



Plate mounted axial flow fans
**COMPACT Series type HCBB /
HCBT (Aluminium impellers)**

**HCBT/4-400/H- (230/400V50/60HZ)
V3**



ATEX versions

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

-Motors IP55, Class F

-ATEX Flameproof-Gas

For models 800 to 1000mm



II 2G Ex d IIC T4



II 2G Ex d IIB T5

-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



II 3D Ex tc IIIB or IIIC T125°C or T135°C

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 Ø 800, 900 and 1000 suitable for usage in environments from -20°C to +40°C. (3) Except models Ø 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).

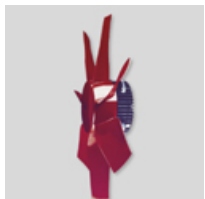
Additional Information

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

On request

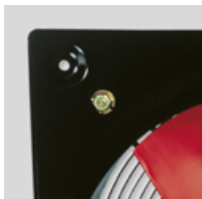
Inlet finger proof guard for models 800 to 1000.

+ Attributes



Compact design

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



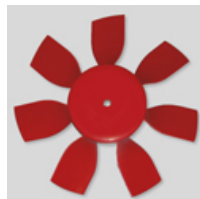
Corrosion resistance

Mounting plate, motor support and finger proof guard protected by cataforesis primer and black



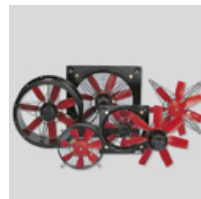
Terminal box

Wiring terminal box with cable gland PG-11.



Impeller dynamically balanced

Impellers are dynamically balanced, according to ISO 1940 standard, giving



Manufacturing variations

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

impeller hub.

polyester paint finish.
Stainless steel screws.

vibration free operation.



**Configuration for models
Ø 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)	48	61	61	68	72	69	66	57	76
Inlet LpA @ 1,5m	34	47	47	53	58	55	51	43	61

+ Technical characteristics

CONSTRUCTION

Diameter	400
Blades	7
Weight	9 kg

MOTOR CHARACTERISTICS

Number of poles	4
Motor Power	0
Voltage	230/400~3
Maximum absorbed current	1,1 A / 0,7 A
IP Rating	IP65
Motor insulation class	F

+ 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
			High
	400V 50Hz		Low*

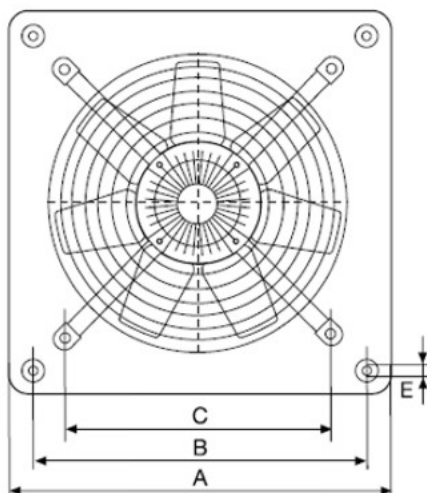
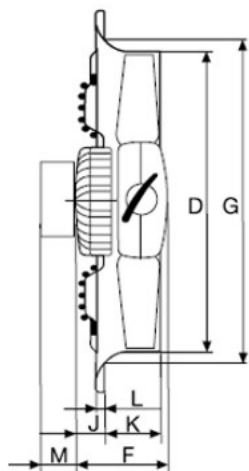
* From sizes 450 up to 630 mm diameter.

