Continuous,
Always Monitoring.

KCF technologies

Motor Current Signature Analysis is Here.

The addition of Motor Current Signature Analysis (MCSA) to KCF's comprehensive machine health platform combines MCSA's robust motor-electrical diagnostic capabilities with the high-fidelity continuous monitoring, ease of installation, and focus on root cause eradication that are central to KCF's solutions. Pairing this technology with vibration monitoring results in a comprehensive asset health solution crafted for your most critical electric motors.

For more information on KCF's comprehensive machine health platform visit: www.kcftech.com

DATA USES

- **Power Consumption**
- **Power Factory Duty Cycle**
  (+ total operating hours)
- **Motor Efficiency**

Our MCSA Solution Unlocks:

24/7 Monitoring: Provides continuous online monitoring with 24/7 access to critical data. Effectively covering all blind spots that exist between readings in periodic route-based monitoring.

Triggering: Allows motor behavior during start up to be trended over time, enabling early detection of damaging conditions and motor issues.

Improved Safety: Route-based analysts or maintenance staff members no longer need to enter dangerous environments to take readings.

Root Cause Analysis: The inclusion of potential transformers facilitates power supply monitoring. This enables the identification of chronic power supply issues, eliminating the cause of motor faults and suboptimal performance.

When should you use MCSA?

Costs of Downtime Are High:
When failure costs a significant sum due to lost production.

Failure Prevention is Essential:
When motor replacement cost is significant, or failure results in collateral damage such as product needing to be discarded, or adjacent equipment being damaged.

Regulatory & Fines Risk Reduction:
When catastrophic failure results in fines levied against the customer.

Our MCSA Hardware

- **Current Transformers (CTs)**
  Detects motor faults.

- **Current Triggering**
  Enables synchronized sampling on motor startup, enabling the identification of hard to catch phenomena including inrush current.

- ***Tachometer** *Optional Hardware*
  Provides precise reading of motor (rotor) turning speed—important for MCSA Analytics Model.

- ***Potential Transformers (PTs)**
  Enables electrical current signature analysis (ESA). Identifies power supply issues and enables root cause analysis.

*KCF's MCSA solutions are possible with an **IoT HUB** and **Analog Adapter**. For more information, please reach out to the KCF Technologies Team!*