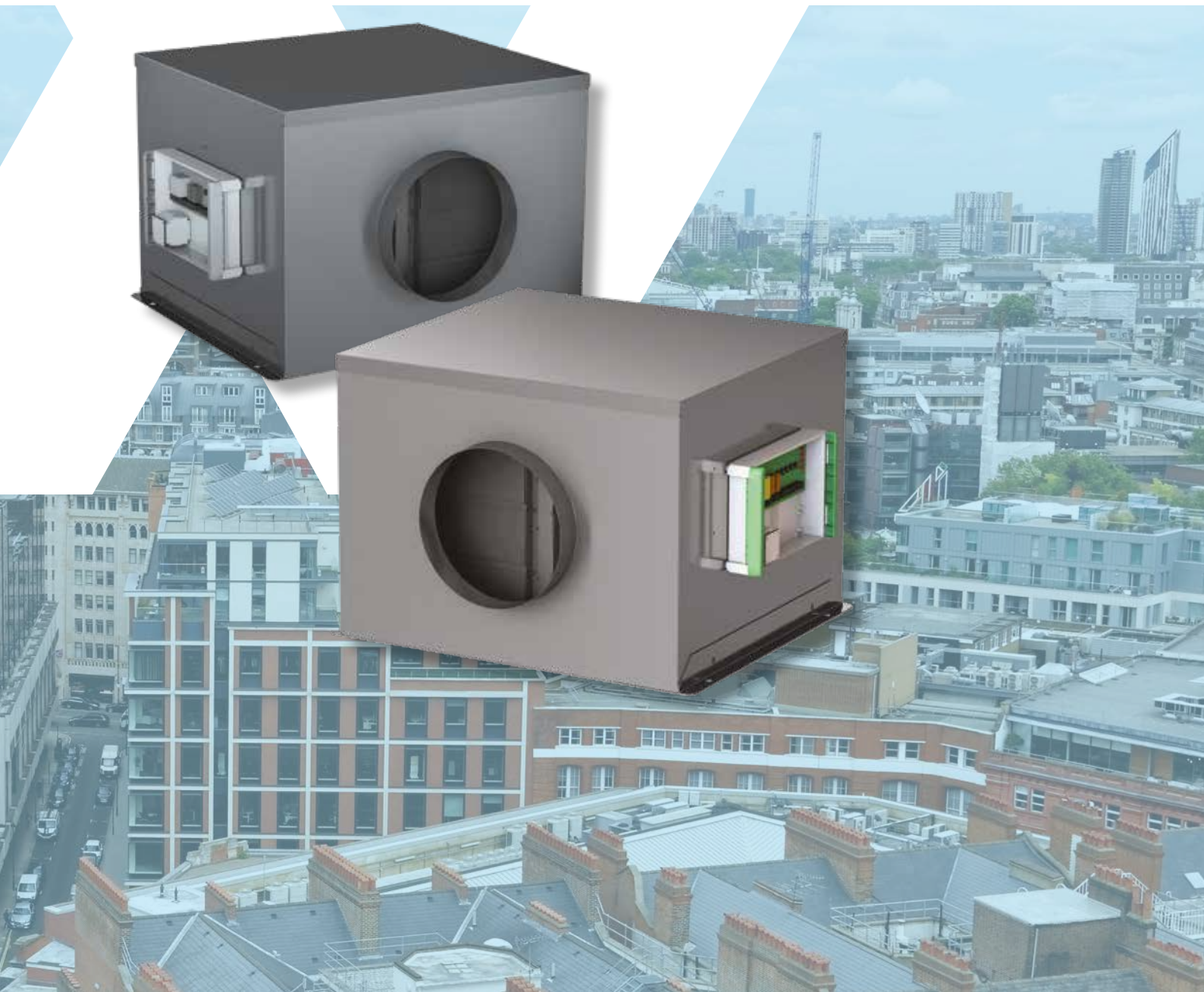
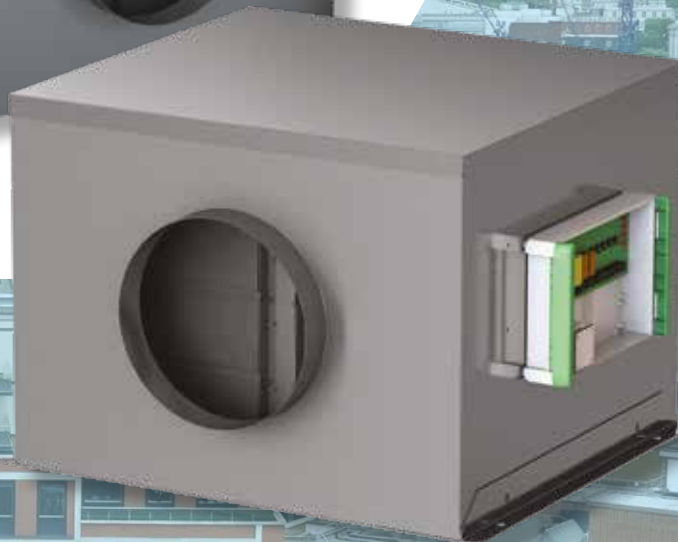
