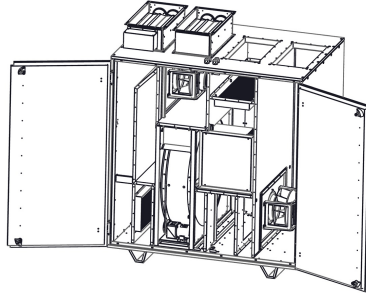


HR Rotor-1500Bi Compact

Artikel 1644



		Supply	Extract
Air flow	[m ³ /h]	1500	1500
External pressure	[Pa]	250	250
Inlet temperature, summer	[°C]	28	21
Relative humidity, summer	[%]	50	60
Inlet temperature, winter	[°C]	-10	21
Relative humidity, winter	[%]	95	50
Unit SFP	[W/(m ³ /s)]	1502.04	

Heat exchanger, summer

Supply			Extract		
Temperature after heat exchanger	[°C]	22.23	Temperature after heat exchanger	[°C]	26.78
Relative humidity after heat exchanger	[%]	70.51	Relative humidity after heat exchanger	[%]	42.38
Exchange efficiency dry	[%]	82.5	Exchange efficiency dry	[%]	82.5
Exchange efficiency wet	[%]	0	Exchange efficiency wet	[%]	0
Heat recovery wet	[kW]	-2.94			

Heat exchanger, winter

Supply			Extract		
Temperature after heat exchanger	[°C]	15.58	Temperature after heat exchanger	[°C]	-4.42
Relative humidity after heat exchanger	[%]	29.22	Relative humidity after heat exchanger	[%]	100
Exchange efficiency dry	[%]	82.51	Exchange efficiency dry	[%]	82
Exchange efficiency wet	[%]	27	Exchange efficiency wet	[%]	82
Heat recovery wet	[kW]	14.87			

Fans, winter

EC fan, backward curved impeller

Rated power = 500W(0,68Hp)\nPhase/voltage [50/60Hz/VAC] ~1, 200/277

Sound pressure level at 3 meters to environment 39 db(A)

Insulation class B

Motor protection class IP 54

Supply fan, winter			Extract fan, winter		
RPM	[1/min]	2433.91	RPM	[1/min]	2456.06
Electric power consumption	[W]	309.25	Electric power consumption	[W]	316.6
Current, A	[A]	1.37	Current, A	[A]	1.4
Total fan pressure, Pa	[Pa]	449.89	Total fan pressure, Pa	[Pa]	461.89
Static fan pressure, Pa	[Pa]	420.8	Static fan pressure, Pa	[Pa]	432.8
Static fan efficiency η_{es}	[%]	56.7	Static fan efficiency η_{es}	[%]	56.96
Airflow at operating point	[m ³ /h]	1500	Airflow at operating point	[m ³ /h]	1500
Power rated	[W]	500	Power rated	[W]	500
Current rated	[A]	2.3	Current rated	[A]	2.3
Control voltage	[V]	7	Control voltage	[V]	7.07
Sound pressure level to environment @3m	[dB(A)]	29.1	Sound pressure level to environment @3m	[dB(A)]	29.05

Fans sound power, winter Lw, (dB)

Sound power level	Gen.	Octave frequency bands [Hz]							
		63	125	250	500	1000	2000	4000	8000
Lwa (to inlet)	69	46	52	57	62	64	61	60	54
Lwa (to outlet)	73	36	47	61	65	68	68	63	57
Lwa (to environment)	50	29	38	49	37	35	35	30	25

Fans sound power, winter Lw, (dB)

Sound power level	Gen.	Octave frequency bands [Hz]							
		63	125	250	500	1000	2000	4000	8000
Lwa (to inlet)	69	46	52	58	63	64	61	60	55
Lwa (to outlet)	73	36	47	61	65	68	68	63	57
Lwa (to environment)	50	29	38	49	37	35	35	30	25

SFP, winter

Unit external SFP, real at operation point [W/(m³/s)] 1502.04

Filter

Filter 403*253*48 - ePM1 70% ISO16890 / F7 EN 779:2012 panel type, PP+PET / MERV 13 (ASHRAE 52.2) Frames
9.9x15.8x1.9inch.

