ZERA

Infopaper

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What would it be like – Simulation of circuit errors with MCS

Circuit errors in meter installation are a constantly recurring challenge for power utility companies. Especially if there are combination of errors. Here, the variants are plenty and checking the wiring is correspondingly costly. Meter Check Simulation (MCS) helps you to reduce these costs.

Sphere of application

The Meter Check Simulation (MCS) program is used to simulate errors in the switching of voltage and current paths in meter installations within a low-, medium- or high-voltage network.

Your advantage

During on-site error detection, the physical wiring does not have to be checked each time; instead, the suspicion of an error can first be checked via the simulation. Errors can be presented, for example for training purposes, without any real metering installations. MCS can be used independently from a certain measuring device.

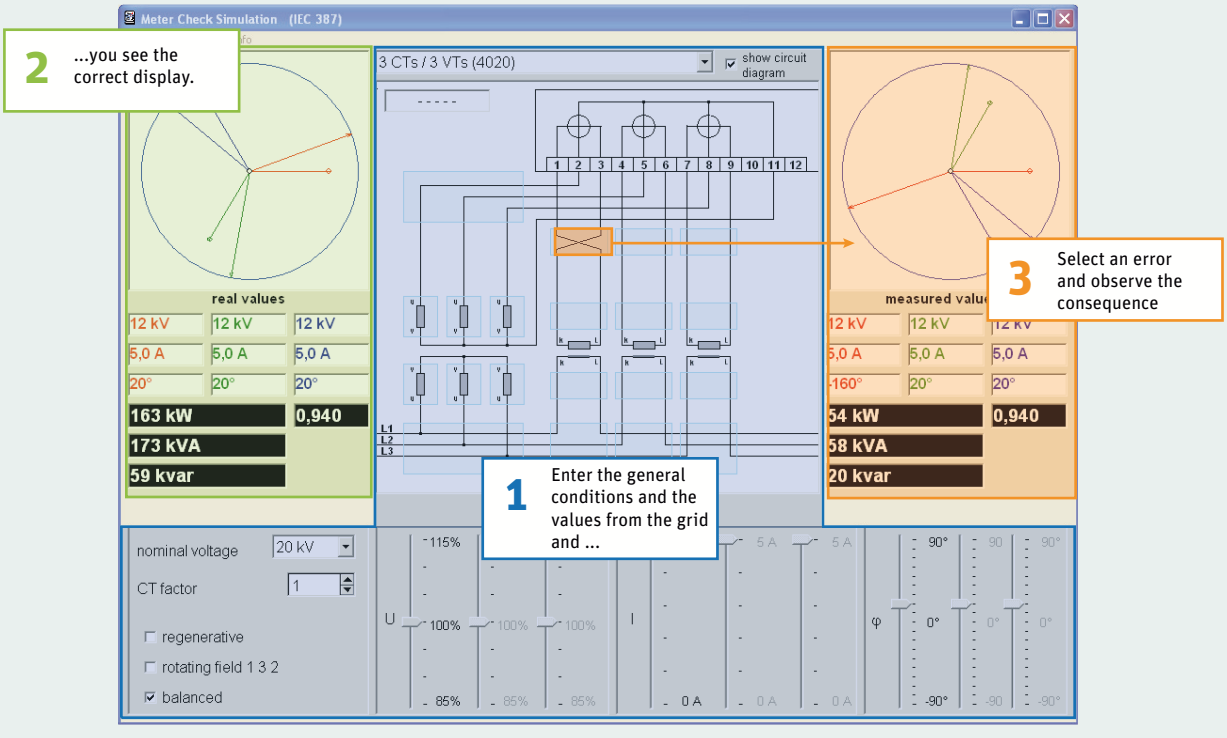
Place of installation:

- On a laptop for conducting on-site simulations.
- On a PC at a test centre.
- For training purposes.

How to work with

Enter the values and general conditions (e.g. current, voltage, circuit, etc.) as they would exist in a correctly connected system. Then, choose a circuit error. See how this error would impact the vector diagram and values in a real meter installation.

Everything at a glance: You can compare the vector diagrams of the correct and the faulty values. For training purposes you can hide the circuit.



