

EQ / DQ SERIES - ROSENBERG PLATE MOUNTED AXIAL FANS

MODELS

EQ - Single phase
DQ - Three phase

GENERAL

The Rosenberg EQ/DQ Series of plate mounted axial fans offers the benefits of the very latest motor technology and production techniques. Powered by the Rosenberg external rotor motor, the fan has a flat, low profile, compact design.

A wide performance range is made possible by the use of 100% speed controllable fans to obtain the correct air flow for each application.

APPLICATION

The EQ/DQ Series of high efficiency axial fans are designed to handle large air volumes against low to medium pressure applications. Typical applications include the ventilation of restaurants, showrooms, workshops, warehouses, swimming pools, gymnasiums, restaurants, clubrooms and plantrooms. They can also be used in OEM air conditioning, cooling or drying applications.

The initial cost of installation is low. On-going maintenance is negligible due to the high quality of the fans utilised.

The same fans are available in a short-cased flanged mount for use with ducting - refer to your local **temperzone** sales office.

CONSTRUCTION

Mounting plates are made from galvanised sheet metal and polyester powder coated. Motor mounting inlet guards, standard in sizes 200 to 630, are steel either with black epoxy finish or electro plated.

FAN

All fans are statically and dynamically balanced in accordance with ISO standard 1940, grade 2.5.

The EQ/DQ Series utilise aerodynamically profiled high efficiency impeller blades. The impellers are epoxy coated galvanised steel from sizes 200 to 300 and fibre reinforced plastic from sizes 315 to 560 (plus 630-6). Sizes 710 to 1000 (plus 630-4) impellers are die cast aluminium.

MOTORS

All models incorporate the latest generation of 100% speed controllable Rosenberg external rotor motors.

The motors are all fitted with thermal contacts embedded in the motor windings to provide protection against overload, mains phase failure, stalling of the motor and excessive ambient temperatures. Note: A condition of the warranty is that thermal contacts must be utilised in the electric circuit.

Motors are rated IP 44 with protection against humidity and thermal contact. They can be operated in up to 95% relative humidity conditions. Bearings are German ball bearings, sealed for life.

The use of single phase fans is recommended wherever possible because of the following advantages:

- two core and earth cable only are needed
- correct rotation is assured
- motor protection is through the thermal contacts wired in series with the motor windings
- lower cost speed control
- more commonly available power supply

Note: With three phase models it is important to check for correct rotation of the impeller at installation.

Some models are available on indent with three phase explosion proof (Ex 'e') motors - refer fan curves marked 'Ex'.

ACOUSTIC DATA

The single figure dB(A) free field data is given as a general guide for quick reference to the sound level of the unit at 3 m from the open inlet to the fan. This figure does not take into account the reverberant effect of the area in which the fan is installed.

SPEED CONTROL

Being of the external rotor motor type, these fans are ideal for 100% speed control utilising voltage control. This can be done through transformers or electronically.

5 Step Manual Controllers are suitable for single and three phase motors. These transformer type controllers have a motor protection installed so that if the mains contactor drops out a reconnection is only possible by manually resetting the control dial.

Electronic Controllers provide continuously adjustable speed control and an on/off switch. Thermal contacts in the fan's motor windings disconnect the motor if it gets too hot and automatically reconnect it when the motor cools down.

Three phase electronic controllers are available with pressure or temperature dependant regulation for automatic control of fan speed.

ACCESSORIES

1. Shutters - made from shockproof, weather and UV-ray resistant plastic; light grey colour; supplied with mounting parts.
2. Guards for sizes 710 to 1000.
3. Speed controllers.

ORDERING DETAIL

Example:

Rosenberg EQ 350 - 4

Phase: E - single
D - three

Fan size

Motor poles

PERFORMANCE DATA

EQ / DQ Series

Fig.1

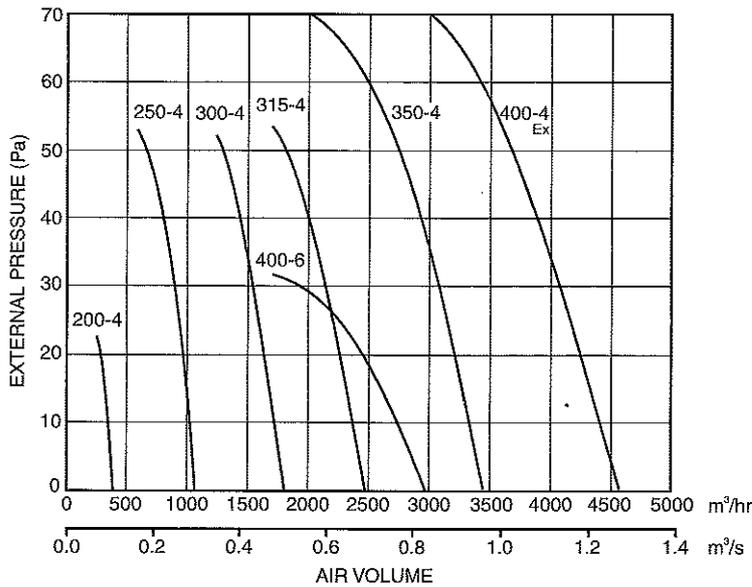


Fig.2

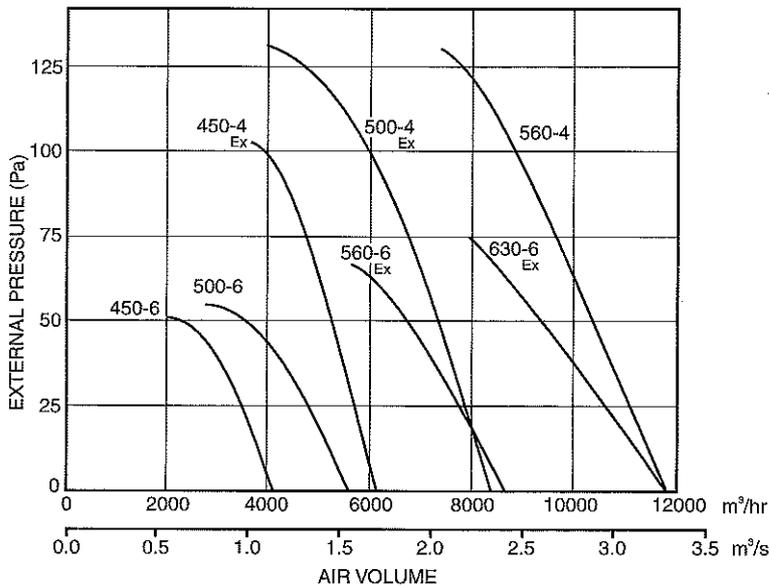
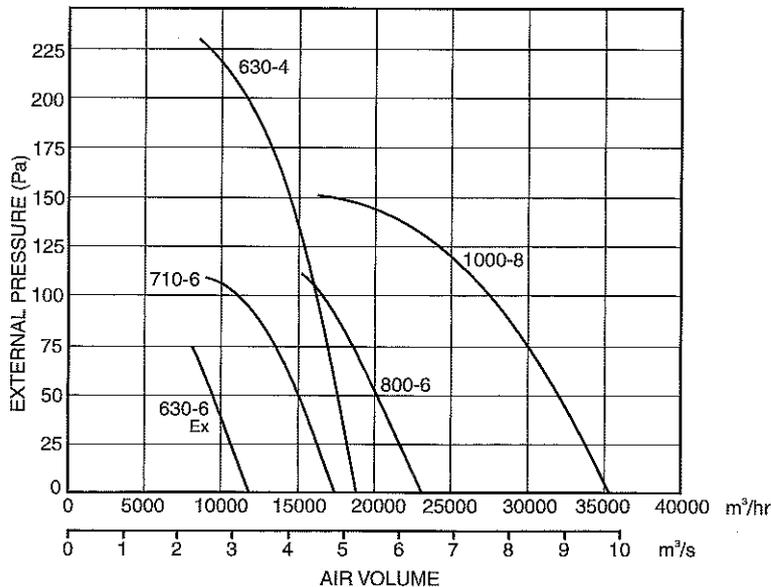


Fig.3



1 Phase 230 V

Model	Power (kW)	Input amps	Fan Speed RPM	dB(A) @ 3m
EQ 200-4	0.03	0.13	1220	37
EQ 250-4	0.06	0.27	1350	41
EQ 300-4	0.10	0.44	1290	50
EQ 315-4	0.12	0.55	1380	49
EQ 350-4	0.18	0.82	1390	51
EQ 400-4	0.22	1.00	1335	53
EQ 400-6	0.09	0.40	900	43
EQ 450-4	0.33	1.50	1370	56
EQ 450-6	0.15	0.72	910	45
EQ 500-4	0.50	2.30	1370	58
EQ 500-6	0.20	0.88	935	47
EQ 560-6	0.40	1.85	930	52
EQ 630-6	0.54	2.55	915	57

