



BOX BLB

Centrifugal Box Fan

BOX BLB

Product Overview

- 3 sizes from 260mm to 400mm
- Air volume flow rates up to 0.751m³/s
- Static pressures up to 733 Pa
- Suitable for operating temperatures up to +60°C
- Lightweight galvanised sheet steel casing
- Available in **EC**

The Box BLB fan uses advanced motor technology with a straightforward design to provide high performance in a wide range of applications.

Low Noise

Each unit is acoustically lined internally with Class O rated (BS 476 Parts 6 and 7) fire resistant acoustic foam lining minimising breakout noise levels.

Easy Installation

To facilitate ease of installation, all models are designed for direct connection to the standard 20mm Doby flange system as standard.

Efficient Performance

Aerodynamic fan design with a backward curved centrifugal impeller directly driven by an EC external rotor motor, provides low specific fan powers, increased efficiency and precise, stepless speed control.

Controllability /

Advanced Control Features

EC motors provide precise speed control via potentiometer or BMS input. Reduced fan speed can provide significant cost-savings through lower energy consumption in both mechanical energy of motors and also on the conditioning of replacement air.

Construction

Manufactured with robust 1.5mm thick pre-galvanised mild steel sheet, treated internally with 25mm thick fire resistant Class "O" rated acoustic foam lining (BS 476 Parts 6 and 7).

Motor

The BLB range of units has an EC external rotor motor fitted as standard. The IP44 motor contains sealed for life bearings. All motors are suitable for use in ambient air conditions up to +60°C. Electrical connection shall be via an IP55 terminal box mounted on the side for easy customer connection.

Impeller

High efficiency backward curved centrifugal impeller. Dynamically balanced to ISO1940-1 Grade G6.3 and directly driven by EC motors.



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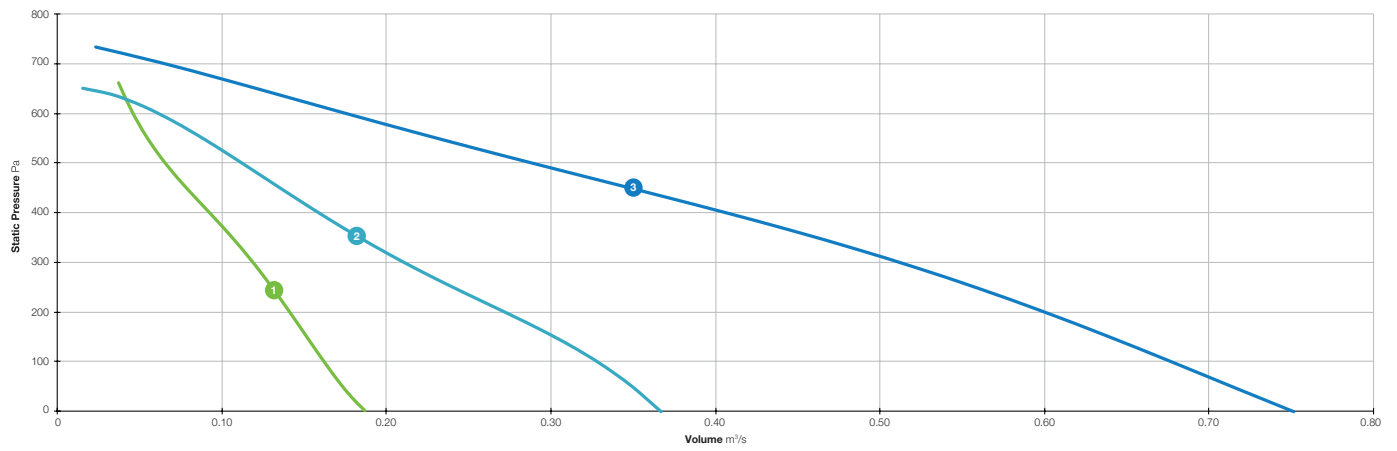
Product Coding

Code	Reference
BLB	Product Range
400	Diameter (260/330/400...)
-	
1	Voltage Supply (Single Phase / Three Phase)
EC	Motor Type (AC/EC)
e.g.	BLB400 - 1EC

