

# RIRS H



AHU with heat recovery

Rekuperatoriniai įrenginiai

Centrale wentylacyjne z odzyskiem ciepła

Вентиляционные агрегаты с рекуперацией тепла



Air handling units RIRS H 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 80%.
- Electrical or water heater.
- Efficient and low-noise fans.
- Controlled air flow.
- External-rotor motors.
- Convertible inspection side for RIRS 400HE - 1200HE 3.0 and 400HW - 1200HW 3.0.
- RIRS 400H - 1200H 3.0 with integrated control and monitoring capabilities, using Flex, Stouch remote control devices.
- Acoustic insulation of the walls – 50 mm.
- RIRS 400H - 1200H 3.0 housing: powder coated painting RAL 7040.
- Low noise level.
- Easy mounting.



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

- Rotorinis šilumokaitis, efektyvumas iki 80%.
- Elektrinis arba papildomai užsakomas kanalinis vandeninis šildytuvas.
- Energiją taupantys ir tyliai dirbantys ventiliatoriai.
- Keičiamas oro srautas.
- Tiekiamo oro temperatūros valdymas.
- Keičiama aptarnavimo pusė.
- Integruota automatika, galima valdyti su Flex, Stouch pulteliais.
- Sienulių triukšmo izoliacija – 50mm.
- Milteliniu būdu dažytas korpusas - spalva RAL 7040.
- Žemas triukšmo lygis.
- Greitas ir lengvas montavimas.



Centrale wentylacyjne z odzyskiem ciepła – RIRS H 3.0. Centrale wentylacyjne RIRS H 3.0 są wyposażone w obrotowy wymiennik ciepła. Przeznaczone są do wentylacji ogrzewanych pomieszczeń.

- Układ centrali - poziomy
- Wymiennik obrotowy wykonany w całości z aluminium.
- Zabudowane nagrzewnice elektryczne wtórne lub wodne.
- Energooszczędne i ciche wentylatory AC.
- Zmiana wydatku (3 biegi).
- Regulacja temperatury powietrza nawiewanego.
- Wymiennik napędzany silniczkami.
- Centrala z możliwością samodzielnej zmiany strony serwisowej.
- Możliwość sterowania sterownikami Flex, Stouch.
- Izolacja wełną mineralną 50 mm.
- Obudowa malowana proszkowo (RAL 7040).



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

- Роторный теплообменник.
- Высокоэффективная отдача тепла до 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 3.0 и 400HW - 1500HW 3.0.
- RIRS 400H - 700H 3.0 с интегрированными возможностями управления и наблюдения с помощью пультов управления Flex, Stouch.
- Акустическая изоляция стен - 50 мм.
- RIRS 400H - 1500H 3.0 корпус: окрашенный RAL 7040.
- Низкий уровень шума.
- Легко монтируются.

