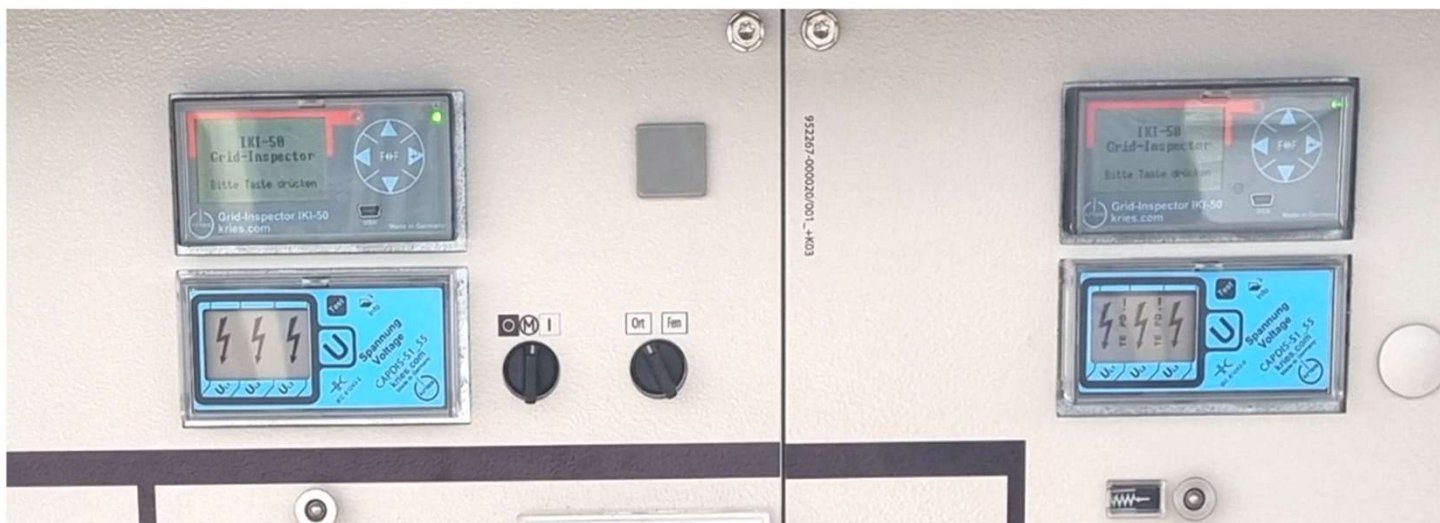


CAPDIS R5: Condition-Monitoring for Datacenters and CRITIS



CAPDIS R5 expands FLISR by Forecast Function and avoids Outages in Critical Information Infrastructures (CRITIS) e.g. T3- and T4- Datacenters

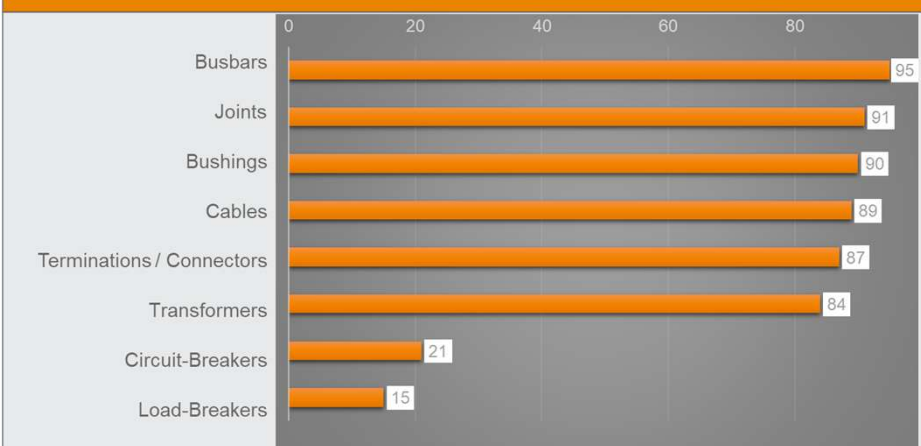
Datacenter Insurance:

„Online condition monitoring of MV-insulation quality is a risk mitigation measure and is taken into account when calculating the MFL“
(MFL = Maximum Foreseeable Loss)

Datacenter Insurances recommend online-PD detection for T3- and T4-approved DCs

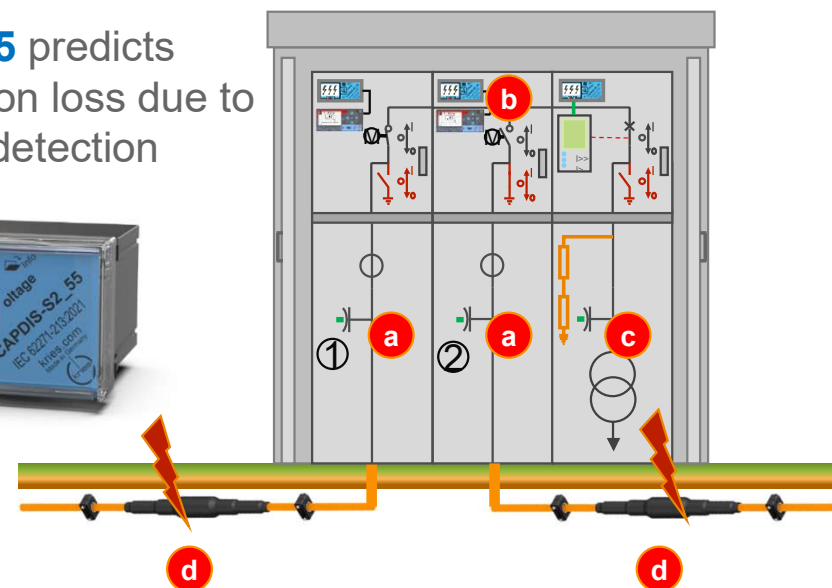
CAPDIS R5: Fault Prediction by Partial Discharge Detection

In IEEE Goldbook Table 36 the failure-frequencies due to insulation losses - (i.e. Partial Discharge) for individual components are listed:



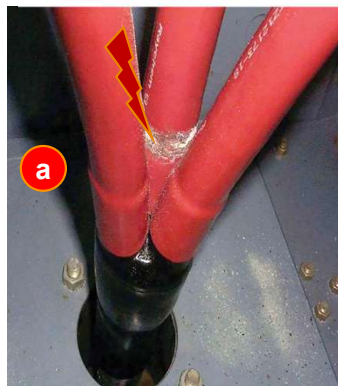
Example: 84% of Transformer failures are related to insulation losses

CAPDIS R5 predicts the insulation loss due to online PD-detection



Typical PD-Sources:

- a) Defective terminations or grounding**
- b) Defective busbars**
- c) Defective transformers**
- d) Defective joints**



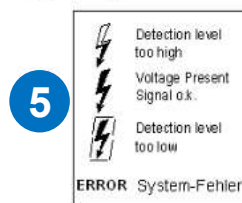
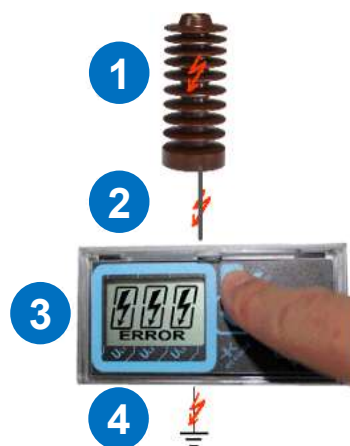
CAPDIS R5: Safest Voltage and Insulation-Monitoring minimizes Arc-Fault Risk for Operator and CRITIS- Grid

CAPDIS R5 = Voltage and PD detection

- Voltage Detecting according to IEC-62271-213
- Free of maintenance, no battery required
- Complete self-test

Safe voltage testing including:

- 1 Insulation test
- 2 Connecting line test
- 3 Equipment test
- 4 Grounding test
- 5 Threshold test
- 6 PD detection with CAPDIS R5



Online PD-Detection:

- Minimizes Arc-Fault Risk for Operator
- Predicts Insulation losses



Patented PD-sensor allows wide detection range

