



## Direct Drive Exhaust Air Units **AM-BF-EX-AC**



### APPLICATION

Aire Maskin Double Skin fans are specially designed for supply and exhaust ventilation of premises requiring high pressure, powerful air flow and low noise level. These fans are featured with wide capabilities and high performance. The range includes capacity from 100 cfm to 7000 cfm with pressure range from 100 Pa to 750 Pa. No condensate formation can be used for Outdoor Applications also.

### AREAS OF APPLICATION

Hospitals / Isolation Rooms / COVID Wards / labs / Offices / Hotels / Bars / Industrial Buildings / Basement Rooms / Greenhouses / Parking Facilities / Warehouses / Nursing Homes / Schools / Sports Halls / Super Markets / Workshops / Residential Houses / Fitness Centers

### DESIGN

Casing:

- The housing is made of an extruded aluminium anodized profile with corners made of plastic.
- **OPTION I** : Double skinned 25mm / 50 mm galvanized steel panels insulated with Puff Insulation. Outer GSS sheet minimum 0.8 mm thick and inner 0.6 mm thick as standard. The inner and outer thickness can be increased as per client requirement.
- **OPTION II - PREMIUM UNITS WITH LOW NOISE LEVELS** Double skin with Thick insulating layer of non-combustible, heat-insulated, sound that ensures silent fan operation in combination with high aerodynamic characteristics. Outer GSS sheet minimum 1 mm thick and inner 1 mm thick perforated sheet as standard. Special inner perforation of the casing and sound-insulating material is designed for wide-frequency sound absorption. The inner casing perforation let sound waves pass through the holes and fall at a specific angle to the sound absorbing layer there by making unit with low noise levels.

### IMPELLERS

The impellers are balanced dynamically together with the external rotor motors at two levels according to quality level G2.5/G6.3 to DIN ISO 21940-11.

Up to size 225 : Backward curved centrifugal impellers made of plastic

Size 280 GSS

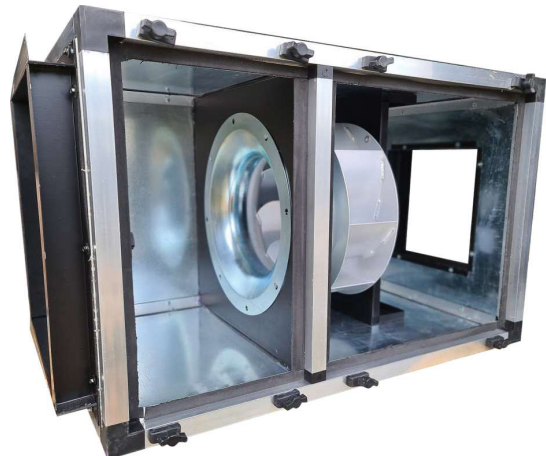
Size 315 to 630 : High efficiency backward curved centrifugal impellers made of aluminum

### MOTOR

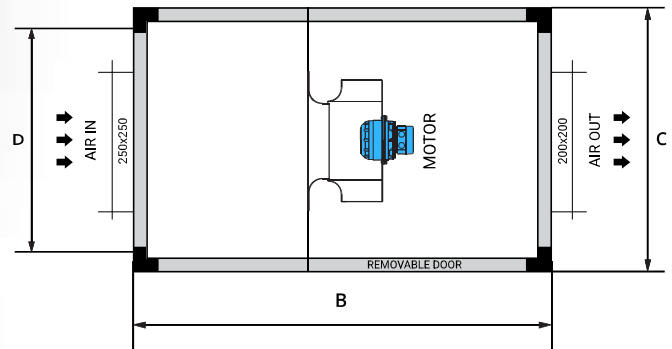
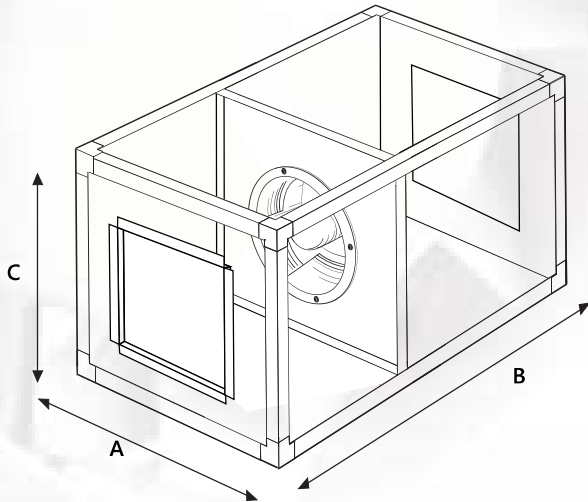
All fans are equipped with direct driven external rotor motors i.e the motors is fitted with impeller with low energy demand. This makes unit compact and hence a lot of space is saved. The motor comes with double ball bearing motor with built in thermal overload protection and Class F Insulation. In addition External rotor motors have extremely low starting currents and the windings have a standard moisture impregnation.

### WIRING

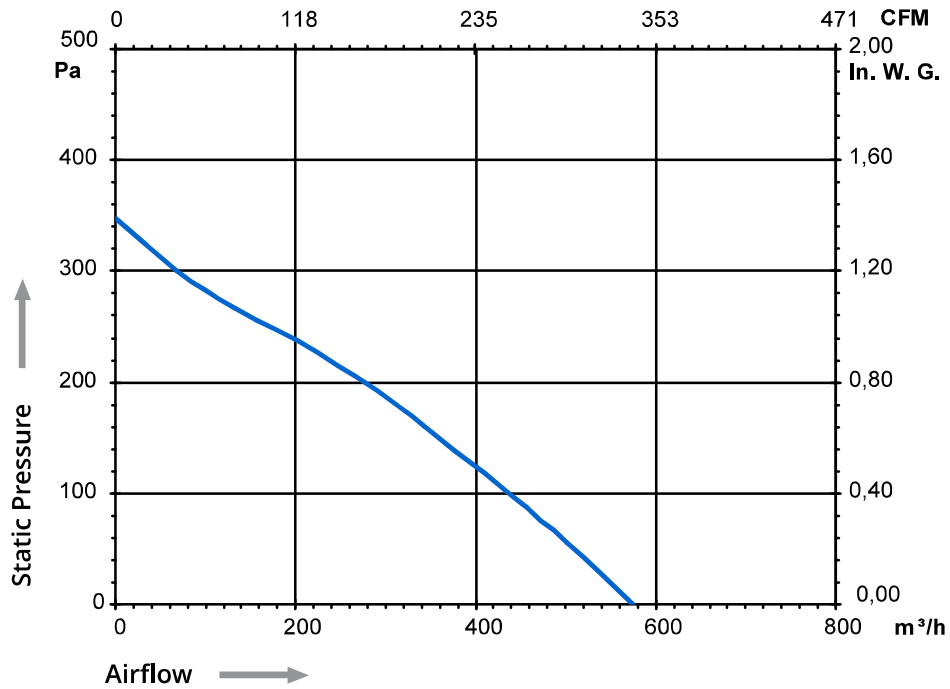
The junction / terminal box is affixed to the motor housing.



