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## **WOODS**

# Box Fans





## BOX FAN

# Application

Box fans are used in commercial complexes where a fan needs to be placed with a ducted system to maintain the pressure within the system for proper ventilation.



# Offices & Kitchens



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**PRODUCT FACTS**

- Air flow up to 5.7 m<sup>3</sup>/s
- Static pressures up to 1400 Pa
- Speed controllable external rotor motors
- Multiple outlet orientations motor located out of air stream
- Air discharged at 90 degrees
- DW172 compliant for solid fuel cooking applications

Up to  
**110**



**ELECTRICAL SUPPLY**

220-240V/50Hz/1PH & 380-420V/50Hz/3PH

**TEMPERATURE RANGE**

Up to 110°C depending on size, see electrical data table on next page for more information.

**SIZES**

355, 400, 450, 500, 560 and 630 mm

**CONSTRUCTION**

The casing is galvanized and made from sheet steel with double chambered aluminum supporting frames and plastic made corners. The acoustic insulation is made from fibre glass with a thickness of 20 mm. Can be horizontal or vertical mounted with weather proof hood and has removable side panels. One side of the casing is open as standard.

**IMPELLER**

The Estoc Targe is equipped with high efficiency backward curved centrifugal impellers made of plastic for size up to 560 mm and with aluminum for 630 mm.

**MOTOR**

Motor is situated out of air stream. The fans are equipped with direct driven external motors having motor protection through thermal contacts in the motor windings. The impellers together with the external rotor motors are dynamically balanced to quality standard G2,5 DIN ISO 19410.

**SPEED CONTROLLER**

Speed is variable using auto transformers and inverter control with auxiliary electronic control option and includes a integrated emergency switch.

**PRODUCT CODE**

Estoc Targe 50-355-3

- ESTOC TARGE - Product Name
- 50 = Box Size            ie, 50 = 500mm; 67 =670mm; 80 = 800mm; 102 = 1020mm
- 355 = Spigot Diameter size (mm)
- 1 = 1PH or 3 = 3PH

**ACCESSORIES**

The range of accessories include dampers, flexible connectors, service doors, outlet covers, guards, side covering and insulating connections. A quick reference guide is shown below.



**220-240V/50Hz/1PH & 380-420V/50Hz/3PH**



**Performance Table**

Product Code	0	50	100	150	200	250	300	350	400	450	500	550	600	650
Estoc Targe 50-355-1	0.80	0.73	0.66	0.59	0.53	0.44	0.35	0.22	0.08					
Estoc Targe 67-400-1	1.26	1.20	1.12	1.03	0.93	0.83	0.73	0.62	0.49	0.28	0.09			
Estoc Targe 67-450-1	1.77	1.71	1.64	1.56	1.48	1.40	1.30	1.20	1.12	1.01	0.87	0.75	0.55	0.25

Product Code	m3/s @ Pa (Static)													
	0	50	100	150	200	250	300	350	400	450	500	550	600	650
Estoc Targe 50-355-3	0.85	0.79	0.72	0.63	0.53	0.44	0.32	0.18	0.04					
Estoc Targe 67-400-3	1.25	1.17	1.09	1.00	0.87	0.76	0.69	0.51	0.37	0.17				
Estoc Targe 67-450-3	1.81	1.73	1.66	1.59	1.52	1.45	1.35	1.25	1.14	1.03	0.90	0.74	0.56	0.22
Estoc Targe 80-500-3	2.50	2.41	2.33	2.24	2.18	2.07	1.99	1.88	1.77	1.65	1.53	1.39	1.25	1.05
Estoc Targe 80-560-3	3.06	3.01	2.94	2.87	2.79	2.73	2.66	2.58	2.51	2.43	2.34	2.24	2.13	2.01
Estoc Targe 80-630-3	3.97	3.90	3.84	3.77	3.70	3.62	3.55	3.46	3.37	3.29	3.20	3.11	3.00	2.89
Estoc Targe 102-630-3	5.75	5.66	5.57	5.48	5.39	5.30	5.19	5.10	4.99	4.88	4.77	4.66	4.54	4.41

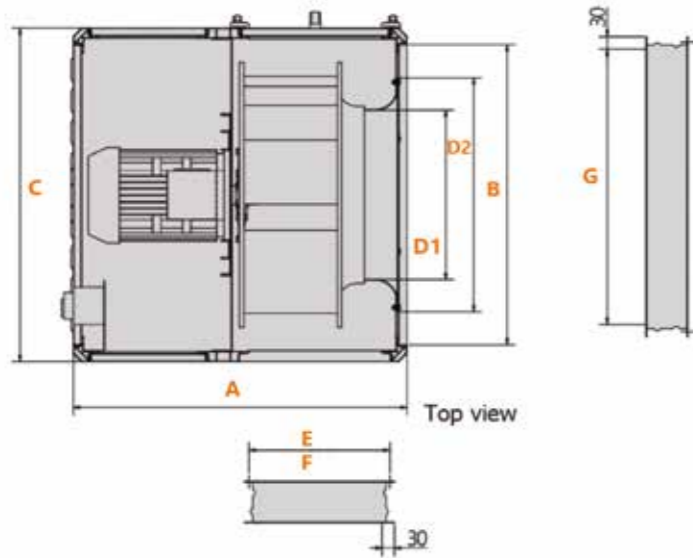
**Product and Electrical Details**

Product Code	Product Number	Speed rpm	Motor Frame	Electrical Supply	Electrical Current			Wiring Diagrams	**Speed Controllers		Maximum Operating Temp °C	Breakout *Sound Level db(A) (3m)
					Motor (kW)	Full Load Current (A)	Starting Current (A)		Transformer	Inverter		
Estoc Targe 50-355-1	GF503551	1360	Integral	220-240 V/50 Hz/1 Ph	0.3	1.4	3.5	CD3006	ME1.3	TEID 1.5	110	35
Estoc Targe 67-400-1	GF674001	1270	Integral	220-240 V/50 Hz/1 Ph	0.5	2.2	4.8	CD3006	ME1.3	TEID 2.2	90	39
Estoc Targe 67-450-1	GF674501	1380	Integral	220-240 V/50 Hz/1 Ph	1	5.4	12	CD3006	ME1.6	TEID 5	80	44

Product Code	Product Number	Speed rpm	Motor Frame	Electrical Supply	Electrical Current			Wiring Diagrams	**Speed Controllers		Maximum Operating Temp °C	Breakout *Sound Level db(A) (3m)
					Motor (kW)	Full Load Current (A)	Starting Current (A)		Transformer	Inverter		
Estoc Targe 50-355-3	GF535524	1360	Integral	380-420 V/50 Hz/3 Ph	0.3	0.7	2.6	CD3031	TDID 2.5	IDDXF54 2.2	110	35
Estoc Targe 67-400-3	GF674003	1240	Integral	380-420 V/50 Hz/3 Ph	0.5	1	2.8	CD3031	TDID 2.5	IDDXF54 2.2	100	38
Estoc Targe 67-450-3	GF674503	1380	Integral	380-420 V/50 Hz/3 Ph	0.9	1.8	8.8	CD3031	TDID 2.5	IDDXF54 2.2	100	44
Estoc Targe 80-500-3	GF805003	1380	Integral	380-420 V/50 Hz/3 Ph	1.5	3	15	CD3032	TDID 4	IDDXF54 3.7	90	47
Estoc Targe 80-560-3	GF805607	1410	Integral	380-420 V/50 Hz/3 Ph	2.5	5	35	CD3032	-	IDDXF54 7.2	100	49
Estoc Targe 80-630-3	GF806303	1445	Integral	380-420 V/50 Hz/3 Ph	4.4	8	46	CD3032	-	IDDXF54 9	90	53
Estoc Targe 102-630-3	GF163027	1460	Integral	380-420 V/50 Hz/3 Ph	6	11	62.6	CD3032	-	IDDXF54 12	75	91

\*Sound power levels are average dBA at 3 metres 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 speed controllers, please refer to accessories section. For ErP efficiency ratings and grades please refer to our Fan Selector for more information.

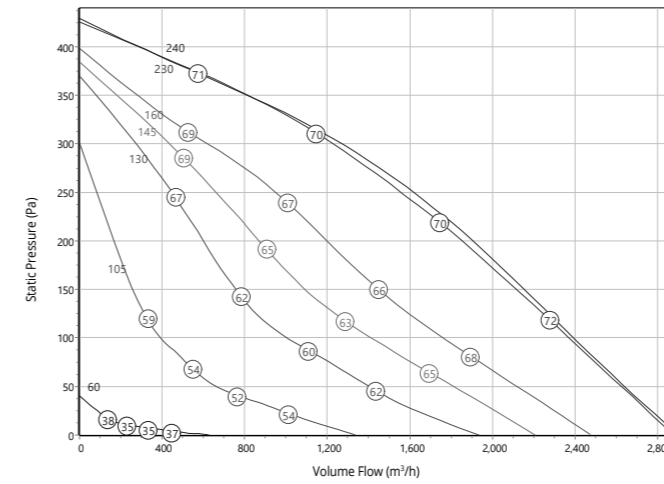
## Drawings and Dimensions



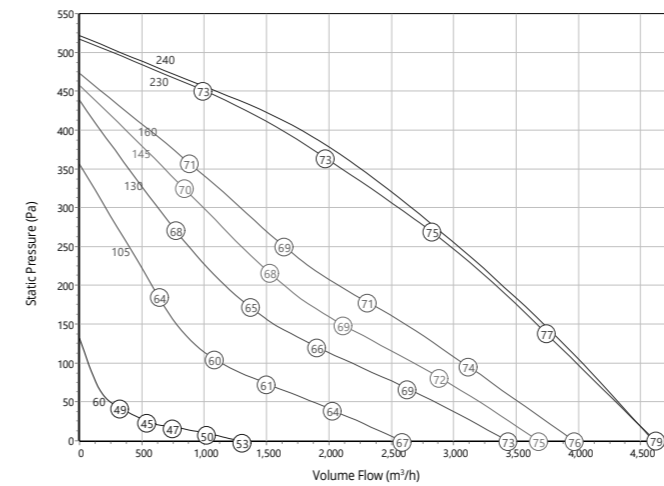
Product Code	A	B	C	D1	D2	E	F	G	Weight Max (kg)
Estoc Targe 50-355	420	420	500	228	350	218	398	360	35
67-400	500	590	670	248	422	258	568	450	52
67-450	500	590	670	289	422	258	568	450	69
80-500	590	720	800	310	519	338	698	580	78
80-560	740	720	800	362	519	338	698	580	106
80-630	800	720	800	405	560	338	698	580	146
102-630	880	940	1020	390	640	398	918	750	173

