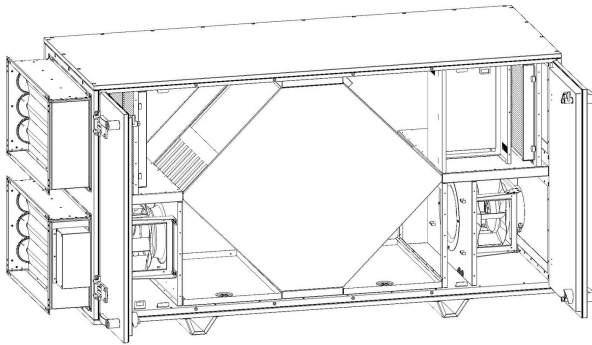


Air handling unit model:

Blauair US 03 CFH 3500



		Supply	Exhaust
Airflow	[cfm]	2000	2000
Pressure static, ext	[in. WG]	1	1
Temperature, inlet	[F]	5	70
Relative humidity In	[%]	90	50
Temperature after heat exchanger	[F]	67.34	32.91
Exchange efficiency dry	[%]	86.48	75.15
Unit SFP	[cfm/W]	2996	
Heater type		none	

Energy recovery

Outlet supply

Temperature after heat exchanger	[F]	67.34
Relative humidity after heat exchanger	[%]	6.54
Condensation	[kg/h]	0
Exchange efficiency dry	[%]	86.48
Exchange efficienct wet	[%]	95.91
Heat recovery dry	[kBTU/hr]	101.72
Heat recovery wet	[kBTU/hr]	116.12

Outlet extract

Temperature after heat exchanger	[F]	32.91
Relative humidity after heat exchanger	[%]	100
Condensation	[kg/h]	-15.44
Exchange efficiency dry	[%]	75.15
Exchange efficienct wet	[%]	57.06

Fans

Supply

RPM	[1/min]	2057.55
Electric power consumption, Pe	[HP]	1.07
Current, I	[A]	1.23
Total fan pressure, Pf	[in. WG]	2.11
Static fan pressure, Psf	[in. WG]	1.95
Static fan efficiency, es	[%]	57.2

Exhaust

RPM	[1/min]	2126.25
Electric power consumption, Pe	[HP]	1.18
Current, I	[A]	1.36
Total fan pressure, Pf	[in. WG]	2.36
Static fan pressure, Psf	[in. WG]	2.2
Static fan efficiency, es	[%]	58.46

Sound power Lw [dB]

	Hz	62.5	125	250	500	1000	2000	4000	8000	LwA
Outlet	69	67	72	74	76	74	69	65	81	

Sound power Lw [dB]

	Hz	62.5	125	250	500	1000	2000	4000	8000	LwA
Outlet	70	67	73	75	77	75	69	65	81	

Basic construction

Heat recovery ventilation unit for floor installation

Counterflow aluminum plate heat exchanger

High-efficient EC-fans, backward-curved, external rotor

Integrated automatic dampers

Integrated plug-and-play controls

Automatic full-size by-pass

Insulated double-skin frameless casing

Double-deck arrangement with horizontal duct connection

ECO-Design'18 compliant

Phase~Voltage/Herz 3~220 V/60 Hz

Panel filters MERV8, MERV13, MERV15(optional)

Hinged service doors

Outdoor installation with outdoor mounting kit (optional)

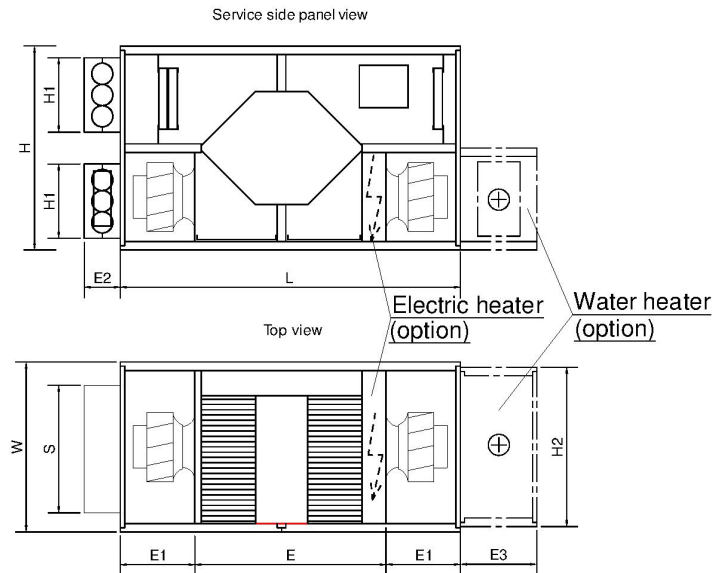
Web-interface, MODBUS, outputs for optional DX or Hydronic cooling / heating

Complete set of accessories: silencers, economizers, VAV, CAV, etc.

