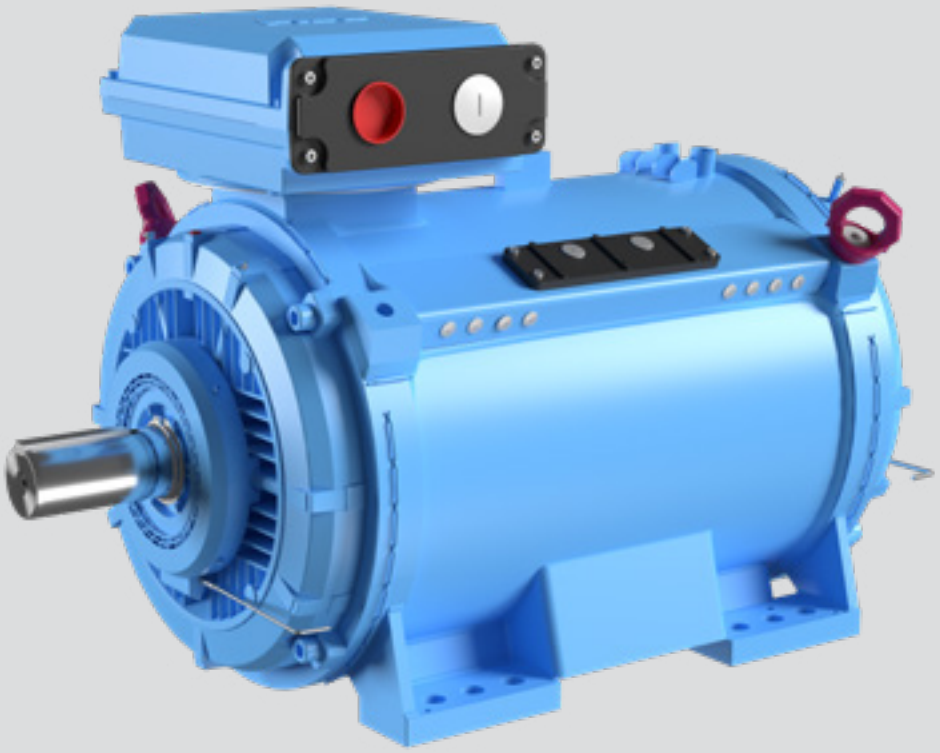
CATALOG | JULY 2023

Low voltage

Water-cooled motors

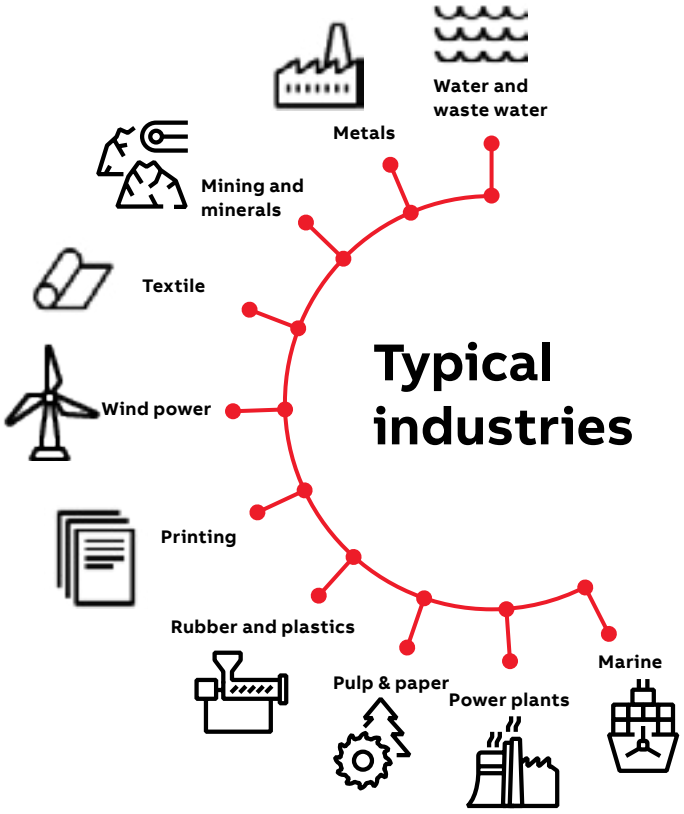


With expertise, and a comprehensive portfolio of products and life-cycle services, we help value-minded industrial customers improve their energy efficiency and productivity.

Low voltage
Water-cooled motors
Sizes 280 to 500, 90 to 2000 kW

Water-cooled motors

Ideal choice for applications where reliable and powerful operation is required



Water-cooled motors ensure maximum reliability combined with a compact installation footprint for on-shore and off-shore applications and industries.

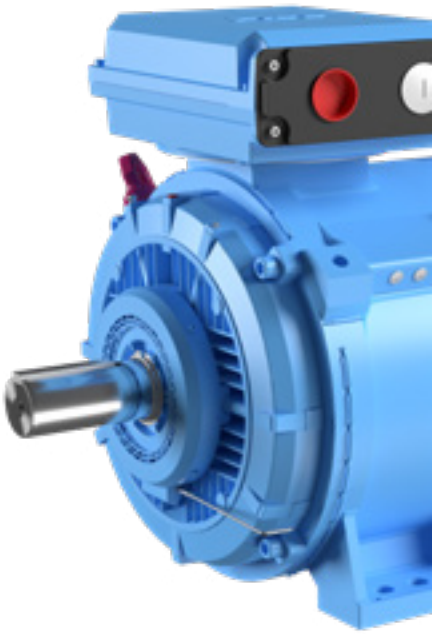
ABB's water-cooled motors are an ideal choice for applications where reliable and powerful operation is required. The motors are robust, compact, economical and simple in design.

ABB Water-cooled motors guarantee optimal reliability while occupying minimal installation space, making them an excellent choice for both on-shore and off-shore applications across various industries. These motors are specifically designed to deliver dependable and high-performance operation, characterized by their sturdy construction, compact size, cost-effectiveness, and user-friendly design.

Why to choose ABB's Water-cooled motors?

High power density
- Higher ratings per frame size than traditional air-cooled motor designs
- Reduces cost and saves valuable space

Productivity
- Available in efficiency classes IE2 and IE3
- Compatible with VSD
- Low voltage technology means lower network cost
- No need to build air cooling channels for cooling purposes



Smart and flexible design
- Casted aluminum rotor is maintenance-free
- Longer bearing life with bearing cooling fans
- Wide range of selectable components and optional features
- Steel frame is easy to keep clean

Easy to select and install
- MotSize tool for selecting the optimal motor
- Optimizer tool for selecting the motor for any MEPS worldwide
- DriveSize tool for selecting the optimal drive for the motor
- These tools and support from our experts ensure that the motor can be set up easily and reliably

Minimized downtime
- Minimized downtime through superior water-cooling technology for enhanced motor performance
- Optimized heat dissipation capabilities for minimized motor downtime and improved reliability
- The ABB Smart Sensor offers significant benefits by providing real-time monitoring and predictive maintenance capabilities, enabling proactive interventions and minimizing downtime

Reliability in harsh environments
- Equipped with a steel frame and high-quality coating, the motor features excellent resistance to corrosion and dust accumulation
- Labyrinth seals allow the motor to withstand intrusion of humidity, dust or particles
- Easy to keep clean

Operating benefits
- In some clean room installations air-cooled motors may not be allowed because of the risk of contamination
- Water-cooled motors are designed to withstand higher load and vibration, which is a benefit for instance with conveyors
- Low noise level creates a better working environment

Global compatibility with various demands
- Global product approvals, e.g. CE, UL, cUL, CSA,
- Marine certifications
- Support for various converter types

Fast and easy service
- Smart design of the motors: casted aluminum rotor, longer bearing life with bearing cooling fans.
- Standardized design of components enables fast and easy replacement.
- Professional support is provided globally through ABB's wide network of workshops and service partners.
- Compatible with ABB Smart sensor

Application- and industry-specific solutions
- Wide range of options available to meet industry and application-specific needs
- Ideal choice for some 24/7 industrial applications, like pumps in W&WW

Key design features

We tailor our motors to match the precise needs of the customer and application

Flexible design

You can have your motor perfectly customized according to your specific need as we are able to design it using a wide range of selectable components and optional features.

Balancing grades, bearing and lubrication options, heating elements, insulation systems, painting systems, stator winding sensors, bearing temperature sensors, terminal box configurations, cable entry configurations, encoder options and brake options – they are all selectable, offering practically endless customization possibilities.

Large terminal box

The terminal box is larger than most comparable motors from other suppliers. It is therefore easier to install cables, thus simplifying and speeding up motor implementation. When upgrading, many motor users have experience of cum-bersome cable installation and therefore request a larger terminal box than on their previous motors.

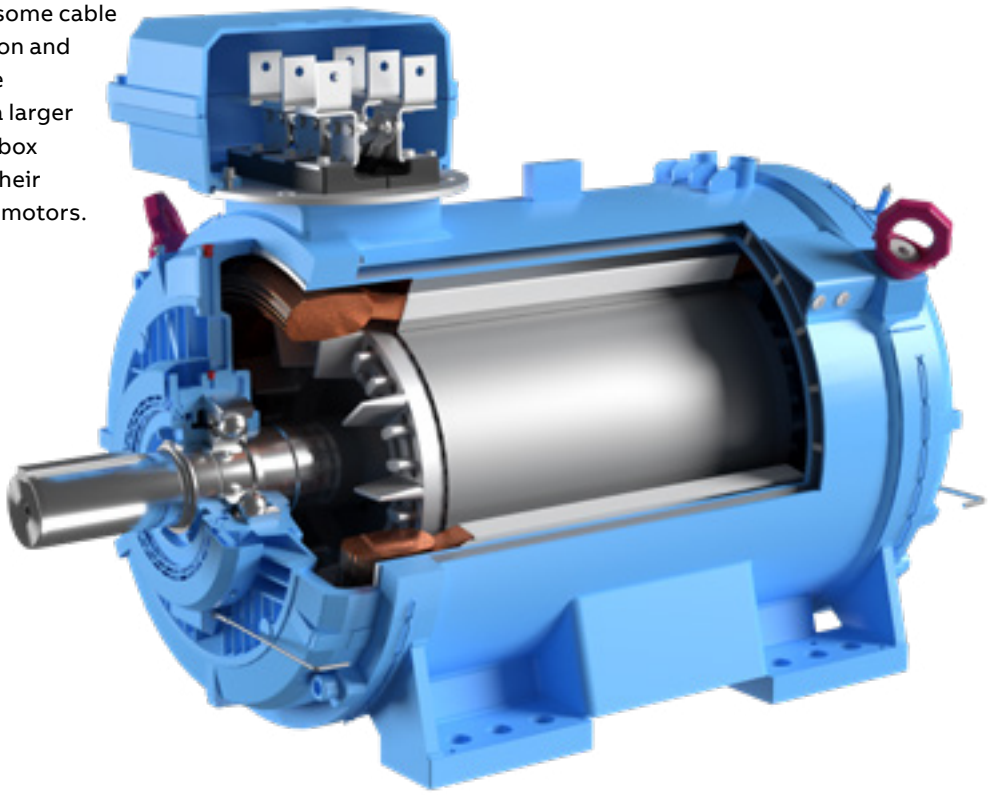
No ventilation needed

Air-cooled megawatt motors require a continuous supply of air for cooling, posing challenges in heat-sensitive environments like mines or cement factories. The need for dedicated motor ventilation increases costs and occupies valuable space.

In contrast, water-cooled motors are compact, consume less space, and eliminate safety risks associated with dust accumulation. They are ideal for sensitive production environments that require minimal air circulation, such as PET bottle extrusion.

Longer bearing life with bearing cooling fans

ABB water-cooled motor comes delivered with bearing cooling fans. Together with the inherently lower motor temperature of a water-cooled motor, the fans allow for improved uptime and longer bearing lifetime.



Reliable performance in harsh environments

Reliable in harsh environments

ABB Water-cooled motors are equipped with a steel frame and high-quality coating. The motors feature excellent resistance to corrosion and dust accumulation. It is equipped with labyrinth seals, which allow it to withstand intrusion of humidity, dust or particles. ABB Water-cooled motors are easy to keep clean.

Given the harsh operating environments in which they generally appear, maintenance procedures may be difficult to perform – making low maintenance requirements crucial. These factors combined make the ABB water-cooled motors particularly reliable in harsh operating environments – including narrow, damp and dusty locations – where the corresponding air-cooled motor would be considerably less suitable.

