Diagnostic Monitoring
Avoid costly failures due to high voltage transients

Switching overvoltages and other high voltage transients place significant demands on equipment, which increases the risk of failure. The ABB DIAMONS monitoring system is based on diagnostic evaluations that detect dangerous overvoltage conditions and thereby allow corrective action to be taken.

**ABB DIAMONS Solution**

The ABB DIAMONS system can be used to monitor transient voltages on a continuous basis. The monitoring is performed while the transformer or other high voltage equipment is operating. The system records transients beyond a certain trigger voltage set by the user in the software. Recorded data is stored on a hard disk. It can also be connected to an Ethernet or similar to enable analysis of the recordings from anywhere and at any time.

Measurements are displayed and maximum voltage amplitudes are indicated for each phase. A Fast Fourier Transformation analysis can be performed to see the frequency content in the transients. There are three possible alarm outputs corresponding to three different voltage levels. A contact on a relay board in the computer closes when the transient overvoltage exceeds an alarm level set in the program. This gives an early warning of a critical overvoltage situation.

**DIAMONS study**

ABB Service can conduct a study which takes just a few days. This would provide a detailed analysis of your present electrical system. The equipment can be set up without any lengthy downtime and problems will immediately be reported. A final report is issued after completion of the study, outlining the findings and recommendations.
For more information please contact:

**ABB Inc.**
Transformer Remanufacturing and Engineering Services (TRES)

**Customer Service Center**
1-800-HELP 365 (1-800-435-7365)
contact.center@ca.abb.com

**Alberta**
9604 - 31 Avenue
Edmonton, AB
T6N 1C4

**Ontario**
201 Westcreek Boulevard
Brampton, ON
L6T 5S6

**Quebec**
1600 Lionel-Boulet Boulevard
Varennes, QC
J3X 1S4

www.abb.com/transformerservice

---

**Note:** The information contained in this document is for general information purposes only. While ABB strives to keep the information up to date and correct, it makes no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability or availability with respect to the information, products, services, or related graphics contained in the document for any purpose. Any reliance placed on such information is therefore strictly at your own risk. ABB reserves the right to discontinue any product or service at any time.

© Copyright 2014 ABB Inc. All rights reserved.