



Plate mounted axial flow fans

COMPACT Series type HCBB / HCBT (Aluminium impellers)

HCBT/4-630/H- *230/400V50* V5



On request, explosion proof versions in accordance with ATEX Directive, for three phase models.

- Motors IP55, Class F
- ATEX Flameproof-Gas

For models 800 to 1000mm

- ⒺII 2G Ex d IIB T4
- ⒺII 2G Ex d IIB+H2 T4 (with Ex d IIC T4 motor)
- ATEX Increased safety-Gas

Except models HCBT/ 4-250, HCBT/ 6-355, HCBT/ 6-400

Available model HCBT/ 6-400 with 230/400 V motor

Available models to HCBT-1000

- ⒺII 2G Ex e II T3
- ATEX Dust

For models 800 to 1000mm

Suspended flammable particles and non-conductive dust:

- ⒺII 3D Ex tc IIIB T125°C

Conductive dust:

- ⒺII 3D Ex tc IIIC T125°C (with IP65 motor)

Working temperatures for ATEX versions:

-20°C to +55°C

models HCBT/4-315 to HCBT/4-710

models HCBT/6-450 to HCBT 6-710

-20°C to +40°C

model HCBT/4-800 to 1000

model HCBT/6-800 to 1000

To select HCBT ATEX refer to Easyvent. Note electrical data may vary for ATEX motors."



Range of low profile plate mounted axial fans fitted with aluminium impellers and single phase motor (HCBB) or three phase motor (HCBT), IP65 (1), Class F insulation (2), equipped with thermal protection (3).

(1) Models 800, 900 and 1000 are IP55. (2) Working temperatures from -40°C up to +70°C. Except models 800, 900 and 1000 suitable for usage in environments from -20°C to +40°C. (3) Except models 800 to 1000.

Motors

Available, depending upon the model, with single or three phase motors in 4 or 6 poles. All motors are speed controllable by autotransformer except models /4-630, B/710, T/4-710, T/800, T/900 and T/1000. Three phase models are speed controllable by inverter.

Electrical supplies:

Single phase 230V-50Hz. (Capacitor located inside the wiring terminal box).
 Three phase 230/400V-50Hz or 400V-50Hz (See characteristic chart).

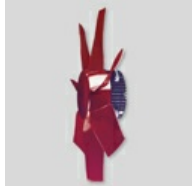
Additional Information

Standard air direction: form (A) configuration (Motor over Impeller).

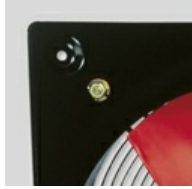
On request

Inlet finger proof guard for models 800 to 1000.

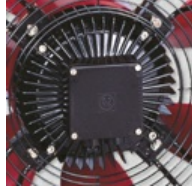
+ Attributes



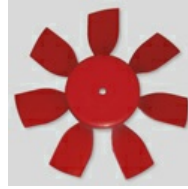
Compact design
 Compact design created by the combination of the motor with the factory matched direct drive wrap around impeller hub.



Corrosion resistance
 Mounting plate, motor support and finger proof guard protected by cataforesis primer and black polyester paint finish. Stainless steel screws.



Terminal box
 Wiring terminal box with cable gland PG-11.



Impeller dynamically balanced
 Impellers are dynamically balanced, according to ISO 1940 standard, giving vibration free operation.



Manufacturing variations
 Multiple manufacturing variations, depending on the type of installation and use conditions.



Configuration for models 800 to 1000
 Special design of motor over impeller, which provides compactness and tightness IP55.

+ Acoustic characteristics

Hz	63	125	250	500	1k	2k	4k	8k	Overall
Inlet (LwA)	59	74	78	83	87	84	81	74	91
Inlet LpA @ 1.5m	45	59	63	69	72	70	67	60	76

+ Technical characteristics

Unfortunately an error occurred.

+ Supply Voltages and Frequencies



SINGLE PHASE 220V 50Hz, 240V 50Hz	230V 50Hz	See wiring diagram	High
THREE PHASE 220V 50Hz 240V 50Hz	230/400V 50Hz		High
			Low*
THREE PHASE 380V 50Hz 415V 50Hz	230/400V 50Hz		High
	400V 50Hz		High
			Low*

* From sizes 450 up to 630 mm diameter.

+ Reference

H	C	F	T	/	4	-	4	0	0	/	H	A			
1	2	3	4		5		6				7	8			9

1 - H: Compact plate axial fan.

2 - C: Series designation.

3 - Impeller type:

F: Ø 250-Ø 630 Fixed blade plastic impeller.

Ø 710 - Ø 1000 Aluminium impeller hub + adjustable plastic blade impellers.

G: Adjustable plastic blade impellers.

B: Ø 250-Ø 400 Fixed blade aluminium impeller Ø 450 - Ø 1000 Adjustable blade aluminium impeller.

4 - Electrical supply:

B: Single phase.

T: Three phase.