Some of the features

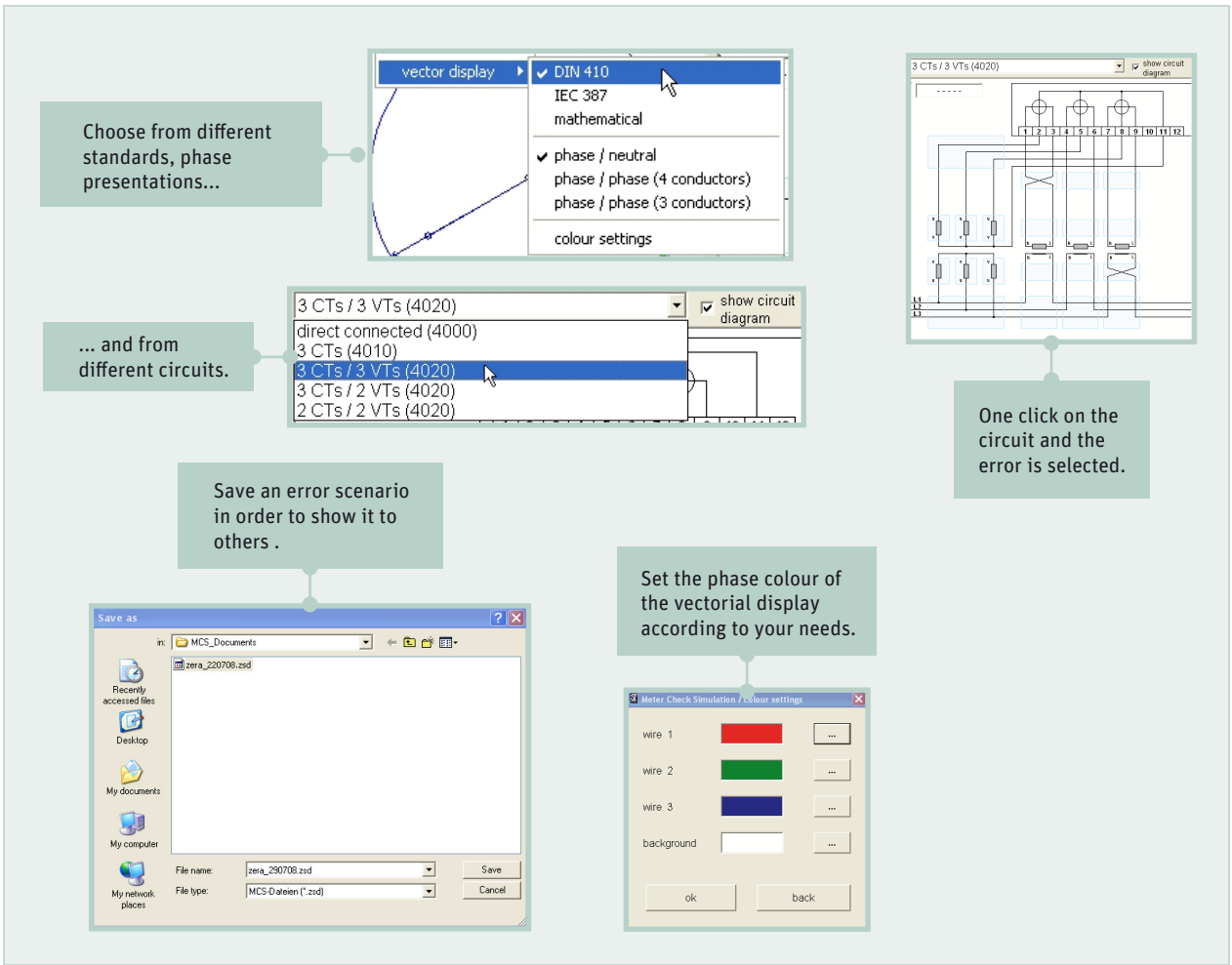
- There are several settings that help you to adapt the user interface according to your requirements. For example, you can change presentation of the vectorial display to DIN410 or IEC387 and choose the phase colour.
- You can save error scenarios and open these scenarios on every PC where you have Meter Check Simulation installed.
- For the simulation of circuit errors you can choose from the following standard circuits:
- Für die Fehlersimulation stehen Ihnen verschiedene Standardschaltungen zur Verfügung: Direct connection, 3 current transformers, 3 current / 3 voltage transformers, 3 current / 2 voltage transformers, 2 current / 2 voltage transformers.
- The following errors can be simulated: Polarisation, exchange of voltage or current phases, bypass, wrong rotating field.

The licensing process

Each licence is a single user licence. Licensing takes place via a hardware identifier that is automatically generated at the first start of MCS an transmitted to ZERA via E-Mail. From the data transmitted, a registration code is generated, sent back to the customer and imported to Meter Check Simulation.

System requirements

- *Operating system*: Windows 2000 or Windows XP
- *Processor*: At least Pentium III with 500 MHz
- *Monitor*: Minimum resolution 1024 x 768 pixels with 16- or 32-bit colour depth. DPI settings for the display: 96 DPI (small font or standard size).
- *Drives*: CD-ROM drive for installation
- *Disk space*: 20 MB free hard-drive space for the program
- *Access rights*: Local administrator rights for installation and program activation. User rights during operation.



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