tyliai veikiantys ventiliatoriai.

Dalyje įrenginių naudojami ventiliatoriai su diržine pavara.

Plokštelinis šilumokaitis, šilumos atgavimo efektyvumas 58-62%.

Elektrinis šildytuvas.

Reguliuojamas oro srautas.

Oro apėjimo sklendė by-pass.

Šilumokaičio priešužšaliminė apsauga.

Žemas triukšmo lygis.

Kiekvienas agregatas patikrintas atskirai.

Akustinė sienelių izoliacija – 50mm.

Lengvai montuojami.

Skirtas darbui patalpose.

Įrenginio paskirtis - oro valymas, šildymas ir tiekimas į patalpas. Naudojamas tik švaraus oro ventiliavimo ir kondicionavimo sistemose.



Heat recovering air handling units are used for cleaning, heating and supplying with fresh air. AHU recover heat from exhaust air and convey it to supply air.

Efficient low-noise fans.

Particular series are equipped with belt-driven fans.

Efficiency of plate heat exchanger 58-62%.

Electrical heater.

Controlled air flow.

Supply air temperature control.

By-pass damper.

Low noise level.

All units are pre-run and tested.

Acoustic insulation of the walls – 50 mm.

Easy to mount.

Suitable for operation indoor environment.

The purpose of the unit is: cleaning, heating and supplying room with exceptionally clean air. The unit is used in clean air ventilation and conditioning systems.



Die Wärmerückgewinnungsgeräte filtern, erwärmen und fördern frische Luft. Sie nehmen Wärme aus der Abluft auf und leiten sie an die Außenluft weiter.

Leistungsfähige und leise Ventilatoren.

Im einigen Teil der Geräten werden die Ventilatoren mit dem Keilriemenantrieb verwendet.

Plattenwärmeaustauscher, Wärmerückgewinnungsgrad 58-62%.

Elektrisches Heizregister für die Zuluft.

Regelung des Luftstromes.

Regelung der Temperatur der gelieferten Luft.

Bypassklappe.

Niedriges Geräuschniveau.

Jedes Aggregat ist getrennt geprüft.

Akustische Isolation des Gehäuses - 50mm stark.

Leicht montierbar.

Anwendung: nur in geschützten Räumen.

Die Anlage ist für den Transport, Filterung und die Aufwärmung sauberer Luft vorgesehen.



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

Производительные и бесшумные вентиляторы.

В части установок применяются вентиляторы с ременной передачей.

Пластинчатый теплообменник, эффективность теплоотдачи 58-62%.

Электрический нагреватель.

Регулируемый воздушный поток.

Регулируемая температура подаваемого воздуха.

Воздухообводной клапан by-pass.

Низкий уровень шума.

Каждый агрегат проверен отдельно.

Акустическая изоляция стенок – 50 мм.

Легко монтируются.

Предназначен для монтажа в помещениях.

Агрегат предназначен для очистки, подогрева и подачи чистого воздуха в помещения. Используется только в системах вентиляции и кондиционирования чистого воздуха

Accessories



SKM



AKS



SSP



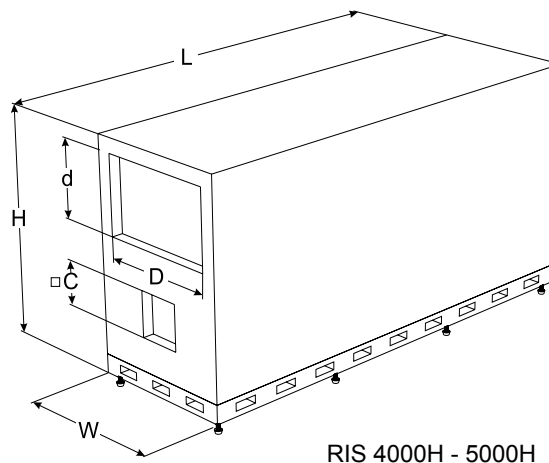
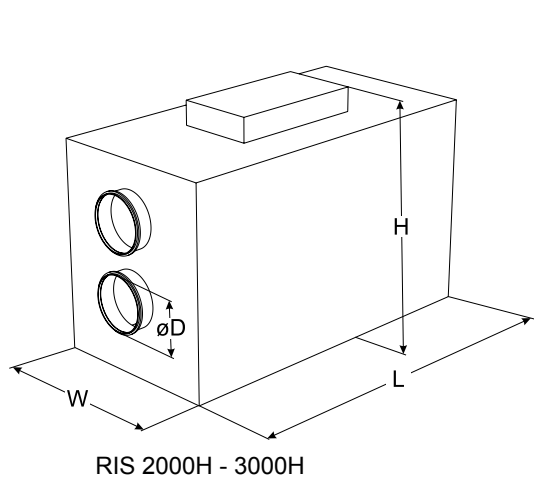
AP



