

## DATEV eG achieves higher data centre availability and reduces downtime through the application of Bender Residual Current Monitoring technology



### DATEV eG computer centre

This datacentre has almost 20.7 petabytes of storage space (20,700,000 gigabytes!), 4 mainframe computers, around 6800 high-performance servers, thousands of desktop PCs and dozens of high-performance laser printers that print several million forms every month. The network infrastructure is also impressive. Every day an average of 500,000 user systems remotely log on to the mainframe computers in the computer centre.

### DATEV eG Needs

In addition to the vast IT installation, there are many peripheral machines such as printers, packing machines and office equipment within the data centre. The complex requirements that must be met by a permanent residual current monitoring system (RCMS) in such a large and heterogeneous installation quickly become clear. ***A sudden power failure could have a devastating effect on process, reliability and of course on the operating costs.*** The consequences of such a shutdown become clear to not only DATEV eG, but also potentially the 500,000 users of the datacentre.

### The solution – Residual Current Monitoring Technology

Datav selected Bender to supply Residual Current Monitoring Technology. By continuously monitoring the residual current in an electrical installation the technology provides a warning when residual current levels are exceeded.

#### ***Bender residual current monitoring technology provides the following benefits:***

- Due to the adjustable threshold values, Bender RCMS assists both during troubleshooting phase and preventive maintenance works
- The time delay can be adjusted so that known sources of errors, e.g. the peak pulse on switching on and off the outdoor lighting, as well as transient faults can be masked
- The technology can be adapted to the related situation in an electrical installation, therefore the test effort necessary in accordance with BGVA3 is significantly reduced

- ▶ Increased Efficiency
- ▶ Optimised Maintenance
- ▶ Improved Fire Prevention
- ▶ Reduced Downtime

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- If a residual current exceeds a defined threshold value, RCM technology sends a warning to the building control system. The fault message is displayed via a standard web browser, where a member of the service staff can act immediately.

## Growing requirements

Over time, the size and complexity of the DATEV datacentre installation has increased, along with the number electrical loads, and the requirements on the system safety technology. Bender installed quantities of 58 RCMS460 and 54 RCMS470-12 in the system. We installed Bender communication devices to give our customer full visualisation of their monitored power system.

### Benefits:

- ▶ Avoids expensive and unplanned system shutdowns
- ▶ Increases personnel safety
- ▶ Negate the need for switch off during periodic inspection and testing
- ▶ To reduce fire risks and insurance premiums
- ▶ Detecting weak points in the electrical infrastructure
- ▶ Optimises the use of planned downtime

## Summary

Our customer DATEV eG has a cost effective residual current monitoring solution that is easy to manage and extremely powerful. The operation of the installation is eased by the support provided during troubleshooting, providing early detection of faults in the electrical installation. As a result, the datacentres processes have become much more efficient. Demands on engineer call-outs outside of working hours have been reduced to a minimum due to a constantly monitored and well-maintained installation.



Bender RCM technology