

RIRS V



AHU with heat recovery

Rekuperatoriniai įrenginiai

Centrale wentylacyjne z odzyskiem ciepła

Вентиляционные агрегаты с рекуперацией тепла



Air handling units RIRS V 3.0 have high efficiency rotor heat exchanger. AHU is used for ventilation of houses and other heated areas.

- Rotor heat exchanger with efficiency up to 75%.
- Electrical or water heater.
- Efficient and low-noise fans.
- Controlled air flow.
- External-rotor motors.
- RIRS 400VE - 1200VE 3.0 with integrated control and monitoring capabilities, using Flex, Stouch and TPC remote control devices.
- Acoustic insulation of the walls – 50 mm.
- RIRS 400V - 1200V 3.0 housing: powder coated painting RAL 7040.
- Low noise level.
- Easy mounting.



Vėdinimo įrenginiai RIRS V 3.0 pagaminti su efektyviu rotoriniu šilumokaičiu. Rekuperatoriai montuojami vėdinti šildomas patalpas.

- Rotorinis šilumokaitis, efektyvumas iki 75%.
- Elektrinis arba papildomai užsakomas kanalinis vandeninis šildytuvas.
- Energiją taupantys ir tyliai dirbantys ventiliatoriai.
- Keičiamas oro srautas.
- Tiekiamo oro temperatūros valdymas.
- Integruota automatika, galima valdyti su Flex, Stouch ir TPC pulteliais.
- sienelių triukšmo izoliacija – 50mm.
- Milteliniu būdu dažytas korpusas - spalva RAL 7040.
- Žemas triukšmo lygis.
- Greitas ir lengvas montavimas.



Centrale wentylacyjne z odzyskiem ciepła – RIRS V 3.0.

Centrale wentylacyjne RIRS V 3.0 są wyposażone w obrotowy wymiennik ciepła. Przeznaczone są do wentylacji ogrzewanych pomieszczeń.

- Układ centrali - pionowy.
- Wymiennik obrotowy wykonany w całości z aluminium.
- Energooszczędne i ciche wentylatory AC.
- Zabudowane nagrzewnice elektryczne wtórne lub wodne (czasami - montowane na kanale).
- Zmiana wydatku (3 biegi).
- Regulacja temperatury powietrza nawiewanego.
- Wymiennik napędzany silnikiem.
- Strony serwisowe L-lewa oraz R-prawa.
- Możliwość sterowania sterownikami Flex, Stouch, TPC.
- Izolacja wełną mineralną 50 mm.
- Obudowa malowana proszkowo (RAL 7040).



Установки с рекуперацией тепла RIRS V 3.0 очищают, нагревают и подают свежий воздух. RIRS V 3.0 устройства извлекают тепло из выходящего воздуха и передают его в поступающий.

- Роторный теплообменник.
- Высокоэффективная отдача тепла до 75 %.
- Электрический или водяной нагреватель.
- Производительные и бесшумные вентиляторы.
- Регулируемый воздушный поток.
- Регулируемая температура подаваемого воздуха.
- Двигатели с наружными ротором.
- RIRS 400VE - 1500VE 3.0 с интегрированными возможностями управления и наблюдения с помощью пультов управления Flex, Stouch и TPC.
- Акустическая изоляция стенок - 50 мм.
- RIRS 400V - 1500V 3.0 корпус: окрашенный RAL 7040.
- Низкий уровень шума.
- Легко монтируются.

Accessories

Control panel



Flex

p. 178

Sensor controller



Stouch

p. 179

Programmable controller



TPC

p. 180

Circular duct silencer



AKS

p. 230

Shift-off damper



SKG

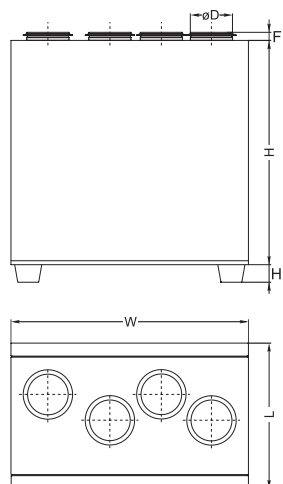
p. 226

Mounting clamp



AP

p. 229



RIRS 400 V E L 3.0

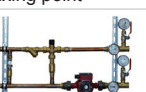
- Equipped with new PRV V1.1 control board
- Air intake side (L - left; R - right)
- Heater type (E - integrated electrical heater; W - optional water heater)
- Housing type (V - vertical, H - horizontal, P - under - ceiling)
- AHU size according to air flow range m³/h
- AHU with rotor heat-exchanger