MR



SSK



RIS 2000 H E K

K	Air intake side (K - left; D - right)
E	Heater type (E - electrical; W - water)
H	Housing type (H - horizontal)
2000	Air flow m³/h
	AHU with plate heat-exchanger

Type	Dimensions [mm]			
	L, mm	W, mm	H, mm	øD, mm
RIS 2000HE, 2000HW	2100	790	1130	400
RIS 3000HE, 3000HW	2400	830	1130	400

Type	L, mm	W, mm	H, mm	D, mm	d, mm	□C, mm
RIS 4000HE, 4000HW	3000	740	1470	500	500	260
RIS 5000HE, 5000HW	3000	990	1470	800	500	290

Accessories



AVS



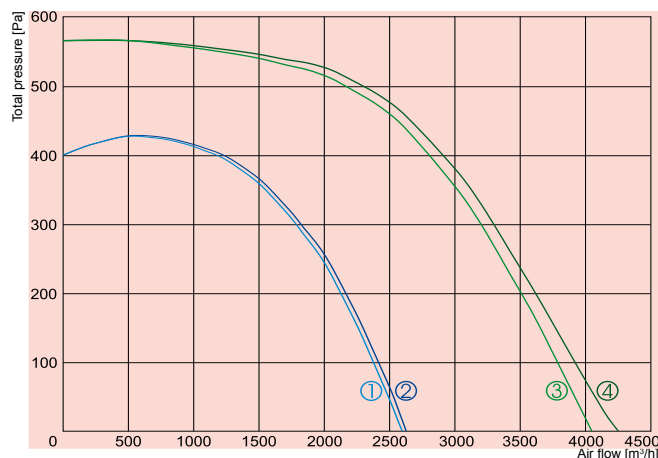
SP



RMG



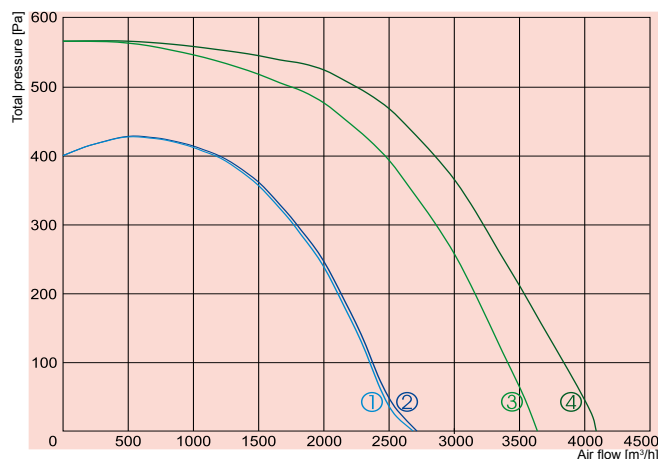
PS



① supply
② exhaust **RIS 2000HE**

③ supply
④ exhaust **RIS 3000HE**

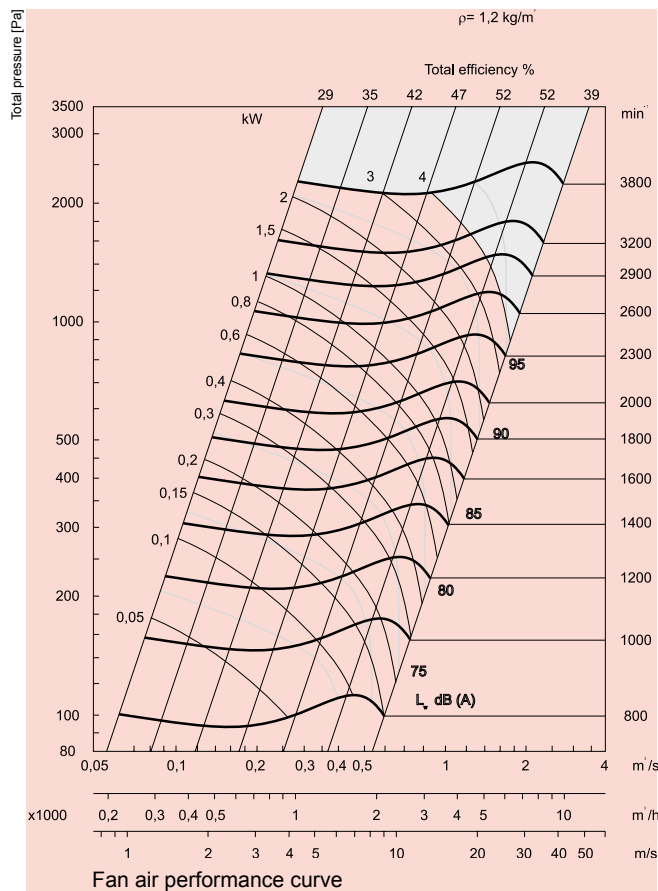
		2000HE	3000HE
Heater	-phase/voltage [50Hz/VAC]	~3, 400	~3, 400
	-power consumption [kW]	15,0	24,0 (9+15)
Fans	-phase/voltage [50Hz/VAC]	~3, 400	~3, 400
	-power/current [kW/A]	1,5/2,6	2,5/4,1
exhaust	-fan speed [min ⁻¹]	1310	1300
supply	-power/current [kW/A]	1,5/2,6	2,5/4,1
