ACTAS operating software

With ACTAS test systems, the output of switching sequences and the measurements performed on a switchgear device are fully controlled by means of the operating software.

Know-how put into practice

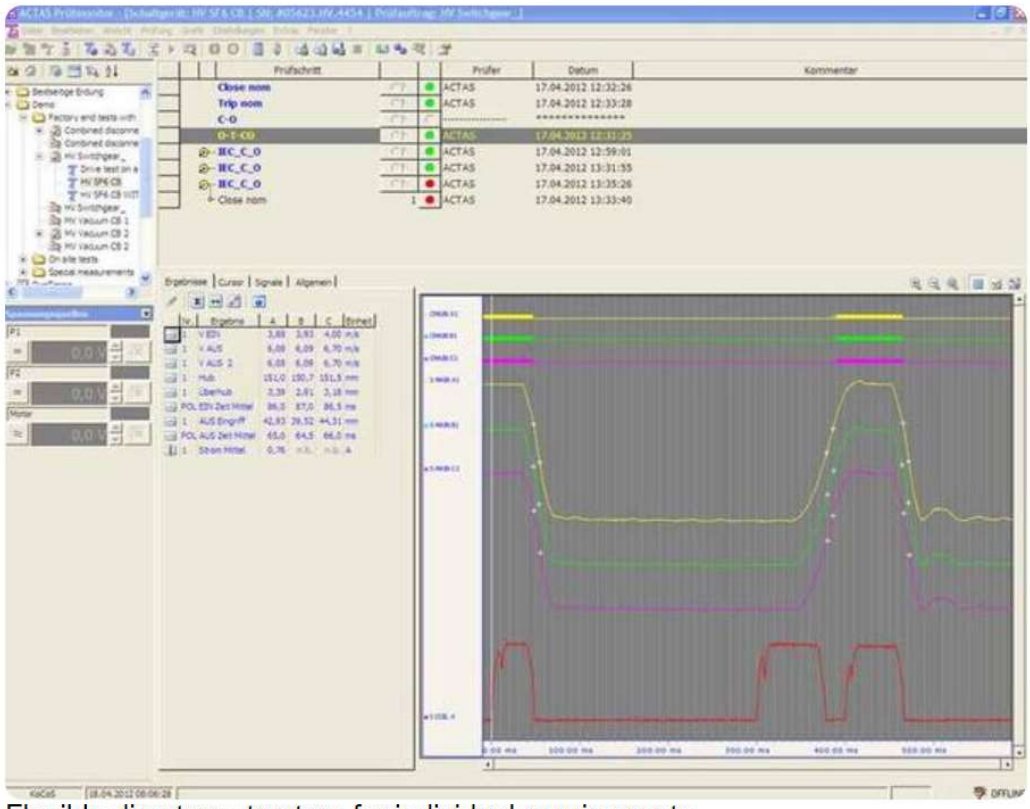
The ACTAS software is the product of many years of practical experience and close cooperation with network operators and switchgear manufacturers.

The resulting test applications can be used to solve any test task likely to be met in practice.

The whole test at a glance

The central element of the operating software is the test monitor. Tests are created, carried out and archived here.

All test parameters and results can be seen at a glance. Tests are started and monitored directly in the test monitor. Indicators show whether or not the measurement results lie within the de-fined limit values. A graph of all measured signal characteristics, featuring zoom functions and measurement cursors, offers additional options for detailed analysis.



Flexible directory structure for individual requirements

Flexible directory structure for individual requirements

All switchgear data and test parameters, including the results, are automatically saved in a freely definable directory structure.

This makes it easy for tests to be called up, edited or used as templates.

