

TwinBox

Boxed Fans

- 125mm - 400mm diameter spigot sizes
- Volume flow up to 0.74m³/s
- Static pressures up to 370 Pa
- Spigots with double lip neoprene seals as standard
- Forward curved impellers
- Acoustically lined box
- External Terminal Box
- Robust construction
- Suitable for either horizontal or vertical (air up) mounting
- Low noise levels at higher pressures
- Operation up to 70°C
- Standard Auto-changeover facility in the event of fan failure

Introduction

Often modern building designs restrict the space available to install ventilation equipment. In these situations the size of the ductwork is limited and often the fan itself has to be mounted in ceiling voids close to the building occupants. These restrictions mean that fans need to be compact, reliable and quiet in operation.

The Fläkt Woods TwinBox units have been specifically designed to meet these requirements. The TwinBox offers 100% Standby, with automatic changeover, in the event of fan failure.

Sizes

Twin 125, Twin 150, Twin 200, Twin 250, Twin 315, Twin 355, Twin 400.
All sizes refer to circular inlet and outlet connections.

Construction

Casings are manufactured from pre-galvanised sheet steel and are carefully designed to provide a strong and rigid casing.

TwinBox units incorporate an internal shutter arrangement to prevent recirculation through the standby fan.

Units are designed for duct mounting within the building, for external mounting (weatherproof) refer to Copford range or contact the Colchester office.

Motors

The motor is mounted within the centrifugal impeller to form a compact unit, powered by a single phase 220-240V, 50Hz motor, giving silent and virtually vibration free running, operating at temperatures of up to a maximum of between 40°C and 70°C (depending on model). All motors are manufactured in accordance with BS5000 and incorporate thermal overload protection, they are maintenance free, with sealed for life bearings offering an expected life L10 of 40000 hours.

Electrical Supply

220 - 240V / 50Hz / 1 φ

Wiring/Controls

All units are fully speed controllable using Fläkt Woods standard speed controllers. TwinBox units are fitted with a surface mounted Terminal box. TwinBox changeover panels are available (ACRC4, or ACRDC4 where duty share is required).

Servicing

The top panel of each unit can be removed for inspection and maintenance. The fan assembly can also be easily removed for cleaning purposes. The units can be inverted if bottom access is required.

Accessories

Speed controllers, Changeover panels and run on timers, Electric heater batteries, Panel filter cassettes, non return dampers, silencers, flexible connectors and solid duct fasteners.

Mounting

Suitable for both horizontal and vertical (air up) mounting only. For a full range please see pages 100-101.