	-fan speed [min ⁻¹]	1310	1300
Motor protection class		IP-54	IP-54
Terminal box protection class		IP-54	IP-54
Thermal efficiency		60%	59%
Max power consumption [kW/A]		18,0/26,9	29,0/44,7
Automatic control		optional	optional
Filter class	-exhaust	EU5	EU5
	-supply	EU5	EU5



① supply
② exhaust **RIS 2000HW**

③ supply
④ exhaust **RIS 3000HW**

		2000HW	3000HW
Water heater	-power [kW]	15,6	20,2
	-water temp. T _{in} /T _{out} [°C]	80/60	80/60
	-water flow rate [l/s]	0,2	0,25
	-water pressure drop [kPa]	5,8	10,3
Fans	-phase/voltage [50Hz/VAC]	~3, 400	~3, 400
	-power/current [kW/A]	1,5/2,6	2,5/4,1
exhaust	-fan speed [min ⁻¹]	1310	1300
supply	-power/current [kW/A]	1,5/2,6	2,5/4,1
	-fan speed [min ⁻¹]	1310	1300
Motor/terminal box protection class		IP-54/IP-54	IP-54/IP-54
Thermal efficiency		60%	59%
Max power consumption [kW/A]		3,0/5,2	5,0/8,2
Automatic control		optional	optional
Filter class	-exhaust/supply	EU5/EU5	EU5/EU5