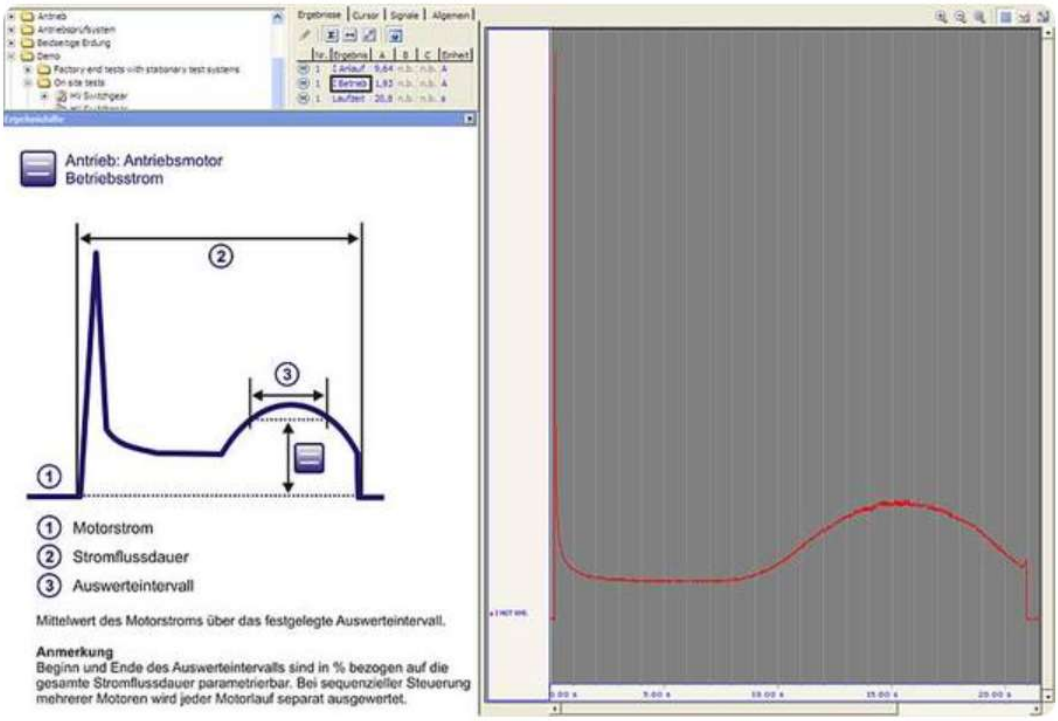
Compressing switchgear data and measurement results so that they can be sent by e-mail, for example, is made simple by the central storage of data. Archiving the data or exporting them to other data formats or databases is child's play too.

Result help

A help function supports users in the selection of the measurement results they require and the subsequent evaluation of those results. Descriptions and graphs facilitate the correct interpretation of the results obtained.

Automatic generation of test reports

The software includes an option for automatically creating test reports to document test results. As well as the results themselves, reports can also include curve characteristics of recorded signals, switchgear data and test parameters. The contents and layout of test reports can be customized to meet individual requirements.



