

- Non residential
- Condensation
- R-COVERY by SALDA
- $Q_v \leq 5500 \text{ m}^3/\text{h}$
- Horizontal/Vertical
- Heat recovery unit with efficiency $\geq 75\%$



HRU with rotor heat exchanger type HRS-RE/W

Heat recovery units with **rotor heat exchanger** for recuperation of humidity and electrical or water post-heating. The unit is available in different versions, 700 m³/h until 5500 m³/h with vertical outlets in left or right execution or with horizontal outlets. The unit has been tested according to NBN EN308.

Brand

- R-COVERY by SALDA

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 700Hand on) with a roof (with electrical resistance to be built into the control box)

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 CO₂** (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)

Versions

Vertical execution:

- Type **HRS-REV xxx L**: vertical unit, left execution, electrical battery
- Type **HRS-REV xxx R**: vertical unit, right execution, electrical battery
- Type **HRS-RWV xxx L**: vertical unit, left execution, warm water battery (**external battery not included**)
- Type **HRS-RWV xxx R**: vertical unit, right execution, warm water battery (**external battery not included**)

Horizontal execution:

- Type **HRS-REH xxx**: horizontal unit, electrical battery
- Type **HRS-RWH xxx**: horizontal unit, warm water battery (**external battery not included**)

Mounting

- HRS-R V 3500 will be delivered in 1 part
- HRS-R H 3500 can be delivered in 3 parts, on demand

Accessories

- Airtight control valve **AKH**
- Manual control with weekly timer, type **MC-HRS**
- Air outlet, type **UT** (for models up to 1900 m³/h)
- Connection piece, type **MDV** (for models up to 1900 m³/h)
- Rain roof for outside application, type **RF-HRS**
- Warm water battery, type **CWA / CWAR**
- Replacement filters, type **FS-HRS-R**
- Touchscreen controller **TS-AIR**

Order example

HRS-REV 700 L RHX

Explanation

HRS-R = type of heat recovery unit

E = electrical post-heating

V = vertical execution

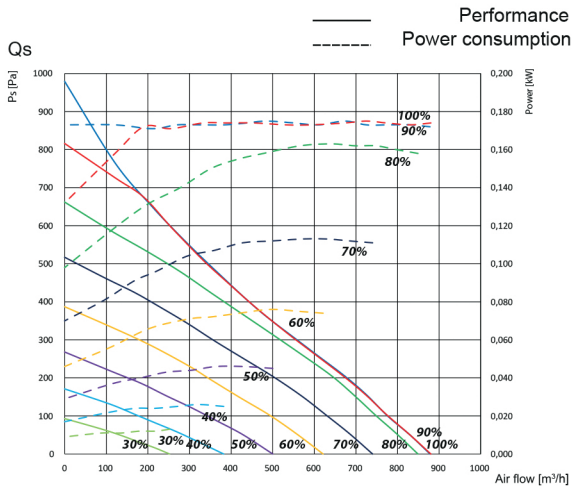
700 = air flow rate in m³/h

L = left execution

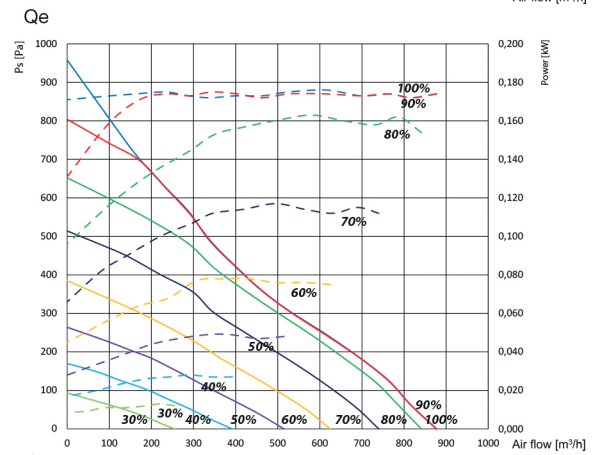
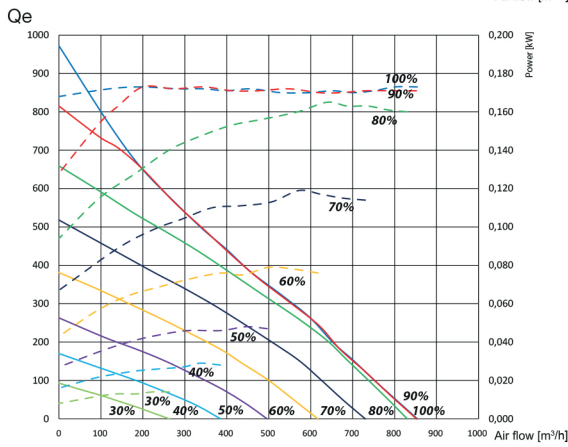
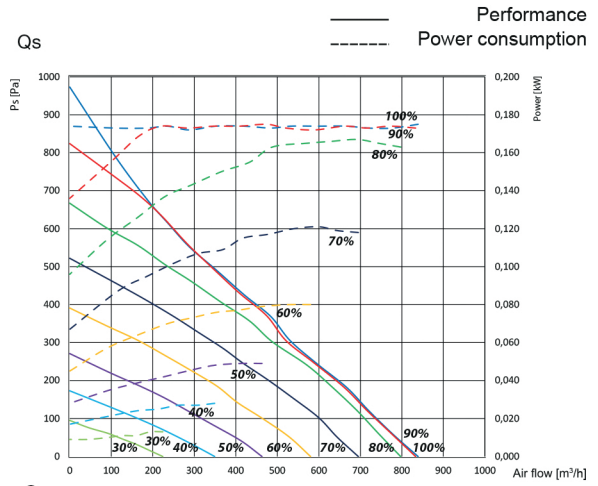
RHX = rotor with variable speed