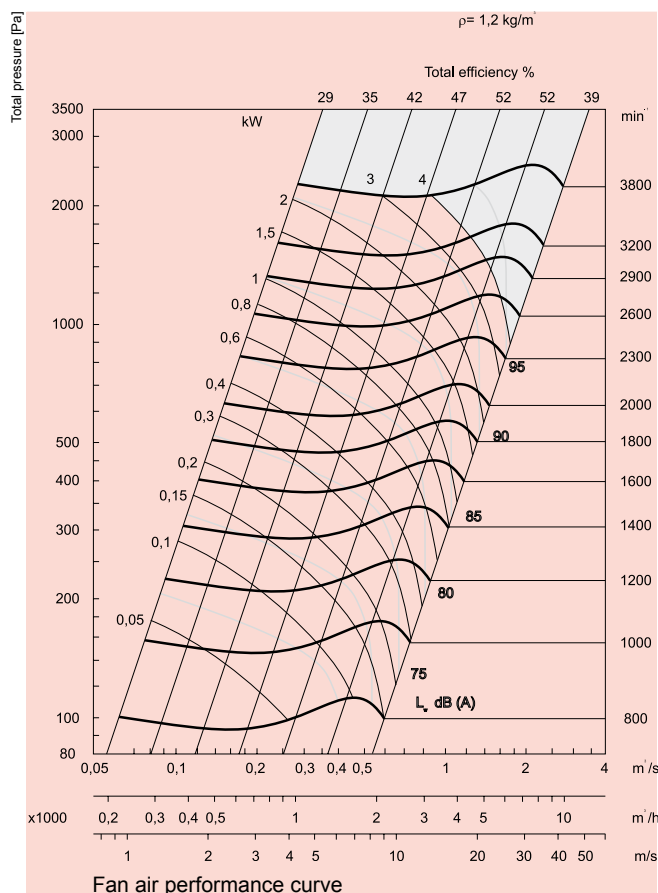


RIS 4000HE

Air flow: approx. 4000 m³/h
Pressure to duct: approx. 300 Pa

1G **2G**
1st sp. / 2nd sp.

Heater	-phase/voltage [50Hz/VAC]	~3, 400	~3, 400
	-power [kW]	27,0 (12+15)	27,0 (12+15)
Fans	-phase/voltage [50Hz/VAC]	~3, 400	~3, 400
exhaust	-power [kW]	2,2	2,0/0,5
	-current [A]	4,7	4,25/2,5
	-fan speed [min ⁻¹]	2090	1989/998
supply	-power [kW]	2,2	2,0/0,5
	-current [A]	4,7	4,25/2,5
	-fan speed [min ⁻¹]	2090	1989/998
Motor protection class		IP-55	IP-55
Terminal box protection class		IP-54	IP-54
Thermal efficiency		58%	58%/62%
Max power consumption	[kW]	31,4	31,0/28,0
Max current	[A]	50,4	49,5/46,0
Automatic control		optional	optional
Filter class		EU5	EU5