BOX BLB



Performance Range Curves



- 1 BLB260 - 1EC
- 2 BLB330 - 1EC
- 3 BLB400 - 1EC

Performance, SFP & Electrical Data

Single Phase 220V - 277V / 50Hz or 60Hz

Product Code	Control Voltage V	Speed r/min	Airflow SFP	Airflow m ³ /s @ Static Pressure Pa												At Best Efficiency Point		Elec. Data	dBA @ 3m	
				0	25	50	75	100	150	200	250	300	350	400	500	Overall Eff. %	Input kW			
BLB260-1EC	10	3565	m ³ /s	0.187	0.179	0.173	0.167	0.162	0.151	0.141	0.130	0.118	0.106	0.092	0.065	39.5	0.109	0.91	Inlet	48
			W/(L/s)	0.59	0.62	0.64	0.66	0.68	0.72	0.77	0.83	0.92	1.03	1.18	1.66				Outlet	48
	8	3330	m ³ /s	0.171	0.166	0.160	0.154	0.148	0.136	0.124	0.112	0.101	0.088	0.075	0.048	39.3	0.092	0.79	Inlet	47
			W/(L/s)	0.54	0.56	0.58	0.60	0.62	0.68	0.74	0.81	0.91	1.04	1.23	1.95				Outlet	47
	5	2580	m ³ /s	0.135	0.128	0.121	0.114	0.107	0.092	0.075	0.055	0.039	0.026	0.016	-	36.1	0.049	0.42	Inlet	41
			W/(L/s)	0.37	0.39	0.41	0.43	0.46	0.53	0.66	0.89	1.28	1.92	3.03	-				Outlet	43
	2	1280	m ³ /s	0.066	0.057	0.042	-	-	-	-	-	-	-	-	-	22.0	0.012	0.12	Inlet	25
			W/(L/s)	0.18	0.20	0.28	-	-	-	-	-	-	-	-	-				Outlet	26
BLB330-1EC	10	2480	m ³ /s	0.366	0.358	0.349	0.339	0.328	0.302	0.272	0.240	0.210	0.183	0.158	0.112	45.6	0.162	1.30	Inlet	50
			W/(L/s)	0.46	0.47	0.48	0.50	0.51	0.55	0.61	0.68	0.77	0.88	1.03	1.48				Outlet	49
	8	2440	m ³ /s	0.321	0.316	0.310	0.303	0.296	0.281	0.262	0.240	0.214	0.185	0.154	0.079	45.3	0.164	1.26	Inlet	49
			W/(L/s)	0.33	0.35	0.38	0.41	0.44	0.51	0.59	0.68	0.77	0.89	1.04	1.69				Outlet	48
	5	1490	m ³ /s	0.195	0.185	0.174	0.161	0.145	0.097	-	-	-	-	-	-	45.8	0.040	0.33	Inlet	38
			W/(L/s)	0.13	0.16	0.19	0.23	0.27	0.40	-	-	-	-	-	-				Outlet	37
	2	555	m ³ /s	0.071	0.020	-	-	-	-	-	-	-	-	-	-	18.7	0.004	0.07	Inlet	18
			W/(L/s)	0.05	0.20	-	-	-	-	-	-	-	-	-	-				Outlet	18
BLB400-1EC	10	2135	m ³ /s	0.751	0.732	0.714	0.695	0.677	0.639	0.600	0.558	0.512	0.461	0.406	0.288	43.1	0.424	1.82	Inlet	57
			W/(L/s)	0.53	0.55	0.57	0.58	0.60	0.65	0.70	0.76	0.83	0.92	1.04	1.44				Outlet	56
	8	2440	m ³ /s	0.710	0.694	0.678	0.663	0.648	0.618	0.587	0.552	0.512	0.462	0.399	0.227	42.9	0.425	1.82	Inlet	58
			W/(L/s)	0.47	0.49	0.51	0.54	0.56	0.61	0.67	0.74	0.82	0.92	1.05	1.59				Outlet	52
	5	1385	m ³ /s	0.482	0.460	0.437	0.411	0.384	0.322	0.241	0.106	-	-	-	-	40.8	0.140	0.81	Inlet	47
			W/(L/s)	0.24	0.26	0.28	0.32	0.35	0.44	0.57	1.10	-	-	-	-				Outlet	45
	2	740	m ³ /s	0.253	0.210	0.153	-	-	-	-	-	-	-	-	-	27.0	0.034	0.17	Inlet	32
			W/(L/s)	0.12	0.16	0.22	-	-	-	-	-	-	-	-	-				Outlet	31

Data provided is at standard air density of 1.2 kg/m³.

Data in accordance with ErP 1253/2014 of the European Parliament. Product category is NRVU. Measurement category used to determine energy efficiency: D.

A variable speed drive is integrated within the fan.

Peak Amps @ 230V / 1PH / 50Hz.

The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20μPa and is presented for comparative purposes only.

Sound Data

Single Phase 220V to 277V / 50Hz or 60Hz

Product Code	Control Voltage V		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
BLB260-1EC	10	Inlet	78	66	64	70	57	57	56	56	79
		Outlet	82	68	64	68	61	58	58	57	82
	8	Inlet	69	66	65	68	56	56	55	54	74
		Outlet	77	71	65	66	61	57	57	55	79
	5	Inlet	70	66	65	58	52	51	48	47	73
		Outlet	75	76	63	57	53	51	50	47	79
	2	Inlet	52	54	49	42	36	34	31	32	57
		Outlet	52	56	48	43	40	35	33	32	58
BLB330-1EC	10	Inlet	74	69	72	68	64	63	60	57	78
		Outlet	74	69	72	67	59	60	61	61	78
	8	Inlet	73	68	71	67	63	62	60	55	77
		Outlet	73	68	72	66	58	59	61	58	77
	5	Inlet	64	64	61	56	50	50	46	38	68
		Outlet	64	64	61	55	46	46	49	41	68
	2	Inlet	53	45	39	33	28	27	28	33	54
		Outlet	53	45	39	33	25	27	28	33	54
BLB400-1EC	10	Inlet	78	78	84	74	68	65	61	55	86
		Outlet	81	78	84	70	64	62	61	59	87
	8	Inlet	78	78	85	75	68	65	61	56	87
		Outlet	80	85	74	68	62	62	60	56	87
	5	Inlet	73	81	67	62	58	55	50	44	82
		Outlet	76	79	66	60	55	52	51	47	81
	2	Inlet	74	59	53	46	43	39	33	35	74
		Outlet	74	57	52	45	41	38	35	35	74