## Performance charts

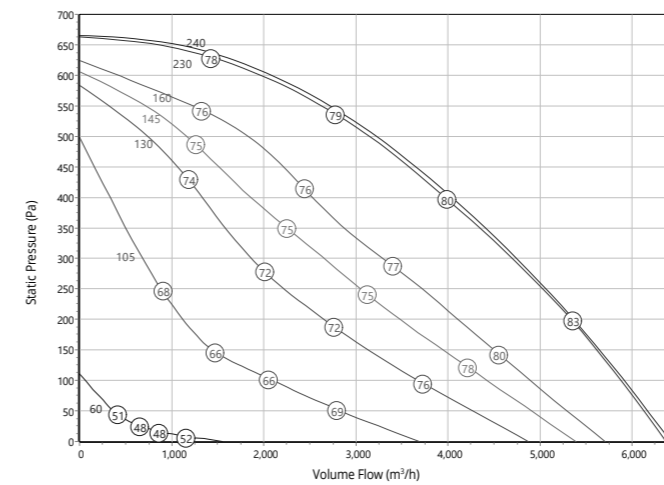
ESTOC TARGE 50-355-1 - GF503551



ESTOC TARGE 67-400-1 - GF674001

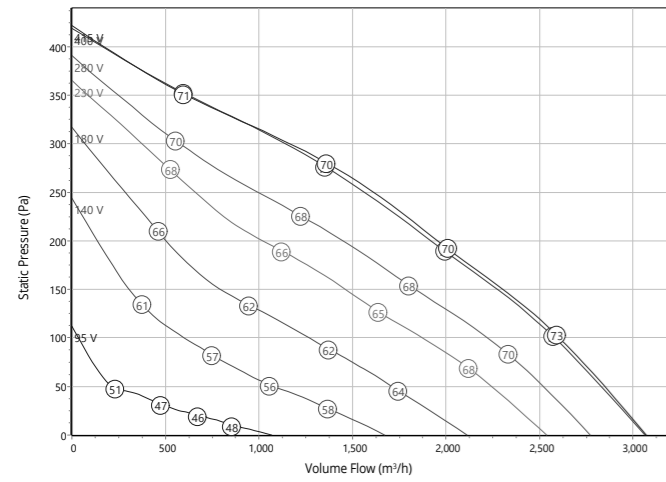


ESTOC TARGE 67-450-1 - GF674501

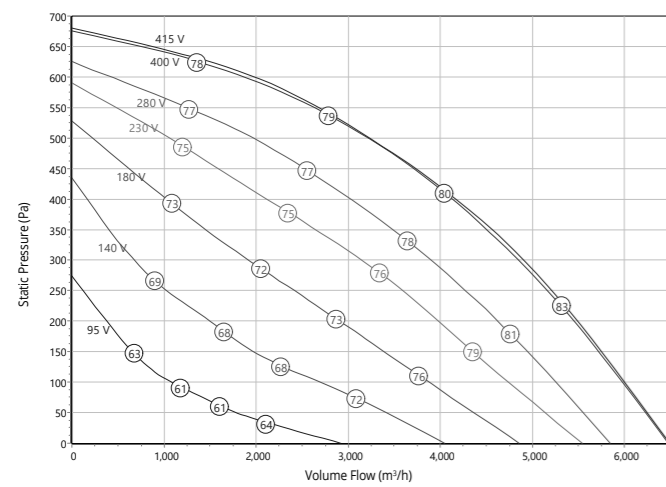


## Drawings and Dimensions

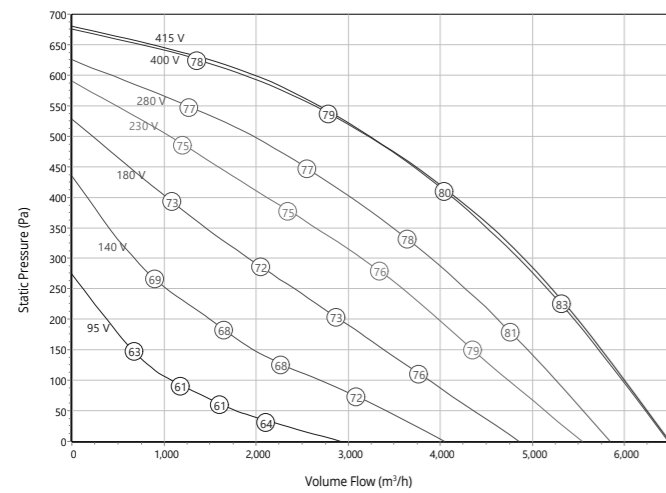
ESTOC TARGE 50-355-3 - GF535524



ESTOC TARGE 67-400-3 - GF674003

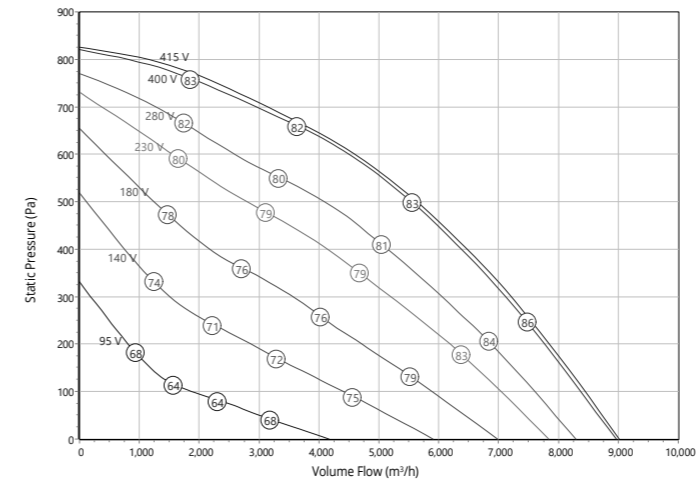


ESTOC TARGE 67-450-3 - GF674503

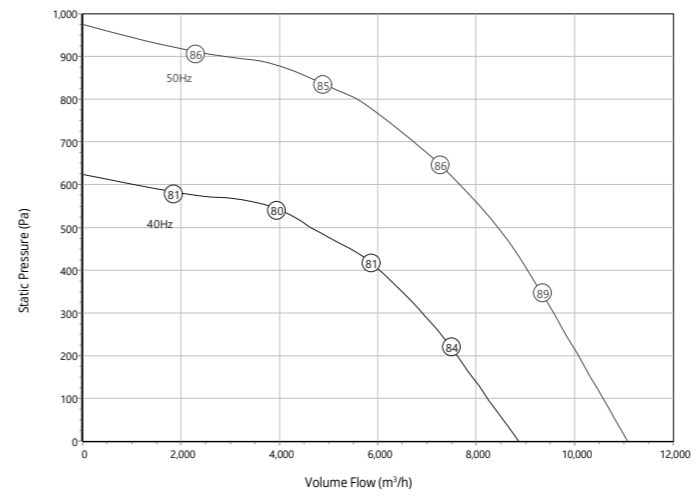


## Performance charts

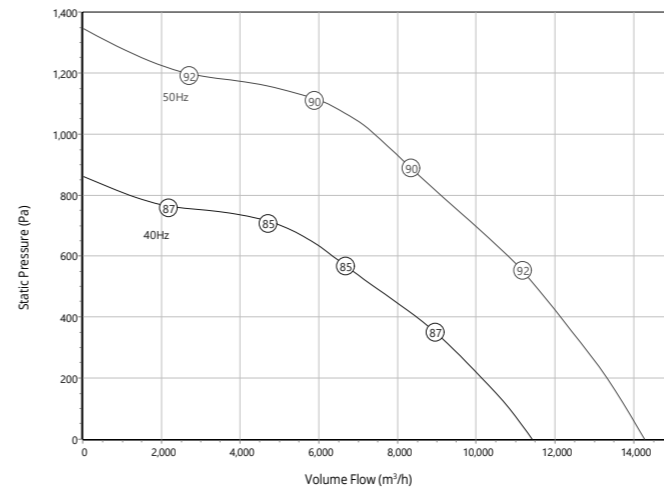
ESTOC TARGE 80-500-3 - GF805003



ESTOC TARGE 80-560-3 - GF805607

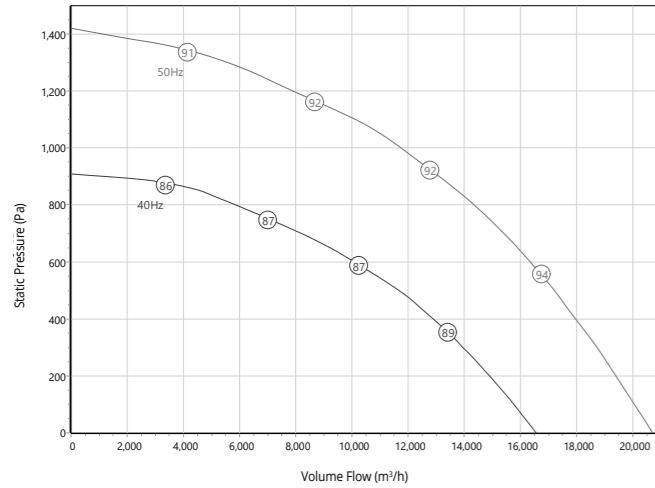


ESTOC TARGE 80-630-3 - GF806303



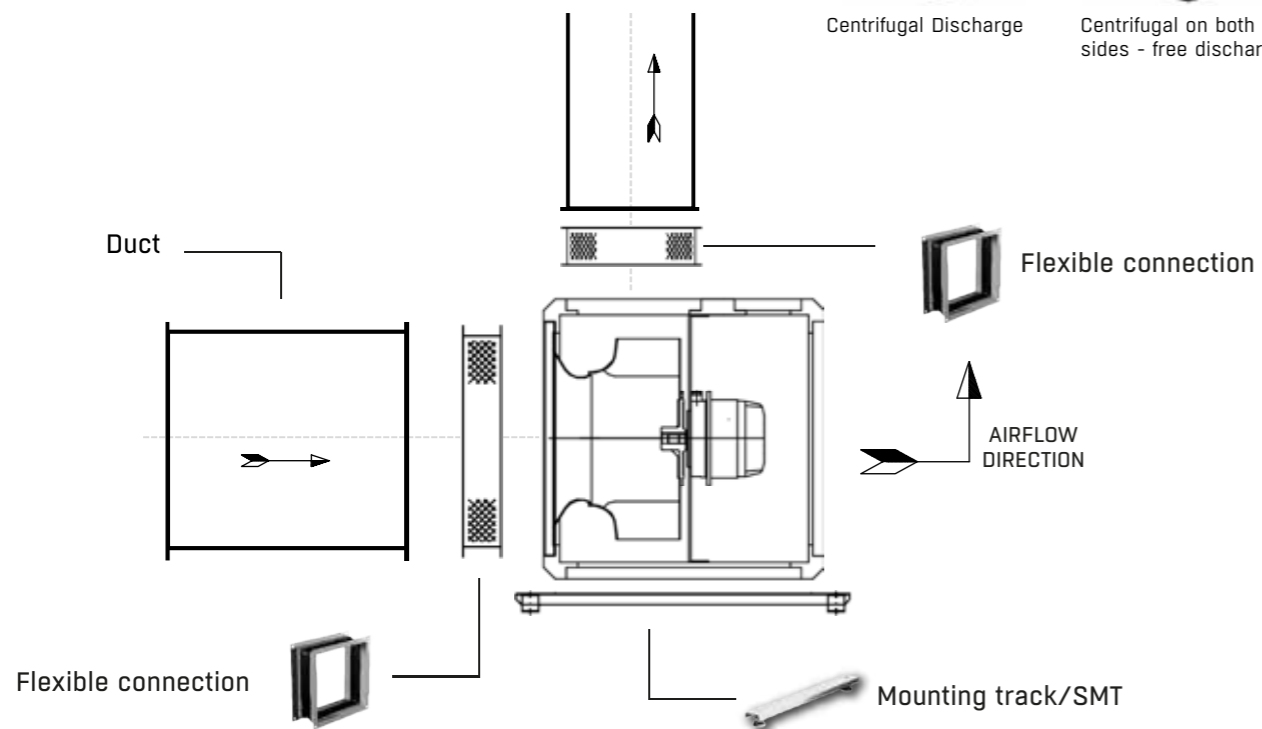
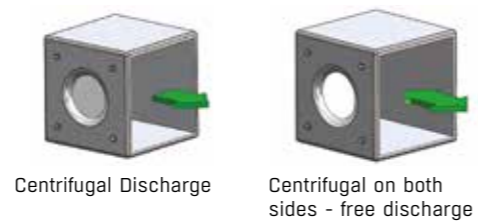
## Performance Charts

### ESTOC TARGE 102-630-3 - GF163027



## INSTALLATION GUIDE

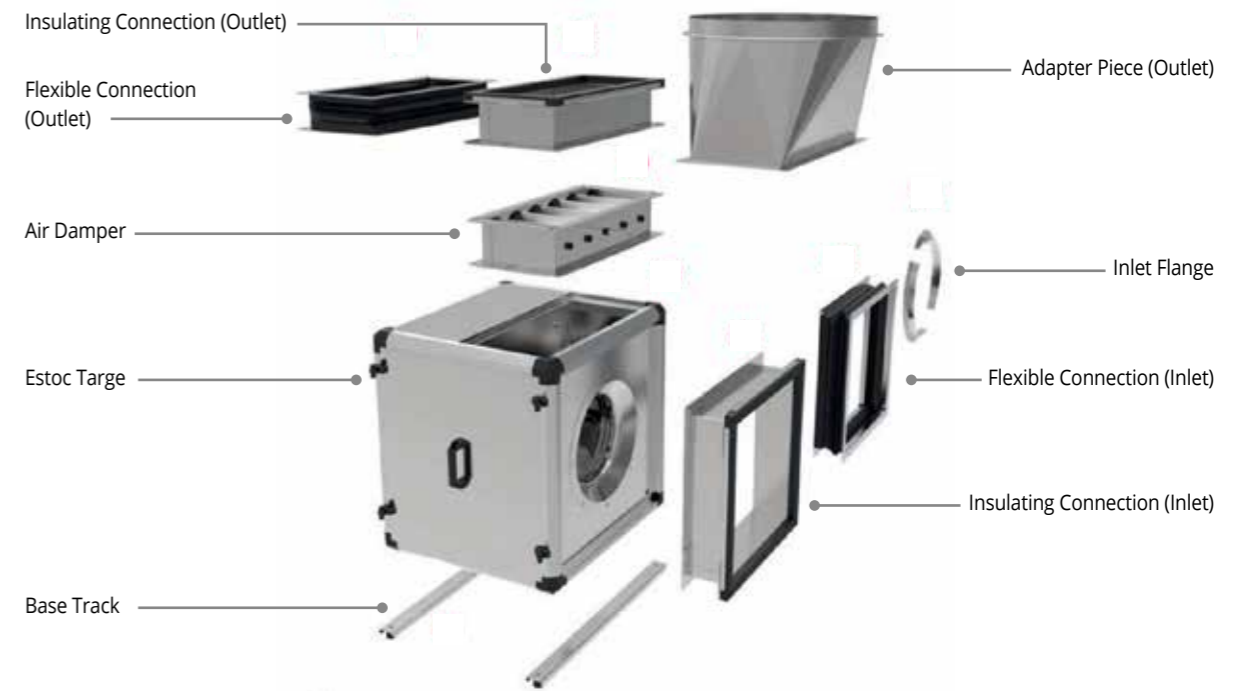
Outdoor installation PowerBox GF Estoc Targe  
Axial air flow (90° discharge available)  
All accessories supplied separately



When the Estoc Targe is used externally with a horizontal outlet an additional weather roof/cowl is available if required.

## Construction Scheme

### INDOOR INSTALLATION



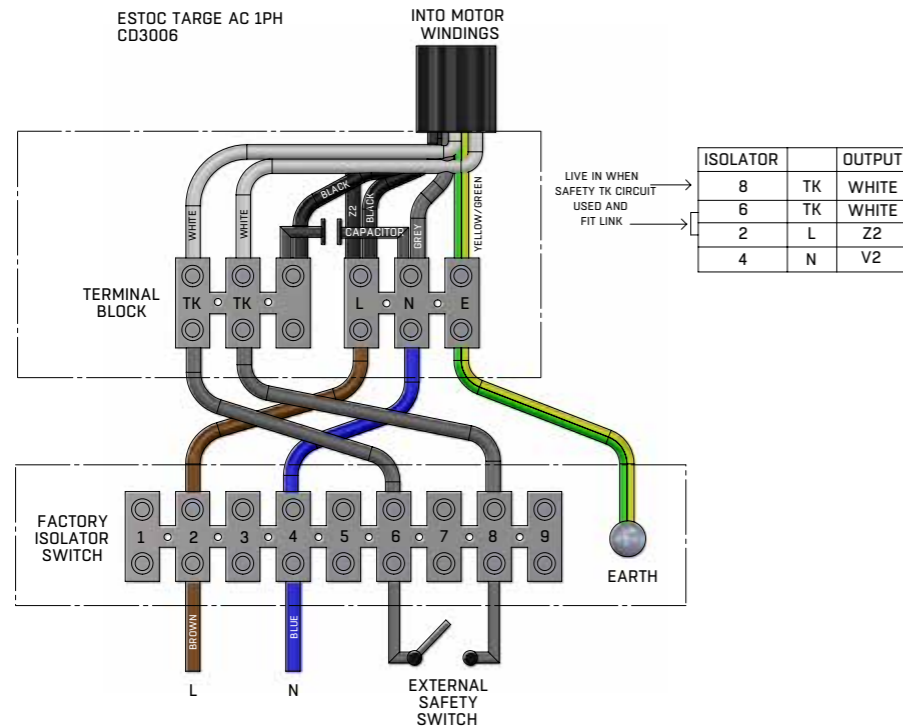
### OUTDOOR INSTALLATION





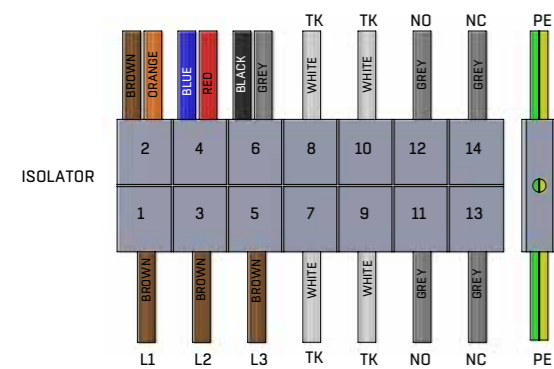
## Wiring Diagrams - Estoc Targe

CD3006



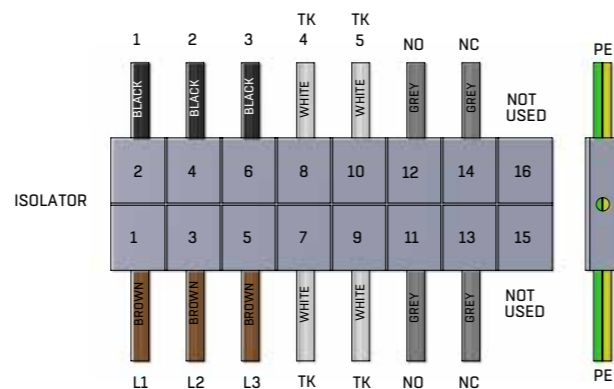
CD3031

355-450



CD3032

500-630



## SELECTION TOOLS AND WEB RESOURCES

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**PRODUCT FACTS**

- Air flow up to 3.7 m<sup>3</sup>/s
- Static pressures up to 1000 Pa
- Controllable EC motors
- Multiple outlet orientations motor located out of air stream
- Air discharged at 90 degrees
- DW172 compliant for solid fuel cooking applications

**ELECTRICAL SUPPLY**

220-240V/50Hz/1PH & 380-420V/50Hz/3PH

**TEMPERATURE RANGE**

Up to 120°C depending on size, see electrical data table on next page for more information.

**SIZES**

355, 400, 450, 500, 560 and 630 mm

**CONSTRUCTION**

The casing is galvanized and made from sheet steel with double chambered aluminum profiles and plastic made corners. The acoustic insulation is made from fibre glass with a thickness of 20 mm.

Can be horizontal or vertical mounted with weather proof hood and has removable side panels. One side of the casing is open as standard.

**IMPELLER**

The Estoc Targe is equipped with high efficiency backward curved centrifugal impellers made of plastic for size up to 560 and with aluminum for 630 mm.

**MOTOR**

Motor is situated out of air stream. The fans are equipped with direct driven external motors having motor protection through thermal contacts in the motor windings. The impellers together with the external rotor motors are dynamically balanced to quality standard G2,5 DIN ISO 19410.

**SPEED CONTROLLER**

Speed is variable using a 0-10 volt potentiometer.

Up to

110



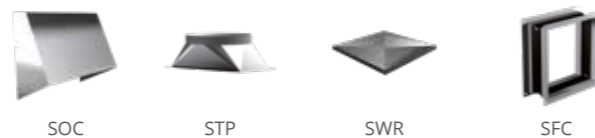
**PRODUCT CODE**

Estoc Targe EC 50-355-3

- ESTOC TARGE EC - Product Name
- 50 = Box Size            ie, 50 = 500mm; 67 = 670mm; 80 = 800mm; 102 = 1020mm
- 355 = Spigot Diameter size (mm)
- 1 = 1PH or 3 = 3PH

**ACCESSORIES**

The range of accessories include dampers, flexible connectors, service doors, outlet covers, guards, side covering and insulating connections. A quick reference guide is shown below.



Mounting track/SMT

**220-240V/50Hz/1PH & 380-420V/50Hz/3PH**

**Performance Table**

Product Code	m <sup>3</sup> /s @ Pa (Static)										
	0	100	200	300	400	500	600	700	800	900	1000
Estoc Targe EC 50-355-1	0.90	0.81	0.69	0.55	0.19						
Estoc Targe EC 67-400-1	1.25	1.13	0.98	0.78	0.37						
Estoc Targe EC 67-450-1	1.57	1.43	1.28	1.08	0.74						

Product Code	m <sup>3</sup> /s @ Pa (Static)										
	0	100	200	300	400	500	600	700	800	900	1000
Estoc Targe EC 50-355-3	0.91	0.80	0.69	0.55	0.21						
Estoc Targe EC 67-400-3	1.41	1.31	1.20	1.05	0.86	0.58					
Estoc Targe EC 67-450-3	1.79	1.67	1.54	1.39	1.20	0.91	0.13				
Estoc Targe EC 80-500-3	2.50	2.37	2.23	2.07	1.88	1.63	1.39	1.02	0.01		
Estoc Targe EC 80-560-3	3.03	2.88	2.74	2.59	2.41	2.23	2.01	1.74	1.00		
Estoc Targe EC 80-630-3	3.68	3.52	3.37	3.21	3.06	2.89	2.70	2.49	2.20	1.74	0.41

**Product and Electrical Details**

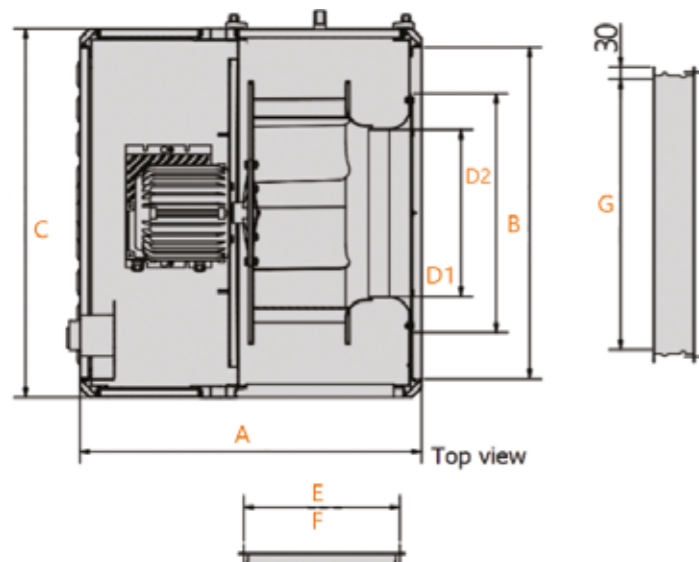
Product Code	Product Number	Speed rpm	Motor Frame	Electrical Supply	Electrical Current			Wiring Diagrams	**Speed Controllers	Maximum Operating Temp°C	Breakout *Sound Level db(A) (3m)
					Motor (kW)	Full Load Current (A)	Starting Current (A)		Potentiometer		
Estoc Targe EC 50-355-1	GF503555	1500	Integral	220-240 V/50 Hz/1 Ph	0.36	1.5	1.5	1.451	0-10 V Pot	120	36
Estoc Targe EC 67-400-1	GF674006	1320	Integral	220-240 V/50 Hz/1 Ph	0.43	1.8	1.8	1.451	0-10 V Pot	120	41
Estoc Targe EC 67-450-1	GF674506	1230	Integral	220-240 V/50 Hz/1 Ph	0.65	2.8	2.8	1.451	0-10 V Pot	120	42

Product Code	Product Number	Speed rpm	Motor Frame	Electrical Supply	Electrical Current			Wiring Diagrams	**Speed Controllers	Maximum Operating Temp°C	Breakout *Sound Level db(A) (3m)
					Motor (kW)	Full Load Current (A)	Starting Current (A)		Potentiometer		
Estoc Targe EC 50-355-3	GF503556	1500	Integral	380-420 V/50 Hz/3 Ph	0.36	0.7	0.7	1.451	0-10 V Pot	120	37
Estoc Targe EC 67-400-3	GF674006	1500	Integral	380-420 V/50 Hz/3 Ph	0.62	1.2	1.2	1.451	0-10 V Pot	120	43
Estoc Targe EC 67-450-3	GF674507	1400	Integral	380-420 V/50 Hz/3 Ph	0.95	1.7	1.7	1.451	0-10 V Pot	120	45
Estoc Targe EC 80-500-3	GF805006	1400	Integral	380-420 V/50 Hz/3 Ph	1.45	2.4	2.4	1.451	0-10 V Pot	120	48
Estoc Targe EC 80-560-3	GF805608	1400	Integral	380-420 V/50 Hz/3 Ph	2.3	3.6	3.6	1.451	0-10 V Pot	120	50
Estoc Targe EC 80-630-3	GF806306	1350	Integral	380-420 V/50 Hz/3 Ph	3.6	5.5	5.5	1.451	0-10 V Pot	120	51

\*Sound power levels are average dBA at 3 metres 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 speed controllers, please see pages 250-297. For ErP efficiency ratings and grades please refer to our Fan Selector for more information.



