The Compact Series of Flameproof 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.

Typical Applications
Fantech's Compact Flameproof fans can be used to exhaust in areas where the environment has been defined as being hazardous or explosive necessitating the use of flameproof motors. These areas include spray booths and battery charge rooms. They are suitable for all Group II hazardous gas environments EXCEPT for the following:

- Where the ambient temperature is less than -20°C or greater than 40°C.
- Where the fan is exhausting from the vapour space of a tank or vessel (Zone 0). See Page O-5/7 for details on Zones)
- Where the fan is exhausting immediately adjacent to a continuous source of release (Zone 0).
- In mines susceptible to fire damp.
- Where special conditions exist such as corrosion, water, dust, vibration or high level of UV exist.

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.
- Motors comply with Ex d, Group II, Zone 1, T6 protection - see Special Note.
- IP66 rated.

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

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.

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-8, diagram ER6.

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

This certificate, number IEC Ex TSA 14.0024X, covers these fans for Ex d Group II, Zone 1 protection. These fans are approved for gas Groups IIA, IIB and IIC, have temperature classification T6 and enclosure protection IP66.

ANCILLARY EQUIPMENT
- Vibration Isolators
  Ref. I-4
- CMF - Matching Flange
  Ref. J-4
- VZ - Run-on timer
  Ref. M-14

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Model</th>
<th>Fan Speed rev/sec</th>
<th>Avg dB(A) @ 3m</th>
<th>Watts</th>
<th>Amps</th>
<th>Approx. wt. kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>254</td>
<td>23</td>
<td>45</td>
<td>120</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>304</td>
<td>23</td>
<td>48</td>
<td>120</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>354</td>
<td>23</td>
<td>50</td>
<td>120</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>404</td>
<td>23</td>
<td>52</td>
<td>120</td>
<td>1</td>
<td>18</td>
</tr>
</tbody>
</table>

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

They shall be approved for gas Groups IIA, IIB and IIC, have temperature classification T6 and enclosure protection IP66.

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

FP - Flameproof
MD - Miniduct
Fan diameter in cm
Fan speed, no. of poles

© FANTECH 2016
**NOISE DATA**

<table>
<thead>
<tr>
<th>Model</th>
<th>In-duct Sound Power Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>L_w dB re 1pW</strong></td>
</tr>
<tr>
<td>254 Inlet</td>
<td>66</td>
</tr>
<tr>
<td>304 Inlet</td>
<td>66</td>
</tr>
<tr>
<td>354 Inlet</td>
<td>67</td>
</tr>
<tr>
<td>404 Inlet</td>
<td>72</td>
</tr>
</tbody>
</table>

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

**DIMENSIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions, mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>A</strong></td>
</tr>
<tr>
<td>254</td>
<td>318</td>
</tr>
<tr>
<td>304</td>
<td>368</td>
</tr>
<tr>
<td>354</td>
<td>420</td>
</tr>
<tr>
<td>404</td>
<td>470</td>
</tr>
</tbody>
</table>

Scan the QR Code to view more information online.