

# STANDARD MOTORS

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## Introduction

Constructed to appropriate European and International Standards, standard motors are used to drive a range of fans extending from window and wall units to large industrial axial flow and centrifugal fans.

## Standards

The standard motors used are foot, flange or pad mounted, metric type and totally enclosed as produced by most of the world's major manufacturers. They will run continuously with the minimum of attention and have been selected for their universal interchangeability and availability in countries throughout the world. The motors comply with the appropriate British, Australian and International Standards as far as:-

- output
- performance
- dimensions
- minimum energy performance standard (MEPS) to IEC 34 are concerned.

## Temperature Range

In general the motors can operate in ambients from -30° C to +40° C. Motors to operate outside this range can be supplied if required.

## Enclosure Standard

As specified by customer

## Finish

Standard finish is enamel paint top coat on suitable primer to give good appearance and protection for general usage. Alternative finishes such as epoxy coating can also be provided.

## Speed Control

Certain sizes of single and three-phase motors are suitable for variable speed control.

## Bearings

Unless otherwise nominated, all fans are fitted with ball or roller bearings. The bearing housing of motors up to frame size D132 as a minimum, are fully enclosed, sealed-for-life and therefore do not require maintenance.

Bearings are pre-packed with grease and, under normal circumstances, last for several years.

Larger frame sizes are fitted with lubrication nipples. When these motors are fitted to axial flow fans, lubricators, extended to the outside of the fan casing to facilitate lubrication, are optional. Grease relief valves must be fitted when extended lubrications are fitted.

## Electrical Supply

Motors are generally wound for 415V3ph/50Hz or 220-240V/1ph/50Hz, however, we can provide motors wound for all voltage and frequency variations.

## Insulation

Insulation to Class F with Class B temperature rise is used throughout, allowing for operation in ambients up to +40°C. Motors for higher temperature can be provided upon request.

## Multi-Speed Motors

Many application require the maximum design conditions for only relatively short time periods, resulting in a waste of energy and consequently, a high running cost. To overcome this, fans can be supplied with 2-speed motors.

A wide range of motor speed combinations can be provided, based upon the motor synchronous speeds.

Using this method power savings can be substantial, as well as generating much lower noise levels.

## Thermal Protection

Thermal protection in the form of thermistors can be incorporated in any of the squirrel cage induction motors on request.

Thermistor overloads must be used in conjunction with these motors.

## High Temperature Applications

When continuous operation in higher ambients is essential, the motor can be wound with Class H insulation.

The maximum continuous ambient temperature for Class H insulation is:-

Class H - 80° C

## Smoke Spill Applications

The above figure is a guide only as the maximum ambient depends upon the load being applied to the motor and the temperature rise of the motor.

If in doubt, refer to our sales office.

Refer to page C-6