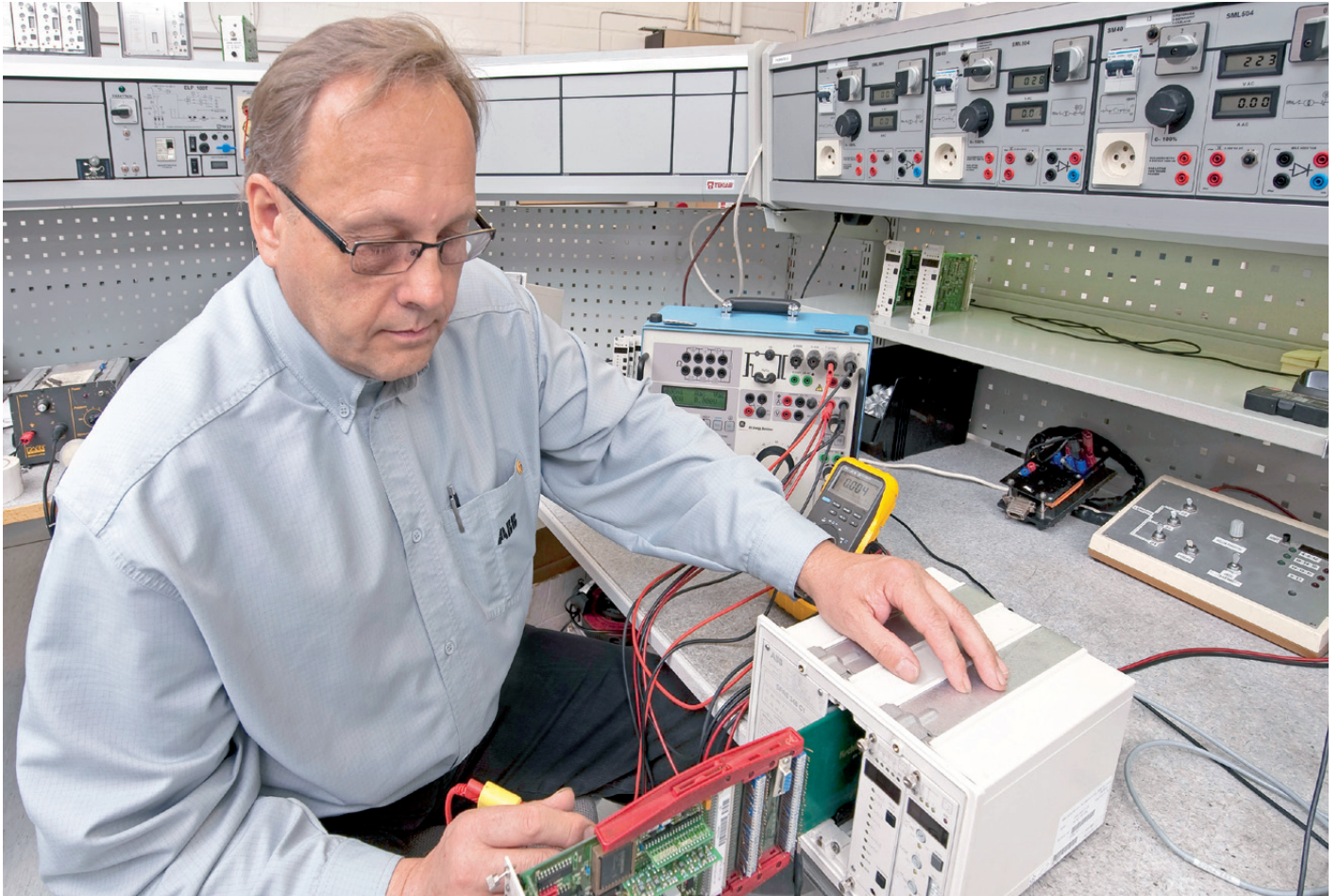


Life Cycle Services for distribution protection and control Repair

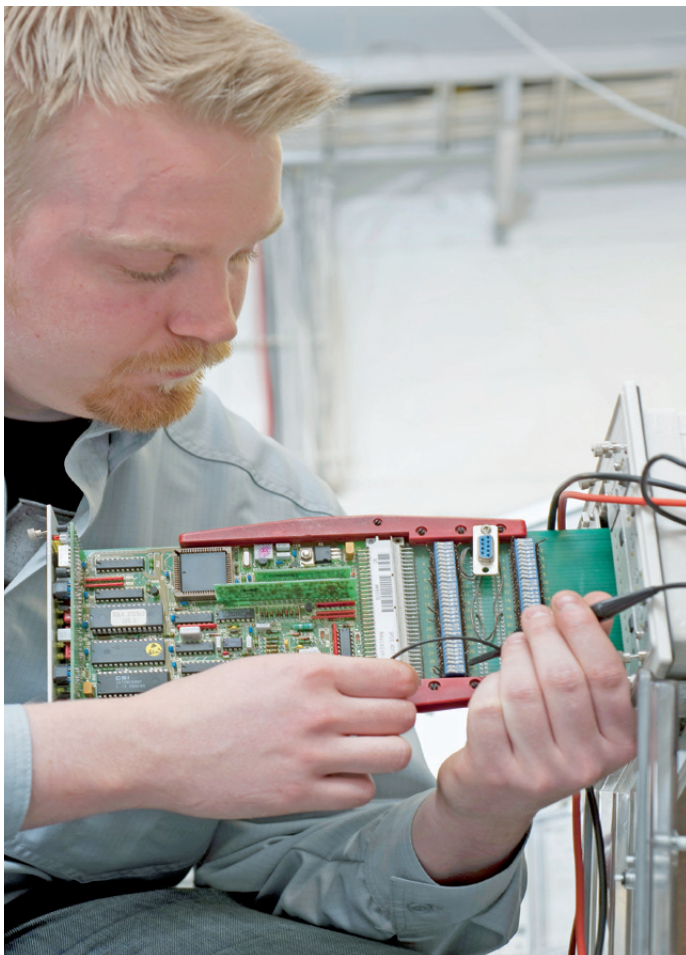


Customer support over the product life cycle and beyond
Did you know that it is possible to extend the product lifetime
by investing in repair services?

ABB Product Support provides protection relay repair services globally for all active ABB Distribution Automation products and also very extensively for older products, even from the early 1970's. Our repair shop is authorized by the manufacturer and we provide professional, quality certified (ISO 9001:2000) repair services based on decades of experience. We aim to provide as efficient and transparent service as possible. The repair work is based on a thorough fault analysis and all of the steps are carefully recorded.

We guarantee the product functionality after repair

Our electronic repair engineers are highly qualified professionals with long experience in protection relays. We use only genuine spare parts for repairing the devices and we have extensive testing possibilities in the manufacturer's production line. Our repair lab also has the possibility to get support from the manufacturers R&D if needed. We guarantee the quality of our service by granting a 2-year warranty for the repair work.



Did you know that repairing faulty electronic products is not just worthwhile but also ecological?

The common assumption is that it is not profitable to repair faulty electronic devices. This, however, is not entirely accurate. The high quality and affordable pricing of ABB Product Support's repair services make repairing a worthwhile alternative. It is also possible to extend the product lifetime by repairing instead of scrapping the faulty products. This makes product repair also an ecological option.

