

# BD 12/12 EEC (251609261C120)

## GENERAL DATA



### DOUBLE INLET CENTRIFUGAL FAN WITH ELECTRONIC MOTOR EEC

#### MANUFACTURING FEATURES

- Galvanised steel sheet housing.
- Polyamide impeller reinforced with fibreglass in models 7/7, 9/9, 10/10 and 12/12. Galvanised steel sheet impeller for all range.
- Double inlet forward curved impeller.
- Supplied with mounting feet (included in price).
- Motor fixing with an exclusive system designed by Casals through flexible arms and silent blocks to avoid vibration. Flexible arms in compliance with the ROHS 2002/95/EC Directive (Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipments).
- PM brushless motor (permanent magnets), synchronous, electronically commutated, high efficiency and low sound level. Specially designed for fans with electronic operation and control in deported box IP65.

Working range: from 400 to 1200-2000rpm (depending on the models)

Motor with IP54 protection and class F insulation. IP 65 drive case

Power: 220V ± 10% single phase

Power frequency: 50 / 60Hz

Operating temperature range: -20°C to 50°C

Speed control through signal 0-10V or PWM

#### APPLICATIONS

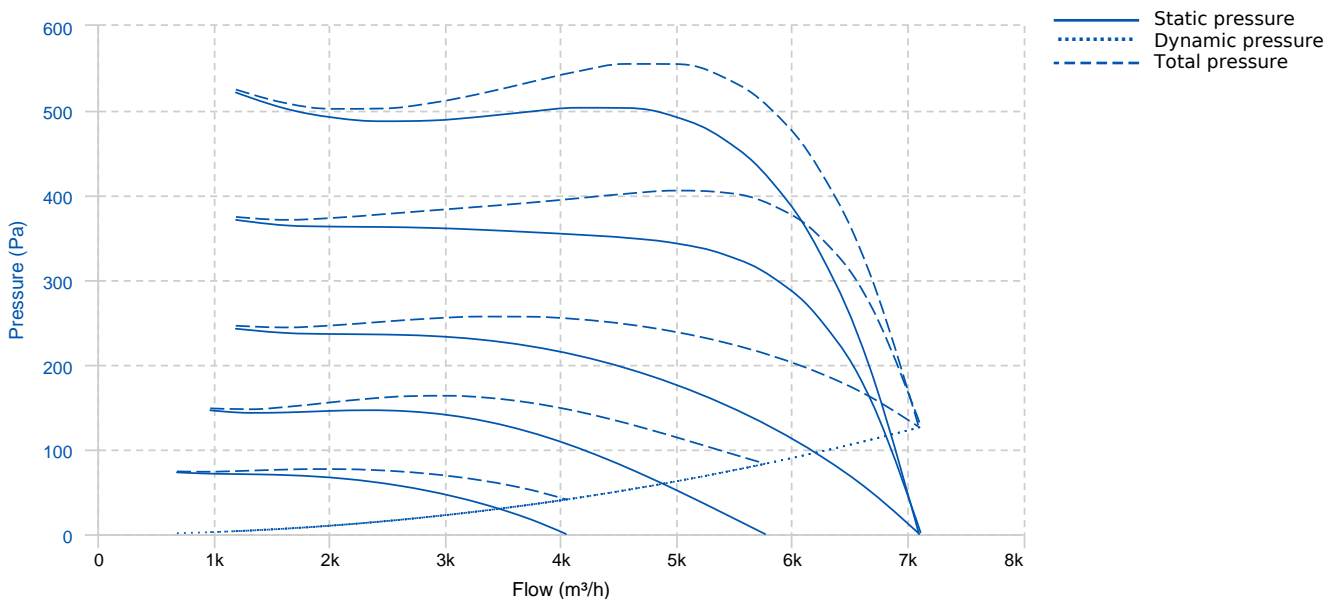
Designed for assembly in equipment:

- Ventilation boxes and air handling units.
- Centrifugal heaters.
- Industrial and professional kitchen hoods.
- Maximum working temperature: 50°C.

