



CFW Plate Mounted Axial Aerofoil Fans

Application

The design of plate mounted fans is such that these fans can be utilised to move air across a partition, be it a wall, a plenum chamber, a duct, or a drying chamber, to name a few examples.

Unlike flat bladed propeller fans, plate axial fans are fitted with aerofoil shaped aluminium impellers suitable for developing medium pressures. As a result, their application is found in simple ducted fresh air supply systems, kitchen canopies, spray booths, panel ventilation, and drying kilns, as examples.

Because of the materials of construction, these fans are also suitable for use in high corrosion areas. In this instance the preferred fan blade is glass reinforced nylon with epoxy coated metal components.

The range consists of seven standard sizes, from $\varnothing 400\text{mm}$ to $\varnothing 800\text{mm}$. Larger sizes can be manufactured when required.

The fan mounting plate is manufactured using GRP and includes an aerodynamic inlet bell to optimise efficiency. Steel mounting plates with hot dip galvanised finish are also available. The air inlet side of the fan is protected with a spiral wound wire guard with integral motor support on sizes up to $\varnothing 630\text{mm}$. Sizes $\varnothing 710\text{mm}$ and $\varnothing 800\text{mm}$ have separate motor support arms.

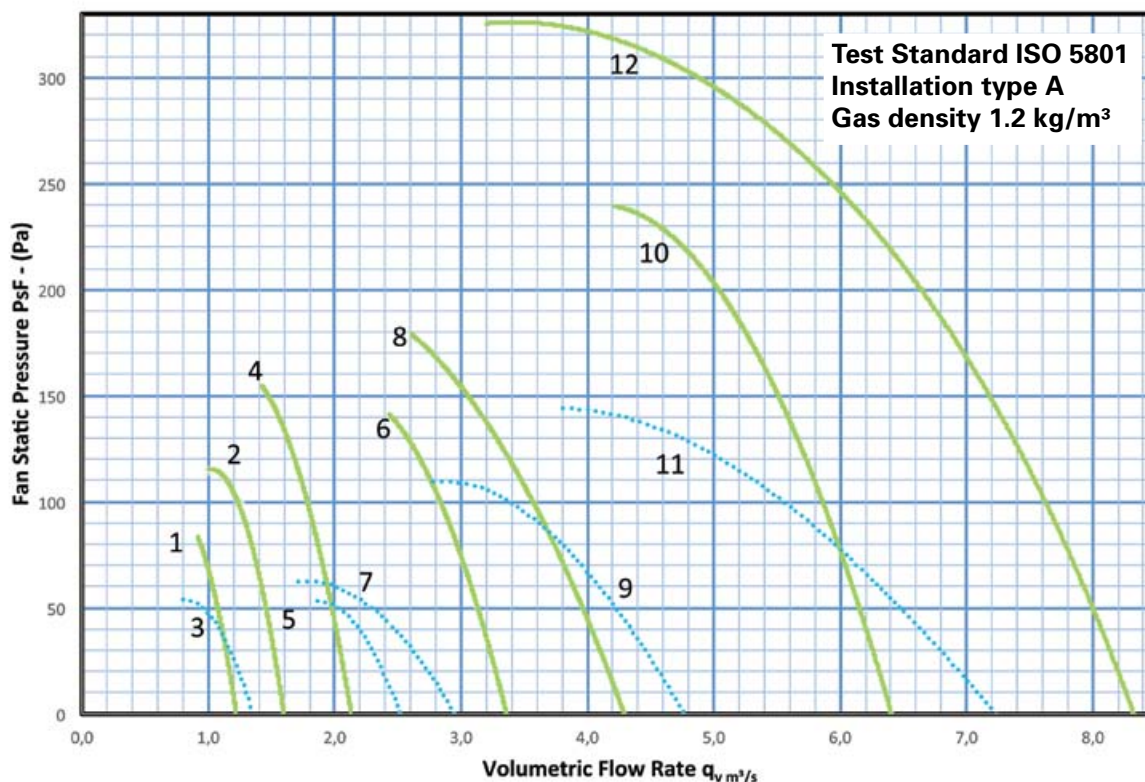
Motors

Standard fans are supplied with Class F, IP55 pad mounted motors. Also available are sparkproof (Zone 2) motors and Flameproof (Zone 1) motors, as well as motors with Class H insulation.

Balancing

Fans are balanced as an assembled unit to well within balance grade G6.3, ISO 1940, and ISO 14964.