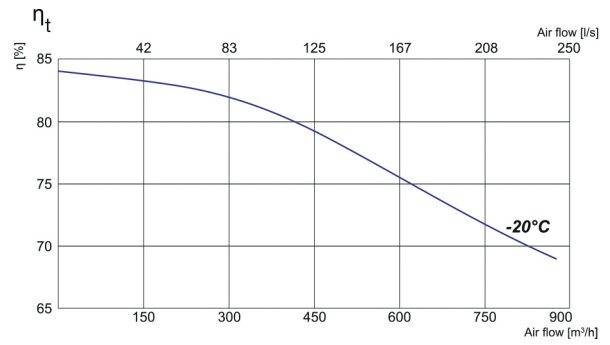
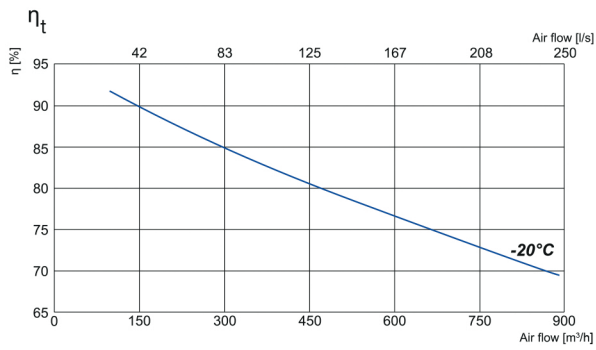
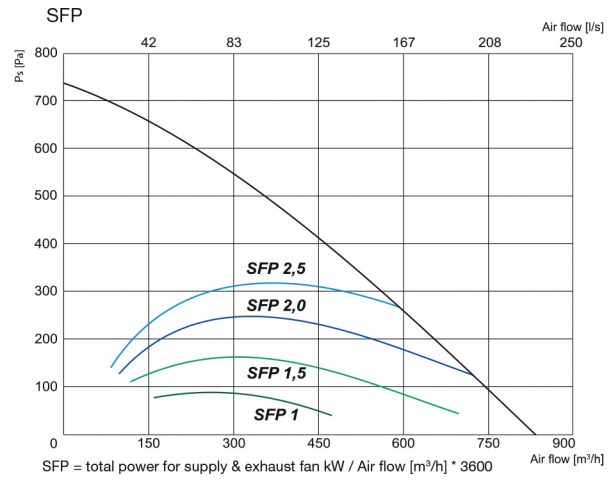
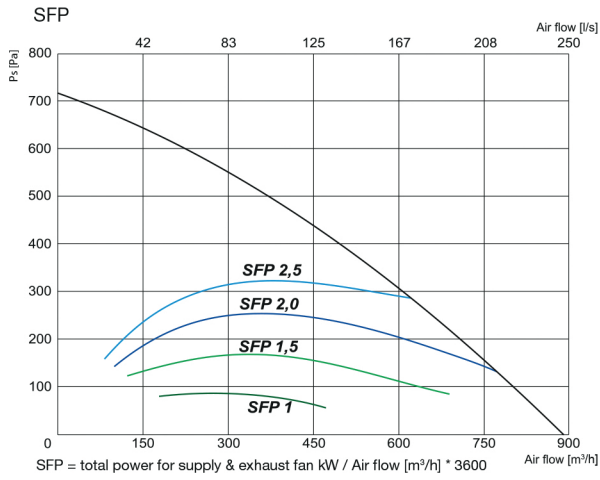
Selection curves

