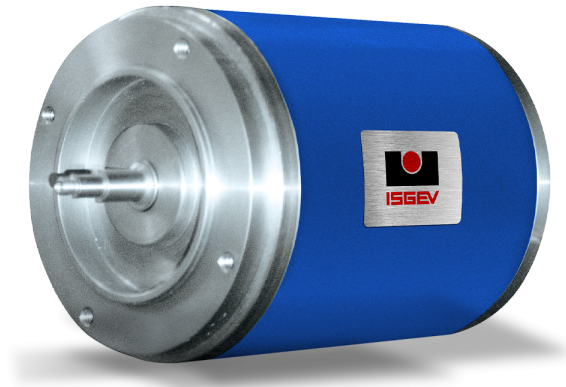


NEMA MOTORS



Power outputs	0,5 - 100HP
Voltages	Up to 600V
Frames	NEMA FRAME 143 - 405
Sectors	Industrial
Most common applications	Machine tools / Fans / Pumps / Handling and lifting systems

We can supply NEMA motors for the US market, in standard configuration with couplings corresponding to the American measurement system, or in special configuration according to your requirements.

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	NEMA MG1 + 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	On request
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
Bearings	Ball	Roller / Angular
Seal ring	MIM	Labyrinth / Viton / Silicon

	Standard configuration	Special configuration
Material of the screws	Galvanised	Stainless steel
Vibration grade	A	B
Material of the fan	Polyamide	Aluminum
Material of the fan cover	Steel	-
Lifting eyebolt	From 100 frame and above	On request
Feet	Fixed	-
Terminal box - position	On the left side, when seen from D-End On top (Aluminum)	On top / On the right / Flying leads
Terminal box - material	Aluminum(*)	-
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	-

(*): cast-iron for NEMA frame 324-326 e 364-365

SPECIAL SOLUTIONS

Windings

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

Bearings

Sealed bearings
Roller bearings
Insulated bearings
Hybrid bearings
Bearings for low temperatures
Bearings for high temperatures
Angular bearings
Re-greasing systems

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
Tachometer

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 canopy
IP56, IP65, IP66 protection degrees

D-End fixed bearing
Rotating labyrinth
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

Terminal box

12 terminals
Position of terminal box
Direction of cable entry
Flying leads
Auxiliary terminal box