## Accessories

Control panel



Flex

p. 178

Sensor controller



Stouch

p. 179

Heating coil



AVS

p. 192

Mounting clamp



AP

p. 229

Shuft-off damper



SKG

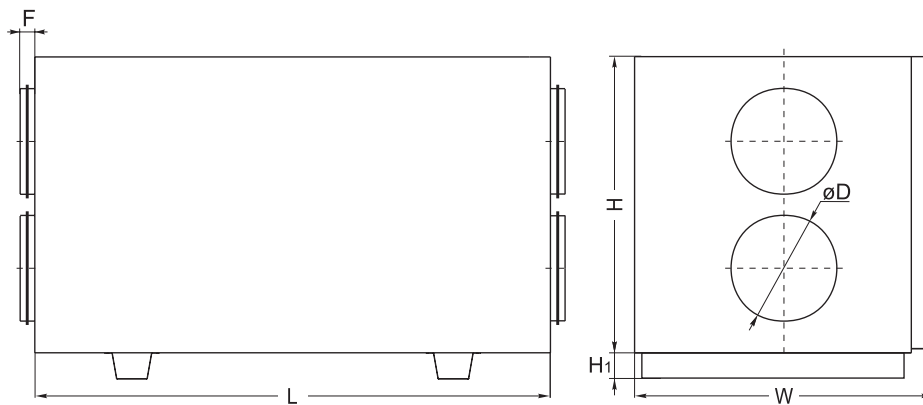
p. 226

Actuator for dampers



SP

p. 188



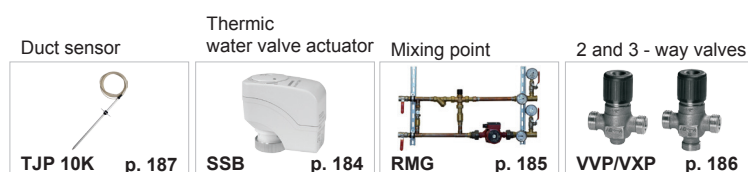
## RIRS 1200 H E 3.0

→	Equipped with new PRV V1.1 control board
→	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 m <sup>3</sup> /h
→	AHU with rotor heat-exchanger

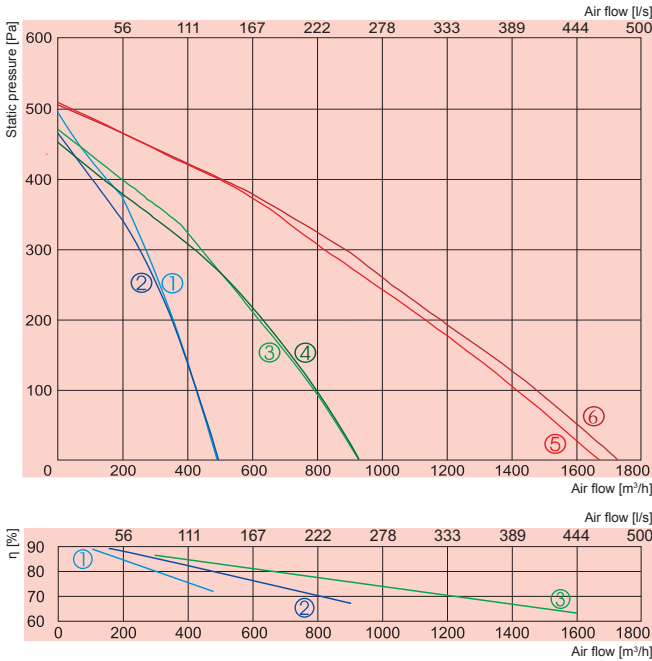
Type	Dimensions [mm]					
	L	W	H	øD	F	H <sub>1</sub>
RIRS 400HE/HW 3.0	1000	558	580	160	30	40
RIRS 700HE/HW 3.0	1100	654	700	250	40	40
RIRS 1200HE/HW 3.0	1350	855	900	315	40	70

Type	Accessories										
	Flex Stouch	AVS	SVS SSK	AP SKG	SP	TJK-10P CO4C***	SSB Heating	RMG 80/60°C	RMG 60/40°C	VVP/VXP 80/60°C	VVP/VXP 60/40°C
RIRS 400HE 3.0	+	-	-	160	LM230A-TP	-	-	-	-	-	-
RIRS 400HW 3.0	+	160	-	160	TF230	+	81	3-0,63-4	3-0,63-4	45.10-0,63	45.10-0,63
RIRS 700HE 3.0	+	-	-	250	LM230A-TP	-	-	-	-	-	-
RIRS 700HW 3.0	+	250	-	250	TF230	+	81	3-1,0-4	3-0,63-4	45.10-1,0	45.10-0,63
RIRS 1200HE 3.0	+	-	-	315	LM230A-TP	-	-	-	-	-	-
RIRS 1200HW 3.0	+	int	-	315	LF230	int	81	3-1,0-4	3-0,63-4	45.10-1,0	45.10-0,63

### Accessories



# RIRS H



- ① — supply     **RIRS 400HE 3.0**
- ② — exhaust
- ③ — supply     **RIRS 700HE 3.0**
- ④ — exhaust
- ⑤ — supply     **RIRS 1200HE 3.0**
- ⑥ — exhaust

