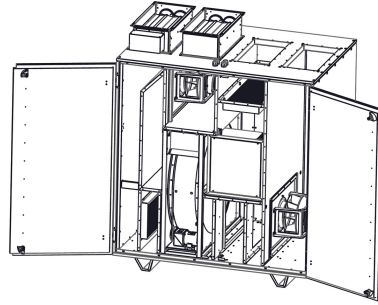


Energy recovery unit Blauair BL03 RV 3500



		Supply	Extract
Air flow	[cfm]	2200	2200
External pressure	[in. WG]	1	1
Inlet temperature, summer	[F]	85	70
Relative humidity, summer	[%]	40	50
Inlet temperature, winter	[F]	5	70
Relative humidity, winter	[%]	90	40
After heat exchanger temperature, summer	[F]	72.97	82.04
Exchange efficiency dry, summer	[%]	80.21	80.2
After heat exchanger temperature, winter	[F]	57.09	18.19
Exchange efficiency dry, winter	[%]	80.14	79.7
Unit SFP	[cfm/W]	0.77	
Heating type		None	

Heat exchanger

Rotary aluminum heat exchanger class H1 (DIN EN 13053)

Supply			Extract		
Temperature after heat exchanger	[F]	72.97	Temperature after heat exchanger	[F]	82.04
Relative humidity after heat exchanger	[%]	59.58	Relative humidity after heat exchanger	[%]	33.61
Exchange efficiency dry	[%]	80.21	Exchange efficiency dry	[%]	80.2
Exchange efficiency wet	[%]	0	Exchange efficiency wet	[%]	0
Heat recovery wet	[kBTU/hr]	-28.83			
Supply			Extract		
Temperature after heat exchanger	[F]	57.09	Temperature after heat exchanger	[F]	18.19
Relative humidity after heat exchanger	[%]	24.39	Relative humidity after heat exchanger	[%]	100
Exchange efficiency dry	[%]	80.14	Exchange efficiency dry	[%]	79.7
Exchange efficiency wet	[%]	28	Exchange efficiency wet	[%]	78
Heat recovery wet	[kBTU/hr]	138.43			

Fans, winter

EC fan, backward curved impeller
 Phase/voltage [50/60Hz/VAC] ~3, 380/480
 Sound pressure level at 3 meters to environment 41 db(A)
 Insulation class B
 Motor protection class IP 54

Supply fan, winter			Extract fan, winter		
RPM	[1/min]	2106.27	RPM	[1/min]	2128.66
Electric power consumption, Pe	[kBTU/h]	2.85	Electric power consumption, Pe	[kBTU/h]	2.94
Current, I	[A]	1.29	Current, I	[A]	1.33
Total fan pressure, Pf	[in. WG]	1.95	Total fan pressure, Pf	[in. WG]	2.03
Static fan pressure, Psf	[in. WG]	1.75	Static fan pressure, Psf	[in. WG]	1.84
Static fan efficiency η_{es}	[%]	54.28	Static fan efficiency η_{es}	[%]	55.07
Number of fans		1	Number of fans		1

Fans sound power, winter Lw, (dB)

Hz	62.5	125	250	500	1000	2000	4000	8000	LwA
Inlet	67	66	71	72	68	68	69	66	76
Outlet	69	68	73	76	78	76	73	69	82

Fans sound power, winter Lw, (dB)

Hz	62.5	125	250	500	1000	2000	4000	8000	LwA
Inlet	67	66	71	72	68	68	68	66	75
Outlet	69	68	73	76	78	76	72	68	82

