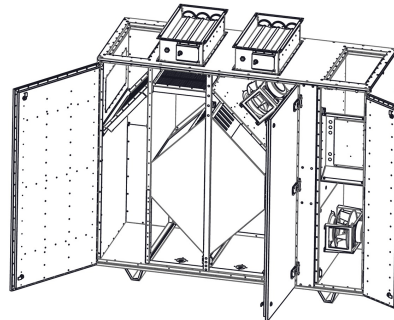


Heat recovery unit Blauair BL03 CFV 3500



		Supply	Extract
Air flow	[cfm]	1800	1800
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]	72.9	82.48
Exchange efficiency dry, summer	[%]	80.67	83.23
After heat exchanger temperature, winter	[F]	66.73	30.26
Exchange efficiency dry, winter	[%]	86.99	75.76
Unit SFP	[cfm/W]	0.78	
Heating type		None	

Heat exchanger

Counterflow aluminum plate heat exchanger

Eurovent certified heat recovery efficiency

Removable drain pans on both supply and extract

Automatic full-size by-pass

Supply			Extract		
Temperature after heat exchanger	[F]	72.9	Temperature after heat exchanger	[F]	82.48
Relative humidity after heat exchanger	[%]	59.54	Relative humidity after heat exchanger	[%]	33.1
Condensation	[kg/h]	0	Condensation	[kg/h]	0
Exchange efficiency dry	[%]	80.67	Exchange efficiency dry	[%]	83.23
Exchange efficiency wet	[%]	80.67	Exchange efficiency wet	[%]	83.23
Heat recovery dry	[kBTU/hr]	-23.41			
Heat recovery wet	[kBTU/hr]	-23.41			
Supply			Extract		
Temperature after heat exchanger	[F]	66.73	Temperature after heat exchanger	[F]	30.26
Relative humidity after heat exchanger	[%]	6.67	Relative humidity after heat exchanger	[%]	100
Condensation	[kg/h]	0	Condensation	[kg/h]	-11.39
Exchange efficiency dry	[%]	86.99	Exchange efficiency dry	[%]	75.76
Exchange efficiency wet	[%]	94.97	Exchange efficiency wet	[%]	61.14
Heat recovery dry	[kBTU/hr]	92.09			
Heat recovery wet	[kBTU/hr]	103.49			

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		
RPM	[1/min]	1918.01
Electric power consumption, Pe	[kBTU/h]	2.29
Current, I	[A]	1.03
Total fan pressure , Pf	[in. WG]	1.93
Static fan pressure , Psf	[in. WG]	1.79
Static fan efficiency η_{es}	[%]	56.55
Number of fans		1

Extract fan, winter		
RPM	[1/min]	1982.33
Electric power consumption, Pe	[kBTU/h]	2.52
Current, I	[A]	1.13
Total fan pressure , Pf	[in. WG]	2.14
Static fan pressure , Psf	[in. WG]	2.01
Static fan efficiency η_{es}	[%]	57.55
Number of fans		1

Fans sound power, winter Lw, (dB)

Hz	62.5	125	250	500	1000	2000	4000	8000	LwA
Inlet	65	64	69	68	64	65	62	58	71
Outlet	68	65	71	72	74	72	66	62	78

Fans sound power, winter Lw, (dB)

Hz	62.5	125	250	500	1000	2000	4000	8000	LwA
Inlet	65	64	70	69	65	66	62	59	72
Outlet	68	66	72	73	75	73	67	62	79

SFP, winter		
Unit external SFP, real at operation point	[cfm/W]	0.78

Filter

Filter, class (EN779) F7, Frames 253x603x48, 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

