



## CYLINDRICAL CASED AXIAL FLOW FANS

# COMPACT series TCFB / TCFT (plastic impellers)



**IP65**

Range of cylindrical cased axial fans fitted with plastic impellers and manufactured from high grade rolled galvanised steel and **protected against corrosion by cataforesis primer and black polyester paint finish.**

All models are supplied with pre-wired wiring junction box located on the outside of the fan casing for easy wiring access.

Available, depending upon the model, with single or three phase motors in 2, 4, 6 or 8 poles.

### Motors

All the motors are **IP65, Class F** insulation (1), equipped with **thermal protection.**

All motors are speed controllable except 2 poles, T/4-560/H, /4-630, B/6-710 and B/8-710.

Three phase motors 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).

(1) Working temperatures from -40°C up to 70°C (except /2-315/H, /2-355/H).

### Additional Information

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

### On request

Air direction: form (A) configuration (Motor over Impeller).

## APPLICATIONS



Warehouses



Workshops



Commercial premises



Car Parks

### Corrosion resistance



Rollled steel casings and motor support **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

COMPACT TCFB/TCFT

Cylindrical cased axial flow fans

### Reference

T C B T / 4 - 4 0 0 / H - B 4 0 0 V 5 0 Hz

1 2 3 4 5 6 7 8 9 10 11

- 1 - T: Compact Plate Axial Fan
- 2 - C: Series designation
- 3 - Impeller Type:  
 F: Ø 250-Ø 630 Fixed blade plastic impeller  
 B: Ø 250-Ø 400 Fixed blade aluminium impeller  
 Ø 450-Ø 800 Adjustable blade aluminium impeller
- 4 - Type of supply:  
 B: Single phase  
 T: Three phase
- 5 - Number of poles:  
 2: (approx. 2800 r.p.m. - 50 Hz)  
 4: (approx. 1400 r.p.m. - 50 Hz)  
 6: (approx. 900 r.p.m. - 50 Hz)  
 8: (approx. 700 r.p.m. - 50 Hz)
- 6 - : Nominal Diameter of Fan. (mm).
- 7 - : Pitch Angle
- 8 - Direction of Air: **A:** Motor over Impeller  
**B:** Impeller over Motor
- 9 - Voltage:  
 230 V (Single Phase)  
 230/400 V (Three Phase)  
 400 V (Three Phase)
- 10 - Frequency of Service: 50 Hz  
 60 Hz
- 11 - Special versions:  
**2 V:** Two Speed Motors  
 4/8 poles of motor for models from Ø 450 up to Ø 800 mm.  
 6/12 poles of motor for models from Ø 710 up to Ø 800 mm.  
**C:** Condensation drain holes on motor.  
**EX:** Explosion proof and flame proof versions.

### Supply voltages and frequencies



Mains supply voltage	Motor type	Connection	Speed
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/L diameter.

### Acoustic characteristics

The sound levels -NPS- shown in the technical characteristic chart, correspond to the value of sound pressure dB(A), measured in free field conditions at a distance equivalent to three times the diameter of the impeller with a minimum of 1.5 meters.  
 Sound power level spectrum in dB(A) at the corresponding octave band average frequencies in Hz.

LwA ASP QMAX	63	125	250	500	1000	2000	4000	8000
2-250/H	50	61	68	73	74	74	67	58
2-315/H	51	62	82	77	85	85	79	71
2-355/H	58	63	87	83	89	92	86	79

LwA ASP QMAX	63	125	250	500	1000	2000	4000	8000
4-250/H	44	50	57	58	60	59	53	42
4-315/H	37	47	57	61	66	63	57	48
4-355/H	39	59	56	65	70	66	61	52
4-400/H	41	62	58	67	74	70	66	43
4-450/H	41	57	60	69	73	71	65	55
4-500/H	44	61	64	73	76	75	68	59
4-560/L	44	60	66	75	78	76	71	62
4-560/H	46	61	67	76	80	78	72	64
4-630/L	46	60	69	78	82	80	75	67
4-630/H	47	61	70	79	83	81	76	68
4-710/L	52	72	79	84	86	83	78	70
4-710/H	56	76	83	88	90	86	81	74
4-800/L	64	81	92	95	96	90	83	74
4-800/K	67	83	94	98	98	92	85	76
4-800/G	69	85	96	99	100	94	87	78
4-800/H	71	87	99	102	102	97	90	81

