HRS-RE/W

- HRU with efficiency ≥ 75%
- Rotary wheel
- Qv > 500 m³/h

HRU with rotor heat exchanger type HRS-RE/W

Application

- Ventilation for both residential and non-residential applications
- For indoor mounting in a frost protected area
- Outside mounting only possible for horizontal versions (from model 1200H and on) with a roof

Composition

- Housing in prelacquered steel plate RAL9016 (model 700) and RAL7040 (other models)
- 50 mm insulation
- Round or rectangular connections depending on the model
- 2 motorised dampers included for horizontal model 2500 and higher
- Electrical or warm water post-heating (**external warm water battery not included**)
- Automatic bypass
- Standard Modbus communication
- Possibility of **regulation by constant pressure** or **regulation by CO_2** (sensors not included)
- Filter detection with pressure switch
- The remote control is not included

Fan

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

Exchanger

- Rotor heat exchanger on/off with high efficiency up to 80%
- Version **RHX**: rotor with variable speed

Filter

- **HRS-RE / HRS-RW** is equipped with two panelfilters M5 - ISO 16890 ePM10 55% / F7 - ISO 16890 ePM1 70% (exhaust/supply)

Mounting

- HRS-R V 3500 will be delivered in 2 parts
- HRS-R H 2500-3500 can be delivered in 3 parts, on demand

Order example

HRS-REV 700 L RHX
Explanation
HRS-R = type of heat recovery unit
E = electrical post-heating
V = vertical execution
700 = air flow rate in m³/h
L = left execution
RHX = rotor with variable speed

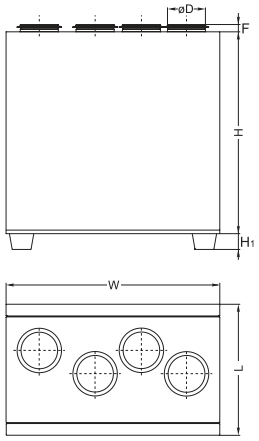
- Qs = Supply air
- Qe = Exhaust air
- SFP = Specific fan power
- ŋt = Temperature efficiency

Technical data								
			HRSREV 700	HRSREV 1200	HRSREV 1900	HRSREV 2500	HRSREV 3500	HRSREV 5500
Heating battery	electrical power	[kW]	2	4	9	9	12	18
EC Fans	power supply	[50Hz/VAC]	230	2 x 400	3 x 400	3 x 400	3 x 400	3 x 400
Extract fan	power/current	[kW/A]	0,22/1,8	0,41/2,71	0,49/3,15	0,75/3,3	1,35/6	1,9/3,1
Extract fan	fan speed	[min-1]	3380	3400	2600	2800	2390	2180
Supply fan	power/current	[W/A]	0,22/1,71	0,42/2,81	0,49/3,15	0,76/3,32	1,33/5,7	1,9/3,1
Supply fan	fan speed	[rpm]	3380	3400	2600	2800	2390	2180
Thermal efficiency		%	74	74	74	80	80	80
Max. electrical power		[kW/A]	2,45/12,31	4,84/15,69	9,99/19,47	10,55/19,97	14,72/29,35	21,84/32,55
Automatic defrost		00	integrated	integrated	integrated	integrated	integrated	integrated
Filterclass	extraction		M5	M5	M5	M5	M5	M5
Filterclass	supply		F7	F7	F7	F7	F7	F7
Thermal insulation		[mm]	50	50	50	50	50	50
Thermal efficiency measured according EN 308								
			HRSRWV 700	HRSRWV 1200	HRSRWV 1900	HRSRWV 2500	HRSRWV 3500	HRSRWV 5500
EC Fans	power supply	[50Hz/VAC]	230	230	230	230	230	3 x 400
Extract fan	power/current	[kW/A]	0,22/1,8	0,41/2,71	0,49/3,15	0,75/3,3	1,35/6	1,9/3,1
Extract fan	fan speed	[min-1]	3380	3400	2600	2800	2390	2180
Supply fan	power/current	[W/A]	0,22/1,71	0,42/2,81	0,49/3,15	0,76/3,32	1,33/5,7	1,9/3,1
Supply fan	fan speed	[rpm]	3380	3400	2600	2800	2390	2180
Thermal efficiency		%	74	74	74	80	80	80
Max. electrical power		[kW/A]	0,45/3,61	0,84/5,69	0,99/6,47	1,55/6,97	2,72/12,05	3,84/6,55
Automatic defrost		00	integrated	integrated	integrated	integrated	integrated	integrated
Filterclass	extraction		M5	M5	M5	M5	M5	M5
Filterclass	supply		F7	F7	F7	F7	F7	F7
Thermal insulation		[mm]	50	50	50	50	50	50
Thermal efficiency measured according EN 308								
			HRSREH 700	HRSREH 1200	HRSREH 1900	HRSREH 2500	HRSREH 3500	HRSREH 5500 *
Heating battery	electrical power	[kW]	2	4	9	9	12	15
EC Fans	power supply	[50Hz/VAC]	230	2 x 400	3 x 400	3 x 400	3 x 400	3 x 400
Extract fan	power/current	[kW/A]	0,22/1,88	0,44/2,8	0,5/3,25	0,75/3,35	1,34/6	1,98/3,06
Extract fan	fan speed	[min-1]	3380	3400	2600	2800	2390	2180
Supply fan	power/current	[W/A]	0,21/1,76	0,44/2,9	0,49/3,2	0,71/3,19	1,3/5,75	2/3,17
Supply fan	fan speed	[rpm]	3380	3400	2600	2800	2390	2180
Thermal efficiency		%	75	80	74	80	80	80
Max. electrical power		[kW/A]	2,44/12,44	4,9/15,87	10,0/19,62	10,5/19,95	14,68/29,43	19,0/28,35
Automatic defrost		00	integrated	integrated	integrated	integrated	integrated	integrated
Filterclass	extraction		M5	M5	M5	M5	M5	M5
Filterclass	supply		F7	F7	F7	F7	F7	F7
Thermal insulation		[mm]	50	50	50	50	50	50
Thermal efficiency measured according EN 308								
			HRSRWH 700	HRSRWH 1200	HRSRWH 1900	HRSRWH 2500	HRSRWH 3500	HRSRWH 5500 *
EC Fans	power supply	[50Hz/VAC]	230	230	230	230	230	3 x 400
Extract fan	power/current	[kW/A]	0,22/1,88	0,44/2,8	0,5/3,25	0,75/3,35	1,34/6	1,98/3,06
Extract fan	fan speed	[min-1]	3380	3400	2600	2800	2390	2180
Supply fan	power/current	[W/A]	0,21/1,76	0,44/2,9	0,49/3,2	0,71/3,19	1,3/5,75	2/3,17
Supply fan	fan speed	[rpm]	3380	3400	2600	2800	2390	2180
Thermal efficiency		%	75	80	74	80	80	80
Max. electrical power		[kW/A]	0,44/3,74	0,9/5,87	1/6,62	1,5/6,95	2,68/12,13	4,2/6,64
Automatic defrost		00	integrated	integrated	integrated	integrated	integrated	integrated
Filterclass	extraction		M5	M5	M5	M5	M5	M5
Filterclass	supply		F7	F7	F7	F7	F7	F7
Thermal insulation		[mm]	50	50	50	50	50	50
Thermal efficiency measured according EN 308								

