

# CENTRIFUGAL SINGLE INLET FANS

## CBT-N Series



CONTINUOUS operation

Range of single inlet direct drive centrifugal fans designed for the continuous extraction of air stream up to 120°C<sup>(1)</sup>.

The casings are manufactured from one piece die cast aluminium and finished with a tough, grey colour, epoxy-polyester paint coating. All models incorporate radial centrifugal impellers manufactured from die cast aluminium and finished in a red colour epoxy-polyester paint finish.

Available with motors in 2 poles.

(1) CSB Models: up to 70°C.

### Motors

All motors are IP55 class F<sup>(1)</sup>, with ball bearings greased for life.

Electrical supply:

Single phase 230V-50Hz.

Three phase 230/400V-50Hz.

(See characteristics chart).

(1) CSB and CST Models: IP44 and Class B.

### Additional Information

The scroll can be orientated<sup>(1)</sup> in 7 different positions as per the table below.

Standard supplied position: LG270.

(1) CSB and CST Models: only can be supplied in LG270 position.

### On request

Fan fitted with 2-speed motor.

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

- Increase safety Ex II2G EExe IIT3 (only CBT-100 and CBT-130)
- Flame proof Ex II2G EExd IIBT5 or EExd IICT4

Working temperatures up to 40°C

### Tough casing design



Scroll made in one piece aluminium die casting

### Impellers dynamically balanced



Radial centrifugal impellers dynamically balanced, according to ISO 1940 standard, providing vibration free operation

## APPLICATIONS



Materials transport



Garages



Commercial or industrial drying installations



Iron and steel industries Foundries



Cooling of motors or electrical machines



Applications in machinery



CONTINUOUS operation

## POSITIONS

LG 0	LG 45	LG 90	LG 135	LG 180	LG 270	LG 315
RD 0	RD 45	RD 90	RD 135	RD 180	RD 270	RD 315

Standard supplied position: LG 270. It is possible to obtain all other positions (LG and RD) by adjusting the scroll.

## ■ Technical characteristics

Before installation check that the product electrical characteristics listed on the data plate label (Voltage, power, frequency etc) match those of the intended electrical supply. Explosion proof types only work at an ambient temperature between -30°C and +40°C.

\* Average sound pressure levels, measured at 1,5 meters in dB(A) in open air, at the inlet side of the fans.

Model	Speed (r.p.m.)	Outlet diameter (mm)	Max. power abs. (kW)	Motor ins. Class	IP protection	Max. air stream temp. °C	Maximum absorbed current		Max. air volume (m <sup>3</sup> /h)	Sound pressure level** dB(A)	Weight (kg)
							230 V	400 V			

### SINGLE PHASE

CSB-60	2750	60	0,20*	B	IP44	70	1,2	–	310	69	6,6
CBB-60N	2800	60	0,18	F	IP55	120	1,18	–	400	69	10,0
CBB-80N	2800	80	0,37	F	IP55	120	2,2	–	730	71	13,5
CBB-100N	2800	100	0,75	F	IP55	120	3,9	–	1250	78	18,5

