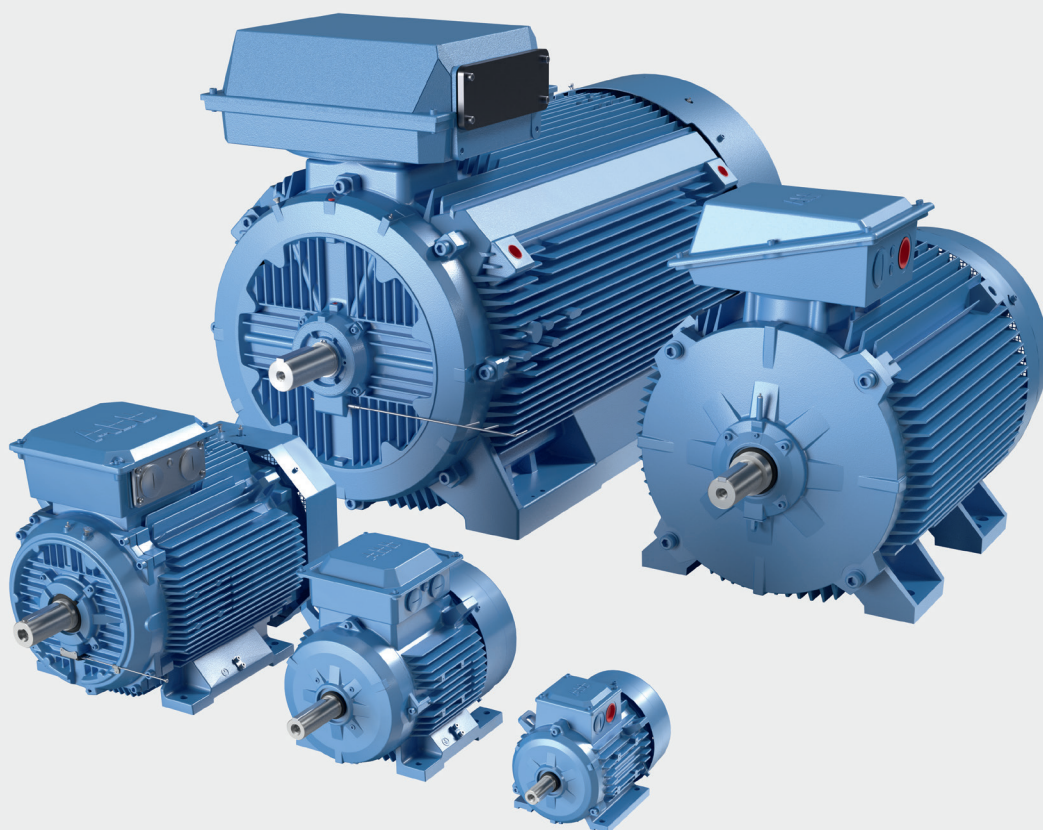


PRODUCT OFFERING





IEC Low voltage motors

Product overview



- Wide range of IEC low voltage motors for any industry or application
- Fulfill all international and national efficiency regulations

IEC Low voltage motors

<u>General performance motors</u>		<u>Process performance motors</u>		
Cast iron		Cast iron	Aluminum	<u>Synchronous reluctance motors</u>
				
Best suited for applications where simplicity and off-the-shelf availability is of highest importance.		Fully flexible motors for any customer need for reliability, availability and highest efficiency.	Fully flexible motors for any customer need for reliability, availability and efficiency, light weight and easy to clean.	SynRM IE5 motors save energy, with up to 50 percent lower energy losses, drop-in replacement for induction motors.
Product type	M2BAX	M3BP	M3AA	M3AL, M3BL
Efficiency classes	IE1, IE2, IE3	IE2, IE3, IE4	IE2, IE3	up to IE5
IEC Frame sizes	71 – 355	71 – 450	56 – 280	IE5 range: 132 – 315 High output range: 90 – 315
Power range	0.25 – 355 kW	0.25 – 1000 kW	0.12 – 90 kW	1.1 – 350 kW
Poles	2 – 6	2 – 12	2 – 8	1000 – 3000 r/min
Voltage	230 – 690 V	230 – 690 V	230 – 690 V	–
Frequency	50 Hz, 60 Hz	50 Hz, 60 Hz	50 Hz, 60 Hz	–
IP Class	up to IP 56	up to IP 66	up to IP 66	–
Cooling	IC411, IC416	IC410, IC411, IC416, IC418	IC410, IC411, IC416, IC418	IC411, IC416, IC418
Starting	DOL, VSD	DOL, VSD	DOL, VSD	VSD
MEPS	EU, CN, IN, TR, AU	EU, UKCA, CN, AU, BR, KR, USA, CA, SG, SA, IN, TR	EU, UKCA, CN, USA, CA, AU, TR, SA	–
Certification	Marine	Marine	Marine	–
Protection type	–	–	–	–
Suggested applications and industries.	Pumps, fans, conveyors, food and beverage machinery, compressors, general machinery.	Pumps, fans, compressors, crushes, mills, centrifugal machines, presses, grinders and general process applications.	Pumps, fans, compressors, centrifugal machines, Food and beverage applications – target easy cleaning and general process applications.	Pumps, fans, compressors, extruders, conveyors, mixers.
Link to web page	new.abb.com/motors-generators/iec-low-voltage-motors/general-performance-motors	new.abb.com/motors-generators/iec-low-voltage-motors/process-performance-motors/process-induction-motors	new.abb.com/motors-generators/iec-low-voltage-motors/process-performance-motors/process-induction-motors	new.abb.com/motors-generators/iec-low-voltage-motors/process-performance-motors/synchronous-reluctance-motors

IEC Low voltage motors

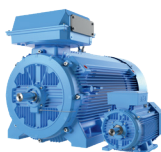
Motors for explosive atmospheres

Flameproof Ex db / Ex db eb



Certified for maximum safety, for environments with gas explosion risk.