# AM- BF- EX- AC- 192

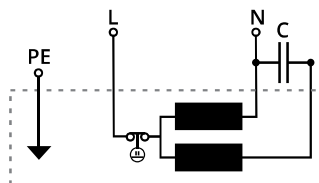


A = 410      C = 410  
B = 640      D = 350



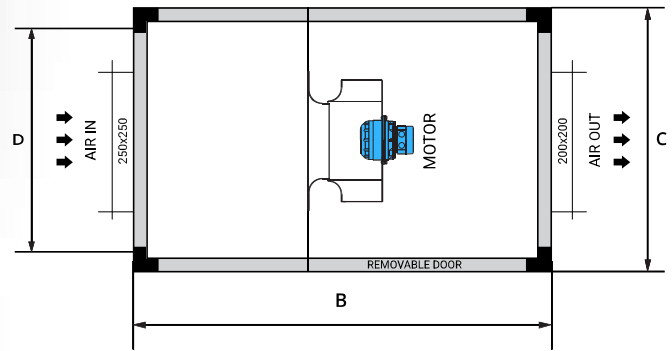
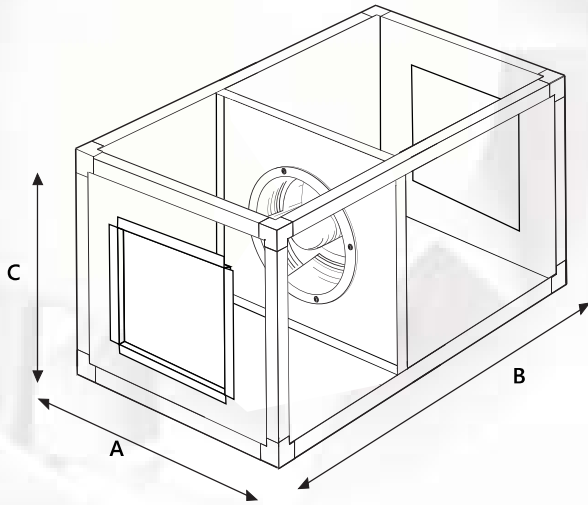
## SPECIFICATIONS

Voltage [V]	Power [W]	Current [A]	Frequency [Hz]	Capacitor [µF]	RPM	dBA	Temp min / max	Weight	IP 44
230	62	0.28	50	2.0	2 510	45	-20°C / +70°C	22 Kg	IP 44

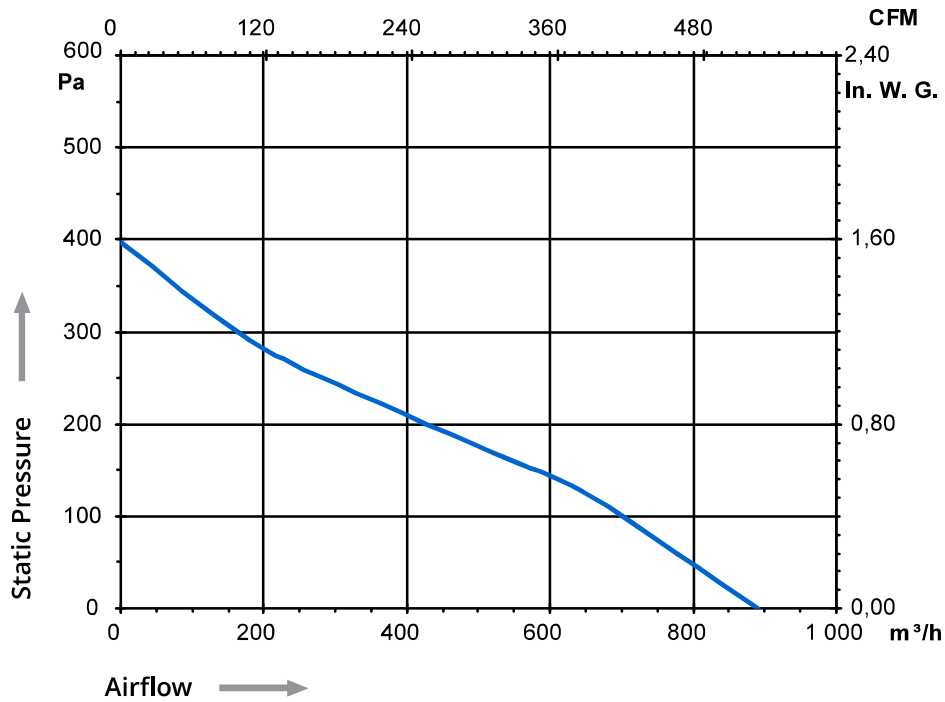


PE - Green / Yellow  
L - Blue  
N - Black  
C - Brown

# AM- BF- EX- AC- 220

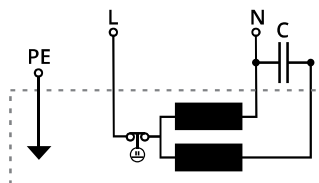


A = 410      C = 410  
B = 640      D = 350



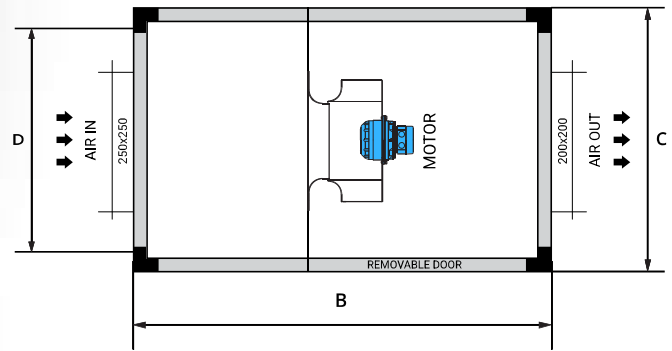
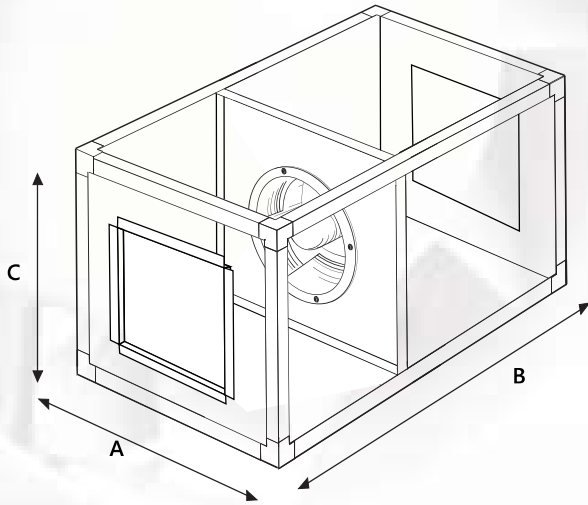
## SPECIFICATIONS

Voltage [V]	Power [W]	Current [A]	Frequency [Hz]	Capacitor [µF]	RPM	dBA	Temp min / max	Weight	IP 44
230	84	0.38	50	2.0	2 350	45	-20°C / +60°C	22 Kg	IP 44

