POWERBOX FANS
ePOWERBOX

PRODUCT FACTS

- Air flow up to 5.2 m^3/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/1ϕ & 380-420V/50Hz/3ϕ

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 casing is made from galvanized sheet steel with PentaPost construction and acoustic insulation made from mineral wool with a thickness of 20 mm.

IMPELLER

The ePowerBox 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 560 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 (please see pages 265-314).

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

PRODUCT CODE

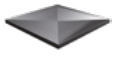
ePowerBox 50-355-3

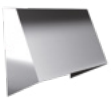
- ePowerBox - Product Name
- 50 = Box Size ie, 50 = 500mm; 67 = 670mm; 80 = 800mm; 102 = 1020mm
- 355 = Spigot Diameter size
- 1 = 1ϕ or 3 = 3ϕ

ACCESSORIES (Pages 182-192) - CONTROLLERS (Pages 250-297)

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.


SFC


SWR


SOC


Controls Transformer


Mounting track/SMT


Controls Inverter

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web: www.airtrend.rs

PERFORMANCE AND ELECTRICAL DATA

220-240V/50Hz/1ϕ & 380-420V/50HZ/3ϕ

PERFORMANCE TABLE

Product Code	m³/s @ Pa (Static)													
	0	50	100	150	200	250	300	350	400	450	500	550	600	650
ePowerBox 50-355-1	1.3	1.24	1.17	1.11	1.04	0.97	0.87	0.75	0.58	0.18				
ePowerBox 67-400-1	0.91	0.86	0.79	0.73	0.66	0.57	0.45	0.18						
ePowerBox 67-450-1	1.91	1.84	1.77	1.69	1.61	1.53	1.44	1.33	1.21	1.08	0.91	0.6	0.13	
ePowerBox 67-500-1	2.61	2.52	2.43	2.34	2.24	2.15	2.05	1.94	1.83	1.7	1.55	1.39	1.16	0.86

Product Code	m³/s @ Pa (Static)										
	0	100	200	300	400	500	600	700	800	900	1000
ePowerBox 50-355-3	0.93	0.8	0.65	0.43							
ePowerBox 67-400-3	1.3	1.15	1.01	0.81	0.4						
ePowerBox 67-450-3	1.81	1.66	1.49	1.3	1.03	0.59	0.02				
ePowerBox 67-500-3	2.58	2.4	2.23	2.03	1.82	1.55	1.16	0.38			
ePowerBox 80-560-3	3.61	3.4	3.19	2.98	2.75	2.47	2.13	1.69	0.88	0.22	
ePowerBox 80-630-3	4.01	3.82	3.64	3.44	3.25	3.05	2.83	2.57	2.24	1.74	0.13
ePowerBox 102-710-3	4.82	4.47	4.07	3.63	3.14	2.59	0.99				

PRODUCT AND ELECTRICAL DETAILS

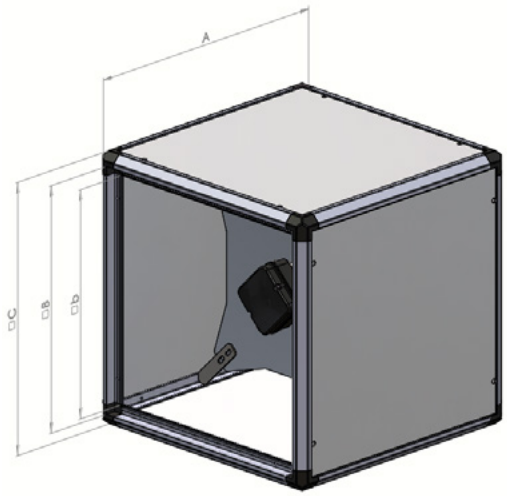
Product Code	Product Number	Speed rpm	Motor Frame	Electrical Supply	Electrical Current			Wiring Diagrams	**Speed Controllers	Maximum Operating Temp°C	Breakout
					Motor (kW)	Full Load Current (A)	Starting Current (A)		Transformer		*Sound Level db(A) (3m)
ePowerBox 50-355-1	BE355017	1325	Integral	220-240 V-50 Hz-1 Ph	0.28	1.35	4.46	CD3028	TEID 1.5	65	33
ePowerBox 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 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 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