Data provided at standard air density of 1.2 kg/m³.
 Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.
 The Sound Power Level Spectra are in dB re-1pW.

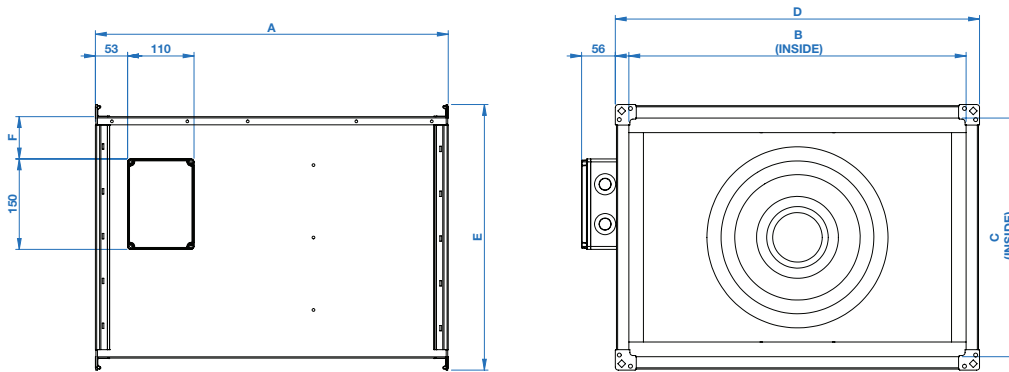
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Dimensional Data

Single Phase

Product Code	A	B	C	D	E	F	Weight kg
BLB260-1EC	459	343	255	387	300	55	12
BLB330-1EC	534	441	323	486	372	70	18
BLB400-1EC	585	559	396	604	440	70	27



Dimensions are in mm.

REV2 01/05/2018

A	B	C*			D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S
		C.1	C.2	C.3															
Elta Fans Ltd	BLB260-1EC	NRVU	UVU	2018	VSD	None	n/a	0.102	0.109	n/a	1.17	368	n/a	39.5	n/a	n/a	n/a	48	www.eltafans.com
Elta Fans Ltd	BLB330-1EC	NRVU	UVU	2018	VSD	None	n/a	0.186	0.162	n/a	1.31	346	n/a	45.6	n/a	n/a	n/a	50	www.eltafans.com
Elta Fans Ltd	BLB400-1EC	NRVU	UVU	2018	VSD	None	n/a	0.427	0.424	n/a	1.93	385	n/a	43.1	n/a	n/a	n/a	57	www.eltafans.com

- A** Manufacturer's Name
- B** Model Identifier
- C.1** RVU or NRVU
- C.2** UVU or BVU
- C.3** ErP Compliance
- D** Type of Drive (MSD / VSD)
- E** Type of HRS (Run Around / Other / None)
- F** Thermal Efficiency (% or N/A)
- G** Nominal Flow Rate (m³/s)
- H** Effective Electrical Power Input (kW)
- I** SFP int (W/m³/s)
- J** Face Velocity (m/s)
- K** Nominal External Pressure (Pa)
- L** Internal Pressure Drop of Ventilation Components (Pa)
- N** Static Efficiency of Fan Used 327/2011
- O** Maximum External Leakage Rate (%)
- P** Energy Classification of Filters
- Q** Description of Visual Filter Warning
- R** Casing Sound Power Level (LWA)
- S** Website for Disassembly Instructions

* Declared Typology C



Single Phase

Product Code	EC Electronic Controller
BLB260-1EC	149-POT-10
BLB330-1EC	149-POT-10
BLB400-1EC	149-POT-10

EC ELECTRONIC CONTROLLER

Accessories

- EC Type fans
- Variable Speed Drives (Inverters)



Product Code
149-POT-10

Building Services

Tel **+44 (0) 1384 275800**
Fax **+44 (0) 1384 275810**
Email **info@eltafans.co.uk**

46 Third Avenue, Pensnett Trading Estate, Kingswinford,
West Midlands, DY6 7US United Kingdom

Applied Technology & Building Services Export

Tel **+44 (0) 1489 566500**
Fax **+44 (0) 1489 566555**
Email **at@eltafans.co.uk / export@eltafans.co.uk**

17 Barnes Wallis Road, Segensworth East Industrial Estate,
Fareham, Hampshire, PO15 5ST United Kingdom

eltafans.com

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