ABB Ability™ Monitoring Service
Monitoring of assets in submersed, hot or toxic environments

ABB Ability™ Monitoring Service helps users of motor-driven applications make better decisions by giving them access to a network of ABB experts who remotely track the performance of their assets, provide regular reports, trigger early warnings, and highlight areas for improvement.

ABB extends its monitoring service to assets equipped with SAM4 Health from Samotics which uses electrical signature analysis (ESA) to provide powerful insight on critical production systems in extreme environments.

Monitor your machines, wherever they are
From ATEX zones to underwater: SAM4’s sensors install in the motor control cabinet, not on the asset itself, making hazards and location no barrier to reliable round-the-clock data.

Find faults other systems can’t
SAM4 can directly detect beginning electrical failures, long before they leave marks that physically based systems can register.

Extend asset life
SAM4 uses the data it’s already collecting to provide additional insights: real-time and historical power quality and operational metrics such as a real-time pump performance dashboard.

Reap the benefits of service not just sensors
From a detailed value assessment through fault to concrete recommendations, our team of industry data scientists and maintenance experts help derive maximum ongoing value from your data.
Abolish unplanned downtime

SAM4 uses high-frequency sensors installed inside the motor control cabinet to measure all three phases of current and all three phases of voltage.

The gateway performs initial signal processing on the data locally, then encrypts and sends it to the SAM4 platform over 4G, Wi-Fi or Ethernet.

SAM4's self-learning artificial intelligence processes the incoming data 24/7 to detect and classify developing faults as soon as they begin.

Our expert data analysts review SAM4's automatic flags and contact the customer with a detailed analysis and recommendations.