#### UNDER REQUEST

- Galvanized sheet impeller
- MBI assembled

## PERFORMANCE CURVE

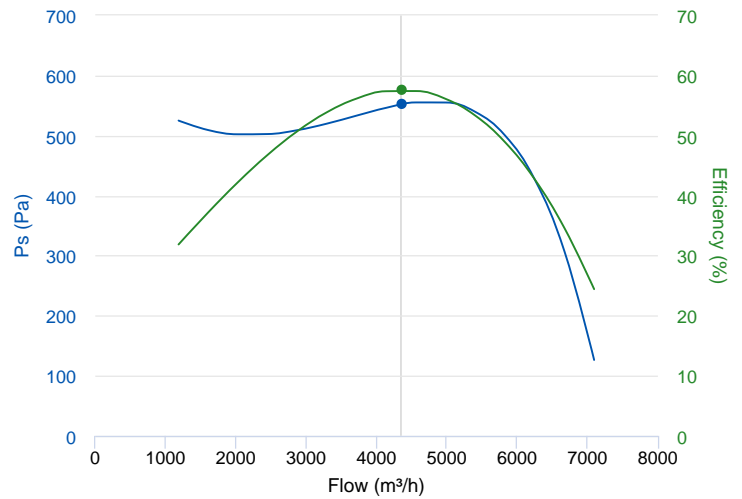


## TECHNICAL DATA

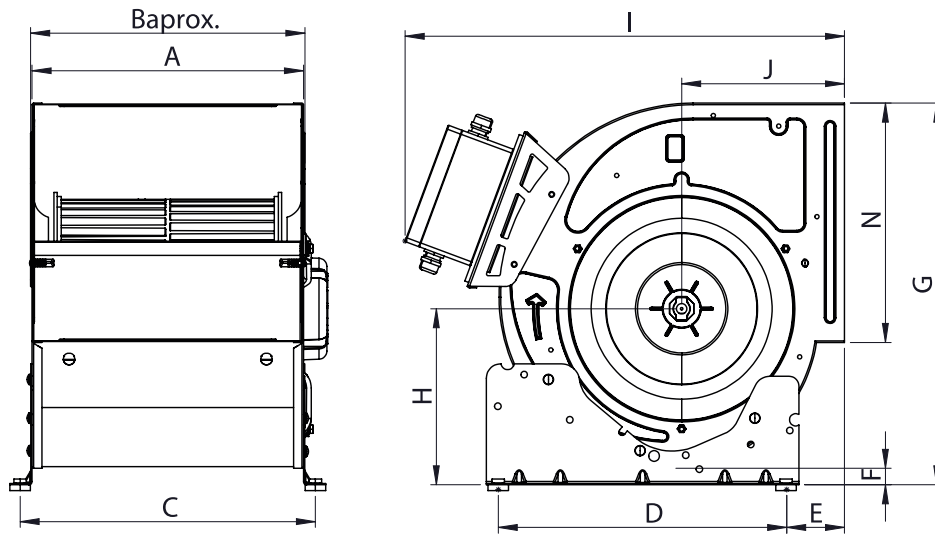
Fan							
RPM	1200	Approx. weight	34 kg	Max. Flow	7110 m <sup>3</sup> /h		
Motor							
Power	1,5 kW	RPM	1200 (máx)	I max. (230V)	10 A	Approx. weight	0 kg

## ERP DATA

Fan data sheet		
Fan type	Centrifugal fan radial or forward blades	
Installation category	B: Inlet free, Ducted outlet	
Efficiency category	Total	
The fan has to be installed with VF	No	
Motor power (kW)	1.5	
	Fan values	ERP Requirements 2015
Max. efficiency (%)	57.55	43.34
Efficiency grade (N)	63.21	49
Pabs (kW)	1.278	
Flow (m <sup>3</sup> /h)	4360.88	
Total pressure (Pa)	551.91	
Speed (m/s)	1200 (10V)	
Specific ratio	1.01	



## DIMENSIONS



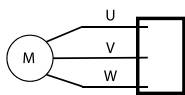
### Dimensions (mm)

A	396	B	416	C	425	D	350	E	77
F	17	G	536	H	244	I	590	J	230
N	343.5								

## WIRING DIAGRAM

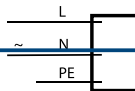
### MOTOR OUTPUT SALIDA MOTOR

The EC motor is three phase and the output of three phases is connected in this connection terminal.  
El motor EC es trifásico y la salida de las 3 fases del mismo se conectan a este terminal de conexión.