The repair service is a great alternative especially in cases where the used protection relays are of an older version that is not manufactured any longer. If a malfunction appears in a single device, purchasing a completely new device might not be feasible since most of the SCADA systems (e.g. MicroSCADA) are compatible with only a predefined protection relay versions and updating the system is often a time consuming and costly process. The new device may also be incompatible with the relays already in use and then the only alternative would be to renew or upgrade all of the relays in the substation. The most convenient option in that case is to have the faulty device repaired. After repair, the device can be put back to use without any modifications to the rest of the system.

Why should you choose the repair service?

- Product repair extends the product lifetime, making it also an ecological option
- Systematic repair procedure ensures the quality and efficiency of the service
- Extensive repair report includes a full account of all the steps taken during the repair
- Tests conducted after the repair work are equivalent to the final factory tests made for new relays
- The high quality of the service enables us to grant a 2-year warranty for the repair work

Additional information

The available repair services can be checked online at www.abb.com/partsonline. Select country → Browse → Repair → Substation Automation and Protection.

For more information please contact your local ABB representative or visit our website at www.abb.com/substationautomation.

Protection relay repair is extensive service

During the repair work, the product will be thoroughly inspected and tested. Additionally, each faulty product will be given a return number for easy reference during the repair. Our repair service consists of the following:

Product analysis → the purpose is to repeat the reported fault. This is the basis for planning the repair work.

Repair work → the faulty part that was detected during the analysis is repaired or changed.

Components → only genuine spare parts are used.

Repair report → the report includes the results of the visual inspection and fault analysis, the description of the repair work, of the changed components, of functional test made after the repair and of the final test results.