Note: All available ex stock

3 Phase 400 V

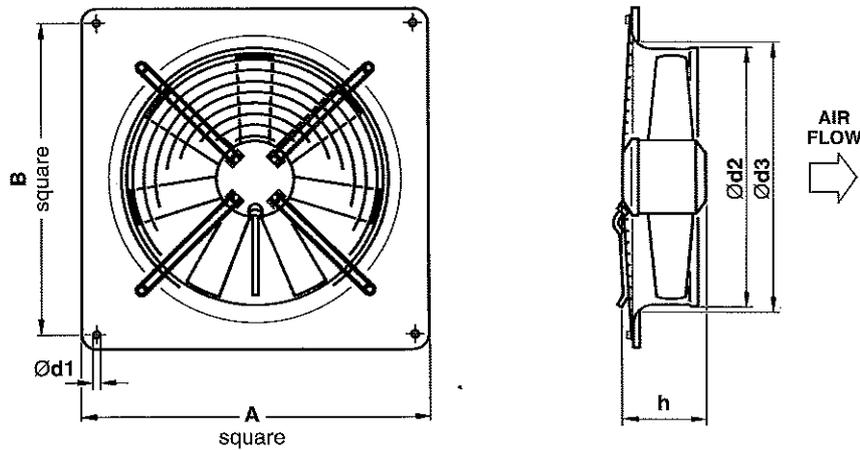
Model	Power (kW)	Input amps	Fan Speed RPM	dB(A) @ 3m
DQ 315-4	0.11	0.28	1390	49
DQ 350-4	0.16	0.38	1370	51
DQ 400-4	0.21	0.50	1360	53
DQ 450-4	0.33	0.58	1335	56
DQ 450-6	0.13	0.25	900	45
DQ 500-4*	0.52	1.10	1340	58
DQ 500-6	0.20	0.51	935	47
DQ 560-4*	0.94	1.79	930	60
DQ 560-6*	0.34	0.75	930	52
DQ 630-4	2.20	3.90	1295	65
DQ 630-6*	0.53	1.19	925	57
DQ 710-6	0.96	1.85	845	58
DQ 800-6*	1.50	3.10	855	61
DQ 1000-6	2.20	5.20	690	66

* Available ex stock

Fig. 4 DIMENSIONS (mm)

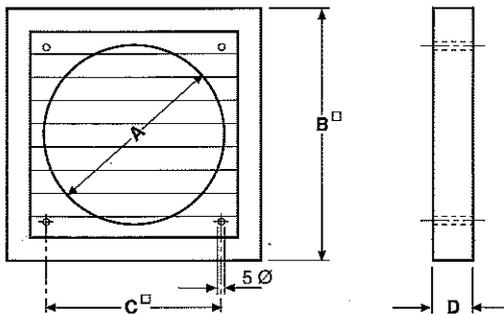
EQ / DQ Series

Not to Scale



MODEL	A	B	d1	d2	d3	h	Approx. Weight (kg)
200	312	260	7	203	208	71	3
250	370	320	7	257	263	81	4
300, 315	430	380	9	324	330	100	5
350	485	435	9	360	375	112	6
400	540	490	9	407	420	127	7
450	575	535	11	458	480	120	10.5
500	655	615	11	512	535	152	13
560	725	675	11	588	590	190	15
630	805	750	11	643	670	190	16.5
710	850	810	14.5	721	765	222	35
800	970	910	14.5	807	870	245	47
1000	1170	1110	14.5	1010	1070	291	73

Fig. 5 Shutters



Model	A	B	C	D
VK 200	201	244	184	22
VK 250	260	294	227	22
VK 300	310	344	276	26
VK 315	310	344	276	26
VK 350	360	294	310	26
VK 400	420	457	365	26
VK 450	460	499	395	31
VK 500	510	544	440	31
VK 560	565	605	533	31
VK 630	640	674	606	42
VK 710	723	757	689	42

Note: Larger sizes available on request.

NOTE

The manufacturer reserves the right to make changes in specifications at any time without notice or obligation. Certified dimensions available on request.

**ISO 9002
CERTIFIED**

Available from



AUCKLAND
Phone
279-5250
Fax
275-5637

WELLINGTON
Phone
569-3262
Fax
566-6249

CHRISTCHURCH
Phone
379-3216
Fax
379-5956