

FANS FOR Ex d AND Ex e APPLICATIONS

Fans for Ex d and Ex e applications, or indeed any hazardous application, can be constructed of special materials and incorporate special features.

Anti-static impellers and earthing leads are just some of the features we can provide.

ELECTRONICALLY COMMUTATED (EC) DC MOTORS

INTRODUCTION

The Electronically Commutated DC motors featured in this catalogue are external-rotor DC motors which are suitable for AC mains supply. These motors have no wear and tear elements such as collectors or carbon brushes which used to be an undesirable component of DC motors and would require regular maintenance. The EC units consist of a brushless DC external-rotor motor with an EC controller that commutates the current in the motor windings electronically. The EC controller monitors the motor and provides interfaces for easy control of the drive. EC motors provide a high level of motor efficiency and carry on-board features that offers almost limitless flexibility in terms of automatic and manual fan speed control.

TEMPERATURE RANGE

These motors are generally suitable for operating in ambients from -25°C to $+60^{\circ}\text{C}$.

ENCLOSURE STANDARD

The motor enclosure standard is IP54 in accordance with the appropriate Standards.

ELECTRICAL DETAILS

Motors are suitable for 240V or 415V, 50 or 60Hz supply. These motors should not be speed controlled by VSD or VA controller.
Insulation; Motor insulation is Class F with a 60°C winding temperature rise.

BEARINGS

Motors are fitted with sealed-for-life maintenance free bearings.

PARAMETER SETTINGS

Parameters of the EC fans are programmed in our factory for best possible operation to suit the specific application requirements. It is necessary for the mechanical designer or contractor to provide details as to the application and system control requirements at the time of order.

PROTECTION

The EC motors feature their own integral current overload and over-temperature protection. No other electrical protection is required with these units.