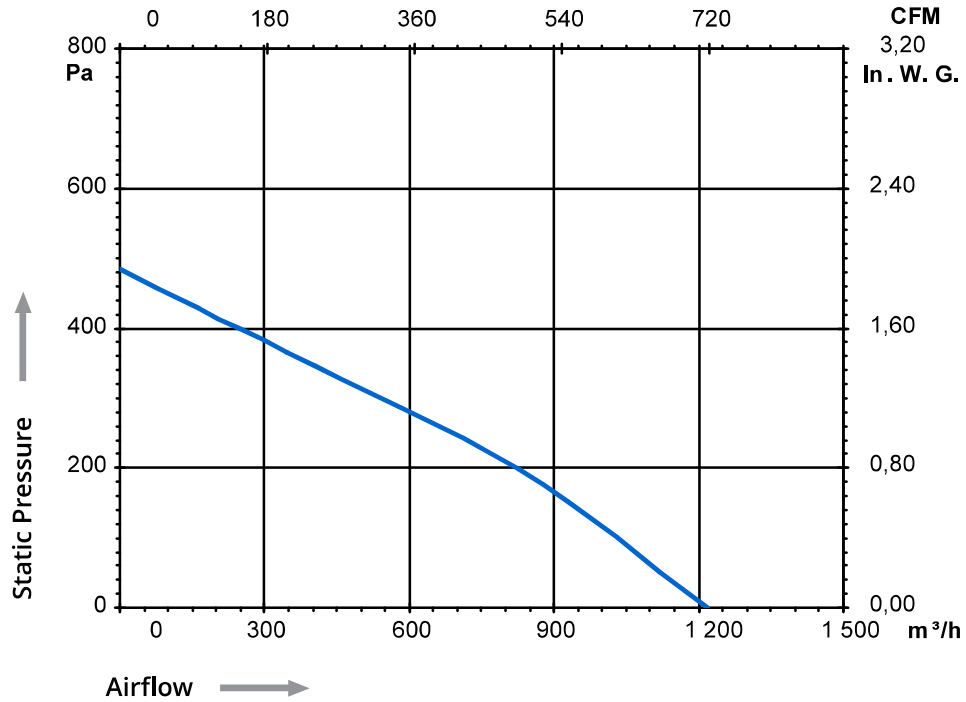


PE - Green / Yellow  
L - Blue  
N - Black  
C - Brown

# AM- BF- EX- AC- 225

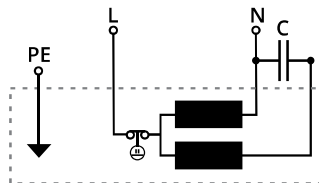


A = 410      C = 410  
B = 640      D = 350



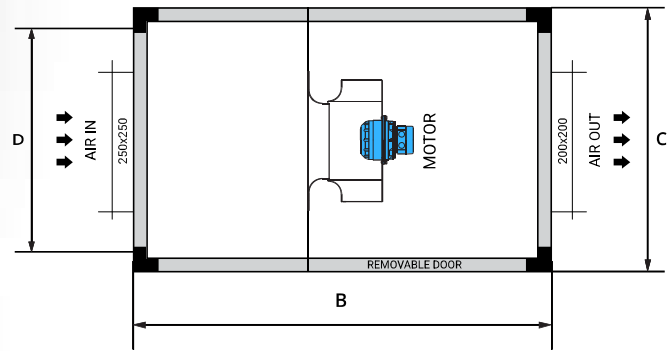
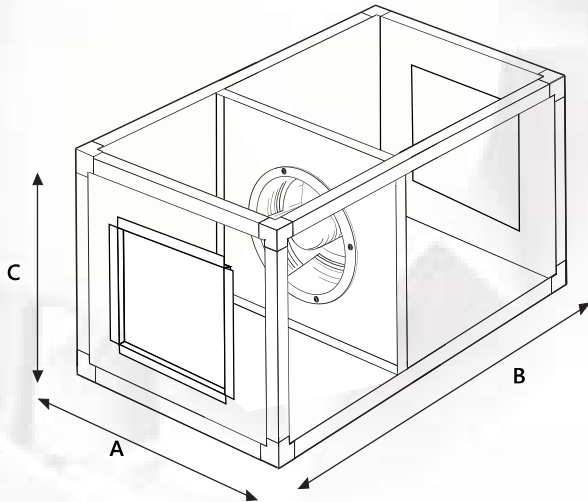
## SPECIFICATIONS

Voltage [V]	Power [W]	Current [A]	Frequency [Hz]	Capacitor [µF]	RPM	dBA	Temp min / max	Weight	IP 44
230	143	0.63	50	4.0	2 505	48	-20°C / +70°C	23 Kg	IP 44

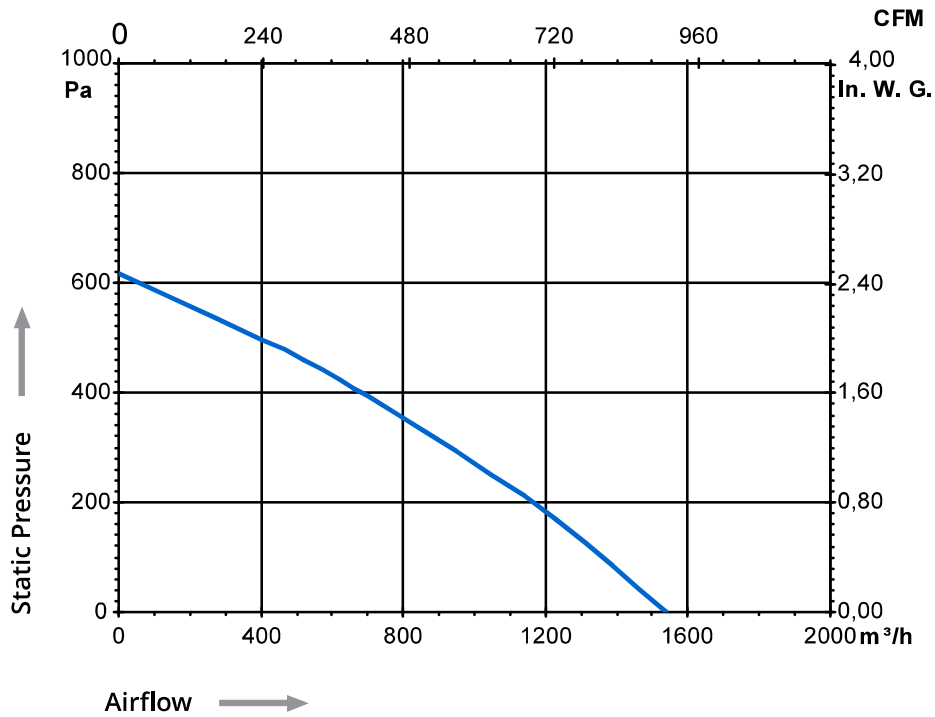


PE - Green / Yellow  
L - Blue  
N - Black  
C - Brown

# AM- BF- EX- AC- 250

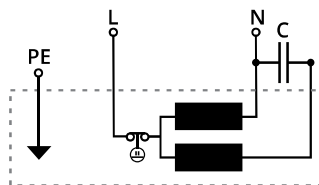


A = 460      C = 460  
B = 690      D = 400



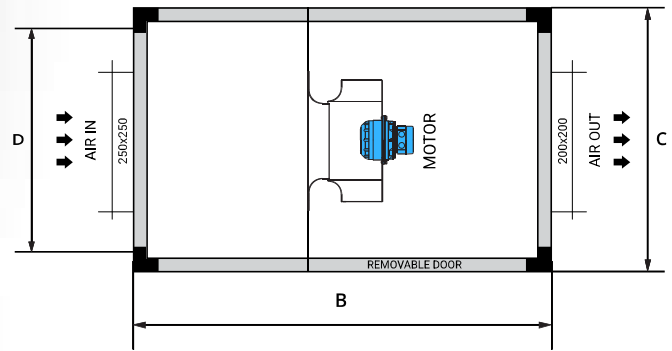
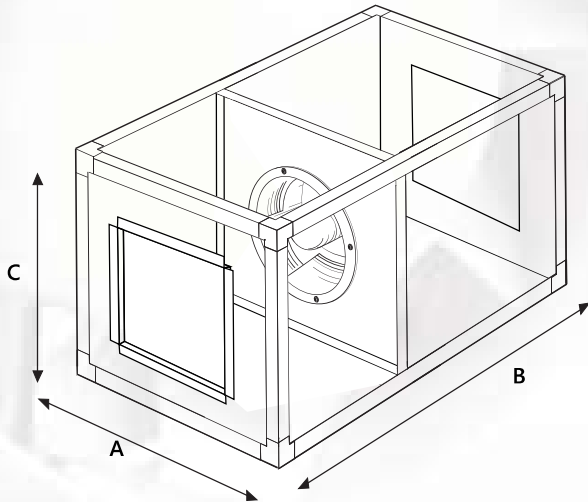
## SPECIFICATIONS

Voltage [V]	Power [W]	Current [A]	Frequency [Hz]	Capacitor [µF]	RPM	dBA	Temp min / max	Weight	IP 44
230	190	0.83	50	6.0	2 700	46	-20°C / +60°C	30 Kg	IP 44