Aerodynamic Performance Curves



CFW PLATE MOUNTED AXIAL AEROFOIL FANS TECHNICAL DATA

Model	Fan Size (ømm)	Motor Power (kW)	Motor Poles	Motor Full Load Amps (A)	Power Supply (PhV/Hz)	Motor Frame Size	Insulation Class	Spark-proof	Fan Speed (Nominal RPM)	Sound Level (dBA @ 3m)	Free Air Delivery (m³/s)	Curve No.	Permissible Ambient Temperature Range (°C)	Mass with Steel Plate (kg)	Dimensions (L x W x Hmm)
PMLDAG40/9-9/25°/4/A/0.37kWMF	400	0,37	4	2,7	1/230/50	71	F	No	1400	60	1,2	1	-29 - +40	19	506 x 506 x 246mm
PMLDAG40/9-9/25°/4/A/0.37kWMH	400	0,37	4	2,7	1/230/50	71	H	No	1400	60	1,2	1	-29 - +70	19	506 x 506 x 246mm
PMLDAG45/9-9/22°/4/A/0.37kWMF	450	0,37	4	2,7	1/230/50	71	F	No	1400	65	1,6	2	-29 - +40	22	550 x 550 x 246mm
PMLDAG45/9-9/20°/4/A/0.37kWMH	450	0,37	4	2,7	1/230/50	71	H	No	1400	65	1,3	-	-29 - +70	22	550 x 550 x 246mm
PMLDAG50/9-9/25°/4/A/0.55kWMF	500	0,55	4	3,5	1/230/50	80	F	No	1400	70	2,1	4	-29 - +40	28	675 x 675 x 253mm
PMLDAG50/9-9/18°/4/A/0.55kWMH	500	0,55	4	3,5	1/230/50	80	H	No	1400	70	1,7	-	-29 - +70	28	675 x 675 x 253mm
PMLDAG56/9-9/30°/4/A/1.1kWMF	560	1,1	4	6,3	1/230/50	90	F	No	1400	73	3,3	6	-29 - +40	37	675 x 675 x 295mm
PMLDAG56/9-9/21°/4/A/1.1kWMH	560	1,1	4	6,3	1/230/50	90	H	No	1400	73	2,75	-	-29 - +70	37	675 x 675 x 295mm
PMLDAG63/9-9/25°/4/A/1.5kWMF	630	1,5	4	8,5	1/230/50	90	F	No	1400	76	4,3	8	-29 - +40	40	730 x 730 x 297mm
PMLDAG63/9-9/18°/4/A/1.5kWMH	630	1,5	4	8,5	1/230/50	90	H	No	1400	76	3,7	-	-29 - +70	40	730 x 730 x 297mm
PMLDAG71/9-9/25°/4/A/2.2kWMF	710	2,2	4	12,9	1/230/50	100	F	No	1400	80	6,4	10	-29 - +40	60	860 x 860 x 337mm
PMLDAG71/9-9/16°/4/A/2.2kWMH	710	2,2	4	12,9	1/230/50	100	H	No	1400	80	4,9	-	-29 - +70	60	860 x 860 x 337mm