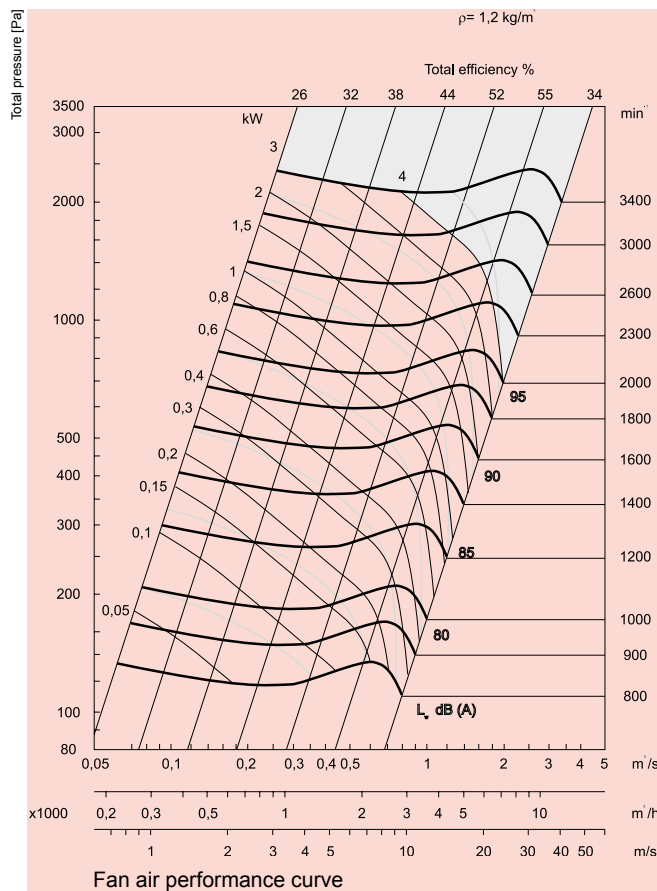
RIS 4000HW

Air flow: approx. 4000 m³/h
Pressure to duct: approx. 300 Pa

1G **2G**
1st sp. / 2nd sp.

Water heater	-power [kW]	26,0	26,0/13,6*
	-water temp. T _{in} /T _{out} [°C]	80/60	80/60
	-water flow rate [l/s]	0,31	0,31/0,16
	-water pressure drop [kPa]	5,0	5,0/1,55
Fans	-phase/voltage [50Hz/VAC]	~3, 400	~3, 400
exhaust	-power [kW]	2,2	2,0/0,5
	-current [A]	4,7	4,25/2,5
	-fan speed [min ⁻¹]	2090	1989/998
supply	-power [kW]	2,2	2,0/0,5
	-current [A]	4,7	4,25/2,5
	-fan speed [min ⁻¹]	2090	1989/998
Motor protection class		IP-55	IP-55
Terminal box protection class		IP-54	IP-54
Thermal efficiency		58%	58%/62%
Max power consumption	[kW]	4,4	4,0/1,0
Max current	[A]	9,4	8,5/5,0
Automatic control		optional	optional
Filter class		EU5	EU5

