

Vertical Discharge Roof Fans (DRMX)



The vertical discharge backward curved mixed flow roof fan - the DRMX range - is specifically designed for high velocity vertical discharge applications.

- > Air temp +60°C up to 500 model, +50°C on a 630 model
- > Potentiometer fully speed variable control on both phases
- > Manufactured from corrosion resistant aluminium
- > IP65 service isolator
- > Integral bird guard fitted as standard
- > Manufacture controlled to BS EN ISO 9001
- > Back draught shutters fitted as standard
- > 1-Year Guarantee

Ideal for many commercial or industrial applications such as kitchen extract systems, the DRMX range discharges vertically at high velocity to give fast dilution. Available in four models with extract performance ranging from 0.21 m³/s up to 4.4 m³/s (756 m³/h to 15842 m³/h). With pressure characteristics of up to 750 Pa this range is particular suitable for ducted applications. Suitable for nearly vertical mounting with maximum angle of 80° from horizontal.

Motors

The motor is mounted on a corrosion resistant aluminium support in a ventilated enclosure out of the airstream, and drives a highly efficient aluminium, mixed flow impeller, which offers non-overloading characteristics.

To meet basic machinery safety requirements, a service isolator switch is fitted and pre-wired as standard.

The motors are rated at IP54 to BS EN 60529; the bearings are sealed for life. Insulation is Class 'B'. The motor is pre-wired to a service isolator protected to IP65 with 20mm entry fitted as standard and providing local isolation conforming to the latest machinery safety requirements.

High Performance Centrifugal Fans

Single inlet; direct drive; 2D centrifugal impeller mounted on an electronically commutated external-rotor motor with integrated electronics; backward curved impeller blades; aerodynamically optimised inlet nozzle made of galvanised sheet steel to reduce blade rotation noise once mounted; complete unit statically and dynamically balanced in two planes according to DIN / ISO 1940 and to balancing quality G6.3; EC external-rotor motor with maintenance-free ball bearings and permanent lubrication; wide voltage input 200-277V, 50/60 Hz respectively 380-480V, 50/60hz; unit can be operated on all standard Electricity Board networks at identical air performance; optimised motor technology; soft start; integrated current limitation; connection via brought-out variable cable connector (motor size 084) or via easy-to-mount and robust integrated terminal box made of aluminium with spring loaded terminals (motor sizes 112 and 150); extremely compact electronics; with adjustable PID controller (motor sizes 112 and 150); meets all necessary EMC directives and all requirements as to current reverse transfer; no complicated installation with shielded cables required; very low-noise commutation logics; 100% controllability.

FAN SELECTION



Protective Features

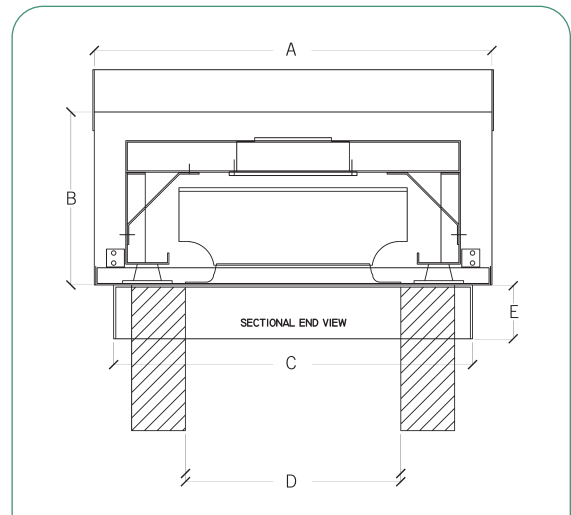
- Alarm relay with zero-potential change-over contacts (250 V AC/2 A, cos ohms = 1)
- Locked-rotor protection
- Phase failure detection
- Soft start of motors
- Mains under-voltage detection
- Over-temperature protection of electronics and motor
- Short-circuit protection

Sound Levels

Published dB (A) figures are free field sound pressure levels at 3m with spherical propagation at a reference level of 2×10^{-5} Pa (20 micro-Pascal). The sound power level spectra figures are dB with a reference level of 10 watts (1 pico-watt).

DRMX Attenuators

Duct attenuators available in three lengths 600, 900 or 1200mm dependant on the attenuation required.



Fan Model	Motor KW	Phase	SC Amps	FLC Amps	d B(A) @3m	r.p.m	Speed Control
DRMX310	0.13	1	Soft Start	1.0	48	1865	SP1
DRMX400	0.385	1	Soft Start	2.4	56	1390	SP1
DRMX500	2.7	3	Soft Start	4.3	65	1700	SP1
DRMX630	2.9	3	Soft Start	4.6	72	1200	SP1

Fan Model	A	B	C	D	E	Unit Weight
DRMX310	554	300	500	300	75	22kg
DRMX400	755	385	670	500	75	35kg
DRMX500	958	455	850	700	75	48kg
DRMX630	1254	602	950	800	75	56kg

Fan Model	M ³ /s e pa													
	50	100	150	200	250	300	350	400	450	500	550	600	650	700
DRMX310	-	0.504	0.453	0.406	0.403	0.402	-	-	-	-	-	-	-	-
DRMX400	0.96	0.90	0.88	0.83	0.75	0.70	0.60	0.54	0.46	0.21	-	-	-	-
DRMX500	3.12	2.99	2.92	2.88	2.84	2.73	2.68	2.58	2.51	2.42	2.28	2.25	2.07	1.97
DRMX630	4.42	4.35	4.19	3.95	3.78	3.64	3.44	3.25	3.14	2.75	2.56	2.32	2.13	1.73

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