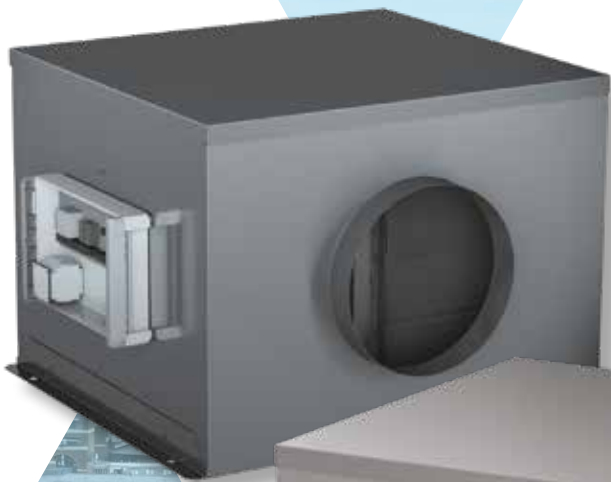
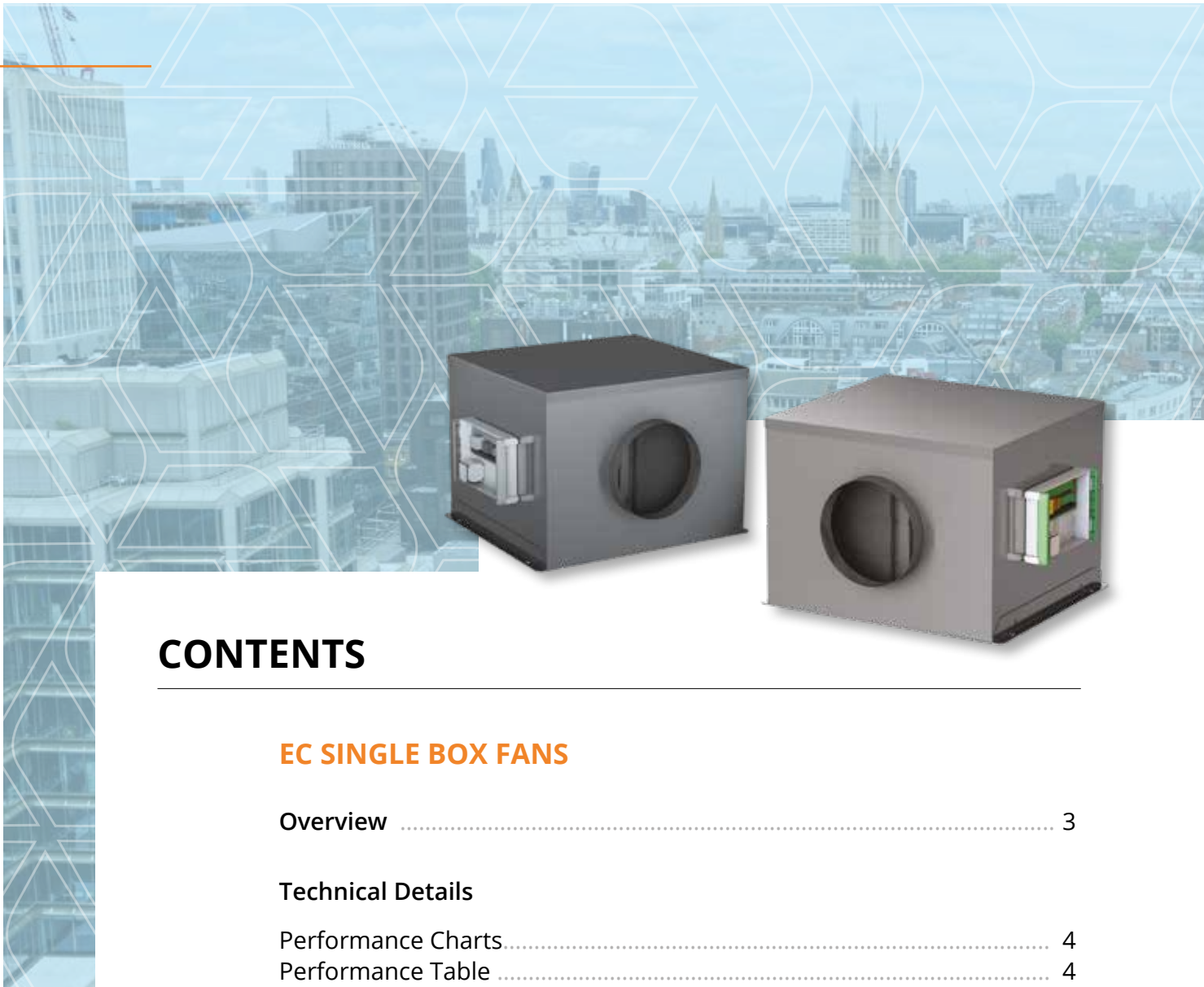