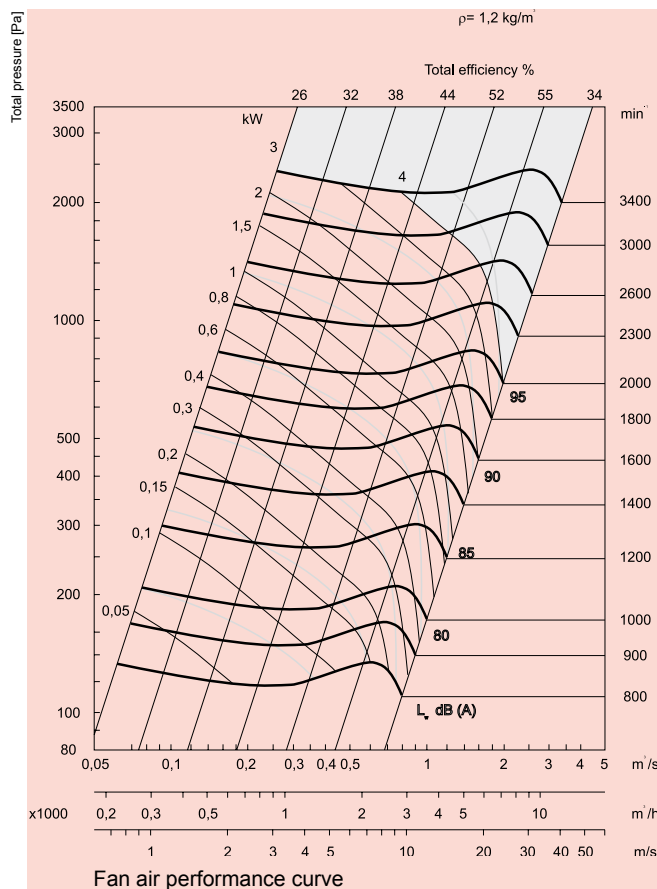
* heater power measured at 2nd speed



RIS 5000HE

Air flow: approx. 5000 m³/h
Pressure to duct: approx. 300 Pa

		1G	2G
		1st sp. / 2nd sp.	
Heater	-phase/voltage [50Hz/VAC]	~3, 400	~3, 400
	-power [kW]	33,0 (15+18)	33,0 (15+18)
Fans	-phase/voltage [50Hz/VAC]	~3, 400	~3, 400
	-power [kW]	3,0	2,5/0,65
	-current [A]	6,47	5,3/2,8
	-fan speed [min⁻¹]	1867	1776/888
supply	-power [kW]	3,0	2,5/0,65
	-current [A]	6,47	5,3/2,8
	-fan speed [min⁻¹]	1867	1776/888
Motor protection class		IP-55	IP-55
Terminal box protection class		IP-54	IP-54
Thermal efficiency		58%	58%/62%
Max power consumption [kW]		39,0	38,0/34,3
Max current [A]		63,1	60,8/55,8
Automatic control		optional	optional
Filter class		EU5	EU5



RIS 5000HW

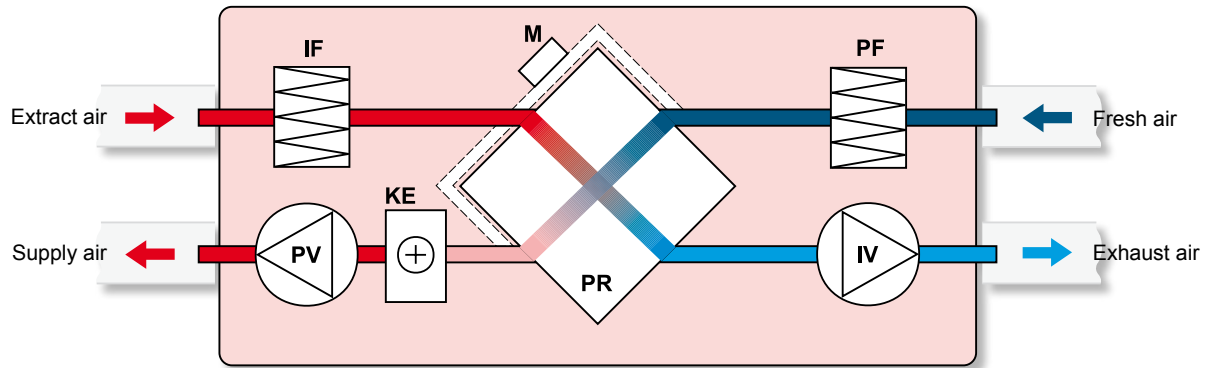
Air flow: approx. 5000 m³/h
Pressure to duct: approx. 300 Pa

		1G	2G
		1st sp. / 2nd sp.	
Water heater	-power [kW]	32,0	32,0/17,0*
	-water temp. T_{in}/T_{out} [°C]	80/60	80/60
	-water flow rate [l/s]	0,38	0,38/0,2
	-water pressure drop [kPa]	4,14	4,14/1,32
Fans	-phase/voltage [50Hz/VAC]	~3, 400	~3, 400
	-power [kW]	3,0	2,5/0,65
	-current [A]	6,47	5,3/2,8
	-fan speed [min⁻¹]	1867	1776/888
supply	-power [kW]	3,0	2,5/0,65
	-current [A]	6,47	5,3/2,8
	-fan speed [min⁻¹]	1867	1776/888
Motor protection class		IP-55	IP-55
Terminal box protection class		IP-54	IP-54
Thermal efficiency		58%	58%/62%
Max power consumption [kW]		6,0	5,0/1,3
Max current [A]		13,0	10,6/5,6
Automatic control		optional	optional
Filter class		EU5	EU5