5 - Number of poles:

2: (approx. 2900 rpm - 50 Hz)

4: (approx. 1400 rpm - 50 Hz)

6: (approx. 900 rpm - 50 Hz)

6 - Nominal diameter of impeller (mm).

7 - Pitch angle.

H: High.

I, L: Low.

8 - Direction of air:

A: Motor over impeller.

9 - Special construction:

X: Motor support without inlet finger guard.

L: Weatherproof protected.

C: Condensation drain holes on motor.

EX: Explosion proof versions in accordance to ATEX Directive, for three phase models:

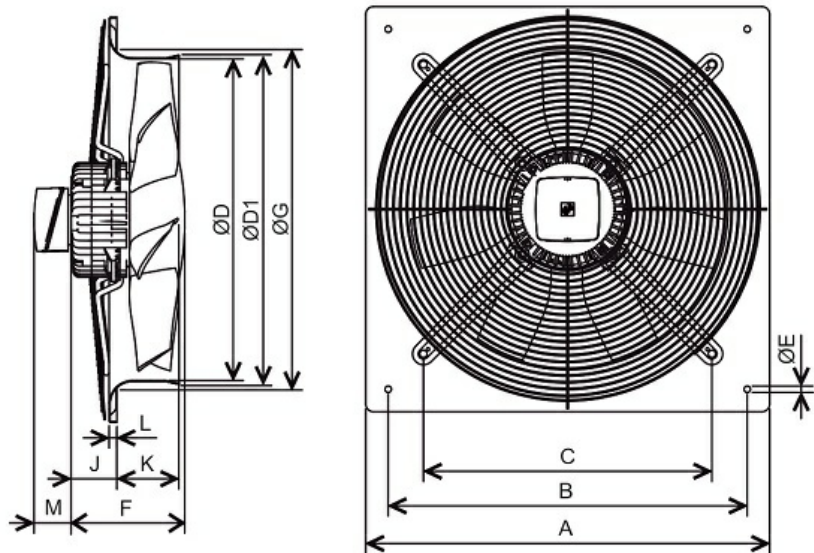
-EXE: Increased safety Ⓢ II2G EExeII3

-EXD: Flame proof, only for models 800 and 1000 Ⓢ II2G EExdIIBT5 or EExdIICT4

G: Special corrosion treatment for agricultural applications.

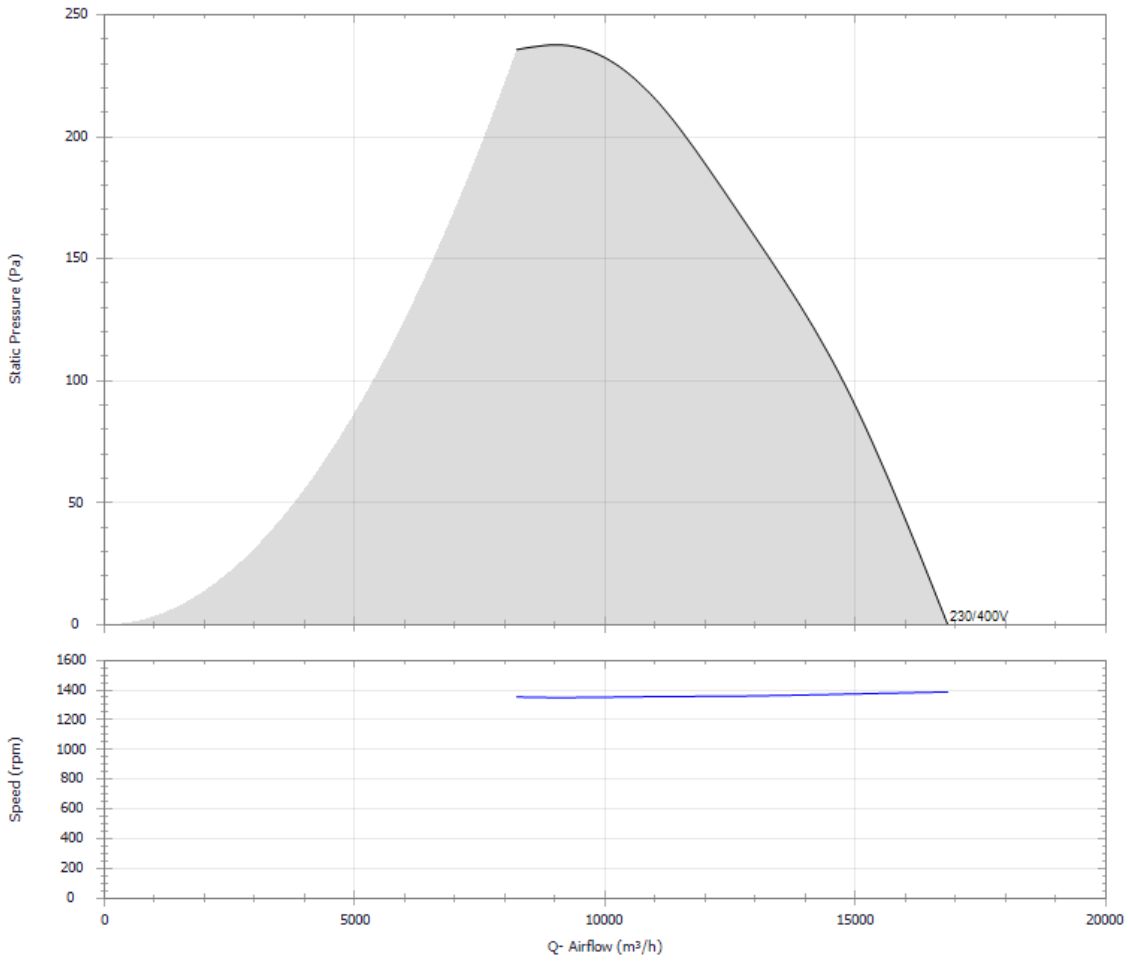
TF: With anticorrosive Teflon paint finish.