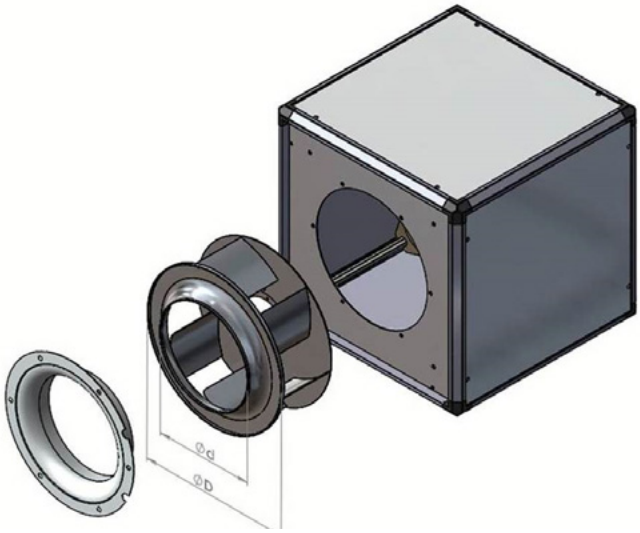
Product Code	Product Number	Speed rpm	Motor Frame	Electrical Supply	Electrical Current			Wiring Diagrams	**Speed Controllers	Maximum Operating Temp°C	Breakout
					Motor (kW)	Full Load Current (A)	Starting Current (A)		Transformer		*Sound Level db(A) (3m)
ePowerBox 50-355-3	BE355018	1355	Integral	380-420V-50 Hz-3 Ph	0.28	0.67	2.68	CD3030	IDDXF54 2.2	70	34
ePowerBox 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 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 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 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 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 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 see pages 250-297. For ErP efficiency ratings and grades please refer to our Fan Selector for more information.

DRAWING AND DIMENSIONS



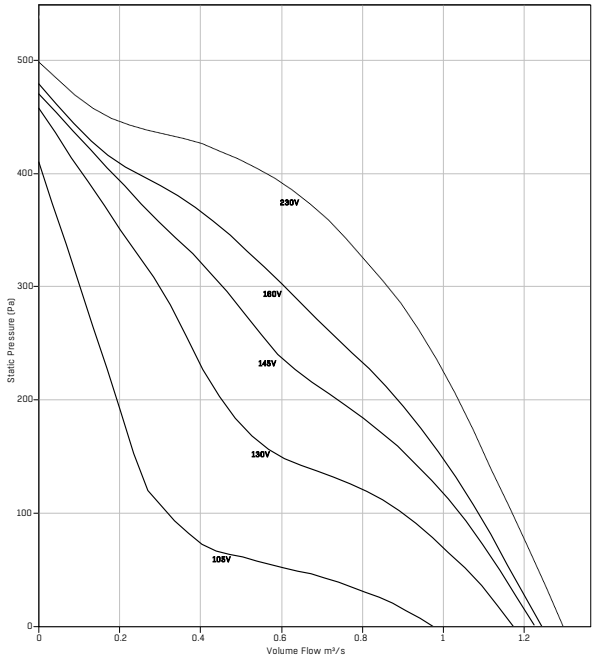


Product Code	A	B	b	C	Ø D	Ø d	Weight max (kg)
ePowerBox 50-355	500	450	420	500	365	224	33
ePowerBox 67-400	670	620	590	670	404	253	49
ePowerBox 67-450	670	620	590	670	454	286	58
ePowerBox 67-500	670	620	590	670	504	321	66
ePowerBox 80-560	800	720	690	800	570	361	95
ePowerBox 80-630	800	720	690	800	634	407	105
ePowerBox 102-710	1020	940	910	1020	718	438	157