- ① — **RIRS 400HE 3.0**
- ② — **RIRS 700HE 3.0**
- ③ — **RIRS 1200HE 3.0**

		<b>400HE 3.0</b>	<b>700HE 3.0</b>	<b>1200HE 3.0</b>
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 <sup>-1</sup> ]	1850	2050	2750
supply	-power/current [kW/A]	0,190/0,84	0,300/1,31	0,390/1,71
	-fan speed [min <sup>-1</sup> ]	1850	2050	2750
Motor protection class		IP-44	IP-44	IP-44
Thermal efficiency		75%	74%	74%
Max power consumption	[kW/A]	1,58/6,90	2,6/11,31	5,79/9,915
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	170,0
Comply with ERP 2013		+	+	+

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

Designed for operation indoors only

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

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

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

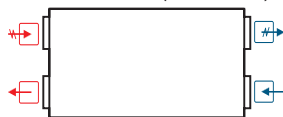
## RIRS 400HE 3.0 (convertible) ver.



<b>400HE 3.0</b>	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	76	42	50	57	64	72	72	66
Extract	54	45	43	44	50	44	42	37
Surrounding	51	31	32	36	43	46	45	44

Measured at 411 m³/h, 117 Pa

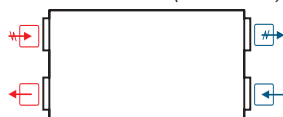
## RIRS 700HE 3.0 (convertible) ver.



<b>700HE 3.0</b>	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	76	56	63	70	69	71	68	62
Extract	59	52	52	53	49	49	47	40
Surrounding	54	41	43	47	45	48	46	45

Measured at 675 m³/h, 173 Pa

## RIRS 1200HE 3.0 (convertible) ver.

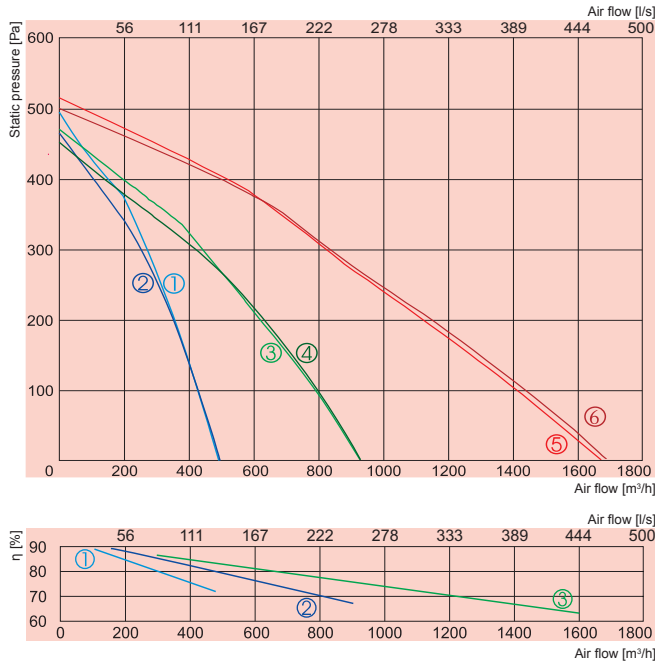


<b>1200HE 3.0</b>	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	77	66	72	70	71	68	60	54
Extract	68	63	64	63	57	50	42	30
Surrounding	58	52	53	52	50	47	39	36

Measured at 1460m³/h, 86 Pa

View from inspection side

- Exhaust air
- Extract air
- Fresh air
- Supply air



- ① — supply **RIRS 400HW 3.0**
- ② — exhaust
- ③ — supply **RIRS 700HW 3.0**
- ④ — exhaust
- ⑤ — supply **RIRS 1200HW 3.0**
- ⑥ — exhaust

