

CONTRAFOIL™ CONTRA-ROTATING AXIAL FLOW FANS

TCBBx2 / TCBTx2

Range of cylindrical cased axial fans fitted with aluminium impellers and manufactured from high grade rolled galvanised steel and protected against corrosion by cataforesis primer and black polyester paint finish. Fitted with two contra-rotating complementary impellers manufactured from die-cast aluminium. All models are supplied with pre-wired wiring junction box located on the outside of the fan casing for easy wiring access. Available with single or three phase 4 pole motors.

Motors

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

Single phase motors, except 630mm, are speed controllable but must be wired in three wire control.

Three phase motors suitable for inverter control.

Electrical supplies:

Single phase 230V-50Hz

Three phase 230/400V-50Hz.

(1) Working temperatures from -40°C up to 70°C.



PART L2: 2013
COMPLIANT



Contra-rotating: High pressure

Contra-rotating system with two complementary impellers allowing the duplication of the pressure with the same air volume.

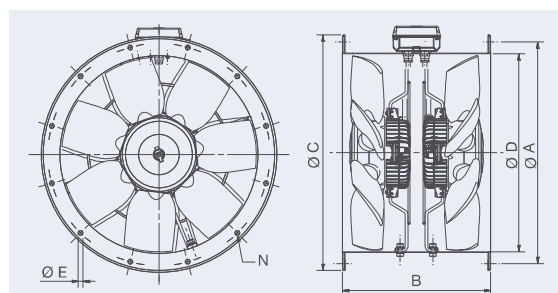


Terminal box

Wiring terminal box with cable gland PG-11.



DIMENSIONS (mm)



Model: TCBBx2 (single phase)	Ø A	B	Ø C	Ø D	Ø E	Number of holes N
450	500	375	537	450	12	8
500L	560	375	595	500	12	12
500	560	520	595	500	12	12
560	620	520	655	560	12	12
630	690	520	725	630	12	12

Model: TCBTx2 (three phase)	Ø A	B	Ø C	Ø D	Ø E	Number of holes N
450	500	375	537	450	12	8
500	560	375	595	500	12	12
560	620	520	655	560	12	12
630	690	520	725	630	12	12

TECHNICAL DATA 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.

Model	Speed (r.p.m.)	Maximum absorbed power (W)	Maximum absorbed current (A)		Sound pressure level* (dB(A))	Maximum air volume (m³/s)	Weight (Kg)	Speed controller REB/ RMT	Frequency inverter	
			230 V	400 V					S&P VFD	
									1/230V**	3/400V
SINGLE PHASE										
TCBBx2/4-450	1420	1316	5.7		67	2.070	42	REB-6		
TCBBx2/4-500L	1294	1255	6.5		68	2.360	50	REB-8		
TCBBx2/4-500	1425	1957	9.0		70.5	2.763	50	REB-10		
TCBBx2/4-560	1425	3185	14.2		73	3.859	66	REB-16		
TCBBx2/4-630	1400	3671	16.3		75	4.527	80			
THREE PHASE										
TCBTx2/4-450	1430	1309	5.2	3	67	2.013	42		S&P VFD-M10A	S&P VFD-T 5A
TCBTx2/4-500	1390	1700	5.8	3.3	70.5	2.722	50		S&P VFD-M10A	S&P VFD-T 5A
TCBTx2/4-560	1420	3173	10.0	5.6	73	4.215	66		S&P VFD-M16A	S&P VFD-T 6.8A
TCBTx2/4-630	1445	4014	12.8	7.4	75	4.991	80		S&P VFD-M16A	S&P VFD-T 9A

* Sound pressure level, measured in free field condition at a distance of 3m ** Only for fans fitted with three phase motors 230/400V.

PERFORMANCE DATA

Airflow m³/s @ Static Pressure Pa

Model	0	50	100	150	200	250	300	350	400	450	500	550	600
SINGLE PHASE 4 POLE													
TCBBx2/4-450	2.070	2.005	1.938	1.868	1.790	1.701	1.601	1.497	1.379				
TCBBx2/4-500L	2.360	2.270	2.176	2.074	1.957	1.820	1.661	1.405					
TCBBx2/4-500	2.763	2.688	2.612	2.533	2.448	2.354	2.249	2.138	2.027	1.915	1.766		
TCBBx2/4-560	3.869	3.757	3.643	3.526	3.402	3.267	3.122	2.973	2.826	2.675	2.491		
TCBBx2/4-630	4.527	4.395	4.263	4.129	3.991	3.849	3.701	3.545	3.377	3.190	2.963	2.600	2.125
THREE PHASE 4 POLE													
TCBTx2/4-450	2.013	1.955	1.897	1.835	1.766	1.686	1.593	1.494	1.390				
TCBTx2/4-500	2.722	2.632	2.542	2.447	2.348	2.243	2.133	2.020	1.900	1.747			
TCBTx2/4-560	4.215	4.111	4.006	3.896	3.781	3.655	3.517	3.368	3.220	3.078	2.938	2.784	2.550
TCBTx2/4-630	4.991	4.893	4.792	4.683	4.561	4.427	4.290	4.150	4.006	3.856	3.699	3.527	3.324

TCBB/TX2 CONTRAFOIL CONTRA ROTATING CASED AXIAL FAN



Model	Electronic Speed Controller	Transformer Speed Controller	S&P VFD 1/230V*	S&P VFD 3/400V	DOL Starter
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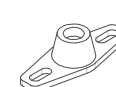
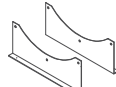
SINGLE PHASE 4 POLE

TCBBx2/4-450	REB-6	REV-7N			
TCBBx2/4-500L	REB-8	REV-7N			
TCBBx2/4-500	REB-10	REV-10N			
TCBBx2/4-560	REB-16				
TCBBx2/4-630					

THREE PHASE 4 POLE

TCBTx2/4-450			VFD-M 10A	VFD-T 5A	MSD 0-25A
TCBTx2/4-500			VFD-M 10A	VFD-T 5A	MSD 0-25A
TCBTx2/4-560			VFD-M 16A	VFD-T 6.8A	MSD 0-25A
TCBTx2/4-630			VFD-M 16A	VFD-T 9A	MSD 0-25A

* Inverter VFD option for 230V-50Hz Single Phase Input & 230V-50Hz Three Phase Output



Model	Ancillary Packs	Mounting Feet (Pair)	Matching Flange	Flexible Connector	AV Mounts (Set of 4)
TCBB / T x2/4-450	SPANC-450	PIE-450	BRIDA-450 Flange	ACOPEL F400 450 N	KSE-45
TCBBx2/4-500L	SPANC-500	PIE-500	BRIDA-500 Flange	ACOPEL F400 500 N	KSE-45
TCBB / T x2/4-500	SPANC-500	PIE-500	BRIDA-500 Flange	ACOPEL F400 500 N	KSE-45
TCBB / T x2/4-560	SPANC-560	PIE-560	BRIDA-560 Flange	ACOPEL F400 560 N	KSE-45
TCBB / T x2/4-630	SPANC-630	PIE-630	BRIDA-630 Flange	ACOPEL F400 630 N	KSE-45

ALL THREE-PHASE MODELS
WHERE CONTROLLED BY A VFD



Speed Controller
REB-CVF 0-10V