HRS-FE/W

- HRU with efficiency ≥ 75%
- Counterflow
- Qv > 700 m³/h
- Horizontal

Flat HRU with counterflow exchanger type HRS-FE/W

Flat heat recovery units with counterflow heat exchanger and electrical or warm water post-heating. The unit is available in different versions, 700 m³/h until 2500 m³/h.

Application

- Ventilation for both residential and non-residential applications
- For indoor mounting in a frost protected area

Composition

- Housing in prelacquered steel plate RAL9016 (model 700) and RAL7040 (other models)
- 30 mm insulation for model 700 and 50 mm insulation for other models
- Round or rectangular connections depending on the model
- Evacuation drain made of stainless steel
- Electrical or warm water post-heating (**external warm water battery not included**)
- Automatic bypass
- Filter detection with timer for model 700 and with pressure switch for other models
- Standard Modbus communication
- Possibility of **regulation by constant pressure** or **regulation by CO_2** (sensors not included)
- The remote control is not included

Fan

- Directly driven EC direct current fan with backward inclined blades
- Can be regulated 20-100%

Exchanger

- Counterflow heat exchanger of German fabrication with an efficiency up to 94%
- Heat exchanger certified according Eurovent EN 13141-7

Filter

- **HRS-FE/W** is equipped with two flat filters M5 - ISO 16890 ePM10 55% / F7 - ISO 16890 ePM1 70% (exhaust/supply)

Accessories

- Manual control with weekly timer, type **MC-HRS**
- Warm water battery, type **CWA / CWAR**
- Replacement filters, type **FS-HRS F**

Order example

HRS-FE 700
Explanation
HRS-F = type of heat recovery unit
E = electrical post-heating
700 = maximum air flow rate in m³/h

Selection curves

Selection curves

Selection curves

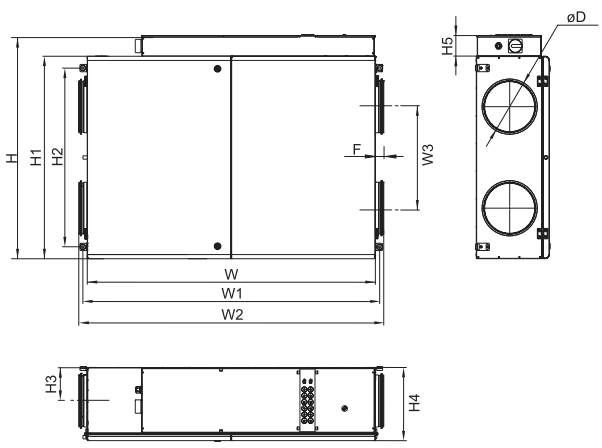
Selection curves

Technical data						
			HRSE 700	HRSE 1200	HRSE 1900	HRSE 2500
Heating battery	electrical power	[kW]	1,2	3	3	4,5
EC Fans	power supply	[50Hz/VAC]	230	230	230	3 x 400
Extract fan	power/current	[kW/A]	0,22/1,9	0,37/2,5	0,49/3,16	0,68/3,0
Extract fan	fan speed	[min-1]	3380	3400	2540	2800
Supply fan	power/current	[kW/A]	0,24/2,07	0,45/2,95	0,49/3,12	0,73/3,24
Supply fan	fan speed	[rpm]	3380	3400	2540	2800
Thermal efficiency		%	>90	>90	>90	>90
Max. electrical power		[kW/A]	1,66/9,51	3,82/18,49	3,97/20,32	5,90/12,78
Automatic defrost		00	integrated	integrated	integrated	integrated
Filterclass	extraction		M5	M5	M5	M5
Filterclass	supply		F7	F7	F7	F7
Thermal insulation		[mm]	30	50	50	50
Working temperature between -5°C and +40°C to maintain balanced air volumes						
Only suitable for indoor installation						
Thermal efficiency measured according Eurovent EN 13141-7						
			HRSW 700	HRSW 1200	HRSW 1900	HRSW 2500
EC Fans	power supply	[50Hz/VAC]	230	230	230	230
Extract fan	power/current	[kW/A]	0,22/1,9	0,37/2,5	0,49/3,16	0,68/3,0
Extract fan	fan speed	[min-1]	3380	3400	2540	2800
Supply fan	power/current	[kW/A]	0,24/2,07	0,45/2,95	0,49/3,12	0,73/3,24
Supply fan	fan speed	[rpm]	3380	3400	2540	2800
Thermal efficiency		%	>90	>90	>90	>90
Max. electrical power		[kW/A]	0,46/4,01	0,82/5,49	0,97/6,32	1,40/6,28
Automatic defrost		00	integrated	integrated	integrated	integrated
Filterclass	extraction		M5	M5	M5	M5
Filterclass	supply		F7	F7	F7	F7
Thermal insulation		[mm]	30	50	50	50
Working temperature between -5°C and +40°C to maintain balanced air volumes						
Only suitable for indoor installation						
Thermal efficiency measured according Eurovent EN 13141-7						

