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ABB MOTION SERVICES

# ABB motors and generators life-cycle services

Maximize performance, uptime and efficiency

ufacturer · https://abb.bonnew.com · E-mail: sales@sogears.com

**ABB Motion Services helps you** maximize uptime, extend product lifetime, enhance performance and boost energy efficiency of your motors, generators and drives. **Our tailored services and digital** solutions keep your operations running profitably, safely and reliably.

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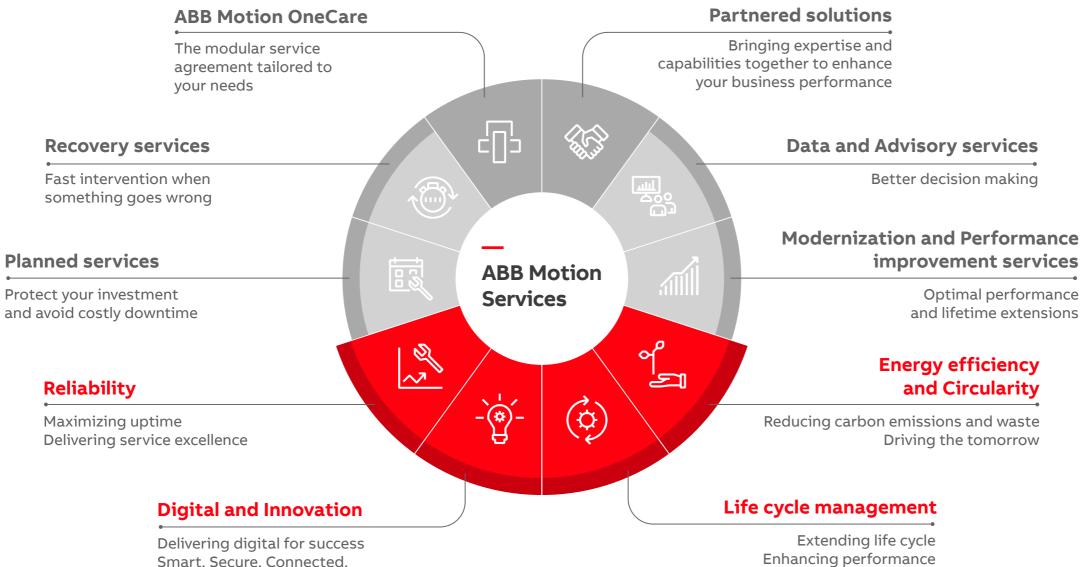
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# Services to match your needs

We can make the difference for you every day by keeping your operations running profitably, safely, and reliably.

Based on 140 years of experience in manufacturing and servicing motors and generators, we provide support to maximize performance, uptime and efficiency over the lifetime of your assets.

Whatever your applications' needs, we offer a full range of services to keep your equipment running at top performance.



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# **OUR EXPERTISE** YOUR ADVANTAGE

ABB Motion OneCare, our fully tailored service agreement ensures the highest availability and reliability of your assets while increasing the predictability of your maintenance budget. Our experts will collaborate with you to design the ideal agreement.

An ABB Motion OneCare agreement is tailored specifically to your business needs and budget.

ABB partners with you to help you plan, coordinate and execute your equipment maintenance according to its criticality in your facility. We analyze your equipment's condition and recommend services that optimize your application's uptime, all bundled into a single agreement for easy management.

An ABB Motion OneCare agreement can cover a single service, life-cycle support of a motor, generator, drive or digital services. Alternatively, the entire maintenance can be handled by ABB's experts.



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### Key benefits

- Customized agreement for an exact match with your needs and maintenance strategy
- Efficient and cost effective
- Single agreement for easy management

# The modular service agreement tailored to your needs.





# **Planned services** Protect your investment and avoid costly downtime

# Installation and commissioning

Getting it right from the start



With ABB installation and commissioning services, you are making an investment in the long-term trouble-free operation of your equipment. They are the first steps to ensure your motors and generators deliver the best possible performance.

ABB's installation and commissioning services are carried out by certified engineers. Their know-how and experience, backed by the expertise of our design team, makes installation and commissioning fast and smooth, laying the foundations for high reliability and safety.



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### Key benefits

- Optimized cost of ownership
- Increased reliability and safety
- · Experienced and qualified personnel
- · Serviced in accordance with local and international standards

## **Preventive maintenance**

Unplanned outages always seem to occur at the worst possible time. Our preventive maintenance program cuts the risk of unscheduled downtime.