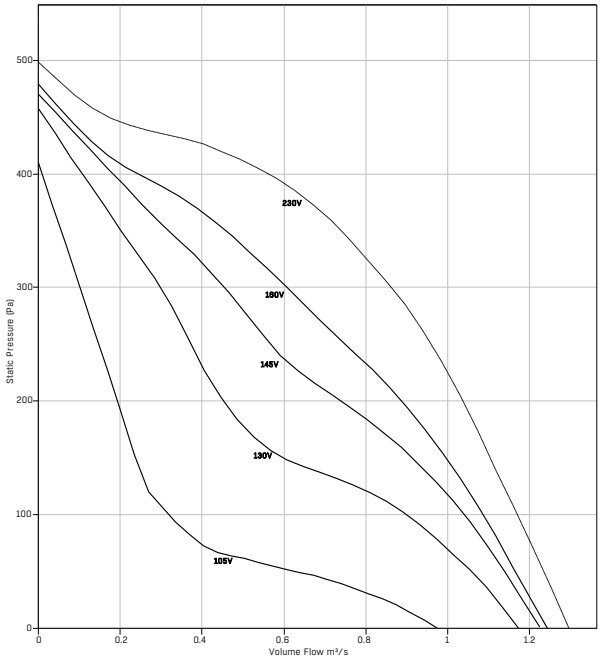
All dimensions shown in mm

PERFORMANCE CHARTS

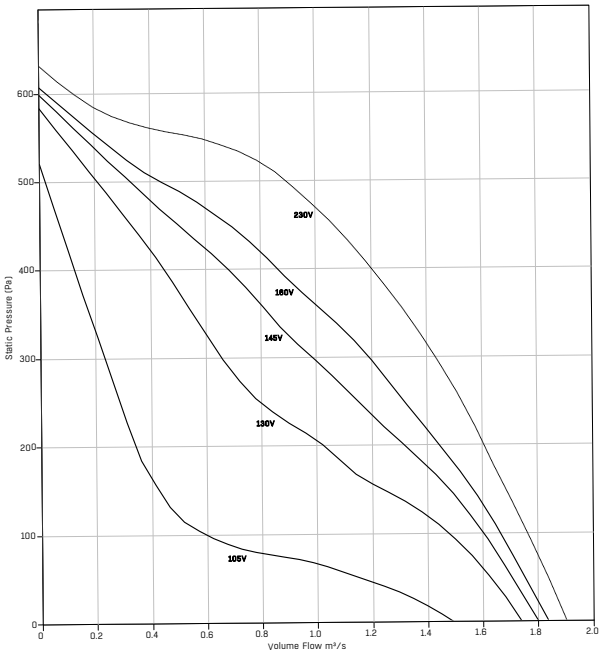
ePOWERBOX 50-355-1 - BE355017



ePOWERBOX 67-400-1 - BE400018



ePOWERBOX 67-450-1 BE450022

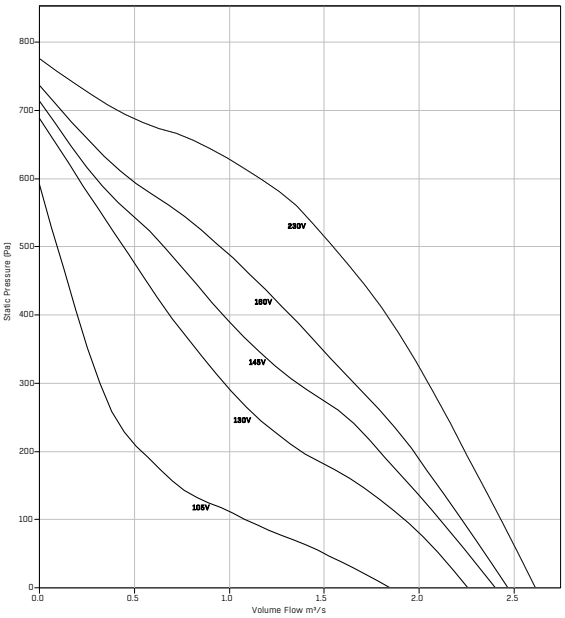


Please note : -

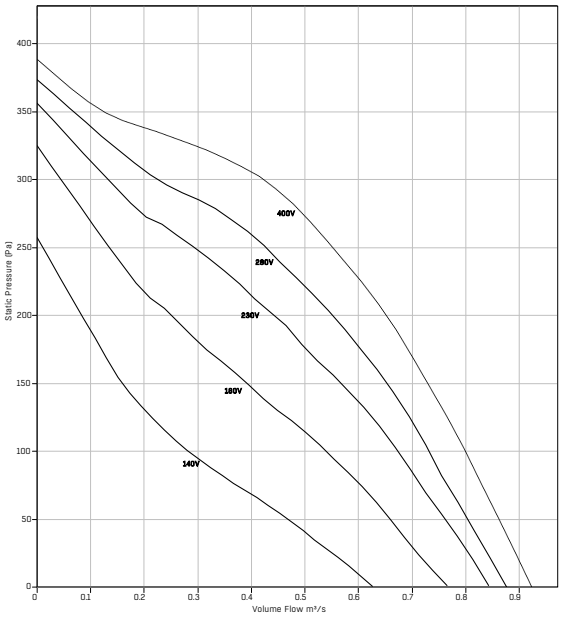
The performances shown are based on the centrifugal 90 degrees discharge, for the axial flow performance please contact our sales team.