Operating benefits

In certain industrial applications, water-cooled motors are the only viable alternative, necessitated by specific production requirements. In some cleanroom production environments, air-cooled motors are disallowed because of the risk of contamination due to the uncontrolled air circulation arising from the presence of air-cooled motors in the room.

Conveyors may generate large vibrations, which may affect the motor driving it in a negative way. Motors in use to drive conveyors must therefore be designed specifically to withstand vibration. ABB water-cooled motors come with a steel frame, which allows the motor to typically withstand higher load and vibration than a comparable air-cooled motor.

Cost-efficient solutions

Saving money and cutting emissions

Smart use of existing infrastructure

With today's increasing cost of floor space, every square-meter counts and must be used efficiently. Constructing a ventilation system specifically for motor cooling is an expensive and space demanding undertaking. Especially when replacing a motor in an existing location. In contrast, a water-cooled motor can use cooling infrastructure already existing in the building: its ordinary tap-water supply system.

Water-cooled motors are easy and cost-effective to implement especially when replacing one existing water-cooled motor with a new one. The availability to fresh water makes it easy and less costly to implement other related water-cooled equipment, too, e.g. water-cooled variable speed drives (VSDs), which would otherwise require setting up specific purpose-built cooling pumps.

Energy efficiency

Efficiency is a key focus for companies aiming to reduce energy expenses, driving the demand for motors compatible with high efficiency classes like IE3 and IE4. Water-cooled motors, especially when operated continuously with a VSD, offer significant energy efficiency benefits. By prioritizing high efficiency, these motors effectively reduce operating costs and overall total cost of ownership (TCO).

For critical applications like pump stations in wastewater management and other 24/7 industrial operations, water-cooled motors are increasingly favored as a reliable and economically attractive alternative to traditional air-cooled motors.

Global compatibility and service for various demands

Across the globe

Fast and easy service

Although designed specifically for low maintenance requirements, even a water-cooled motor does require regular maintenance and occasional repairs. Servicing any megawatt-class motor is a time-consuming task, requiring days or weeks rather than hours. However, even the large M3LP 500 motor is relatively easy to service. One important reason is that the motor has a casted rotor cage, which does not require recurring tightening of the rotor bars.

Maintenance stops are shorter since easy dismantling and assembling of the end shields were considered during the design of the motor. Standardized design of components, e.g. bearings, enables fast and easy replacement.

Parts are available for ordering 24/7 in ABB's online spare parts network, Business Online. Professional support is provided globally through ABB's wide network of workshops and service partners. Our global service and support network ensures that we can deliver local support wherever our customers are located.

We support our customers throughout the whole lifecycle helping them maximize operational uptime and performance through preventive and condition-based servicing.

Ordering information

Explanation of the product code

Motor type	Motor size	Product code	Mounting arrangement code, Voltage and frequency code, Generation code	Variant codes
M3LP	450 LC	3GLP 45 3 530 - ADG		003 etc.
		1 2 3 4 5 6 7 8 9 10 11 12 13 14		

Positions 1 to 4	
3GLP	Totally enclosed water cooled squirrel cage motor with steel frame

Positions 5 to 6	
IEC size	
28:	280
31:	315
35:	355
40:	400
45:	450
50:	500

Position 7	
Pole pairs	
1:	2 poles
2:	4 poles
3:	6 poles
4	8 poles

Positions 8 to 10
Running number

Position 11
-(dash)

Position 12	
Mounting arrangement	
A:	Foot-mounted
B:	Flange-mounted, large flange with clearance holes.
R	Foot mounted, terminal box RHS seen from D-end
Use a variant code for ordering any other mounting arrangement	

Position 13
Voltage and frequency

Position 14	
Design code	
G	IE2
K	IE3
M	IE4

Position 15
Variant code

Technical data

Water-cooled IE2 low voltage motors, 400 V & 50 Hz

IP 55 - IC 71W - Insulation class F, temperature rise class B

Output	Motor type	Product code	Speed	Efficiency IEC 60034-2 - 1; 2014			Power factor	Current		Torque			Moment of inertia J = 1/4	Weight
kW			r/min	Full load 100 %	3/4 load 75 %	1/2 load 50 %	cos φ	I_N A	I_S I_N	T_N Nm	T_I T_N	T_b T_N	GD^2 kgm²	kg
3000 r/min = 2 poles				**400V 50 Hz**										
110	M3LP 280SMA 2	3GLP281210-G	3000	94,4	94,5	93,9	0,84	200	6,8	352	2,1	2,8	0,5	640
132	M3LP 280SMB 2	3GLP281220-G	3000	94,7	94,9	94,8	0,87	231	6,3	424	1,9	2,5	0,5	660
150	M3LP 280SMC 2	3GLP281230-G	3000	95,3	95,5	95,1	0,88	258	7,2	481	2,3	2,9	0,8	740
160	M3LP 315MA 2	3GLP311310-G	3000	95	95,1	94,8	0,86	282	6,5	513	2,1	2,5	1,2	720
200	M3LP 315MB 2	3GLP311320-G	3000	95,2	95,2	94,3	0,83	365	7,2	641	2,5	2,9	1,3	780
250	M3LP 315MC 2	3GLP311330-G	3000	95	94,8	94,6	0,85	443	7,5	801	2,7	3	1,6	870
315	M3LP 315MLA 2	3GLP311410-G	3000	95	95,6	95,7	0,86	551	7,1	1011	2,6	2,6	2	1030
335	M3LP 315MLB 2	3GLP311420-G	3000	95	95,1	94,6	0,84	599	6,1	1074	2,2	2,5	2	1030
355	M3LP 315KHA 2	3GLP311810-G	3000	95	95	94,6	0,83	643	9,5	1136	2,7	3,1	2	1420
375	M3LP 315KHB 2	3GLP311820-G	3000	95	95,7	95,6	0,89	634	7,1	1202	2,3	2,9	2	1600
1500 r/min = 4 poles				**400V 50 Hz**										
90	M3LP 280SMA 4	3GLP282210-G	1500	94,2	94,6	94,5	0,85	160	6,1	580	2,3	2,6	1,1	680
110	M3LP 280SMB 4	3GLP282220-G	1500	94,9	95,2	94,9	0,81	206	6,8	707	2,7	2,9	1,1	680
132	M3LP 280SMC 4	3GLP282230-G	1500	95	95,5	95,5	0,85	235	6,5	848	2,5	2,6	1,4	740
160	M3LP 280SMD 4	3GLP282240-G	1500	95	95,4	95,3	0,8	303	6,6	1030	2,7	2,8	1,4	740
185	M3LP 280SME 4	3GLP282250-G	1500	95,3	95,8	95,7	0,85	329	7,7	1191	2,8	3	1,7	790
200	M3LP 315MC 4	3GLP312330-G	1500	95,4	95,6	95,3	0,84	360	6,6	1284	2,2	2,8	2,4	870
250	M3LP 315MLA 4	3GLP312410-G	1500	95,1	95,1	94,9	0,83	452	6,9	1607	2,7	3,1	3,7	1030
315	M3LP 315KHA 4	3GLP312810-G	1500	95,6	96	96	0,87	546	6,2	2025	2,2	2,6	3,5	1490
315	M3LP 315KHA 4	3GLP312810-G	1500	95,6	96	96	0,87	546	6,2	2025	2,2	2,6	3,5	1490
355	M3LP 315KHB 4	3GLP312820-G	1500	95,8	96,2	96,2	0,88	607	6,5	2282	2,3	2,6	4	1520
355	M3LP 315KHB 4	3GLP312820-G	1500	95,1	95,5	95,5	0,88	607	6,5	2283	2,3	2,6	4	1520
375	M3LP 315KHC 4	3GLP312830-G	1500	95,6	95,9	95,9	0,87	650	6,3	2413	2,2	2,7	4,4	1560
315	M3LP 355MLA 4	3GLP352410-G	1500	95,1	95,2	94,6	0,83	567	6,5	2021	2,1	2,4	5,3	1520
355	M3LP 355MLB 4	3GLP352420-G	1500	95,1	95,2	94,9	0,85	623	6,7	2278	2	2,4	6	1620
400	M3LP 355MLC 4	3GLP352430-G	1500	95,1	95,2	94,9	0,85	701	6,5	2567	2,2	2,5	7	1750
450	M3LP 355MLD 4	3GLP352440-G	1500	95,1	95,2	94,9	0,85	790	7,2	2887	2,4	2,5	7,8	1900
500	M3LP 355MLE 4	3GLP352450-G	1500	95,1	95,2	94,9	0,85	876	7,5	3206	2,5	2,6	8,4	2000
560	M3LP 355LKA 4	3GLP352810-G	1500	95,1	95,2	94,7	0,86	968	7,4	3591	2,7	2,7	10	2350
630	M3LP 355LKB 4	3GLP352820-G	1500	95,1	95,2	94,9	0,85	1104	7,3	4043	2,7	2,6	10,6	2450
710	M3LP 400LA 4	3GLP402510-G	1500	95,1	95,4	95,2	0,86	1231	6,8	4556	2	2,3	15	3200
780	M3LP 400LB 4	3GLP402520-G	1500	95,1	95,2	95,1	0,87	1334	7,1	4998	2	2,4	16	3300
850	M3LP 400LC 4	3GLP402530-G	1500	95,1	95,2	95,1	0,86	1469	7,4	5447	2	2,5	17	3400
1000	M3LP 450LA 4	3GLP452510-G	1500	95,1	95,2	95,1	0,88	1687	6,6	6408	0,8	2,6	23	3750