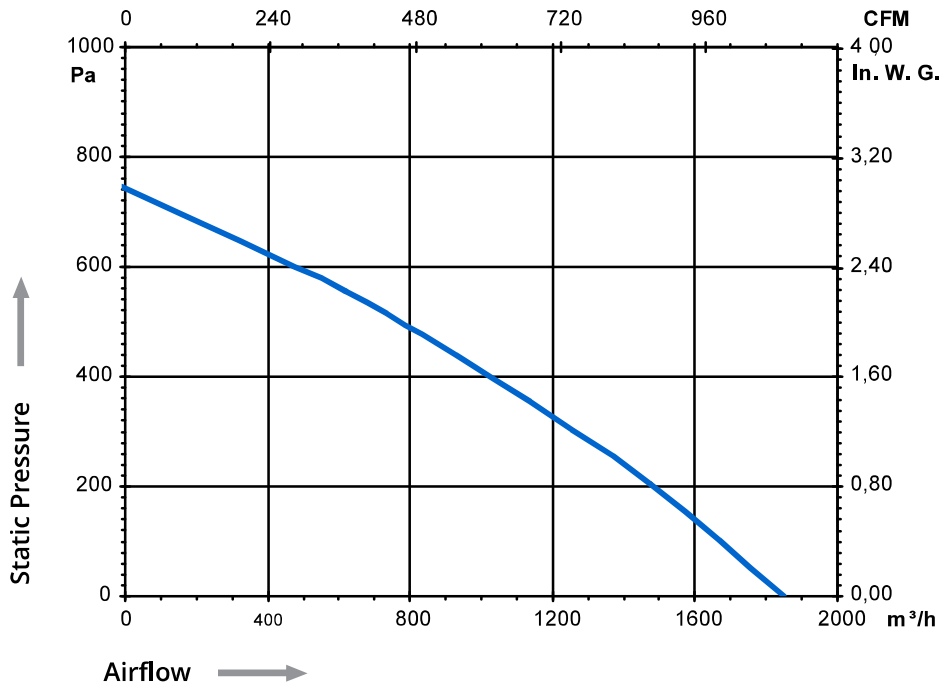


PE - Green / Yellow  
L - Blue  
N - Black  
C - Brown

# AM- BF- EX- AC- 280x4

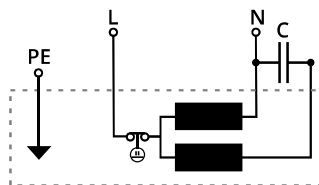


A = 510      C = 510  
B = 740      D = 450



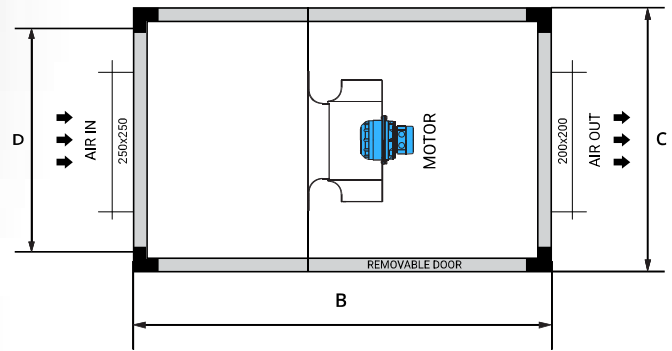
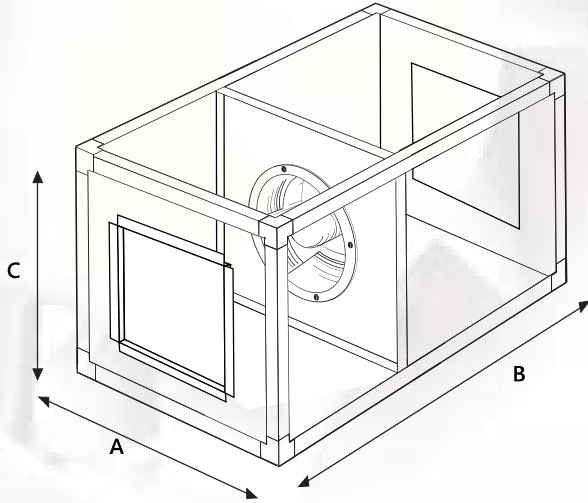
## SPECIFICATIONS

Voltage [V]	Power [W]	Current [A]	Frequency [Hz]	Capacitor [µF]	RPM	dBA	Temp min / max	Weight	IP 44
230	216	0.98	50	8.0	2 735	50	-20°C / +60°C	34 Kg	IP 44

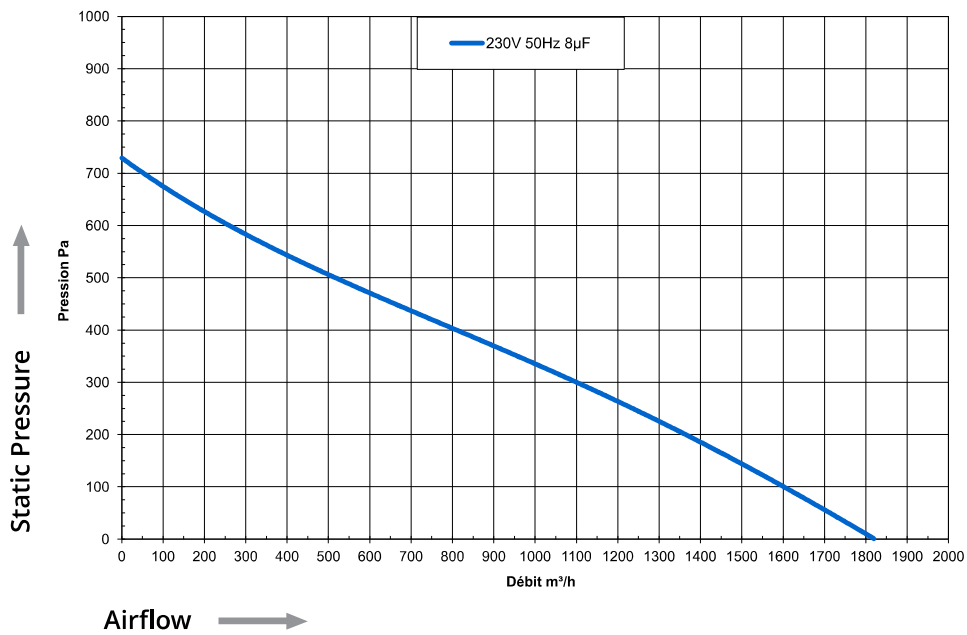


PE - Green / Yellow  
L - Blue  
N - Black  
C - Brown

# AM- BF- EX- AC- 280x5

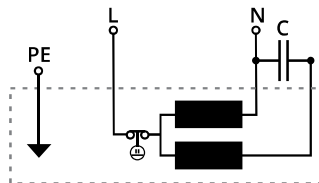


A = 510      C = 510  
B = 740      D = 450



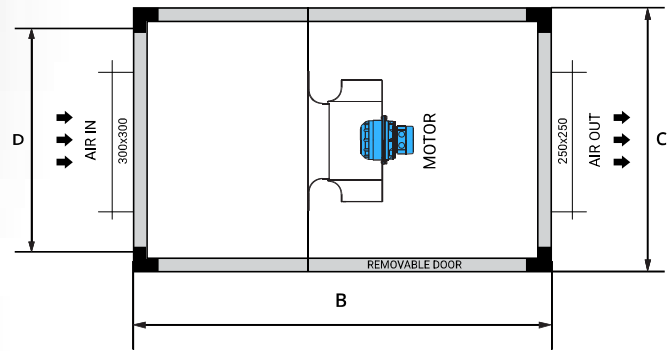
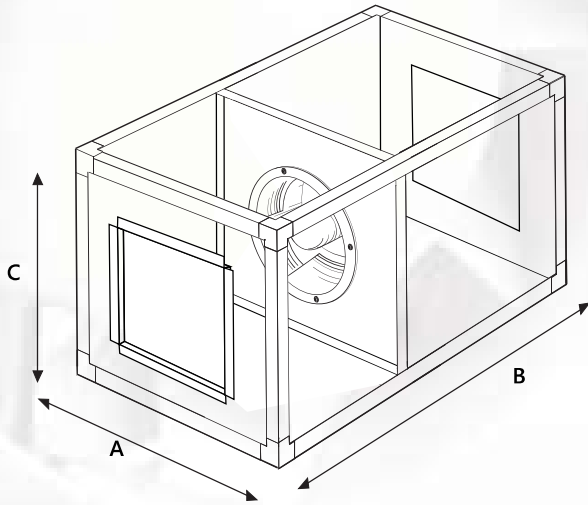
## SPECIFICATIONS

Voltage [V]	Power [W]	Current [A]	Frequency [Hz]	Capacitor [µF]	RPM	dBA	Temp min / max	Weight	IP 44
230	216	0.98	50	8.0	2 735	50	-20°C / +60°C	34 Kg	IP 44