PERFORMANCE CHARTS

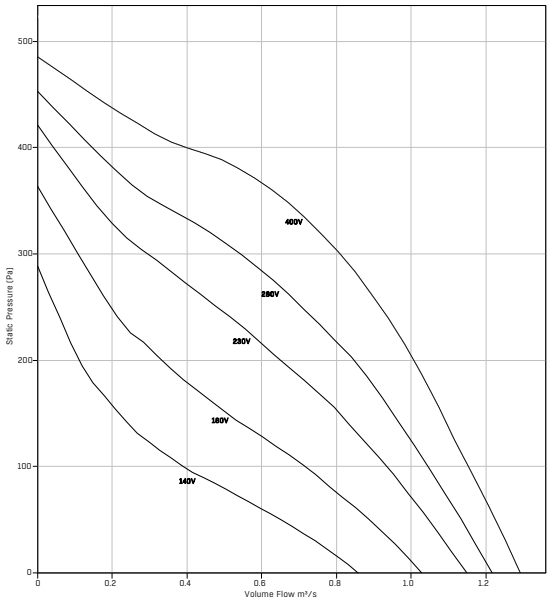
ePOWERBOX 67-500-1 - BE500003



ePOWERBOX 50-355-3 - BE355018



ePOWERBOX 67-400-3 - BE400019

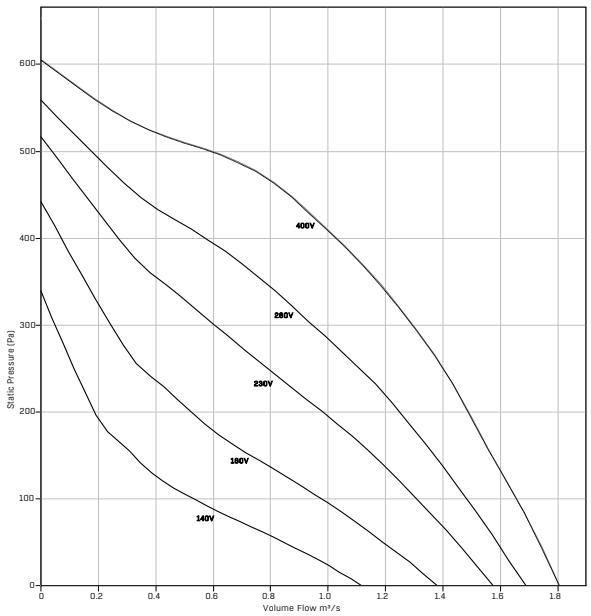


Please note : -

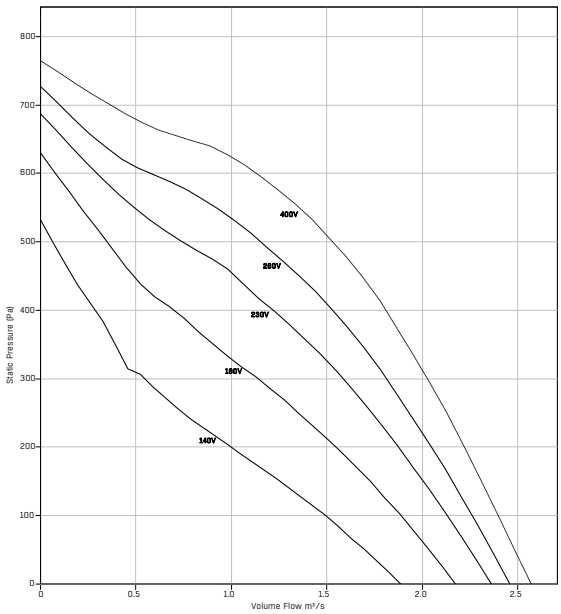
The performances shown are based on the centrifugal 90 degrees discharge, for the axial flow performance please contact our sales team.