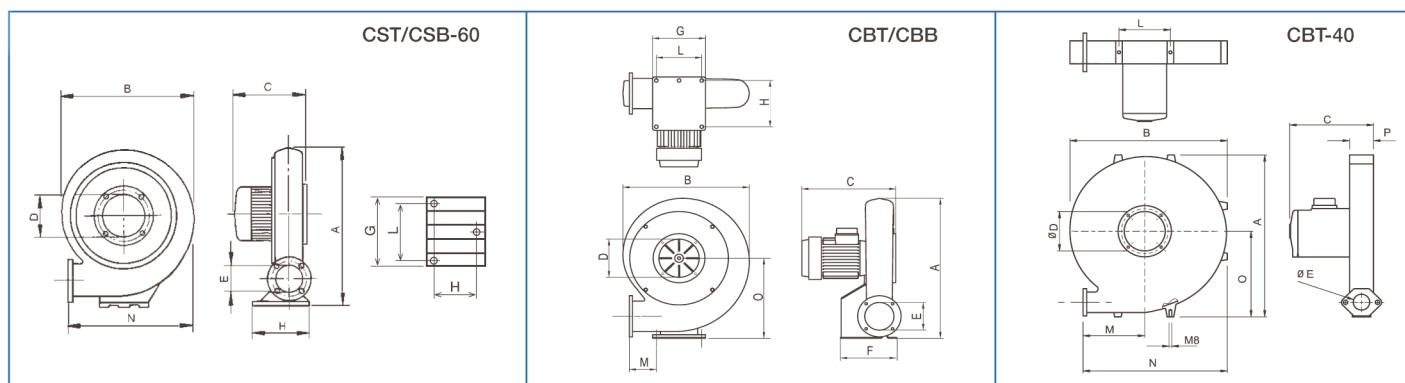
### THREE PHASE

CBT-40	2800	40	0,25*	B	IP44	120	0,75	0,43	250	78	10,0
CST-60	2750	60	0,18*	B	IP44	120	0,67	0,39	310	69	6,5
CBT-60N	2800	60	0,18	F	IP55	120	1,09	0,63	400	69	10,5
CBT-80N	2800	80	0,37	F	IP55	120	2,10	1,21	730	71	14,5
CBT-100N	2800	100	0,75	F	IP55	120	2,90	1,70	1250	78	19,5
CBT-130N	2800	130	1,1	F	IP55	120	4,30	2,50	1910	80	27,5

\*Motor power. \*\*Sound pressure dB(A), measured in free field conditions at a distance of 1,5 meters.

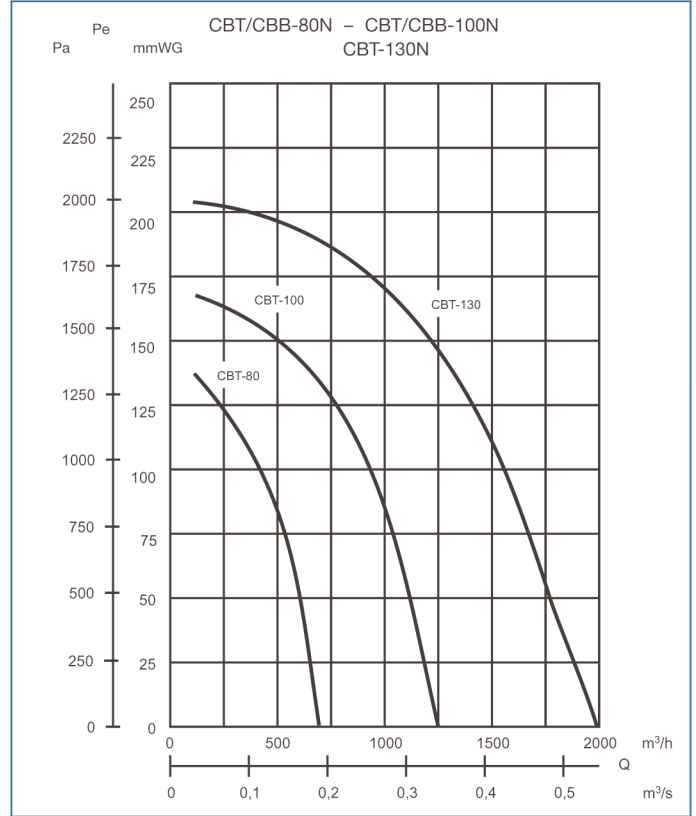
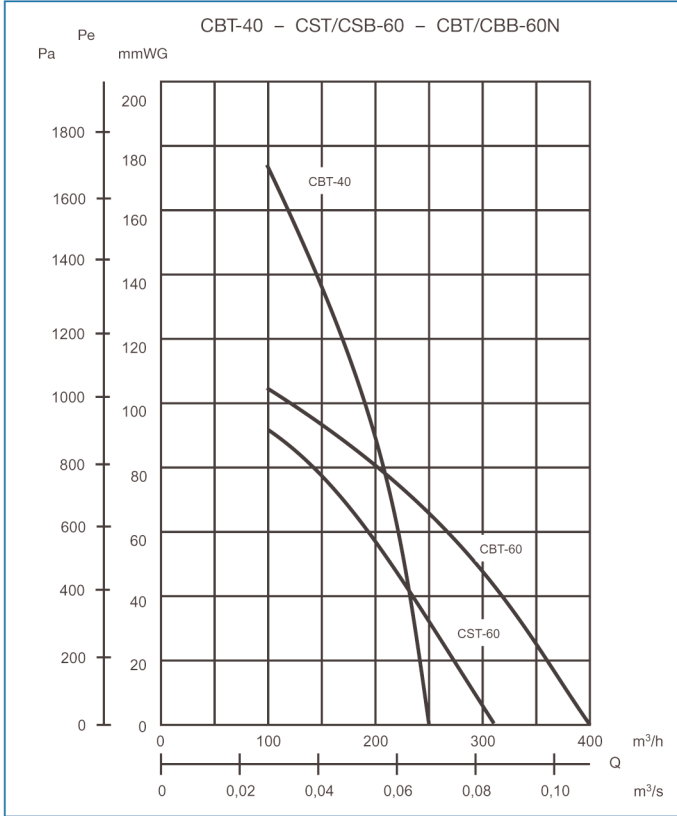
## ■ Dimensions (mm)