+ Reference

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

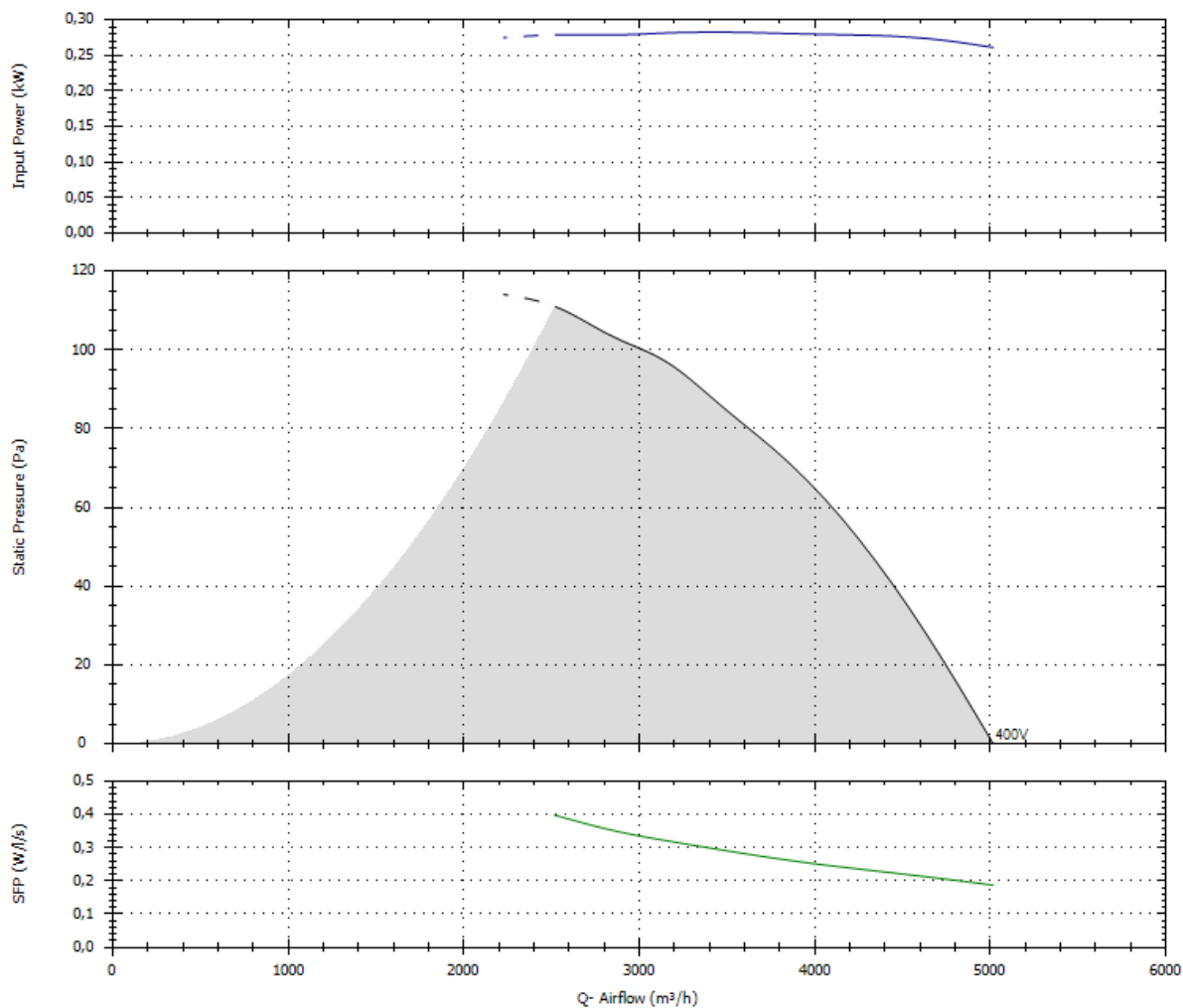
- 1 - H: Compact plate axial fan.
- 2 - C: Series designation.
- 3 - Impeller type:
 - F: Ø 250-Ø 630 Fixed blade plastic impeller.
 - G: Adjustable plastic blade impellers.
 - B: Ø 250-Ø 400 Fixed blade aluminium impeller Ø 450 - Ø 1000 Adjustable blade aluminium impeller.
- 4 - Electrical supply:
 - 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 EExeIIBT3
 - EXD: Flame proof, only for models 800 and 1000 Ⓢ II2G EExdIIBT5 or EExdIIBT4
- G: Special corrosion treatment for agricultural applications.
- TF: With anticorrosive Teflon paint finish.

+ Dimensions

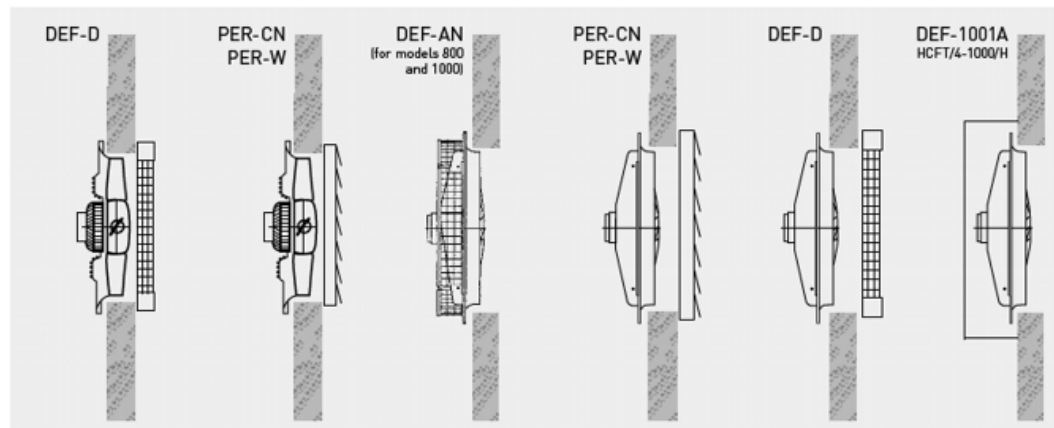


A	B	C	D	E	F	G	J	K	L	M
500	420	355	400	10	129	422	40,5	78	12	40

+ Curves



+ Mounting Accessoires



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.