Application Guide



TwinBox

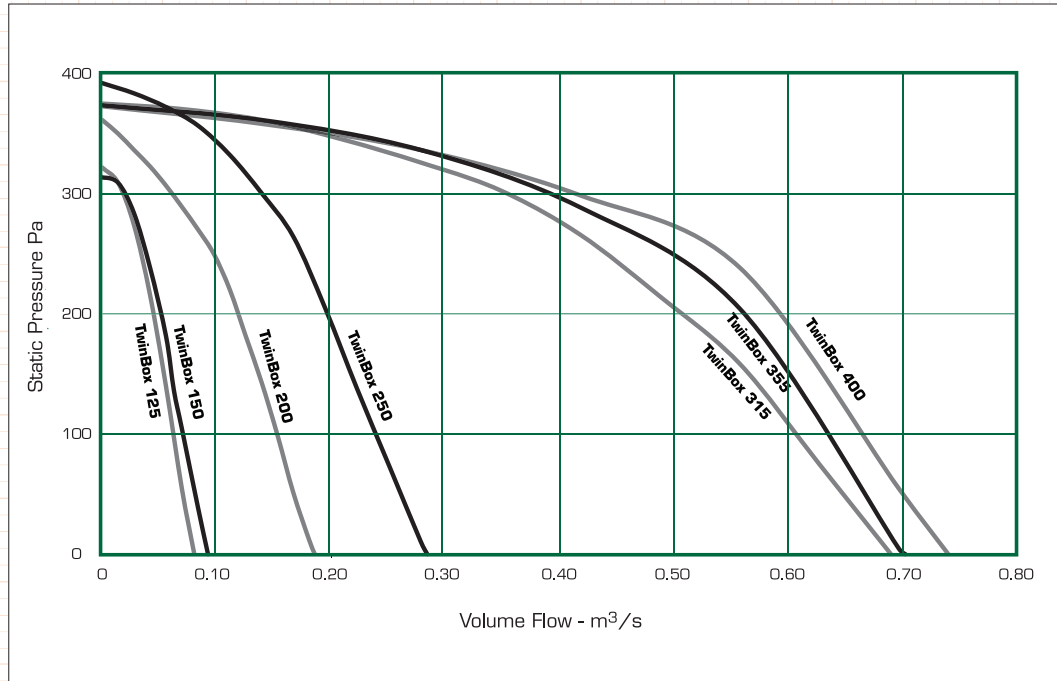
Boxed Fans

Super

XPRESS

Range

Performance Data



Sound Data

Product Code	Sound Power Levels (dB) In Octave Band Centre Frequency - Hz							Total dBA @3m
	125	250	500	1K	2K	4K	8K	
Twin 125	54	48	39	38	32	31	29	24
Twin 150	56	49	40	39	35	34	33	25
Twin 200	59	58	50	45	43	41	39	33
Twin 250	61	59	54	47	45	43	42	35
Twin 315	63	59	52	52	51	48	42	37
Twin 355	62	57	51	51	49	48	43	36
Twin 400	65	62	55	54	52	50	45	39

Electrical Data

Product Code	Speed (rev/min)	Product Number	220-240V/50Hz/1φ				m³/s @ Pa (Static)									
			Motor Rating (kW)	Full Load Current (at 230V) (A)	Starting Current (at 230V) (A)	Wiring Diagram	Speed Controller									
							0	50	100	150	200	250	300	350		
Twin 125	2560	DH125202	0.080	0.35	0.5	CDWTBD	MT1.1.5	0.08	0.07	0.062	0.054	0.044	0.034	0.018		
Twin 150	2530	DH150202	0.080	0.36	0.5	CDWTBD	MT1.1.5	0.092	0.081	0.07	0.06	0.052	0.038	0.019		
Twin 200	2250	DH200202	0.160	0.73	0.85	CDWTBD	MT1.1.5	0.185	0.167	0.152	0.136	0.12	0.096	0.06	0.01	
Twin 250	2450	DH250202	0.270	1.17	1.6	CDWTBD	MT1.5	0.28	0.26	0.24	0.215	0.195	0.172	0.14	0.09	
Twin 315	1370	DH315202	0.680	3.0	4.45	CDWTBD	MT1.5	0.685	0.65	0.61	0.56	0.50	0.44	0.35	0.19	
Twin 355	1360	DH355202	0.720	3.15	4.45	CDWTBD	MT1.8	0.70	0.66	0.62	0.59	0.56	0.50	0.385	0.22	
Twin 400	1350	DH400202	0.720	3.2	4.45	CDWTBD	MT1.8	0.74	0.70	0.66	0.63	0.59	0.54	0.41	0.20	

Performance tested in accordance with DIN 24163, noise levels to DIN 45635. Sound pressure levels quoted are average dBA at 3m distance over a sphere, under free field conditions and are presented for comparative purposes only.

Sound power levels are non-ducted, measured at mid point on the fan characteristic. **Bold text denotes Super Express Product, next day delivery available if ordered by 4pm.**

The fan noise levels shown are for the specified operating point. When an electronic controller is incorporated, a magnetic noise (enhanced motor noise) can occur - particularly if the fan is operating at speeds well below maximum. For noise sensitive applications FWL recommend using an auto transformer speed controller. Wiring diagrams can be found on page 73.

Telephone:
01206 222 555

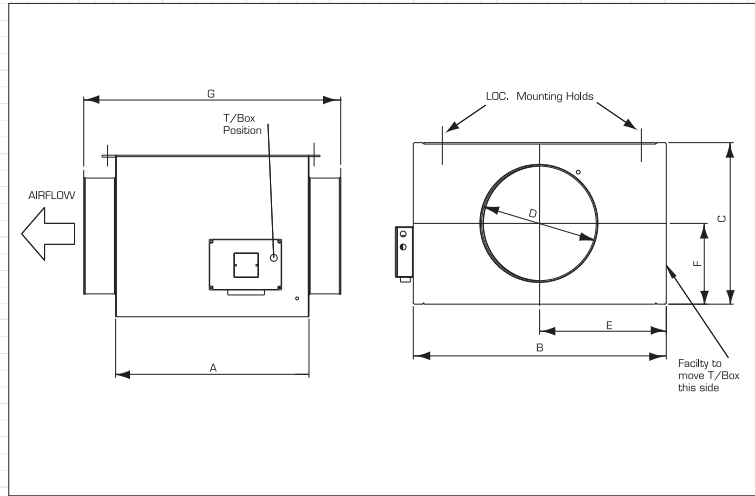
Fax:
01206 222 905

Email:
fans.uk@flaktwoods.com

Express Website:
www.flaktwoods.com/express

Fan Selector:
www.flaktwoods.com/fanselector

Dimensions

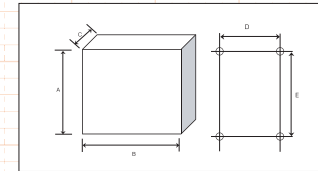


Product Code	A	B	C	D Δ	E	F	G	Weight (kg)
Twin 125	466	482	287	125	240	158	542	17.25
Twin 150	466	482	287	150	240	158	542	17.25
Twin 200	516	542	386	200	270	194	592	25.9
Twin 250	516	542	386	250	270	195	628	27.3
Twin 315	661	880	587	315	440	288	773	71.3
Twin 355	661	880	587	355	440	288	773	69
Twin 400	661	880	587	400	440	288	773	69