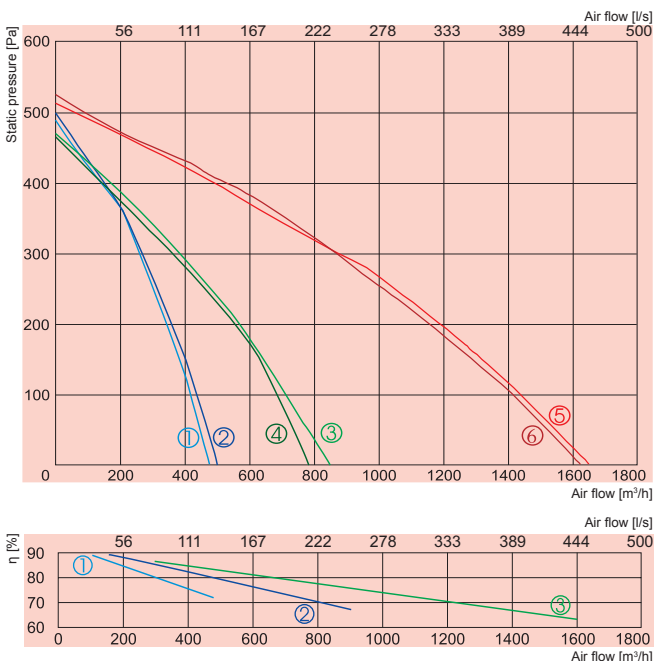
Type	Dimensions [mm]					
	W	L	H	øD	H ₁	F
RIRS 400VE/VW 3.0	900	553	850	160	40	30
RIRS 700VE/VW 3.0	1000	653	980	250	40	40
RIRS 1200VE/VW 3.0	1500	855	1150	315	70	40

Type	Accessories										
	Flex Stouch TPC	AKS SKG AP	AVS	SP	TJP-10K CO4C***	SSB Heat-ing	SSB Cool-ing	RMG 80/60°C	RMG 60/40°C	VVP/VXP 80/60°C	VVP/VXP 60/40°C
RIRS 400VE 3.0	+	160	-	LM230A-TP	-	-	-	-	-	-	-
RIRS 400VW 3.0	+	160	160	TF230	+	61	81	3-0,63-4	3-0,63-4	45.10-0,63	45.10-0,63
RIRS 700VE 3.0	+	250	-	LM230A-TP	-	-	-	-	-	-	-
RIRS 700VW 3.0	+	250	250	TF230	+	61	81	3-1,0-4	3-0,63-4	45.10-1,0	45.10-0,63
RIRS 1200VE 3.0	+	315	-	LM230A-TP	-	-	-	-	-	-	-
RIRS 1200VW 3.0	+	315	315	LF230	+	61	81	3-1,0-4	3-1,0-4	45.10-1,0	45.10-1,0

*** - anti-frost thermostat

Accessories

Heating coil  AVS p. 192	Actuator for dampers  SP p. 188	Duct sensor  TJP 10K p. 187	Thermic water valve actuator  SSB p. 184	Mixing point  RMG p. 185	2 and 3 way valves  VVP/VXP p. 186
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① supply
② exhaust

RIRS 400VE 3.0

③ supply
④ exhaust

RIRS 700VE 3.0

⑤ supply
⑥ exhaust

RIRS 1200VE 3.0

①

RIRS 400VE 3.0

②

RIRS 700VE 3.0

③

RIRS 1200VE 3.0

		400VE 3.0	700VE 3.0	1200VE 3.0
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	0,280/1,22	0,390/1,71
	-fan speed [min ⁻¹]	1850	2050	2750
supply	-power/current [kW/A]	0,190/0,84	0,280/1,22	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]	1,58/6,89	2,56/11,17	5,28/9,92
Automatic control		integrated	integrated	integrated
Filter class	-exhaust	M5	M5	M5
	-supply	M5	M5	M5
Thermal insulation	[mm]	50	50	50
Weight	[kg]	79,5	104,0	192,0
Comply with ERP 2013		+	+	+

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

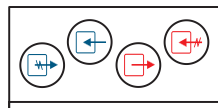
Designed for operation indoors only

Thermal efficiency of RIRS 400VE 3.0 was calculated at 400m³/h (indoor conditions +20°/60%; outdoor conditions -20°/90%)

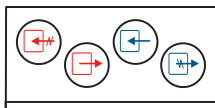
Thermal efficiency of RIRS 700VE 3.0 was calculated at 700m³/h (indoor conditions +20°/60%; outdoor conditions -20°/90%)

Thermal efficiency of RIRS 1200VE 3.0 was calculated at 1200m³/h (indoor conditions +20°/60%; outdoor conditions -20°/90%)