Technical data

Water-cooled IE2 low voltage motors, 400 V & 50 Hz

IP 55 - IC 71W - Insulation class F, temperature rise class B

Output	Motor type	Product code	Speed	Efficiency IEC 60034-2 - 1; 2014			Power factor	Current		Torque			Moment of inertia J = 1/4	Weight
kW			r/min	Full load 100 %	3/4 load 75 %	1/2 load 50 %	cos φ	I_N A	I_S I_N	T_N Nm	T_l T_N	T_b T_N	GD^2 kgm^2	kg
1000 r/min = 6 poles				**400V 50 Hz**										
90	M3LP 280SME 6	3GLP283250-G	1000	94,1	94,5	94,3	0,86	160	7,3	868	2,5	2,6	2,8	790
110	M3LP 315MB 6	3GLP313320-G	1000	94,4	94,7	94,2	0,82	205	7,2	1058	2,6	2,8	3,9	770
132	M3LP 315MC 6	3GLP313330-G	1000	94,7	94,9	94,4	0,82	245	7,2	1270	2,7	2,9	4,6	850
160	M3LP 315MLA 6	3GLP313410-G	1000	95	95,1	94,6	0,82	296	7,4	1540	2,9	3	5,3	1020
185	M3LP 315MLB 6	3GLP313420-G	1000	95	95,2	95	0,83	338	6,5	1784	2,4	2,6	5,3	1020
220	M3LP 315KHA 6	3GLP313810-G	1000	95	95,3	94,9	0,82	407	6,5	2122	2,5	2,7	6,6	1500
220	M3LP 315KHA 6	3GLP313810-G	1000	95	95,3	94,9	0,82	407	6,5	2122	2,5	2,6	6,6	1500
250	M3LP 315KHB 6	3GLP313820-G	1000	95,2	95,4	94,9	0,82	462	6,7	2409	2,6	2,8	7,5	1530
250	M3LP 315KHB 6	3GLP313820-G	1000	95,2	95,4	94,9	0,82	462	6,7	2409	2,6	2,8	7,5	1530
315	M3LP 315KHC 6	3GLP313830-G	1000	95	95,6	95,8	0,79	603	6,5	3041	2,4	2,6	7,8	1560
250	M3LP 355MLA 6	3GLP353410-G	1000	95,3	95,8	95,8	0,84	450	6,1	2411	0,9	2,3	8	1520
315	M3LP 355MLB 6	3GLP353420-G	1000	95,5	95,9	96	0,85	560	6,3	3038	0,9	2,3	9,8	1680
355	M3LP 355MLC 6	3GLP353430-G	1000	95,6	96	96	0,84	638	6,6	3420	1	2,5	10,6	1750
400	M3LP 355MLD 6	3GLP353440-G	1000	95	95,4	95,6	0,85	709	6,5	3858	1	2,4	12,2	1900
450	M3LP 355LKA 6	3GLP353810-G	1000	95	95,3	95,3	0,85	795	7,1	4336	1,1	2,6	14,2	2200
500	M3LP 355LKB 6	3GLP353820-G	1000	95	95,4	95,2	0,85	882	7,8	4813	1,3	2,9	16,6	2450
560	M3LP 400LA 6	3GLP403510-G	1000	95	95,4	95,2	0,84	1000	6,5	5390	0,9	2,4	17	2900
630	M3LP 400LB 6	3GLP403520-G	1000	95	95,2	95,1	0,84	1122	7,2	6058	1,1	2,7	20,5	3150
710	M3LP 400LC 6	3GLP403530-G	1000	95	95,1	94,8	0,84	1261	7,7	6827	1,2	2,9	22	3300
800	M3LP 400LD 6	3GLP403540-G	1000	95	95,2	95	0,82	1459	7,7	7693	1,2	2,9	24	3400
850	M3LP 450LA 6	3GLP453510-G	1000	95	95,4	95,6	0,87	1458	6,6	8182	0,9	2,6	31	3850
920	M3LP 450LB 6	3GLP453520-G	1000	95	95,4	95,4	0,87	1576	6,7	8856	1,1	2,4	37	4200
750 r/min = 8 poles			**400V 50 Hz**											
55	M3LP 280SMA 8	3GLP284210-G	750	91,8	92,2	91,8	0,8	108	6,3	709	1,5	2,5	1,5	730
75	M3LP 280SMC 8	3GLP284230-G	750	93	93,3	92,7	0,8	145	7,5	967	1,8	3	2,3	780
90	M3LP 315MB 8	3GLP314320-G	750	93,1	93,6	93,3	0,82	170	6,7	1161	1,6	2,8	4,1	780
110	M3LP 315MC 8	3GLP314330-G	750	93,5	94	93,7	0,82	207	7	1419	1,7	2,8	4,8	850
132	M3LP 315MLA 8	3GLP314410-G	750	93,8	94,3	94,1	0,83	244	7,2	1705	2	2,7	5,6	1020
160	M3LP 315KHA 8	3GLP314810-G	750	94	94,5	94,3	0,83	296	7,4	2064	1,7	2,7	6,9	1550
200	M3LP 315KHC 8	3GLP314830-G	750	94,3	94,7	94,5	0,83	368	8	2580	1,5	2,6	8,6	1600
160	M3LP 355MLA 8	3GLP354410-G	750	93	93,1	92,5	0,8	304	6,7	2056	1,1	2,5	8	1520
200	M3LP 355MLB 8	3GLP354420-G	750	93,5	93,7	93,3	0,81	375	6,8	2570	1,1	2,5	9,8	1680
250	M3LP 355MLC 8	3GLP354430-G	750	93,5	93,8	93,3	0,79	481	6,9	3213	1,2	2,6	10,6	1750
355	M3LP 355LKB 8	3GLP354820-G	750	93,5	93,6	93,3	0,81	662	7,4	4562	1,3	2,7	16,5	2450
400	M3LP 400LA 8	3GLP404510-G	750	93,5	93,9	93,8	0,83	726	6,2	5147	1,1	2,5	17	2900
450	M3LP 400LB 8	3GLP404520-G	750	93,5	93,8	93,8	0,84	806	6,5	5791	1,1	2,6	21	3200
500	M3LP 400LC 8	3GLP404530-G	750	93,5	93,8	93,6	0,83	905	7	6426	1,3	2,8	24	3400
560	M3LP 450LA 8	3GLP454510-G	750	93,5	94,1	94,2	0,83	1017	5,8	7207	0,9	2,3	26	3450
630	M3LP 450LB 8	3GLP454520-G	750	93,5	93,9	94,1	0,84	1128	6	8107	1	2,3	29	3700

Technical data

Water-cooled IE2 low voltage motors, 690V & 50 Hz

IP 55 - IC 71W - Insulation class F, temperature rise class B

Output	Motor type	Product code	Speed	Efficiency IEC 60034-2 - 1; 2014			Power factor	Current		Torque			Moment of inertia J = 1/4	Weight
kW			r/min	Full load 100 %	3/4 load 75 %	1/2 load 50 %	cos φ	I_N A	I_S I_N	T_N Nm	T_l T_N	T_b T_N	GD^2 kgm²	kg
3000 r/min = 2 poles				**690V 50 Hz**										
110	M3LP 280SMA 2	3GLP281210-G	2976	94,4	94,5	93,9	0,84	116	6,8	352	2,1	2,8	0,5	640
132	M3LP 280SMB 2	3GLP281220-G	2972	94,7	94,9	94,8	0,87	134	6,3	424	1,9	2,5	0,5	660
150	M3LP 280SMC 2	3GLP281230-G	2976	95,3	95,5	95,1	0,88	149	7,2	481	2,3	2,9	0,8	740
160	M3LP 315MA 2	3GLP311310-G	2977	95	95,1	94,8	0,86	164	6,5	513	2,1	2,5	1,2	720
200	M3LP 315MB 2	3GLP311320-G	2979	95,2	95,2	94,3	0,83	210	7,2	641	2,5	2,9	1,3	780
250	M3LP 315MC 2	3GLP311330-G	2979	95	94,8	94,6	0,85	255	7,5	801	2,7	3	1,6	870
315	M3LP 315MLA 2	3GLP311410-G	2975	95	95,6	95,7	0,86	313	7,1	1011	2,6	2,6	2	1030
335	M3LP 315MLB 2	3GLP311420-G	2978	95	95,1	94,6	0,84	347	6,1	1074	2,2	2,5	2	1030
355	M3LP 315KHA 2	3GLP311810-G	2982	95	95	94,6	0,83	373	9,5	1136	2,7	3,1	2	1420
375	M3LP 315KHB 2	3GLP311820-G	2982	95	95,7	95,6	0,89	368	7,1	1202	2,3	2,9	2	1600
1500 r/min = 4 poles				**690V 50 Hz**										
90	M3LP 280SMA 4	3GLP282210-G	1481	94,2	94,6	94,5	0,85	93	6,1	580	2,3	2,6	1,1	680
110	M3LP 280SMB 4	3GLP282220-G	1484	94,9	95,2	94,9	0,81	120	6,8	707	2,7	2,9	1,1	680
132	M3LP 280SMC 4	3GLP282230-G	1485	95	95,5	95,5	0,85	137	6,5	848	2,5	2,6	1,4	740
160	M3LP 280SMD 4	3GLP282240-G	1483	95	95,4	95,3	0,8	176	6,6	1030	2,7	2,8	1,4	740
185	M3LP 280SME 4	3GLP282250-G	1483	95,3	95,8	95,7	0,85	191	7,7	1191	2,8	3	1,7	790
200	M3LP 315MC 4	3GLP312330-G	1487	95,4	95,6	95,3	0,84	209	6,6	1284	2,2	2,8	2,4	870
250	M3LP 315MLA 4	3GLP312410-G	1485	95,1	95,1	94,9	0,83	263	6,9	1607	2,7	3,1	3,7	1030
315	M3LP 315KHA 4	3GLP312810-G	1485	95,6	96	96	0,87	317	6,2	2025	2,2	2,6	3,5	1490
355	M3LP 315KHB 4	3GLP312820-G	1485	95,1	95,5	95,5	0,88	351	6,5	2283	2,3	2,6	4	1520
355	M3LP 315KHB 4	3GLP312820-G	1485	95,8	96,2	96,2	0,88	352	6,5	2282	2,3	2,6	4	1520
375	M3LP 315KHC 4	3GLP312830-G	1484	95,6	95,9	95,9	0,87	376	6,3	2413	2,2	2,7	4,4	1560
315	M3LP 355MLA 4	3GLP352410-G	1488	95,1	95,2	94,6	0,83	329	6,5	2021	2,1	2,4	5,3	1520
355	M3LP 355MLB 4	3GLP352420-G	1488	95,1	95,2	94,9	0,85	362	6,7	2278	2	2,4	6	1620
400	M3LP 355MLC 4	3GLP352430-G	1488	95,1	95,2	94,9	0,85	404	6,5	2567	2,2	2,5	7	1750
450	M3LP 355MLD 4	3GLP352440-G	1488	95,1	95,2	94,9	0,85	458	7,2	2887	2,4	2,5	7,8	1900
500	M3LP 355MLE 4	3GLP352450-G	1489	95,1	95,2	94,9	0,85	508	7,5	3206	2,5	2,6	8,4	2000
560	M3LP 355LKA 4	3GLP352810-G	1489	95,1	95,2	94,7	0,86	562	7,4	3591	2,7	2,7	10	2350
630	M3LP 355LKB 4	3GLP352820-G	1488	95,1	95,2	94,9	0,85	645	7,3	4043	2,7	2,6	10,6	2450
710	M3LP 400LA 4	3GLP402510-G	1488	95,1	95,4	95,2	0,86	713	6,8	4556	2	2,3	15	3200
780	M3LP 400LB 4	3GLP402520-G	1490	95,1	95,2	95,1	0,87	773	7,1	4999	2	2,4	16	3300
850	M3LP 400LC 4	3GLP402530-G	1490	95,1	95,2	95,1	0,86	852	7,4	5447	2	2,5	17	3400
1000	M3LP 450LA 4	3GLP452510-G	1490	95,1	95,2	95,1	0,88	975	6,6	6408	0,8	2,6	23	3750

Technical data

Water-cooled IE2 low voltage motors, 690 V & 50 Hz

IP 55 - IC 71W - Insulation class F, temperature rise class B

Output	Motor type	Product code	Speed	Efficiency IEC 60034-2 - 1; 2014			Power factor	Current		Torque			Moment of inertia J = 1/4	Weight
kW			r/min	Full load 100 %	3/4 load 75 %	1/2 load 50 %	cos φ	I_N A	I_S I_N	T_N Nm	T_l T_N	T_b T_N	GD^2 kgm²	kg
1000 r/min = 6 poles				**690V 50 Hz**										
90	M3LP 280SME 6	3GLP283250-G	990	94,1	94,5	94,3	0,86	93	7,3	868	2,5	2,6	2,8	790
110	M3LP 315MB 6	3GLP313320-G	992	94,4	94,7	94,2	0,82	119	7,2	1058	2,6	2,8	3,9	770
132	M3LP 315MC 6	3GLP313330-G	992	94,7	94,9	94,4	0,82	142	7,2	1270	2,7	2,9	4,6	850
160	M3LP 315MLA 6	3GLP313410-G	992	95	95,1	94,6	0,82	172	7,4	1540	2,9	3	5,3	1020
185	M3LP 315MLB 6	3GLP313420-G	990	95	95,2	95	0,83	196	6,5	1784	2,4	2,6	5,3	1020
220	M3LP 315KHA 6	3GLP313810-G	990	95	95,3	94,9	0,82	236	6,5	2122	2,5	2,6	6,6	1500
250	M3LP 315KHB 6	3GLP313820-G	991	95,2	95,4	94,9	0,82	267	6,7	2409	2,6	2,8	7,5	1530
315	M3LP 315KHC 6	3GLP313830-G	988	95	95,6	95,8	0,79	346	6,5	3041	2,4	2,6	7,8	1560
250	M3LP 355MLA 6	3GLP353410-G	990	95,3	95,8	95,8	0,84	261	6,1	2411	0,9	2,3	8	1520
315	M3LP 355MLB 6	3GLP353420-G	990	95,5	95,9	96	0,85	323	6,3	3038	0,9	2,3	9,8	1680
355	M3LP 355MLC 6	3GLP353430-G	991	95,6	96	96	0,84	370	6,6	3420	1	2,5	10,6	1750
400	M3LP 355MLD 6	3GLP353440-G	990	95	95,4	95,6	0,85	411	6,5	3858	1	2,4	12,2	1900
450	M3LP 355LKA 6	3GLP353810-G	991	95	95,3	95,3	0,85	459	7,1	4336	1,1	2,6	14,2	2200
500	M3LP 355LKB 6	3GLP353820-G	992	95	95,4	95,2	0,85	511	7,8	4814	1,3	2,9	16,6	2450
560	M3LP 400LA 6	3GLP403510-G	992	95	95,4	95,2	0,84	580	6,5	5390	0,9	2,4	17	2900
630	M3LP 400LB 6	3GLP403520-G	993	95	95,2	95,1	0,84	650	7,2	6058	1,1	2,7	20,5	3150
710	M3LP 400LC 6	3GLP403530-G	993	95	95,1	94,8	0,84	731	7,7	6827	1,2	2,9	22	3300
800	M3LP 400LD 6	3GLP403540-G	993	95	95,2	95	0,82	846	7,7	7693	1,2	2,9	24	3400
850	M3LP 450LA 6	3GLP453510-G	992	95	95,4	95,6	0,87	842	6,6	8182	0,9	2,6	31	3850
920	M3LP 450LB 6	3GLP453520-G	992	95	95,4	95,4	0,87	910	6,7	8856	1,1	2,4	37	4200
750 r/min = 8 poles			**690V 50 Hz**											
55	M3LP 280SMA 8	3GLP284210-G	739	91,8	92,2	91,8	0,8	62	6,3	709	1,5	2,5	1,5	730
75	M3LP 280SMC 8	3GLP284230-G	740	93	93,3	92,7	0,8	84	7,5	967	1,8	3	2,3	780
90	M3LP 315MB 8	3GLP314320-G	740	93,1	93,6	93,3	0,82	98	6,7	1161	1,6	2,8	4,1	780
110	M3LP 315MC 8	3GLP314330-G	740	93,5	94	93,7	0,82	119	7	1419	1,7	2,8	4,8	850
132	M3LP 315MLA 8	3GLP314410-G	740	93,8	94,3	94,1	0,83	142	7,2	1705	2	2,7	5,6	1020
160	M3LP 355MLA 8	3GLP354410-G	743	93	93,1	92,5	0,8	176	6,7	2056	1,1	2,5	8	1520
200	M3LP 355MLB 8	3GLP354420-G	743	93,5	93,7	93,3	0,81	216	6,8	2570	1,1	2,5	9,8	1680
250	M3LP 355MLC 8	3GLP354430-G	743	93,5	93,8	93,3	0,79	279	6,9	3213	1,2	2,6	10,6	1750
400	M3LP 400LA 8	3GLP404510-G	742	93,5	93,9	93,8	0,83	419	6,2	5147	1,1	2,5	17	2900

