

Testing Solutions for Recloser and Sectionalizer Controls

Easy and efficient testing of controllers



Testing of recloser and sectionalizer controls

The challenge

Testing of reclosers and sectionalizers in distribution networks has become demanding for both the testing personnel and the test equipment used. Some reasons for that are the application of more accurate and versatile digital controls, their integration in smart grid automation, and the introduction of more stringent regulations for ensuring the reliability of the power distribution system.

The solution

In its position as market leader of advanced testing solutions for the electric power industry, OMICRON also offers easy to use solutions for testing recloser and sectionalizer controls. The CMC product family is a proven performer in the field of protection testing. The applicable test set models CMC 356, CMC 256plus, and CMC 353 particularly excel in these applications by their high reliability, precision, versatility, and compact design.

Flexible operation

For quick manual testing in the field, the flexible front panel control unit CMControl R is the ideal choice for operating the CMC test sets. Its new touch screen applications and specific tools for testing recloser and sectionalizer controls are particularly easy to work with.

For highly automated testing a CMC test set can also be controlled via the Test Universe software running on a Windows PC. For this kind of application OMICRON offers test object specific test templates which can be customized by the user. These templates provide access to expert knowledge on how to test various control functions in the most effective and efficient way.

The functional tests for the controls include: current pick-up levels and timing, voltage pick-up & drop-off levels, complete logic trip cycles to lock-out sequences, partial trip cycles to confirm no false trips under load currents, under-frequency load shedding logic, etc.

Due to the CMCs' high flexibility, companies can use them for both testing reclosers and sectionalizers as well as protection relays.



CMC test set with recloser test cable. Operation via CMControl R or Windows PC

Convenient connection

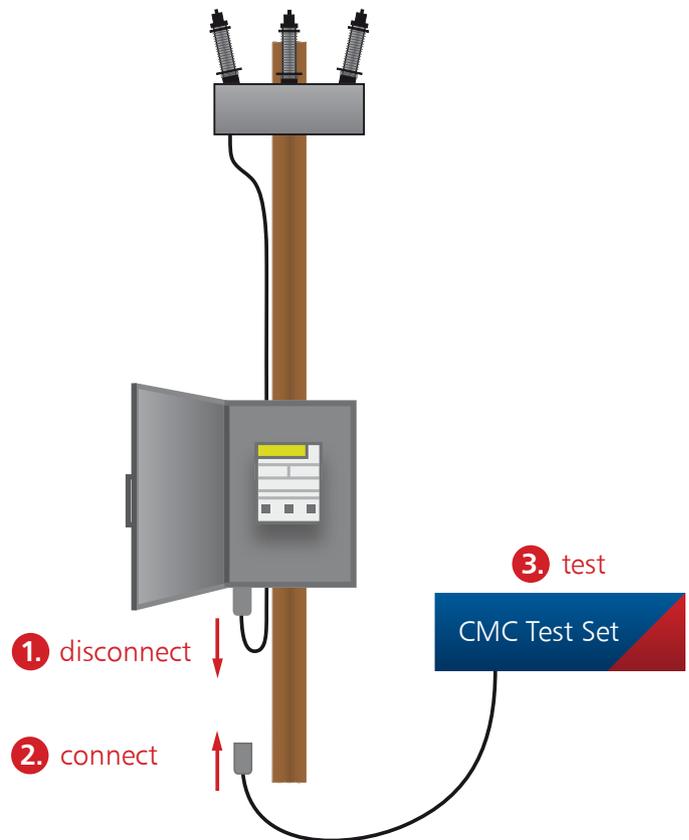
For an easy and time saving test setup OMICRON offers a comprehensive range of test cable packages for various recloser controls from different manufacturers. Simply connect our test cable to the plug of the control housing. For testing the CMC simulates the behavior of the recloser or sectionalizer in normal operation and provides all voltages, currents and status signals required.

CMC test cable packages are offered for testing of recloser controls with 10, 14, 19, 24, 32, 40 pin interfaces used by manufacturers including ABB, Cooper, G&W, Siemens, S&C, Tavrída, Thomas & Betts and more. These cable packages allow testing of recloser controls such as:¹

- > ABB PCD, RER620
- > Cooper Form 4,5,6, FXB
- > SEL 351R, 351R Falcon, 351RS Kestrel, 651R
- > S&C 5800, 6800 Series
- > S&C IntelliRupter PulseCloser
- > GE URC
- > ICMI URC II

Comprehensive range of accessories

Besides the test cable packages, OMICRON also offers a broad range of additional accessories. Distribution automation applications utilize communication channels between reclosers for instance; tailor-made accessories for the synchronization of several CMC test sets via GPS or IRIG-B make testing of these systems much easier.



Your benefits

- > Simple operation without PC: CMControl R with touch screen and control wheel
- > Automated testing with Test Universe PC software and predefined test templates
- > Quick and reliable connection via standard test cables
- > Support GPS or IRIG-B synchronization for end-to-end testing with multiple test sets
- > Use the same test set for recloser and sectionalizer testing as well as for all protection relays

¹ Non-exhaustive list of supported recloser controls. Please contact us for cable package requests.

OMICRON is an international company serving the electrical power industry with innovative testing and diagnostic solutions. The application of OMICRON products allows users to assess the condition of the primary and secondary equipment on their systems with complete confidence. Services offered in the area of consulting, commissioning, testing, diagnosis and training make the product range complete.

Customers in more than 140 countries rely on the company's ability to supply leading-edge technology of excellent quality. Service centers on all continents provide a broad base of knowledge and extraordinary customer support. All of this together with our strong network of sales partners is what has made our company a market leader in the electrical power industry.

For more information, additional literature, and detailed contact information of our worldwide offices please visit our website.