RIRS 400VEL 3.0



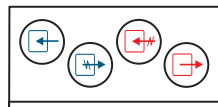
RIRS 400VER 3.0



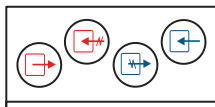
400VE 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	77	52	60	68	73	73	65	64
Extract	55	45	45	46	48	49	43	36
Surrounding	49	45	42	35	41	39	31	28

Measured at 366 m³/h, 135 Pa

RIRS 700VEL 3.0



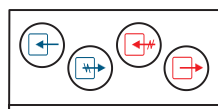
RIRS 700VER 3.0



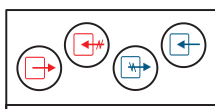
700VE 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	79	60	61	68	69	77	67	62
Extract	61	53	57	54	51	52	45	39
Surrounding	52	50	45	34	36	40	27	22

Measured at 687 m³/h, 144 Pa

RIRS 1200VEL 3.0



RIRS 1200VER 3.0



1200VE 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	80	66	77	73	72	70	66	52
Extract	70	63	68	61	55	47	43	34
Surrounding	61	52	58	53	50	47	43	33

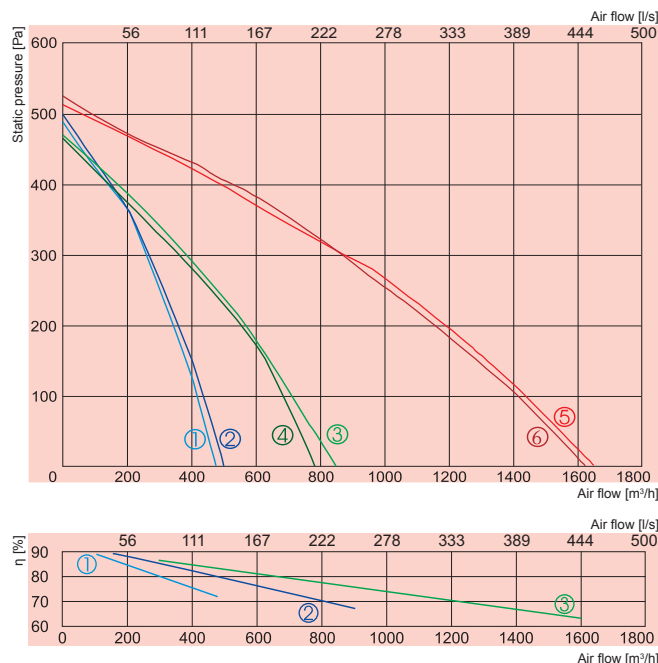
Measured at 1411 m³/h, 102 Pa

View from inspection side

↔ Exhaust air ↔ Extract air

View from inspection side

↔ Fresh air ↔ Supply air



① supply
② exhaust

RIRS 400VW 3.0

③ supply
④ exhaust

RIRS 700VW 3.0

⑤ supply
⑥ exhaust

RIRS 1200VW 3.0

① **RIRS 400VW 3.0**
② **RIRS 700VW 3.0**
③ **RIRS 1200VW 3.0**

400VW 3.0 700VW 3.0 1200VW 3.0

Water heater	-power	[kW]			
	-water . T_{in}/T_{out}	[°C]			
	-water flow rate	[l/s]			
	-water pressure drop	[kPa]			
Fans	-phase/voltage	[50Hz/VAC]	~1, 230	~1, 230	~1, 230
exhaust	-power/current	[kW/A]	0,190/0,84	0,280/1,22	0,390/1,71
	-fan speed	[min ⁻¹]	1850	2050	2750
supply	-power/current	[kW/A]	0,190/0,84	0,280/1,22	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]	0,39/1,68	0,56/2,44	0,78/3,42
Automatic control			integrated	integrated	integrated
Filter class	-exhaust		M5	M5	M5
	supply		M5	M5	M5
Thermal insulation		[mm]	50	50	50
Weight		[kg]	79,0	104,0	192,0
Comply with ERP 2013			+	+	+

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

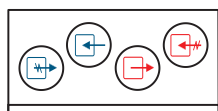
Designed for operation indoors only

Thermal efficiency of RIRS 400VW 3.0 was calculated at 400m³/h (indoor conditions +20°/60%; outdoor conditions -20°/90%)

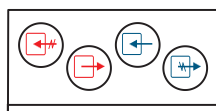
Thermal efficiency of RIRS 700VW 3.0 was calculated at 700m³/h (indoor conditions +20°/60%; outdoor conditions -20°/90%)