Technical data

Water-cooled IE2 low voltage motors, 440 V & 60 Hz

IP 55 - IC 71W - Insulation class F, temperature rise class B

Output	Motor type	Product code	Speed	Efficiency IEC 60034-2 - 1; 2014			Power factor	Current		Torque			Moment of inertia J = 1/4	Weight
kW			r/min	Full load 100 %	3/4 load 75 %	1/2 load 50 %	cos φ	I_N A	I_S I_N	T_N Nm	T_I T_N	T_b T_N	GD^2 kgm²	kg
3600 r/min = 2 poles				**440V 60 Hz**										
225	M3LP 315MB 2	3GLP311320-G	3576	95,5	95,4	94,8	0,86	359	6,3	600	1,9	2,4	1,3	780
330	M3LP 315MLA 2	3GLP311410-G	3576	95,4	96,3	96,3	0,89	505	6,3	881	2,7	2,5	2	1030
355	M3LP 315MLB 2	3GLP311420-G	3577	95,4	95,5	95	0,87	560	6,3	947	2,3	2,6	2	1030
375	M3LP 315KHA 2	3GLP311810-G	3581	95,4	95,4	94,8	0,86	596	9	999	2,5	3	2	1420
400	M3LP 315KHB 2	3GLP311820-G	3578	95,4	95,8	95,8	0,9	606	7	1067	2,2	2,5	2	1600
1800 r/min = 4 poles				**440V 60 Hz**										
100	M3LP 280SMA 4	3GLP282210-G	1779	95	95,4	94,7	0,86	160	5,9	536	2	2,3	1,1	680
145	M3LP 280SMC 4	3GLP282230-G	1780	95,1	95,5	95,5	0,86	232	6,3	777	2,3	2,5	1,4	740
175	M3LP 280SMD 4	3GLP282240-G	1782	95,3	95,8	95,7	0,84	285	6,7	937	2,5	2,6	1,4	740
200	M3LP 280SME 4	3GLP282250-G	1782	95,7	96,1	96,1	0,87	315	7,7	1071	2,8	2,8	1,7	790
225	M3LP 315MC 4	3GLP312330-G	1785	95,4	95,5	95,4	0,86	362	6,3	1203	2	2,5	2,4	870
275	M3LP 315MLA 4	3GLP312410-G	1784	95,4	95,7	95,7	0,85	441	6,5	1472	2,1	2,5	3,7	1030
330	M3LP 315KHA 4	3GLP312810-G	1784	95,5	96	95,9	0,88	515	6,4	1766	2,1	2,5	3,5	1490
375	M3LP 315KHB 4	3GLP312820-G	1784	95,8	96,1	96,1	0,88	583	6,5	2007	2,2	2,5	4	1520
375	M3LP 315KHB 4	3GLP312820-G	1784	95,8	96,1	96,1	0,88	583	6,5	2007	2,2	2,5	4	1520
362	M3LP 355MLA 4	3GLP352410-G	1787	95,8	95,9	95,5	0,86	570	6,2	1934	1,8	2,1	5,3	1520
400	M3LP 355MLB 4	3GLP352420-G	1787	95,8	96,1	95,9	0,87	623	6,5	2137	1,8	2,1	6	1620
450	M3LP 355MLC 4	3GLP352430-G	1787	95,8	95,9	95,5	0,87	700	6,3	2404	1,9	2,2	7	1750
500	M3LP 355MLD 4	3GLP352440-G	1787	95,8	96	95,6	0,87	777	6,8	2671	2,2	2,3	7,8	1900
560	M3LP 355MLE 4	3GLP352450-G	1788	95,8	95,8	95,3	0,87	870	7,2	2990	2,2	2,4	8,4	2000
630	M3LP 355LKA 4	3GLP352810-G	1788	95,8	95,9	95,5	0,87	979	7,2	3364	2,4	2,4	10	2350
710	M3LP 355LKB 4	3GLP352820-G	1787	95,8	95,9	95,6	0,87	1105	7	3794	2,4	2,3	10,6	2450
800	M3LP 400LA 4	3GLP402510-G	1787	95,8	96,1	95,9	0,86	1250	6,3	4275	1,7	2	15	3200
880	M3LP 400LB 4	3GLP402520-G	1788	95,8	96	95,9	0,88	1350	6,6	4699	1,7	2,2	16	3300
950	M3LP 400LC 4	3GLP402530-G	1789	95,8	95,9	95,5	0,88	1458	6,9	5070	1,7	2,3	17	3400
750 r/min = 8 poles				**440V 60 Hz**										
185	M3LP 355MLA 8	3GLP354410-G	892	93,6	93,8	93,3	0,82	312	6,1	1980	0,8	2,1	8	1520
400	M3LP 355LKB 8	3GLP354820-G	892	94,1	94,3	94,1	0,83	662	6,8	4282	1,1	2,3	16,5	2450
500	M3LP 400LB 8	3GLP404520-G	891	94,1	94,5	94,3	0,86	795	6	5358	0,9	2,3	21	3200
630	M3LP 450LA 8	3GLP454510-G	891	94,1	94,6	94,7	0,85	1016	5,3	6752	0,8	2	26	3450
710	M3LP 450LB 8	3GLP454520-G	891	94,1	94,6	94,8	0,85	1144	5,5	7609	0,8	2,1	29	3700

Technical data

Water-cooled IE3 low voltage motors, 400 V & 50 Hz

IP 55 - IC 71W - Insulation class F, temperature rise class B

Output	Motor type	Product code	Speed	Efficiency IEC 60034-2 - 1; 2014			Power factor	Current		Torque			Moment of inertia J = 1/4	Weight
kW			r/min	Full load 100 %	3/4 load 75 %	1/2 load 50 %	cos φ	I_N A	I_S I_N	T_N Nm	T_l T_N	T_b T_N	GD^2 kgm^2	kg
3000 r/min = 2 poles				**400V 50 Hz**										
90	M3LP 280SMB	3GLP281220-••K	2976	95,2	95,1	94,3	0,88	154	7,7	289	1,8	3,1	0,9	660
132	M3LP 315MB	3GLP311320-••K	2983	95,6	95,3	94,3	0,85	234	7,8	422	1,5	3,1	1,3	766
160	M3LP 315MC	3GLP311330-••K	2982	95,7	95,7	94,9	0,89	272	8,3	512	1,8	3,1	1,7	860
200	M3LP 315MLA	3GLP311410-••K	2983	96,1	96,1	95,5	0,90	334	8,9	641	2,1	3,1	2	1037
315	M3LP 315KHA	3GLP311810-••K	2978	96,0	96,3	96,2	0,92	512	7,7	1010	2,1	2,5	2,9	1539
355	M3LP 355MLB	3GLP351420-••K	2978	96,2	96,2	95,7	0,91	586	7,4	1138	1,6	2,8	3,9	1359
560	M3LP 355MLE	3GLP351450-••K	2979	96,8	96,9	96,6	0,92	901	8,4	1795	1,8	3,5	5,6	1768
560	M3LP 355LKA	3GLP351810-••K	2983	96,7	96,9	96,4	0,92	903	10,0	1793	2,2	4,1	6,1	1914
1500 r/min = 4 poles				**400V 50 Hz**										
90	M3LP 280SMB	3GLP282220-••K	1484	95,4	95,7	95,4	0,84	162	7,5	579	2,4	2,8	1,31	664
110	M3LP 280SMC	3GLP282230-••K	1484	95,7	96,0	95,8	0,86	193	7,5	708	2,5	2,7	1,59	715
110	M3LP 315MB	3GLP312320-••K	1489	95,7	95,7	95,0	0,86	193	8,2	706	2,3	3,1	2,43	798
132	M3LP 280SMD	3GLP282240-••K	1485	95,9	96,2	96,0	0,86	232	8,1	848	2,9	2,9	1,88	786
132	M3LP 315MC	3GLP312330-••K	1488	95,7	95,9	95,4	0,87	228	8,0	848	2,3	3,0	2,9	866
160	M3LP 280SME	3GLP282250-••K	1485	96,0	96,3	96,2	0,85	284	9,0	1029	3,3	3,1	1,71	836
160	M3LP 315MD	3GLP312340-••K	1488	95,9	96,0	95,6	0,87	278	8,3	1027	2,5	3,1	3,2	907
200	M3LP 315MLB	3GLP312420-••K	1487	96,2	96,4	96,2	0,88	342	8,3	1284	2,6	3,0	3,9	1083
250	M3LP 315KHA	3GLP312810-••K	1488	96,1	96,3	96,0	0,86	435	9,0	1604	3,0	3,2	4,4	1506
315	M3LP 315KHB	3GLP312820-••K	1486	96,0	96,3	96,2	0,88	541	8,3	2023	2,8	2,9	5	1602
315	M3LP 355MLA	3GLP352410-••K	1488	96,5	96,6	96,2	0,83	567	6,5	2021	2,1	2,4	5,3	1520
355	M3LP 355MLB	3GLP352420-••K	1488	96,7	96,8	96,6	0,85	623	6,7	2278	2,0	2,4	6	1620
400	M3LP 355MLC	3GLP352430-••K	1488	96,8	96,9	96,7	0,85	701	6,5	2567	2,2	2,5	7,0	1750
450	M3LP 355MLD	3GLP352440-••K	1488	96,7	96,8	96,6	0,85	790	7,2	2888	2,4	2,5	7,8	1900
500	M3LP 355MLE	3GLP352450-••K	1489	96,9	97,0	96,8	0,85	876	7,5	3207	2,5	2,6	8,4	2000
630	M3LP 355LKB	3GLP352810-••K	1488	96,9	97,0	96,8	0,85	1104	7,3	4043	2,7	2,6	10,6	2450
710	M3LP 400LA	3GLP402510-••K	1488	96,8	97,0	96,9	0,86	1231	6,8	4556	2,0	2,3	15,0	3200
780	M3LP 400LB	3GLP402520-••K	1490	97,0	97,1	97,0	0,87	1334	7,1	4999	2,0	2,4	16	3300
850	M3LP 400LC	3GLP402530-••K	1490	97,1	97,2	97,1	0,86	1469	7,4	5447	2,0	2,5	17,0	3400
1000	M3LP 450LA	3GLP452510-••K	1490	97,2	97,3	97,2	0,88	1687	6,6	6409	0,8	2,6	23	3750
1100	M3LP 450LB	3GLP452520-••K	1490	97,2	97,3	97,2	0,88	1856	6,8	7050	0,8	2,7	25,0	4050
1200	M3LP 450LC	3GLP452530-••K	1491	97,2	97,3	97,1	0,88	2024	7,2	7685	0,9	2,8	30	4400