HRS-REV/HRS-RWV 700



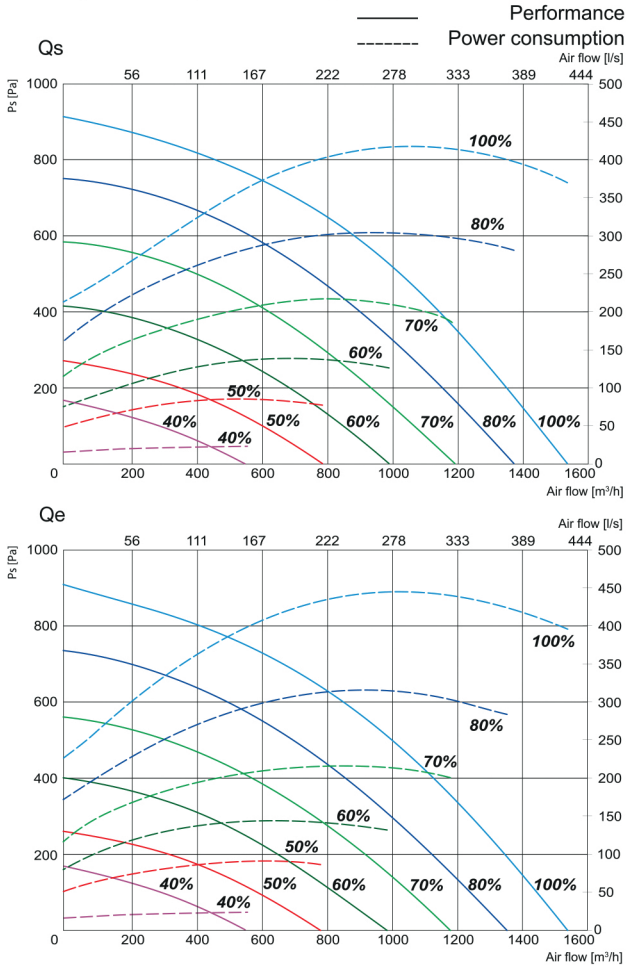
HRS-REH/HRS-RWH 700



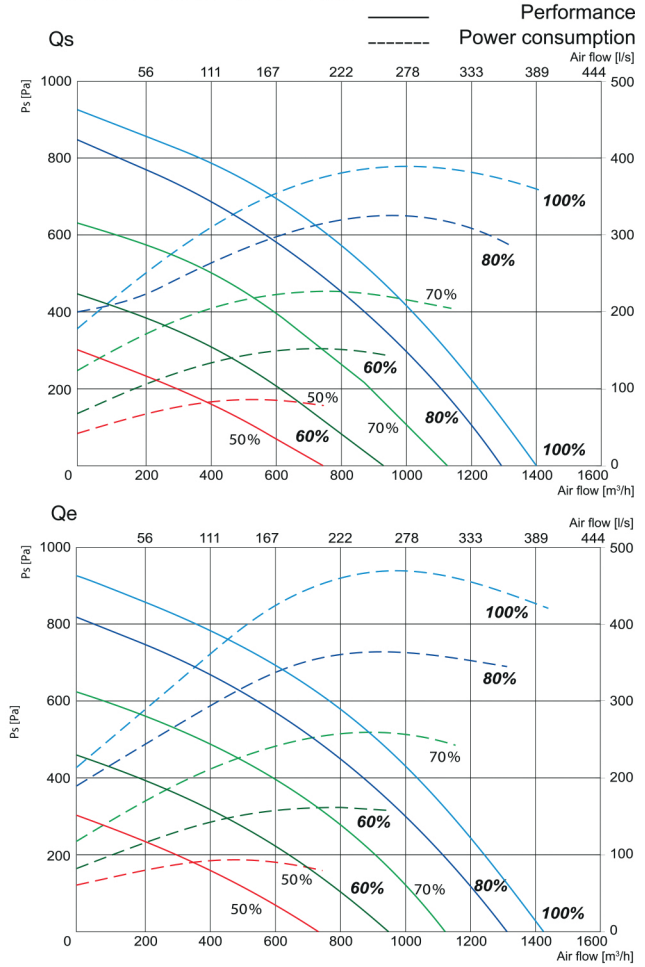


Selection curves

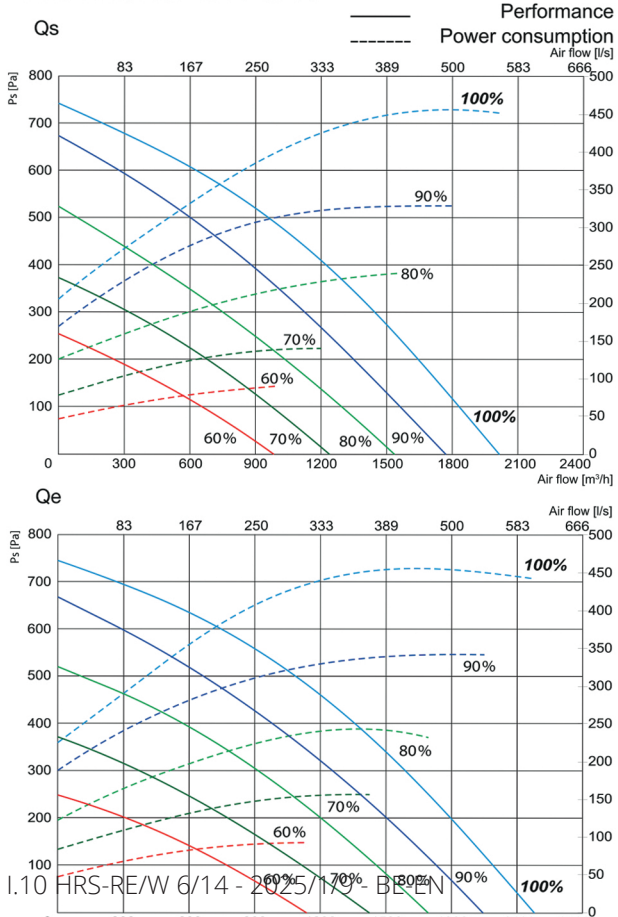
HRS-REV/HRS-RWV 1200



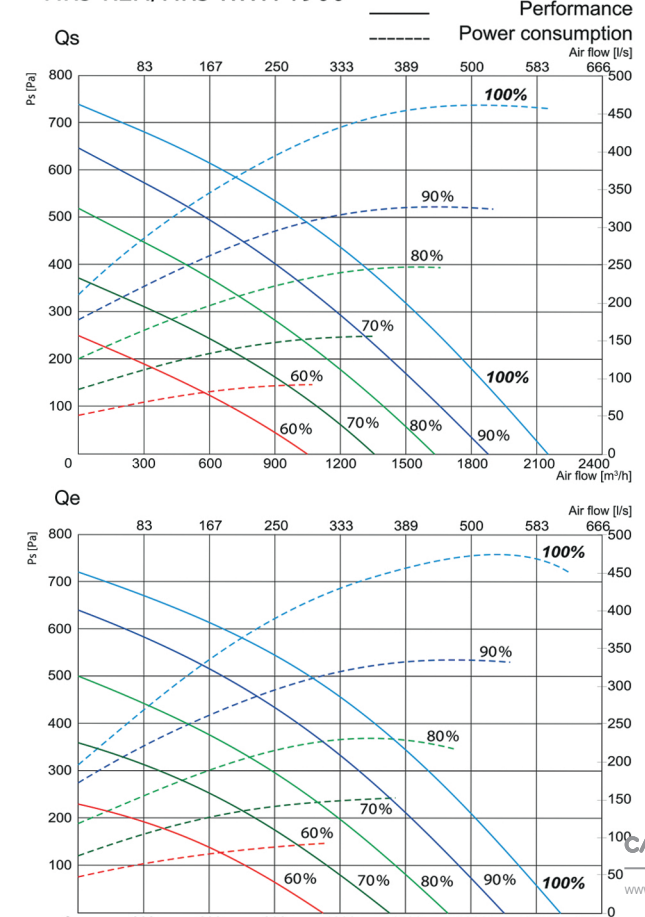
HRS-REH/HRS-RWH 1200



HRS-REV/HRS-RWV 1900

