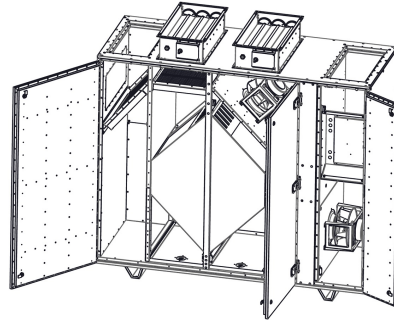


# Heat recovery unit Blauair BL02 CFV 1500



		<b>Supply</b>	<b>Extract</b>
Air flow	[ cfm ]	900	900
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 ]	73.05	82.33
Exchange efficiency dry, summer	[ % ]	79.69	82.23
After heat exchanger temperature, winter	[ F ]	65.13	31
Exchange efficiency dry, winter	[ % ]	85.95	74.85
Unit SFP	[ cfm/W ]	0.81	
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 ]	73.05	Temperature after heat exchanger	[ F ]	82.33
Relative humidity after heat exchanger	[ % ]	59.25	Relative humidity after heat exchanger	[ % ]	33.26
Condensation	[ kg/h ]	0	Condensation	[ kg/h ]	0
Exchange efficiency dry	[ % ]	79.69	Exchange efficiency dry	[ % ]	82.23
Exchange efficiency wet	[ % ]	79.69	Exchange efficiency wet	[ % ]	82.23
Heat recovery dry	[ kBTU/hr ]	-11.77			
Heat recovery wet	[ kBTU/hr ]	-11.77			

Supply			Extract		
Temperature after heat exchanger	[ F ]	65.13	Temperature after heat exchanger	[ F ]	31
Relative humidity after heat exchanger	[ % ]	7.06	Relative humidity after heat exchanger	[ % ]	100
Condensation	[ kg/h ]	0	Condensation	[ kg/h ]	-5.53
Exchange efficiency dry	[ % ]	85.95	Exchange efficiency dry	[ % ]	74.85
Exchange efficiency wet	[ % ]	92.51	Exchange efficiency wet	[ % ]	60
Heat recovery dry	[ kBTU/hr ]	46.34			
Heat recovery wet	[ kBTU/hr ]	51.36			

## Fans, winter

EC fan, backward curved impeller

Phase/voltage [50/60Hz/VAC] ~1, 200/277

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 ]	2513.96
Electric power consumption, Pe	[ kBTU/h ]	1.19
Current, I	[ A ]	2.29
Total fan pressure , Pf	[ in. WG ]	1.79
Static fan pressure , Psf	[ in. WG ]	1.67
Static fan efficiency $\eta_{es}$	[ % ]	50.65
Number of fans		1

Extract fan, winter		
RPM	[ 1/min ]	2587.26
Electric power consumption, Pe	[ kBTU/h ]	1.3
Current, I	[ A ]	2.49
Total fan pressure , Pf	[ in. WG ]	1.97
Static fan pressure , Psf	[ in. WG ]	1.85
Static fan efficiency $\eta_{es}$	[ % ]	51.29
Number of fans		1

**Fans sound power, winter Lw, (dB)**

Hz	62.5	125	250	500	1000	2000	4000	8000	LwA
Inlet	60	60	67	66	64	64	65	58	71
Outlet	63	62	66	67	70	72	70	62	77

**Fans sound power, winter Lw, (dB)**

Hz	62.5	125	250	500	1000	2000	4000	8000	LwA
Inlet	61	60	67	66	64	64	65	58	71
Outlet	64	62	67	68	71	72	70	63	77