Technical data

Water-cooled IE3 low voltage motors, 400 V & 50 Hz

IP 55 - IC 71W - Insulation class F, temperature rise class B

Output	Motor type	Product code	Speed	Efficiency IEC 60034-2 - 1; 2014			Power factor	Current		Torque			Moment of inertia J = 1/4	Weight
kW			r/min	Full load 100 %	3/4 load 75 %	1/2 load 50 %	cos φ	I_N A	I_S / I_N	T_N Nm	T_l / T_N	T_b / T_N	GD^2 kgm²	kg
1000 r/min = 6 poles				**400V 50 Hz**										
45	M3LP 280SMB	3GLP283220-••K	992	94,3	94,3	93,8	0,85	80,7	7,9	433	2,5	2,9	1,87	611
55	M3LP 280SMC	3GLP283230-••K	992	94,5	94,5	94,7	0,82	97,8	8,1	530	2,6	2,9	2,57	663
75	M3LP 315MB	3GLP313320-••K	993	94,9	95,0	94,3	0,86	133	7,1	721	1,8	2,7	4,1	822
90	M3LP 315MC	3GLP313330-••K	994	95,1	95,2	94,5	0,82	161	7,6	865	2,1	2,9	4,6	889
110	M3LP 315MD	3GLP313340-••K	994	95,3	95,3	94,8	0,85	196	7,6	1057	2,1	2,9	4,9	943
132	M3LP 315MLB	3GLP313420-••K	994	95,5	95,4	94,7	0,83	239	8,3	1268	2,5	3,1	6,3	1062
160	M3LP 315KHA	3GLP313810-••K	994	95,7	95,8	95,2	0,82	293	8,4	1537	2,6	3,2	7,3	1417
200	M3LP 315KHB	3GLP313820-••K	995	95,8	95,8	94,8	0,75	404	9,3	1919	3,3	3,7	8,3	1512
250	M3LP 355MLA	3GLP353410-••K	990	95,8	96,0	96,0	0,84	448	6,1	2411	0,9	2,3	8	1520
315	M3LP 355MLB	3GLP353420-••K	990	95,8	96,1	96,2	0,85	560	6,3	3038	0,9	2,3	9,8	1680
355	M3LP 355MLC	3GLP353430-••K	991	95,8	96,1	96,1	0,84	638	6,6	3420	1,0	2,5	10,6	1750
400	M3LP 355MLD	3GLP353440-••K	990	95,8	96,2	96,3	0,85	709	6,5	3858	1,0	2,4	12,2	1900
450	M3LP 355LKA	3GLP353810-••K	991	96,0	96,3	96,3	0,85	795	7,1	4336	1,1	2,6	14	2200
500	M3LP 355LKB	3GLP353820-••K	992	96,2	96,5	96,4	0,85	882	7,8	4813	1,3	2,9	16,5	2450
560	M3LP 400LA	3GLP403510-••K	992	96,2	96,5	96,4	0,84	1000	6,5	5391	0,9	2,4	17	2900
630	M3LP 400LB	3GLP403520-••K	993	96,4	96,6	96,5	0,84	1122	7,2	6058	1,1	2,7	20,5	3150
710	M3LP 400LC	3GLP403530-••K	993	96,7	96,8	96,6	0,84	1261	7,7	6828	1,2	2,9	22	3300
800	M3LP 400LD	3GLP403540-••K	993	96,5	96,7	96,5	0,82	1459	7,7	7693	1,2	2,9	24	3400
850	M3LP 450LA	3GLP453510-••K	992	96,7	97,0	97,1	0,87	1458	6,6	8182	0,9	2,6	31	3850
920	M3LP 450LB	3GLP453520-••K	992	96,8	97,1	97,1	0,87	1576	6,7	8856	1,1	2,4	37	4200
1050	M3LP 450LC	3GLP453530-••K	993	96,9	97,2	97,1	0,87	1797	7,4	10097	1,2	2,9	41	4500
750 r/min = 8 poles				**400V 50 Hz**										
45	M3LP 280SMB	3GLP284220-••K	742	92,4	92,4	91,4	0,77	91,2	7,3	579	1,6	3,5	2,2	704
55	M3LP 315MB	3GLP314320-••K	742	92,7	92,9	92,1	0,82	105	6,8	708	1,4	3,0	2,85	681
75	M3LP 315MC	3GLP314330-••K	741	93,2	93,2	92,9	0,83	141	6,9	966	1,4	3,0	4,1	773
90	M3LP 315MD	3GLP314340-••K	741	93,5	93,8	93,3	0,83	168	7,2	1160	1,5	3,1	4,9	850
110	M3LP 315MLA	3GLP314410-••K	740	93,7	94,1	93,7	0,83	203	7,0	1419	1,5	3,0	5,8	1028
132	M3LP 315KHA	3GLP314810-••K	740	94,0	94,4	94,1	0,84	241	7,0	1703	1,5	3,0	7,3	1440
150	M3LP 315KHB	3GLP314820-••K	740	94,2	94,2	94,2	0,84	275	7,4	1934	1,7	3,1	8,3	1539
160	M3LP 315KHC	3GLP314830-••K	740	94,3	94,6	94,3	0,84	292	7,4	2065	1,7	3,1	9,2	1622
160	M3LP 355MLA	3GLP354410-••K	743	94,8	94,9	94,5	0,80	304	6,7	2056	1,1	2,5	8	1520
200	M3LP 355MLB	3GLP354420-••K	743	95,0	95,2	94,9	0,81	375	6,8	2570	1,1	2,5	9,8	1680
250	M3LP 355MLC	3GLP354430-••K	743	94,8	95,1	94,7	0,79	481	6,9	3213	1,2	2,6	10,6	1750
315	M3LP 355LKA	3GLP354810-••K	743	95,4	94,5	95,2	0,80	595	7,4	4048	1,3	2,7	13,3	2270
355	M3LP 355LKB	3GLP354820-••K	743	95,5	95,6	95,4	0,81	662	7,4	4562	1,3	2,7	16,5	2450
400	M3LP 400LA	3GLP404510-••K	742	95,8	96,1	96,0	0,83	726	6,2	5148	1,1	2,5	17,0	2900
450	M3LP 400LB	3GLP404520-••K	742	95,9	96,1	96,1	0,84	806	6,5	5791	1,1	2,6	21	3200
500	M3LP 400LC	3GLP404530-••K	743	96,0	96,2	96,1	0,83	905	7,0	6426	1,3	2,8	24,0	3400
560	M3LP 450LA	3GLP454510-••K	742	95,7	96,1	96,2	0,83	1017	5,8	7207	0,9	2,3	26	3450
630	M3LP 450LB	3GLP454520-••K	742	95,9	96,2	96,3	0,84	1128	6,0	8108	1,0	2,3	29,0	3700

Technical data

Water-cooled IE3 low voltage motors, 690 V & 50 Hz and 690 V & 60 Hz

IP 55 - IC 71W - Insulation class F, temperature rise class B

Output	Motor type	Product code	Speed	Efficiency IEC 60034-2 - 1; 2014			Power factor	Current		Torque			Moment of inertia J = 1/4	Weight
kW			r/min	Full load 100 %	3/4 load 75 %	1/2 load 50 %	cos φ	I_N A	I_S I_N	T_N Nm	T_l T_N	T_b T_N	GD^2 kgm^2	kg
1500 r/min = 4 poles				**690V 50 Hz**										
1400	M3LP 500LA	3GLP502510-••K	1492	97,5	97,6	97,5	0,87	1380	6,7	8960	0,6	2,8	35	5350
1600	M3LP 500LB	3GLP502520-••K	1492	97,7	97,8	97,7	0,87	1575	7,2	10240	0,7	3,1	39,5	5650
1800	M3LP 500LC	3GLP502530-••K	1493	97,5	97,6	97,5	0,87	1775	7,9	11513	0,8	3,3	43	5950
1000 r/min = 6 poles				**690V 50 Hz**										
1200	M3LP 500LA	3GLP503510-••K	994	97,3	97,5	97,4	0,84	1230	6,5	11528	0,8	2,6	51	5200
1350	M3LP 500LB	3GLP503520-••K	994	97,4	97,6	97,5	0,85	1365	6,5	12969	0,8	2,6	60	5650
1600	M3LP 500LC	3GLP503530-••K	994	97,5	97,7	97,6	0,84	1635	7,1	15371	0,9	2,8	67	6000
750 r/min = 8 poles				**690V 50 Hz**										
800	M3LP 500LA	3GLP504510-••K	745	96,7	97,0	96,9	0,81	855	6,0	10254	0,9	2,4	51,0	5200
900	M3LP 500LB	3GLP504520-••K	744	96,7	97,0	97,0	0,82	950	5,9	11552	0,9	2,3	60,0	5650
1000	M3LP 500LC	3GLP504530-••K	745	96,8	97,1	97,0	0,81	1067	6,2	12818	1,0	2,5	67,0	6000
1800 r/min = 4 poles				**690V 60 Hz**										
1600	M3LP 500LA	3GLP502510-••K	1792	97,5	97,6	97,5	0,87	1380	6,7	8960	0,6	2,8	35	5350
1800	M3LP 500LB	3GLP502520-••K	1792	97,7	97,8	97,7	0,87	1575	7,2	10240	0,7	3,1	39,5	5650
2000	M3LP 500LC	3GLP502530-••K	1792	97,5	97,6	97,5	0,87	1775	7,9	11513	0,8	3,3	43	5950
1200 r/min = 6 poles				**690V 60 Hz**										
1400	M3LP 500LA	3GLP503510-••K	1193	97,3	97,5	97,4	0,84	1230	6,5	11528	0,8	2,6	51	5200
1600	M3LP 500LB	3GLP503520-••K	1194	97,4	97,6	97,5	0,85	1365	6,5	12969	0,8	2,6	60	5650
1800	M3LP 500LC	3GLP503530-••K	1194	97,5	97,7	97,6	0,84	1635	7,1	15371	0,9	2,8	67	6000
750 r/min = 8 poles				**690V 60 Hz**										
930	M3LP 500LA	3GLP504510-••K	894	96,7	97,0	96,9	0,81	855	6,0	10254	0,9	2,4	51,0	5200
1050	M3LP 500LB	3GLP504520-••K	894	96,7	97,0	97,0	0,82	950	5,9	11552	0,9	2,3	60,0	5650
1200	M3LP 500LC	3GLP504530-••K	894	96,8	97,1	97,0	0,81	1067	6,2	12818	1,0	2,5	67,0	6000

