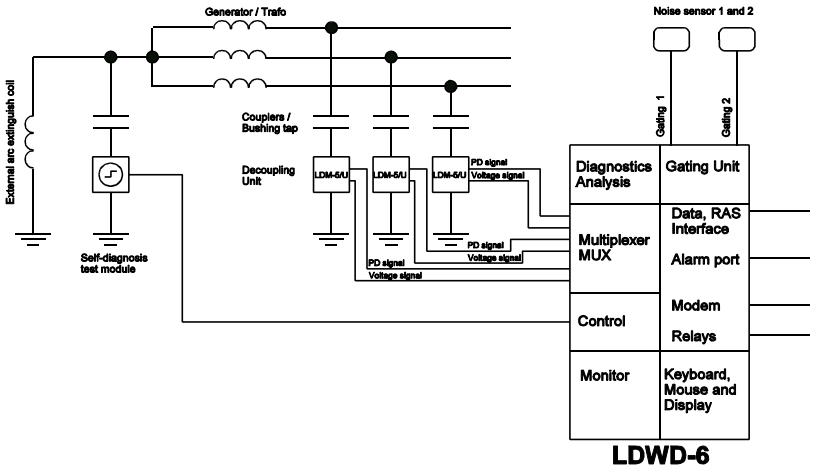
ADVANCED PARTIAL DISCHARGE MONITORING SYSTEM

For PD monitoring of HV equipment, such as power transformers and rotating machines, the **PD Warning Device LDWD-6** was developed. It is especially designed for high-sensitive continuous PD monitoring of three-phases power apparatus.

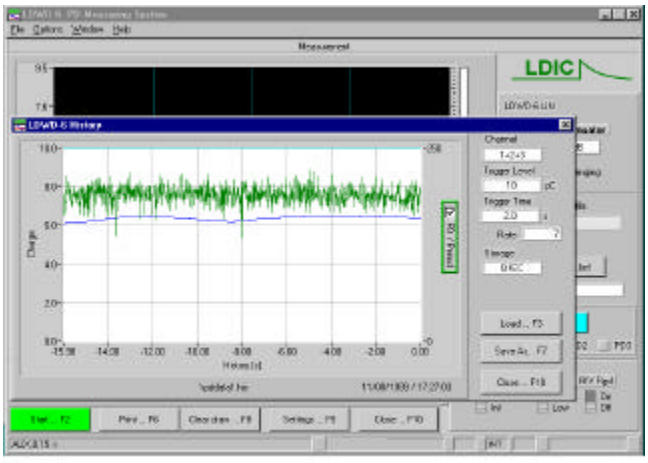
With an utmost high measuring dynamic real-time monitoring as well as phase resolved PD measurement is performed. An internal multiplexing unit for phase selection is implemented to measure each phase seperately or all phases in parallel. With the high sophisticated control algorithm the PD affected phase can automatically be determined by parallel supervision of several PD parameters such as PD charge, PD frequency, PD current, etc. The multiplexing unit switches the PD signals and the voltage signals of all three decoupling units in a tracking synchronous or asynchronous mode. The different channels can be adjusted in the setup individually for sequencing control.

PD Warning Device LDWD-6



LDWD-6 Block Diagram

The powerful built-in alarm function automatically determines the affected PD channel and reports an user-defined alarm to individually configured alarm ports in case of exceeding predefined alarm levels based on the PD quantities magnitude, pulse repetition rate and average PD current. The critical threshold level and the time of appearance can be adjusted independently.



History panel of the LDWD-6 software

An advanced benefit is the built-in Gating Unit GU to suppress external disturbances. The noise sources are detected by magnetic or electric field coupling mode, using inductive or capacitive sensors.

The monitored PD data is processed with the latest technology of software analysis. The continuously monitored PD characteristics are displayed and transmitted in real-time-mode to a central database via an extensive selection of transmission ports.

With statistic and diagnostic software tools a wide range of analyzing features are at the users disposal. With the windows-based software and the coloured flat-panel display the user will enjoy to operate the PD Warning device LDWD-6 with the greatest ease. All operations are done by a special keyboard. The compact device is designed as water- and shockproofed version and can therefore be used for outdoor application.

PD coupling units installed on a power transformer

On-Site installed PD Monitoring System LDWD-6

Monitored 345 kV power transformer