

PRODUCT NOTE

## **IEC low voltage motors** North American product offering

ABB is a leader in power and automation technologies that enable utility, industrial and commercial customers to improve performance, reduce cost and minimize environmental impact. ABB partners with customer-focused distributors to deliver a very wide range of innovative and high-quality products, solutions and services.

Standard induction motors				
Product / offering		Stock availability in US	Benefits and features	Suggested applications
General performance aluminum motors - Export only	010	-	Simple and light weight, available wherever you are.	Pumps, fans, conveyors, food and beverage machinery, compressors general machinery
M2AA 56-250 IE1, IE2 0.06 - 55 kW General performance cast iron motors M2BAX 71-355 IE2, IE3 0.25 - 355 kW		-	Competitive, reliable in tough ambient conditions. Available wherever you are.	Pumps, fans, conveyors, food and beverage machinery, compressors, general machinery
Process performance aluminum motors - Can be used in US or exported M3AA 63-280; IE2, IE3 0,12-90 kW		IE3 K-generation IEC 160-250 11-55 kW	Improve customer's processes over the total life cycle while achieving significant energy and maintenance savings. Maximum adaptability to customer needs with light weight and good corrosion resistance.	Pumps, fans, crushers, mills, centrifugal machines, presses, grinders and general process applications
Process performance cast iron motors M3BP 71-450; IE2, IE3, IE4 0,25-1000 kW Process performance NEMA cast iron motors M3BN 586-588 500-800 HP		IE3 K-generation IEC 80-280 0.25-90 kW	Improve customer's processes over the total life cycle while achieving significant energy and maintenance savings. Maximum adaptability to customer needs. Safe running in harsh environments.	Pumps, fans, crushers, mills, centrifugal machines, presses, grinders and general process applications

Motors for explosive atmospheres					
Product / offering		Stock availability in US	Benefits and features Maximum security, reliability and flexibility. A very wide range of motors, fully certified by third party according to ATEX and IECEx, wide range of local certificates available.	Suggested applications Applications where explosion hazards may exist due to flammable gases or dust, flammable liquid-vapors, combustible liquid-vapors.	
Flameproof motors Ex d/Ex de M3JP, M3KP 80-450; IE2, IE3 0.55-950 kW - Export only		IEC 80-225, 4-pole, 0.55-45 kW			
Dust ignition protection motors Ex t - Export only	3 <u>;</u> 3	-			
Cast iron M3GP 71-450;					
IE2, IE3 0.25-1000 kW		-			
Aluminum M3AA 71-250, IE2, IE3 0.25-79 kW					
Non-sparking motors Ex nA Cast iron M3GP 71-450; IE2, IE3 ).25-1000 kW • Export only		IEC 80-280, 4-pole 0.55-90 kW			
Increased safety aluminum motors Ex ec M3AA 160-250 IE2, IE3 11-90 kW • Export only		-			
Other applications		Charles and the billion in 110	Demofile and features	Commente de multi-stien	
Product / offering Motors for marine applications		Stock availability in US	Benefits and features With the broadest offer of marine	Suggested applications On deck and under deck pumps, fans	
Motors for marine applications Aluminum motors M3AA 63-280 IE2, IE3 0.12-90 kW - Can be used in US or exported		IE3 K-generation IEC 160-250 11-55 kW	with the broadest offer of marine motors in the market place, ABB also has the biggest installed base. These motors offer the highest level of confidence with maximum adaptability to customer needs. High	On deck and under deck pumps, rans deck cranes, thrusters, winches, hydraulic power packs and compressors.	
Cast iron motors		IE3 K-generation	efficiency for lowest environmental		

IE3 K-generation IEC 80-280 0.25-90 kW

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impact and quick investment pay-back.

0.25-1000 kW - Can be used in US or exported

Cast iron motors M3BP 71-450 IE2, IE3, IE4

Cast iron motors M2BAX 71-355 IE2, IE3 0.25-355 kW - Export only

Product / offering	Stock availability in US	Benefits and features	Suggested applications
Brake motors - Export only Universal aluminum motors M3VR, M3AR 63-132 0.12-11 kW Cast iron motors M3BP 90-355 with built in brake		Easy selection, economic and with short delivery times. Continuous operation and sustainability in severe duty applications, with highest tailoring degree. "Just for me" customer convenience.	Horizontal non overhauling applications typically with parking brakes on conveyors and gearing applications. Severe duty applications, typically for vertical overhauling movement, demanding duty cycles or harsh ambient conditions in applications like cranes and hoists, escalators and lifts or machine tools in industries like F&B, Metal, Marine, Mining and Wind.
AC induction low inertia motors - Can be used in US HDP M3EB/M3EH 100-250 3-750 kW		Operation in harsh conditions needing excellent dynamic response thanks to low inertia. These motors offer high overload capacity and very high power density and can be used to tailor customer's processes to their exact needs.	Applications that need high dynamic response and precise control of angular position, velocity and acceleration. A reliable alternative for DC motors.
Mining motors - Export only Underground mining M3JM 80-355 Ex d I Mb IP66 0.55-710 kW Safe area mining M3BP 71-450 IP66 0.37-1000 kW		High ingress IP66 protection ensures maximum tightness and protection against dust. High visibility in dusk and dusty ambients and maximum corrosion resistance. These motors offer maximum reliability while meeting the requirements set by the biggest mining operators.	Mine operations both in surface and underground. The explosion atmospheres version features Group I classification.
IEC Stainless steel motors for food and beverage industry - Can be used in US M3MA 80-90, IE3 0.55-1.5 kW M3MA 100-132, IE3 up to 7.5 kW available Q1/2018	-	Withstands extreme washdown conditions - easy to clean, H1 food grade grease used to avoid food contamination and maximize food safety. Encapsulated windings ensure longer lifetime in humid conditions.	Applications in harsh industries like meat, poultry, fish, dairy, beverage and basically wherever high food safety is essential.

Product / offering		Stock availability in US	Benefits and features	Suggested applications
Synchronous reluctance motor-drive packages - Can be used in US M3AL/M3BL 132-315 5.5-315 kW		-	Synchronous reluctance motor-drive packages provide the advantages of permanent magnet motors together with the cost-efficiency, simplicity and service-friendliness of an induction motor.	Suitable for a wide range of applications such as pumps, fans, compressors, extruders, conveyors and mixers.
			Two packages available: · IE4 SynRM package for highest efficiency performance	
			<ul> <li>High output SynRM package for compact machine design</li> </ul>	
Motors for special applications - Can be used in US		-	Safe bearing working conditions, state of the art insulation system, maximum	Motors for a wide range of applications aimed to profitably grow
High speed motors		tailoring possibilities and good	the business of our customers in the	
Motors for high ambient tempera Roller table motors	tures		interchangeability.	process industry.
Permanent magnet motors				
Water cooled motors				

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