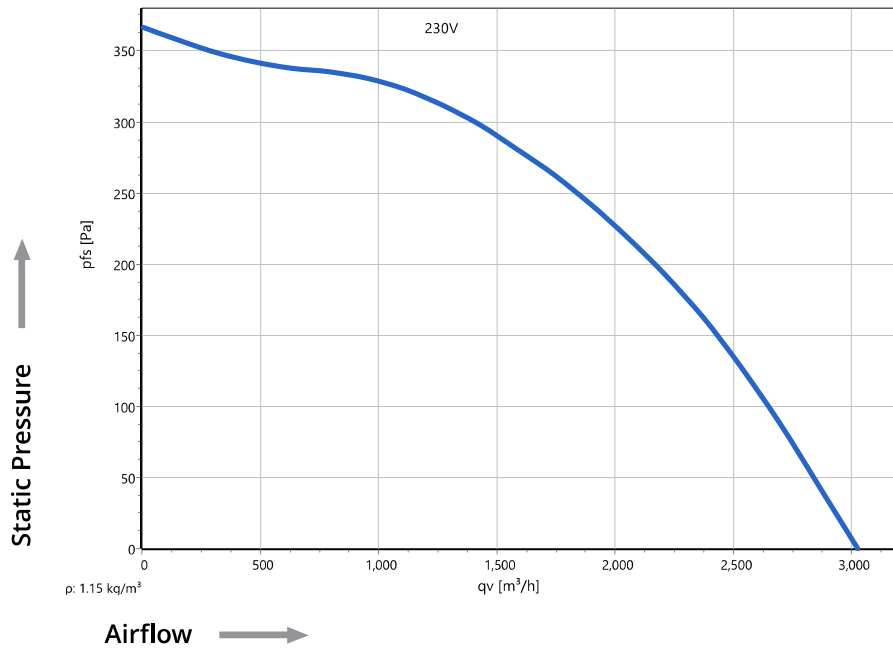


PE - Green / Yellow  
L - Blue  
N - Black  
C - Brown

# AM- BF- EX- AC- 355

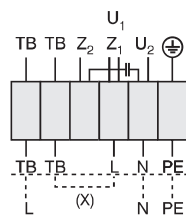


A = 600      C = 600  
 B = 930      D = 540



## SPECIFICATIONS

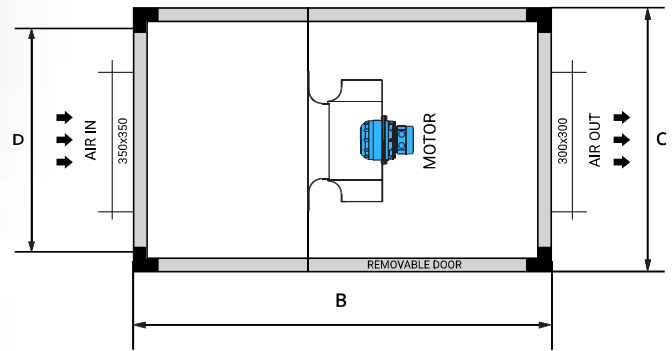
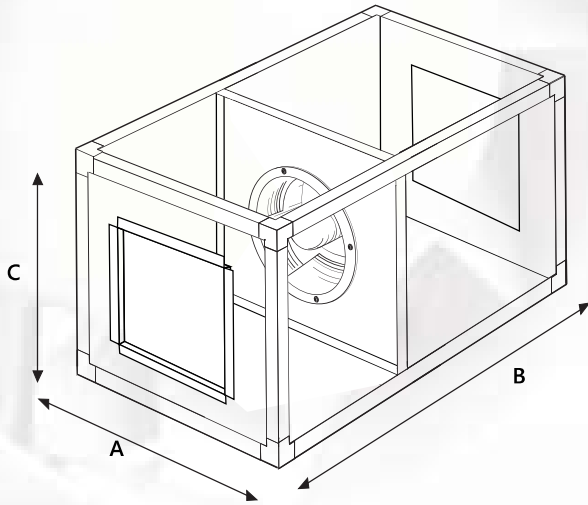
Voltage [V]	Power [kW]	Current [A]	Frequency [Hz]	Capacitor [ $\mu\text{F}$ ]	RPM	dBA	Temp min / max	Weight	IP 54
1~230	0.4	2.12	50	10	1410	43-55	60°C	60 Kg	IP 54



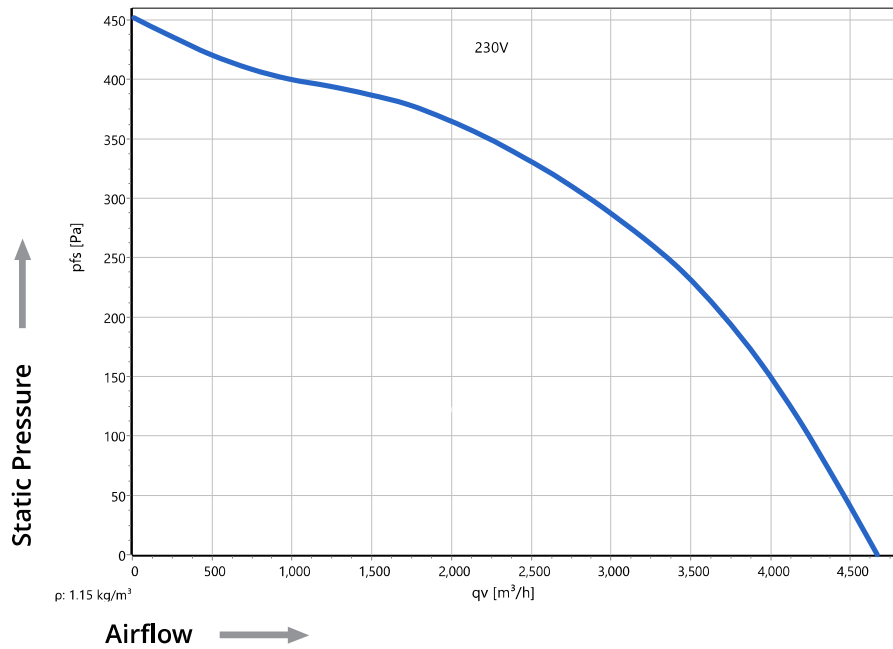
Clockwise

- U<sub>1</sub> Brown
- U<sub>2</sub> Blue
- Z<sub>1</sub> Black
- Z<sub>2</sub> Orange
- TB White
- PE Yellow-Green

# AM- BF- EX- AC- 400

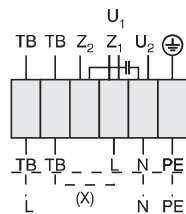


A = 700      C = 700  
B = 1030     D = 640



## SPECIFICATIONS

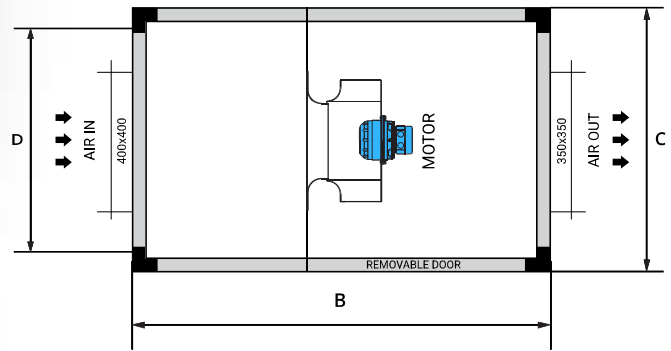
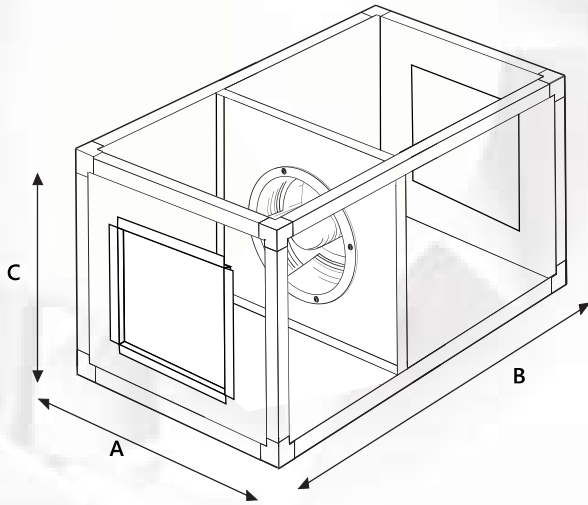
Voltage [V]	Power [kW]	Current [A]	Frequency [Hz]	Capacitor [ $\mu\text{F}$ ]	RPM	dBA	Temp min / max	Weight	IP 54
1~230	0.6	2.8	50	12	1350	45-48	40°C	84 Kg	IP 54