PMLDAG40/9-9/25°/4/A/0.37kWTF	400	0,37	4	1,06	3/400/50	71	F	No	1440	60	1,2	1	-29 - +40	19	506 x 506 x 246mm
PMLDAG40/9-9/25°/4/A/0.37kWTH	400	0,37	4	1,06	3/400/50	71	H	No	1440	60	1,2	1	-29 - +70	19	506 x 506 x 246mm
PMLDAG40/9-9/25°/4/A/0.37kWTFs	400	0,37	4	1,06	3/400/50	71	F	Yes	1440	60	1,2	1	-29 - +40	19	506 x 506 x 246mm
PMLDAG45/9-9/22°/4/A/0.37kWTF	450	0,37	4	1,06	3/400/50	71	F	No	1440	65	1,6	2	-29 - +40	22	550 x 550 x 246mm
PMLDAG45/9-9/20°/4/A/0.37kWTH	450	0,37	4	1,06	3/400/50	71	H	No	1440	65	1,3	-	-29 - +70	22	550 x 550 x 246mm
PMLDAG45/9-9/22°/4/A/0.37kWTFs	450	0,37	4	1,06	3/400/50	71	F	Yes	1440	65	1,6	2	-29 - +40	22	550 x 550 x 246mm
PMLDAG50/9-9/22°/6/A/0.37kWTF	500	0,37	6	1,18	3/400/50	80	F	No	960	68	1,3	3	-29 - +40	28	675 x 675 x 253mm
PMLDAG50/9-9/22°/6/A/0.37kWTFs	500	0,37	6	1,18	3/400/50	80	F	Yes	960	68	1,3	3	-29 - +40	28	675 x 675 x 253mm
PMLDAG50/9-9/25°/4/A/0.55kWTF	500	0,55	4	1,42	3/400/50	80	F	No	1440	70	2,1	4	-29 - +40	28	675 x 675 x 253mm
PMLDAG50/9-9/18°/4/A/0.55kWTH	500	0,55	4	1,42	3/400/50	80	H	No	1440	70	1,7	-	-29 - +70	28	675 x 675 x 253mm
PMLDAG50/9-9/25°/4/A/0.55kWTFs	500	0,55	4	1,42	3/400/50	80	F	Yes	1440	70	2,1	4	-29 - +40	28	675 x 675 x 253mm
PMLDAG56/9-9/35°/6/A/0.75kWTF	560	0,75	6	1,89	3/400/50	90	F	No	960	71	2,5	5	-29 - +40	37	675 x 675 x 295mm
PMLDAG56/9-9/35°/6/A/0.75kWTFs	560	0,75	6	1,89	3/400/50	90	F	Yes	960	71	2,5	5	-29 - +40	37	675 x 675 x 295mm
PMLDAG56/9-9/30°/4/A/1.1kWTF	560	1,1	4	2,66	3/400/50	90	F	No	1440	73	3,3	6	-29 - +40	37	675 x 675 x 295mm
PMLDAG56/9-9/21°/4/A/1.1kWTH	560	1,1	4	2,66	3/400/50	90	H	No	1440	73	2,75	-	-29 - +70	37	675 x 675 x 295mm
PMLDAG56/9-9/30°/4/A/1.1kWTFs	560	1,1	4	2,66	3/400/50	90	F	Yes	1440	73	3,3	6	-29 - +40	37	675 x 675 x 295mm
PMLDAG63/9-9/30°/6/A/0.75kWTF	630	0,75	6	1,89	3/400/50	90	F	No	960	74	2,95	7	-29 - +40	40	730 x 730 x 297mm
PMLDAG63/9-9/30°/6/A/0.75kWTFs	630	0,75	6	1,89	3/400/50	90	F	Yes	960	74	2,95	7	-29 - +40	40	730 x 730 x 297mm
PMLDAG63/9-9/25°/4/A/1.5kWTF	630	1,5	4	3,42	3/400/50	90	F	No	1440	76	4,3	8	-29 - +40	40	730 x 730 x 297mm
PMLDAG63/9-9/18°/4/A/1.5kWTH	630	1,5	4	3,42	3/400/50	90	H	No	1440	76	3,7	-	-29 - +70	40	730 x 730 x 297mm
PMLDAG63/9-9/25°/4/A/1.5kWTFs	630	1,5	4	3,42	3/400/50	90	F	Yes	1440	76	4,3	8	-29 - +40	40	730 x 730 x 297mm
PMLDAG71/9-9/30°/6/A/1.5kWTF	710	1,5	6	3,9	3/400/50	100	F	No	960	78	4,75	9	-29 - +40	60	860 x 860 x 342mm
PMLDAG71/9-9/30°/6/A/1.5kWTFs	710	1,5	6	3,9	3/400/50	100	F	Yes	960	78	4,75	9	-29 - +40	60	860 x 860 x 342mm
PMLDAG71/9-9/24°/4/A/2.2kWTF	710	2,2	4	4,8	3/400/50	100	F	No	1440	80	6,4	10	-29 - +40	60	860 x 860 x 342mm
PMLDAG71/9-9/16°/4/A/2.2kWTH	710	2,2	4	4,8	3/400/50	100	H	No	1440	80	4,9	-	-29 - +70	60	860 x 860 x 342mm
PMLDAG71/9-9/24°/4/A/2.2kWTFs	710	2,2	4	4,8	3/400/50	100	F	Yes	1440	80	6,4	10	-29 - +40	60	860 x 860 x 342mm
PMLDAG80/9-9/30°/6/A/1.5kWTF	800	1,5	6	3,9	3/400/50	100	F	No	960	82	7,2	11	-29 - +40	70	970 x 970 x 342mm
PMLDAG80/9-9/30°/6/A/1.5kWTFs	800	1,5	6	3,9	3/400/50	100	F	Yes	960	82	7,2	11	-29 - +40	69	970 x 970 x 342mm
PMLDAG80/9-9/21°/4/A/3.0kWTF	800	3	4	6,56	3/400/50	100	F	No	1440	85	8,3	12	-29 - +40	69	970 x 970 x 342mm
PMLDAG80/9-9/14°/4/A/3.0kWTH	800	3	4	6,56	3/400/50	100	H	No	1440	85	6,3	-	-29 - +70	69	970 x 970 x 342mm
PMLDAG80/9-9/21°/4/A/3.0kWTFs	800	3	4	6,56	3/400/50	100	F	Yes	1440	85	8,3	12	-29 - +40	69	970 x 970 x 342mm

Single phase

Three phase

Class F

Class H: - Note class H fan motors have been de-rated to operate at 70 °C at 1750m above sea level. For special airflow requirements please refer to CFW Sales.