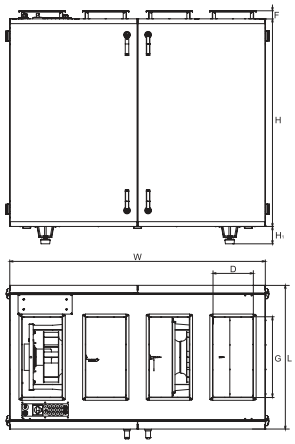
1. Exhaust air
2. Extract air
3. Fresh air
4. Supply air

Dimensions															
	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	W [mm]	W1 [mm]	W2 [mm]	W3 [mm]	H [mm]	øD [mm]	G [mm]	D [mm]	F [mm]	H1 [mm]	[kg]
HRS-REV / HRS-RWV 500 (zie tekening HRS-REH/HRS-RWH 700-1900)	1000	-	-	-	560	-	-	-	610	200	-	-	31	40	69
HRS-REV / HRS-RWV 700	655	-	-	-	1100	-	-	-	980	250	-	-	40	40	104
HRS-REV / HRS-RWV 1200	855	-	-	-	1500	-	-	-	1150	315	-	-	40	70	180
HRS-REV / HRS-RWV 1900	855	-	-	-	1500	-	-	-	1150	315	-	-	40	70	180/178
HRS-REV / HRS-RWV 2500	900	-	-	-	1600	-	-	-	1300	-	500	250	50	110	280/270
HRS-REV / HRS-RWV 3500	1010	-	-	-	1930	850	1075	-	1355	-	600	300	50	190	380/370
HRS-REV / HRS-RWV 5500	1310	-	-	-	2120	855	400	855	1400	-	900	300	50	190	580/565
HRS-REH / HRS-RWH 700	1100	-	-	-	653	-	-	-	700	250	-	-	40	40	96
HRS-REH / HRS-RWH 1200	1350	-	-	-	853	-	-	-	900	315	-	-	40	70	162/160
HRS-REH / HRS-RWH 1900	1350	-	-	-	853	-	-	-	900	315	-	-	40	70	162/160
HRS-REH / HRS-RWH 2500	1608	500	606	500	1110	1110	-	-	1105	-	700	400	50	140	350/348
HRS-REH / HRS-RWH 3500	2005	630	628	630	1205	1205	-	-	1433	-	700	400	50	140	492/490
HRS-REH / HRS-RWH 5500	1908	600	700	600	1394	1404	-	-	1485	-	800	500	50	140	625/623