# WOODS BOX FANS EC SINGLE AND TWIN





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## PRODUCT FACTS

- Volume flows up to 3.55 m<sup>3</sup>/s
- Static pressures up to 1100 Pa
- EC motors
- Available in 50 Hz only
- Sound-proof cabinets, low breakout noise levels
- Low SFP to help achieve L2 regulations
- Speed controllable
- ErP compliant
- Plug and play fitted control panel
- Compact design

## ELECTRICAL SUPPLY

- 220-240V / 50Hz / 1Ph
- 380-420V / 50Hz / 3Ph (450 and 560 size only)

## TEMPERATURE RANGE

- Maximum working temperature: 50°C

## SIZES

- 150, 200, 250, 315, 350, 450 & 560 mm

## CONSTRUCTION

Galvanised steel casing of thickness 0.9mm to 1.2mm depending on the size and model. Standard construction suitable for internal and/or external application, power coated on request.

Top access is provided as standard, bottom access option is available on request.

The units are lined with 20mm Barafoam 'O' class liner with 6mm barrier mat layer which significantly reduces noise breakout.

## IMPELLER

High efficiency backward curved centrifugal impeller.

## MOTOR

This product is fitted with EC motors to optimize energy savings and can be controlled via a 0-10V signal providing highest degree of controllability.

## INSTALLATION

These fans can be mounted vertically or horizontally. The external use models are fitted with removable discharge cowl. Bottom inlet also available on request.

## FAN CONTROLLER

The fans are fitted with plug and play control unit designed to work with BMS systems as:

- Fault Out
- VFC Enable
- VFC Boost
- Remote Speed control

## ACCESSORIES - CONTROLLERS

The range of accessories include duct clamps and silencers. A quick reference guide is shown below.



CFC



BDER



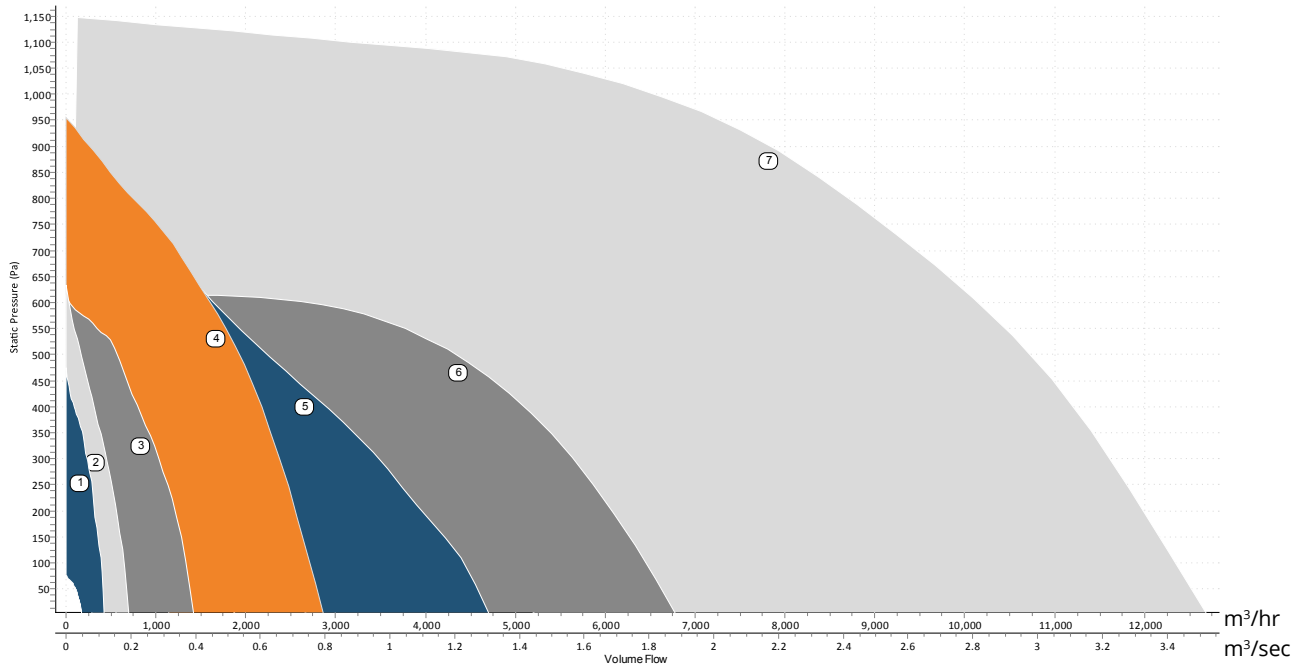
0-10V Pot



PIR

Note: The ErP legislation Reg 1253 states that a multi-speed drive or a variable speed drive must be used with this range of products.