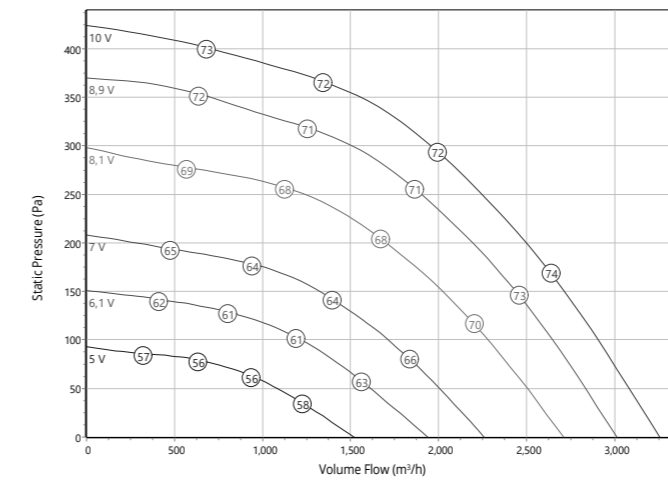
## Drawings and Dimensions



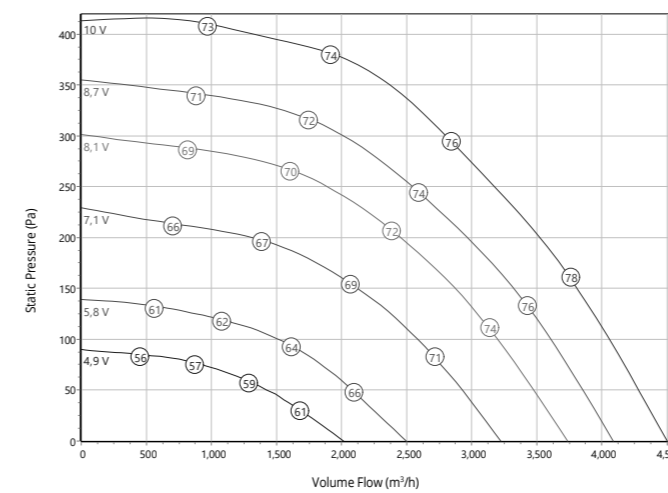
Product Code	A	B	C	D1	D2	E	F	G	Weight Max (kg)
Estoc Targe EC 50-355	540	420	500	228	348	218	398	360	44
67-400	600	590	670	248	422	258	568	450	60
67-450	600	590	670	289	422	258	568	450	66
80-500	740	720	800	310	519	338	698	580	96
80-560	740	720	800	362	519	338	698	580	102
80-630	740	720	800	405	560	338	698	580	112

## Performance charts

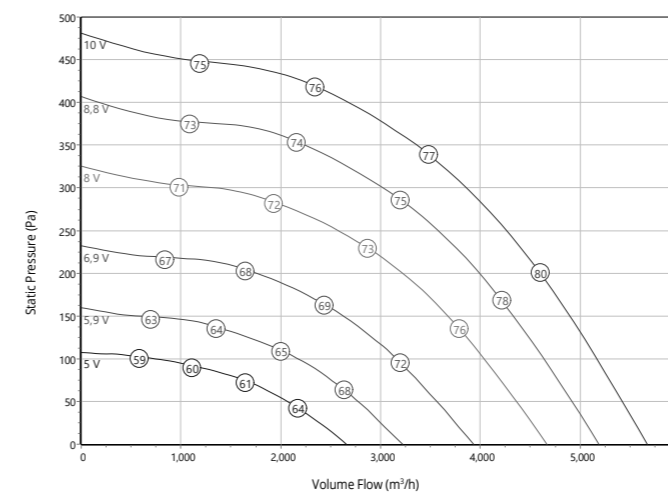
ESTOC TARGE EC 50-355-1 - GF503555



ESTOC TARGE EC 67-400-1 - GF674006

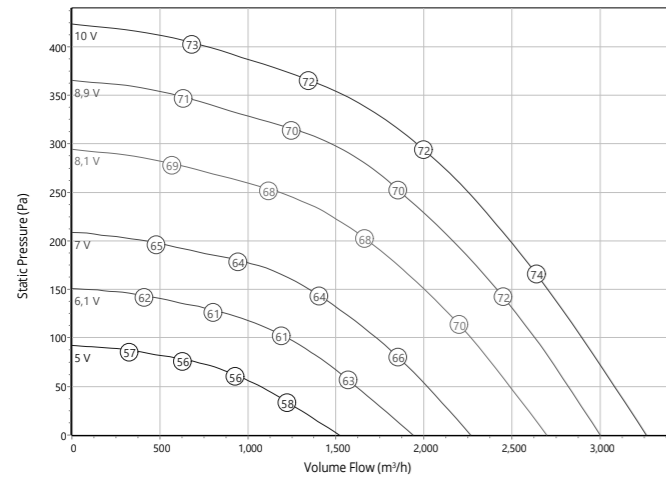


ESTOC TARGE EC 67-450-1 - GF674506

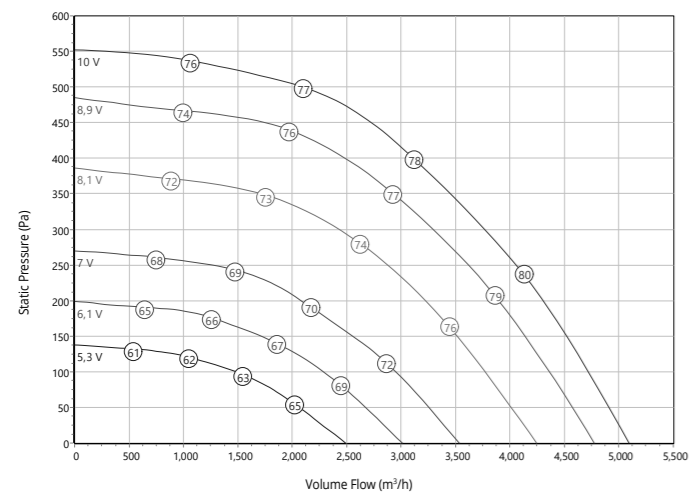


Performance charts

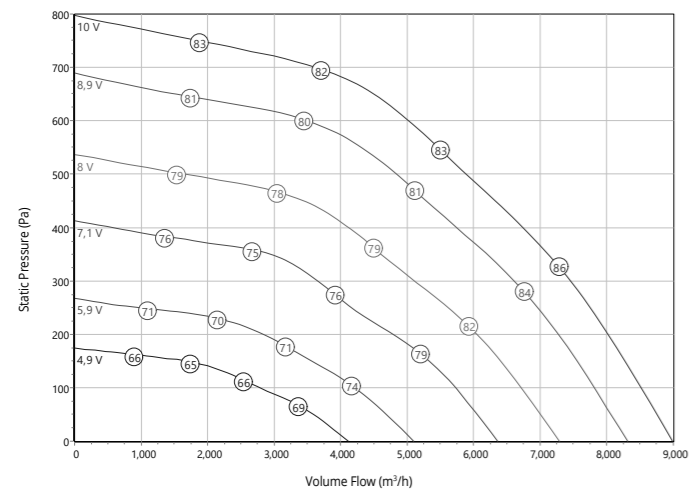
ESTOC TARGE EC 50-355-3 - GF503556



ESTOC TARGE EC 67-400-3 - GF674006

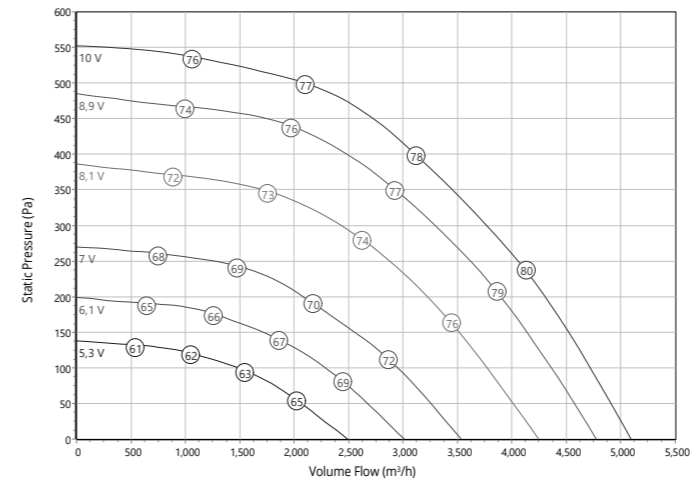


ESTOC TARGE EC 50-355-3 - GF503556

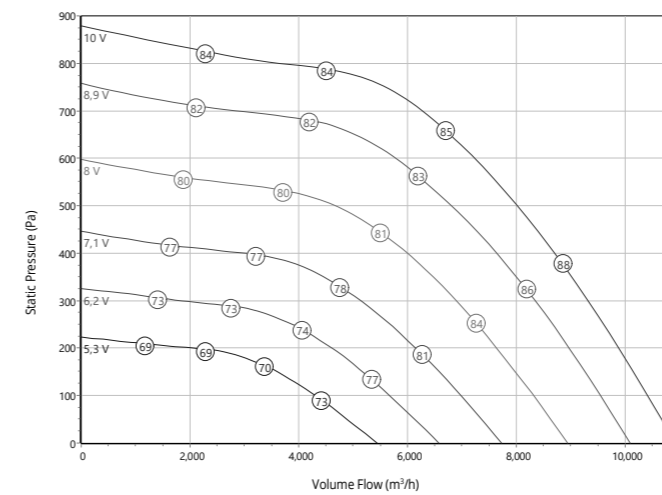


Performance charts

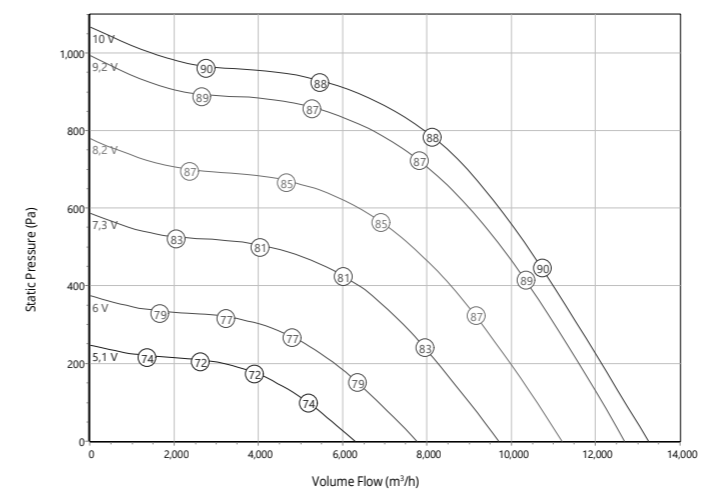
ESTOC TARGE EC 67-400-3 - GF674006



ESTOC TARGE EC 80-560-3 - GF805608



ESTOC TARGE EC 80-630-3 - GF806306







**PRODUCT FACTS**

- Air flow up to 5.2 m3/s
- Static pressures up to 1130 Pa
- Speed controllable external rotor motors
- Multiple outlet orientations
- All panels interchangeable to offer flexible outlet position

**ELECTRICAL SUPPLY**

220-240V/50Hz/1PH & 380-420V/50Hz/3PH

**TEMPERATURE RANGE**

Maximum temperature from +40°C to +70°C (depending on the model)

**SIZES**

355, 400, 450, 500, 560, 630 and 710 mm

**CONSTRUCTION**

The ePowerBox AC casing is made from galvanized sheet steel with double chambered aluminum supporting frames and plastic made corners. The acoustic insulation made from mineral wool with a thickness of 20 mm.

**IMPELLER**

The ePowerBox AC has a backward curved centrifugal impellers made of plastic with galvanised steel support plates for those up to 560 mm. Fans with a diameter of 630 mm and larger have high efficiency backward curved centrifugal impellers made of aluminium.

**MOTOR**

The impellers together with the external rotor motors are dynamically balanced to quality standard G2,5 DIN ISO 19410.

**SPEED CONTROLLER**

Speed is 100% infinitely variable using auto transformers or inverter control.

NB; Performance reduction in straight through configuration. Please refer to performance curve.



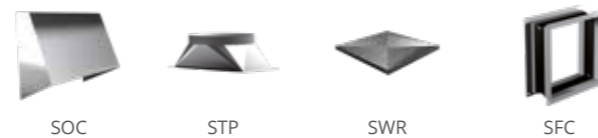
**PRODUCT CODE**

ePowerBox AC 50-355-3

- ePowerBox AC - Product Name
- 50 = Box Size ie, 50 = 500mm; 67 = 670mm; 80 = 800mm; 102 = 1020mm
- 355 = Spigot Diameter size (mm)
- 1 = 1PH or 3 = 3PH

**ACCESSORIES**

The range of accessories include dampers, flexible connectors, service doors, outlet covers, guards, side covering and insulating connections. A quick reference guide is shown below.



