



FC Axial fans

FEATURES

Ziehl-Abegg and EBM are the world's largest manufacturers of external rotor motor fans. OST Technologies (Asia Pac) Pte Ltd in Singapore having achieved the ISO 9001 gives further assurance on the quality of these products.

The unique method of construction where the fan blades form an integral part of the external rotor allows extremely efficient heat dissipation, compactness, low noise levels and a degree of balancing not possible with conventional fan drives.

ADVANTAGES

Wide range of sizes to suit various requirements.

Very stable performance, greater all round efficiency due to improved aerodynamic construction of impeller and motor.

The typical construction of the external rotor motor with its excellent bearing alignment together with dynamic balancing in two planes in accordance with VDI 2060 ensures long life trouble free operation.

MOTOR

The external rotor motor, single and three phase, are manufactured in accordance with DIN 40.050 and VDE 0530/11.72. All motors incorporate tropic-proofed insulation and is suitable for use in ambient temperature as high as 70°C.

Standard configuration: Motor is class 'B' insulation IP44 (Class 'F' and class 'H' are also available upon request). Bearing life minimum 40,000 hours (L10). Impedance or winding protection using built-in thermal contact.

All fans are to DIN IEC 38

230V single phase +6% / -10%

400V three phase +10% / -10%

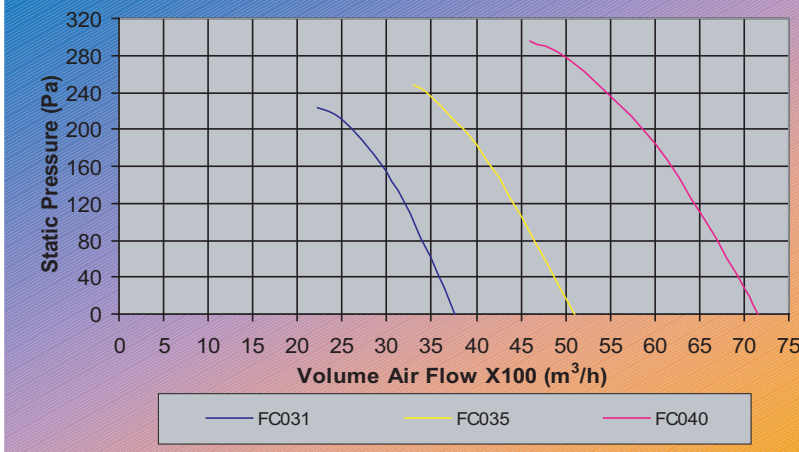
WE ARE:

DESIGNERS with form and function in mind, and excel in efficiency

MANUFACTURERS offering a high standard of quality, utilising economical premium materials

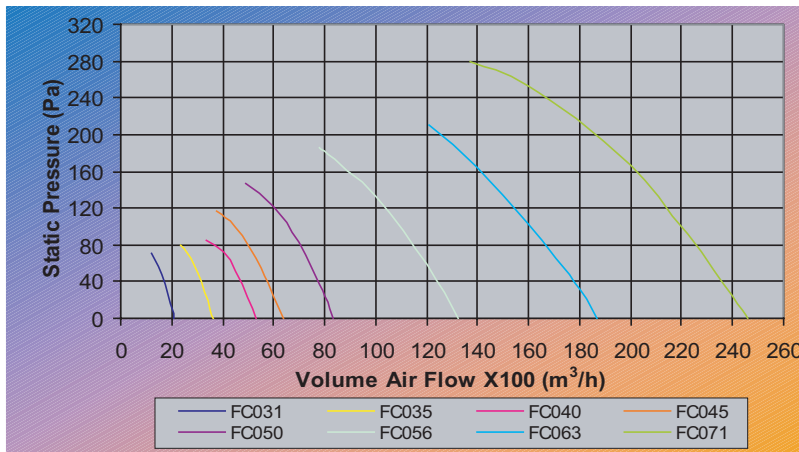
TESTERS with fully accredited superior in-house facilities to attain high levels of accuracy and an aptitude for investigative knowledge

With 20 years of experience behind us, we pride ourselves in technology with service and support



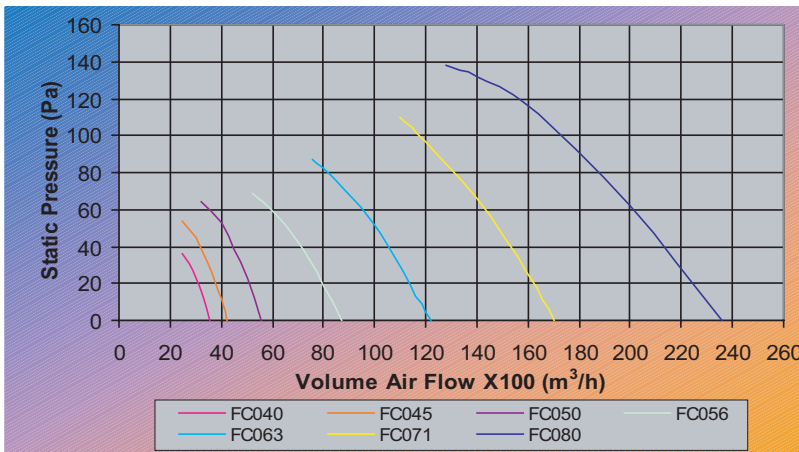
MODEL	FAN DIAMETER (mm)	RPM (min ⁻¹)	1 Phase (230V)		3 Phase (415V)		SPL (dBA @ 3.0m)
			CURRENT (A)	POWER INPUT (kW)	CURRENT (A)	POWER INPUT (kW)	
FC031	310	2670	2.10	0.47	0.79	0.51	59
FC035	350	2700	-	-	2.20	1.05	62
FC040	400	2850	-	-	2.70	1.40	65