+ Dimensions

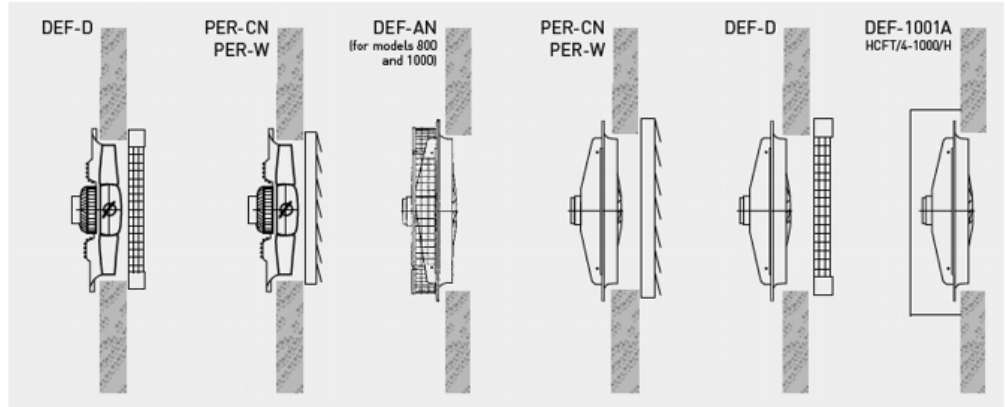


A	B	C	D	D1	E	F	G	J	K	L	M
800	710	580	630	640	12	218.5	674	110.5	103	12	58

+ Curves



+ Mounting Accessories



Model HCFB/HCFT HCBB/HCBT	Wire Protection Guards		Exhaust Side Louvre Shutters		
	Outlet	Inlet	Plastic	Aluminium	ATEX version*
250	DEF-250 D	-	PER-250 W	PER-250 CN	PER-315 Ex
315	DEF-325 D	-	PER-355 W	PER-355 CN	PER-315 Ex
355	DEF-375 D	-	PER-355 W	PER-355 CN	PER-355 Ex
400	DEF-450 D	-	PER-400 W	PER-400 CN	PER-400 Ex
450	DEF-450 D	-	PER-450 W	PER-450 CN	PER-450 Ex
500	DEF-525 D	-	PER-500 W	PER-500 CN	PER-500 Ex
560	DEF-630 D	-	PER-560 W	PER-630 CN	PER-560 Ex
630	DEF-630 D	-	PER-630 W	PER-630 CN	PER-630 Ex
710	DEF-800 D	-	PER-710 W	PER-710 CN	PER-710 Ex
800	DEF-800 D	DEF-800 AN	PER-800 W	PER-800 CN	-
/4-900/H	DEF-1000 D	DEF-900 AN	PER-1000 W	PER-1000 CN	-
/4-900/L	DEF-1000 D	DEF-901 AN	PER-1000 W	PER-1000 CN	-
/6-900	DEF-1000 D	DEF-901 AN	PER-1000 W	PER-1000 CN	-
1000	DEF-1000 D	DEF-1000 AN	PER-1000 W	PER-1000 CN	-
HCFT / 4-1000 / H	DEF-1000 D	DEF-1001 AN	PER-1000 W	PER-1000 CN	-

* Three phase speed controllers (RMT) or inverter control (VFKB/VFTM); three phase 400V.

+ Electrical Accessories



REB-1N / REB-2,5N
Single phase electronic speed controllers.



**REB-5
REB-10**
Single phase electronic speed controllers.



RMB/RMT
Single and three phase auto transformer speed controllers.



REB-4 Auto
Electronic single phase speed controllers with temperature sensor. For agricultural applications.



VFTM TRI IP54
Adjustable frequency drive for three phase motors from 0,37 to 15 kW. 230 V or 400 V.



VFKB IP65
Adjustable frequency drives for three phase motors from 0,37 to 4 kW 230 V or 400 V.



COM D/S
To connect three phase fans with 400 V motor. For three phase models.