* heater power measured at 2nd speed

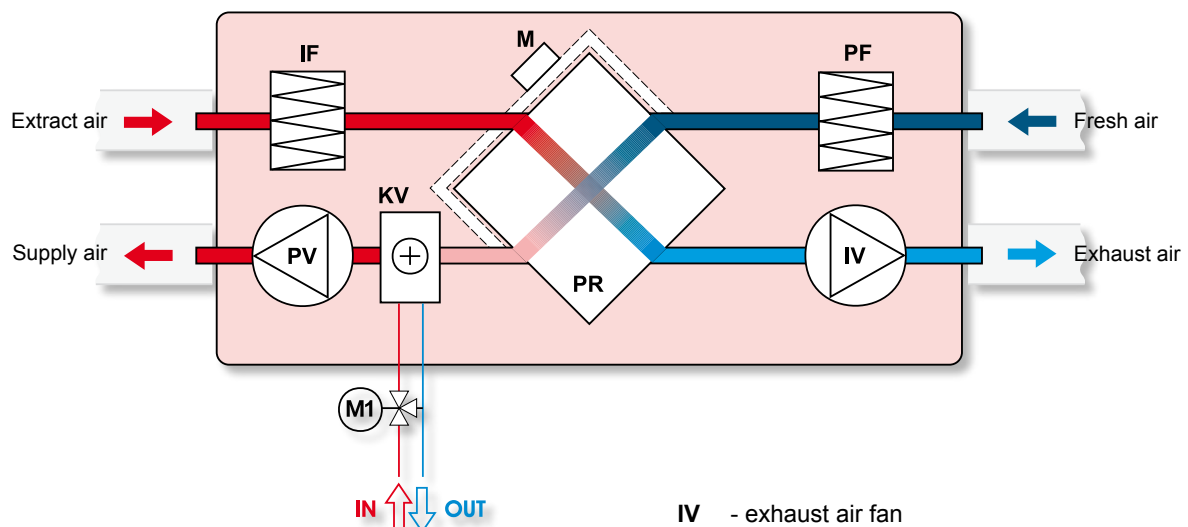


RIS 2000HE; 3000HE versions with electrical heater



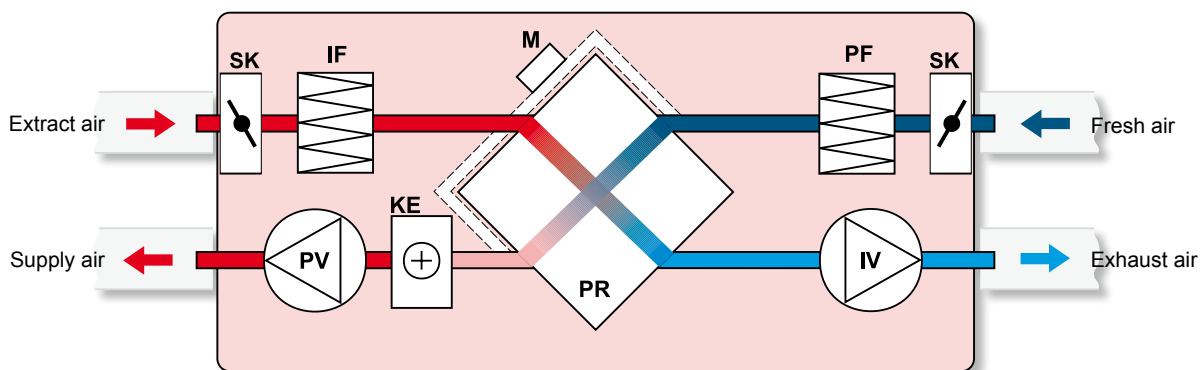
- IV - exhaust air fan
- PV - supply air fan
- PR - plate heat exchanger
- KE - electrical heater
- PF - filter for supply air (class EU5)
- IF - filter for extract air (class EU5)
- M - by-pass damper