2 POLE MOTOR PERFORMANCE DATA



MODEL	FAN DIAMETER (mm)	RPM (min ⁻¹)	1 Phase (230V)		3 Phase (415V)		SPL (dBA @ 3.0m)
			CURRENT (A)	POWER INPUT (kW)	CURRENT (A)	POWER INPUT (kW)	
FC031	310	1350	0.64	0.13	0.27	0.11	46
FC035	350	1320	0.84	0.19	0.39	0.18	52
FC040	400	1310	0.60	0.28	1.45	0.29	58
FC045	450	1350	1.60	0.36	0.75	0.36	56
FC050	500	1380	2.30	0.51	1.05	0.55	59
FC056	560	1280	-	-	2.20	1.25	66
FC063	630	1310	-	-	3.20	1.90	69
FC071	710	1320	-	-	4.90	2.90	80

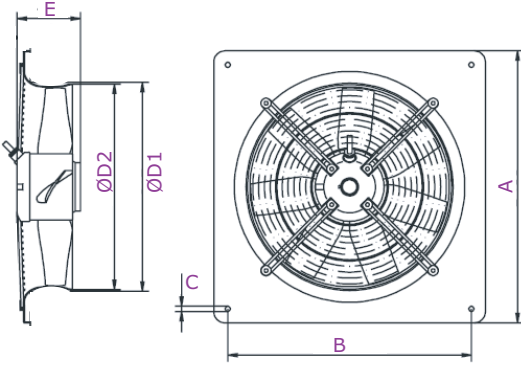
4 POLE MOTOR PERFORMANCE DATA



MODEL	FAN DIAMETER (mm)	RPM (min ⁻¹)	1 Phase (230V)		3 Phase (415V)		SPL (dBA @ 3.0m)
			CURRENT (A)	POWER INPUT (kW)	CURRENT (A)	POWER INPUT (kW)	
FC040	400	900	0.60	0.13	0.28	0.11	46
FC045	450	910	0.75	0.17	0.35	0.13	47
FC050	500	920	0.96	0.20	0.56	0.20	51
FC056	560	890	1.95	0.43	0.81	0.39	55
FC063	630	900	2.70	0.60	1.30	0.70	58
FC071	710	880	4.10	0.89	1.80	0.89	61
FC080	800	870	-	-	2.70	1.40	63

6 POLE MOTOR PERFORMANCE DATA

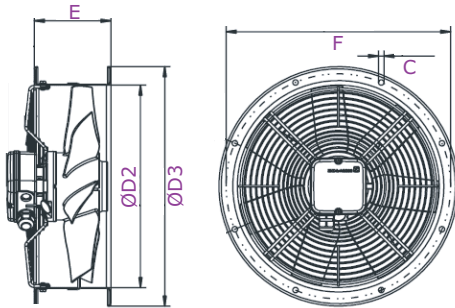
SQUARE WALL MOUNTED HOUSING



MODEL	Dimensions (mm)						max wt. (kg)
	A	B	C	ØD1	ØD2	max E	
FC031	430	380	9.0	328	320	162	6
FC035	485	435	9.0	372	372	176	7
FC040	540	490	9.0	420	412	193	9
FC045	575	535	11.0	480	463	186	11
FC050	655	615	11.0	528	517	198	17
FC056	725	675	11.0	589	568	245	25
FC063	805	750	11.0	664	643	244	32
FC071	850	810	14.5	763	720	294	43
FC080	970	910	14.5	870	807	244	47



IN DUCT DOUBLE FLANGE MOUNTED



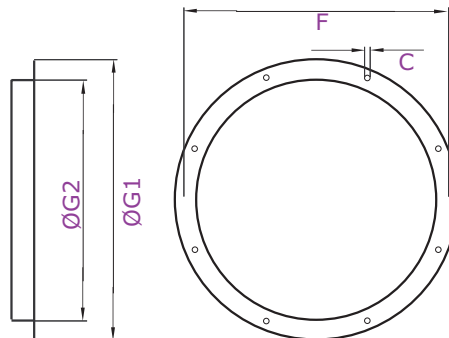
MODEL	Dimensions (mm)					No. of holes	max wt. (kg)
	F	C	ØD2	ØD3	max E		
FC031	356	9.5	317	382	135	8	8
FC035	395	9.5	356	421	135	8	9
FC040	438	9.5	400	466	155	12	10
FC045	487	9.5	451	515	160	12	12
FC050	541	9.5	503	567	165	12	17
FC056	605	11.5	559	635	234	16	23
FC063	674	11.5	634	707	244	16	29
FC071	751	11.5	711	785	260	16	45
FC080	837	11.5	797	875	280	24	46