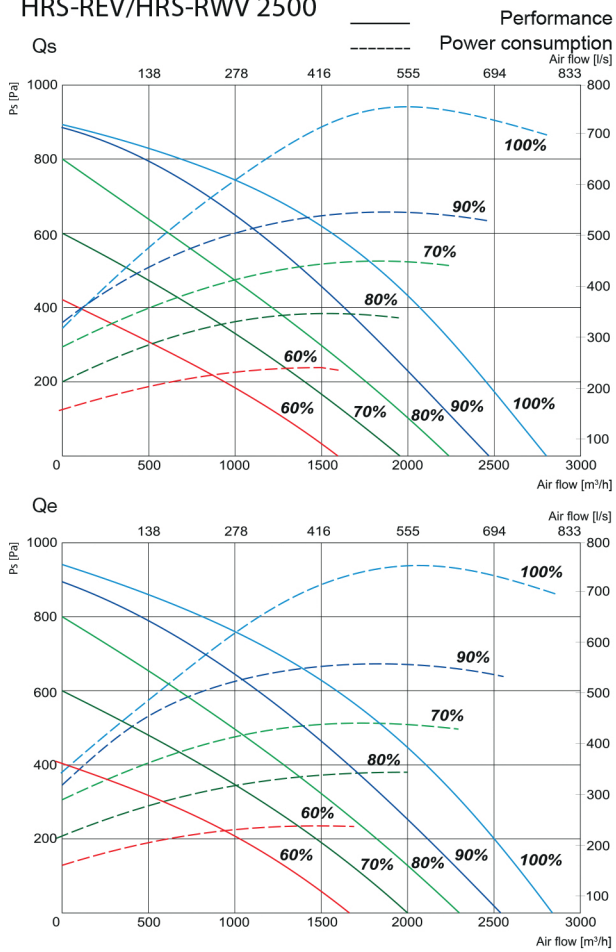


HRS-REH/HRS-RWH 1900

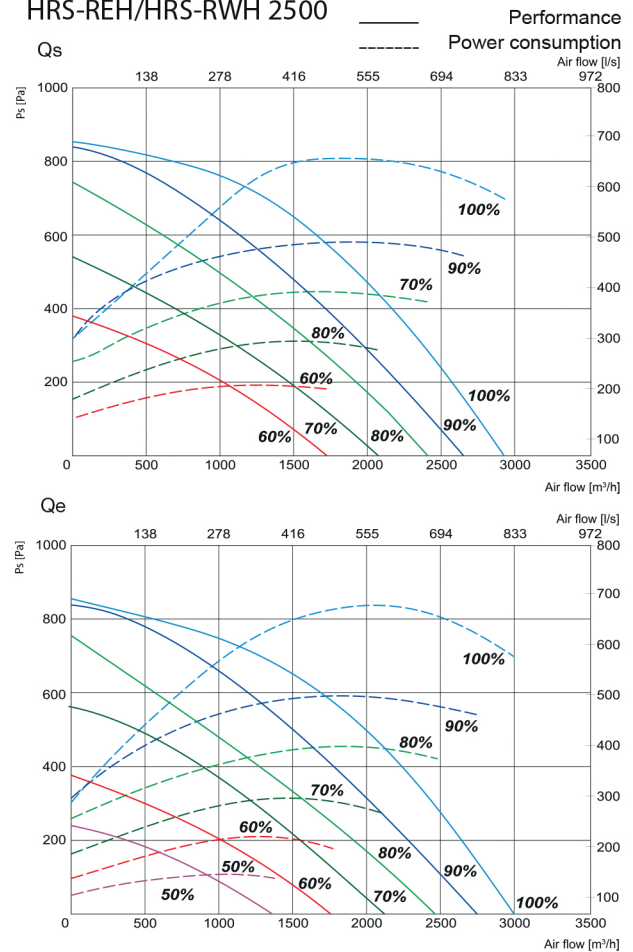


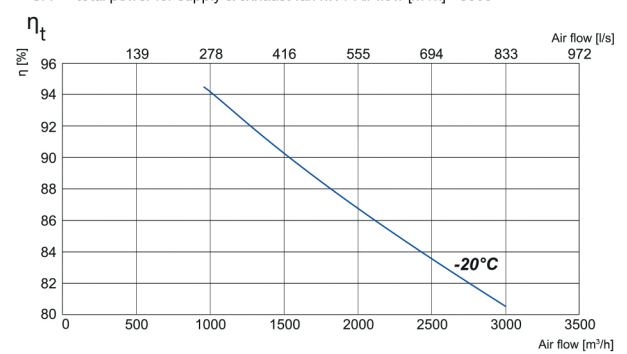
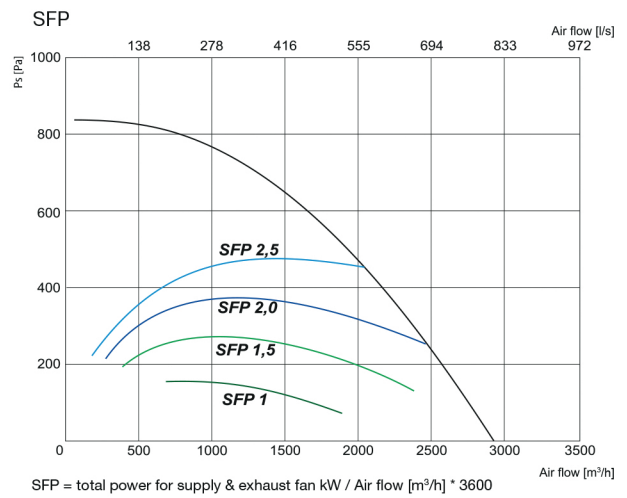
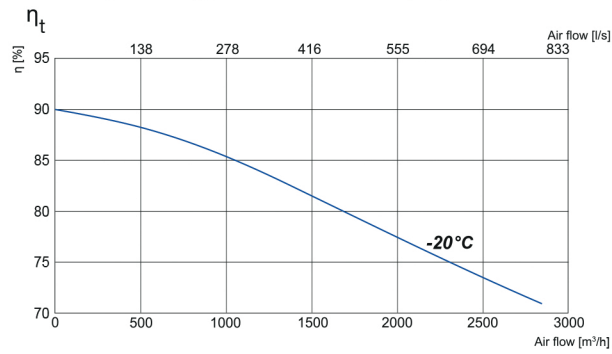
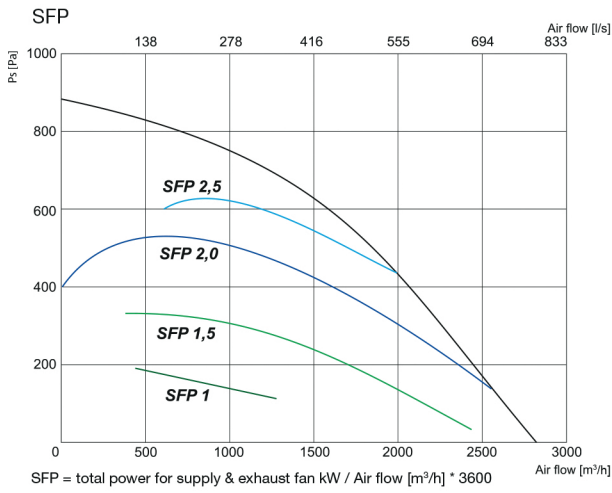
Selection curves