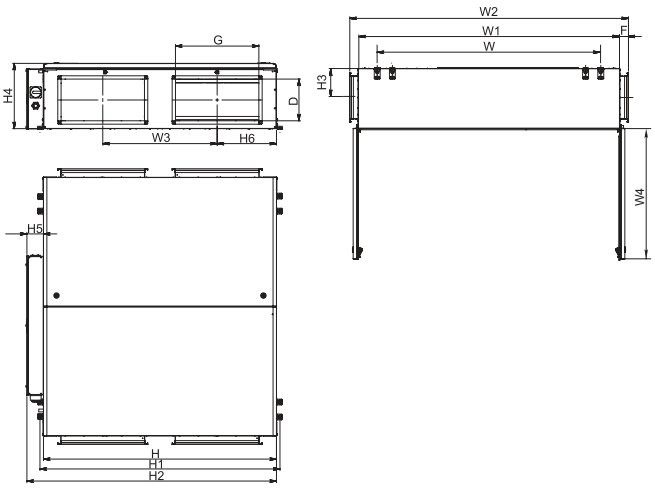
View from inspection side
1. Exhaust air
2. Extract air
3. Fresh air
4. Supply air

Product drawing horizontal configuration

HRS-FE/HRS-FW 700



HRS-FE/HRS-FW 1200-2500



Dimensions																	
	W [mm]	W1 [mm]	W2 [mm]	W3 [mm]	W4 [mm]	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	H6 [mm]	F [mm]	øD [mm]	G [mm]	D [mm]	[kg]
HRS-FE / HRS-FW 700	1422	1380	1461	487	719	1074	970	857	160	350	104	-	40	250	-	-	106
HRS-FE / HRS-FW 1200	1320	1550	1655	685	800	1400	1440	1500	175	390	100	-	52	-	500	250	170
HRS-FE / HRS-FW 1900	1750	1710	1870	861	728	1850	1892	1955	194	399	105	495	60	-	700	300	270
HRS-FE / HRS-FW 2500	1850	1810	1970	961	735	1950	1992	2055	244	499	105	-	60	-	700	400	316/313

Sound values								
HRSF 700	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	72	75	75	66	65	64	62	63
Extract	61	67	68	54	51	46	38	35
Surrounding	48	53	51	47	36	33	31	36
650 m³/h - 100 Pa								
HRSF 1200	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	77	77	77	69	71	70	67	70
Extract	66	71	73	59	58	53	45	44
Surrounding	51	55	53	50	42	39	36	43
1200 m³/h - 100 Pa								
HRSF 1900	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	75	79	79	69	68	66	64	64
Extract	65	70	73	58	54	48	41	38
Surrounding	51	57	55	50	39	35	33	37
1800 m³/h - 100 Pa								
HRSF 2500	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	80	60	68	72	75	74	71	65
Extract	69	56	60	64	63	60	58	41
Surrounding	62	46	54	56	57	54	50	45
2548 m³/h - 102 Pa								

Lwa = Sound power level