

Motors

Type - squirrel cage induction motor.

Electricity Supply - 230V, single-phase, 50Hz.

Bearings - sealed-for-life, ball

Maximum ambient temperature 40°C.

These motors are not speed-controllable.

See pages O-5/7 for details on these motors.

DESCRIPTION

The Compact Series of Ex Miniduct fans has been specifically designed for duct mounting and to ventilate hazardous or explosive environments.

There are 4 sizes in the range extending from 250 to 400mm diameter.

Special note

These products have a **Certificate of Conformity issued** under the IEC Ex Certification Scheme for Explosion Protected Electrical Equipment.

This certificate, IECEx TSA 14.0024X, covers the electrical equipment for use in IIC T6 Gb atmospheres between the ambient temperature range of -20°C to +40°C.

According to AS/NZS 60079.14:2017 (Explosive atmospheres Design selection, erection and initial inspection) equipment certified to Ex d IIC T6 Gb may be suitable for use in:

All Group II Zones, except Zone 0

• Suitable for zones 1 and 2

All Group II subdivisions

• Suitable for Groups IIA, IIB and IIC

All Temperature Classifications

• Suitable for T1, T2, T3, T4, T5, and T6

The product must **NOT** be used in mines susceptible to fire damp, or where special conditions exist such as corrosion, water, dust or high levels of UV exist.

Under no circumstances shall a product be used outside of the limitations contained in the Certificate of Conformity as doing so would void the Ex certification. Please refer to the Certificate of Conformity and Installation and Users Guide for Specific Conditions of Use.

Typical Applications

Fantech's Compact Ex fans can be used to exhaust in most areas where the environment has been defined as being hazardous or explosive necessitating the use of Ex motors. This may include areas such as spray booths, gas meter rooms or battery rooms.

Features

- Galvanised steel casing with red powder-coated finish.
- Anti-static blades.
- Suitable for ducted installations.
- Can be mounted at any angle.
- Designed for single-phase supply.
- IP66 Ex d motor

Construction

Galvanised steel casing with red powder-coated finish. Axial impellers have glass reinforced anti-static blades.

Internal Thermal Protection

The motor is fitted with thermal protection to conform to the requirements of AS1359. IECEx certification and classification of T6 does not take into account abnormal operation such as locked rotor where the temperature of the surfaces may exceed 85°C. If this is an issue with your application, further protection should be fitted.

Testing

Air flow tests to ISO5801:1997, 'Type 'D' Installation (ducted inlet and outlet).

Noise tests to BS848:Part 2, 1985.

Wiring Diagram

See page N-6, diagram DD8.

TECHNICAL DATA

Model	Fan Speed	Avg dB(A)	FPMD	Approx.	
FPMD	rev/sec	@ 3m	Watts	Amps	wt. kg
254	23	45	120	1	13
304	23	48	120	1	15
354	23	50	120	1	16
404	23	52	120	1	18

SUGGESTED SPECIFICATION

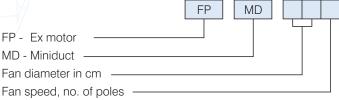
The fans shall be of the Compact Ex Miniduct Series, as designed and manufactured by Fantech Pty Ltd and be of the model numbers shown on the schedule/drawings.

The electrical equipment shall be certified to Ex d IIC T6 Gb, have thermal protection that conforms to the requirements of AS1359 and be IP66 rated.

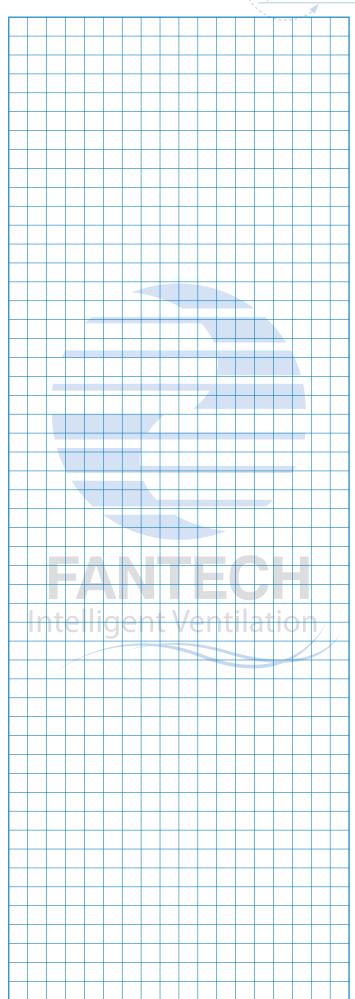
They shall have a galvanised steel casing with a red powder-coated finish and be fitted with glass reinforced anti-static blades.

All data shall be based on tests to ISO5801:1997, Type 'D' Installation for air flow and to BS848:Part 2, 1985 for noise.

HOW TO ORDER



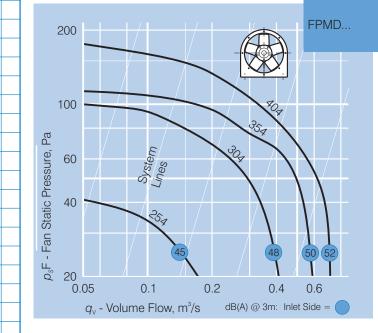
COMPACT EX MINIDUCT SERIES



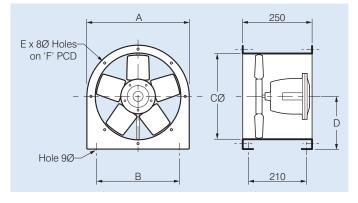
NOISE DATA

	In-duct Sound Power Levels								
Model		L _W dB re 1pW							
FPMD		63	125	250	500	1k	2k	4k	8k
254	Inlet	66	72	70	63	57	54	57	38
304	Inlet	66	78	68	67	61	58	54	48
354	Inlet	67	80	71	66	62	61	57	51
404	Inlet	72	72	68	66	69	67	63	50

Sound Power Levels at 50% of peak pressure and on the Inlet Side of the unit.



DIMENSIONS



Model	Dimensions, mm					
FPMD	Α	В	CØ	D	Е	F
254	318	250	260	160	8	285
304	368	300	310	190	8	340
354	420	350	360	220	8	395
404	470	400	410	250	12	438