Technical data

Water-cooled IE3 low voltage motors, 440 V & 60 Hz

IP 55 - IC 71W - Insulation class F, temperature rise class B

Output	Motor type	Product code	Speed	Efficiency IEC 60034-2 - 1; 2014			Power factor	Current		Torque			Moment of inertia J = 1/4	Weight
kW			r/min	Full load 100 %	3/4 load 75 %	1/2 load 50 %	cos φ	I_N A	I_S I_N	T_N Nm	T_I T_N	T_b T_N	GD^2 kgm²	kg
3600 r/min = 2 poles				**440V 60 Hz**										
220	M3LP 315MLA	3GLP311410-••K	3581	95,8	95,7	94,9	0,91	330	8,4	587	1,7	2,9	2	1037
345	M3LP 315KHA	3GLP311810-••K	3576	95,8	96,0	95,7	0,93	509	7,2	921	1,7	2,3	2,9	1539
390	M3LP 355MLB	3GLP351420-••K	3576	95,8	95,7	94,9	0,91	585	6,9	1041	1,4	2,6	3,9	1359
600	M3LP 355MLE	3GLP351450-••K	3577	96,6	96,6	96,1	0,92	875	8,1	1601	1,6	3,3	5,6	1768
600	M3LP 355LKA	3GLP351810-••K	3582	96,7	96,6	95,6	0,92	876	9,7	1600	2,0	3,9	6,1	1914
1800 r/min = 4 poles				**440V 60 Hz**										
220	M3LP 315MLB	3GLP312420-••K	1786	96,4	96,6	96,4	0,89	337	7,9	1176	2,2	2,7	3,9	1083
125	M3LP 280SMC	3GLP282230-••K	1782	95,8	96,1	95,9	0,88	195	7,1	700	2,2	2,4	1,59	715
145	M3LP 280SMD	3GLP282240-••K	1784	96,2	96,3	96,1	0,88	226	7,9	776	2,6	2,7	1,88	786
175	M3LP 280SME	3GLP282250-••K	1784	96,4	96,7	96,7	0,87	274	8,9	937	3,0	2,9	1,71	836
345	M3LP 315KHB	3GLP312820-••K	1785	96,2	96,2	96,0	0,89	531	8,0	1845	2,5	2,7	5	1602
362	M3LP 355MLA	3GLP352410-••K	1787	96,5	96,6	96,3	0,86	570	6,2	1934	1,8	2,1	5,3	1520
400	M3LP 355MLB	3GLP352420-••K	1787	96,2	96,5	96,3	0,87	623	6,5	2137	1,8	2,1	6	1620
450	M3LP 355MLC	3GLP352430-••K	1787	96,8	96,9	96,6	0,87	700	6,3	2405	1,9	2,2	7	1750
500	M3LP 355MLD	3GLP352440-••K	1787	96,7	96,9	96,6	0,87	777	6,8	2672	2,2	2,3	7,8	1900
560	M3LP 355MLE	3GLP352450-••K	1788	97,0	97,0	96,7	0,87	870	7,2	2991	2,2	2,4	8,4	2000
710	M3LP 355LKB	3GLP352810-••K	1787	96,9	97,0	96,8	0,87	1105	7,0	3794	2,4	2,3	10,6	2450
800	M3LP 400LA	3GLP402510-••K	1787	96,6	96,9	96,7	0,86	1250	6,3	4275	1,7	2,0	15	3200
880	M3LP 400LB	3GLP402520-••K	1788	96,8	97,0	96,9	0,88	1350	6,6	4700	1,7	2,2	16	3300
950	M3LP 400LC	3GLP402530-••K	1789	97,1	97,2	96,9	0,88	1458	6,9	5071	1,7	2,3	17	3400
1100	M3LP 450LA	3GLP452510-••K	1789	97,1	97,2	97,0	0,89	1670	6,1	5871	0,7	2,4	23	3750
1220	M3LP 450LB	3GLP452520-••K	1789	97,1	97,2	97,0	0,89	1852	6,2	6512	0,7	2,4	25	4050
1350	M3LP 450LC	3GLP452530-••K	1790	97,1	97,1	96,8	0,89	2049	6,5	7202	0,7	2,5	30	4400

Technical data

Water-cooled IE3 low voltage motors, 440 V & 60 Hz

IP 55 - IC 71W - Insulation class F, temperature rise class B

Output	Motor type	Product code	Speed	Efficiency IEC 60034-2 - 1; 2014			Power factor	Current		Torque			Moment of inertia J = 1/4	Weight
kW			r/min	Full load 100 %	3/4 load 75 %	1/2 load 50 %	cos φ	I_N A	I_S I_N	T_N Nm	T_I T_N	T_b T_N	GD^2 kgm^2	kg
1200 r/min = 6 poles				**440V 60 Hz**										
49	M3LP 280SMB	3GLP283220-••K	1191	94,5	94,5	93,5	0,86	79,0	7,6	393	2,2	2,7	1,87	611
60	M3LP 280SMC	3GLP283230-••K	1191	94,6	94,6	94,0	0,87	96,0	7,8	481	2,4	2,7	2,57	663
82	M3LP 315MB	3GLP313320-••K	1193	95,0	95,1	94,4	0,87	131	6,8	656	1,7	2,5	4,1	822
99	M3LP 315MC	3GLP313330-••K	1193	95,1	95,1	94,3	0,84	159	7,2	792	1,9	2,6	4,6	889
145	M3LP 315MLB	3GLP313420-••K	1194	95,8	95,7	95,0	0,85	234	8,0	1159	2,3	2,9	6,3	1062
175	M3LP 315KHA	3GLP313810-••K	1194	95,9	96,0	95,4	0,85	283	8,2	1400	2,4	2,9	7,3	1417
220	M3LP 315KHB	3GLP313820-••K	1195	96,1	96,0	95,2	0,80	375	9,5	1758	3,1	3,5	8,3	1512
350	M3LP 355MLB	3GLP353420-••K	1189	95,8	96,1	96,2	0,85	565	5,8	2810	0,8	2,1	9,8	1680
500	M3LP 355LKA	3GLP353810-••K	1190	96,0	96,2	96,2	0,86	794	6,5	4012	0,9	2,3	14	2200
560	M3LP 355LKB	3GLP353820-••K	1191	96,2	96,4	96,4	0,86	888	7,2	4490	1,0	2,5	16,5	2450
630	M3LP 400LA	3GLP403510-••K	1191	96,1	96,4	96,4	0,85	1012	6,0	5051	0,7	2,1	17	2900
710	M3LP 400LB	3GLP403520-••K	1192	96,2	96,5	96,4	0,85	1139	6,6	5688	0,9	2,3	20,5	3150
800	M3LP 400LC	3GLP403530-••K	1192	96,6	96,8	96,6	0,86	1263	7,2	6409	1,0	2,6	22	3300
900	M3LP 400LD	3GLP403540-••K	1192	96,5	96,6	96,5	0,85	1439	7,1	7210	1,0	2,6	24	3400
950	M3LP 450LA	3GLP453510-••K	1191	96,6	97,0	97,0	0,88	1466	6,0	7617	0,8	2,3	31	3850
1020	M3LP 450LB	3GLP453520-••K	1191	96,6	97,0	97,0	0,88	1565	6,1	8178	0,9	2,2	37	4200
1150	M3LP 450LC	3GLP453530-••K	1192	96,8	97,0	97,0	0,88	1771	7,0	9212	1,0	2,7	41	4500
750 r/min = 8 poles				**440V 60 Hz**										
49	M3LP 280SMB	3GLP284220-••K	891	92,4	92,4	91,3	0,74	87,1	7,1	525	1,4	3,3	2,2	704
80	M3LP 315MC	3GLP314330-••K	891	93,6	93,6	92,7	0,84	135	6,6	858	1,2	2,8	4,1	773
100	M3LP 315MD	3GLP314340-••K	890	94,1	94,1	93,2	0,84	167	6,7	1073	1,3	2,8	4,9	850
145	M3LP 315KHA	3GLP314810-••K	889	94,5	94,6	93,9	0,85	238	6,6	1557	1,3	2,7	7,3	1440
185	M3LP 355MLA	3GLP354410-••K	892	94,7	94,9	94,5	0,82	312	6,1	1980	0,8	2,1	8	1520
362	M3LP 355LKA	3GLP354810-••K	892	95,3	95,6	95,3	0,83	597	6,8	3974	1,2	2,5	13,3	2270
400	M3LP 355LKB	3GLP354820-••K	892	95,5	95,7	95,5	0,83	662	6,8	4282	1,1	2,3	16,5	2450
450	M3LP 400LA	3GLP404510-••K	891	95,8	96,1	96,1	0,85	725	5,7	4822	0,9	2,2	17	2900
500	M3LP 400LB	3GLP404520-••K	891	95,9	96,2	96,1	0,86	795	6,0	5359	0,9	2,3	21	3200
630	M3LP 450LA	3GLP454510-••K	891	95,7	96,1	96,2	0,85	1016	5,3	6752	0,8	2,0	26	3450
710	M3LP 450LB	3GLP454520-••K	891	95,8	96,2	96,3	0,85	1144	5,5	7609	0,8	2,1	29	3700

Variant codes

Water-cooled motors

Variant codes specify additional options and features to the standard motor. This page provides an overview lists of variant codes. For detailed and up-to-date variant code information, please refer to our Variants and Prices (VNP) application.

Variant code	Description
Administration	
529	Customer witnessed visual inspection of complete order line.
530	Two-year extension on standard warranty
531	Sea freight packing
533	Wooden sea freight packing
590	Mounting of customer supplied part other than coupling.
Balancing	
417	Vibration acc. to Grade B (IEC 60034-14).
423	Balanced without key.
424	Full-key balancing
Bearings and lubrication	
036	Transport lock for bearings.
037	Roller bearing at D-end.
040	Heat-resistant grease
058	Angular contact bearing at D-end, shaft force away from bearing.
059	Angular contact bearing at N-end, shaft force towards bearing.
060	Angular contact bearing at D-end, shaft force towards bearing.
061	Angular contact bearing at N-end, shaft force away from bearing.
107	PT100 2-wire in bearings.
128	Double PT100, 2-wire in bearings
129	Double PT100, 3-wire in bearings
130	PT100 3-wire in bearings.
420	Bearing mounted PTC thermistors.
433	Outlet grease collector
593	Bearings grease suitable for food and beverage industry.
654	Provision for vibration sensors (M8x1)
796	Grease nipples JIS B 1575 PT 1/8 Type A
797	Stainless steel SPM nipples
798	Stainless steel grease nipples
799	Grease nipples flat type DIN 3404, thread M10x1
800	Grease nipples JIS B 1575 PT 1/8" pin type
Branch standard designs	
056	Float type leakage detector.
178	Stainless steel / acid proof bolts.
204	Jacking bolts for foot mounted motors.
209	Non-standard voltage or frequency, (special winding).
425	Corrosion protected stator and rotor core.
056	Float type leakage detector.
178	Stainless steel / acid proof bolts.
204	Jacking bolts for foot mounted motors.
209	Non-standard voltage or frequency, (special winding).
425	Corrosion protected stator and rotor core.

Variant code	Description
Coupling	
035	Assembly of customer supplied coupling-half.
Documentation	
417	Vibration acc. to Grade B (IEC 60034-14).
423	Balanced without key.
424	Full-key balancing
Drain holes	
065	Plugged existing drain holes.
448	Draining holes with metal plugs.
Heating elements	
450	Heating element, 100-120 V
451	Heating element, 200 - 240 V
Insulation system	
014	Winding insulation class H.
405	Special winding insulation for frequency converter supply.
406	Winding insulation for supply > 690 <= 1000 volts
Marine	
024	Fulfilling Bureau Veritas (BV) requirements, with certificate.
025	Fulfilling Det Norske Veritas (DNV) requirements, with certificate.
026	Fulfilling Lloyds Register of Shipping (LR) requirements, with certificate.
027	Fulfilling American Bureau of Shipping (ABS) requirements, with certificate.
024	Fulfilling Bureau Veritas (BV) requirements, with certificate.
025	Fulfilling Det Norske Veritas (DNV) requirements, with certificate.
026	Fulfilling Lloyds Register of Shipping (LR) requirements, with certificate.
027	Fulfilling American Bureau of Shipping (ABS) requirements, with certificate.
049	Fulfilling Germanischer Lloyd (GL) requirements, with certificate.
050	Fulfilling Registro Italiano Navale (RINA) requirements, with certificate.
051	Fulfilling Russian Maritime Register of Shipping (RS) requirements, with certificate.
096	Fulfilling Lloyds Register of Shipping (LR) requirements, without certificate (non-essential duty only)
186	Fulfilling Det Norske Veritas (DNV) requirements, without certificate
481	Fulfilling Nippon Kaiji Kyokai (NK) requirements, with certificate.
483	Fulfilling China Classification Societies (CCS) requirements (Beijing), with certificate.
484	Fulfilling Korea Register of Shipping (KR) requirements, with certificate.
491	Fulfilling Nippon Kaiji Kyokai (NK) requirements, without certificate.
492	Fulfilling Registro Italiano Navale (RINA) requirements, without certificate.
493	Fulfilling China Classification Societies (CCS) requirements (Beijing), without certificate.
494	Fulfilling Korea Register of Shipping (KR) requirements, without certificate.
496	Fulfilling Bureau Veritas (BV) requirements, without certificate(non-essential duty only)
675	Fulfilling American Bureau of Shipping (ABS) requirements, without certificate (non-essential duty only)
676	Fulfilling Germanischer Lloyd (GL) requirements, without certificate (non-essential duty only)
Mounting arrangements	
009	IM 2001 foot/flange mounted, IEC flange, from IM 1001 (B35 from B3).
066	Modified for specified mounting position differing from IM B3 (1001), IM B5 (3001), B14 (3601), IM B35 (2001), IM B34 (2101)
305	Additional lifting lugs.
Painting	
105	Paint thickness report.
114	Special paint color, standard grade
115	Painting system C4M acc. to ISO 12944-2: 2007.
754	Painting system C5M acc. to ISO 12944-2:1998
Protection	
158	Degree of protection IP65.
403	Degree of protection IP56.
434	Degree of protection IP56, open deck.
783	Labyrinth sealing at D-end.