PERFORMANCE CHARTS

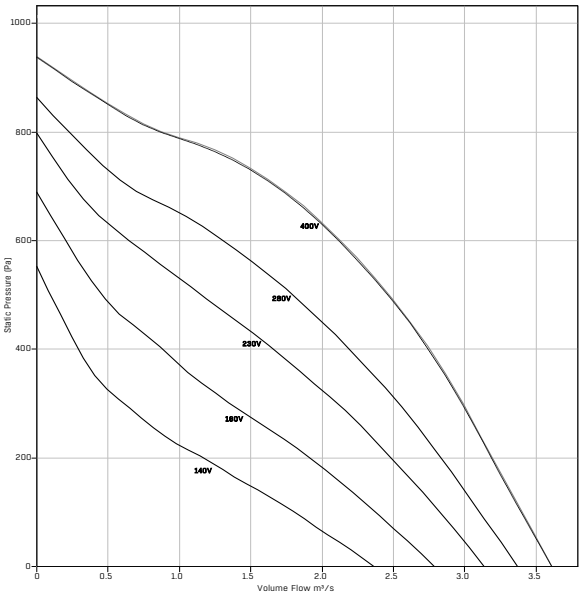
ePOWERBOX 67-450-3 - BE450019



ePOWERBOX 67-500-3 - BE500004



ePOWERBOX 67-560-3 - BE560023

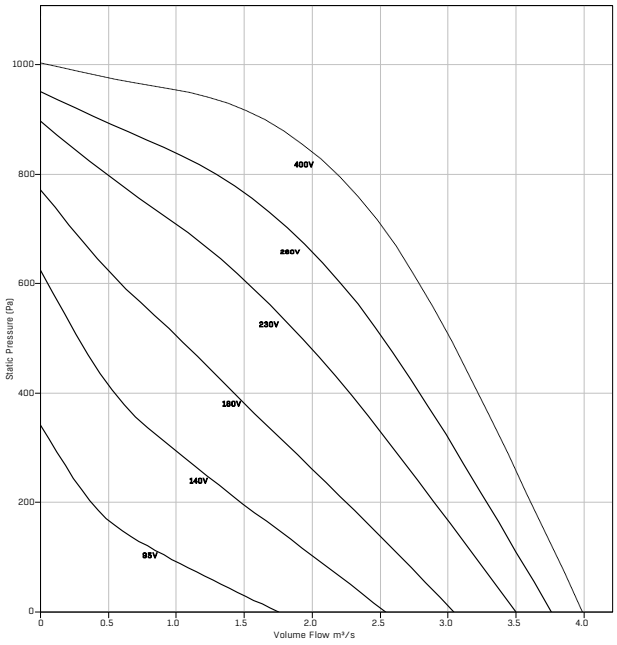


Please note : -

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

PERFORMANCE CHARTS

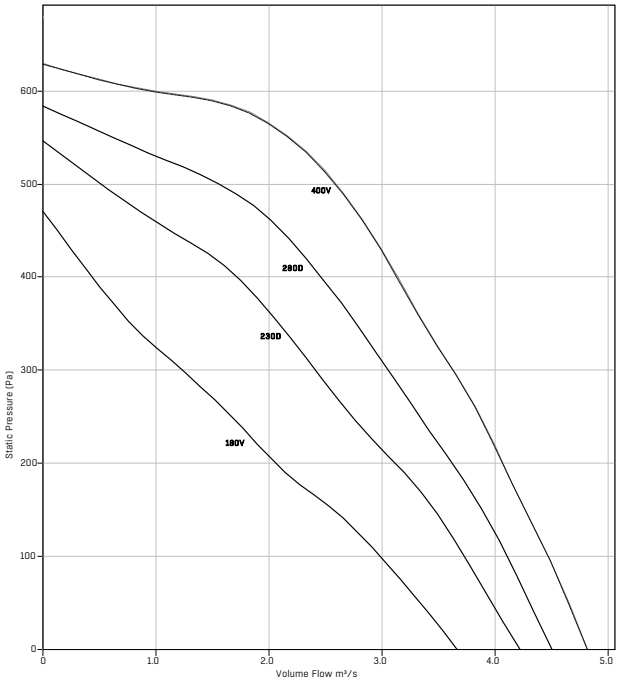
ePOWERBOX 80-630-3 - BI101234



Please note : -

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

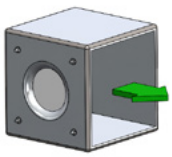
ePOWERBOX 102-710-3 - BI101237

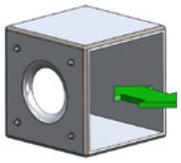


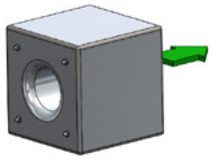
Please note: Performance curve is at rated voltage, shown at in-line axial air flow within Estoc Unit.

