



# CENTRIFUGAL DIRECT DRIVE FANS CBT-N / CBB-N / CST / CSB Series

**NEW DESIGN**



## Description

Range of direct-drive medium pressure centrifugal fans. Include a universal mounting foot that enables the installer to vary the positioning of the discharge outlet. All models are supplied as a standard with the discharge outlet in LG270 position, as shown below.

**i** • ADJUSTABLE OUTLET POSITION  
• EXTRACTION OF DUST AND PARTICULATE AIR STREAMS

## Applications

Range of fans suitable for many special ventilation applications including the extraction of contaminated or particulate airstreams.

Typical applications include the following :

### Industrial Processes

- Metal grinding fume extraction.
- Dryer fume extraction

### Material handling

- Extraction of exhaust air from power saws, sanders and planers.
- Material conveying

- Extract exhaust gas systems for residential or commercial garages.

## Construction

### Casing (Scroll)

The casings are manufactured from one piece die cast aluminium and finished with a tough, grey colour, epoxy-polyester paint coating.

### Impellers

All models incorporate radial centrifugal impellers manufactured from die cast aluminium and finished in a red colour epoxy-polyester paint finish. The impellers are dynamically balanced according to ISO 1940 standards.

### Motors

All models incorporate asynchronous induction motors in die cast aluminium. Manufactured in accordance with IEC 34-1 standard. The following standard specifications apply:

- Three phase 230/400V 50Hz.
- Single Phase 230V 50Hz.
- Safety Thermal Overload Protection.
- Sealed For Life, ball bearing assemblies.
- IP55 Protection, except for models CST and CSB - IP44.

### Special Versions

- Motors with non-standard Voltage and frequencies.

- Explosion proof versions in accordance to

ATEX Directive, for three phase models :

- Increased safety II2G EExeIIT3

- Flame proof II2G EExdIIBT5 or EExdIICT4

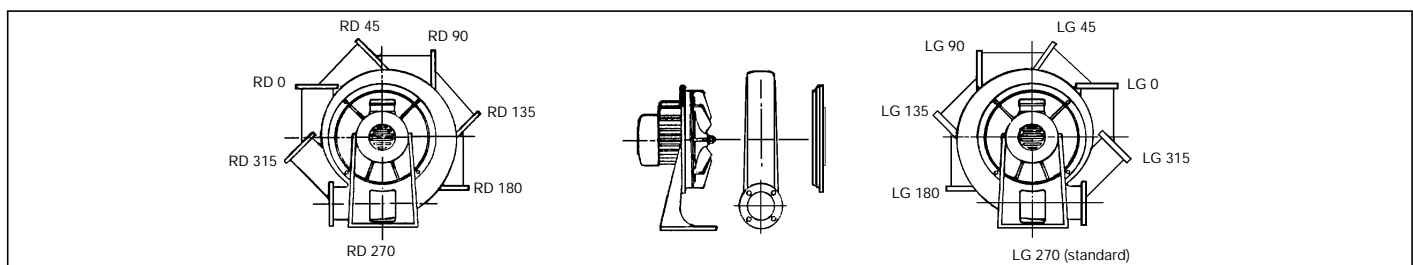
Before installation, it is important to check that the product electrical characteristics listed on the data plate label (voltage, power, frequency etc), match those of the intended electrical supply.

## Technical characteristics

Model Type	Speed (r.p.m.)	Outlet diameter (mm)	Maximum power absorbed (kW)	Motor ins. Class	IP Protección	Max. air stream temp. (°C)	Maximum absorbed current (A)		Maximum air volume (m³/h)	Sound pressure level dB(A)	Weight (kg)
							230 V	400 V			
<b>SINGLE PHASE</b>											
CSB-60	2750	60	0,20*	B	IP-44	70°	1,2	-	310	69	6,6
CBB-60N	2800	60	0,18	F	IP-55	70°	1,18	-	400	69	10,0
CBB-80N	2800	80	0,37	F	IP-55	70°	2,2	-	730	71	13,5
CBB-100N	2800	100	0,75	F	IP-55	70°	3,9	-	1250	78	18,5
<b>THREE PHASE</b>											
CBT-40	2800	40	0,25*	B	IP-44	120°	0,75	0,43	250	78	10,0
CST-60	2750	60	0,18*	B	IP-44	120°	0,67	0,39	310	69	6,5
CBT-60N	2800	60	0,18	F	IP-55	120°	1,09	0,63	400	69	10,5
CBT-80N	2800	80	0,37	F	IP-55	120°	2,10	1,21	730	71	14,5
CBT-100N	2800	100	0,75	F	IP-55	120°	2,90	1,70	1250	78	19,5
CBT-130N	2800	130	1,1	F	IP-55	120°	4,30	2,50	1910	80	27,5

