

EMS MCM

Motor
Condition
Monitoring

 | MAINTENANCE

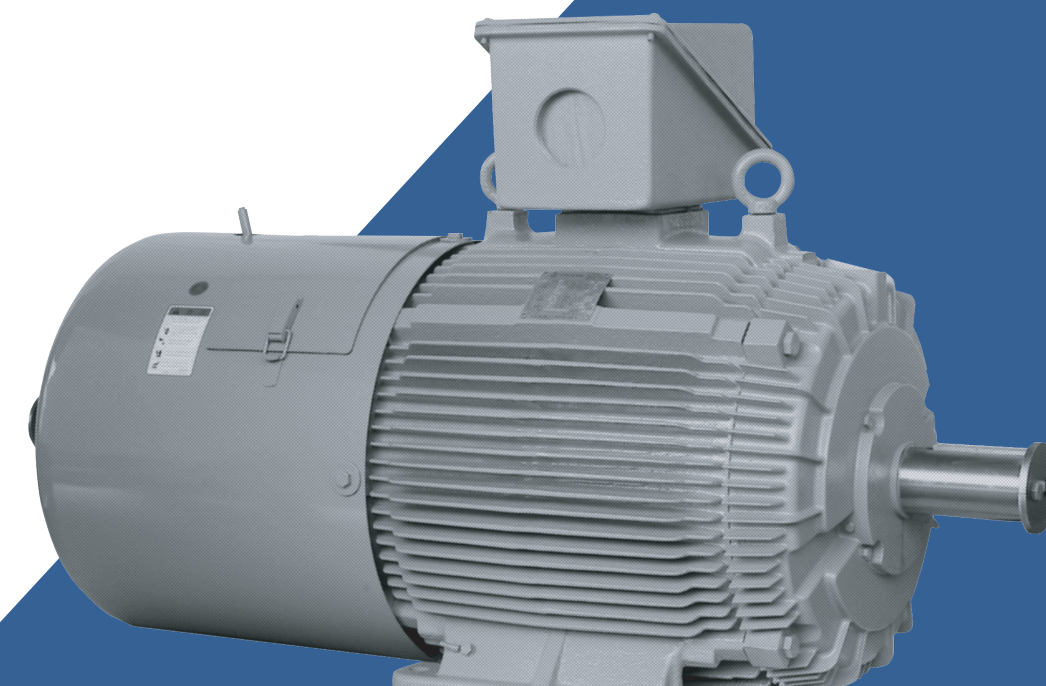
 | ENERGY

 | AUTOMATION

 | SECURITY

 | INDUSTRIAL
COMMUNICATIONS

 | CONSULTING



DATA REPORT

- Qualitative information (in good condition, fault inspires care, imminent shutdown), complemented with colored traffic lights:
 - Quantitative information (fault severity factors in percentage)
 - Recommendation (immediate inspection, inspection check within specific number of months, etc.)
 - Trend analysis of severity factors
- Generation of alarms to the customer
- Visualization software of the motor status
- Optional Information:
 - Power (active and reactive)
 - Power factor and harmonic distortion
 - Voltage and current imbalances and motor overload
 - Motor speed

MAIN FAULTS DETECTED

- Stator faults (inter-turn short-circuits and core faults)
- Rotor faults (broken bars)
- Airgap eccentricity
- Bearings faults
- Motor and mechanical load misalignment
- Mechanical load problems
- Supply system problems (includes problems in variable speed drives)

APPLICATIONS

- Low and medium voltage three-phase motors (induction, synchronous or permanent magnet motors)
- Pumps
- Compressors
- Ventilation motors
- Generators
- Conveyors
- Power electronics and adjustable speed drives