Mounting track/SMT

**220-240V/50Hz/1PH & 380-420V/50Hz/3PH**

**Performance Table**

Product Code	m3/s @ Pa (Static)										
	0	100	200	300	400	500	600	700	800	900	1000
ePowerBox AC 50-355-1	0.91	0.79	0.66	0.45							
ePowerBox AC 67-400-1	1.30	1.17	1.04	0.87	0.58						
ePowerBox AC 67-450-1	1.91	1.77	1.61	1.44	1.21	0.91	0.13				
ePowerBox AC 67-500-1	2.61	2.43	2.24	2.04	1.83	1.55	1.16	0.40			

Product Code	m3/s @ Pa (Static)										
	0	100	200	300	400	500	600	700	800	900	1000
ePowerBox AC 50-355-3	0.92	0.80	0.66	0.43							
ePowerBox AC 67-400-3	1.29	1.15	1.01	0.81	0.40						
ePowerBox AC 67-450-3	1.81	1.66	1.49	1.29	1.03	0.59	0.03				
ePowerBox AC 67-500-3	2.58	2.40	2.23	2.03	1.81	1.55	1.16	0.39			
ePowerBox AC 80-560-3	3.61	3.40	3.19	2.98	2.75	2.47	2.13	1.69	0.88	0.21	
ePowerBox AC 80-630-3	4.03	3.84	3.65	3.44	3.28	3.05	2.84	2.56	2.24	1.73	0.09
ePowerBox AC 102-710-3	4.81	4.47	4.06	3.63	3.13	2.59	0.92				

**Product and Electrical Details**

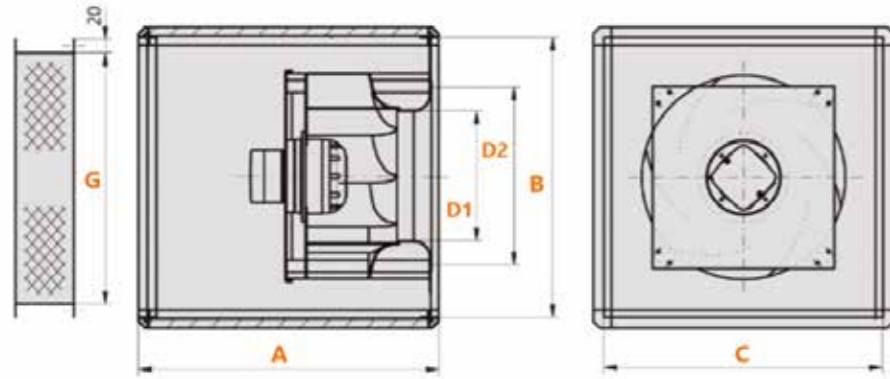
Product Code	Product Number	Speed rpm	Motor Frame	Electrical Supply	Electrical Current			Wiring Diagrams	**Speed Controllers	Maximum Operating Temp°C	Breakout *Sound Level db(A) (3m)
					Motor (kW)	Full Load Current (A)	Starting Current (A)		Transformer		
ePowerBox AC 50-355-1	BE355017	1325	Integral	220-240 V-50 Hz-1 Ph	0.28	1.35	4.46	CD3028	TEID 1.5	65	33
ePowerBox AC 67-400-1	BE400018	1360	Integral	220-240 V-50 Hz-1 Ph	0.51	2.45	7.11	CD3028	TEID 2.2	65	45
ePowerBox AC 67-450-1	BE450022	1270	Integral	220-240 V-50 Hz-1 Ph	0.85	4.1	15.58	CD3028	TEID 3.5	45	41
ePowerBox AC 67-500-1	BE500003	1310	Integral	220-240 V-50 Hz-1 Ph	1.38	6.22	19.90	CD3028	TEID 7.5	40	45

Product Code	Product Number	Speed rpm	Motor Frame	Electrical Supply	Electrical Current			Wiring Diagrams	**Speed Controllers	Maximum Operating Temp°C	Breakout *Sound Level db(A) (3m)
					Motor (kW)	Full Load Current (A)	Starting Current (A)		Transformer		
ePowerBox AC 50-355-3	BE355018	1355	Integral	380-420V-50 Hz-3 Ph	0.28	0.67	2.68	CD3030	IDDXF54 2.2	70	34
ePowerBox AC 67-400-3	BE400019	1335	Integral	380-420V-50 Hz-3 Ph	0.44	0.88	3.34	CD3030	IDDXF54 2.2	70	37
ePowerBox AC 67-450-3	BE450023	1345	Integral	380-420V-50 Hz-3 Ph	0.73	1.47	4.85	CD3030	IDDXF54 2.2	50	37
ePowerBox AC 67-500-3	BE500004	1380	Integral	380-420V-50 Hz-3 Ph	1.29	2.82	14.95	CD3030	IDDXF54 3.7	60	44
ePowerBox AC 80-560-3	BE560023	1350	Integral	380-420V-50 Hz-3 Ph	2.1	4.07	16.28	CD3030	IDDXF54 5.3	50	47
ePowerBox AC 80-630-3	BI101234	1380	Integral	380-420V-50 Hz-3 Ph	3.28	6.1	34.20	CD3030	IDDXF54 7.2	60	55
ePowerBox AC 102-710-3	BI101237	890	Integral	380-420V-50 Hz-3 Ph	2.17	4.79	19.16	CD3030	IDDXF54 5.3	70	49

\*Sound power levels are average dBA at 3 metres 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 speed controllers, please refer to accessories section. For ErP efficiency ratings and grades please refer to our Fan Selector for more information.

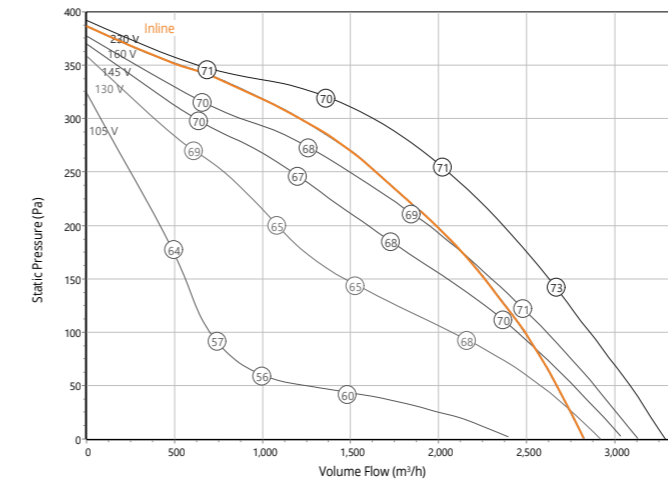
## Drawings and Dimensions



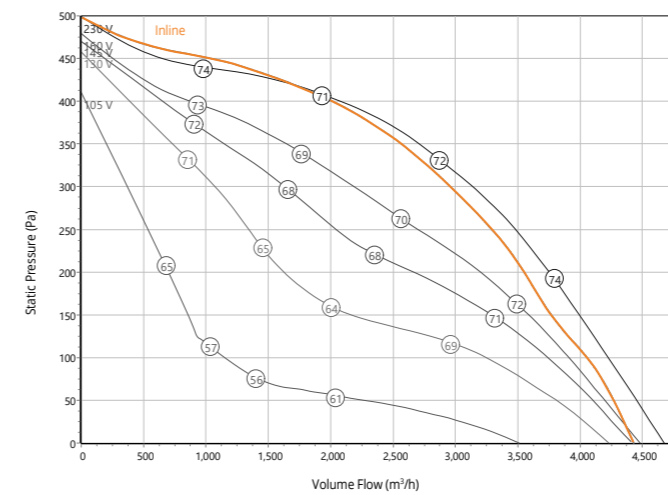
Product Code	A	B	C	D1	D2	G	Weight Max (kg)
ePowerbox 50-355	500	450	450	228	320	409	32
67-400	670	620	620	257	356	579	48
67-450	670	620	620	286	395	579	50
67-500	670	620	620	325	438	579	60
80-560	800	720	720	365	490	659	95
80-630	800	720	720	410	541	659	105
102-710	1020	940	940	460	605	879	146

## Performance charts

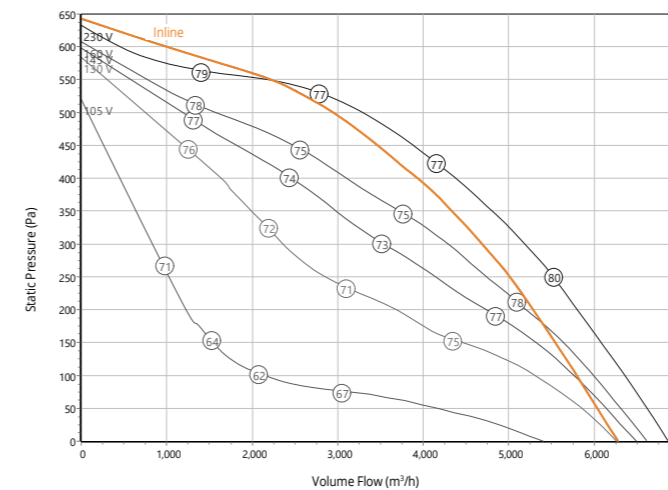
ePOWERBOX AC 50-355-1 - BE355017



ePOWERBOX AC 67-400-1 - BE400018



ePOWERBOX AC 67-450-1 BE450022

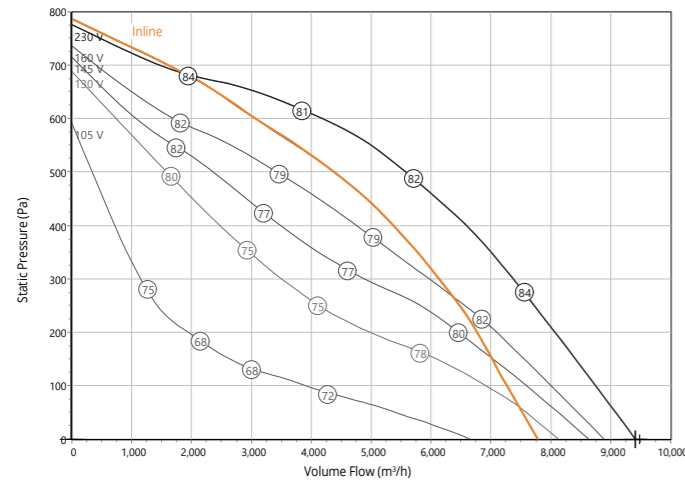


Please note :-

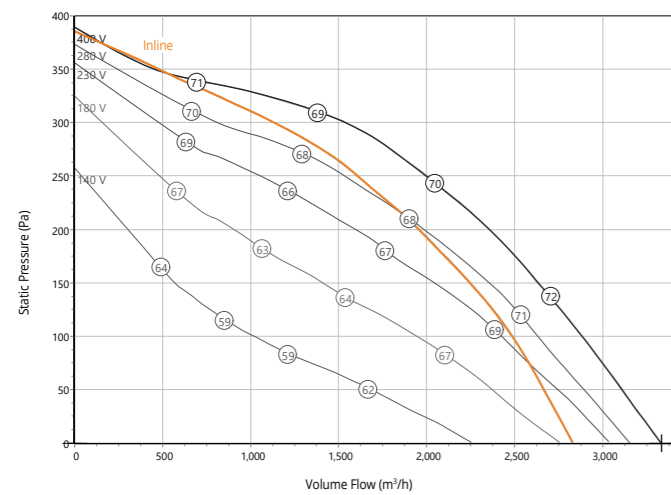
The performances shown are based on the centrifugal 90 degrees discharge, for the axial flow performance please contact our sales team.

Performance charts

ePOWERBOX AC 67-500-1 - BE500003

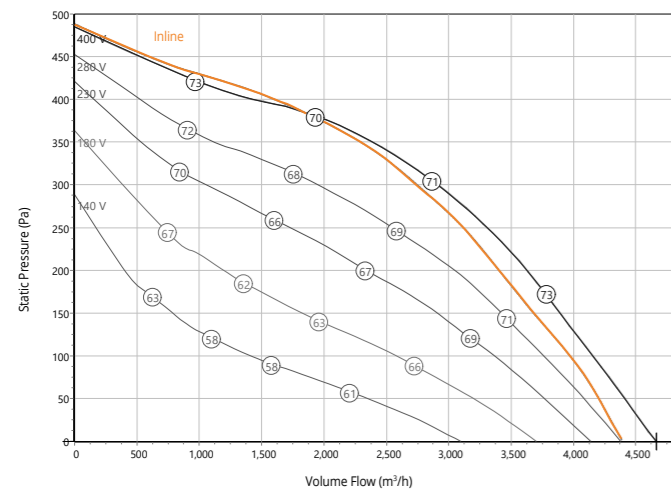


ePOWERBOX AC 50-355-3 - BE355018



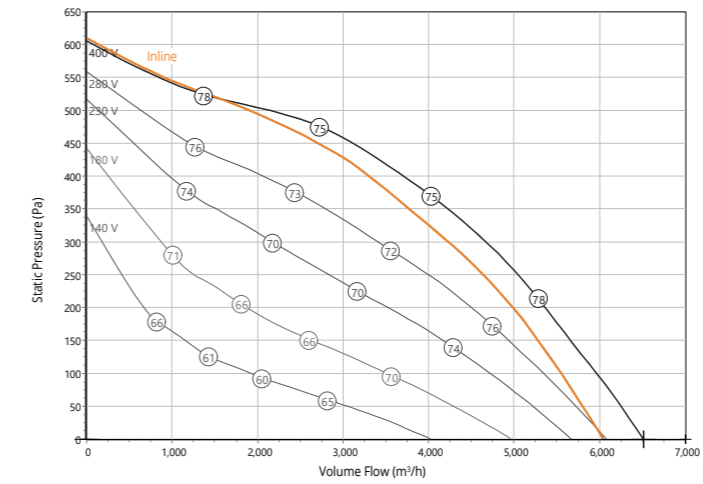
Please note : -  
The performances shown are based on the centrifugal 90 degrees discharge, for the axial flow performance please contact our sales team.

ePOWERBOX AC 67-400-3 - BE400019

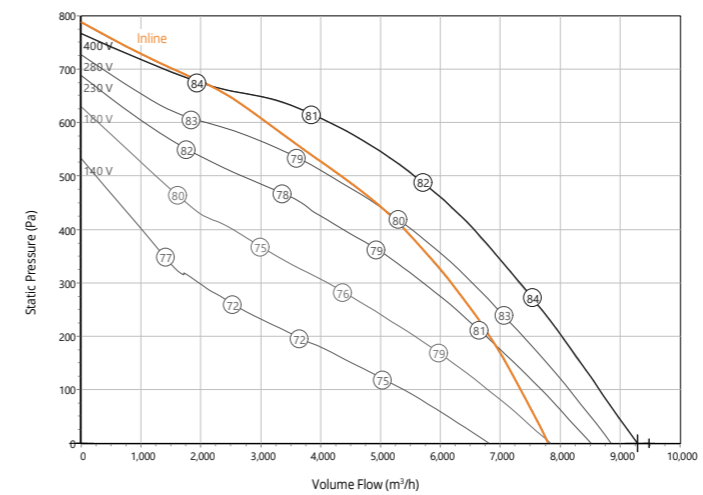


Performance charts

ePOWERBOX AC 67-450-3 - BE450019

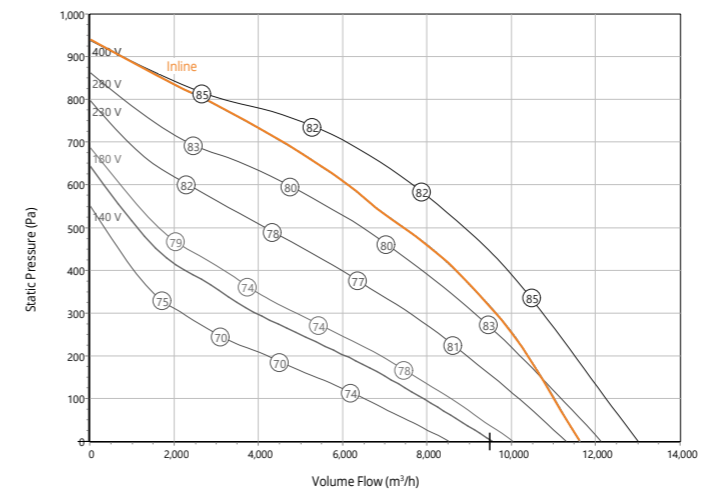


ePOWERBOX AC 67-500-3 - BE500004



Please note : -  
The performances shown are based on the centrifugal 90 degrees discharge, for the axial flow performance please contact our sales team.

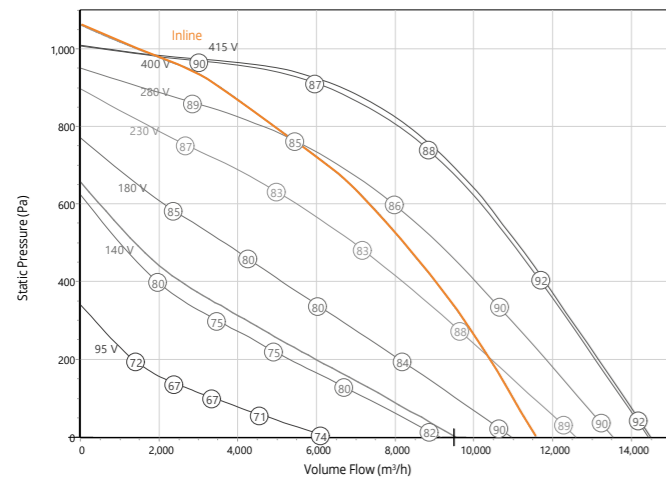
ePOWERBOX AC 67-560-3 - BE560023



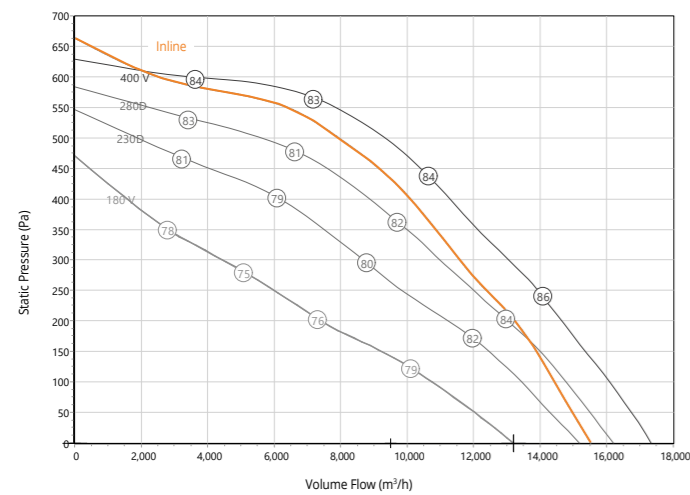


## Performance charts

### ePOWERBOX AC 80-630-3 - B1101234

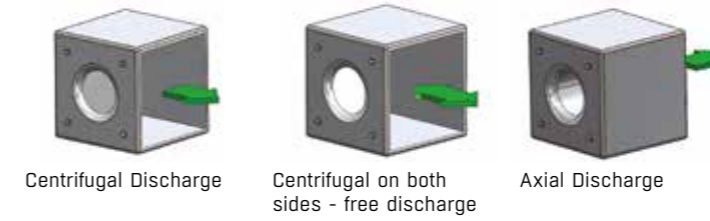


### ePOWERBOX AC 102-710-3 - B1101237

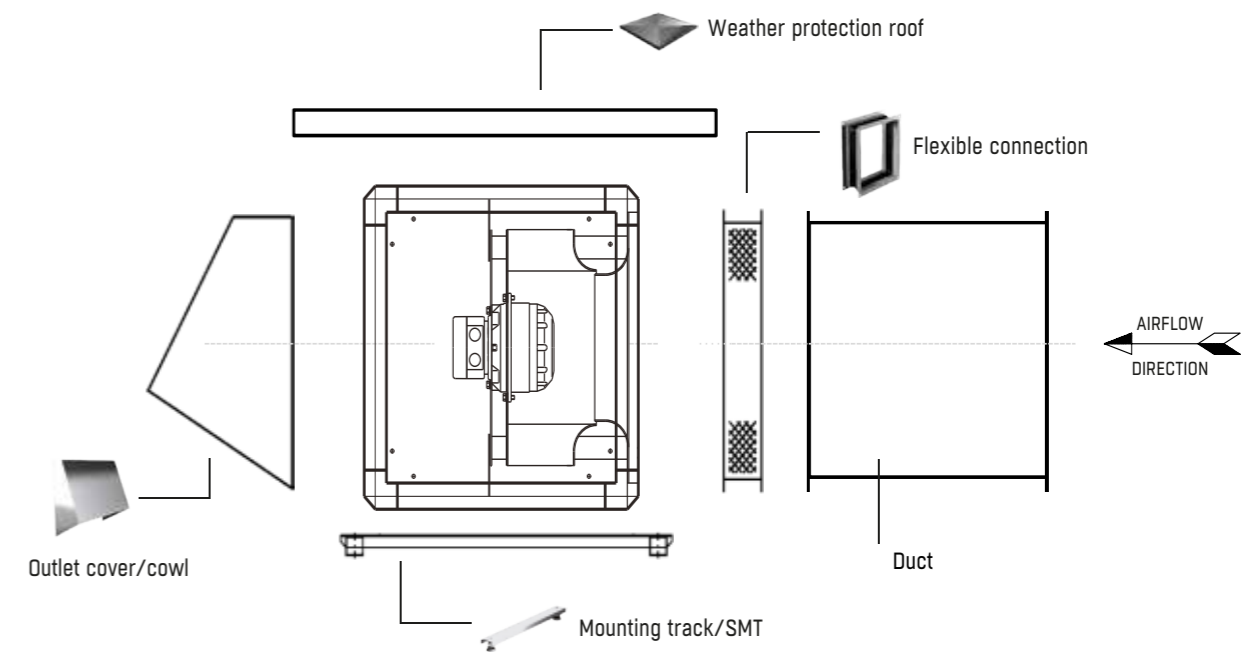


Please note : -  
The performances shown are based on the centrifugal 90 degrees discharge, for the axial flow performance please contact our sales team.

