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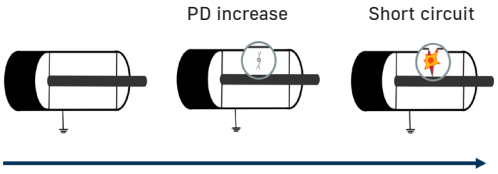
Wega PD
Early detection taken to a new level

Current situation

Early detection of grid and system faults is essential to ensure energy availability and to deploy maintenance personnel in a timely manner. A reliable diagnostic method is partial discharge measurement. This method allows insulation faults to be identified at an early stage, before they develop into complete insulation damage resulting in short circuits. By quickly and easily replacing existing voltage detecting systems with the Wega PD, both new and existing installations can be upgraded with intuitive partial discharge monitoring.

Problem statement

Insulation faults in switchgear – particularly in cable connection compartments – are not uncommon. Typical causes include installation errors in cable terminations or premature ageing of insulating materials.



Schematic representation of the development of partial discharge up to a short circuit

Partial discharge is an early indicator of insulation failure and gives the network operator time to relocate open disconnections and carry out targeted follow-up investigations.

System solution: Wega PD

The Wega PD is a 2-in-1 device that combines permanent partial discharge monitoring with a voltage detection system. It monitors all connected medium- and high-voltage equipment and remotely reports critical partial discharge activity. Installation and manufacturing faults as well as insulation damage caused by ageing effects are detected in good time before an unexpected fault occurs.

The integrated early fault detection enables early detection of potential fault and thus contributes significantly to increased supply reliability.
The 24-hour auto-learning mode for self-adjusting the partial discharge threshold value enables easy commissioning, regardless of cable type or boundary conditions at the installation site.

Your benefits at a glance

- Online partial discharge monitoring without the use of additional sensors and filter circuits - quick and easy installation
- Integrated early fault detection – increased supply reliability
- PD self-adjustment – simple commissioning
- Predictive Maintenance redefined!

Fields of application

Early fault detection for switchgear with high availability:

- Data centres
- Onshore/offshore wind farms
- Primary and secondary distribution network level
- Critical industrial applications such as chemicals, steel, glass, etc.

Conclusion

The Wega PD addresses the central technical challenge in the early detection of faults in plants and networks.
It combines the technical complexity of partial discharge detection and provides the user with clearly understandable and easy-to-interpret interfaces in the form of LEDs and signal contacts.

This significantly simplifies the planning, installation, commissioning and operation of critical switchgear without compromising on functional depth or performance.

Retrofitting in existing switchgear can also be implemented with minimal time and effort.

Contact: Dipl.-Ing. H. Horstmann GmbH | www.horstmanngmbh.com | vertrieb@horstmanngmbh.com