

## HJBM EEC



WALL MOUNTED FAN WITH SQUARE FRAME, VARIABLE PITCH BLADES AND ELECTRONIC MOTOR

### MANUFACTURING FEATURES

- Square plate made of galvanized steel sheet.
- Variable pitch angle polyamide impeller reinforced with fibreglass.
- Supplied with motor support and protection guard according to 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

## Accessories



**INT**



**PC2**



**PCP**



**REGC**



**RPO**

### APPLICATIONS

- Designed for wall assembly, they are suitable for:
- Air renewal for all kind of buildings and industries.

### UNDER REQUEST

- B form impeller (air flow from impeller to motor).
- Aluminium impeller.

## Technical data

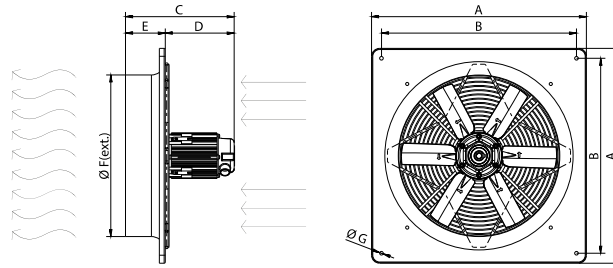
### Single-phase motor / 4 poles

Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m <sup>3</sup> /h	Sound db (A)**	Weight kg	Connect. diagram
268351103	HJBM 35 0,37kW EEC (1420rpm)	1420	5,00	0,37	2.830	42	7	1
268401103	HJBM 40 0,37kW EEC (1420rpm)	1420	5,00	0,37	5.040	46	9	1
268451103V2	HJBM 45 0,75kW EEC (1420rpm)	1420	5,8	0,75	6.020	48	12,50	1
268501103V2	HJBM 50 0,75kW EEC (1420rpm)	1420	5,8	0,75	9.100	50	18	1
268561103	HJBM 56 1,5kW EEC (1420rpm)	1420	10,00	1,50	11.480	53	22	1

**Notes:**

\*\* Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

## Dimensions



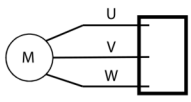
Model	A	B	C	D	E	F	G	ØF	ØG
HJBM 35 0,37kW EEC (1420rpm)	460	392	299	213	86	-	-	366	9
HJBM 40 0,37kW EEC (1420rpm)	540	504	313	213	100	406	9	-	-
HJBM 45 0,75kW EEC (1420rpm)	576	521.5	285.4	186.9	98.5	455	11	-	-
HJBM 50 0,75kW EEC (1420rpm)	655	599.4	300.4	180.4	120	508	11	-	-
HJBM 56 1,5kW EEC (1420rpm)	725	650	315.4	195.4	120	560	11	-	-


# Wiring diagram

## Wiring diagram Nº 1

**MOTOR OUTPUT**  
**SALIDA MOTOR**

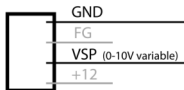
The EC motor is three phase and the output of three phases is connected in this connection terminal.  
El motor EC es trifásico y la salida de las 3 fases del mismo se conectan a este terminal de conexión.





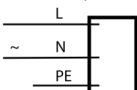
**CONTROL: 0-10 INPUT**  
**CONTROL: 0-10 ENTRADA**

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.