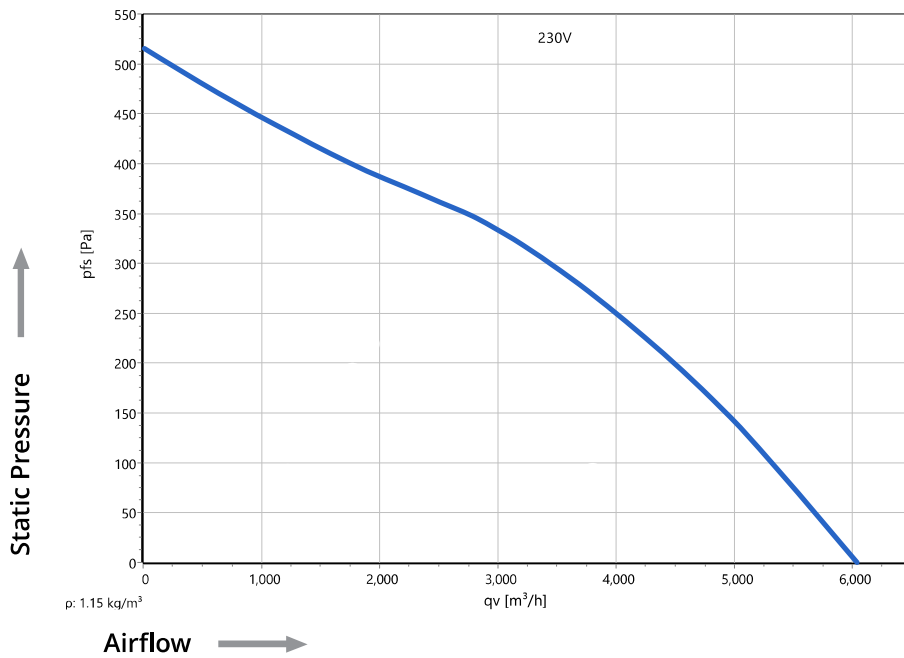
U<sub>1</sub>    Brown  
U<sub>2</sub>    Blue  
Z<sub>1</sub>    Black  
Z<sub>2</sub>    Orange  
TB    White  
PE    Yellow-Green

Clockwise

# AM- BF- EX- AC- 450E

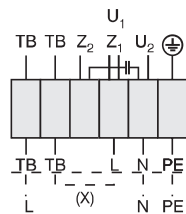


A = 700      C = 700  
B = 1030     D = 640



## SPECIFICATIONS

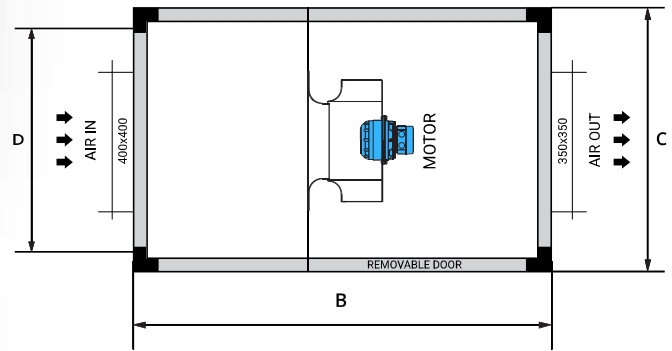
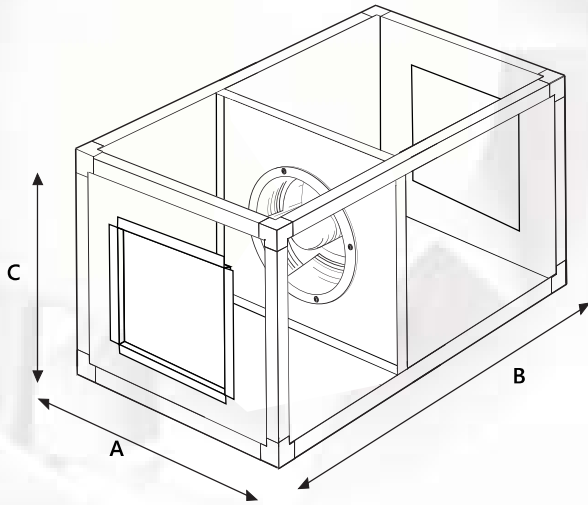
Voltage [V]	Power [kW]	Current [A]	Frequency [Hz]	Capacitor [μF]	RPM	dBA	Temp min / max	Weight	IP 54
1~230	0.82	3.7	50	16	1200	45-48	50°C	85 Kg	IP 54



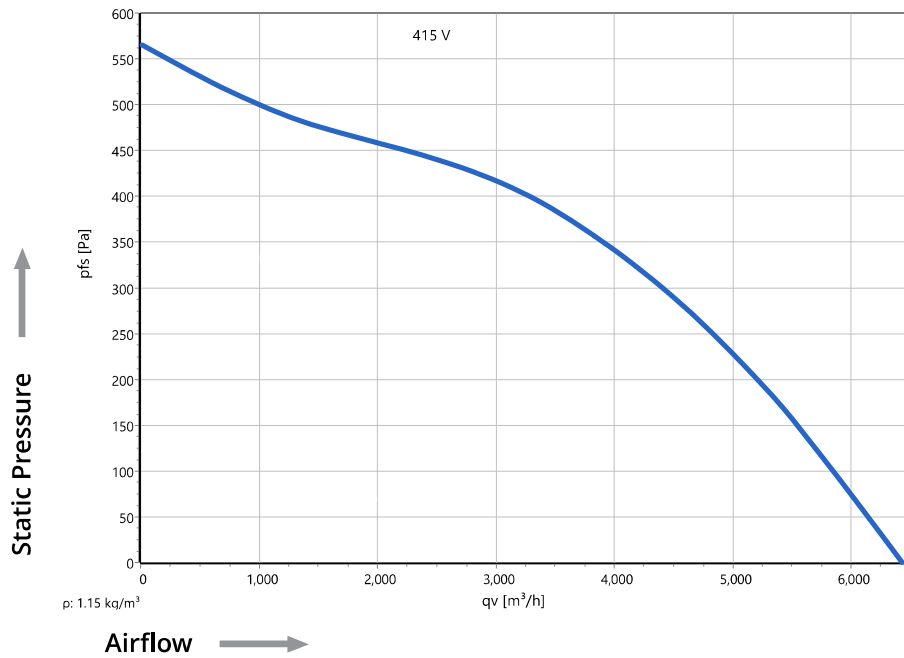
- U<sub>1</sub>    Brown
- U<sub>2</sub>    Blue
- Z<sub>1</sub>    Black
- Z<sub>2</sub>    Orange
- TB    White
- PE    Yellow-Green

Clockwise

# AM- BF- EX- AC- 450D

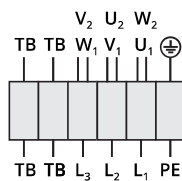


A = 700      C = 700  
B = 1030     D = 640



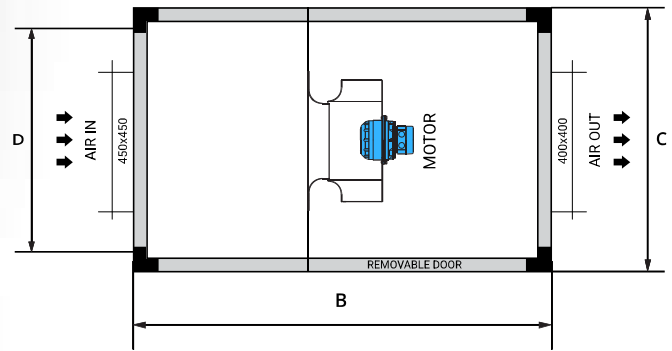
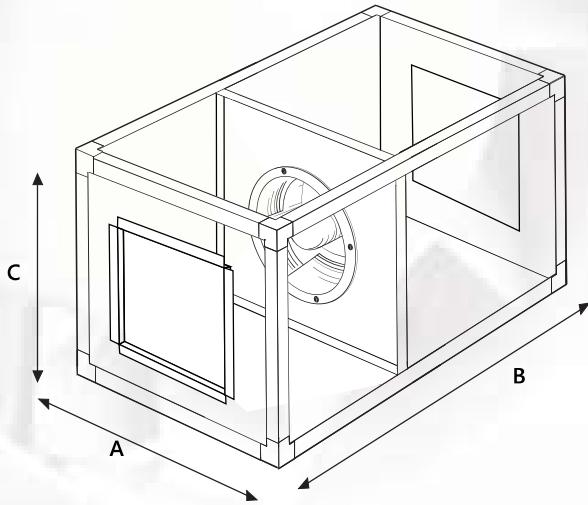
## SPECIFICATIONS

