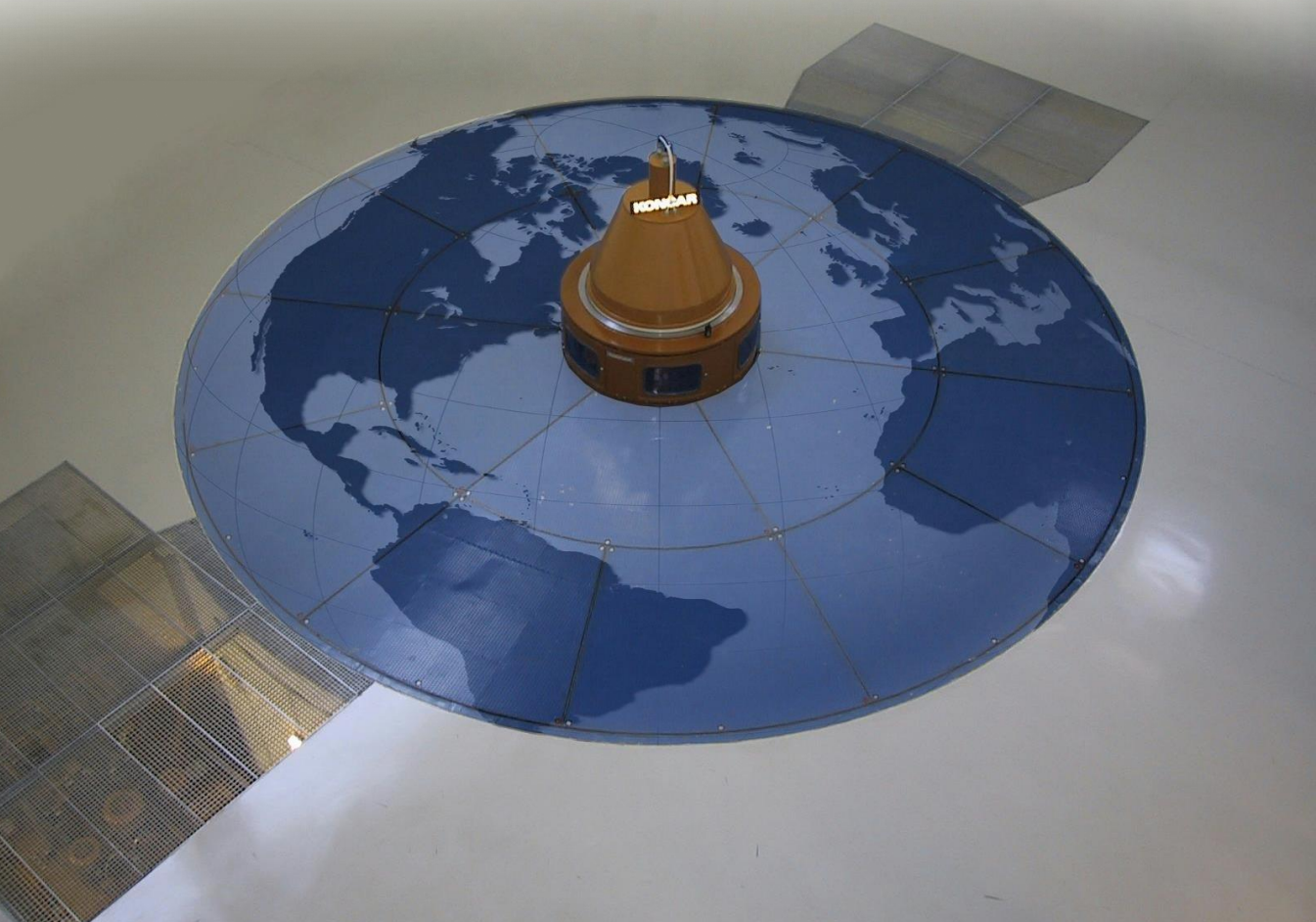
KONČAR
Electrical Engineering
INSTITUTE

Shaft Current and Voltage Protection

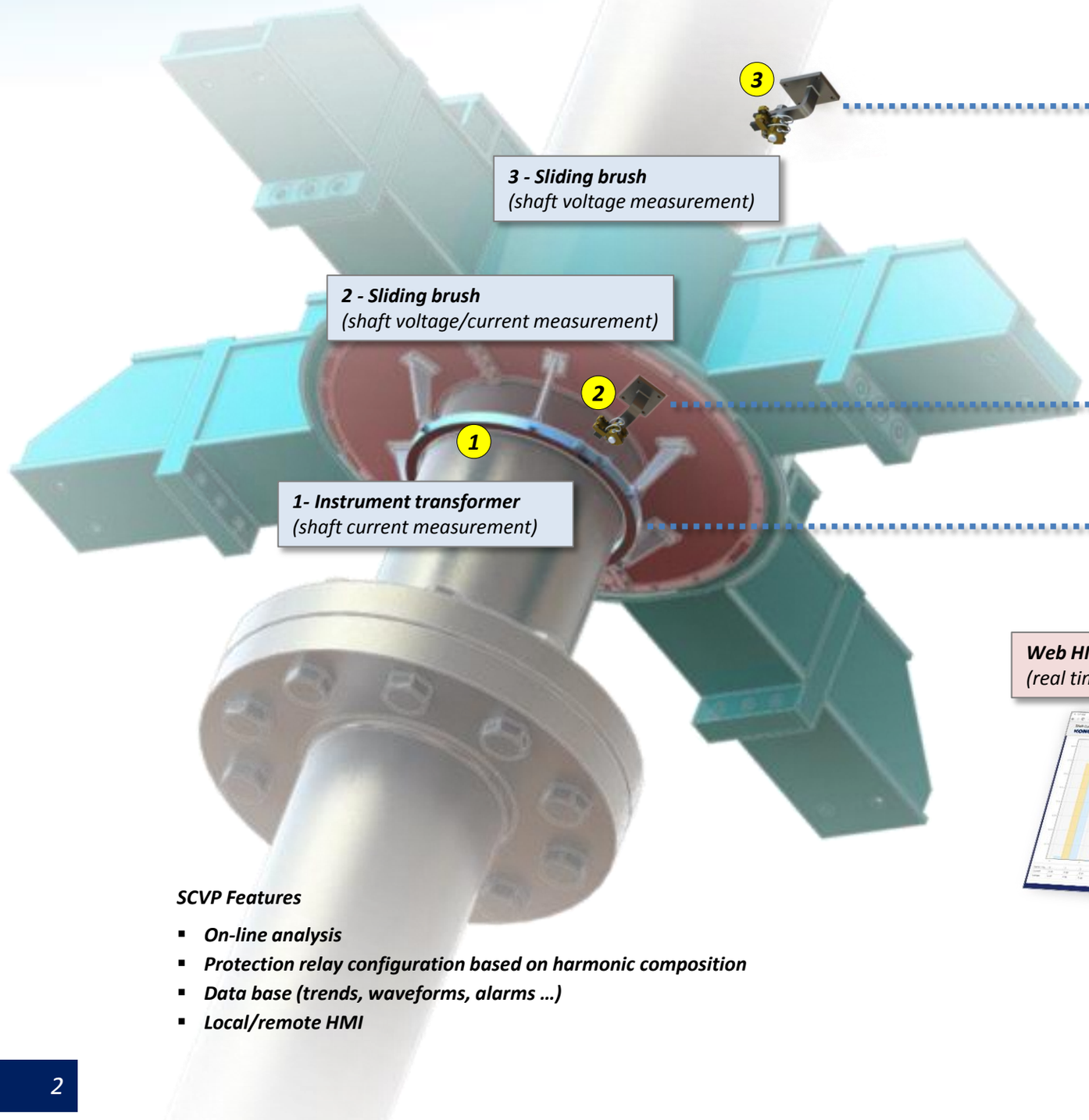
KONČAR SCVP



SCVP *SHAFT CURRENT AND VOLTAGE PROTECTION*

Due to magnetic field asymmetry in the machine, a voltage in the shaft can be induced, which, depending on the type of machine, its size and load, varies in amplitude and frequency composition. Low circuit impedance consisting of shaft, bearing, oil film and other structural components, can cause shaft current flow which leads to bearing destruction.

Shaft Current and Voltage Protection Relay (SCVP) is used to measure/analyze shaft voltage and current that may damage the generator bearing.



3 - Sliding brush
(shaft voltage measurement)

2 - Sliding brush