Variant code	Description
Rating & instruction plates	
002	Restamping voltage, frequency and output, continuous duty.
004	Additional text on std rating plate (max 12 digits on free text line).
095	Restamping output (maintained voltage, frequency), intermittent duty.
126	Tag plate
135	Mounting of additional identification plate, stainless.
139	Additional identification plate delivered loose.
159	Additional plate with text "Made in ...."
160	Additional rating plate affixed.
161	Additional rating plate delivered loose.
163	Frequency converter rating plate. Rating data according to quotation.
528	Rating plate sticker
Shaft & rotor	
069	Two shaft extensions according to catalog drawings.
070	Special shaft extension at D-End, standard shaft material
155	Cylindrical shaft extension, D-end, without key-way.
410	Shaft material stainless steel
591	Special shaft extension according to customer specification.
600	Special shaft extension at N-end, standard shaft material.
630	Shaft material certificate 3.1/3.2 according to EN10204:2004
Standards and Regulations	
208	Fulfilling Underwriters Laboratories (UL), listed requirements
Stator winding temperature sensors	
121	Bimetal detectors, break type (NCC), (3 in series), 130 ºC, in stator winding
122	Bimetal detectors, break type (NCC), (3 in series), 150 ºC, in stator winding
123	Bimetal detectors, break type (NCC), (3 in series), 170 ºC, in stator winding
124	Bimetal detectors, break type (NCC), (3 in series), 140 ºC, in stator winding
125	Bimetal detectors, break type (NCC), (2x3 in series), 150 ºC, in stator winding
127	Bimetal detectors, break type (NCC), (3 in series, 130 ºC & 3 in series, 150 ºC), in stator winding
435	PTC - thermistors (3 in series), 130 ºC, in stator winding
437	PTC - thermistors (3 in series), 170 ºC, in stator winding
439	PTC - thermistors (2x3 in series), 150 ºC, in stator winding
441	PTC - thermistors (3 in series, 130 ºC & 3 in series, 150 ºC), in stator winding
442	PTC - thermistors (3 in series, 150 ºC & 3 in series, 170 ºC), in stator winding
445	PT100 2-wire in stator winding, 1 per phase
446	PT100 2-wire in stator winding, 2 per phase
502	PT100 3-wire in stator winding, 1 per phase
503	PT100 3-wire in stator winding, 2 per phase
511	PTC thermistors (2 x 3 in series), 130 ºC, in stator winding
515	PT100 3-wire in stator winding, 3 per phase
Terminal box	
158	Degree of protection IP65.
403	Degree of protection IP56.
434	Degree of protection IP56, open deck.
783	Labyrinth sealing at D-end.
Testing	
145	Type test report from a catalogue motor, 400V 50Hz.
146	Type test with report for one motor from specific delivery batch.
148	Routine test report.
150	Customer witnessed testing. Specify test procedure with other codes.
222	Torque/speed test, type test and multi-point load test with report for one motor from specific delivery batch.
560	Shaft voltage test, for one motor from specific delivery batch.
561	Overspeed test,for one motor from specific delivery batch
760	Vibration level test
761	Vibration spectrum test for one motor from specific delivery batch.
762	Noise level test for one motor from specific delivery batch.
763	Noise spectrum test for one motor from specific delivery batch.
764	Test for one motor from specific delivery batch with ABB frequency converter available at ABB test field. ABB standard test procedure.

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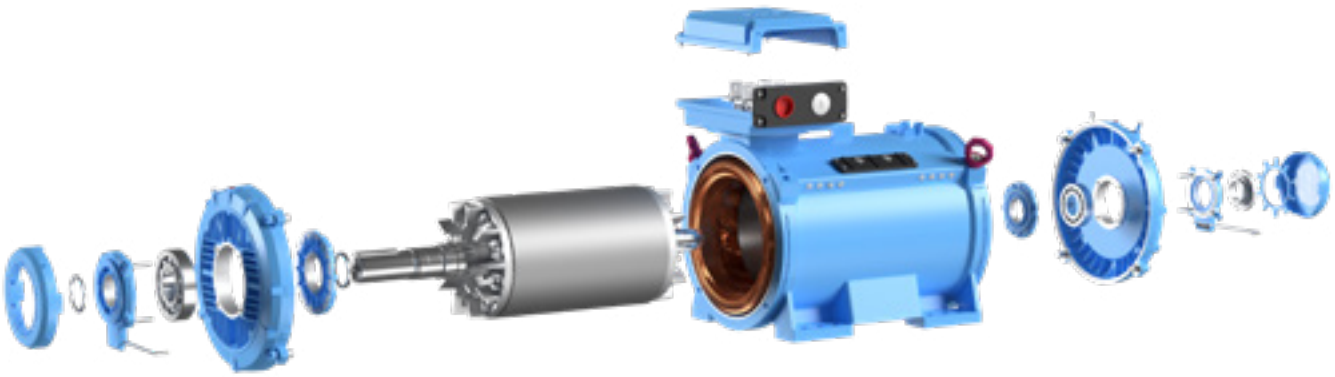
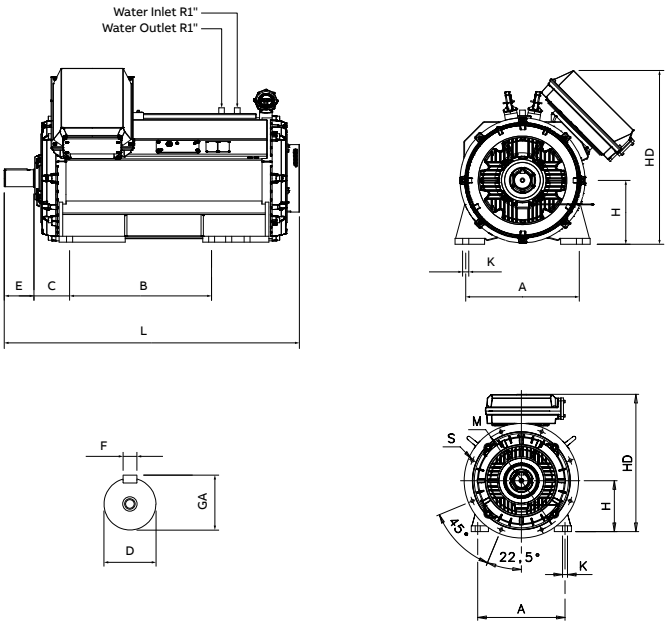
Variant code	Description
Variable speed drives	
182	Mounting of non-listed pulse tacho.
470	Prepared for hollow shaft pulse tacho (L&L equivalent).
472	1024 pulse tacho (L&L 861007455-1024).
473	2048 pulse tacho (L&L 861007455-2048).
479	Mounting of other type of pulse tacho with shaft extension, tacho not included.
658	Special tacho mounted, price category 1
659	Special tacho mounted, price category 2
660	Special tacho mounted, price category 3
701	Insulated bearing at N-end.
704	EMC cable entry.

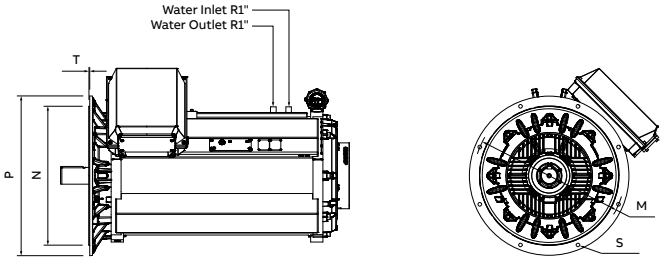


Dimension drawings

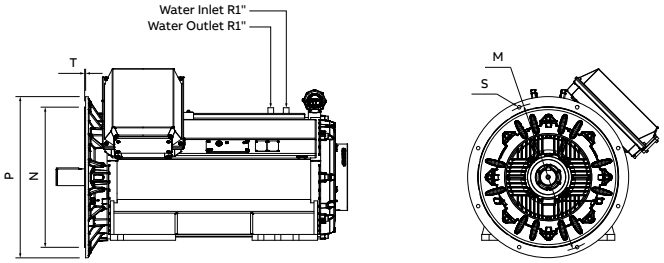
Foot- and flange-mounted motors, IM B3



Foot- and flange-mounted motors, IM B5



Foot- and flange-mounted motors, IM B35



Motor size	Poles	M B3 (IM 1001, IM 1002)											IM V1 (IM 3011)				
		D	GA	F	E	L	A	B	C	HD	K	H	M	N	P	S	T
280	2	65	69	18	140	1034	457	368	190	785	24	280	500	450	550	18	5
280	4-8	75	79,5	20	140	1034	457	368	190	785	24	280	500	450	550	18	5
315 ML	2	60	69	20	140	1145	508	457	216	873	28	315	600	550	660	23	6
315 ML	4-8	75	95	25	170	1156	508	457	216	873	28	315	600	550	660	23	6
315 KH	2	60	74,5	20	140	1305	508	560	216	873	28	315	600	550	660	23	6
315 KH	4-8	75	95	25	170	1336	508	560	216	873	28	315	600	550	660	23	6
355 ML	2	70	74,5	20	140	1348	610	560	254	958	35	355	740	680	800	23	6
355 ML	4-8	100	106	28	210	1418	610	560	254	958	35	355	740	680	800	23	6
355 LK	2	70	74,5	20	140	1578	610	710	254	958	35	355	740	680	800	23	6
355 LK	4-8	100	106	28	210	1648	610	710	254	958	35	355	740	680	800	23	6
400	4-8	110	116	28	210	1865	710	900	224	1138	35	400	940	880	1000	28	6
450	4-8	120	127	32	210	2077	800	1000	250	1224	42	450	1080	1000	1150	28	6
500	4-8	140	148	36	250	2241	900	1250	280	1312	42	500	1180	1120	1250	28	6

Motor size	Poles	IM B35 (IM 2001)				
		M	N	P	S	T
280	2	500	450	550	18	5
280	4-8	500	450	550	18	5
315 ML	2	600	550	660	23	6
315 ML	4-8	600	550	660	23	6
315 KH	2	600	550	660	23	6
315 KH	4-8	600	550	660	23	6
355 ML	2	740	680	800	23	6
355 ML	4-8	740	680	800	23	6
355 LK	2	740	680	800	23	6
355 LK	4-8	740	680	800	23	6
400	4-8	940	880	1000	28	6
450	4-8	1080	1000	1150	28	6
500	4-8	1180	1120	1250	28	6

Motors in brief

Water-cooled motors

Motor size			280	315	355	400	450	500
Stator	Material		Casted aluminum		Steel plate			
	Paint color shade		Blue, Munsell 8B 4.5/3.25 / NCS 4822 B05G / RAL 5014					
	Paint thickness		C3					
Bearing end shields	Material		Cast iron EN-GJL200/GG20/GRS 200, EN-GLJ-250/GG25/GRS 250, EN-GJS-400/GG40/GRP 40					
	Paint color shade		Blue, Munsell 8B 4.5/3.25 / NCS 4822 B05G / RAL 5014					
	Paint thickness		C3					
Bearings	D-end	2-pole	6316/C3	6316/C3	NA	NA	NA	NA
		4-8 poles	6316/C3	6319/C3	6322/C3	6324/C3	6326M/C3	6330M/C3
	N-end	2-pole	6316/C3	6316/C3	NA	NA	NA	NA
		4-8 poles	6316/C3	6319/C3?	6316/C3	6319/C3	6322/C3	6326M/C3
Axially locked bearings	Inner bearing cover		As standard, locked at D-end					
Bearing seals			V-ring or labyrinth seal as standard					
Lubrication			Regreasable bearings, regreasing nipples, M10x1					
Measuring nipples			As standard					
Rating plate	Material		Stainless steel, EN 10088, thickness 0.5 mm					
Terminal box	Frame		Cast iron EN-GJL-250/GG 25/GRS 250					
	Cover		Cast iron EN-GJL-250/GG 25/GRS 250				Steel	
	Cover screws		Steel 8.8, zinc electroplated					
Connections	Cable entries		Transport flange		Transport flange		Cast iron non-drilled flange	
	Terminals		6 terminals for connection with cable lugs (not included)					
	Cable glands		Cable glands as option					
Stator winding	Material		Copper					
	Insulation		Class F					
	Winding protection		3 PTC thermistors as standard, 155°C					
Rotor winding	Material		Pressure die-cast aluminum					
Balancing method			Half-key balancing					
Keyway			Open keyway					
Heating elements	On request		65 W	2 x 65 W	2 x 65 W	2 x 65 W	2 x 100 W	2 x 100 W
Drain holes			Standard, open on delivery					
Enclosure			IP 55, higher protection on request					
Cooling method			IC 71W					

Total product offering

Motors and generators with a complete portfolio of services

IEC motors
- Low voltage motors
- High voltage induction and synchronous motors
- Marine motors
- Motors for explosive atmospheres
- Motors for food and beverage
- Motors for variable speed drives
- Permanent magnet motors
- Synchronous reluctance motors
- Traction motors

NEMA motors
- Low voltage motors
- High voltage induction and synchronous motors
- Marine motors
- Motors for explosive atmospheres
- Motors for variable speed drives
- Permanent magnet motors
- Servomotors
- Washdown motors

Generators
- Generators for wind turbines
- Generators for diesel and gas engine power plants
- Generators for steam and gas turbine power plants
- Generators for marine applications
- Generators for industrial applications
- Generators for traction applications
- Synchronous condensers for reactive power compensation

ABB’s portfolio of drives

Optimal solution for you

Being able to rely on the continuous high performance and efficiency of your operations is something you want to take for granted. ABB variable-frequency drives are made with all this in mind, established upon more than 40 years of experience and backed by a broad range of life cycle services.