> ABB's preventive maintenance program defines maintenance work and required spare parts for different stages. It ensures the best possible availability and performance of the equipment.

Preventive maintenance keeps costs down and lifetime performance optimal. It is an investment in the avoidance of failures - the program can eliminate disruptions to your production and help you secure your long-term competitiveness.

#### Maintenance kits

ABB maintenance kits help to cut maintenance times. The kits contain the components that are changed during specific maintenance procedures. They contain genuine spare parts and typically represent the most economical way of buying the required parts.









### Key benefits

- Maintenance is planned around production and plant schedules
- Minimized unplanned downtime
- Reduced or eliminated loss of production
- Lower overall cost of maintenance
- Warranty protection

Preventive maintenance allows you to plan maintenance around production and plant schedules, thus minimizing unplanned downtime.





ABB MOTORS AND GENERATORS LIFE-CYCLE SERVICES

### Spare parts and capital spares

Easy access to spare parts helps you to maintain equipment availability. ABB's logistics network makes sure you get the right part in the right place at the right time.

We supply genuine spare parts, spare part packages and maintenance kits for all ABB motors and generators.

Where technology has advanced, we may be able to supply a part that is even better than the original.

We can also help you to rationalize your on-site spare part stocks.

#### **Capital spares**

Rotors, stators and other capital spares are typically custom manufactured. This means that such components have a significantly longer delivery time than standard spare parts. When unexpected downtime must be kept to a minimum, capital spares provide the basis for maximizing operational availability.

ABB can help you to determine the optimal capital spare for your application.



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### Key benefits

- All necessary parts from a single source
- Access to original parts
- Expert support in identifying parts based on equipment condition and criticality
- Increased availability and minimized downtime
- Online access to detailed parts information: myportal.abb.com

ABB spare part packages	
Operational	For commissioning and initial years of operation
Recommended	Extended version of operational package to cover anticipated spare parts needs over the life of the equipment
Capital	For critical applications where downtime must be minimized

### Training

We provide training to service engineers and maintenance technicians, either in-class or at your site.

Course topics cover product knowledge, operation and maintenance. Our courses ensure your employees are competent in maintenance and first-line troubleshooting, are able to interpret alarms and undertake appropriate actions to avoid failures.

We also offer eLearning courses, which are a costeffective way for your employees to maintain their certification level and keep up-to-date with the latest information and knowledge from ABB.

#### Key benefits

- Practical approach for effective training
- Develop employee motivation and confidence
- Can be tailored to suit customer needs
- Reduced risk of downtime



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Our training courses are designed to give your people the specialized skills they need.



# **Data and Advisory services** Helping you to make better decisions

Our Data and Advisory services help you to detect potential problems and plan maintenance before reliability, productivity and safety are impacted.



The ABB Ability<sup>™</sup> Condition Monitoring for powertrains enables you to remotely monitor the health and performance of powertrains, including motors, generators, drives and applications, such as pumps and fans. It combines connectivity and data analytics with our expertise, helping you to make better decisions for more efficient, predictable and safe operations.

Maintenance can be planned according to actual needs rather than generic schedules. It extends the lifetime of equipment, cuts maintenance costs and reduces or prevents unplanned downtime.



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accurate information about the health and performance of your equipment for better operational decision making and cost management.



### ABB Ability<sup>™</sup> LEAP

ABB Ability<sup>™</sup> LEAP (Life Expectancy Analysis Program) analyzes the condition and expected lifetime of the stator winding insulation - the most uptime critical component in high voltage motors and generators.

It detects potential problems well before they become critical and cause expensive downtime. Having information on the insulation's condition and expected lifetime enables you to plan maintenance in advance.



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### Air gap inspection

The in-situ visual inspection uses a robotic crawler to examine the stator core, rotor core and winding of large motors without the need to remove the rotor.

The super slim robotic crawler moves in the air gap between the rotor and stator. 5 cameras provide rich inspection information about stator/rotor core, winding, wedges, stator teeth, air ducts and rotor support blocks. It can be used in all motors and generators with air gaps of 10 mm and upwards.



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**Recovery services** Fast intervention when something goes

wrong. Minimize costly downtime.

