

Multi-Speed Three-Phase Induction Motors**DESCRIPTION OF THE CATALOGUE VERSION**

Application	general industrial, centrifugal machines
Duty	S1
Rated voltage	400V
Frequency	50 Hz
Ambient temperature	from -15°C to +40°C
Mounting height	up to 1000 m above sea level
Number of free shaft ends	1
Insulation class	F
Degree of protection	IP 55

DESCRIPTION OF THE CUSTOMIZED VERSION

Different duty type	
Different supply voltage	
Frequency	60 Hz
Number of free shaft ends	2
Insulation class	H
Degree of protection	IP 56
Tropicalization	
Other versions per customer's specifications	

ORDERING INFORMATION

When placing an order, the following motor data should be given:

Motor type designation
Rated outputs
Rated speeds
Operating duty
Supply voltage
Frequency
Mounting arrangements
Degree of protection
Special requirements

Information concerning additional accessories e.g.

Thermal protection
Anticondensation heaters
Vibration sensors, etc.

When ordering spare parts the following data should be given:

Full motor type designation including its serial number
Degree of protection
Mounting arrangement
Name of spare part
Number of pieces

As part of our development program, we reserve the right to alter or amend any of the specifications included in this catalogue without giving prior notice.

Multi-Speed Three-Phase Induction Motors

This catalogue covers industrial squirrel cage multi-speed motors for general application as well as for driving centrifugal machines such as fans.

Our motors are designed for long life and reliable operation in severe industrial applications.

All the motors are manufactured in Quality Assurance System consistent with ISO 9001.

ISO9001

Multi-speed motors can be applied where a rough grading of speed is acceptable. In these motors the operation at two or more fixed speeds is obtained by changing the magnetic poles.

Multi-speed motors can be either single winding - Dahlander connection where speed ratio is 2 to 1 or with two separate windings where speed ratio other than 2 to 1 can be obtained. Single winding motors are designed for direct starting from the supply and are single voltage.

All the motors described in the present catalogue are provided with CE mark. It means that our products are consistent with the European Union directives regarding the safety measures.

CE

for fan

In this catalogue the motors designed especially for driving centrifugal machines are marked **for fan**. In these motors the power at higher speed is much larger than at lower speed. It is because the torque demanded for this kind of applications varies as the square of the speed.

The other motors can be used in applications with constant torque requirements such as mixers, conveyors.

General technical information such as type of bearings, mounting arrangements, construction is the same as for standard motors and is described in catalogue: "General Purpose 3-Phase Induction Motors". This catalogue contains also dimensional drawings of motors.

The motors covered by this catalogue comply with the IEC 60034-1 standard as well as standards effective in other countries, consistent with IEC.

IEC

This catalogue describes the most widely used multi-speed motors. Other types - for different fixed speeds can be supplied according to customer's specifications.