- ① — **RIRS 400HW 3.0**
- ② — **RIRS 700HW 3.0**
- ③ — **RIRS 1200HW 3.0**

		400HW 3.0	700HW 3.0	1200HW 3.0
Water heater	-power [kW]			
	-water $T_{in}/T_{out}$ [°C]			
	-water flow rate [l/s]			
	-water pressure drop [kPa]	AVS 160	AVS 250	AVS 315
	-kvs value [m³/h]			
Fans	-phase/voltage [50Hz/VAC]	~1, 230	~1, 230	~1, 230
exhaust	-power/current [kW/A]	0,190/0,84	0,255/1,12	0,390/1,71
	-fan speed [min <sup>-1</sup> ]	1850	2050	2750
supply	-power/current [kW/A]	0,190/0,84	0,255/1,12	0,390/1,71
	-fan speed [min <sup>-1</sup> ]	1850	2050	2750
Motor protection class		IP-44	IP-44	IP-44
Thermal efficiency		75%	74%	74%
Max power consumption	[kW/A]	0,38/1,68	0,6/2,62	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]	70,0	96,0	165,0
Comply with ERP 2013		+	+	+

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

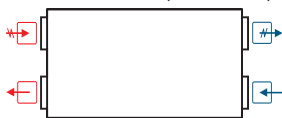
Designed for operation indoors only

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

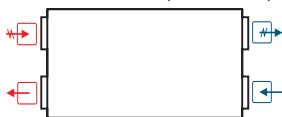
Thermal efficiency of RIRS 700HW 3.0 was calculated at 700m³/h (indoor conditions +20°/60%; outdoor conditions -20°/90%)

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

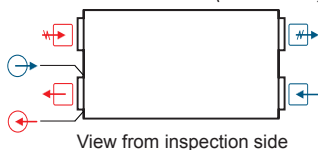
### RIRS 400HW 3.0 (convertible) ver.



### RIRS 700HW 3.0 (convertible) ver.



### RIRS 1200HW 3.0 (convertible) ver.



View from inspection side

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

400HW 3.0	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	76	42	50	57	64	72	72	66
Extract	54	45	43	44	50	44	42	37
Surrounding	51	31	32	36	43	46	45	44

Measured at 411 m³/h, 117 Pa

700HW 3.0	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	76	56	63	70	69	71	68	62
Extract	59	52	52	53	49	49	47	40
Surrounding	54	41	43	47	45	48	46	45

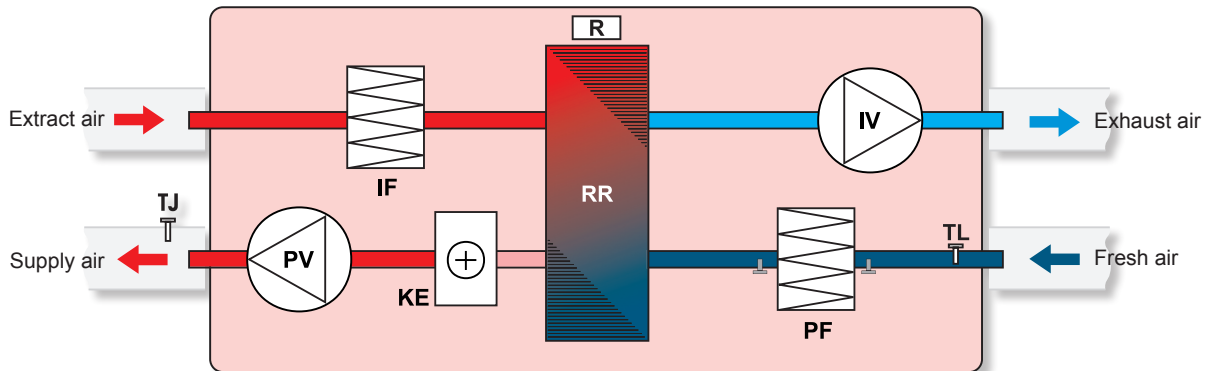
Measured at 675 m³/h, 173 Pa

1200HW 3.0	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	77	66	72	70	71	68	60	54
Extract	68	63	64	63	57	50	42	30
Surrounding	58	52	53	52	50	47	39	36