**Performance Charts**



**Performance Table**

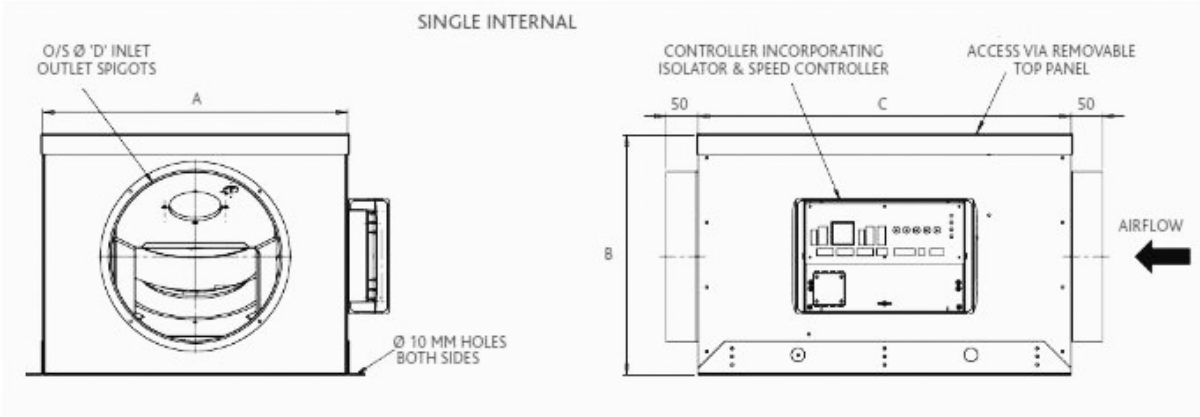
Ref	Product Code	M3/s @ Pa (Static)																							
		0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	
1	Woods EC Single Box 150	0.12	0.11	0.11	0.1	0.09	0.08	0.06	0.05	0.03	0.01														
2	Woods EC Single Box 200	0.19	0.19	0.18	0.17	0.16	0.14	0.12	0.11	0.09	0.07	0.05	0.03	0.1											
3	Woods EC Single Box 250	0.4	0.38	0.37	0.36	0.34	0.31	0.29	0.26	0.22	0.19	0.16	0.1	0.1											
4	Woods EC Single Box 315	0.8	0.77	0.75	0.73	0.71	0.69	0.66	0.63	0.06	0.57	0.54	0.49	0.45	0.4	0.34	0.28	0.21	0.14	0.07	0.01				
5	Woods EC Single Box 350	1.31	1.27	1.23	1.17	1.1	1.03	0.97	0.89	0.08	0.71	0.62	0.54	0.46	0.38	0.28	0.15	0.05							
6	Woods EC Single Box 450	1.89	1.84	1.79	1.74	1.69	1.63	1.57	1.5	1.42	1.32	1.2	1.05	0.75											
7	Woods EC Single Box 560	3.53	3.48	3.43	3.38	3.33	3.28	3.23	3.17	3.11	3.05	2.98	2.9	2.82	2.73	2.52	2.52	2.42	2.32	2.18	2.02	1.82	1.54	0.88	

**Product and Electrical Data**

Ref	Product Code	Product Number	Electrical Supply	Rating (kW)	Full Load Current (A)	Starting Current (A)	Sound level dB(A) (3m)*
1	Woods EC Single Box 150	EC150101	230 V/50Hz/1ph	0.052	0.4	0.4	47
2	Woods EC Single Box 200	EC200101	230 V/50Hz/1ph	0.07	0.55	0.55	46
3	Woods EC Single Box 250	EC250101	230 V/50Hz/1ph	0.17	1.4	1.4	48
4	Woods EC Single Box 315	EC315101	230 V/50Hz/1ph	0.51	3.1	3.1	58
5	Woods EC Single Box 350	EC350101	230 V/50Hz/1ph	0.45	2.9	2.9	52
6	Woods EC Single Box 450	EC450101	400 V/50Hz/3ph	1.01	1.6	1.6	54
7	Woods EC Single Box 560	EC560101	400 V/50Hz/3ph	3.1	4.9	4.9	65

\* Sound power levels are average dB(A) at 3m distance over sphere, under free field conditions and are presented for comparative purposes only. Values shown are those at the mid-point of the performance curve. For ErP efficiency ratings and grades, please refer to our Fan Selector for more information.