Voltage [V]	Power [kW]	Current [A]	Frequency [Hz]	Capacitor [ $\mu\text{F}$ ]	RPM	dBa	Temp min / max	Weight	IP 54
415	0.91	1.65	50	-	1300	43-45	50°C	85 Kg	IP 54

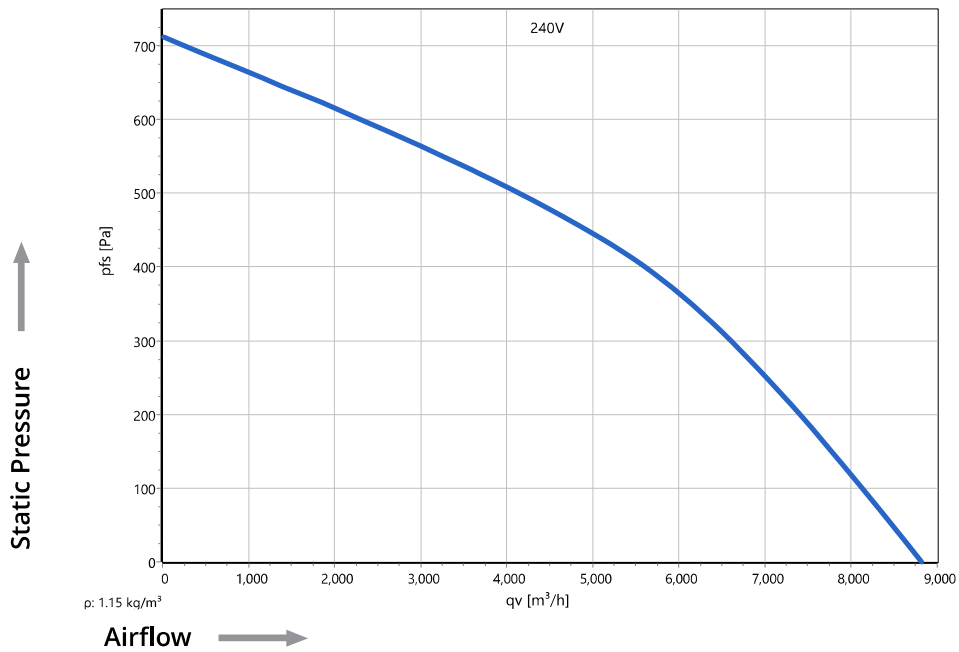


- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green

# AM- BF- EX- AC- 500E

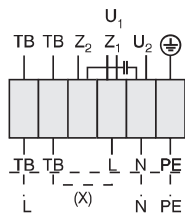


A = 810      C = 810  
B = 1140     D = 750



## SPECIFICATIONS

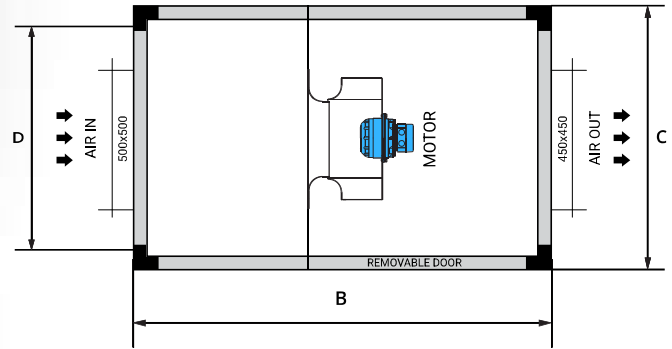
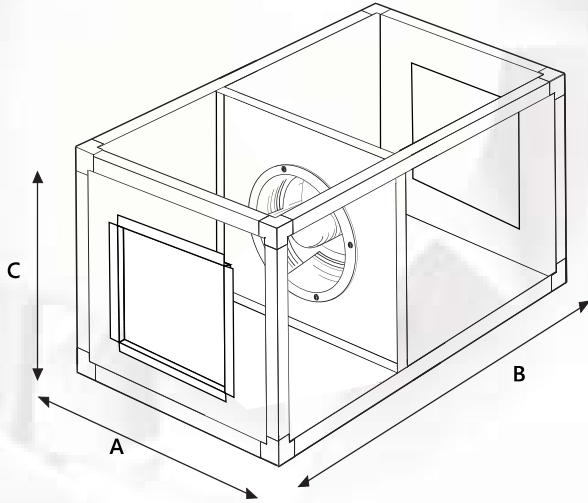
Voltage [V]	Power [kW]	Current [A]	Frequency [Hz]	Capacitor [μF]	RPM	dBA	Temp min / max	Weight	IP
230	1.7	7.5	50	-	1380	52-55	-20°C / +40°C	119 Kg	IP 54



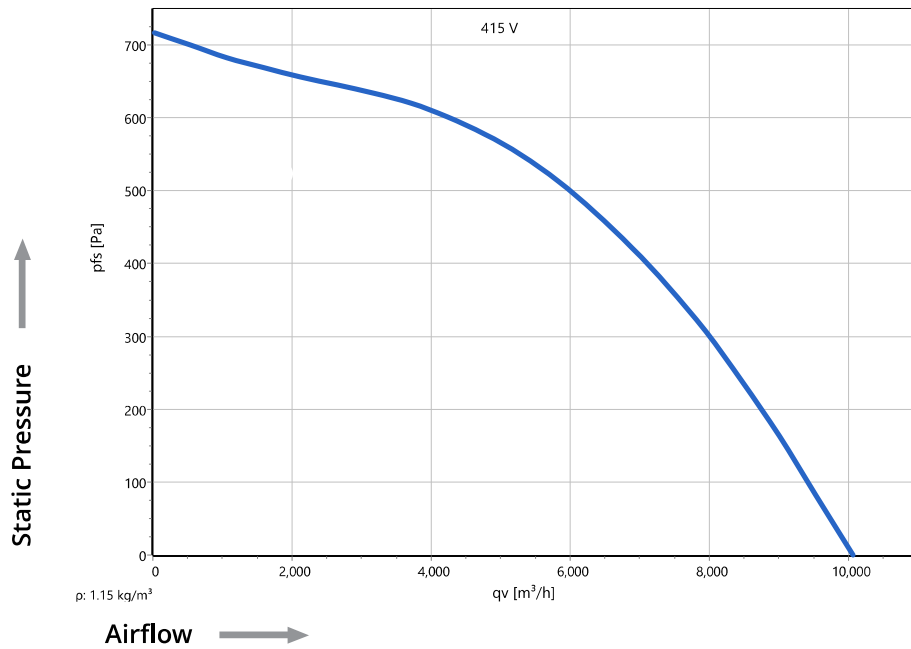
- U<sub>1</sub>    Brown
- U<sub>2</sub>    Blue
- Z<sub>1</sub>    Black
- Z<sub>2</sub>    Orange
- TB    White
- PE    Yellow-Green