Measured at 1460m³/h, 86 Pa

# RIRS H

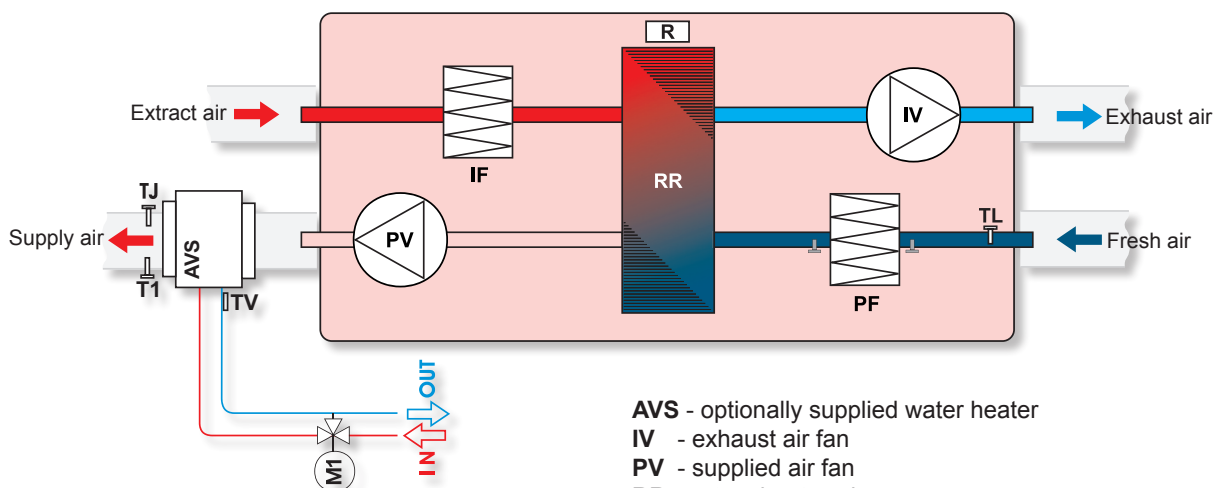
## RIRS 400HE 3.0; 700HE 3.0; 1200HE 3.0 (horizontal) versions with electrical heater \*



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

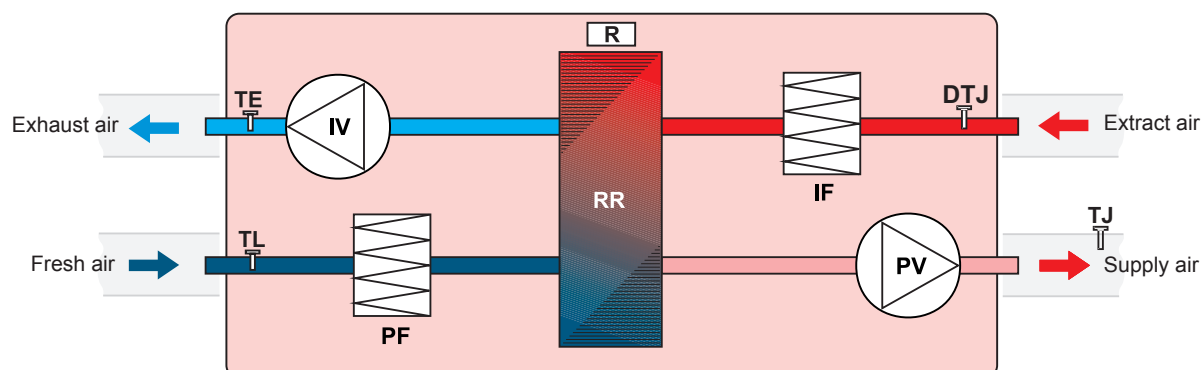
\* - supplied with integrated automatic control (RIRS 400HE 3.0, RIRS 700HE 3.0, RIRS 1200HE 3.0). It is optional for other RIRS models.

## RIRS 400HW 3.0; 700HW 3.0 (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 M5)
- IF** - extract air filter (class M5)
- TJ** - temperature sensor for supply air
- TL** - temperature sensor for fresh air
- T1** - antifrost thermostat
- TV** - antifrost sensor
- M1** - optionally supplied mixing valve and motor

## RIRS 1200HW 3.0 (horizontal) versions with water heater \*



- IV** - exhaust air fan
- PV** - supply air fan
- RR** - rotary heat exchanger
- PF** - filter for supply air
- IF** - filter for extract air
- TJ** - air temperature sensor for supply air
- TL** - air temperature sensor for fresh air
- TE** - temperature sensor for exhaust air
- DTJ** - Temp. and humidity sensor for extract air