Drawings and Dimensions

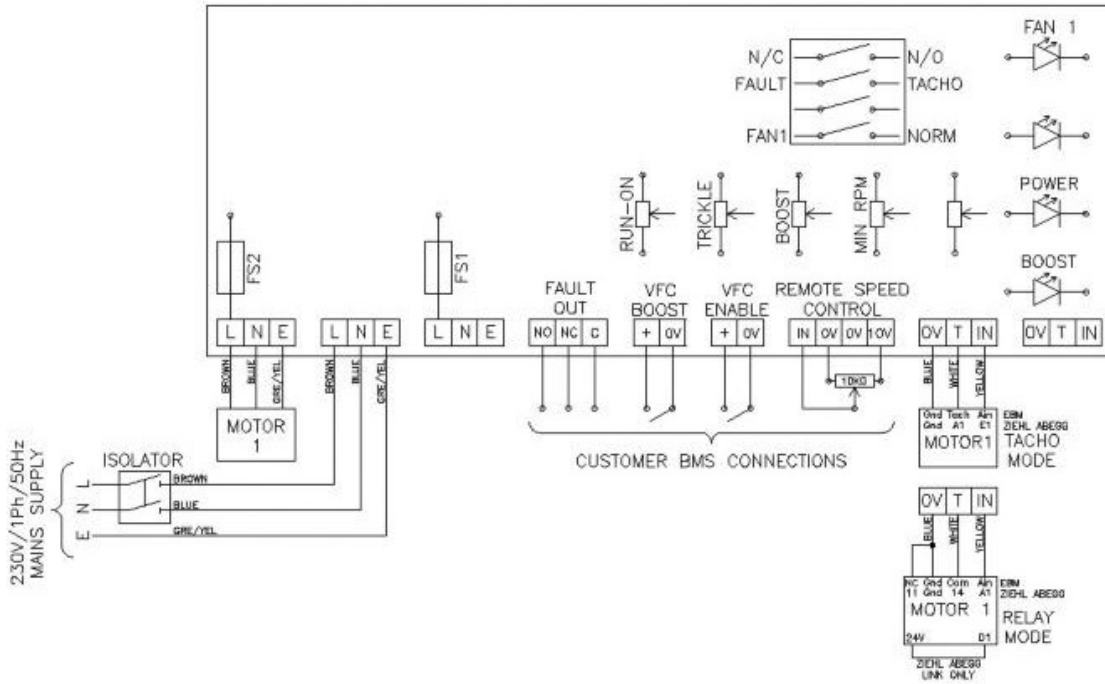


Ref	Product Code	A	B	C	D	Weight in kg
1	Woods EC Single Box 150	250	250	300	150	10
2	Woods EC Single Box 200	350	250	400	200	15
3	Woods EC Single Box 250	450	350	550	250	27
4	Woods EC Single Box 315	550	400	600	310	33
5	Woods EC Single Box 350	650	550	650	350	47
6	Woods EC Single Box 450	750	650	975	450	80
7	Woods EC Single Box 560	900	800	1100	560	118

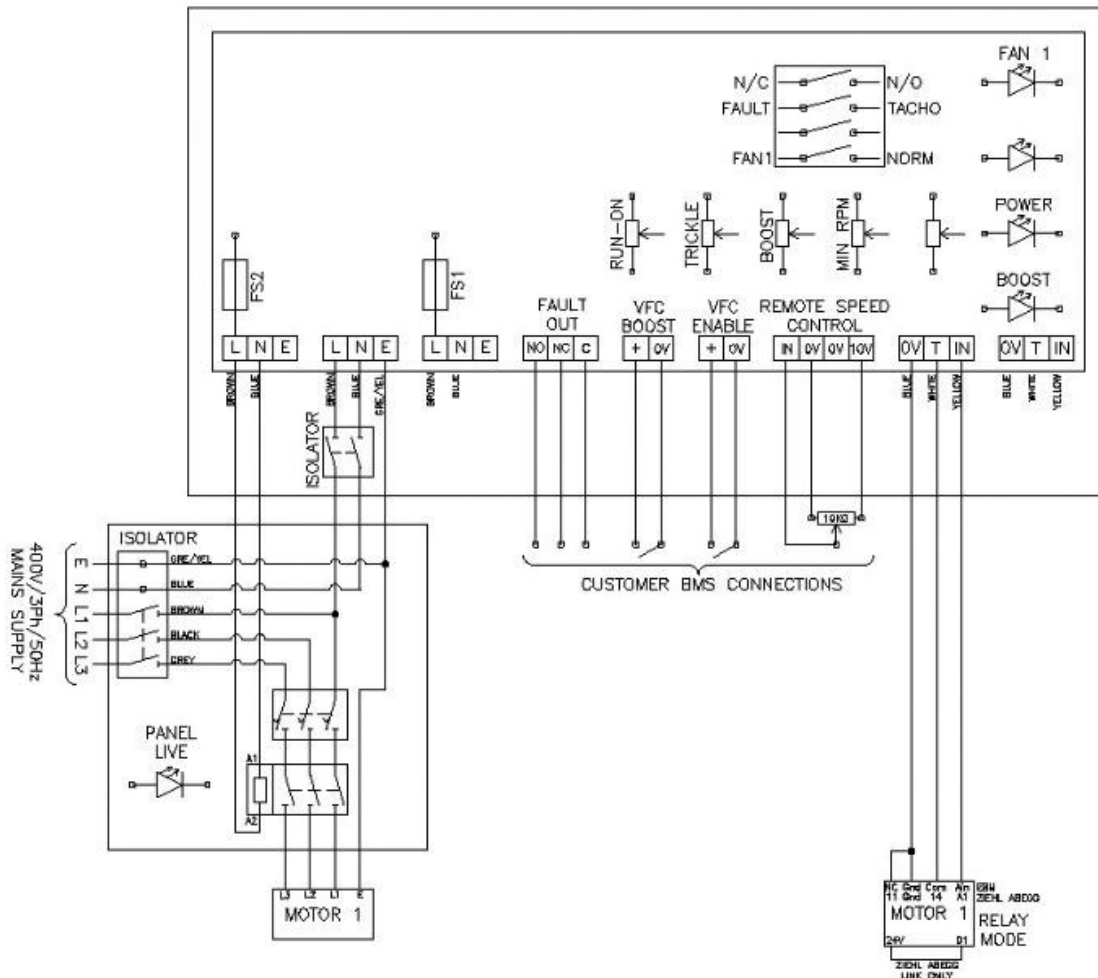


# WIRING DIAGRAMS

## 1 Phase Wiring Diagram



## 3 Phase Wiring Diagram









## PRODUCT FACTS

- EC Motors
- Suitable for internal & external as standard
- Plug & play fitted control panel
- Low breakout noise levels
- Low SFP to help achieve L2 regulations
- Compact design
- As standard supplied with TOP access
- ErP Compliant
- Auto Changeover Panel IP65