ACTAS P / Expert

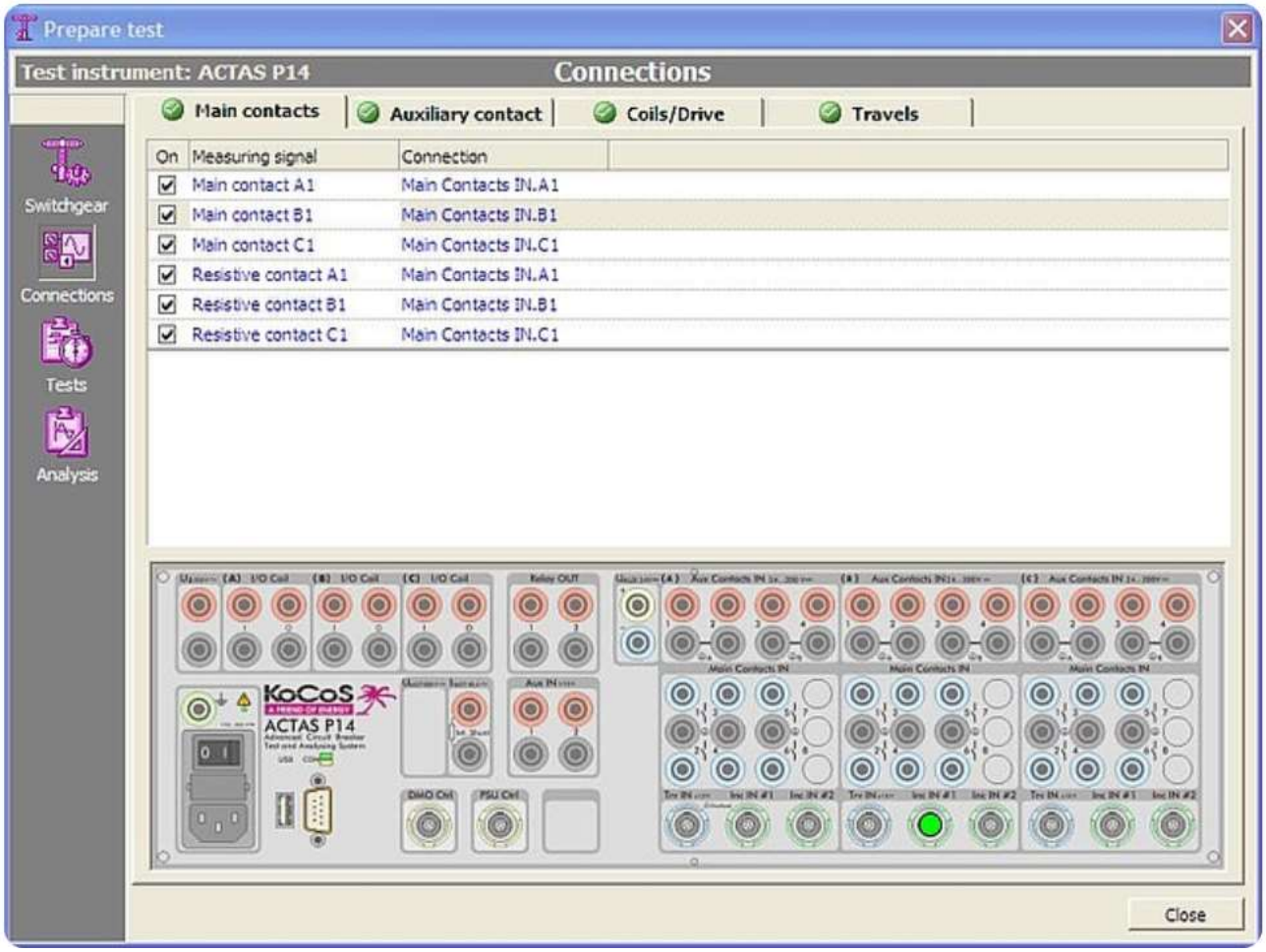
The custom solution for all standard tests