HRS-REV/HRS-RWV 2500



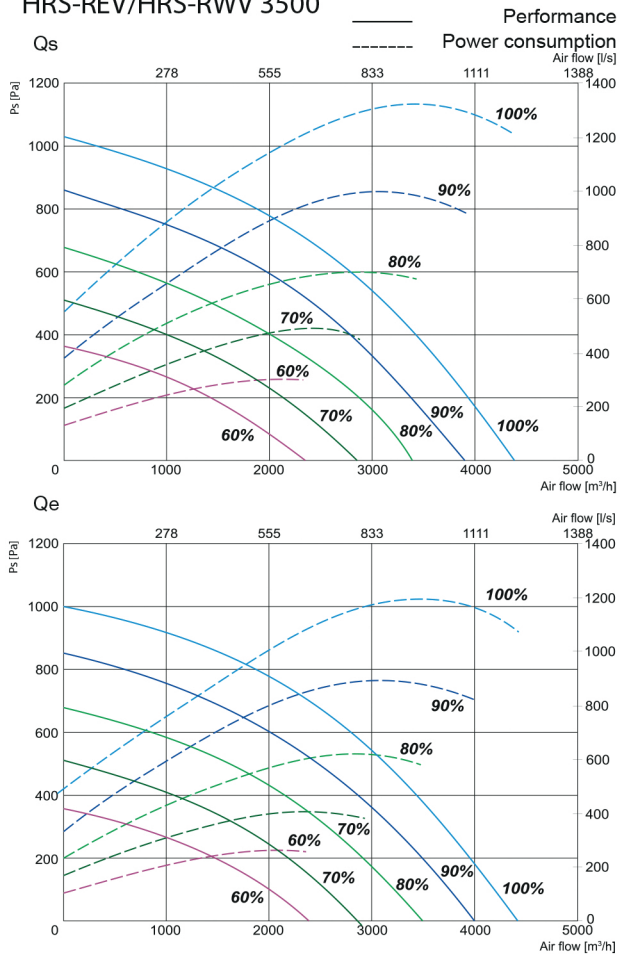
HRS-REH/HRS-RWH 2500



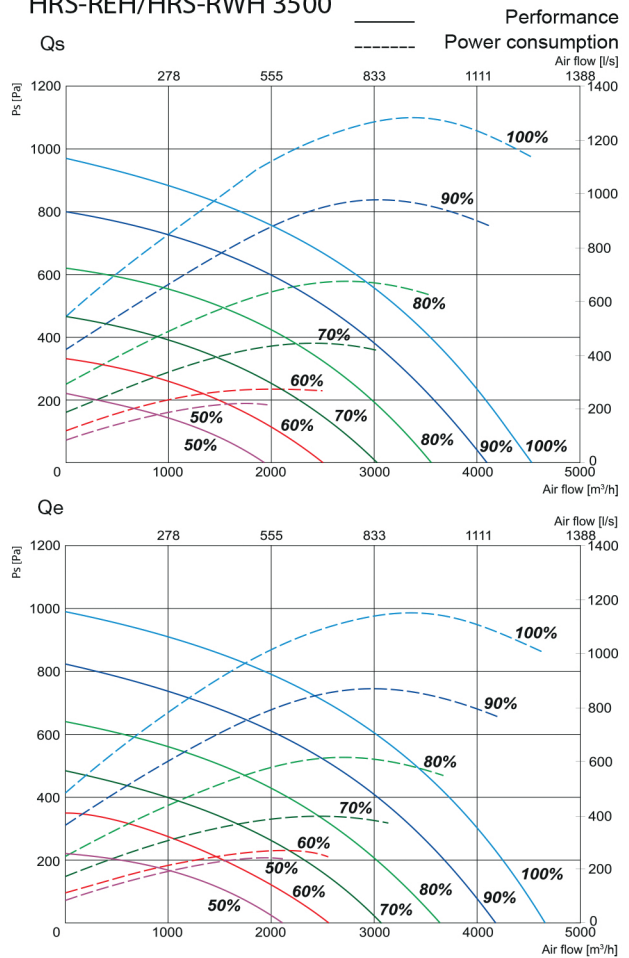


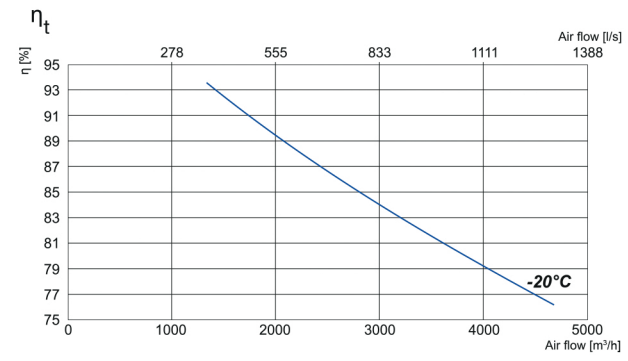
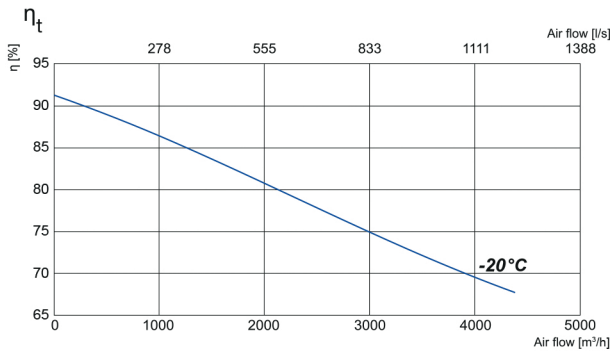
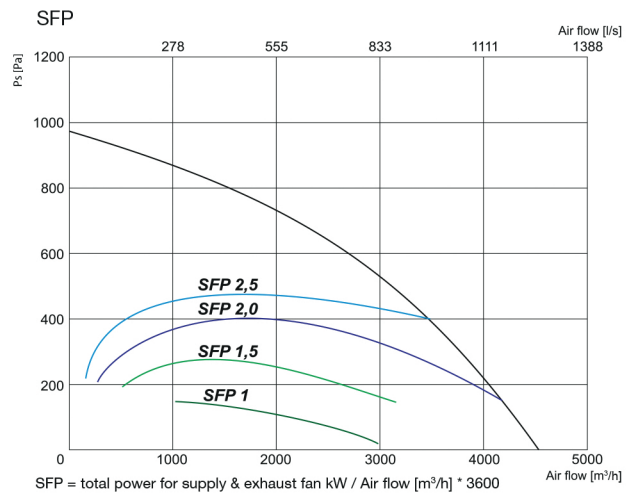
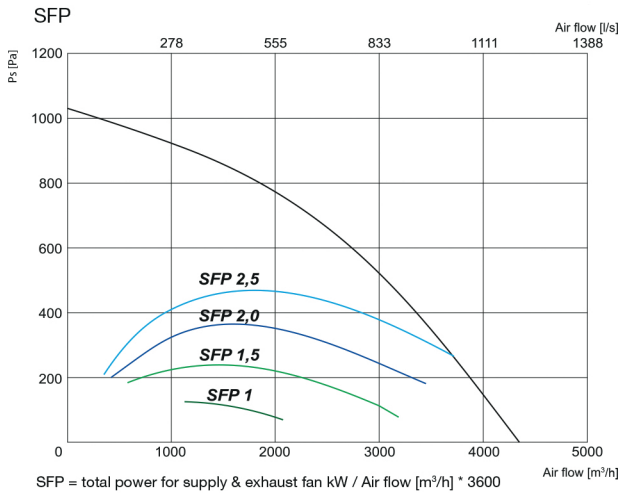
Selection curves