## Installation guide

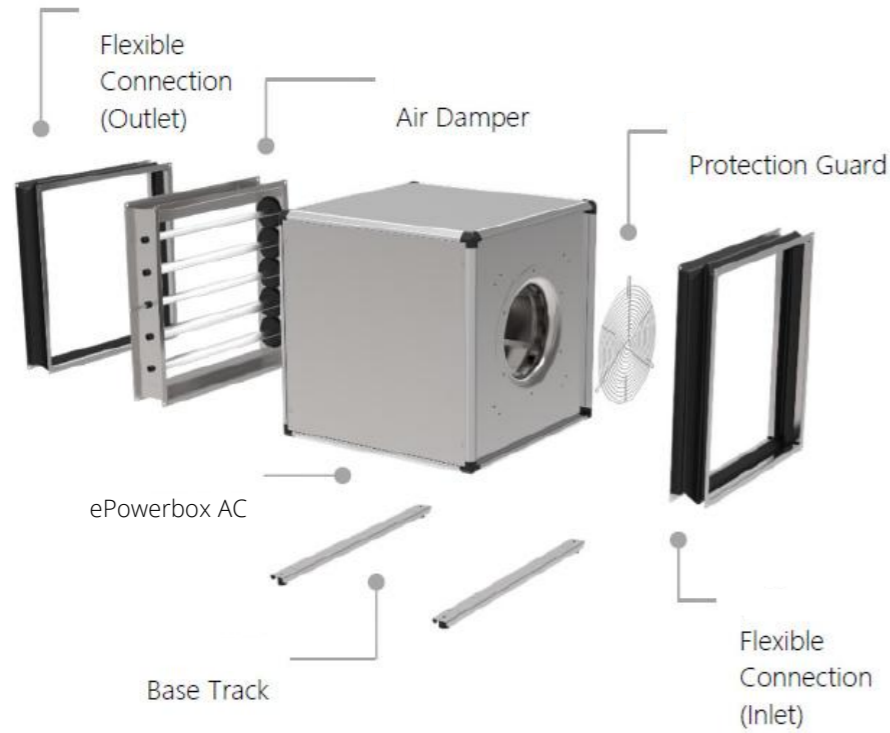


Outdoor installation PowerBox Estoc  
Axial air flow (90° discharge available)  
All accessories supplied separately

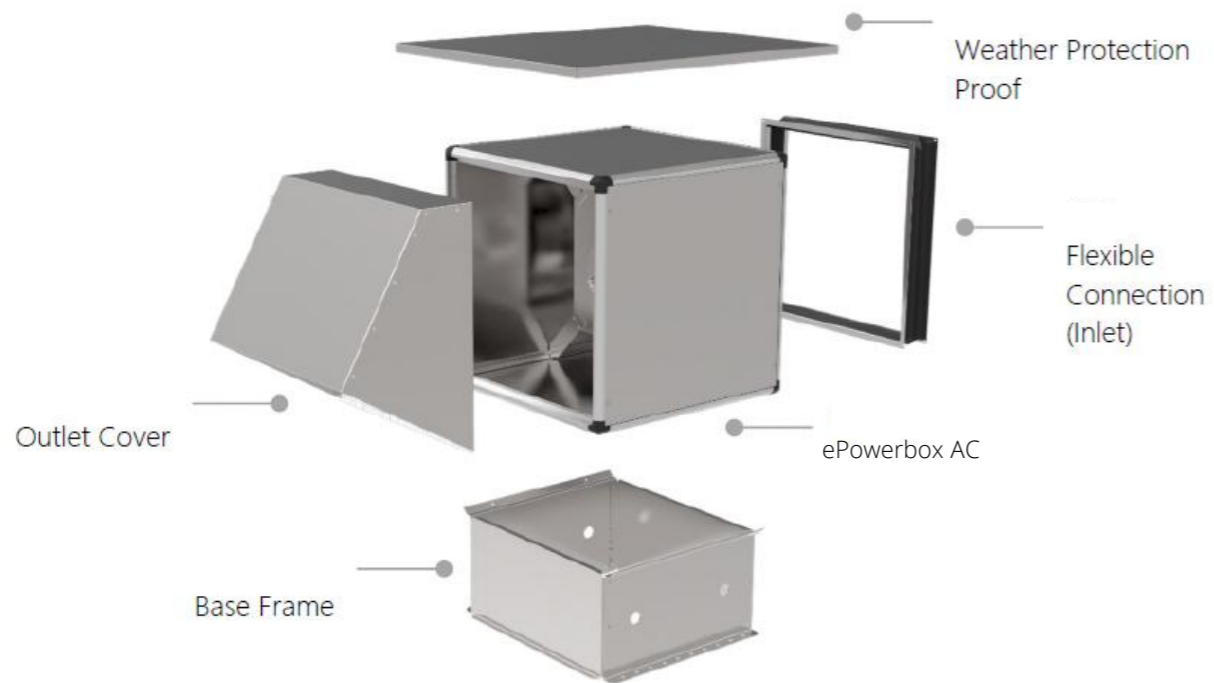


### Construction Scheme

#### Indoor installation:

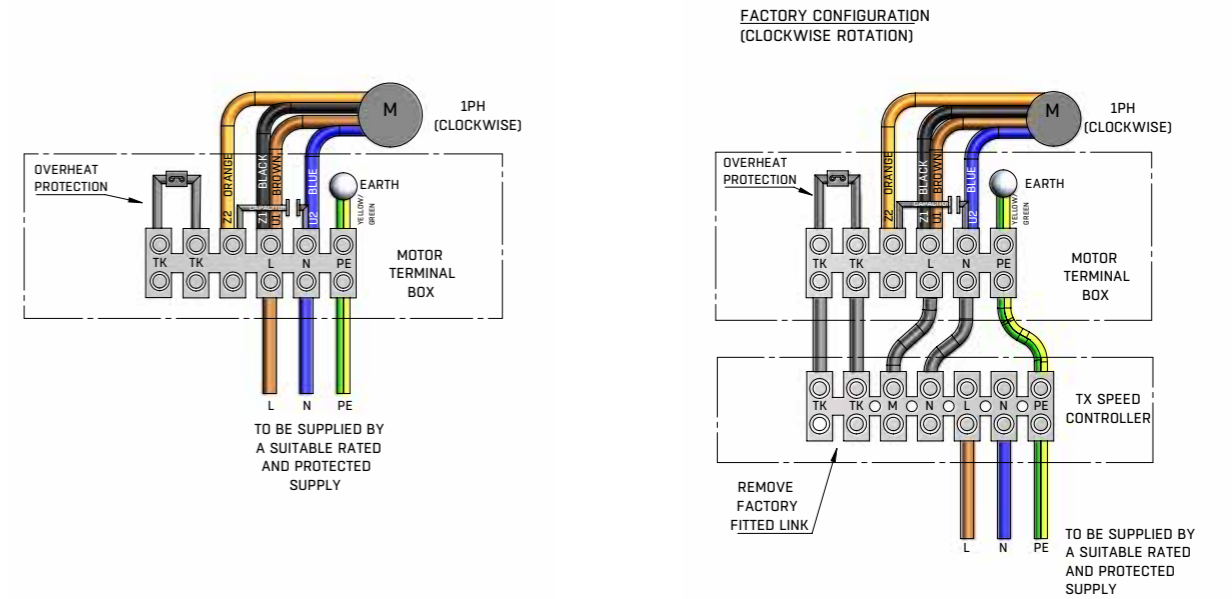


#### Outdoor installation:

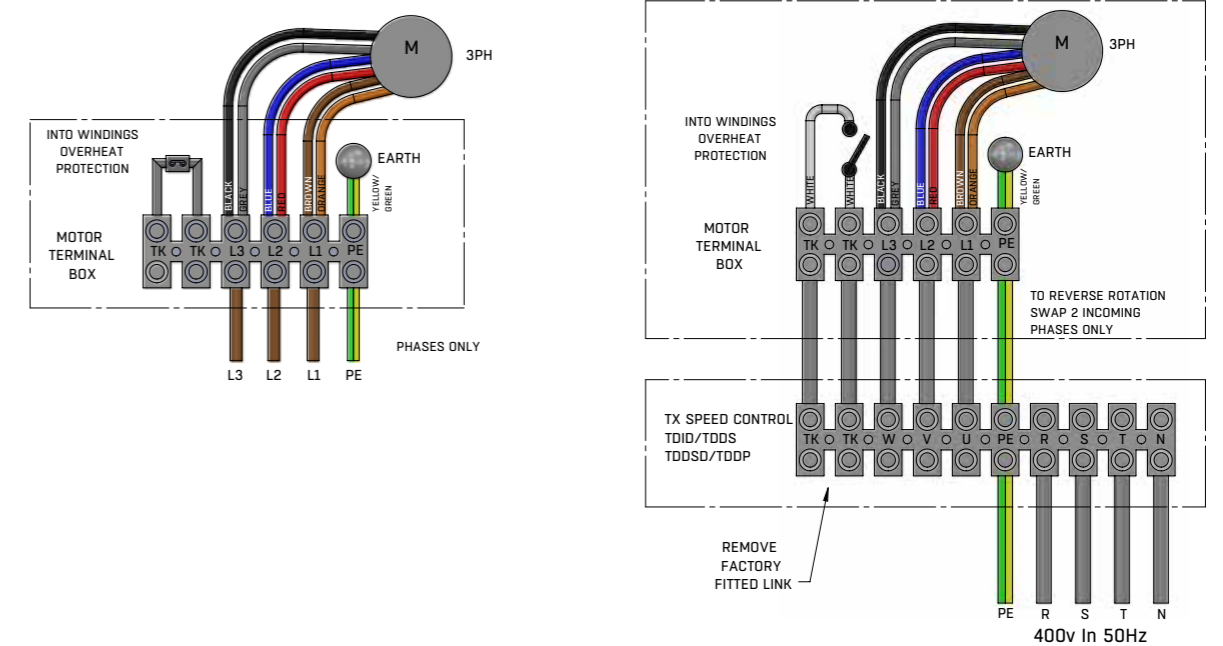


### Wiring Diagrams - ePowerBox AC

#### CD 3028



#### CD 3030



**PRODUCT FACTS**

- Air flow up to 5.4 m<sup>3</sup>/s
- Static pressures up to 840 Pa
- Controllable EC motors
- Multiple outlet orientations

**ELECTRICAL SUPPLY**

220-240V/50Hz/1PH & 380-420V/50Hz/3PH

**TEMPERATURE RANGE**

Maximum temperature up to +55°C (depending on the model)

**SIZES**

315, 355, 400, 450, 500, 560, 630 and 710 mm

**CONSTRUCTION**

The ePowerBox EC casing is galvanized and made from sheet steel with with double chamber aluminum profiles and corners made of plastic and acoustic insulation made from fibre glass mats with a thickness of 20 mm. One side of the casing is open as standard.

**IMPELLER**

The ePowerBox EC has a backward curved centrifugal impellers made of plastic with galvanised steel support plates for those up to 560 mm. Fans with a diameter of 630 mm and larger have high efficiency backward curved centrifugal impellers made of aluminium.

**MOTOR**

The impellers together with the EC (electronically controlled) external rotor motors are dynamically balanced to quality standard G2,5 DIN ISO 19410.

**SPEED CONTROLLER**

Speed is variable using a 0-10 volt potentiometer.



**PRODUCT CODE**

ePowerBox EC 50-355-3

- ePowerBox EC - Product Name
- 50 = Box Size ie, 50 = 500mm; 67 = 670mm; 80 = 800mm; 102 = 1020mm
- 355 = Spigot Diameter size (mm)
- 1 = 1PH or 3 = 3PH 1020mm

**ACCESSORIES**

The range of accessories include dampers, flexible connectors, service doors, outlet covers, guards, side covering and insulating connections. A quick reference guide is shown below.



**220-240V/50Hz/1PH & 380-420V/50Hz/3PH**



**Performance Table**

Product Code	m <sup>3</sup> /s @ Pa (Static)										
	0	100	200	300	400	500	600	700	800	900	1000
ePowerBox EC 50-315-1	0.75	0.67	0.59	0.48	0.25						
ePowerBox EC 50-355-1	1.13	1.04	0.93	0.82	0.66	0.16					
ePowerBox EC 67-400-1	1.34	1.22	1.09	0.91	0.56						
ePowerBox EC 67-450-1	2.03	1.91	1.79	1.66	1.49	1.29	0.98				

Product Code	m <sup>3</sup> /s @ Pa (Static)											
	0	100	200	300	400	500	600	700	800	900	1000	1100
ePowerBox EC 80-500-3	3.28	3.16	3.05	2.93	2.81	2.69	2.53	2.37	2.19	1.96	1.65	0.56
ePowerBox EC 80-560-3	4.07	3.93	3.76	3.59	3.44	3.27	3.07	2.84	2.54	2.18	1.44	
ePowerBox EC 102-630-3	4.31	4.11	3.86	3.60	3.30	2.93	2.37					
ePowerBox EC 102-710-3	5.25	4.92	4.65	4.32	3.90	3.32	1.90					

**Product and Electrical Details**

Product Code	Product Number	Speed rpm	Motor Frame	Electrical Supply	Electrical Current			Wiring Diagrams	**Speed Controllers Potentiometer	Maximum Operating Temp°C	Breakout *Sound Level db(A) (3m)
					Motor (kW)	Full Load Current (A)	Starting Current (A)				
ePowerBox EC 50-315-1	BE315005	1500	Integral	220-240 V/50 Hz/1 Ph	0.2	1.3	1.3	CD3011	0-10 V Pot	55	32
ePowerBox EC 50-355-1	BE355004	1500	Integral	220-240 V/50 Hz/1 Ph	0.35	2.1	2.1	CD3011	0-10 V Pot	50	37
ePowerBox EC 67-400-1	BE400008	1500	Integral	220-240 V/50 Hz/1 Ph	0.62	3.7	3.7	CD3011	0-10 V Pot	50	43
ePowerBox EC 67-450-1	BE450015	1450	Integral	220-240 V/50 Hz/1 Ph	1	5.7	5.7	CD3011	0-10 V Pot	50	47

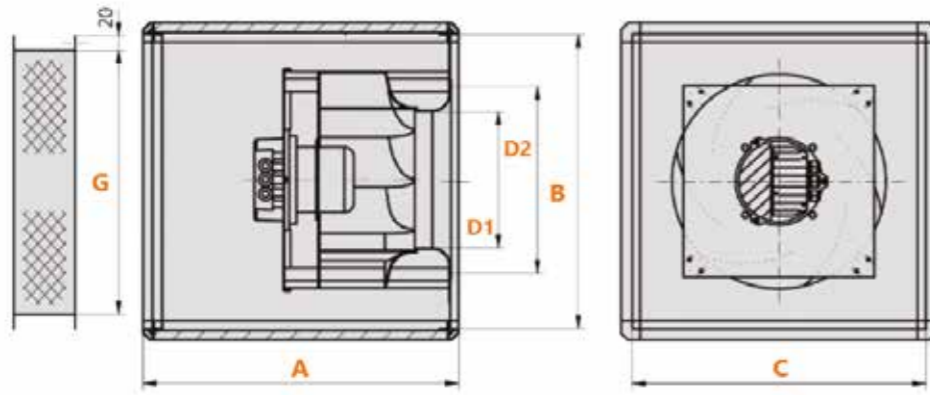
Product Code	Product Number	Speed rpm	Motor Frame	Electrical Supply	Electrical Current			Wiring Diagrams	**Speed Controllers Potentiometer	Maximum Operating Temp°C	Breakout *Sound Level db(A) (3m)
					Motor (kW)	Full Load Current (A)	Starting Current (A)				
ePowerBox EC 80-500-3	BE500019	1500	Integral	380-420 V/50 Hz/3 Ph	1.9	3	3	CD3012	0-10 V Pot	50	50
ePowerBox EC 80-560-3	BE560017	1400	Integral	380-420 V/50 Hz/3 Ph	2.8	4.3	4.3	CD3012	0-10 V Pot	50	50
ePowerBox EC 102-630-3	BE630016	1100	Integral	380-420 V/50 Hz/3 Ph	2.3	3.7	3.7	CD3012	0-10 V Pot	50	43
ePowerBox EC 102-710-3	BE710014	940	Integral	380-420 V/50 Hz/3 Ph	2.7	4.1	4.1	CD3012	0-10 V Pot	50	54

\*Sound power levels are average dBA at 3 metres 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 speed controllers, please see pages 250-297. For ErP efficiency ratings and grades please refer to our Fan Selector for more information.