LwA ASP QMAX	63	125	250	500	1000	2000	4000	8000
6-355/H	39	45	46	52	53	54	48	37
6-400/H	34	46	49	59	60	60	53	41
6-450/H	32	48	52	60	64	62	56	47
6-500/H	36	52	55	64	68	66	60	50
6-560/L	36	51	57	66	70	68	62	54
6-560/H	38	53	59	68	72	70	64	56
6-630/L	37	51	60	69	73	71	65	58
6-630/H	39	53	62	71	75	72	67	60
6-710/L	45	66	72	78	79	76	71	64
6-710/H	48	68	75	81	82	79	74	67
6-800/L	58	74	86	89	89	84	77	68
6-800/K	60	76	88	91	91	85	78	69
6-800/G	61	77	88	92	92	86	79	70
6-800/H	62	79	90	93	94	88	81	72

LwA ASP QMAX	63	125	250	500	1000	2000	4000	8000
8-450/H	38	41	47	52	58	55	47	37
8-500/H	41	43	50	55	61	58	49	39
8-560/H	44	47	53	58	64	61	53	43
8-630/H	43	49	59	67	71	67	58	50
8-710/H	42	62	69	74	76	72	67	60
8-800/L	54	70	81	85	85	79	72	63
8-800/K	54	71	82	85	86	80	73	64
8-800/G	55	72	83	86	86	81	74	65
8-800/H	56	72	84	87	87	82	75	66

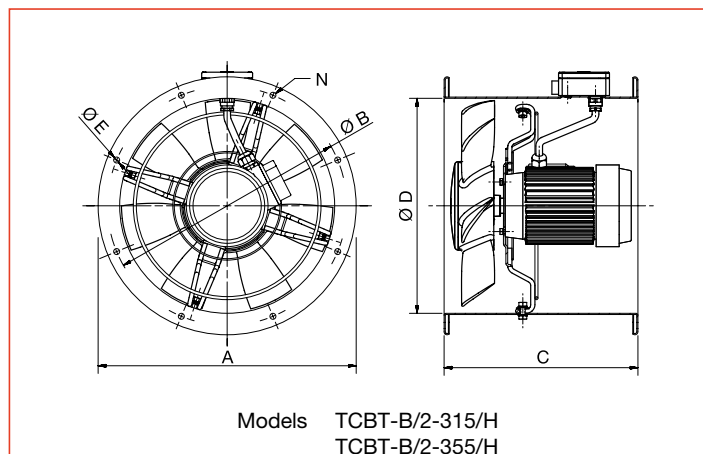
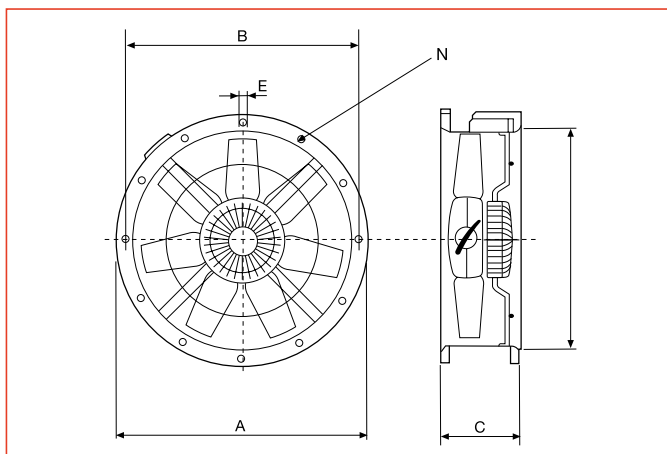
**■ Technical characteristics for models with PLASTIC impellers**