## ELECTRICAL SUPPLY

220-240V / 50Hz / 1Ph

380-420V / 50Hz / 3Ph (450 and 560 size only)

## SIZES

150, 200, 250, 315, 350, 450 & 560 mm

## CONSTRUCTION

Casings is manufactured from galvanised steel 0.99mm to 1.2mm thick depending on the model.

Standard construction suitable for internal & external mounting, however, powder coated upon request.

Bottom access option is available upon request.

## MOUNTING

Suitable for mounting in horizontal applications.

## IMPELLER

Impellers high efficiency backward curved centrifugal impeller design.

## MOTOR

This product is fitted with EC motors to optimise energy savings and can be controlled via a 0-10V signal providing highest degree of controllability.

## AUTO CHANGEOVER PANEL

The fans are fitted with plug and play control unit designed to work with BMS systems as:

- Volt free contact BMS enable
- Volt free contact BMS boost
- BMS fan fault signal
- 0-10 Volt speed control inputs
- Adjustable duty share
- Run on Timer (0-20 minutes)
- Trickle and boost
- PIR enabled boost function

## ACCESSORIES - CONTROLLERS

The range of accessories include duct clamps and silencers. A quick reference guide is shown below.



CFC



BDER

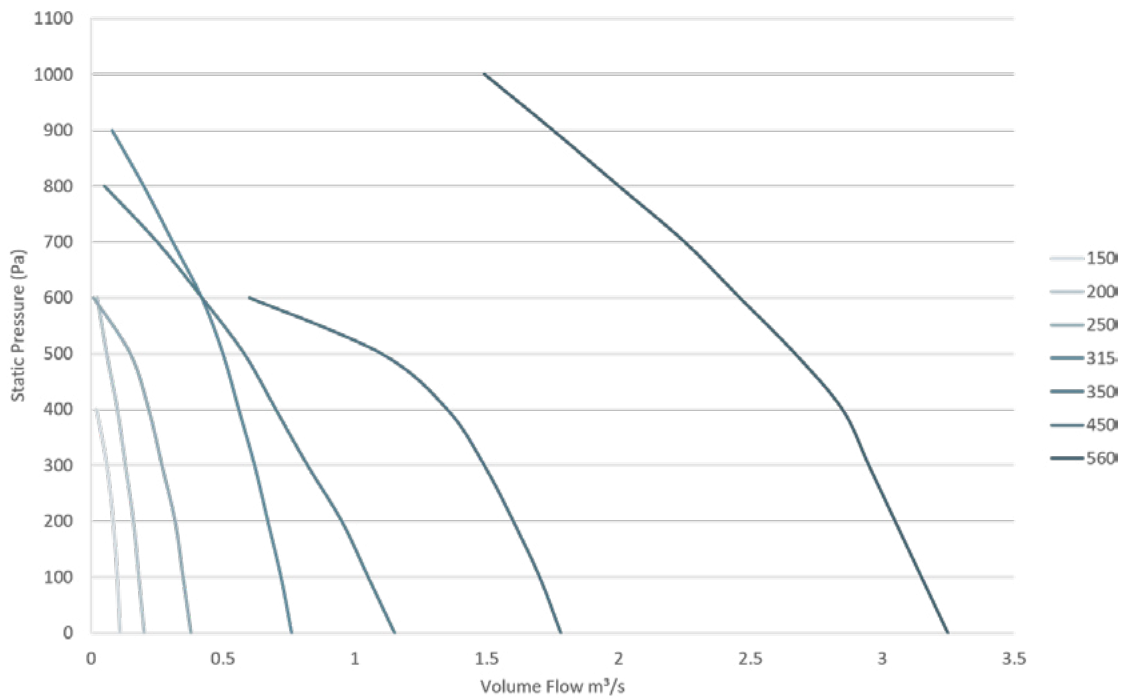


0-10V Pot



PIR

## Performance Charts



## Performance Tables

Product Code	M3/s @ Pa (Static)																
	0	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850
Woods EC Twin Box 150	0.11	0.10	0.07	0.8	0.07	0.06	0.03	0.02									
Woods EC Twin Box 200	0.20	0.19	0.18	0.16	0.15	0.13	0.20	0.10	0.08	0.06	0.03	0.025					
Woods EC Twin Box 250	0.38	0.35	0.35	0.32	0.31	0.27	0.26	0.22	0.20	0.15	0.133	0.01					
Woods EC Twin Box 315	0.76	0.72	0.7	0.67	0.65	0.62	0.6	0.56	0.53	0.50	0.48	0.42	0.37	0.31	0.27	0.20	0.08
Woods EC Twin Box 350	1.15	1.05	1.00	0.95	0.9	0.82	0.78	0.7	0.68	0.58	0.55	0.42	0.38	0.25	0.105	0.05	