Model	A	B	C	Ø D	Ø E	F	G	H	L	M	N	O
CST/B-60	327	281	165	110	60	150	120	110	60	135	291	190
CBT-40	411	385	197	114	40	52	–	–	128	150	352	217
CBT/CBB-60N	375	332	258	110	60	120	122	98	100	97	324	206
CBT/CBB-80N	450	390	286	125	80	142	140	120	118	97	374	256
CBT/CBB-100N	511	434	328	140	100	196	184	170	158	101	415	294
CBT/CBB-130N	603	508	353	160	130	211	230	185	204	88	480	348



### Performance curves

- Q = Air volume in, m<sup>3</sup>/hr and m<sup>3</sup>/s.
- Pe = Static pressure in mmWG and Pa.
- Dry air at 20°C and 760 mmHg.
- Air flow data in accordance with the following standards: UNE 100-212-89, BS 848, Part 1; AMCA 210-85 and ASHRAE 51-1985.

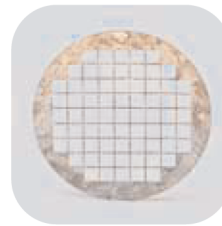


### Mounting accessories



**CBA/CBS** Circular connection flanges

Model	To mount on	Diameter (mm)
CBA-80	Inlet CBT-80N	Ø 125
CBA-100	Inlet CBT-100N	Ø 125
CBA-130	Inlet CBT-130N	Ø 200
CBS-80	Discharge CBT-80N	Ø 125
CBS-100	Discharge CBT-100N	Ø 125
CBS-130	Discharge CBT-130N	Ø 200



**DEF/KRJ** Inlet guard

Inlet guard	Model CBT
DEF-100T	40
KRJ-120	60
KRJ-140	80
DEF-140T	100
KRJ-160	130

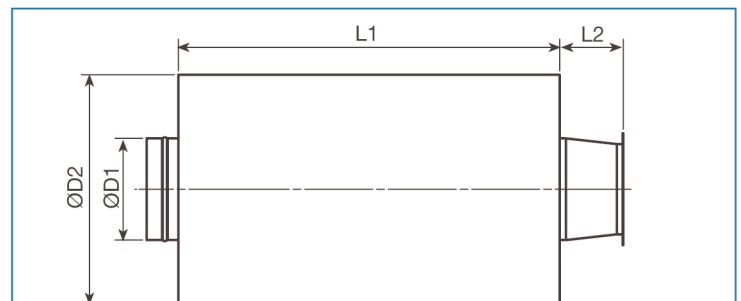


**KBTA**

Sound attenuators to mount at CBT inlet models.

**KBTI**

Sound attenuators to mount at CBT outlet models.



Model CBT	Model KBTA	Model KBTI	L1	L2 (KBTA)	L2 (KBTI)	D1	D2
60	KBTA-60	KBTI-60	600	100	100	100	300
80	KBTA-80	KBTI-80	900	100	100	125	325
100	KBTA-100	KBTI-100	900	100	150	160	360
130	KBTA-130	KBTI-130	900	150	150	200	400