Dampers

Multi-blade damper for air flow control

The housing made of galvanized steel. The aluminium blades driven by plastic gearwheels. Lever with removable metal handle and fixing clamp. Standard connection flange for rectangular air ducts or other ventilation system components. Flanges should be connected with galvanized bolts and clamps.

Casing

Double skin frameless casing with 40 mm (1.5inch) mineral wool 90 kg/m³; non-flammable; outer skin: zinc-aluminum; inner skin: zinc-aluminum; EN1886 class: D1, T3, TB4.
Insulation class B

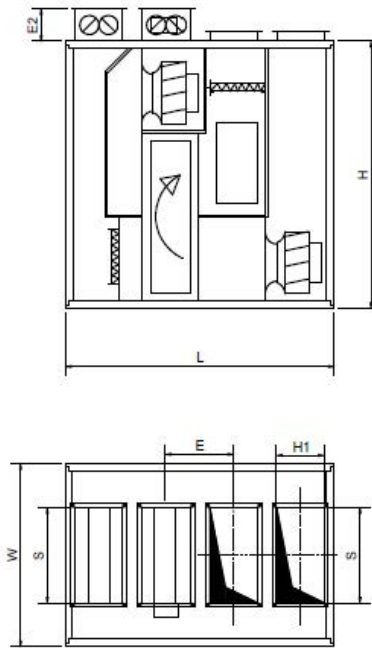
Units	L	W	H	S	H1	E2	S1	S2	S3	E
mm	1400	960	1400	500	250	170	350	360	600	350
inch	55	38	55	20	10	7	14	14	24	14

Unit Weight (without water cooler , DX coil, water heater), [Kg] - 307, [lb] - 677

DX coil/water cooler weight, [Kg] - 34, [lb] - 75

Water heater weigh , [Kg] - 30, [lb] - 66

Electric heater weigh , [Kg] - 25, [lb] - 55

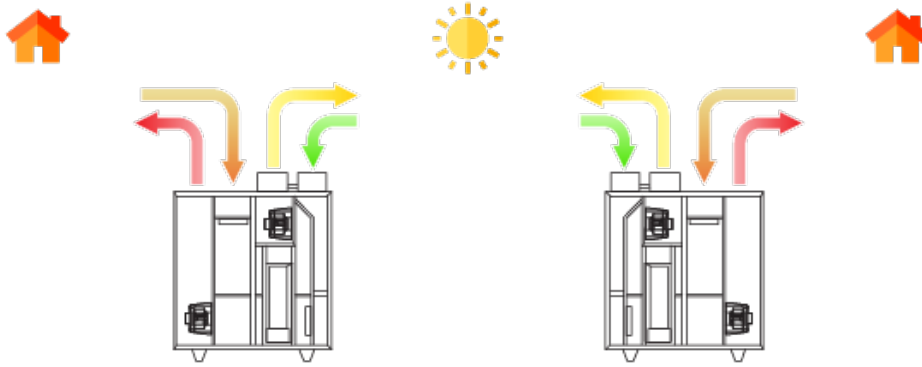


ERP		
Trade mark		Air-Transfer
Model		HR Rotor-1500Bi Compact
Declared typology		NRVU BVU
Type of drive installed		Integrated MSD
Type of heat recovery system		Rotary
Thermal efficiency of heat recovery	[%]	82.51
Supply flow rate	[m ³ /s]	0.42
Effective electric power input	[W]	625.85
SFPint	[W/(m ³ /s)]	622.17
Face velocity at design flow rate	[m/s]	1.35
External pressure	[Pa]	250
Internal pressure drop of ventilation components	[Pa]	170.8
Static efficiency of fans	[%]	56.7
Maximum leakage rates	[%]	2.7
Maximum leakage rates	[%]	2.7
Filtration class		B
Visual filter warning		Visual filter warning
Sound power level	[db]	49.64
Internet address		www.air-transfer.nl

Erp 2018 compliant according to Commission Regulation EU No 1253/2014, 7 July 2014

Left service side

Right service side



Supply air Fresh air Extract air Exhaust air