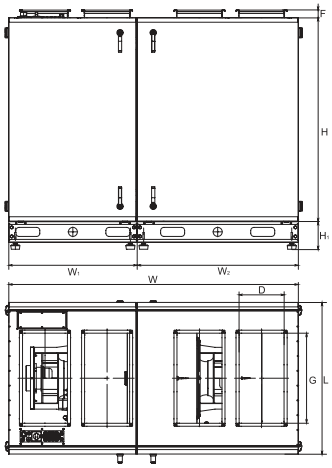
HRS-REV/HRS-RWV 700-1900



HRS-REV/HRS-RWV 2500



HRS-REV/HRS-RWV 3500



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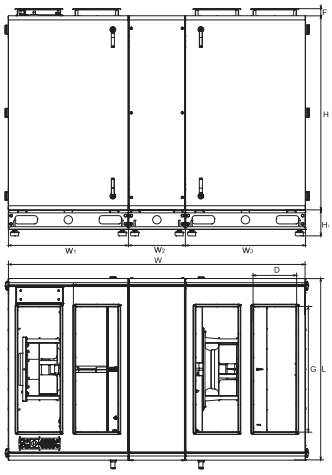
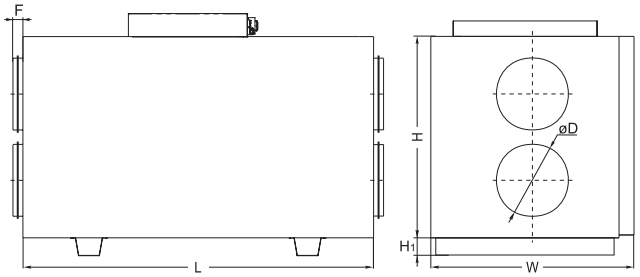
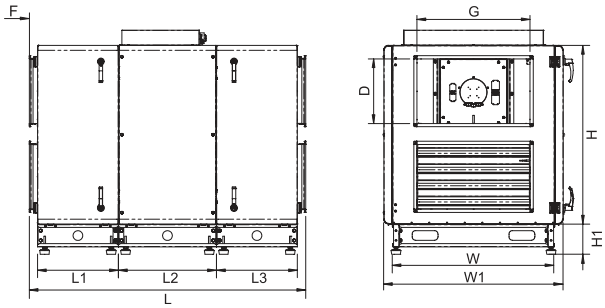


HRS-REH/HRS-RWH 700-1900



HRS-REH/HRS-RWH 2500-5500



Sound values								
HRSR V 700	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	70	73	71	64	63	62	60	60
Extract	60	67	67	54	51	45	38	35
Surrounding	45	51	47	45	34	31	29	33
700 m³/h - 120 Pa								
HRSR V 1200	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	78	63	74	71	70	69	64	55
Extract	67	57	63	56	52	53	51	37
Surrounding	57	47	54	49	47	49	46	36
1351 m³/h - 181 Pa								
HRSR V 1900	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	74	77	78	68	67	65	63	63
Extract	63	68	71	57	53	46	40	37
Surrounding	50	55	54	49	38	34	32	36
1750 m³/h - 120 Pa								
HRSR V 2500	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	78	61	68	72	73	70	64	62
Extract	67	59	62	63	57	52	48	43
Surrounding	62	45	54	59	52	52	49	46
2355 m³/h - 214 Pa								
HRSR V 3500	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	82	60	74	75	76	75	73	68
Extract	72	58	70	66	60	57	51	43
Surrounding	64	55	58	59	57	53	49	45
3728 m³/h - 242 Pa								
HRSR V 5500	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	87	68	80	81	82	78	77	74
Extract	75	63	69	72	66	63	58	55
Surrounding	74	58	66	69	68	65	51	54
5652 m³/h - 246 Pa								
HRSR H 700	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	71	74	73	64	64	63	60	61
Extract	60	66	67	53	50	45	37	33
Surrounding	46	52	49	45	35	32	29	34
650 m³/h - 150 Pa								
HRSR H 1200	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	77	66	73	71	70	66	62	53
Extract	68	63	64	62	56	46	41	31
Surrounding	57	52	53	47	44	41	35	33
1437 m³/h - 102 Pa								
HRSR H 1900	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	79	55	70	70	71	75	72	63
Extract	67	53	65	60	53	54	50	36
Surrounding	61	44	58	53	51	53	50	48
1906 m³/h - 100 Pa								
HRSR H 2500	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	79	61	69	71	75	71	65	64
Extract	68	60	61	65	56	51	46	41
Surrounding	62	45	52	60	54	52	48	43
2599 m³/h - 180 Pa								
HRSR H 3500	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	81	70	82	76	77	73	68	71
Extract	71	68	78	68	59	53	45	48
Surrounding	57	48	59	57	49	42	37	45
4000 m³/h - 150 Pa								