**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.



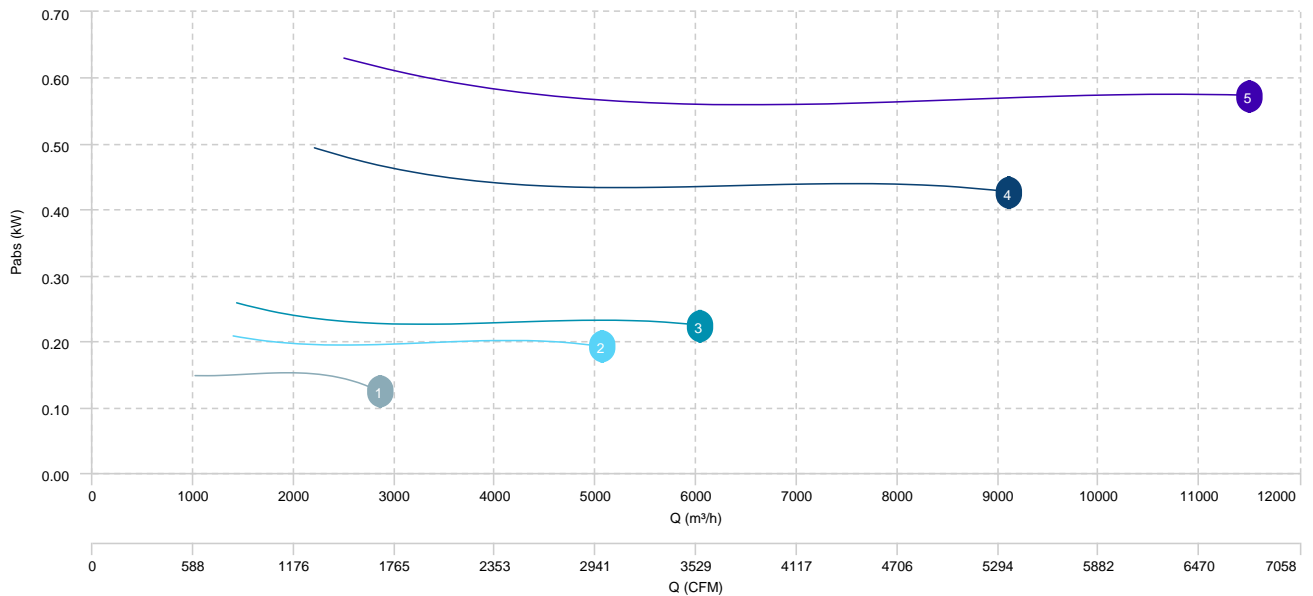
# CHARACTERISTIC CURVE

1	HJBM 35 0,37kW EEC (1420rpm)	2	HJBM 40 0,37kW EEC (1420rpm)	3	HJBM 45 0,75kW EEC (1420rpm)	4	HJBM 50 0,75kW EEC (1420rpm)
5	HJBM 56 1,5kW EEC (1420rpm)						

## AIR FLOW - PRESSURE



## AIR FLOW - ABSORBED POWER



## Sound data

### Sound / 4 poles

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
HJBM 35 0,37kW EEC (1420rpm)	Inlet	40	48	54	58	60	61	62	57	68
HJBM 40 0,37kW EEC (1420rpm)	Inlet	45	52	57	61	64	66	67	60	72
HJBM 45 0,75kW EEC (1420rpm)	Inlet	49	56	61	65	68	68	69	62	74
HJBM 50 0,75kW EEC (1420rpm)	Inlet	51	58	63	67	70	69	70	64	76
HJBM 56 1,5kW EEC (1420rpm)	Inlet	52	61	66	69	73	72	73	67	79

## erp data

ERP	
Fan type	Axial fan
Installation category	A
Efficiency category	Static
The fan has to be installed with FSC	No

## ERP / 4 poles

Model	Motor power (kW)	Maximum efficiency point data						
		Max. efficiency (%)	Efficiency grade (N) (N)	Air Flow (m³/h)	Ps (Pa)	Pabs (kW)	speed (rpm)	Specific ratio
HJBM 35 0,37kW EEC (1420rpm) ()	0,25	28,59	40,09	1.783,48	86,04	0,15	1420	1,00
HJBM 40 0,37kW EEC (1420rpm)	0,37	38,80	49,58	3.246,54	79,70	0,20	1420	1,00
HJBM 45 0,75kW EEC (1420rpm)	0,75	41,55	51,95	3.648,48	88,46	0,23	1420	1,00
HJBM 50 0,75kW EEC (1420rpm)	0,75	42,03	50,65	5.738,86	108,76	0,43	1420	1,00
HJBM 56 1,5kW EEC (1420rpm)	1,50	41,75	49,67	7.158,42	112,91	0,56	1420	1,00