Product Code	M3/s @ Pa (Static)										
	0	100	200	300	400	500	600	700	800	900	1000
Woods EC Twin Box 450	1.78	0.7	1.6	1.49	1.35	1.1	0.6				
Woods EC Twin Box 560	3.25	3.15	3.05	2.85	2.85	2.67	2.46	2.25	2.0	1.75	1.49

### Product and Electrical Data

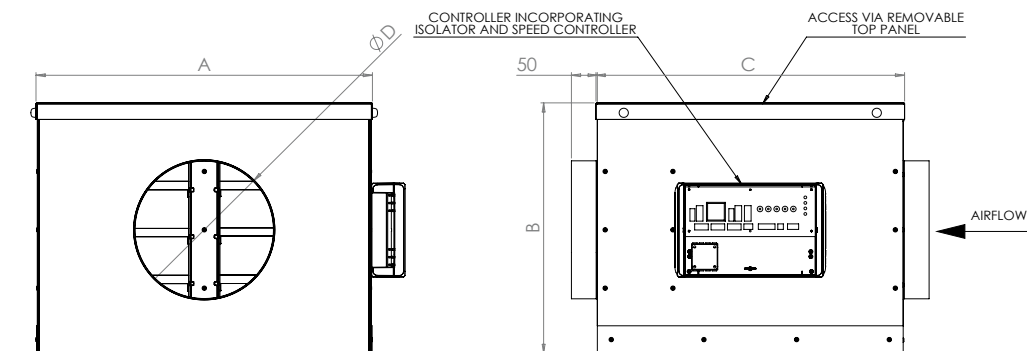
Product Code	Product Number	Voltage	Motor Frame	Electrical Current		Full Load Current (A)	Wiring Diagrams	Breakout
				Electrical Supply	Motor (kW)			Sound Level dB(A) (3m)*
Woods EC Twin Box 150	EC150202	10	Integral	220-240 V/50 Hz/1 Ph	0.052	0.4	CD4044	24
Woods EC Twin Box 200	EC200202	10	Integral	220-240 V/50 Hz/1 Ph	0.07	0.55	CD4044	21
Woods EC Twin Box 250	EC250202	10	Integral	220-240 V/50 Hz/1 Ph	0.17	1.4	CD4044	24
Woods EC Twin Box 315	EC315202	10	Integral	220-240 V/50 Hz/1 Ph	0.51	3.10	CD4044	38
Woods EC Twin Box 350	EC350202	10	Integral	220-240 V/50 Hz/1 Ph	0.45	2.9	CD4044	35

Product Code	Product Number	Voltage	Motor Frame	Electrical Current		Full Load Current (A)	Wiring Diagrams	Breakout
				Electrical Supply	Motor (kW)			Sound Level dB(A) (3m)*
Woods EC Twin Box 450	EC450202	10	Integral	380-420 V/50 Hz/3 Ph	1.01	1.6	CD4045	32
Woods EC Twin Box 560	EC560202	10	Integral	380-420 V/50 Hz/3 Ph	3.1	4.9	CD4045	41

\* Sound power levels are average dB(A) at 3m distance over sphere, under free field conditions and are presented for comparative purposes only. Values shown are those at the mid-point of the performance curve. For ErP efficiency ratings and grades, please refer to our Fan Selector for more information.