SFP, winter

Unit external SFP, real at operation point [cfm/W] 0.77

Filter

Filter, class (EN779) F7, Frames 196x384x40, panel type, PP+PET,

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

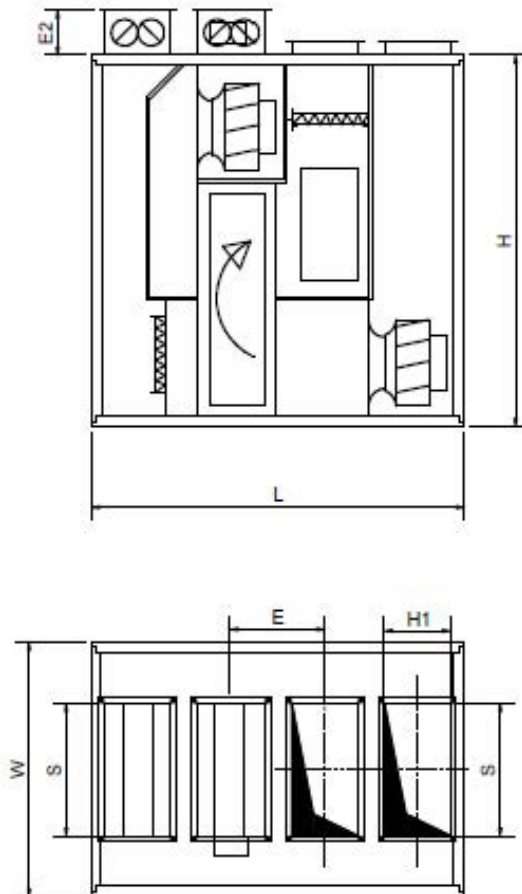
Double skin frameless casing with 40 mm mineral wool 90 kg/m³; non-flammable; outer skin: zinc-aluminum; inner skin: zinc-aluminum; EN1886 class: D1, T2, TB2; corrosion resistance according to ISO 12944: class C4. Insulation class B

L	W	H	S	H1	E2	S1	S2	S3	E
1600	1290	1860	600	300	170	350	360	600	600

Unit Weight (without water cooler , DX coil, water heater), [Kg] - 405

DX coil/water cooler weight, [Kg] - 47

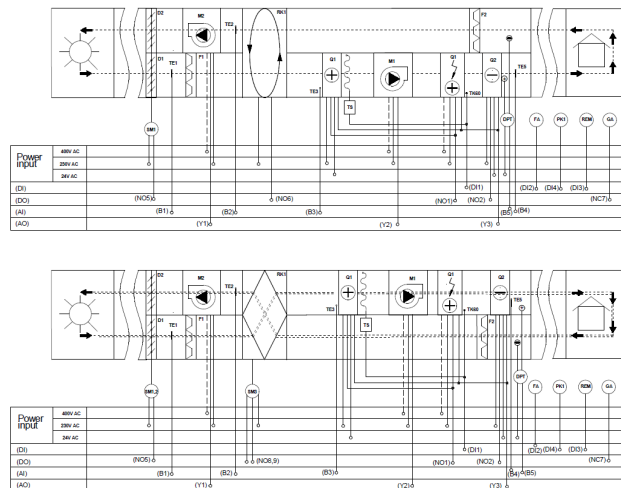
Water heater weigh , [Kg] - 40



Controls

Control system features advanced functions that can be activated based on the devices installed on the air handling unit:

- Coils management: water heater, water cooler, direct expansion, cooler/heater coil;
- Fans management: 3 speed setup, air pressure control, airflow control;
- Heat recovery
- Temperature and/or humidity control;
- Automatic summer/winter (cooling/heating) changeover;
- Operation in comfort, precomfort or economy mode;
- Selection of up to four daily time bands, with settings for each operating modes;
- Holiday and special day function, with reduced set point;
- Air quality control with optional CO2/IAQ probe;
- Priority to temperature or humidity control, by room/supply/extract sensors
- Safety protectors for antifreeze, dirty filters, smoke/fire, no air or water low, inverter alarm;
- Parameter settings divided by level, user, installer or manufacturer, with password-protected access;
- Manual functioning mode;
- Supervisor protocol: Modbus slave build-in, Bacnet build-in;
- Freecooling and freeheating;
- Pumps management, overload alarms and anti-blocking for each pump;
- WEB-interface via integrated Ethernet port



ERP

Trade mark		Blauberg
Model		Energy recovery unit Blauair BL03 RV 3500
Declared typology		NRVU BVU
Type of drive installed		Integrated MSD
Type of heat recovery system		Regenerative
Thermal efficiency of heat recovery	[%]	80.14
Supply flow rate	[cfm]	2200
Effective electric power input	[HP]	2.27
SFPint	[cfm/W]	0.34
Face velocity at design flow rate	[f/m]	7.04
External pressure	[in. WG]	1
Internal pressure drop of ventilation components	[in. WG]	0.75
Static efficiency of fans	[%]	54.28
Maximum leakage rates	[%]	2.7
Maximum leakage rates	[%]	2.7
Filtration class		B
Visual filter warning		Visual filter warning
Sound power level	[db]	82.83
Internet address		http://blaubergventilatoren.de/

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