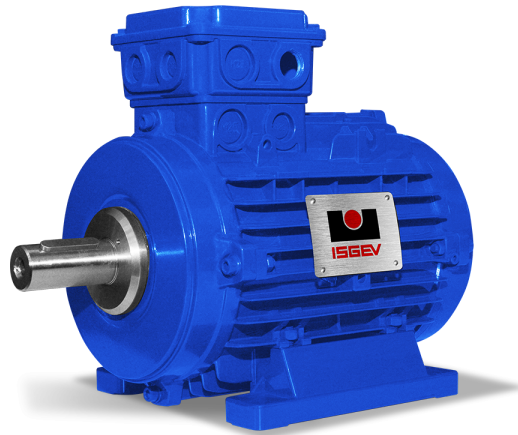


MOTORS FOR EXTREME TEMPERATURES



Power outputs	0,12 - 45kW
Voltages	Up to 690V
Frames	63 - 280
Sectors	Food / Industrial / Snowmaking / Steel Industry
Most common applications	Machine tools / Fans / Pumps / Snow guns / Rolling tables on steel industry

The materials and protections with which we equip these machines ensure the correct functioning of the motors even in very severe temperature conditions.

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		

> 1B-2B-3B-4B-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 / +100°C	-20°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	39NiCrMb3	Stainless steel
Bearings	Ball	Roller / Angular
Seal ring	Labyrinth	Viton / Silicon

	Standard configuration	Special configuration
Drainage hole	Closed with screw	Open
Material of the screws	Stainless steel	-
Vibration grade	A	B
Material of the fan	Aluminum	-
Material of the fan cover	Steel	-
Lifting eyebolt	From 100 frame and above	On request
Feet	Fixed (Cast-iron) / Removable (Aluminum)	-
Terminal box - position	On the right side, when seen from D-End (Cast-iron) On top (Aluminum)	On top(§) / On the left(§) / Flying leads
Terminal box - material	Aluminum (cast-iron for 200 and 225)	-
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	-

(*): -50°C with 5B series only

(§): Available only on 5B Motor series

SPECIAL SOLUTIONS

Windings

Insulation class H

Tropicalisation

Stator windings with enhanced insulation system for inverter

Bearings

Sealed bearings

Insulated bearings

Hybrid bearings

Bearings for low temperatures

Special voltage and/or frequency

Double impregnation

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

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

Open drainage hole

Angular bearings

Re-greasing systems

D-End fixed bearing (only with Cast-iron endshield)

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)

Metallic fan

Vibration grade B (with half or full key)

Terminal box

12 terminals

Special cableglands

Position of terminal box (only with cast-iron case)

Direction of cable entry

Flying leads

Auxiliary terminal box

Special cable entry