HRS-REV/HRS-RWV 3500



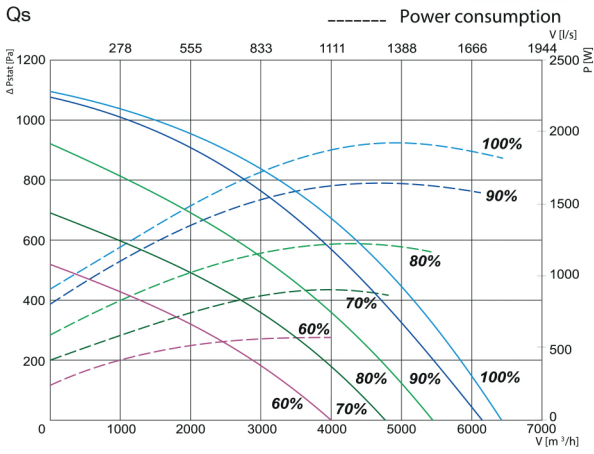
HRS-REH/HRS-RWH 3500



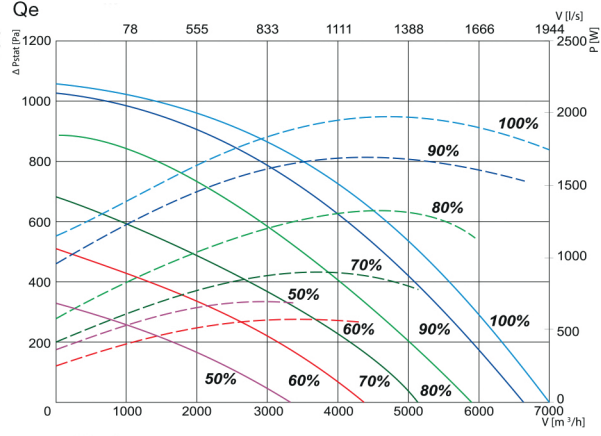
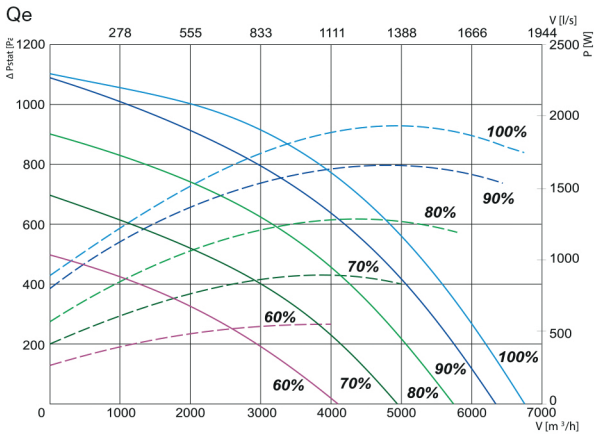
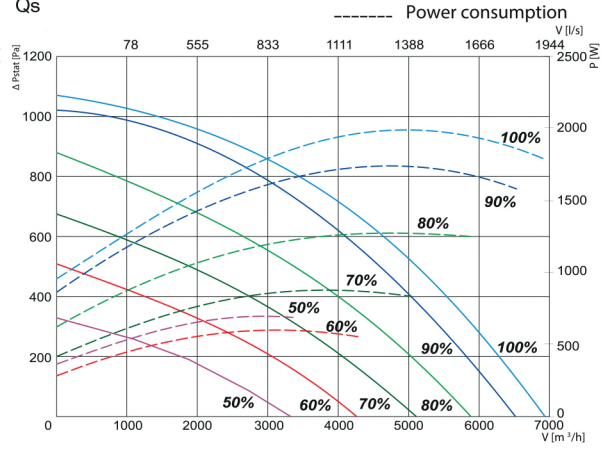


Selection curves

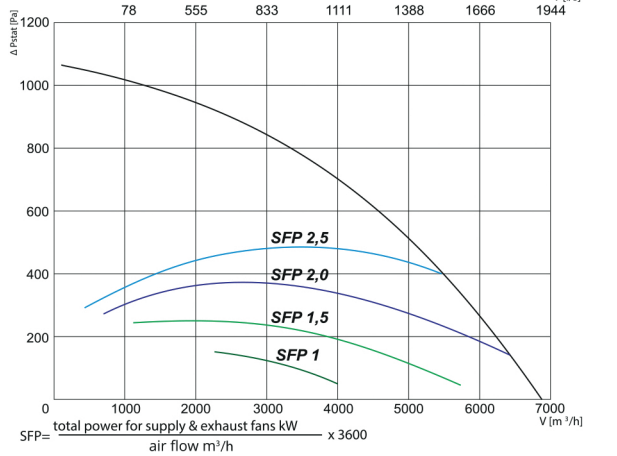
HRS-REV/HRS-RWV 5500



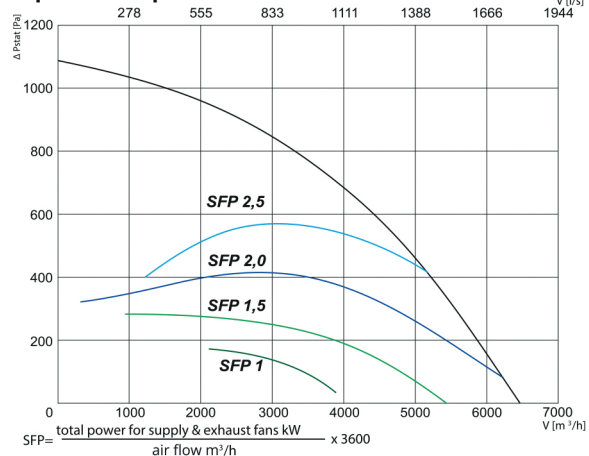
HRS-REH/HRS-RWH 5500



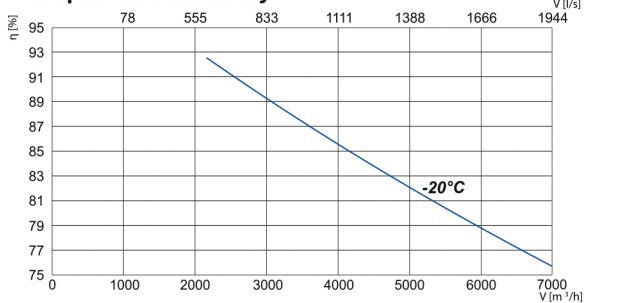
Specific fan power



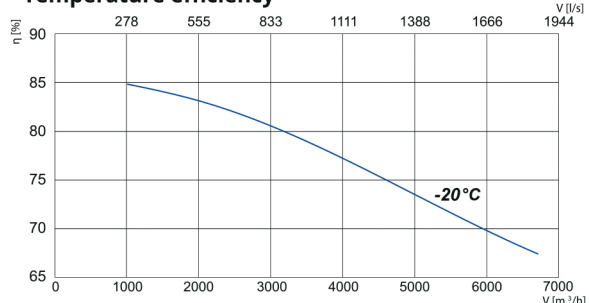
Specific fan power



Temperature efficiency



Temperature efficiency

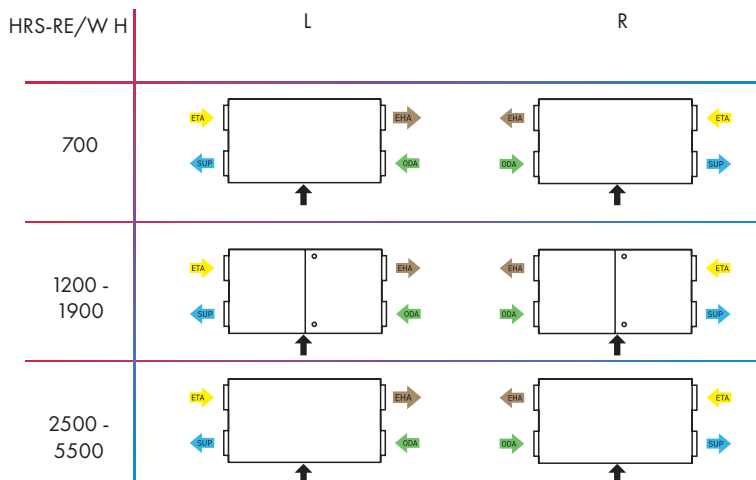


- Qs = Supply air
- Qe = Exhaust air
- SFP = Specific fan power
- η_t = Temperature efficiency