Clockwise

# AM- BF- EX- AC- 500D

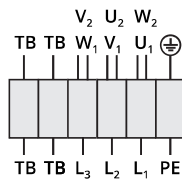


A = 810      C = 810  
B = 1140     D = 750



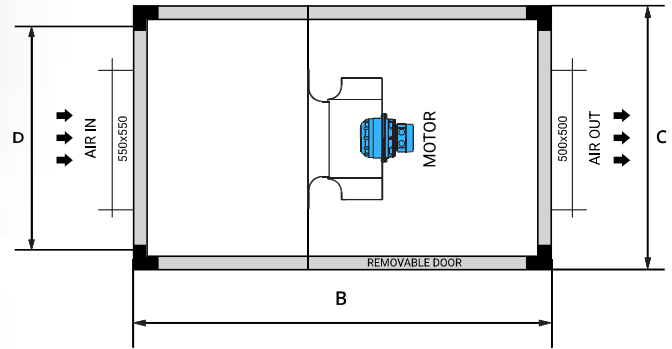
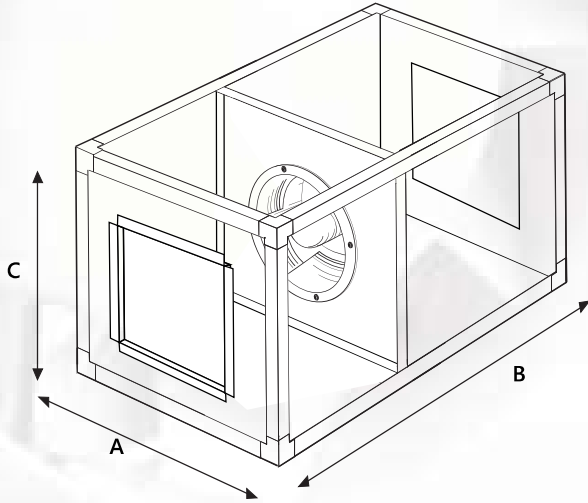
## SPECIFICATIONS

Voltage [V]	Power [kW]	Current [A]	Frequency [Hz]	Capacitor [μF]	RPM	dBA	Temp min / max	Weight	IP
415	1.75	3.55	50	-	1380	52-55	50°C	119 Kg	IP 54

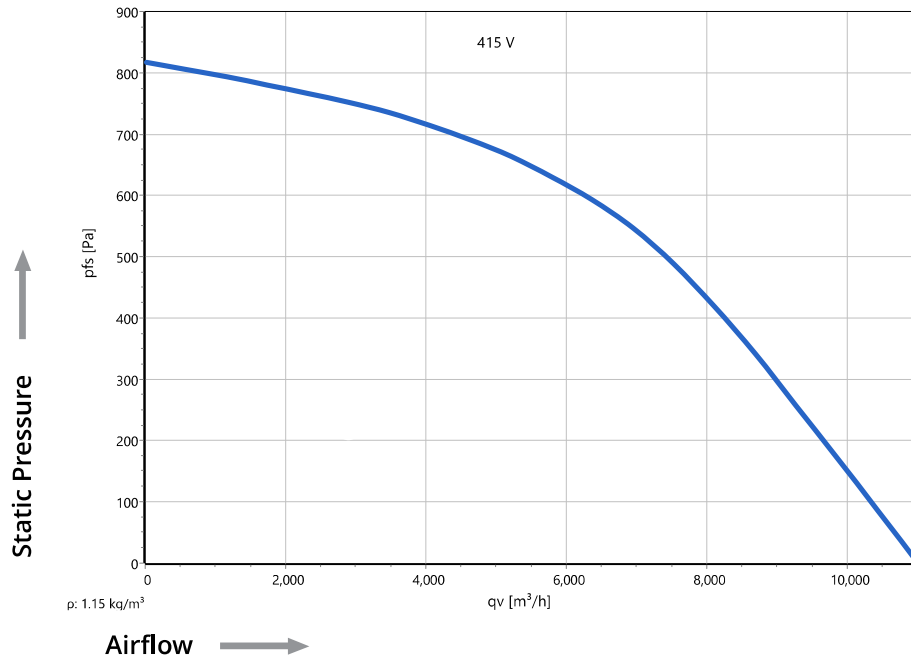


- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green

# AM- BF- EX- AC- 560

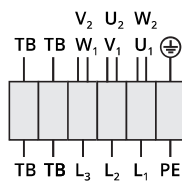


A = 880      C = 880  
 B = 1210    D = 820



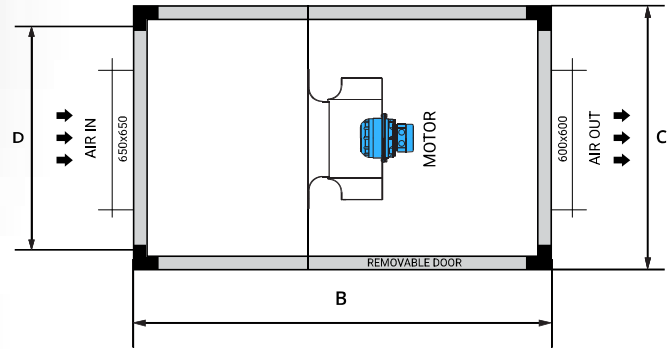
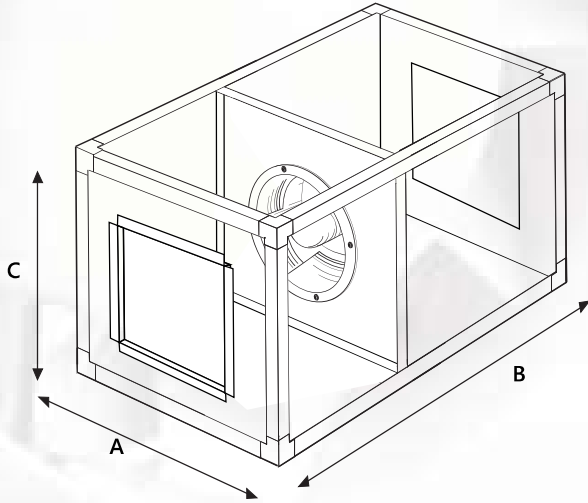
## SPECIFICATIONS

Voltage [V]	Power [kW]	Current [A]	Frequency [Hz]	Capacitor [μF]	RPM	dBA	Temp min / max	Weight	IP 54
415	2.3	4.4	50	-	1350	50-55	50°C	160 Kg	IP 54

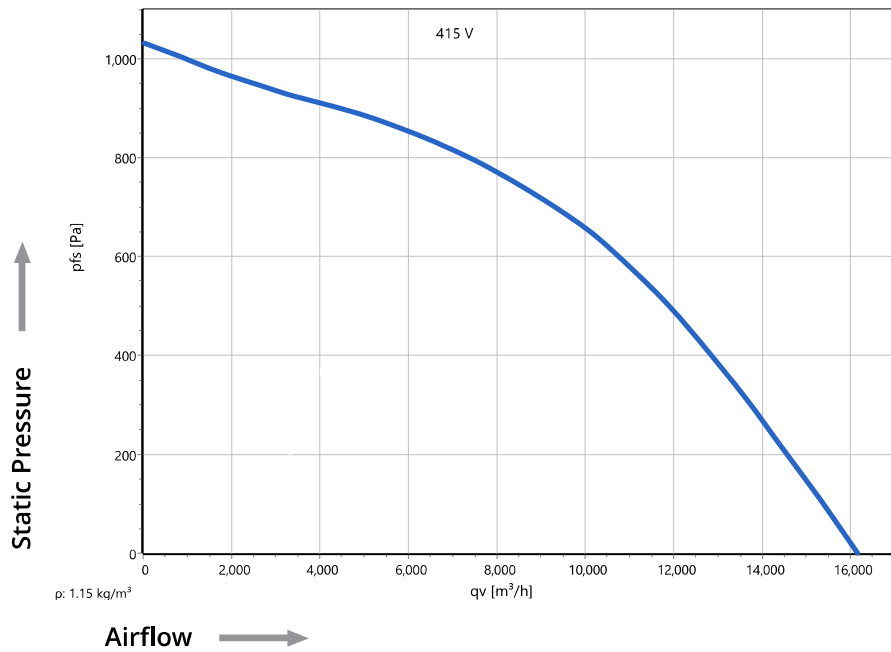


- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green

# AM- BF- EX- AC- 630

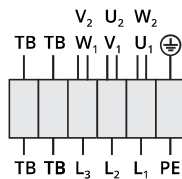


A = 1010      C = 1010  
 B = 1340      D = 950



## SPECIFICATIONS

Voltage [V]	Power [kW]	Current [A]	Frequency [Hz]	Capacitor [μF]	RPM	dBa	Temp min / max	Weight	IP
415	4	6.9	50	-	1340	50-55	40°C	192 Kg	IP 54



- U<sub>1</sub> Brown
- V<sub>1</sub> Blue
- W<sub>1</sub> Black
- U<sub>2</sub> Red
- V<sub>2</sub> Grey
- W<sub>2</sub> Orange
- TB White
- PE Yellow-Green