Thermal efficiency of RIRS 1200VW 3.0 was calculated at 1200m³/h (indoor conditions +20°/60%; outdoor conditions -20°/90%)

RIRS 400VWL 3.0



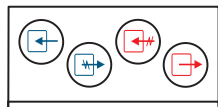
RIRS 400VWR 3.0



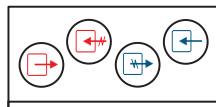
400VW 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	77	52	60	68	73	73	65	64
Extract	55	45	45	46	48	49	43	36
Surrounding	49	45	42	35	41	39	31	28

Measured at 366 m³/h, 135 Pa

RIRS 700VWL 3.0



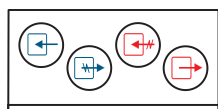
RIRS 700VWR 3.0



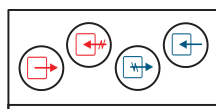
700VW 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	79	60	61	68	69	77	67	62
Extract	61	53	57	54	51	52	45	39
Surrounding	52	50	45	34	36	40	27	22

Measured at 687 m³/h, 144 Pa

RIRS 1200VWL 3.0



RIRS 1200VWR 3.0



1200VW 3.0	Lwa total, dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	80	66	77	73	72	70	66	52
Extract	70	63	68	61	55	47	43	34
Surrounding	61	52	58	53	50	47	43	33

Measured at 1411 m³/h, 102 Pa

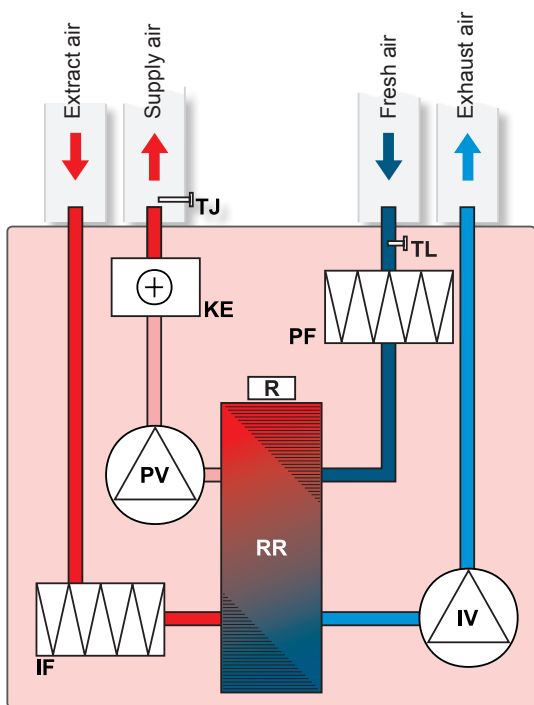
View from inspection side

Exhaust air (blue arrow pointing out) Extract air (red arrow pointing in)

View from inspection side

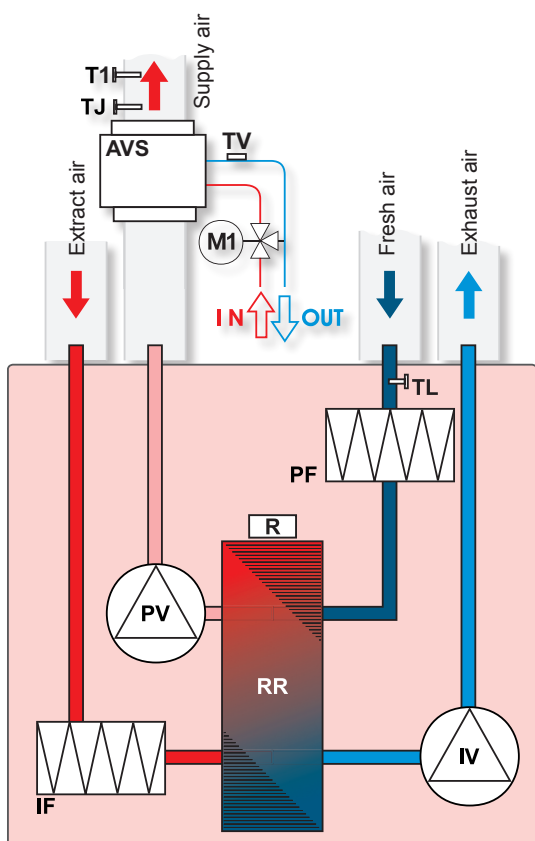
Fresh air (blue arrow pointing in) Supply air (red arrow pointing out)