Increased safety Ex ec



Certified for maximum safety, for environments with gas explosion risk.

Dust ignition proof Ex t



Certified for maximum safety, for environments with dust explosion risk.

Product type	M3JP, M3KP	M3GP, M3AA	M3GP, M3AA
Efficiency classes	IE2, IE3	IE2, IE3	IE2, IE3
IEC Frame sizes	80 – 450	M3GP 71 – 450 M3AA 71 – 280	M3GP 71 – 450 M3AA 71 – 280
Power range	0.55 – 950 kW	0.25 – 1000 kW	0.25 – 1000 kW
Poles	Sizes 80-132: 2-8 Sizes 160-450: 2-20	2-8 (contact manufacturer for information of greater than 8 pole motors)	2-8 (contact manufacturer for information of greater than 8 pole motors)
Voltage	230 – 690 V	230 – 690 V	230 – 690 V
Frequency	50 Hz, 60 Hz	50 Hz, 60 Hz	50 Hz, 60 Hz
IP Class	up to IP 66	up to IP 66	up to IP 66
Cooling	Sizes 80-450: IC411 Sizes 160-450: IC416, IC418	IC411, IC416	M3GP motors: IC411, IC416 M3AA motors: IC411, IC418
Starting	DOL, VSD	DOL, VSD	DOL, VSD
MEPS	EU, CN, AU, BR	EU, CN, AU, BR	EU, CN, AU
Certification	ATEX, IECEx, CCC, CU TR Ex, EQM UAE, IA, INMETRO, PESO, UKEx, marine	ATEX, IECEx, CCC, CU TR Ex, UL, EQM UAE, IA, INMETRO, PESO, UKEx, marine	ATEX, IECEx, CCC, CU TR Ex, UL, EQM UAE, IA, INMETRO, PESO, UKEx, marine M3AA: ATEX, IECEx
Protection type	Ex db IIB or C T4 Gb Ex db eb IIB or C T4 Gb	Ex ec IIC T3 Gc	For zone 21: EPL Db, T 125°C, IP65 For zone 22: EPL Dc, T 125°C, IP55 or IP65 Dust groups IIIB and IIIC
Suggested applications and industries.	Applications where explosion hazards may exist due to flammable gases, flammable and combustible liquid-vapors.	Applications where explosion hazards may exist due to flammable gases, flammable and combustible liquid-vapors.	Applications where explosion hazards may exist due to flammable dust.

IEC Low voltage motors

ABB Ability™ **Smart Sensor for motors**

Condition monitoring solution enabling predictive maintenance for motors. By monitoring the condition and performance of their motors - vibration, bearing condition, misalignment, temperature - users can avoid unexpected downtime, optimize efficiency and improve safety.

- For induction motors, frame sizes 56 – 450 (IEC)
- Available as option
- Can be easily retrofitted to existing motors (ABB and non-ABB motors)

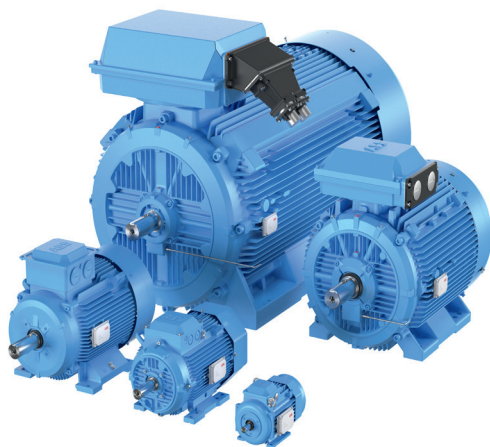


ABB Access – unlocking your **drives, motors, and PLCs**

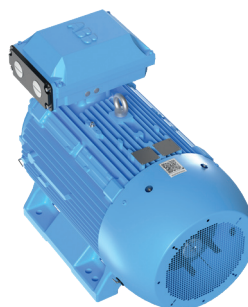
With ABB Access, you can unlock all aspects of your drives, motors or PLCs, from one central location. Simply scan the QR code on the ABB product to get started.

ABB Access, helps you easily find up-to-date product online data. It also provides easy access to documentation and manuals. If you happen to experience issues with your ABB product, this can be fastly and easily reported online to reach expert support from ABB.

Try it yourself

Want to check ABB Access in action, but you don't have ABB motor at hand?

No problem! Simply scan the example QR code and get familiarized with ABB Access.



Visit page:
Motors and Generators



abb.com/motors-generators
new.abb.com/motors-generators/channel-partners
new.abb.com/drives/mobile-tools/abb-access

Visit page:
Channel Partners



We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB.
Copyright © 2022 ABB
All rights reserved