

SERVICE NOTE

# ABB Ability™ Condition Monitoring for HV motors and generators



ABB Ability™ Condition Monitoring for HV motors and generators continuously monitors key parameters in induction motors and synchronous motors and generators. It uses advanced algorithms to analyze the data and provides maintenance recommendations and early warnings. Unplanned downtime can be minimized, maintenance activities optimized and safety improved.

— Users can access real-time information on the status of their motors and generators through a dedicated web portal

ABB Ability™ Condition Monitoring for HV motors and generators enables users to remotely monitor the health of their induction motors and synchronous motors and generators, detect early signs of potential problems and plan maintenance activities to avoid unplanned downtime.

### Continuous monitoring of condition

ABB Ability™ MACHsense-R continuously monitors key operational and health parameters, such as vibration, temperature and magnetic field while the motor/generator is in operation. The data is transferred to a secure cloud-based server where it is stored in an encrypted form.

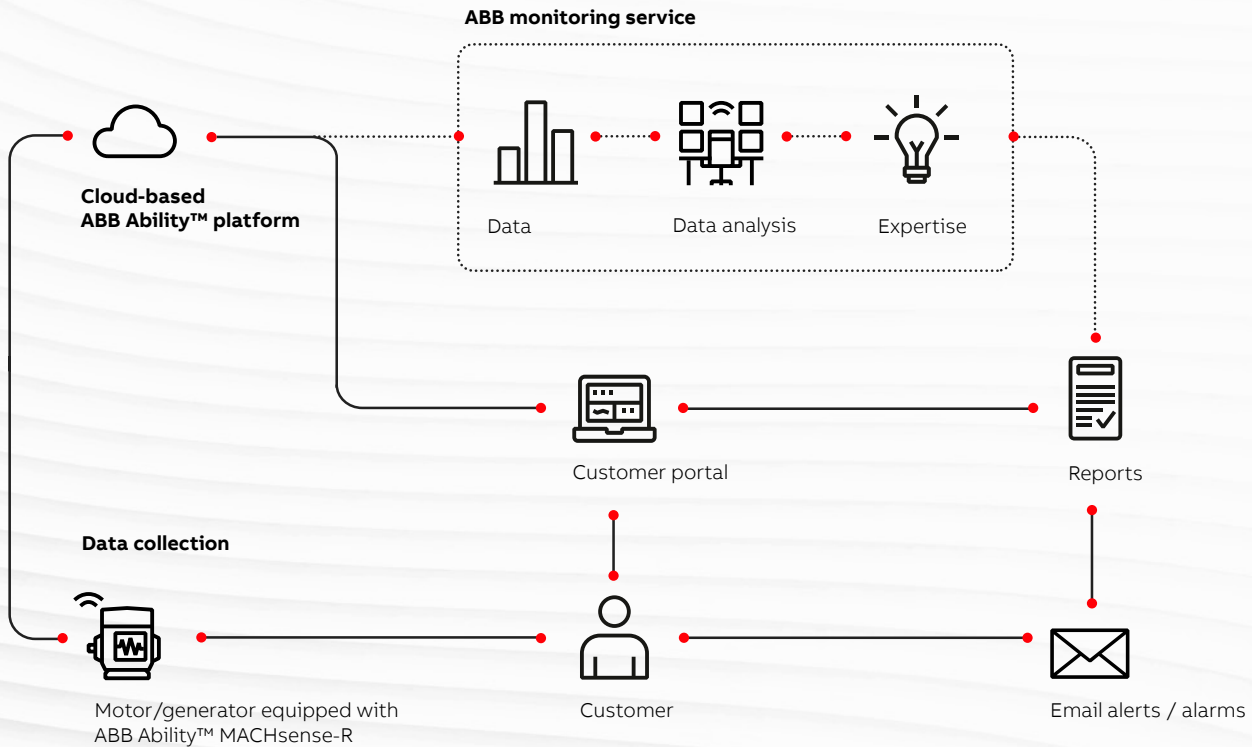
Advanced algorithms, based on ABB's extensive know-how and experience, analyze the data and produce meaningful information on the condition and performance of the motor or generator. Users can easily access the information through a dedicated web portal.

### E-mail alerts for effective maintenance planning

If a parameter value exceeds its preset alarm level, the system sends an e-mail notification and maintenance recommendation to the user. This allows more time for effective maintenance planning and reduces downtime.

### Main benefits

- **Higher uptime** – Maintenance activities can be planned in advance to avoid unplanned downtime
- **Reduced maintenance costs** – Maintenance time and effort can be reduced with early warning system
- **Improved safety** – Enables safe access to motors and generators that are located in dangerous or hard to reach areas
- **Longer equipment lifetime** – Advanced maintenance planning supports longer motor and generator lifetimes



— 01 ABB's condition monitoring solution for HV motors and generators: ABB Ability™ MACHsense-R transmits data to a secure cloud. Algorithms analyze the data and convert it into meaningful information, which is sent to a dedicated web portal.

Based on the ABB Ability™ Condition Monitoring solution for HV motors and generators, ABB offers additional services which allow customers to focus on their core business.

#### Monitoring of motors and generators

Using the ABB Ability™ Condition Monitoring service, users can outsource the remote monitoring of motors and generators to ABB. Should a warning or alarm condition arise, ABB will immediately contact the user to advise of the fault and possible remedies.

#### Expert reports

Furthermore, should a warning or fault be triggered by the motor or generator, ABB offers to analyze the data and provide a detailed report with information on the equipment's condition and recommendations on the required maintenance actions.

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

[new.abb.com/motors-generators/service](http://new.abb.com/motors-generators/service)

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