RIRS 400VE 3.0 (vertical) with electrical heater



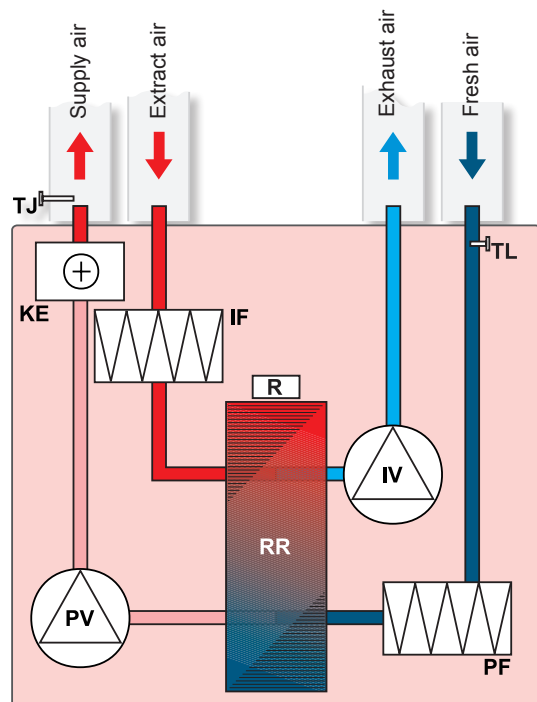
- IV - exhaust air fan
- PV - supply air fan
- RR - rotary heat exchanger
- R - rotor motor
- KE - electrical heater
- PF - fresh air filter (class M5)
- IF - extract air filter (class M5)
- TJ - temperature sensor for supply air
- TL - temperature sensor for fresh air

RIRS 400VW 3.0 (vertical) with water heater



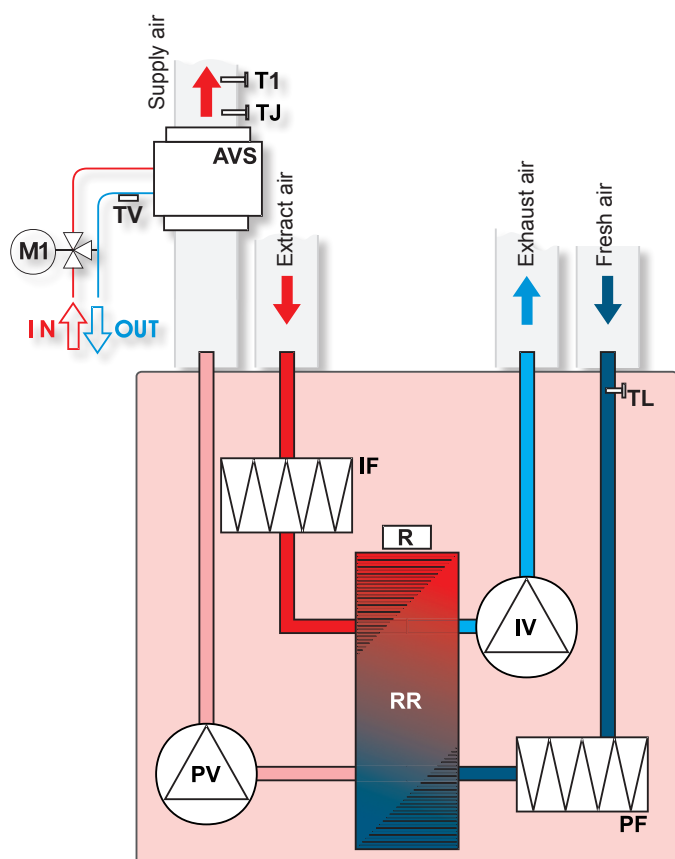
- AVS - optionally supplied water heater
- IV - exhaust air fan
- PV - supply air fan
- RR - rotary heat exchanger
- R - rotor motor
- PF - fresh air filter (class M5)
- IF - extract air filter (class M5)
- TJ - air temperature sensor
- TL - air temperature sensor
- M1 - optionally supplied mixing valve and motor
- T1 - optionally supplied antifrost thermostat
- TV - optionally supplied antifrost sensor

RIRS 700VE 3.0; 1200VE 3.0 (vertical) 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 M5)
- IF - extract air filter (class M5)
- TJ - temperature sensor for supply air
- TL - temperature sensor for fresh air

RIRS 700VW 3.0; 1200VW 3.0 (vertical) versions with water heater



- AVS - optionally supplied water heater
- IV - exhaust air fan
- PV - supply air fan
- RR - rotary heat exchanger
- R - rotor motor
- PF - fresh air filter (class M5)
- IF - extract air filter (class M5)
- TJ - air temperature sensor
- TL - air temperature sensor
- M1 - optionally supplied mixing valve and motor
- T1 - optionally supplied antifrost thermostat
- TV - optionally supplied antifrost sensor