

SERVICE NOTE

ABB Ability™ LEAP for HV motors and generators

Accurate analysis of the stator winding insulation



ABB Ability™ LEAP (Life Expectancy Analysis Program) is an advanced solution for analyzing the condition and expected lifetime of the stator winding insulation – the most uptime critical component in high voltage motors and generators.

Always one step ahead

ABB Ability™ LEAP detects potential problems in the stator winding insulation well before they become critical and cause extended downtime. Access to information on the actual condition and expected lifetime of the insulation allows optimal planning of short and long term maintenance actions. Customers have the option to access their report using myABB customer portal, a single online entry point for services.

Accurate information from a single site visit

ABB Ability™ LEAP is a set of unique analytical tools – developed by ABB – to identify, characterize and quantify defects in the insulation system. Testing and analysis are performed on a single occasion and can be combined with normal maintenance. This is a big advantage versus conventional methods that require trending data from a whole series of measurements before they can provide useful output.

Extended lifetime

The results are used to predict when the condition of the system will become vulnerable or critical. Based on this, specific operation and service actions can be planned well ahead to avoid premature failure and increase the lifetime of your motors and generators.

Lasting benefits

The ABB Ability™ LEAP analysis allows:

- **Maintenance recommendations to reduce insulation system stress** – Extend lifetime and assure long term operation
- **Data-based repair and upgrade decisions** – Make accurate run/repair/replace choices based on insight into the stator insulation condition
- **Expected remaining lifetime calculations of the stator winding insulation** – Optimize the mitigation strategy and overall cost of ownership (COO)

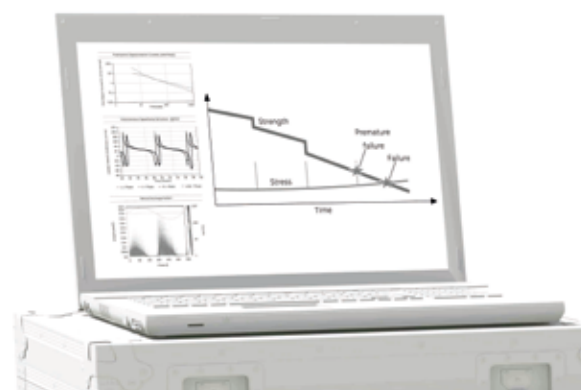
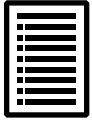


ABB Ability™ LEAP process



Mapping of the installed base

Review your installed base with a local ABB technician and decide which motors and generators to analyze.



On-site measurements

A local ABB technician brings all the equipment needed for the tests and performs the measurements during a normal maintenance break. The data is uploaded to a portal.



Data analysis

An ABB expert analyzes the data using an advanced empirical model that is based on the results of more than 10,000 tests.



ABB expert report

You receive an expert report on the condition and expected lifetime of the motors and generators. The report also includes ABB's short and long term operation and maintenance recommendations.



Making the right decisions

Accurate and up-to-date information on the status of the motors and generators enables you to make informed decisions about the maintenance and management of your equipment.



Planning maintenance activities

Prioritize and optimize the maintenance plan and secure high reliability for your motors and generators.



Optional service activities

Additional service solutions available from ABB provide condition information on other major items of equipment, paving the way for more comprehensive preventive maintenance planning.

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

new.abb.com/motors-generators/service

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