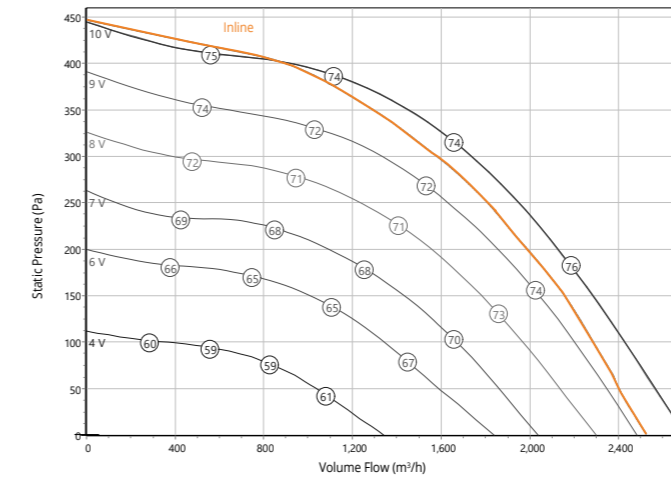
## Drawings and Dimensions



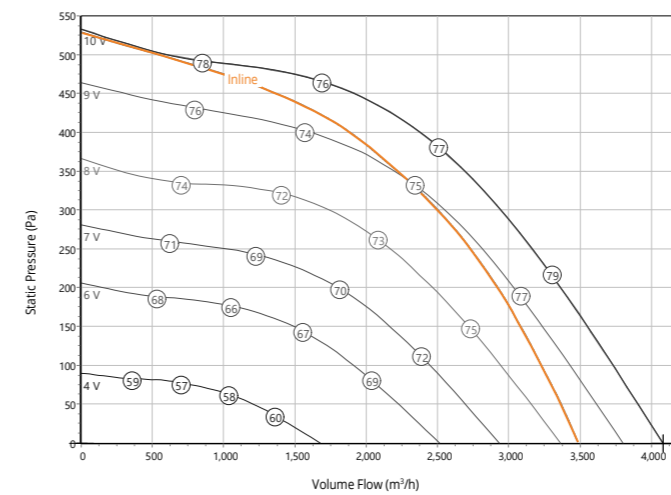
Product Code	A	B	C	D1	D2	G	Weight Max (kg)
ePowerbox EC 50-315	500	450	450	203	486	409	30
50-355	500	450	450	228	320	409	33
67-400	670	620	620	257	356	579	43
67-450	670	620	620	289	395	579	55
80-500	800	720	720	325	438	659	76
80-560	800	720	720	365	490	659	82
102-630	1020	940	940	410	541	879	113
102-710	1020	940	940	460	605	879	121

## Performance charts

ePOWERBOX EC 50-315-1 - UB503159

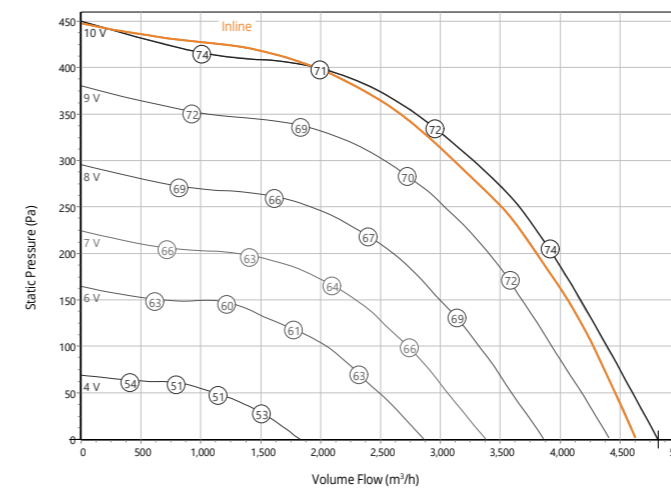


ePOWERBOX EC 50-355-1 - UB503559



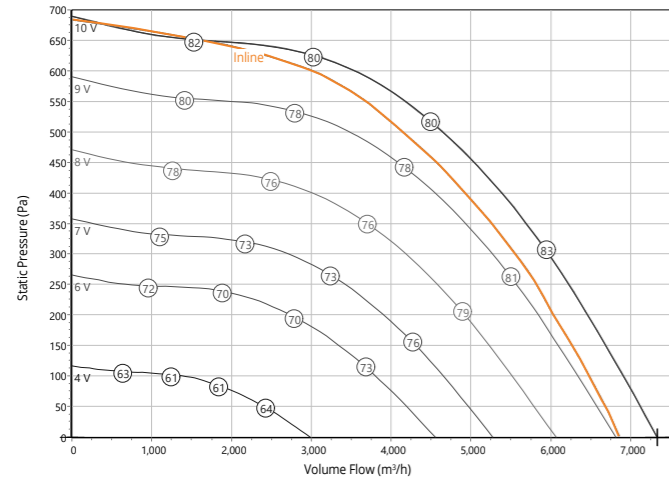
Please note : -  
The performances shown are based on the centrifugal 90 degrees discharge, for the axial flow performance please contact our sales team.

ePOWERBOX EC 67-400-1 - UB674059

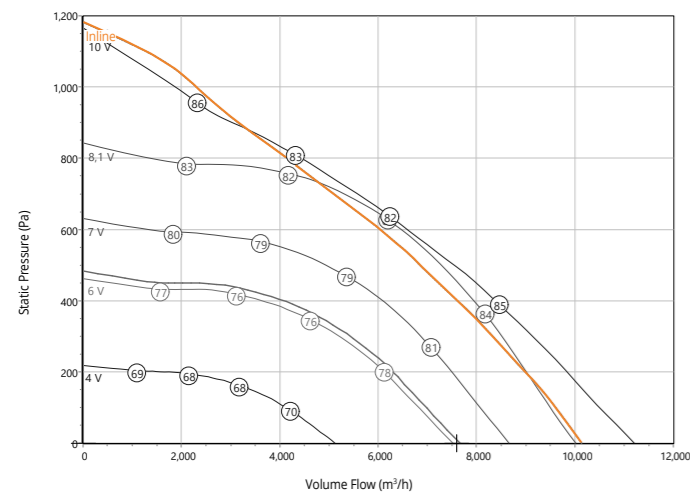


Performance charts

ePOWERBOX EC 67-450-1 - UB674559

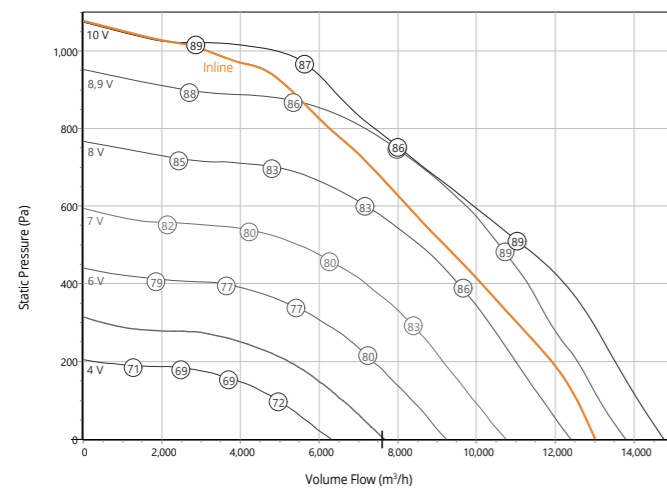


ePOWERBOX EC 80-500-3 - UB805069



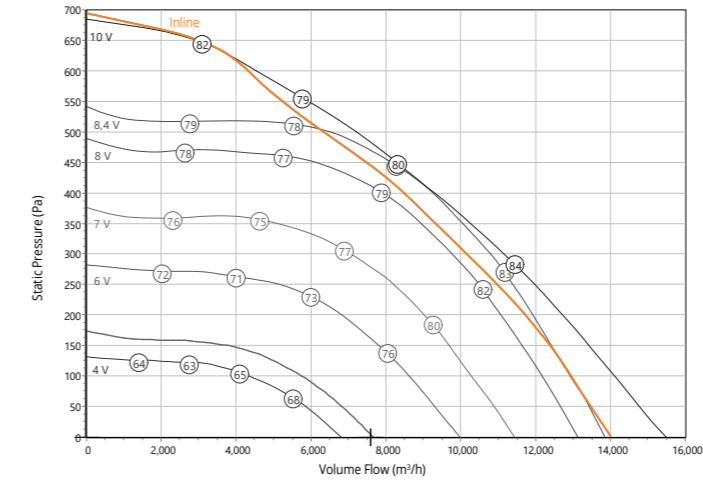
Please note : -  
The performances shown are based on the centrifugal 90 degrees discharge, for the axial flow performance please contact our sales team.

ePOWERBOX EC 80-560-3 - UB805669

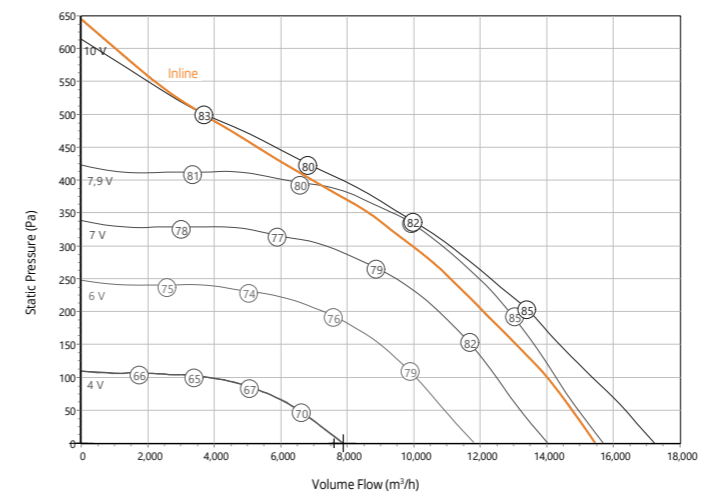


Performance charts

ePOWERBOX EC 102-630-3 - UB106369

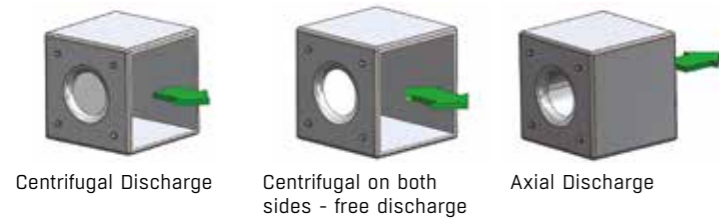


ePOWERBOX EC 102-710-3 - UB107169

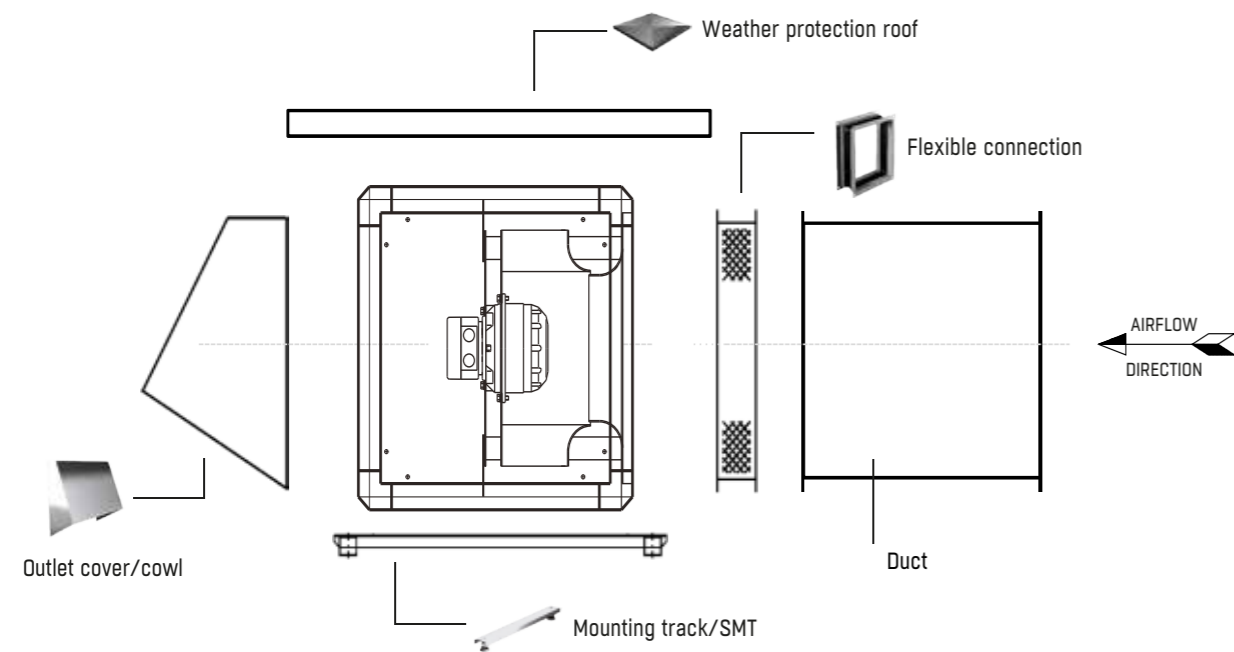


Please note : -  
The performances shown are based on the centrifugal 90 degrees discharge, for the axial flow performance please contact our sales team.

### Installation guide

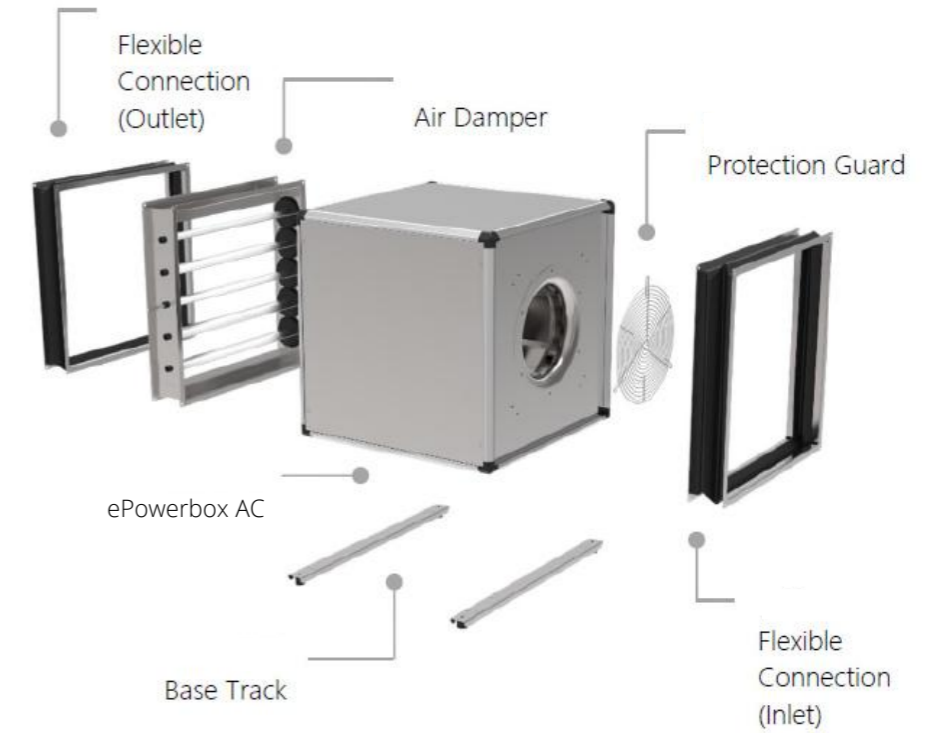


Outdoor installation ePowerBox EC  
Axial air flow (900 discharge available)  
All accessories supplied seperately