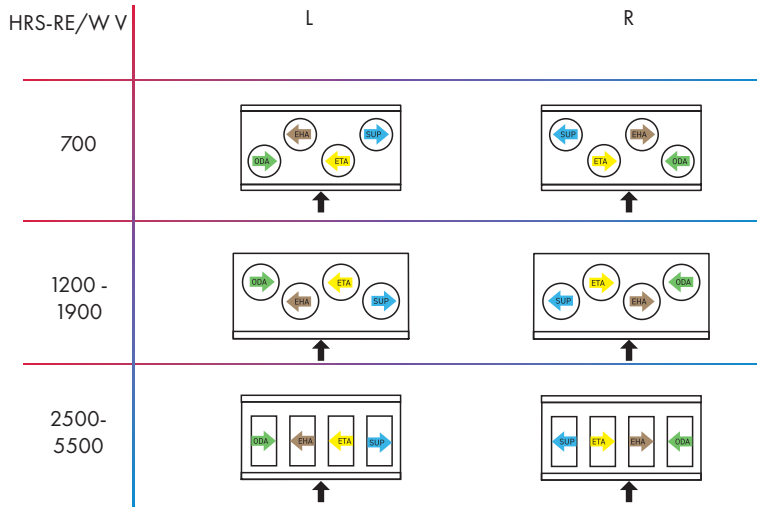
EPB values			
	Q [m³/h]	η_t , epb [%]	Pelec, epb [W]
HRS-RE 2500 H	2495	80	1145
HRS-RE 2500 V	2510	76	1520

Technical data								
			HRS-REV 700	HRS-REV 1200	HRS-REV 1900	HRS-REV 2500	HRS-REV 3500	HRS-REV 5500
Main power supply		[50Hz/VAC]	1 x 230	2 x 400	3 x 400	3 x 400	3 x 400	3 x 400
Heating battery	Electrical power	[kW]	2	4	9	9	12	18
EC Fans	Power supply	[50Hz/VAC]	1 x 230	1 x 230	1 x 230	1 x 230	1 x 230	3 x 400
Extract fan	Power/current	[kW/A]	0,17/1,4	0,38/2,5	0,47/2,04	0,72/3,1	1,3/5,65	1,85/2,9
Extract fan	Fan speed	[rpm]	3230	3370	2530	2800	2390	2180
Supply fan	Power/current	[W/A]	0,17/1,4	0,38/2,5	0,47/2,04	0,72/3,1	1,3/5,65	1,85/2,9
Supply fan	Fan speed	[rpm]	3230	3370	2530	2800	2390	2180
Max. electrical power		[kW/A]	2,34/11,6	4,76/15	9,94/17,18	10,43/19,2	14,6/28,64	21,7/31,8
Automatic defrost			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
			HRS-RWV 700	HRS-RWV 1200	HRS-RWV 1900	HRS-RWV 2500	HRS-RWV 3500	HRS-RWV 5500
Main power supply		[50Hz/VAC]	1 x 230	1 x 230	1 x 230	1 x 230	1 x 230	3 x 400
EC Fans	Power supply	[50Hz/VAC]	1 x 230	1 x 230	1 x 230	1 x 230	1 x 230	3 x 400
Extract fan	Power/current	[kW/A]	0,17/1,4	0,38/2,5	0,47/2,04	0,72/3,1	1,3/5,65	1,85/2,9
Extract fan	Fan speed	[rpm]	3230	3370	2530	2800	2390	2180
Supply fan	Power/current	[W/A]	0,17/1,4	0,38/2,5	0,47/2,04	0,72/3,1	1,3/5,65	1,85/2,9
Supply fan	Fan speed	[rpm]	3230	3370	2530	2800	2390	2180
Max. electrical power		[kW/A]	0,34/2,9	0,76/5	0,94/4,08	1,43/6,2	2,6/11,3	3,7/5,8
Automatic defrost			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
			HRS-REH 700	HRS-REH 1200	HRS-REH 1900	HRS-REH 2500	HRS-REH 3500	HRS-REH 5500 *
Main power supply		[50Hz/VAC]	1 x 230	2 x 400	3 x 400	3 x 400	3 x 400	3 x 400
Heating battery	Electrical power	[kW]	2	4	9	9	12	15
EC Fans	Power supply	[50Hz/VAC]	1 x 230	1 x 230	1 x 230	1 x 230	1 x 230	3 x 400
Extract fan	Power/current	[kW/A]	0,17/1,4	0,38/2,5	0,47/2,04	0,72/3,1	1,3/5,65	1,85/2,9
Extract fan	Fan speed	[rpm]	3230	3370	2530	2800	2390	2180
Supply fan	Power/current	[W/A]	0,17/1,4	0,38/2,5	0,47/2,04	0,72/3,1	1,3/5,65	1,85/2,9
Supply fan	Fan speed	[rpm]	3230	3370	2530	2800	2390	2180
Max. electrical power		[kW/A]	2,34/11,6	4,76/15	9,94/17,18	10,43/19,2	14,6/28,64	18,7/27,5
Automatic defrost			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
			HRS-RWH 700	HRS-RWH 1200	HRS-RWH 1900	HRS-RWH 2500	HRS-RWH 3500	HRS-RWH 5500 *
Main power supply		[50Hz/VAC]	1 x 230	1 x 230	1 x 230	1 x 230	1 x 230	3 x 400
EC Fans	Power supply	[50Hz/VAC]	1 x 230	1 x 230	1 x 230	1 x 230	1 x 230	3 x 400
Extract fan	Power/current	[kW/A]	0,17/1,4	0,38/2,5	0,47/2,04	0,72/3,1	1,3/5,65	1,85/2,9
Extract fan	Fan speed	[rpm]	3230	3370	2530	2800	2390	2180
Supply fan	Power/current	[W/A]	0,17/1,4	0,38/2,5	0,47/2,04	0,72/3,1	1,3/5,65	1,85/2,9
Supply fan	Fan speed	[rpm]	3230	3370	2530	2800	2390	2180
Max. electrical power		[kW/A]	0,34/2,9	0,76/5	0,94/4,08	1,43/6,2	2,6/11,3	3,7/5,8
Automatic defrost			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