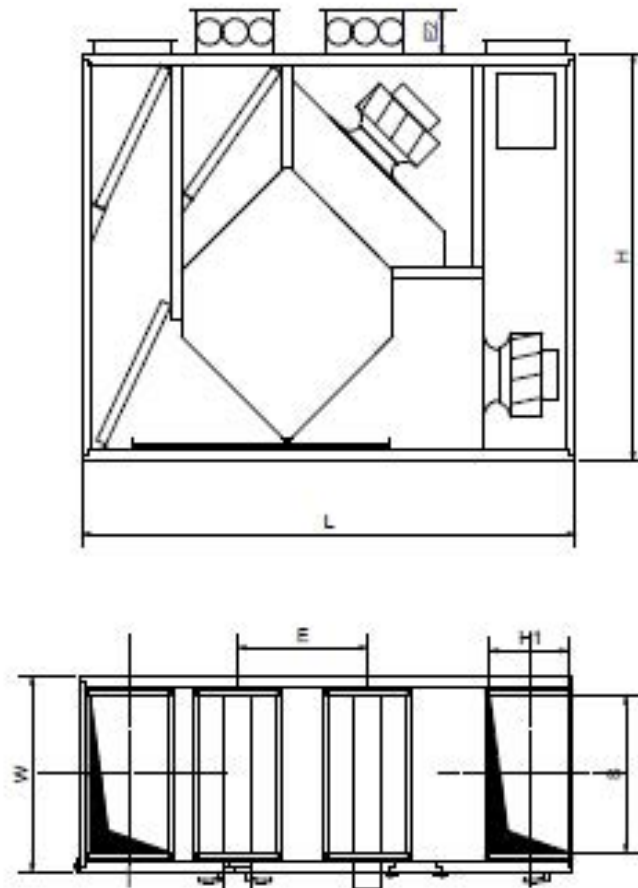
Double skin frameless casing with 40 mm mineral wool 90 kg/m³; non-flammable; outer skin: zinc-aluminum; inner skin: zinc-aluminum; EN1886 class: D1, T2, TB2; corrosion resistance according to ISO 12944: class C4. Insulation class B

L	W	H	S	H1	E2	S1	S2	S3	E
2200	890	1800	600	300	170	350	360	600	560

Unit Weight (without water cooler , DX coil, water heater), [Kg] - 515

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

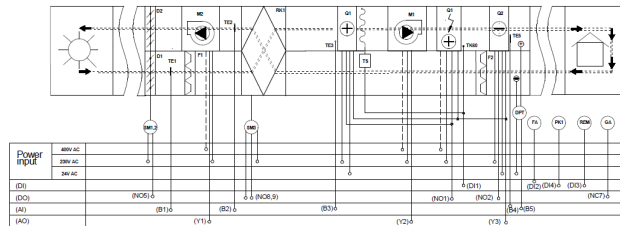
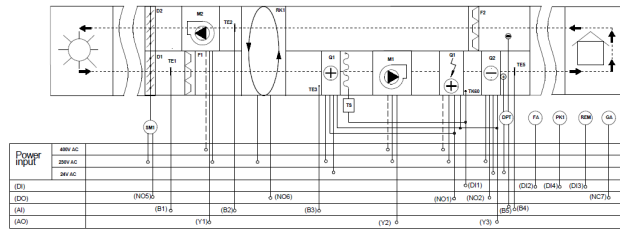
Water heater weigh , [Kg] - 40



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		Heat recovery unit Blauair BL03 CFV 3500
Declared typology		NRVU BVU
Type of drive installed		Integrated MSD
Type of heat recovery system		Regenerative
Thermal efficiency of heat recovery	[%]	86.99
Supply flow rate	[cfm]	1800
Effective electric power input	[HP]	1.89
SFPint	[cfm/W]	0.37
Face velocity at design flow rate	[f/m]	6.26
External pressure	[in. WG]	1
Internal pressure drop of ventilation components	[in. WG]	0.79
Static efficiency of fans	[%]	56.55
Maximum leakage rates	[%]	2.7
Maximum leakage rates	[%]	2.7
Filtration class		B
Visual filter warning		Visual filter warning
Sound power level	[db]	78.93
Internet address		http://blaubergventilatoren.de/

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