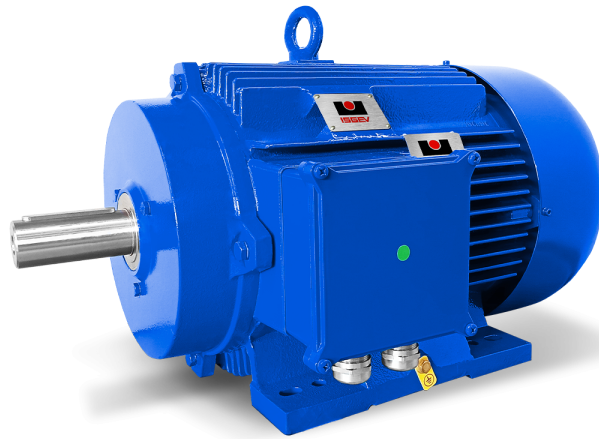


CAST-IRON THREE-PHASE ASYNCHRONOUS MOTORS IE2 - IE3



Power outputs	0,12 - 75kW
Voltages	Up to 690V
Frames	63 - 280
Efficiency classes	IE2 - IE3, where applicable
Sectors	Food / Marine / Rail / Industrial / Snowmaking / Steel Industry
Most common applications	Machine tools / Fans / Pumps / Handling and Lifting Systems

We designed these motor series specifically to be flexible in the combination of their materials. We support you in choosing the configuration that best meets the characteristics of the installation in which these motors will operate.

The series name identifies the combination of materials of the main mechanical components of the engine (case and endshields):

Series name	1B	2B	3B	4B	5B
D-End Endshield	Aluminum	Cast-Iron	Aluminum	Cast-Iron	
Case	Aluminum			Cast-Iron	
N-End Endshield	Aluminum		Cast-Iron		

> 5B MOTOR SERIES

	Standard configuration	Special configuration
Standards	Applicable IEC EN 60034	Specification on request
Polarity / Speed	Single	Double / Triple
Cooling method	IC 411	IC 410 / IC 416 / IC 418
IP Index of Protection	IP55	IP56 / IP65 / IP66
Insulation Class	F	H
Temperature rise Class	B	F / H
Altitude	<1000m a.s.l.	up to 4000m a.s.l.
Power supply	Main	Frequency converter
Rotor	Squirrel cage	-
Material of the rotor windings	Aluminum	-
Duty	S1	S2 ... S9
Ambient temperature	-20°C / +40°C	-50°C / + 120°C
Shaft extension	D-End	D-End + N-End
Shape of the shaft extension	Cylindric, with key	Conical / special
Material of the shaft	Steel C40	39NiCrMo3 / Stainless steel

	Standard configuration	Special configuration
Bearings	Ball	Roller / Angular
Seal ring	MIM	Viton / Silicon / Labirinth
Material of the screws	Galvanised	Stainless steel
Vibration grade	A (with half key)	B (with half or full key)
Material of the fan	Polyamide	Aluminum
Material of the fan cover	Steel	-
Lifting eyebolt	From 100 frame and above	On request
Feet	Fixed	Removable feet (250-280 frames)
Terminal box - position	On the right side, when seen from D-End	On top / On the left / Flying leads
Terminal box - material	Aluminum (cast-iron for 200 and 225)	Cast-iron
Cable entry	On the right side	Rotatable in step of 90°
Q.ty of terminals (single polarity)	6	-
Q.ty of terminals (double polarity)	6	12
Q.ty of terminals (triple polarity)	12	-

SPECIAL SOLUTIONS

Windings

Insulation class H
Tropicalisation
Stator windings with enhanced insulation system for inverter
Special voltage and/or frequency
Double impregnation

Bearings

Sealed bearings
Roller bearings
Insulated bearings
Hybrid bearings
Bearings for low temperatures
Bearings for high temperatures
Angular bearings

Encapsulation of the windings

Protections

Bi-metal protection

PTC Thermistors

PT100 Thermo-resistances

PT1000 Thermo-resistances

Anticondensation heaters

Transducers

Arrangement for vibration detector

Arrangement for speed detector (toothed wheel)

Encoder

Painting and solutions for extreme environment

Special painting colour (std RAL5010)

Special painting process for aggressive environment

Drainage hole

Solutions for low temperatures (down to -50°C)

Solutions for high temperatures (up to +120°C)

Anti-rain canopie

Anti-sun canopie

IP56, IP65, IP66 protection degrees

Stainless steel screws

Re-greasing systems

D-End fixed bearing

labirinth ring

Viton ring

Silicon ring

Shaft and Fan

Special shaft extension

Second shaft extension

Non-ventilated motor (IC410)

Forced ventilation (IC416)

Non-ventilated motor, externally cooled (IC418)

Aluminum fan

Vibration grade B (with half or full key)

Terminal box

12 terminals

Brass cableglands

Special cableglands

Position of terminal box

Direction of cable entry

Material of terminal box

Flying leads

Auxiliary terminal box

Special cable entry