

EUR24_04 - Data-Driven Insights for Induction Motor Thermal Condition Monitoring

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Abstract:

Effective condition monitoring of electric motors plays a pivotal role in ensuring the reliability and performance of various industrial processes.

This paper presents a comprehensive methodology for real-time monitoring of internal thermal and loading behavior within electric induction motors, employing pattern recognition & matching techniques. The approach outlined leverages data-driven insights to assess the health and performance of electric motors in a proactive manner.

The paper defines an approach utilizing conventional sensors, relay data, and advanced pattern recognition & matching algorithms for predictive maintenance, minimizing downtime and optimizing operational efficiency.