Configuration horizontal

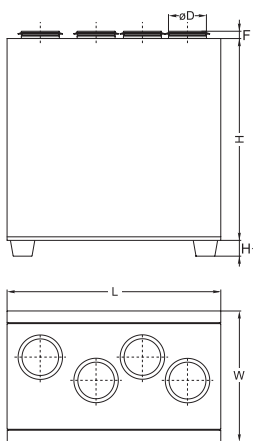


Configurations vertical

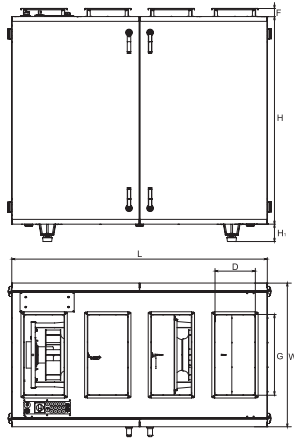


	Dimensions												
	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	W [mm]	H [mm]	C[mm]	øD [mm]	G [mm]	D [mm]	F [mm]	H1 [mm]	[kg]
HRS-REV / HRS-RWV 700	1100	-	-	-	655	980	-	250	-	-	40	40	113/111
HRS-REV / HRS-RWV 1200	1500	-	-	-	855	1150	-	315	-	-	40	70	232/229
HRS-REV / HRS-RWV 1900	1500	-	-	-	855	1150	-	315	-	-	40	70	238/235
HRS-REV / HRS-RWV 2500	1600	-	-	-	900	1300	20	-	500	250	50	70	329/320
HRS-REV / HRS-RWV 3500	1930	1075	854	-	1008	1355	20	-	600	300	50	141	378/370
HRS-REV / HRS-RWV 5500	2117	855	400	855	1310	1400	20	-	900	300	50	141	539/532
HRS-REH / HRS-RWH 700	1100	-	-	-	655	700	-	250	-	-	40	40	96/94
HRS-REH / HRS-RWH 1200	1350	-	-	-	855	900	-	315	-	-	40	70	187/185
HRS-REH / HRS-RWH 1900	1350	-	-	-	855	900	-	315	-	-	40	70	190/188
HRS-REH / HRS-RWH 2500	1608	500	606	500	1110	1105	20	-	700	400	50	140	390/385
HRS-REH / HRS-RWH 3500	1900	630	630	630	1205	1300	20	-	700	400	50	140	432/427
HRS-REH / HRS-RWH 5500	1910	600	700	600	1405	1485	20	-	800	500	50	140	627/620

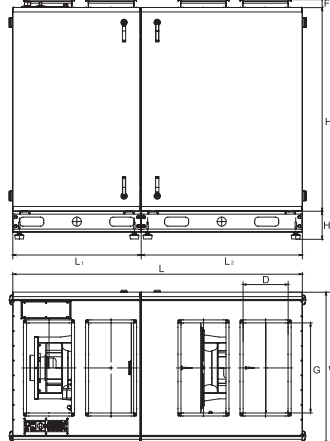
HRS-REV/HRS- RWV 700-1900



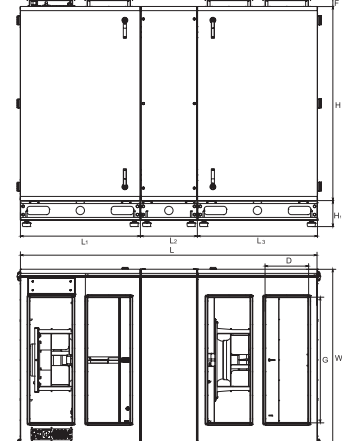
HRS-REV/HRS- RWV 2500



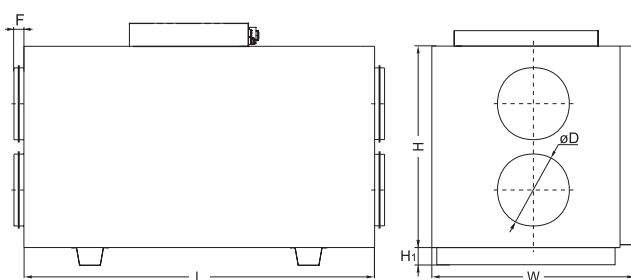
HRS-REV/HRS- RWV 3500



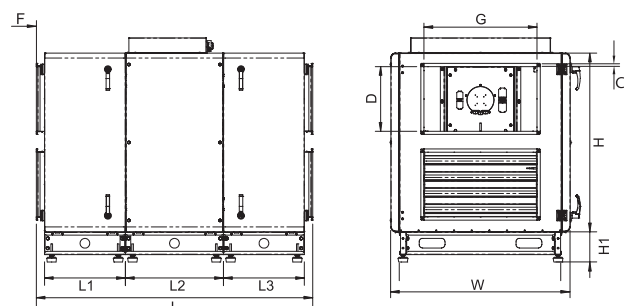
HRS-REV/HRS- RWV 5500



HRS-REH/HRS-RWH 700-1900



HRS-REH/HRS-RWH 2500-5500



Sound values								
HRS-R 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
Extraction	60	67	67	54	51	45	38	35
Surrounding	45	51	47	45	34	31	29	33
700 m³/h - 120 Pa								
HRS-R 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
Extraction	67	57	63	56	52	53	51	37
Surrounding	57	47	54	49	47	49	46	36
1351 m³/h - 181 Pa								
HRS-R 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
Extraction	63	68	71	57	53	46	40	37
Surrounding	50	55	54	49	38	34	32	36
1750 m³/h - 120 Pa								
HRS-R 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
Extraction	67	59	62	63	57	52	48	43
Surrounding	62	45	54	59	52	52	49	46
2355 m³/h - 214 Pa								
HRS-R 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
Extraction	72	58	70	66	60	57	51	43
Surrounding	64	55	58	59	57	53	49	45
3728 m³/h - 242 Pa								
HRS-R 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
Extraction	75	63	69	72	66	63	58	55
Surrounding	74	58	66	69	68	65	51	54
5652 m³/h - 246 Pa								
HRS-R 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
Extraction	60	66	67	53	50	45	37	33
Surrounding	46	52	49	45	35	32	29	34
650 m³/h - 150 Pa								
HRS-R 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
Extraction	68	63	64	62	56	46	41	31
Surrounding	57	52	53	47	44	41	35	33
1437 m³/h - 102 Pa								
HRS-R 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
Extraction	67	53	65	60	53	54	50	36
Surrounding	61	44	58	53	51	53	50	48
1906 m³/h - 100 Pa								
HRS-R 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
Extraction	68	60	61	65	56	51	46	41
Surrounding	62	45	52	60	54	52	48	43
2599 m³/h - 180 Pa								
HRS-R 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
Extraction	71	68	78	68	59	53	45	48
Surrounding	57	48	59	57	49	42	37	45
4000 m³/h - 150 Pa								
HRS-R H 5500	Lwa total.	Lwa, dB						
	dB(A)	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Supply	79	69	79	73	75	72	67	68
Extraction	72	68	80	64	59	54	46	72
Surrounding	54	47	55	54	46	41	36	41
5000 m³/h - 250 Pa								