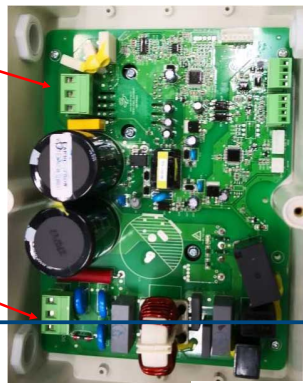
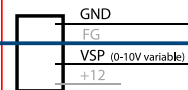
### POWER INPUT (230V) ENTRADA DE ALIMENTACIÓN (230V)

In this other terminal, the power input must be connected with the L (line), N (neutral) and single phase PE (ground).  
En este otro terminal se debe conectar la entrada de alimentación con la L (línea), N (neutro) y PE (tierra) monofásica.



### CONTROL: 0-10 INPUT CONTROL: 0-10 ENTRADA

The fan is adjustable in rpm and has a variable input from 0 to 10V.  
You can connect any accessory or external device that gives this variable signal (for example: temperature sensor, inverter, etc.). In case you want to operate the fan at maximum revolutions, you should connect VSP (0-10V) and +12 directly.  
El ventilador es regulable en RPM y tiene una entrada variable de 0 a 10V.  
Se puede conectar algún accesorio o dispositivo externo que dé esta señal variable (por ejemplo, sensor de temperatura, variador, etc.). En caso de que se quiera hacer funcionar el ventilador a máximas revoluciones se debe conectar directamente VSP (0-10V) y +12.



## ACCESSORIES



**SAFETY SWITCH  
INT 25 3P A  
REF: INT253PA**



**OUTLET PROTECTION GUARD FOR FANS  
RI 12/12  
REF: 960000408**



**INLET PROTECTION GUARD FOR CENTRIFUGAL FANS**  
**RA 12**  
REF: 960670100



**OUTLET FLANGE FOR BD AND BV FANS**  
**MBI 12/12**  
REF: 251521691

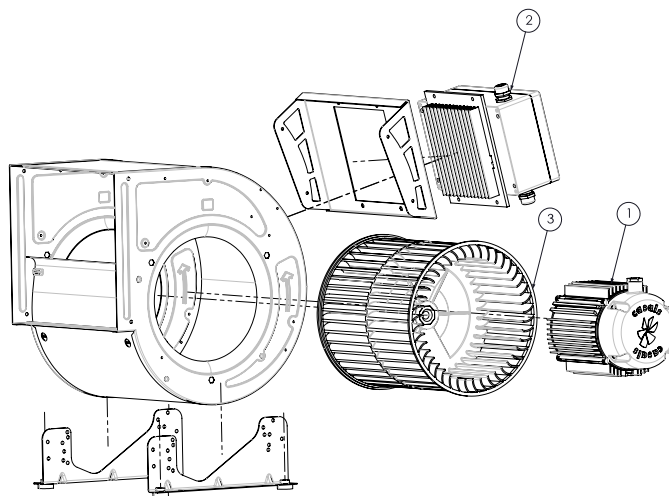


**SPEED CONTROLLER FOR EEC MOTOR**  
**REGC**  
REF: FX263300



**PROTECTION GRID FOR BD FANS, MOTOR SIDE**  
**RM 12 (T80)**  
REF: 960000808

**SPARE PARTS**



	Code	Model	Qty
1	301002300LP4	MOTOR EEC1500 LP Ø5/8"	x1
2	301002204R120	ELECTRONICAL DEVICE EEC1500 1200RPM	x1
3	251529383	TURBINE PA6 BD12/12	x1