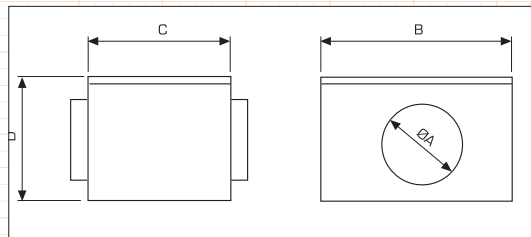
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Transformer Speed Controller

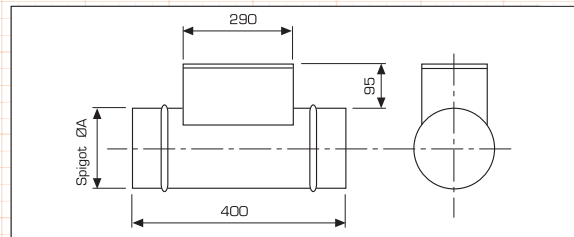
Type	Number Product	A	B	C	D	E	Max. Weight (kg)
MT1.1.5	402008	205	115	100	98	140	2.1
MT1.5	423099	255	170	140	155	194	5.5
MT1.8	402009	325	300	185	255	255	8



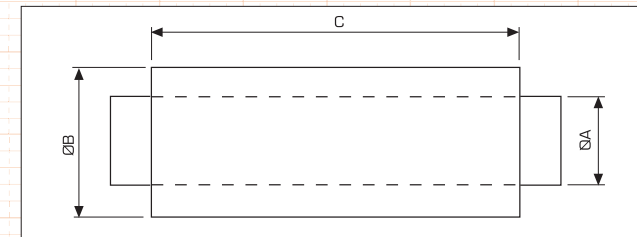
Panel Filter



Electric Heater Battery



Silencer



Note: There are no Panel Filters or Electric Heater Battery for the Mini 100 Unit, if you require these please select a 125mm fan.

Product Code	Product Number	øA	B	C	D	Weight (kg)	Press. loss Pa @ Mid flow
WCF-125	DH125001	125	200	122	200	3	16
WCF-150	DH150001	150	200	122	200	2	28
WCF-200	DH200001	200	245	122	245	3	48
WCF-250	DH250001	250	295	122	295	4	68
WCF-315	DH315001	315	345	122	345	5	111
WCF-355	DH355001	355	395	122	395	6	121
WCF-400	DH400001	400	445	122	445	8	77
WCF-500	DH500001	500	600	400	600	20	78

Product Code	Product Number	øA	Weight (kg)	Press. loss Pa @ Mid flow	Min Airflow m ³ /s
WEHB-125/1kW	DH125051	125	4	5	0.03
WEHB-150/1.5kW	DH150051	150	4	15	0.04
WEHB-200/2kW	DH200051	200	6	15	0.07
WEHB-250/2.5kW	DH250051	250	7	20	0.1
WEHB-315/3kW	DH315051	315	8	30	0.16
WEHB-355/6kW	DH355051	355	10	30	0.2
WEHB-400/9kW	DH400051	400	11	22	0.26
WEHB-500/18kW	DH500051	500	16	20	0.4

Product Code	Product Number	Acoustic Performance (dB) Octave Band Centre Frequency - Hz							Dimensions			
		63	125	250	500	1K	2K	4K	ø A	ø B	C	Weight (kg)
S100	DH100061	3	8	13	25	40	50	40	100	200	600	4.8
S125	DH125062	2	7	12	23	39	47	32	125	225	600	5.2
S150	DH150062	3	4	8	21	37	40	22	150	250	600	6.3
S200	DH200062	2	4	8	20	31	32	20	200	300	600	7.5
S250	DH250062	1	2	6	15	27	25	15	250	355	900	9.3
S315	DH315062	3	3	7	12	17	14	11	315	415	900	12.7

Accessories are fitted to units using Solid Duct Fasteners (SDF - Size).

Heaters 9kW and above are made of 3kW elements therefore can be connected to 3 φ supply.

CDWTBD

Fan

Fan + Changeover Panel

Fan + Changeover Panel + Transformer Controller