SFP, winter		
Unit external SFP, real at operation point	[ cfm/W ]	0.81

## 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

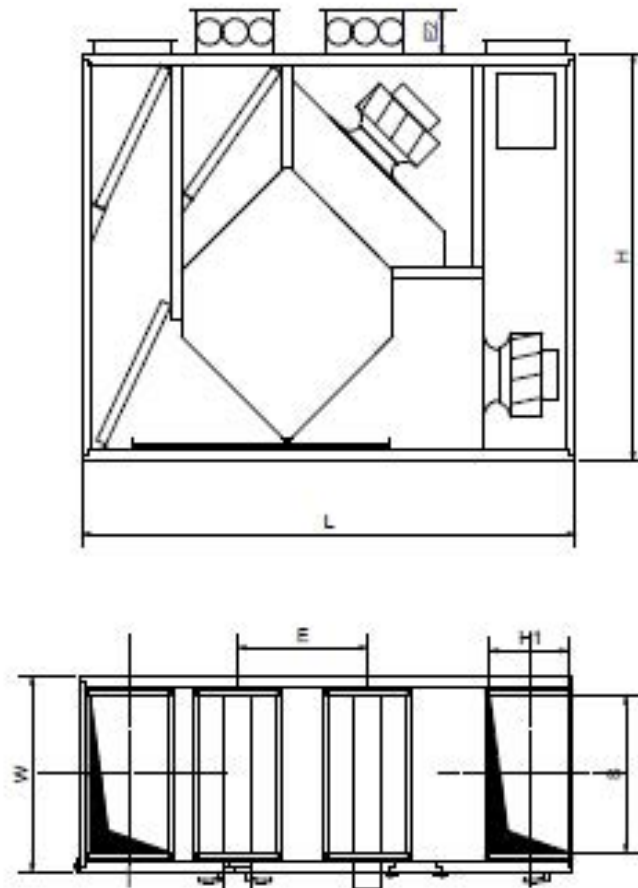
Double skin frameless casing with 40 mm mineral wool 90 kg/m<sup>3</sup>; non-flammable; outer skin: zinc-aluminum; inner skin: zinc-aluminum; EN1886 class: D1, T2, TB2; corrosion resistance according to ISO 12944: class C4. Insulation class B

L	W	H	S	H1	E2	S1	S2	S3	E
1950	750	1550	600	300	170	350	360	600	500

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

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

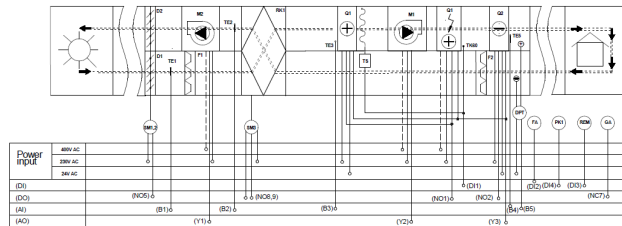
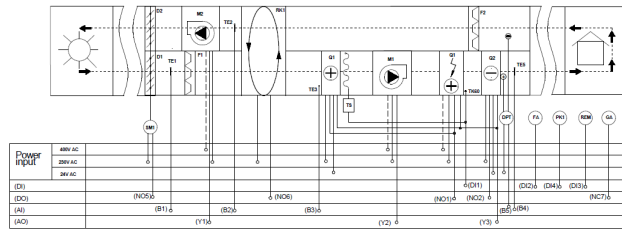
**Water heater weigh** , [Kg] - 30



## 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 BL02 CFV 1500
Declared typology		NRVU BVU
Type of drive installed		Integrated MSD
Type of heat recovery system		Regenerative
Thermal efficiency of heat recovery	[ % ]	85.95
Supply flow rate	[ cfm ]	900
Effective electric power input	[ HP ]	0.98
SFPint	[ cfm/W ]	0.35
Face velocity at design flow rate	[ f/m ]	4.27
External pressure	[ in. WG ]	1
Internal pressure drop of ventilation components	[ in. WG ]	0.67
Static efficiency of fans	[ % ]	50.65
Maximum leakage rates	[ % ]	2.7
Maximum leakage rates	[ % ]	2.7
Filtration class		B
Visual filter warning		Visual filter warning
Sound power level	[ db ]	77.75
Internet address		<a href="http://blaubergventilatoren.de/">http://blaubergventilatoren.de/</a>

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