ABB drives help you to optimize your processes and systems with state-of-the-art motor control technology, resulting in increased energy efficiency, better product quality, and reduced operating costs with higher output, less downtime, and reduced need for maintenance. All ABB drives are designed for easy selection, ordering, installation and use, and they offer integrated safety features, giving you more time to focus on what matters for you and your business.

Our portfolio offers low-voltage AC and DC drives, medium-voltage AC drives, and motion control drives spanning the fractional-kilowatt to multi-megawatt power level. There is a drive available for essentially every industry and application, which can be used with all types of motors, in environments ranging from clean electrical rooms in buildings, to harsh coal mines and windy offshore platforms. This wide product range allows you to select the best-fitting drive solution, providing maximum reliability and efficiency for every need.

Easy selection

With ABB’s digital tools, you can easily select the perfect motor that meets your specific needs and requirements

Make the motor selection process seamless and efficient by utilizing ABB’s cutting-edge digital tools.

Drive and Motor Selector
Instead of flipping through paper catalogs or databases of datasheets, find the drive, softstarter or motor you need based on a series of simple questions.

Link to selector

Optimizer
An online tool that helps you to find the optimal electrical motor for any MEPS worldwide. It also help you to compute the cost of ownership of different motors and get fast access to marketing documents and drawings, test reports and data sheets.

Link to Optimizer

DriveSize
DriveSize helps to select an optimal motor, drive and transformer. DriveSize can also be used to compute network harmonics and to create dimensioning documents. It contains current versions of our motors and drives catalogs.

Link to DriveSize

MotSize
MotSize is a PC program to help select an optimal low voltage Direct On Line (DOL) motor. In MotSize the user can define several selection options like IE class, MEPS etc. to find a suitable catalogue motor. MotSize supports several types of data sheets, graphical printouts and documentation. MotSize motor databases are frequently updated to always offer the latest available motors.

Link to Motsize

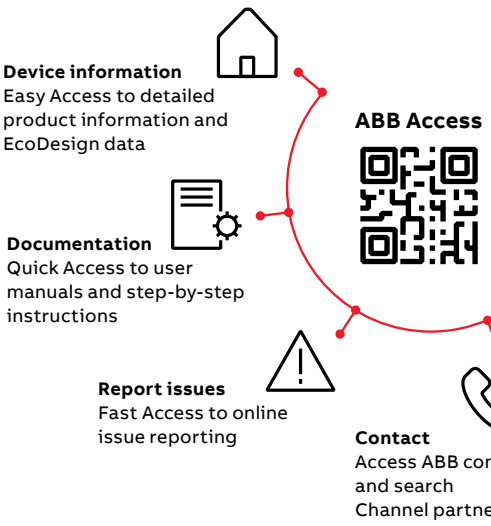
ABB Access

Scan the QR code to access 24/7 self-services for ABB drives, motors and PLCs

With ABB Access, you can unlock all aspects of your drives, motors or PLCs, from one central location: the palm of your hand.

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.



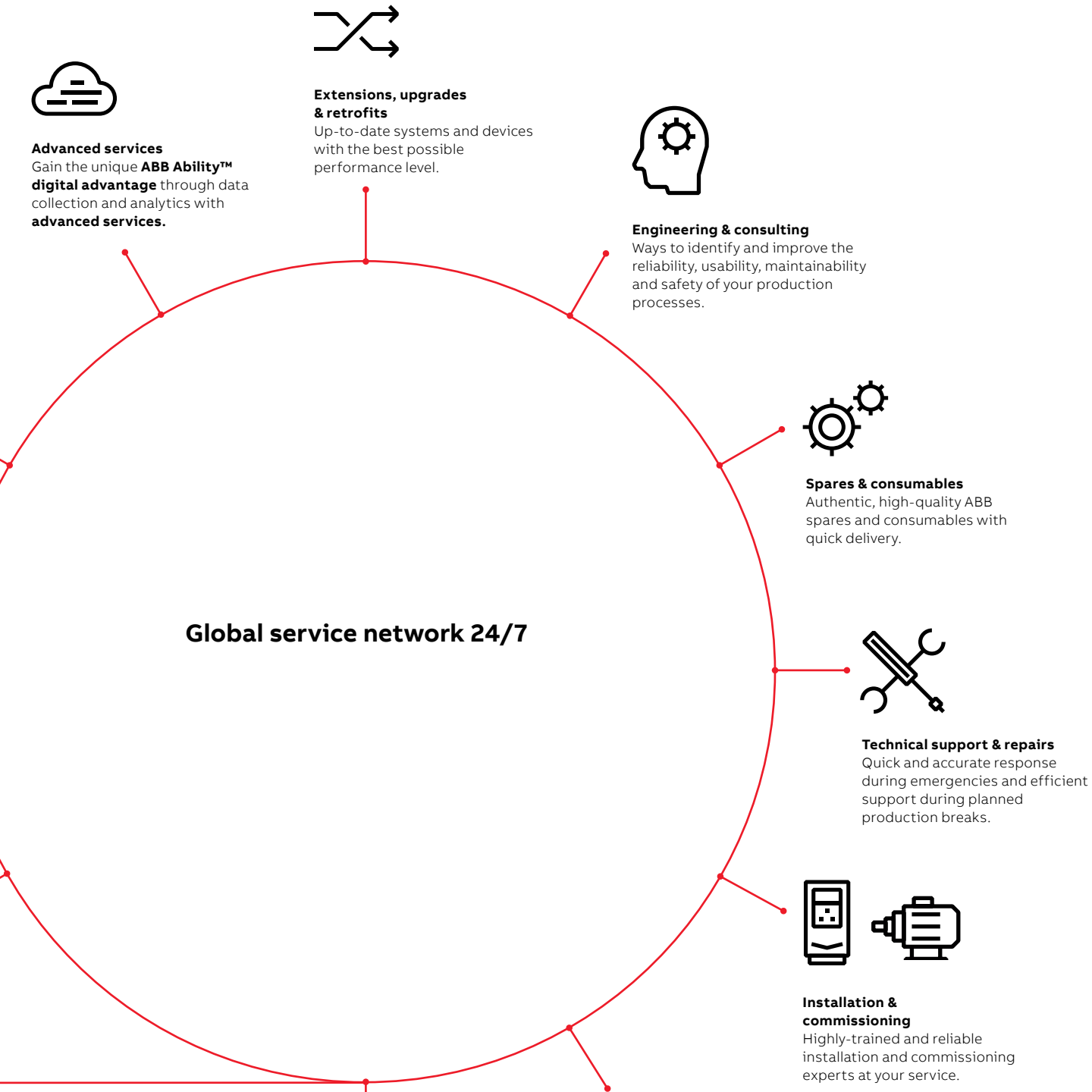
Keep your processes running

From spare parts and technical support to cloud-based remote monitoring solutions, ABB offers the most extensive service offering to fit your needs. The global ABB service units complemented by external authorized value providers form a service network on your doorstep. Maximize performance, uptime and efficiency throughout the life cycle of your assets.

Replacements
Fast and efficient replacement services to minimize production downtime.

End-of-life services
Responsible dismantling, recycling and reusing of products, according to local laws and industrial standards.

Maintenance
Systematic and organized maintenance and support over the life cycle of your assets.



Advanced services
Gain the unique **ABB Ability™ digital advantage** through data collection and analytics with **advanced services.**

Extensions, upgrades & retrofits
Up-to-date systems and devices with the best possible performance level.

Engineering & consulting
Ways to identify and improve the reliability, usability, maintainability and safety of your production processes.

Spares & consumables
Authentic, high-quality ABB spares and consumables with quick delivery.

Technical support & repairs
Quick and accurate response during emergencies and efficient support during planned production breaks.

Installation & commissioning
Highly-trained and reliable installation and commissioning experts at your service.

Training
Comprehensive and professional training either at ABB premises or your own.

Agreements
Comprehensive bundling of relevant services into one contract to suit your needs.

ABB Ability™ Digital Powertrain

Intelligent powertrain

The powertrain is equipped with sensors and cloud connectivity and can comprise motors, drives, mechanical components including bearings, couplings and gearboxes – and also pumps. You can choose yourself what assets you want to monitor.

Turning data into valuable information

Data gathered from drives' inbuilt sensors and loggers together with that collected from ABB Ability™ Smart Sensors fitted to motors, bearings and pumps, can be aggregated, stored and further accessed via the cloud. The ability to gather and analyze this data can reveal information on the status and condition of your equipment, so that you can schedule service activities more effectively.

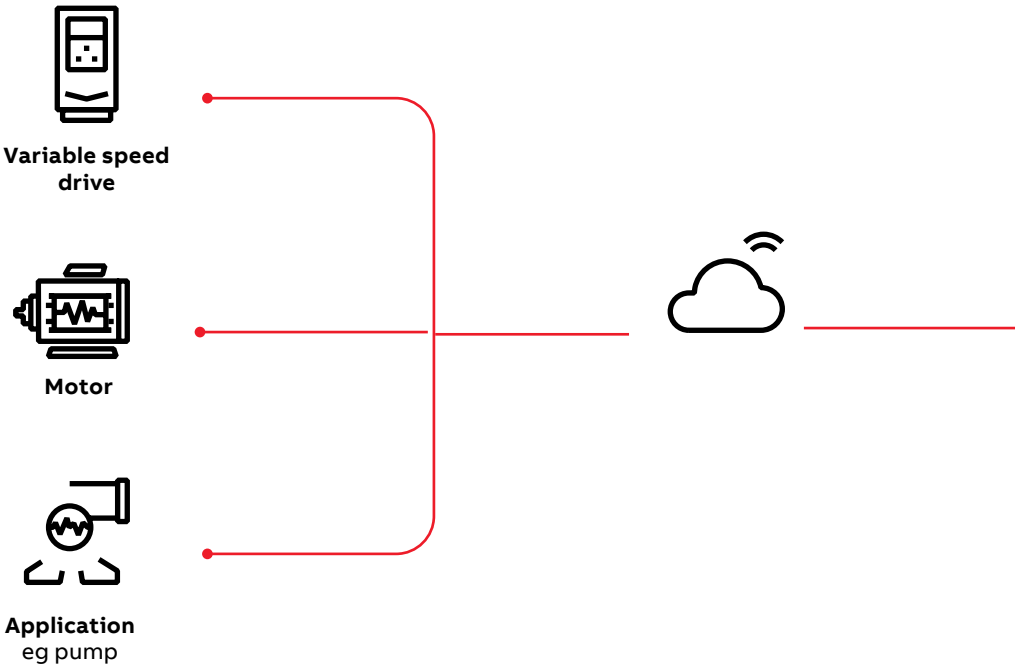


ABB Ability™ Condition Monitoring service for powertrains optimizes the performance and efficiency of rotating equipment. It enables full transparency on key parameters for drives, motors, mounted bearings and pumps, and can also be used in applications such as compressors, conveyors, mixers and extruder main shafts.

Accessing data for analytics

You have access to a monitoring portal to view key operational parameters of individual assets as one unified system. Detailed dashboards give full transparency so that you can take actions that lead to less downtime, extended equipment lifetime, lower costs, safer operations and increased profitability.

Gain a digital advantage

Ensuring that the right person has the right information to at the right time brings:

- Appropriate response to production challenges, minimizing operating costs and wastage of products
- Greater insight into various aspects of your process, thereby improving quality and reducing variations, errors and waste
- Lower risk of production downtime and change of the maintenance from reactive to predictive

For more information and contact details:

new.abb.com/motors-generators/iec-low-voltage-motors

9AKK104379 EN 07-2023