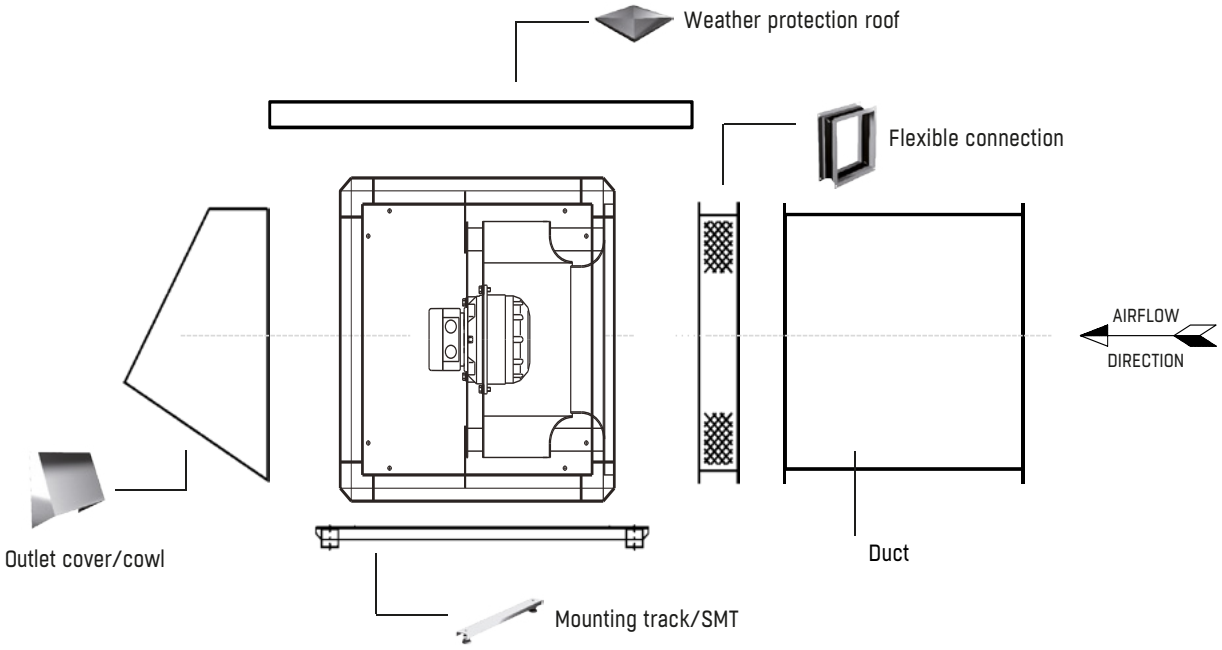
INSTALLATION GUIDE

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


Centrifugal Discharge


Centrifugal on both sides - free discharge


Axial Discharge



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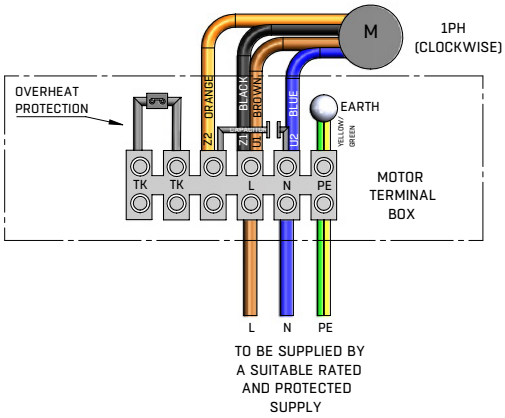
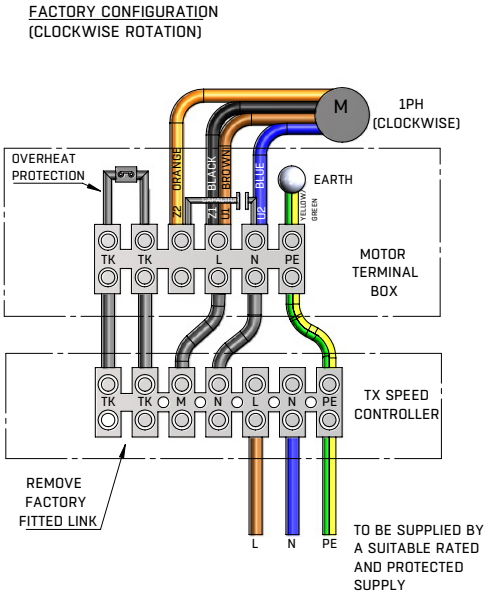
WIRING DIAGRAMS - ESTOC

CD3028





CD3030