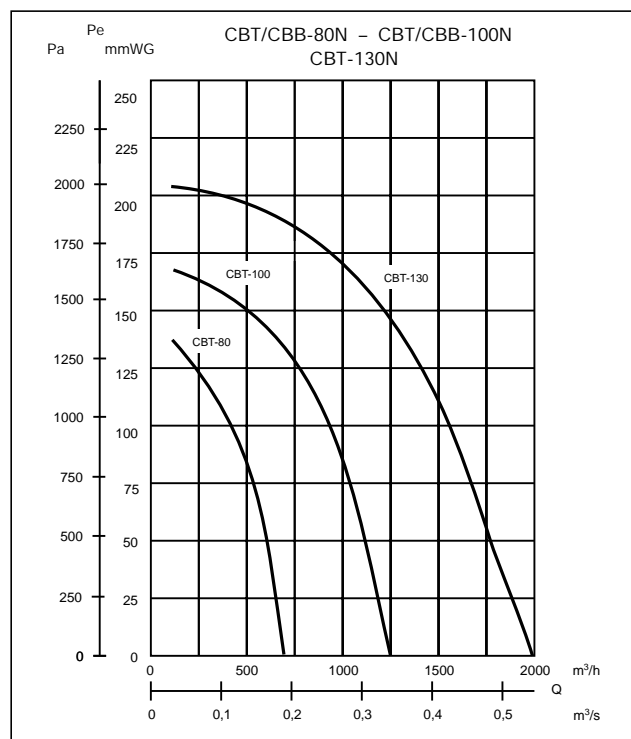
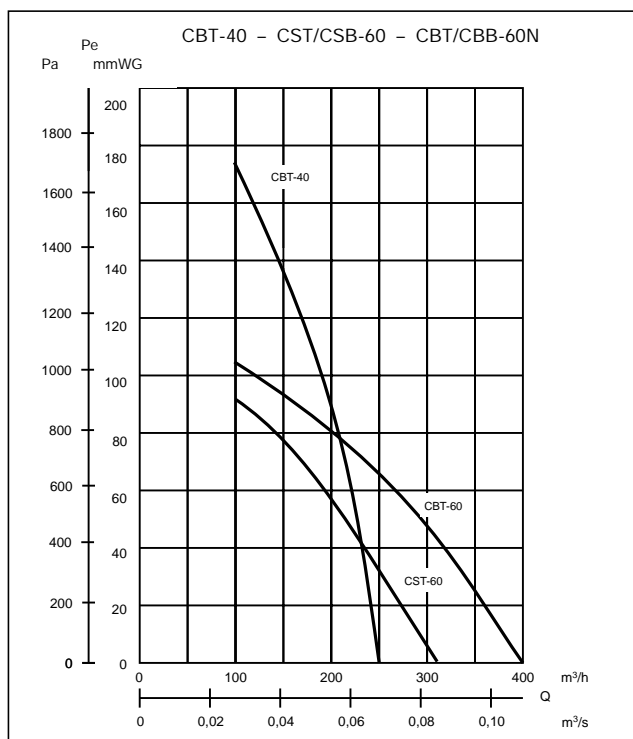
\* Motor power

## Handing positions of fans



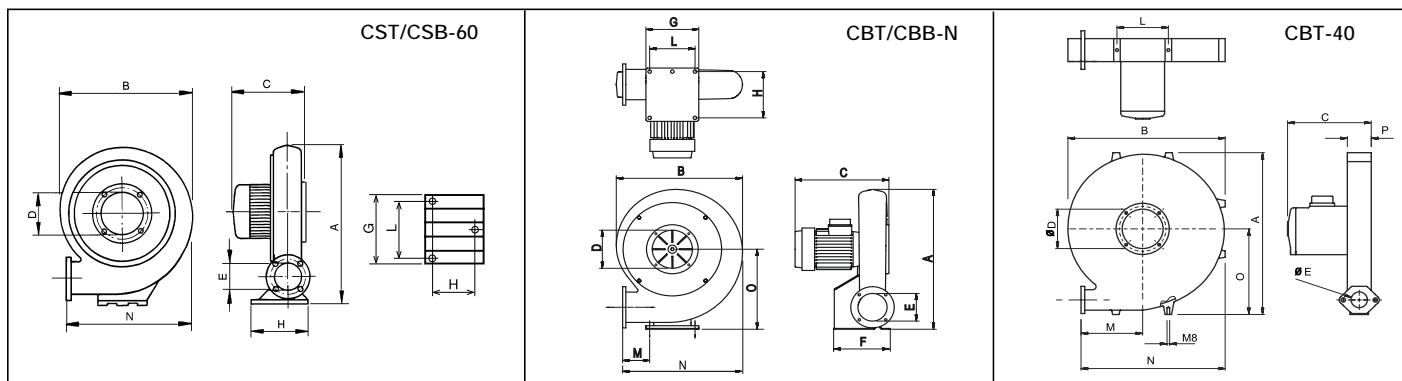
## ■ Performance curves

– 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.



## ■ Dimensions (mm)

Type	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	215	110	60	120	122	98	100	147	324	206
CBT/CBB-80N	450	390	223	125	80	142	140	120	118	156	374	256
CBT/CBB-100N	511	434	252	140	100	196	184	170	158	180	415	294
CBT-130N	603	508	340	160	130	236	230	185	204	190	480	348



## ■ Mounting accessories



**CBA/CBS** Circular connection flanges

Type	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 guards. For mounting to the inlet of the CBT fans.

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