RIS 2000HW; 3000HW versions with water heater



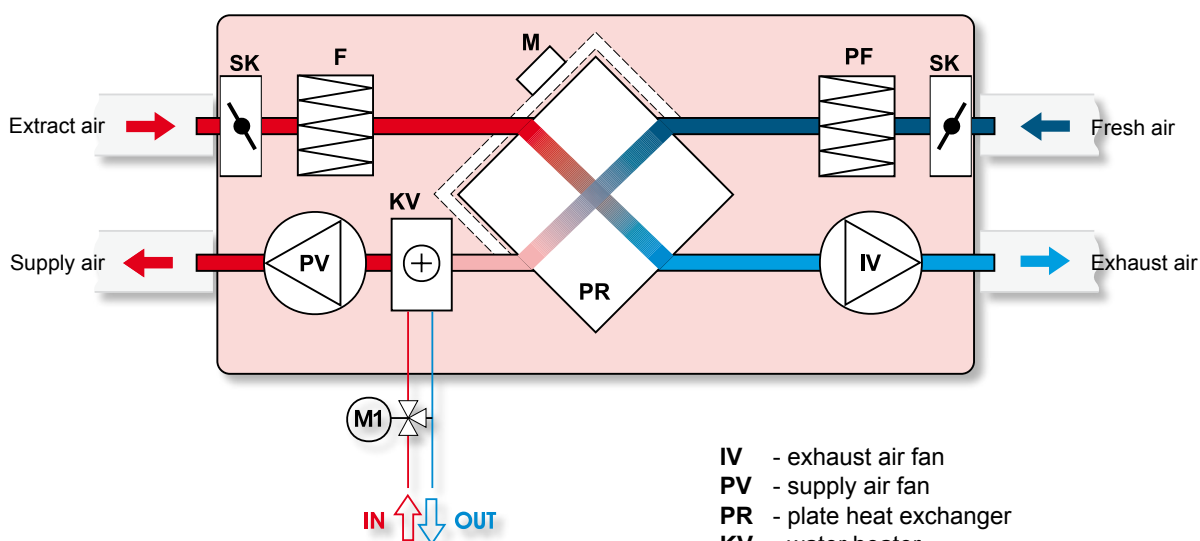
- IV - exhaust air fan
- PV - supply air fan
- PR - plate heat exchanger
- KV - water heater
- PF - filter for supply air (class EU5)
- IF - filter for extract air (class EU5)
- M - by-pass damper
- M1 - optionally supplied mixing valve and motor

RIS 4000HE; 5000HE versions with electrical heater



- IV - exhaust air fan
- PV - supply air fan
- PR - plate heat exchanger
- KE - electrical heater
- PF - filter for supply air (class EU5)
- IF - filter for extract air (class EU5)
- SK - air flow damper
- M - by-pass damper

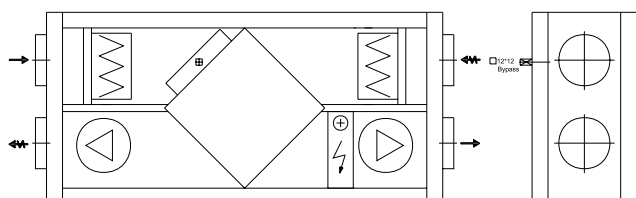
RIS 4000HW; 5000HW versions with electrical heater



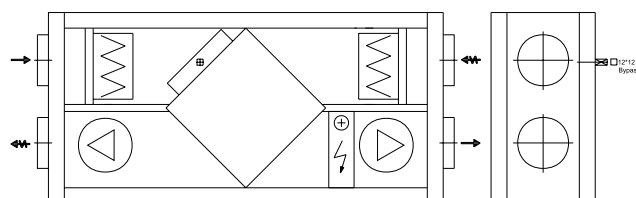
- IV - exhaust air fan
- PV - supply air fan
- PR - plate heat exchanger
- KV - water heater
- PF - filter for supply air (class EU5)
- IF - filter for extract air (class EU5)
- SK - air flow damper
- M - by-pass damper
- M1 - optionally supplied mixing valve and motor

RIS versions

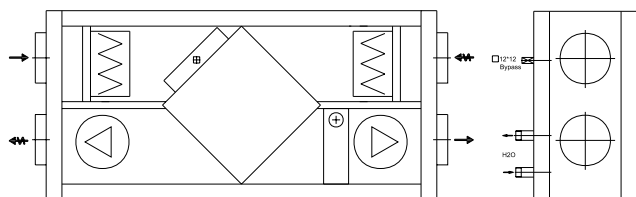
RIS 2000 - 5000HEK



RIS 2000 - 5000HED



RIS 2000 - 5000HWK



RIS 2000 - 5000HWD

