











# Automated Testing Technology





#### **Automated Testing Technology**

### Measurable Experience

For decades we have specialized intensively and successfully in the development and production of electronic supply systems for current and voltage, high precision measuring technology, specimen mounts and contacting equipment for highly differing types of specimen in the field of electrical engineering.

Based on this experience, ZERA first developed test stations for switchgear with manual specimen feed, quickly followed by complete testing lines featuring automatic feed and contacting.

We have supplemented the usual standard tests on switchgear such as:

- Measurement of the release characteristics of magnetic and bimetal cut-outs using highly accurate current
- High voltage tests

with additional functions such as:

- Measurement of trip forces
- Measurement of bimetal deflection
- Noise measurement on tripping coils
- Adjustment of bimetal and magnetic cut-outs.





The importance of using personal computers with ZERA's own software for all developments has increased continuously and is a standard feature today.



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All primary components in a complete system are developed and tested in the ZERA plant. This includes particularly:

Construction of equipment and switch cabinets

as well as production of key technologies:

- Constant current power supplies based on electronic output amplifiers in the range for 10VA to 80KVA and
- Constant voltage power supplies
- High precision test equipment for measuring electrical values

and development of programs for:

- Programmable Logic Controls (PLCs)
- Real time applications
- Controlling data processing

State-of-the-art engineering is used for automation:

- Image processing systems for precise path measurement without contact
- Multiple axis robots for assembly and feed



In addition to testing technology, ZERA also integrates assembly engineering applications:

These include:

- Part marking
- Tampon printing
- Automatic labeling
- Laser printing
- Inkjet printing
- Part recognition
- Bar code scanners
- OCR systems



Everything from one company

**Auxiliary Equipment** 



#### **Automated Testing Technology**

### Always available for you

With its qualified team of specialists from the system construction, analog engineering, digital engineering and software development sectors, ZERA is always at your side even during the conception phase of your testing applications.

All production documents, such as

- Design drawings and
- Circuit diagrams

are completed exclusively on state-of-the-art CAD systems to ensure rapid processing of your equipment.



## We test what you want tested



#### Other Products:

Primary testing equipment

Secondary relay testing equipment

Portable conventional and static test value generators

Stationary testing systems for electric power meters

Portable meter testing equipment

Comparators

Stationary and portable testing equipment for measuring transducers

Insulation testing equipment

Adapter systems for older meter testing equipment

Voltage stabilizers

Transducer testing equipment

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