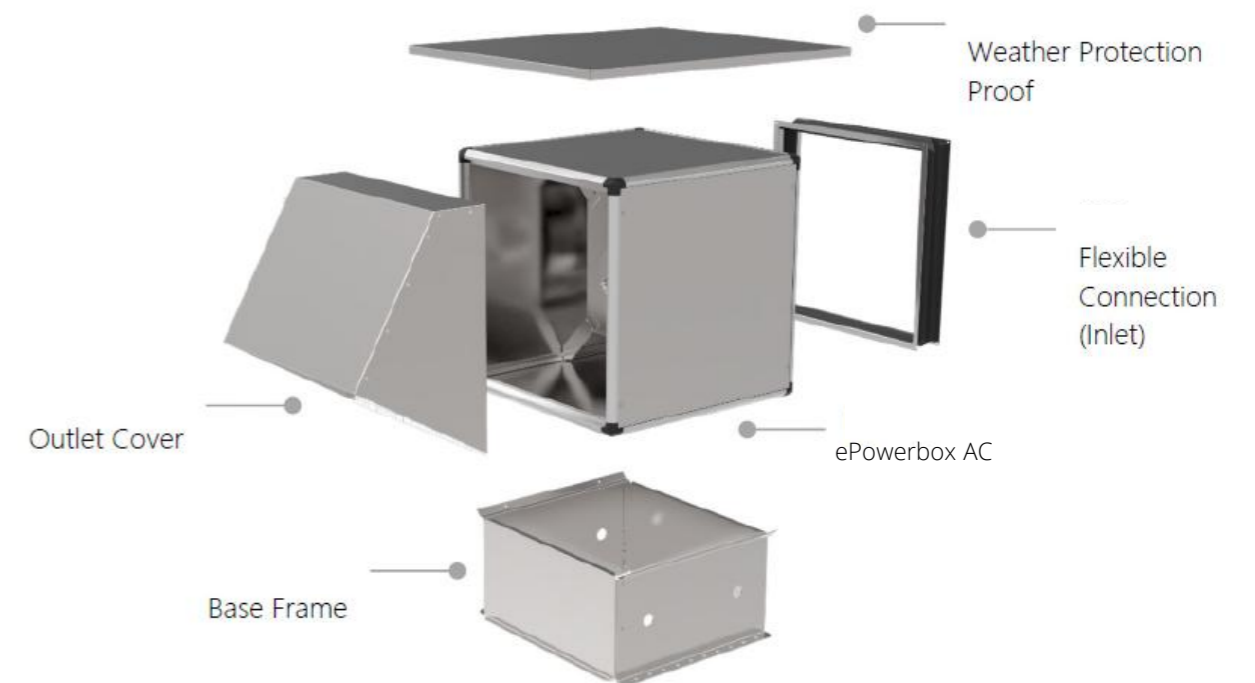


### Construction Scheme

#### Indoor installation:



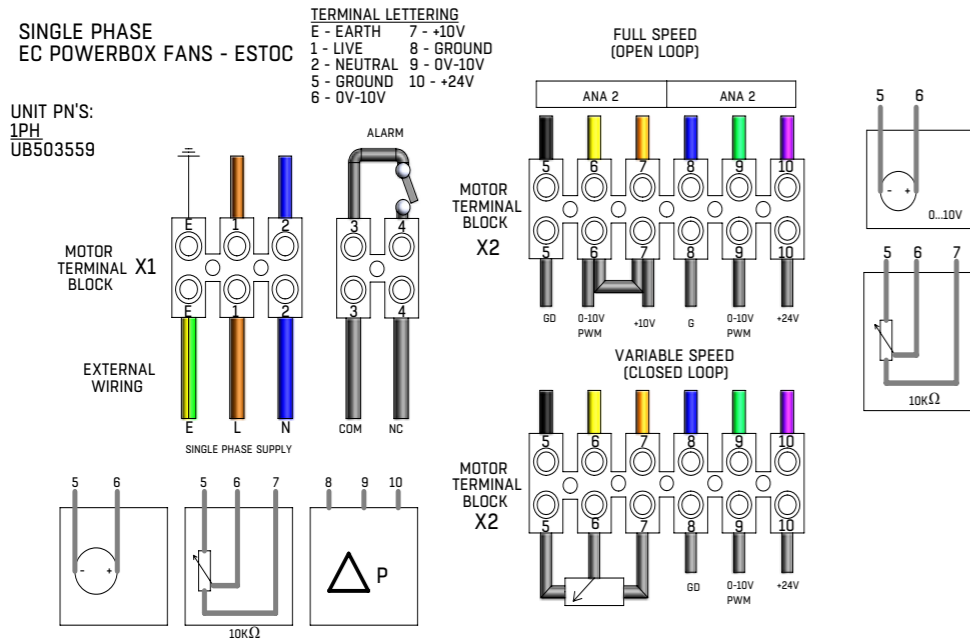
#### Outdoor installation:



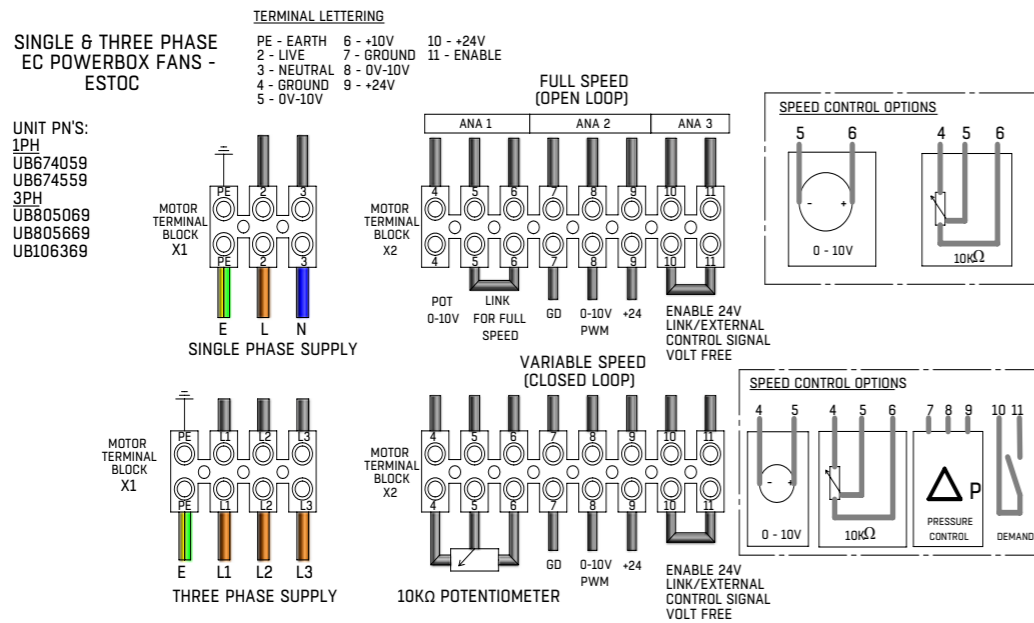


## Wiring Diagrams - ePOWERBOX EC

### CD3011



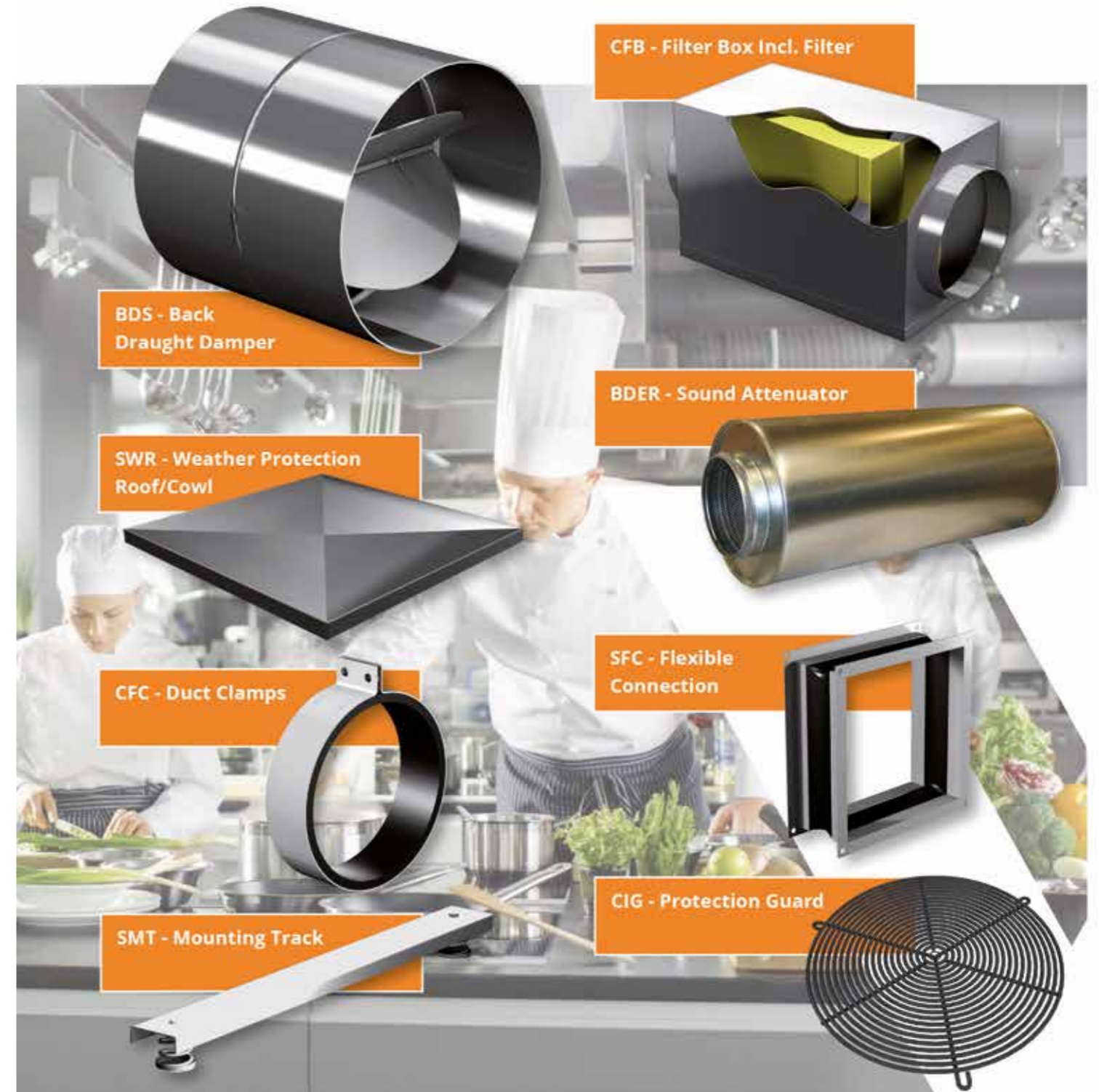
### CD3012



## BOX FAN Accessories

A large number of box fan accessories are available which are suitable for connecting to various sizes of ducts, mounting at different locations, both internal and external, and also protecting the fans against extreme weather conditions.

Protection guards, filter with filter boxes and sound attenuators (for rectangular and circular connections) are available for ready supply wherever applicable.





**PRODUCT FACTS**

- Air flow up to 3.3 m<sup>3</sup>/s
- Static pressures up to 877 Pa
- Speed controllable external rotor motors
- Horizontal or vertical mounting
- Low profile ideal for mounting in ceiling voids
- The fans are suitable for mounting internally
- Speed Controllable (0-10V) via potentiometer



**ELECTRICAL SUPPLY**

220-240V/50Hz/1f & 380-420V/50Hz/3f

**TEMPERATURE RANGE**

Maximum temperature from +45°C to +50°C (depending on the model)

**SIZES**

315, 355, 400, 450, 500 & 560 mm

**CONSTRUCTION**

The Katana is a centrifugal in-line duct fan which can be mounted in any position. Constructed from galvanized sheet metal. The flange is drilled to allow for ease of installation for mounting in any position. Equipped with complete swing-out motorised impellers for easy inspection cleaning and maintenance. The fans are driven by an external rotor EC motor, fitted in the centrifugal impeller.

**IMPELLER**

The Katana has a backward curved centrifugal impeller.

**MOTOR**

External rotor motor directly coupled class F, IP54. Motor-impeller dynamically balanced according to ISO 1940. The integrated motor protection is signaled via alarm relay.

**SPEED CONTROLLER**

Speed is 100% infinitely variable using 0-10 volt potentiometer.

**PRODUCT CODE**

Katana EC 315-2-1(A)

- Katana - Product Name
- 315 = Impeller diameter size (mm)
- 2 = 2 pole or 4 pole
- 1 = 1PH or 3 = 3PH

**ACCESSORIES**

The range of accessories include duct clamps, filters, guards, dampers, silencers, mounting brackets, shutters. A quick reference guide is shown below.



**220-240V/50HZ/1PHF & 380-420V/50HZ/3PH**



**Performance Table**

Product Code	m <sup>3</sup> /s @ Pa (Static)									
	0	100	200	300	400	500	600	700	800	900
Katana EC 315-1	0.57	0.51	0.44	0.34	0.07					
Katana EC 355-1	0.95	0.85	0.76	0.63	0.35					
Katana EC 400-1	1.35	1.26	1.17	1.08	0.97	0.83	0.61			
Katana EC 450-1	1.55	1.44	1.33	1.20	1.05	0.87	0.56			

Product Code	m <sup>3</sup> /s @ Pa (Static)									
	0	100	200	300	400	500	600	700	800	900
Katana EC 355-3	1.10	1.02	0.94	0.86	0.76	0.61	0.34			
Katana EC 400-3	1.36	1.28	1.19	1.09	0.98	0.85	0.66	0.19		
Katana EC 450-3	1.80	1.71	1.62	1.52	1.41	1.29	1.15	0.99	0.81	0.01
Katana EC 500-3	2.67	2.56	2.44	2.30	2.14	1.99	1.75	1.51	1.30	0.86
Katana EC 560-3	3.33	3.19	3.05	2.90	2.71	2.51	2.24	1.93	1.50	0.24

**Product and Electrical Details**

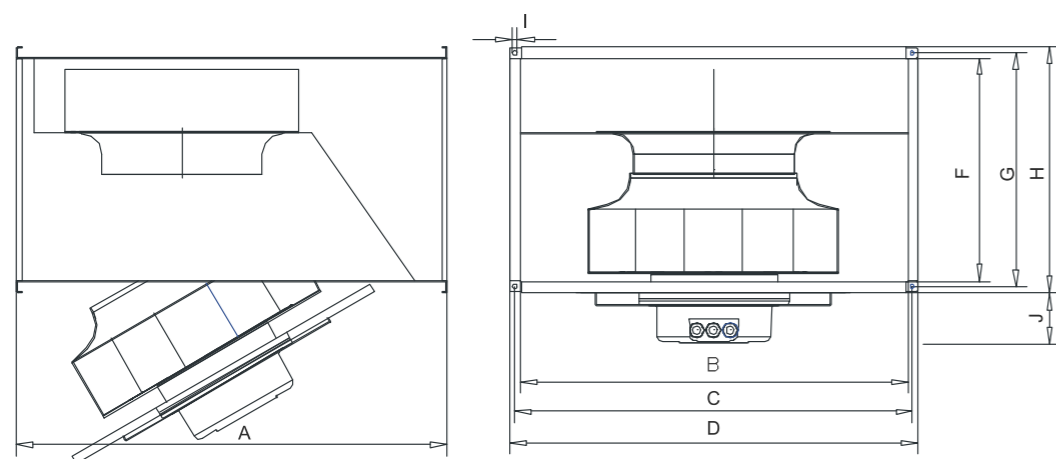
Product Code	Part Number	Speed rpm	Motor Frame	Electrical Supply	Motor Details			Speed Controller	Maximum Operating Temp °C	Breakout Sound Level at 3m (dbA)
					Motor (kW)	Nominal Current (A)	Motor Eff. Rating			
Katana EC 315-1	RE315001	1650	Integral	220-240V/ 50Hz/ 1ph	0.21	0.96	IE4	0-10V Potentiometer	50	40
Katana EC 355-1	RE355052	1500	Integral	220-240V/ 50Hz/ 1ph	0.36	1.6	IE4	0-10V Potentiometer	50	37
Katana EC 400-1	RE400003	1700	Integral	220-240V/ 50Hz/ 1ph	0.8	3.55	IE4	0-10V Potentiometer	50	46
Katana EC 450-1	RE450023	1450	Integral	220-240V/ 50Hz/ 1ph	0.84	3.72	IE4	0-10V Potentiometer	50	46

Product Code	Part Number	Speed rpm	Motor Frame	Electrical Supply	Motor Details			Speed Controller	Maximum Operating Temp °C	Breakout Sound Level at 3m (dbA)
					Motor (kW)	Nominal Current (A)	Motor Eff. Rating			
Katana EC 355-3	RE355007	1800	Integral	380-420V/ 50Hz/ 3ph	0.6	1.2	IE4	0-10V Potentiometer	50	50
Katana EC 400-3	RE400005	1700	Integral	380-420V/ 50Hz/ 3ph	0.8	1.5	IE4	0-10V Potentiometer	50	49
Katana EC 450-3	RE450005	1700	Integral	380-420V/ 50Hz/ 3ph	1.3	2.3	IE4	0-10V Potentiometer	50	47
Katana EC 500-3	RE500004	1580	Integral	380-420V/ 50Hz/ 3ph	1.83	2.88	IE4	0-10V Potentiometer	60	45
Katana EC 560-3	RE560004	1440	Integral	380-420V/ 50Hz/ 3ph	2.47	3.85	IE4	0-10V Potentiometer	60	42

\*Sound power levels are average dbA at 3 metres 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 speed controllers, please see pages 250-297. For ErP efficiency ratings and grades please refer to our Fan Selector for more information.

