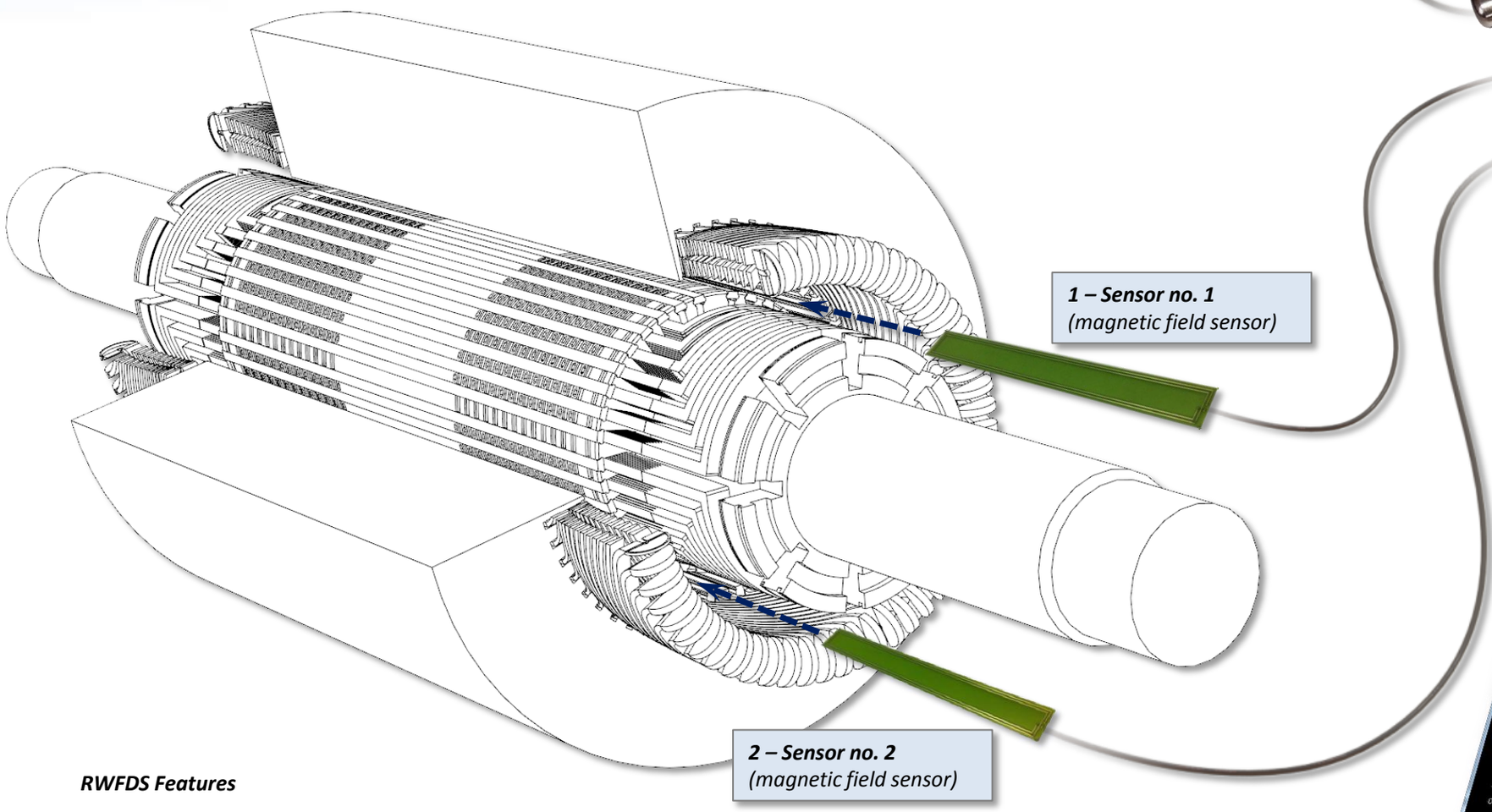
KONČAR
Electrical Engineering
INSTITUTE

Rotor Winding Fault Detection Sensor

KONČAR RWFDS

RWFDS *ROTOR WINDING FAULT DETECTION SENSOR*

RWFDS represents a new concept in rotor winding fault detection. This smart sensor enables detection of inter coil short circuits in rotor excitation winding based on the differential magnetic field measurement method (DMFM) inside the machine air gap. The DMFM method eliminates the contribution of the magnetic field present in the symmetric machine from the measuring signal and in that way the output signal depends only on the magnetic field produced by the fault. By using two magnetic field sensors embedded on the stator, inside the machine air gap, RWFDS enables rotor winding inter coil short detection with much higher price/performance ratio than other similar systems.



RWFDS Features

- ***On-line analysis***
- ***Digital output (alarm)***
- ***Waveform extraction for detailed analysis***
- ***HMI***

RWFDS specification

Architecture:

- *One channel acquisition unit with real time controller (multiple channels on request)*

Inputs and outputs:

- *Voltage input (for magnetic field sensors)*
- *Digital output (for alarm and warning)*

Communication:

- *RS – 232, wireless (on request)*

Data indicators:

- *LED indicator for power supply and digital outputs*

Data logging:

- *Flash memory*

Power supply:

- *24 ± 10 % VDC, (50 mA)*

Temperature range:

- *Operational temperature range: -25°C to +85°C*

Standard compliance:

- *EMC immunity/emission (EN 61000-6-4)*
- *Vibration/shock resistance (EN 60068 - 2 - 6/EN 60068 - 2 - 27/29)*

Installation:

- *On machine housing*

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SYSTEM CERTIFIED

BS OHSAS 18001:2007	No.00242/0
ISO 14001:2004	No.00261/0
ISO 9001:2008	No.01095/0

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