Model	Speed (r.p.m.)	Maximum absorbed power (W)	Maximum current (A)		Sound pressure level (dB(A))	Maximum air volume (m <sup>3</sup> /h)	Weight (kg)	Speed controller		Inverter controllers	
			at 230 V	at 400 V				REB	RMB/T*	VFTM*	VFKB*
<b>SINGLE PHASE 2 POLE</b>											
TCFB/2-250/H	2500	250	1,2	–	65	2160	5	–	–		
TCGB/2-315/L	2500	380	1,7	–	70	3260	11	–	–		
TCGB/2-355/J	2000	460	2,1	–	71	4000	13,2	–	–		
<b>SINGLE PHASE 4 POLE</b>											
TCFB/4-250/H	1330	60	0,3	–	52	1215	5	REB-1	RMB-1,5		
TCFB/4-315/H	1300	100	0,6	–	54	2350	7	REB-1	RMB-1,5		
TCFB/4-355/H	1225	200	1,0	–	58	3490	8	REB-2,5	RMB-1,5		
TCFB/4-400/H	1200	340	1,6	–	60	5070	9	REB-2,5	RMB-3,5		
TCFB/4-450/H	1290	480	2,3	–	65	6760	13	REB-2,5	RMB-3,5		
TCFB/4-500/H	1290	650	3,0	–	68	9200	16	REB-5	RMB-3,5		
TCFB/4-560/H	1250	980	4,9	–	71	12480	22	–	–		
TCFB/4-630/H	1200	1700	7,6	–	72	17060	25	–	–		
<b>SINGLE PHASE 6 POLE</b>											
TCFB/6-355/H	800	90	0,5	–	50	2210	8	REB-1	RMB-1,5		
TCFB/6-400/H	750	110	0,6	–	52	3400	9	REB-1	RMB-1,5		
TCFB/6-450/H	835	220	1,2	–	53	4550	13	REB-2,5	RMB-1,5		
TCFB/6-500/H	840	290	1,6	–	56	5820	16	REB-2,5	RMB-3,5		
TCFB/6-560/H	900	420	2,4	–	59	7870	22	REB-2,5	RMB-3,5		
TCFB/6-630/H	800	510	2,6	–	60	10750	25	REB-5	RMB-3,5		
<b>SINGLE PHASE 8 POLE</b>											
TCFB/8-450/H	625	130	0,7	–	48	3500	13	REB-1	RMB-1,5		
TCFB/8-500/H	605	160	0,9	–	49	4660	16	REB-1	RMB-1,5		
TCFB/8-560/H	610	240	1,3	–	51	5990	22	REB-2,5	RMB-1,5		
TCFB/8-630/H	585	320	1,7	–	52	8340	25	REB-2,5	RMB-3,5		
<b>THREE PHASE 2 POLE</b>											
TCFT/2-250/H	2500	250	0,9	0,5	65	2160	5			VFTM-Tri 0,37	VFKB-45
TCGT/2-315/G	2300	510	1,5	0,9	70	3250	11			VFTM-Tri 0,37	VFKB-45
TCGT/2-355/I	2170	550	1,6	0,9	71	4000	13,2			VFTM-Tri 1,1	VFKB-45
<b>THREE PHASE 4 POLE</b>											
TCFT/4-250/H	1330	60	0,3	0,2	52	1220	5		RMT-1,5	VFTM-Tri 0,37	VFKB-45
TCFT/4-315/H	1300	150	0,6	0,3	54	2350	7		RMT-1,5	VFTM-Tri 0,37	VFKB-45
TCFT/4-355/H	1260	200	0,8	0,5	58	3490	8		RMT-1,5	VFTM-Tri 0,37	VFKB-45
TCFT/4-400/H	1350	300	1,4	0,8	60	5070	9		RMT-1,5	VFTM-Tri 0,37	VFKB-45
TCFT/4-450/H	1230	500	1,7	1,0	65	6760	13		RMT-1,5	VFTM-Tri 0,37	VFKB-45
TCFT/4-500/H	1350	660	2,7	1,6	68	9200	16		RMT-2,5	VFTM-Tri 0,55	VFKB-45
TCFT/4-560/H	1320	1210	3,9	2,3	71	12480	22			VFTM-Tri 1,1	VFKB-45
TCFT/4-630/H	1420	1550	5,2	3,0	72	17060	25			VFTM-Tri 1,1	VFKB-45
<b>THREE PHASE 6 POLE</b>											
TCFT/6-355/H	875	90	0,5	0,3	50	2210	8		RMT-1,5	VFTM-Tri 0,37	VFKB-45
TCFT/6-400/H	830	110	0,5	0,3	52	3400	9		RMT-1,5	VFTM-Tri 0,37	VFKB-45
TCFT/6-450/H	835	190	0,8	0,5	53	4550	13		RMT-1,5	VFTM-Tri 0,37	VFKB-45
TCFT/6-500/H	840	250	0,9	0,5	56	5820	16		RMT-1,5	VFTM-Tri 0,37	VFKB-45
TCFT/6-560/H	900	410	1,6	0,9	59	8260	22		RMT-1,5	VFTM-Tri 0,37	VFKB-45
TCFT/6-630/H	910	530	2,2	1,26	60	11000	25		RMT-1,5	VFTM-Tri 0,37	VFKB-45
<b>THREE PHASE 8 POLE</b>											
TCFT/8-450/H	660	130	0,7	0,4	51	3500	13		RMT-1,5	VFTM-Tri 0,37	VFKB-45
TCFT/8-500/H	625	150	0,7	0,4	53	4660	16		RMT-1,5	VFTM-Tri 0,37	VFKB-45
TCFT/8-560/H	610	230	1,0	0,6	55	5990	22		RMT-1,5	VFTM-Tri 0,37	VFKB-45
TCFT/8-630/H	635	310	1,3	0,8	57	8340	25		RMT-1,5	VFTM-Tri 0,37	VFKB-45

\* Three phase speed controllers (RMT) or inverter controllers (VFKB/VFTM): Three phase 400V.