OPTIONAL ACCESSORIES

Matching flanges

SIZE	Dimensions (mm)					
	A	B	C	D	E	F
310	320	380	30	8	9.5	356
350	361	420	30	8	9.5	395
400	403	463	30	12	9.5	438
450	455	515	30	12	9.5	487
500	507	567	30	12	9.5	541
560	564	644	40	16	11.5	605
630	641	721	40	16	11.5	674
710	722	802	40	16	11.5	751
800	807	893	50	24	11.5	837

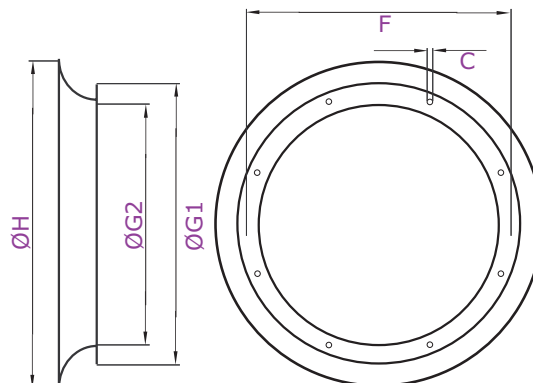


OTHER OPTIONAL ACCESSORIES

- * Thermal contact relay
- * Speed controllers
- * Silencers
- * Vibration isolators

Bellmouth inlet cones

SIZE	Dimensions (mm)						
	A	B	C	D	E	F	G
310	320	380	85	8	9.5	356	409
350	361	420	85	8	9.5	395	450
400	403	463	95	12	9.5	438	503
450	455	515	100	12	9.5	487	570
500	507	567	110	12	9.5	541	618
560	564	644	120	16	11.5	605	685
630	641	721	130	16	11.5	674	806
710	722	802	140	16	11.5	751	905
800	807	893	150	24	11.5	837	1007



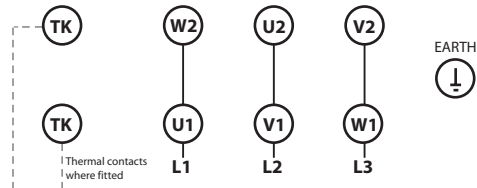
ELECTRICAL INFORMATION

3 PHASE WIRING DIAGRAM

2 Speed Fans

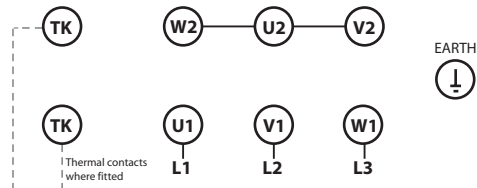
3Phase 2 speed by Y/ Δ switching with or without thermal contacts. Direction of rotation may be changed by interchanging 2 phases of supply line. Bridging of terminals not required when used in conjunction with Y connection.

High Speed Δ Connection



Bridge U1-W2, V1-U2, and W1-V2. Connect incoming supply to U1, V1, and W1.

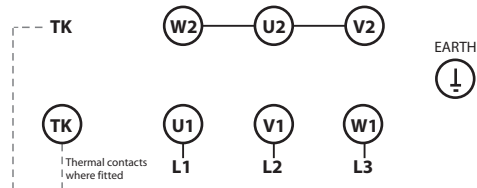
Low Speed Y Connection



Bridge W2, U2, and V2. Connect incoming supply to U1, V1, and W1. Where Y connection is used connect motor terminals to corresponding terminals on contact. Motor terminal bridging not required.

Explosion Proof & Single Speed Fans ONLY

3 phase single speed. With or without thermostats, change of direction of rotation by interchanging 2 phases of supply line.

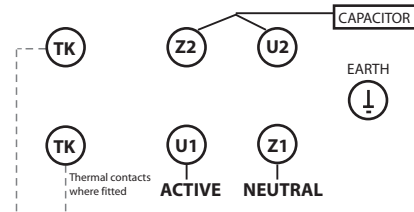


Bridge W2, U2, and V2. Connect incoming supply to U1, V1, and W1.

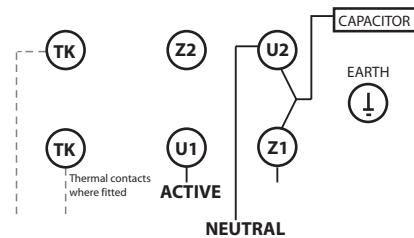
1 PHASE WIRING DIAGRAM

Permanent split capacitor with or without thermal contact.

Clockwise direction, lookin at rotor



Counter clockwise direction, lookin at rotor



NOTE:

Where thermal contacts are fitted (TK) and used, they must be connected to the corresponding connections of the starting contact to interrupt the motor power supply in the event of a fault.

Failure to adhere to wiring diagrams automatically voids warranty.

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