Operation by RH/CO2/temperature/constant pressure/timer schedule

Double skin; frameless, 1 2/4 inch; mineral wool 5.62 lb/ft³; non-flammable; outer skin: zinc-aluminum; inner skin: zinc-aluminum; EN1886 class: D1, T2, TB2; corrosion resistance according to ISO 12944: class C4.

Unit is supplied ready for operation with all necessary control elements

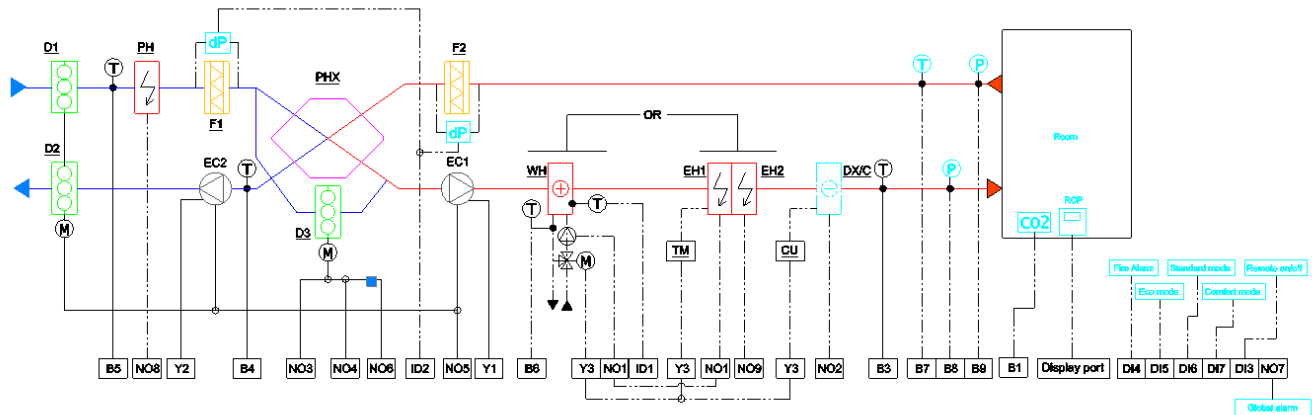


Dimensions [inch]

L	86 1/2
W	35
H	50 3/4
H1	13 3/4
H2 (CFH 2500-W)	35
S	23 1/2
E	59
E1	13 3/4

E2	6 3/4
<hr/>	
E3 (CFH 2500-W)	14 1/4
<hr/>	

Weight (net, without packing), [lb]	551
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Control system features advanced functions that can be activated based on the devices installed on the air handling unit:

Coils management: water heater, electric heater, water cooler, direct expansion, cooler/heater coil;

Fans management: 3 speed setup, air pressure control, airflow control;

Heat recovery with plate heat exchanger, run-around coil or heat wheel;

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

EC Fans - **EBM PAPST**

Controls - **CAREL**

Damper actuators - **BELIMO**

Heat Exchangers - **ERI CORPORATION**

Technical changes reserved

ERP

Trade mark		Blauberg
Model		Blauair US 03 CFH 3500
Declared typology		NRVU BVU
Type of drive installed		Integrated MSD
Type of recovery system		Recuperative (counterflow)
Thermal efficiency of heat recovery	[%]	86.48
Supply flow rate	[cfm]	1999.98
Effective electric power input	[HP]	2.26
SFPint	[cfm/W]	1548.56
Face velocity at design flow rate	[f/m]	12.39
External pressure	[in. WG]	1
Internal pressure drop of ventilation components	[in. WG]	0.95
Static efficiency of fans	[%]	57.2
Maximum internal leakage rates	[%]	2,7
Maximum external leakage rates	[%]	2,7
Energy performance of filters		B
Visual filter warning		See control panel catalogue data
Sound power level	[dB(A)]	81
Internet address		http://www.blaubergventilatoren.de

Erp 2016 compliant according to Commission Regulation EU No 1253/2014, 7 July 2014.