(shaft voltage/current measurement)

1- Instrument transformer
(shaft current measurement)

Operator panel - HMI
(real time data, trends, spectrum, alarms , setup…)

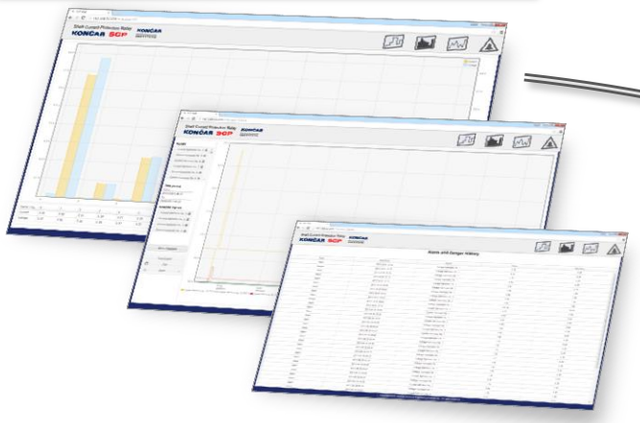
SCVP – Processing/protection unit
(real time processing,
data base, web server, HMI,
voltage and current input,
relay outputs …)

Analog signals

Ethernet

Ethernet

Web HMI
(real time data, trends, spectrum, alarms)



Remote user
(computer, smartphone, tablet …)

SCVP Features

- ***On-line analysis***
- ***Protection relay configuration based on harmonic composition***
- ***Data base (trends, waveforms, alarms …)***
- ***Local/remote HMI***

quality austria
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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