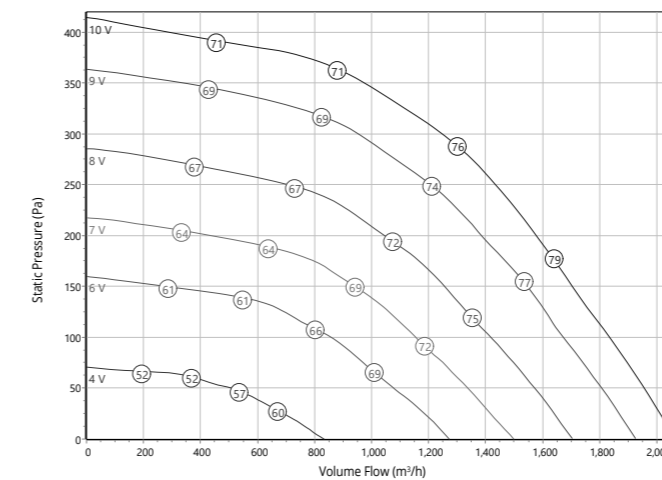
Drawing and Dimensions



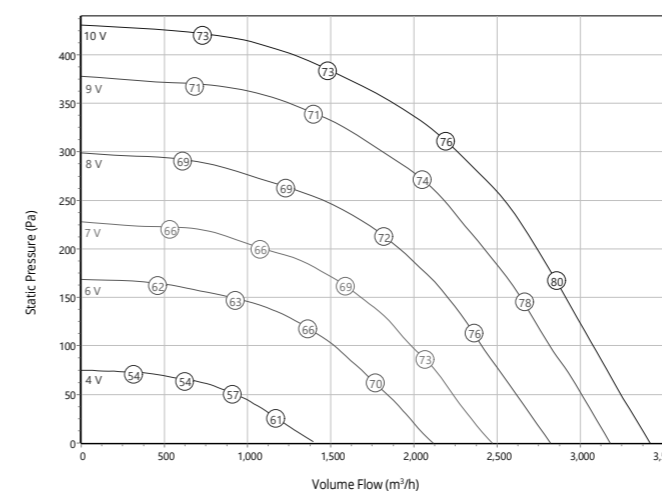
Product Code	A	B	C	D	F	G	H	I	J	Weight max (kg)
KATANA EC 315-1	700	600	620	640	350	370	391	9	81	36
KATANA EC 355-1	700	600	620	640	350	370	391	9	52	36.5
KATANA EC 355-3	700	600	620	640	350	370	391	9	52	36.5
KATANA EC 400-3	700	600	620	640	350	370	391	9	84	36.5
KATANA EC 450-3	780	700	720	740	400	420	442	9	73	51
KATANA EC 500-3	880	800	820	840	500	520	542	9	88	78
KATANA EC 560-3	982	1000	1020	1040	500	520	543	9	88	91

Performance charts

KATANA EC 315-1 - RE315001

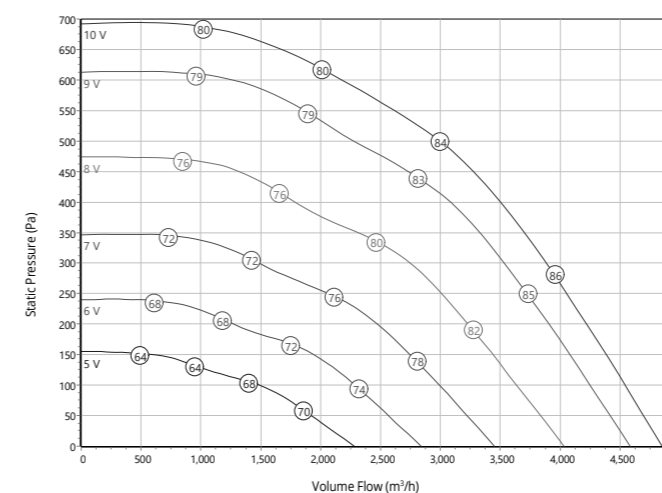


KATANA EC 355-1 - RE355052



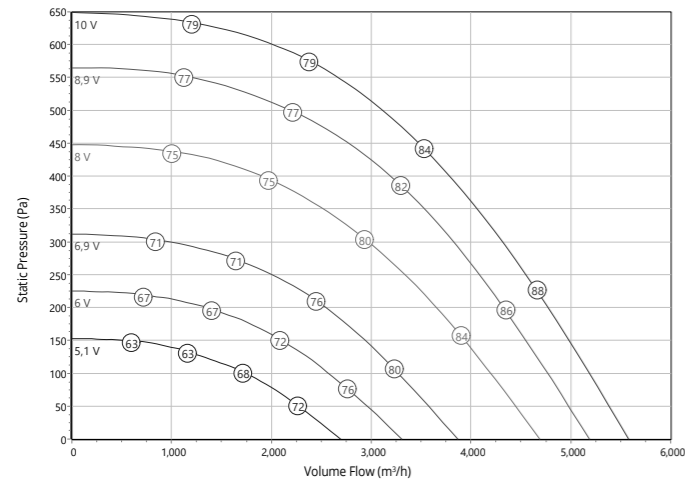
Please note :-  
The performances shown are based on the centrifugal 90 degrees discharge, for the axial flow performance please contact our sales team.

KATANA EC 400-1 - RE400003

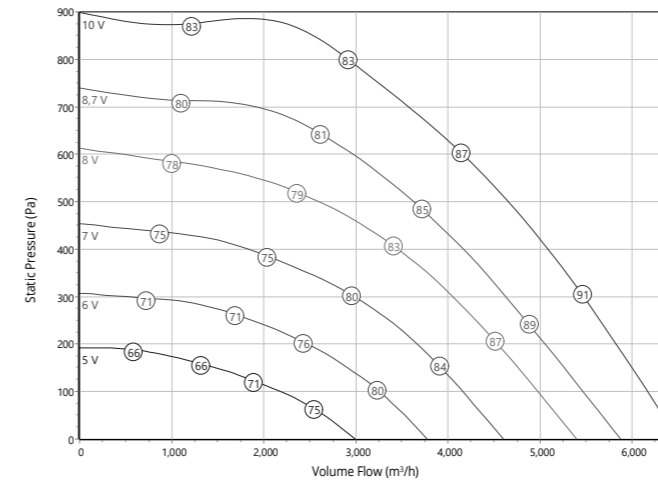


Performance charts

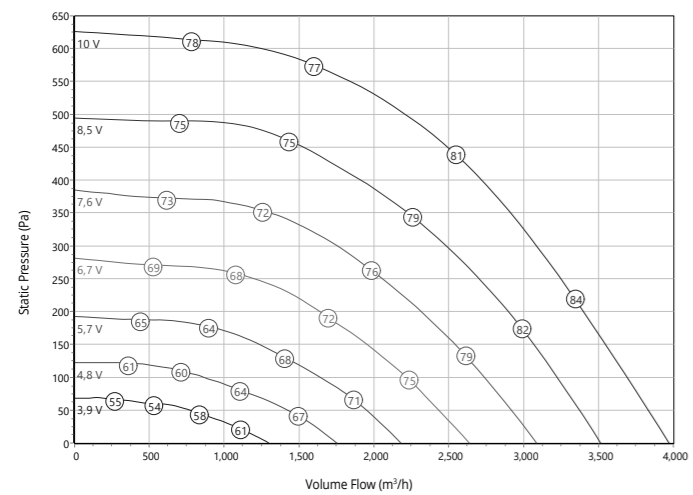
KATANA EC 450-1 - RE450023



KATANA EC 450-3 - RE450005

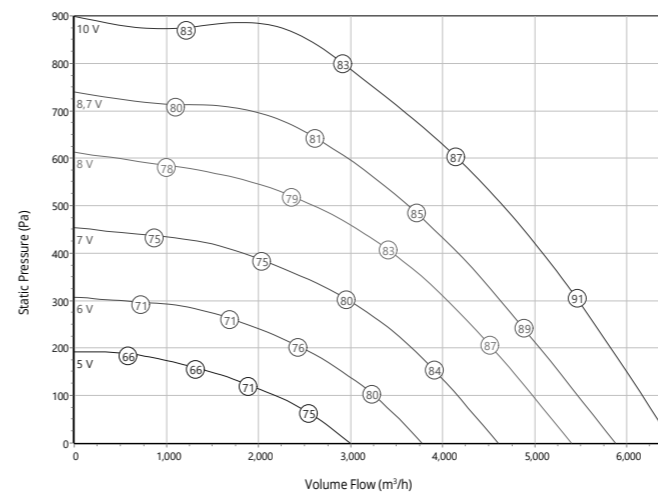


KATANA EC 355-3 - RE355007



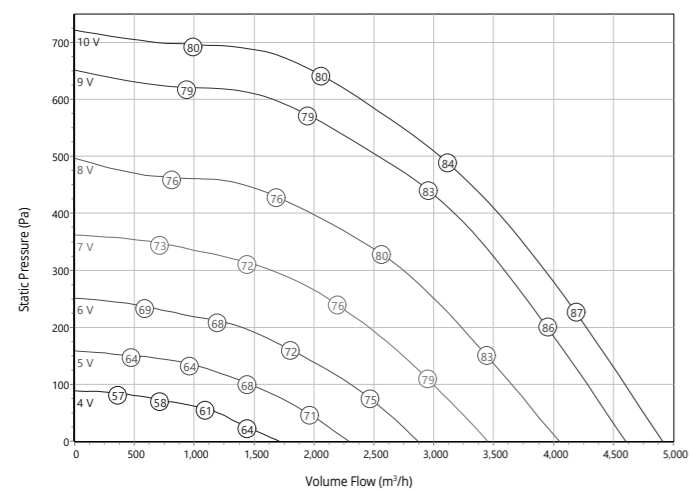
Please note :-  
The performances shown are based on the centrifugal 90 degrees discharge, for the axial flow performance please contact our sales team.

KATANA EC 500-3 - RE500004

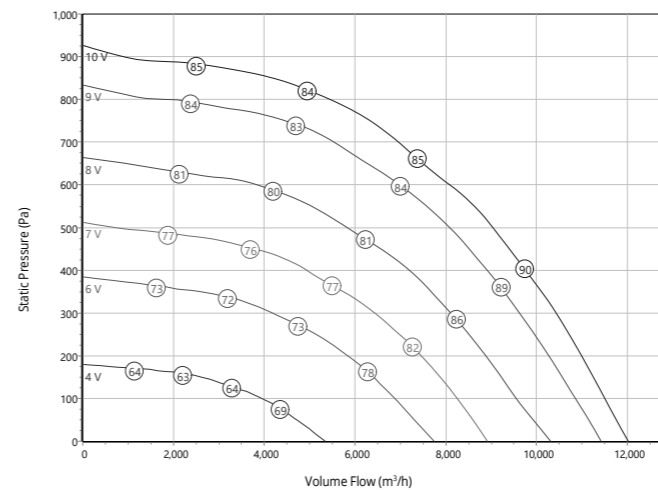


Please note :-  
The performances shown are based on the centrifugal 90 degrees discharge, for the axial flow performance please contact our sales team.

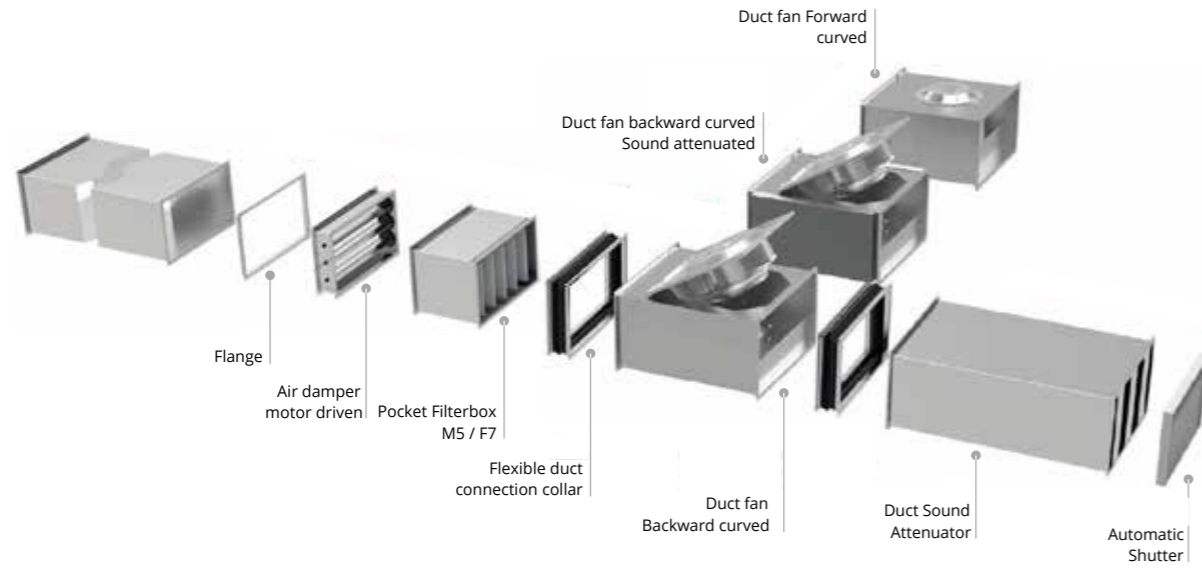
Katana EC 400-3 - RE400005



KATANA EC 560-3 - RE560004



Construction Scheme



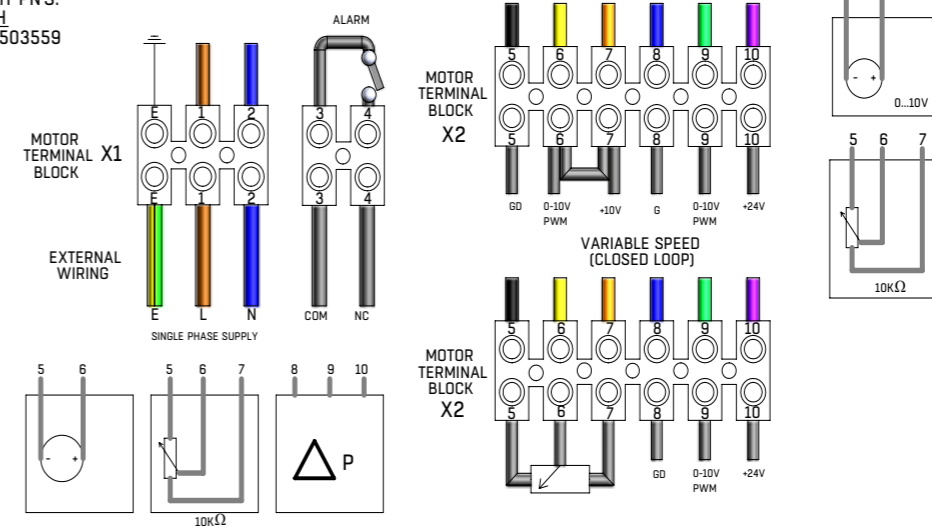
Wiring Diagrams - KATANA

CD3011

SINGLE PHASE  
EC POWERBOX FANS - ESTOC

UNIT PN'S:  
1PH  
UB503559

TERMINAL LETTERING  
E - EARTH 7 - +10V  
1 - LIVE 8 - GROUND  
2 - NEUTRAL 9 - 0V-10V  
5 - GROUND 10 - +24V  
6 - 0V-10V

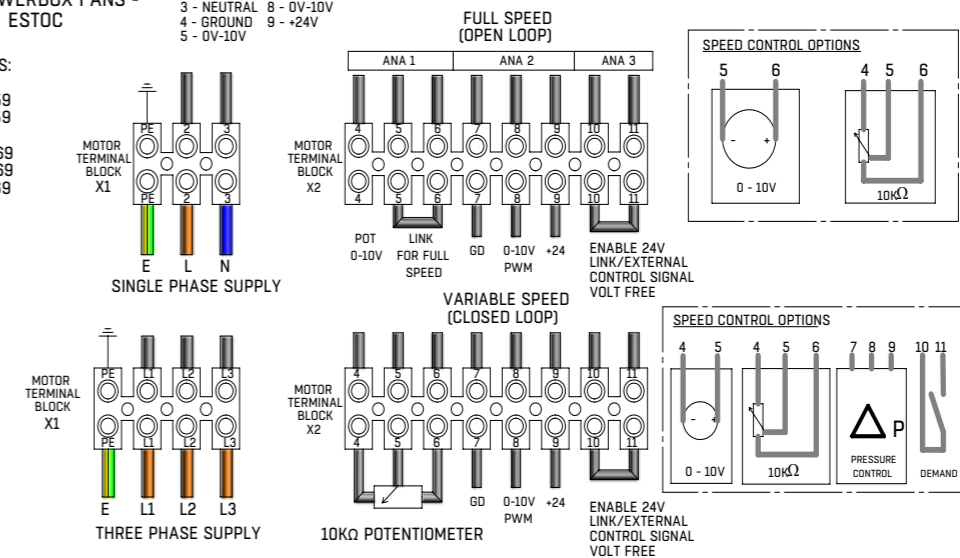


CD3012

SINGLE & THREE PHASE  
EC POWERBOX FANS -  
ESTOC

UNIT PN'S:  
1PH  
UB674059  
UB674559  
3PH  
UB805069  
UB805669  
UB106369

TERMINAL LETTERING  
PE - EARTH 6 - +10V 10 - +24V  
2 - LIVE 7 - GROUND 11 - ENABLE  
3 - NEUTRAL 8 - 0V-10V  
4 - GROUND 9 - +24V  
5 - 0V-10V



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