ELECTRICAL MOTORS AND POWER ELECTRONICS ASSOCIATED MONITORING



UNPLANNED STOPPAGES REDUCTION



BEST MAINTENANCE MANAGEMENT



COST REDUCTION



NO NEED SPECIALIZED TECHNICIANS

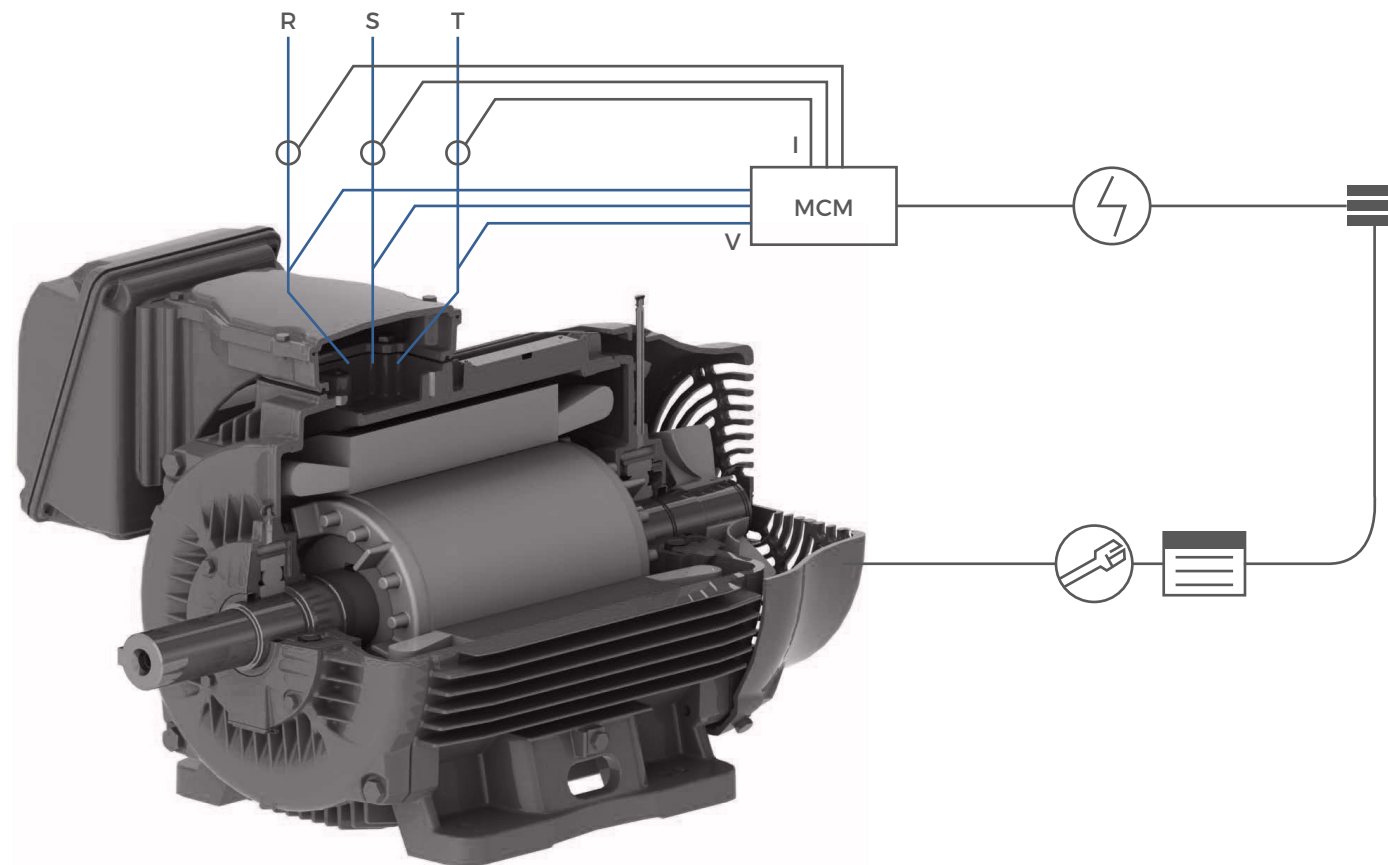


NON INVASIVE



ADVANTAGES

- Non-invasive
- Reduction in unexpected motor failures
- Increase of motor availability
- Early detection of motor faults, before they become catastrophic
- Reduction of motor repair costs
- Detection of manufacturing defects, improper installation and improper maintenance of new or recently repaired motors
- Better planning of maintenance activities
- High-sensitivity diagnostic approaches
- Reliability guaranteed by thousands of motors diagnosed so far
- No need for highly skilled operators



HOW DOES IT WORK?

Fault diagnosis methods of electric motors and variable speed drives based only on electrical variables are considered a powerful tool for predictive maintenance, to detect faults at a very early stage of development.

From any computer at his industrial plant or even at his home, our client knows the operating condition of his electric motors. In case a fault or any anomalous condition is detected, he will be notified, being able to take prompt action to deal with the situation.

The EMS MCM system measures the three-phase electric currents and voltages that supply the motor and sends the raw data to a central server. The fault diagnosis algorithms running on it analyze and process that information and issue a report about the operating condition of the motor or drive system.