Sparkproof

Note: Due to continuous efforts to improve design and manufacturing methods, the information in this data sheet may have changed since publication.

Legend example on page 3

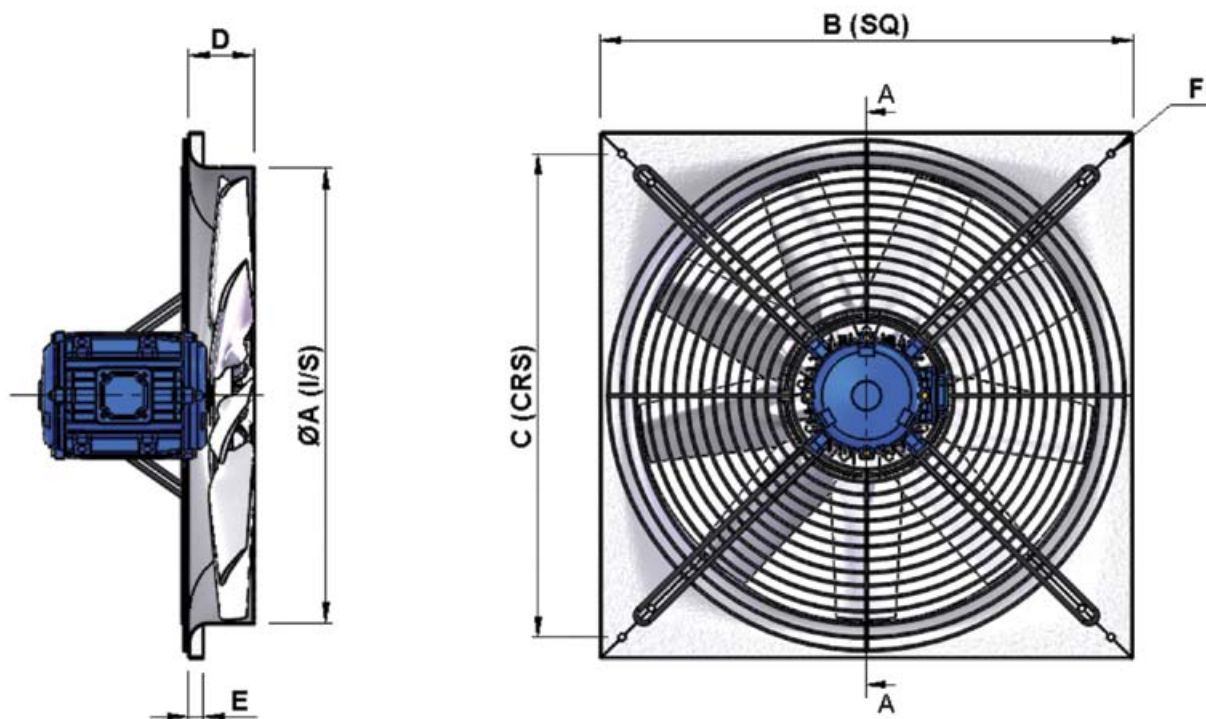

SABS
ISO 9001

www.cfw.co.za

Cape Town Head Office: Tel. +27 (0) 21 931 8331 | Johannesburg Tel: +27 (0) 11 452 5830/3/4

Legend example**PMLDAG63/9-9/25°/4/A/1.5kWTF**

- PM** Plate Mounted Axial
LDA Impeller type
G G = GRP diaphragm plate. S = Steel diaphragm plate
63 Nominal fan diameter in centimeters
9-9 9 Blades-9 bladed hub
25° Blade pitch angle
4 Number of poles: 4 = 1400RPM; 6 = 960RPM
A Form of Running: A = airflow over motor & then through impeller;
 B = airflow through impeller & then over motor
1.5kW Motor rated power
T T = Three phase; M = Single phase
F Insulation class. Also Class H
S Non-sparking motor and construction

**Fan Dimensions (mm)**

Fan size	ØA	B	C	D	E	F
400	400	505	465	100	25	10
450	450	550	495	100	25	10
500	500	675	615	90	20	10
560	560	675	615	95	20	12
630	630	730	670	90	20	12
710	710	860	784	120	20	12
800	800	970	685	105	30	12



www.cfw.co.za

Cape Town Head Office: Tel. +27 (0) 21 931 8331 | Johannesburg Tel: +27 (0) 11 452 5830/3/4