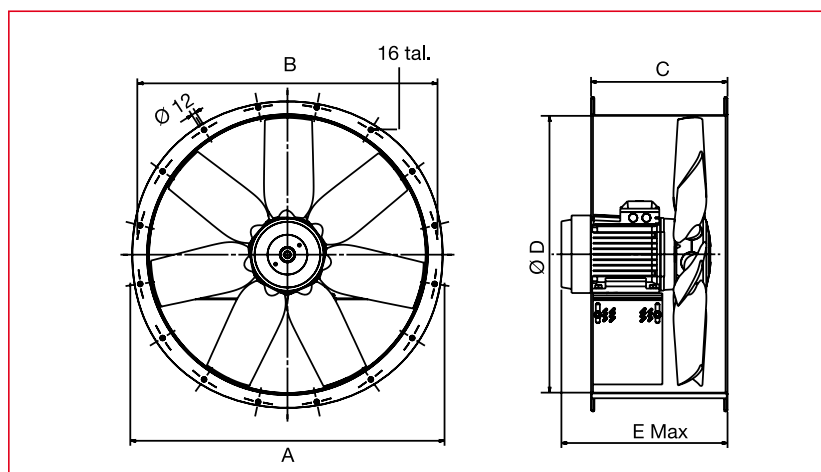


■ **Dimensions (mm)**



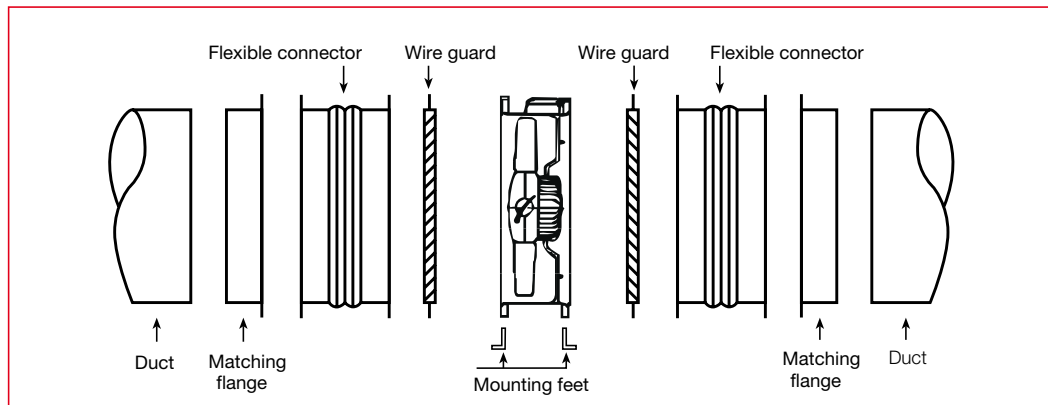
Model	Ø A	Ø B	C	Ø D	Ø E	Number of holes N
250	327	292	170	254	10	4
315	386	355	170	315	10	8
355	426	395	170	355	10	8
400	487	450	170	400	12	8
450	537	500	180	450	12	8
500	595	560	180	500	12	12
560	655	620	240	560	12	12
630	725	690	240	630	12	12
710 (6 and 8 poles)	806	770	240	710	12	16

Model	Ø A	Ø B	C	Ø D	Ø E	Number of holes N
TCBT-B/2-315/H	386	355	320	315	10	8
TCBT-B/2-355/H	426	395	320	355	10	8



Model	Ø A	B	C	Ø D	E		
					4 poles	6 poles	8 poles
710/L (4 poles)	806	770	350	710	415	-	-
710/H (4 poles)	806	770	350	710	444	-	-
800/L	896	860	350	800	437	408	383
800/K	896	860	350	800	448	437	408
800/G	896	860	350	800	447 (5,5kW) 515 (7,5kW)	448	437
800/H	896	860	350	800	515	477	437

■ **Mounting accessories**



■ **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



**COM D/S**  
Three phase fan Y / Δ  
switch



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



**VFTM IP54**  
Adjustable  
frequency drive for  
three phase motors  
from 0,37 kw to  
230V or 400V