With one of the market's most extensive service networks globally, we have certified service engineers standing by to provide technical support and carry out repairs on-site or in authorized workshops. We offers different repair options to match your needs.



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# Remote troubleshooting and technical support services

Maximize your asset uptime with access to ABB motor and generator experts. These services put you in direct contact with a team of engineers who are experienced in your equipment. With the help of interactive tools, the ABB expert can remotely analyze the situation, determine what actions should be taken and guide the on-site engineer through the troubleshooting process.

#### On-site repairs for the fastest turnaround

Downtime can be expensive. We have trained service engineers ready to help when failures occur. Our global scale means that we can get a team to your site quickly to analyze the problem's root cause, determine the corrective actions and carry out repair work. On-site repairs avoid the need to ship the equipment to a workshop, eliminating transportation risks and saving time. Select the guaranteed on-site response time that suits your needs, and you know that if something goes wrong our team will be there to help.

# Workshops equipped for complex repairs, rebuilds and overhauls

ABB and ABB authorized workshops are staffed with professional service engineers, supported by our design experts and by our global service network.

### Key benefits

- Global network of local service centers
- Problems are quickly identified, analyzed and rectified
- Personnel qualified to repair products from ABB and other vendors
- Direct service actions are carried out to prevent failure and minimize knock-on effects

We bring your equipment back on-line fast.



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# **Modernization and Performance Improvement services** Optimal performance and lifetime extensions

Modernization of existing equipment not only extends its lifetime but also optimizes its performance and enables greater energy efficiency, while reducing waste.



### Performance upgrades

An upgrade helps to boost the asset's overall performance, ensuring continuous operation at the most optimized efficiency. Based on your needs, the motor's/generator's technical characteristics and historical production data, we can re-calculate its limits and optimize key components, such as stator, rotor and cooling unit, to meet the new performance and efficiency requirements.

#### Key benefits

- Increased production capacity
- · Lower energy and maintenance costs
- · Enhanced reliability and availability

#### Refurbishments

Refurbishment restores your motor or generator to its original performance and reliability. Depending on the application, the lifetime can be extended by up to 20 years.

The refurbishment service replaces key components, such as stator or rotor with the latest design, and exchanges all other parts that, over the asset's operational lifetime, may have suffered thermal, electrical, ambient and mechanical stresses.

Refurbishment can be a cost-effective and sustainable alternative to buying a new asset.



If a power upgrade is required, it is worthwhile considering it as part of a refurbishment. ABB can advise you on the feasibility and available options.

#### Key benefits

- Extended lifetime by up to 20 years
- Minimized downtime
- Improved reliability and availability

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## Replacements

When a motor or generator needs replacing, do it the easy way - contact your local ABB representative.

> Should refurbishment not be feasible or prove to be uneconomical, we help you to select the optimal replacement with the correct features and best-in class efficiency for your application.

Whether you select a new product from our wide range of standard items or choose a tailor-made unit, we can optimize it to replace your existing equipment. In most cases, we can adapt the mechanical and electrical designs to make the replacement fully interchangeable with the original to ensure a seamless transition between old and new unit. We also provide replacements for thirdparty products. For the plant operator this helps to minimize the downtime, required site work and risks. An added benefit of a tailor-made, fully interchangeable replacement is that you may be able to keep your existing machine as a spare.

We are here to help you evaluate the potential to increase production, reliability and availability as well as decrease energy and maintenance costs with a replacement product from ABB.



### Key benefits

- Expert support in selecting replacement units
- Choose between standard products and
- tailor-made units
- Option to select based on energy calculations
- Access to latest technology
- Reduced life-cycle costs
- · Increased reliability and availability

# You choose, we respond. Globally.

When you make the decision to choose our expert service solutions, we are with you every step of the way. To guide and facilitate whatever service choices suit your business, for the entire lifetime of your motors, generators and drives.

For decades we have built one of the most comprehensive global service networks. It ensures you have all the experts close at hand, locally and globally. Local ABB service units are complemented by external ABB third party channel companies in over 70 countries.

# Global support available locally



**140** years servicing our customers



Over 1,200 field service engineers



~600 service partners



Regional service centers, training centers and authorized service workshops form a well-structured and large service organization, making sure that our motors, generators and drives service team is never too far from your site.



Services in more than 70 countries



~ 50 service workshops



For more information, please contact your local ABB representative or visit

### new.abb.com/service/motion