### Drawings and Dimensions

EC TWIN FAN - 150, 200, 250, 315, 350, 450 and 560

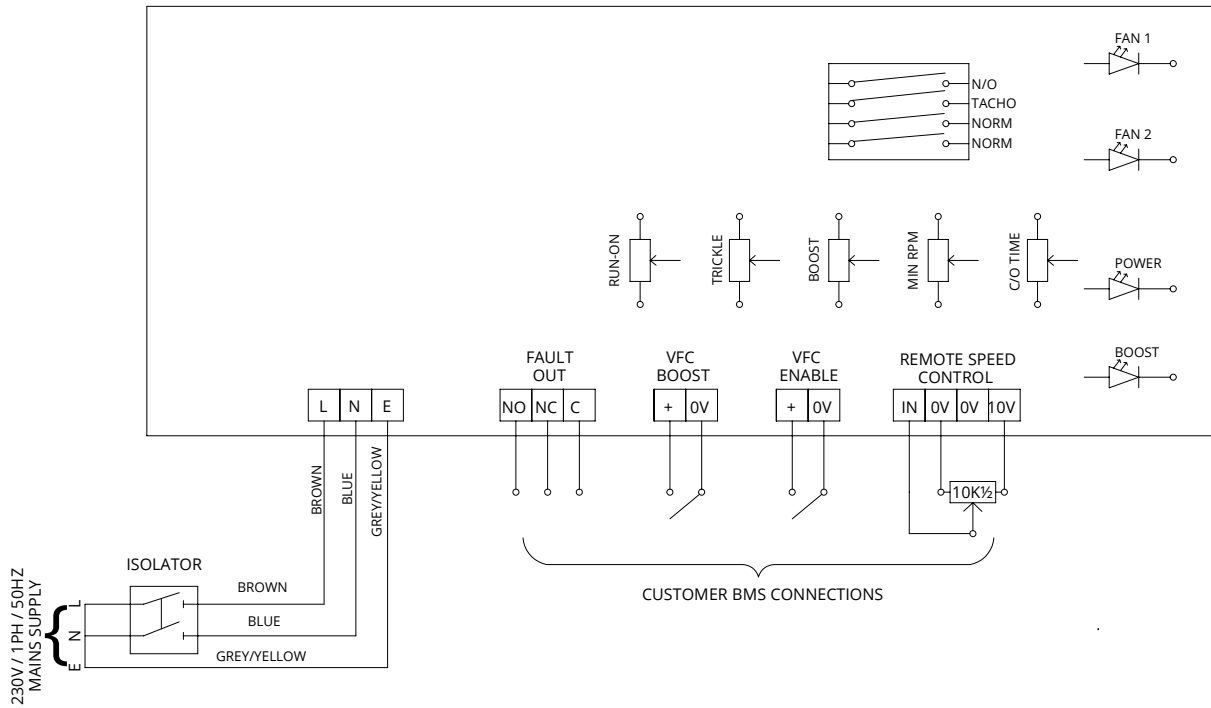


Size	A	B	C	D	E	Weight in kg
150 - EC	450	250	400	150	180	20
200 - EC	450	350	450	200	210	27
250 - EC	600	450	550	250	240	40
315 - EC	850	450	550	250	240	40
350 - EC	950	550	900	350	295	80
450 - EC	1200	650	1200	450	350	131
560 - EC	1500	750	1500	560	415	217

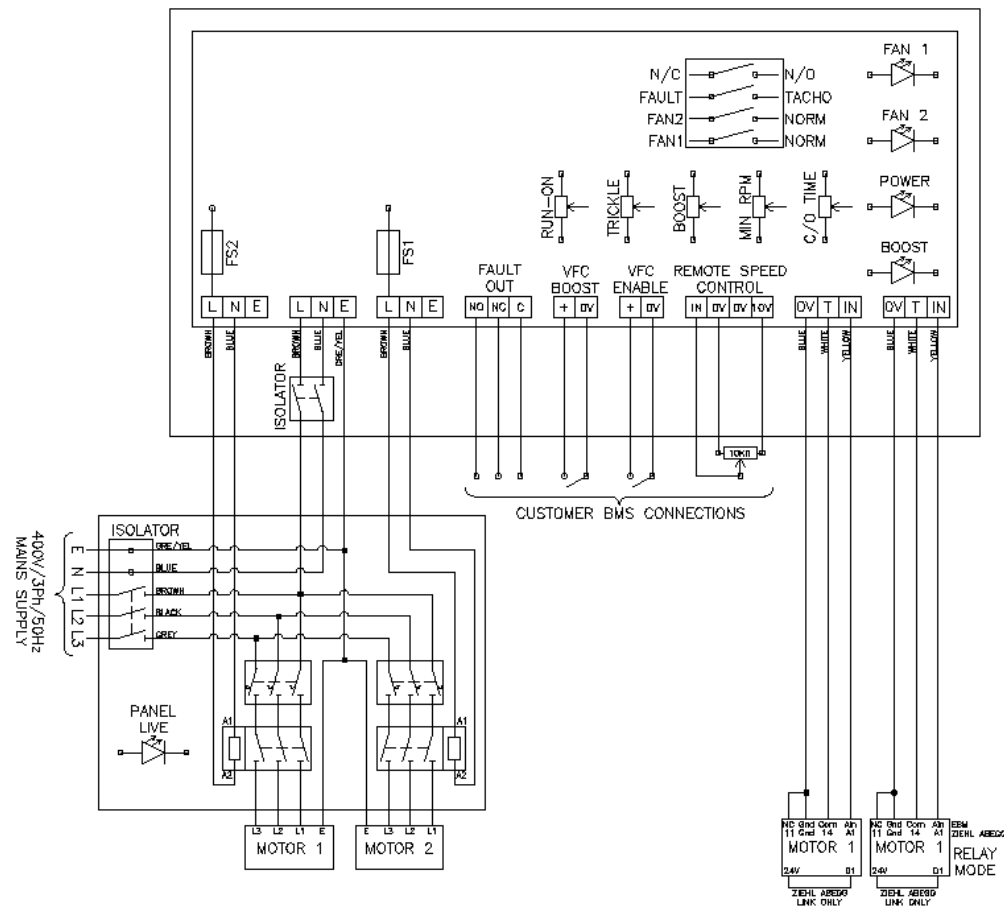
All dimensions shown in mm

# WIRING DIAGRAMS

## 1 Phase Wiring Diagram



## 3 Phase Wiring Diagram









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