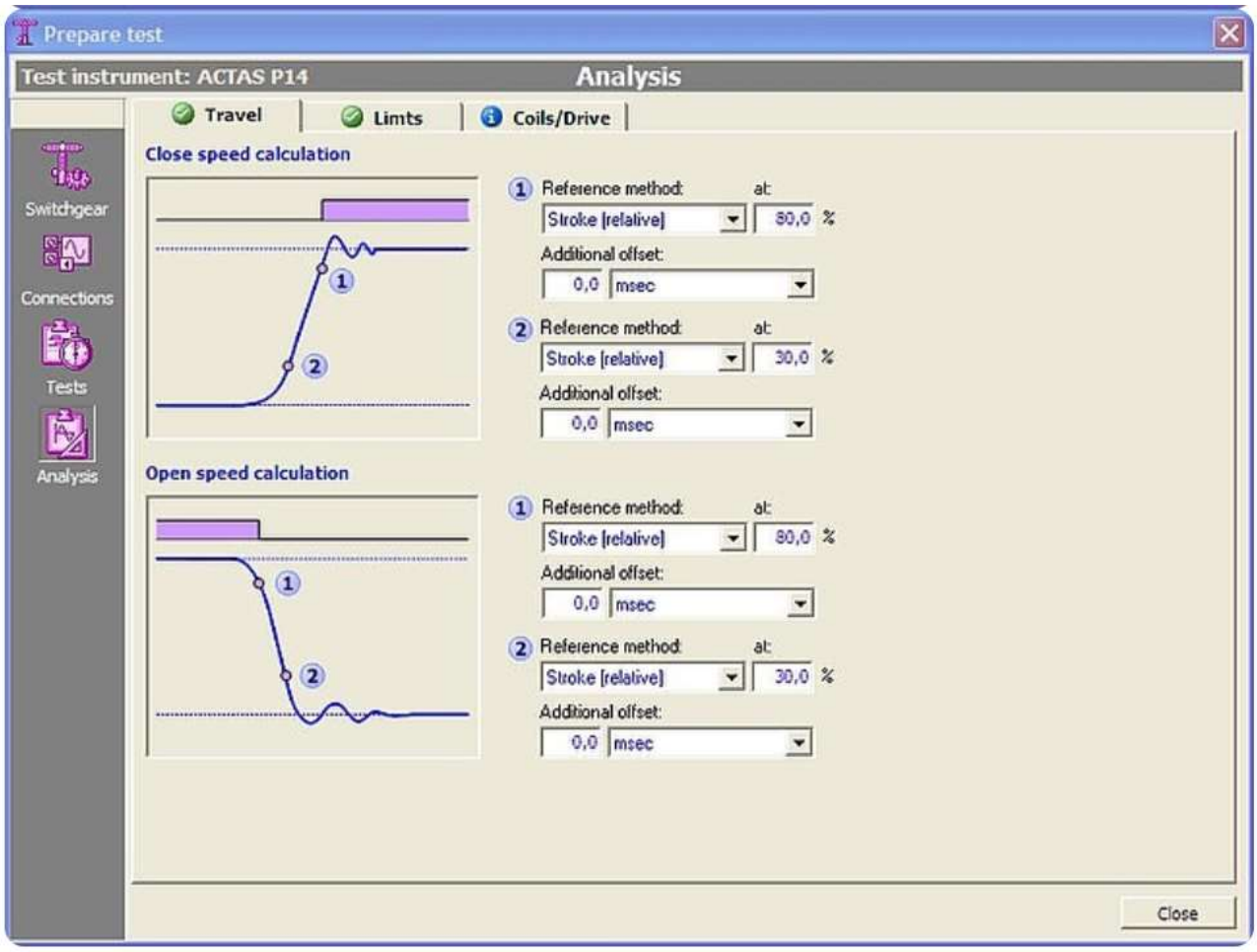
The ACTAS P software has been specially designed for testing switchgear devices on site and contains all the necessary functions. Whatever the task in hand, be it test preparation, test execution or test management, the clearly structured user interface gives fast, direct access to the functions required at any stage.

The user is guided step-by-step through the process of parameterization to the start of the test. Parameters which are not required for a certain test task or type of switchgear device are automatically hidden. This makes it very simple to define operating sequences and limit values or select measurement channels.

The graphical assignment of measurement channels to the corresponding connection sockets is extremely helpful when linking up the switchgear device to the test instrument. A virtual connection panel indicates where the individual measuring leads are to be connected.

The extended functionality of the ACTAS Expert software includes, for example, the simultaneous integration of several devices in the software as well as export functions to other file formats.





ACTAS 2.60

The solution for comprehensive switchgear tests

The ACTAS 2.60 operating software is the first choice when it comes to carrying out comprehensive tests or test procedures.

With its special application modules, the software delivers solutions for individual test tasks.

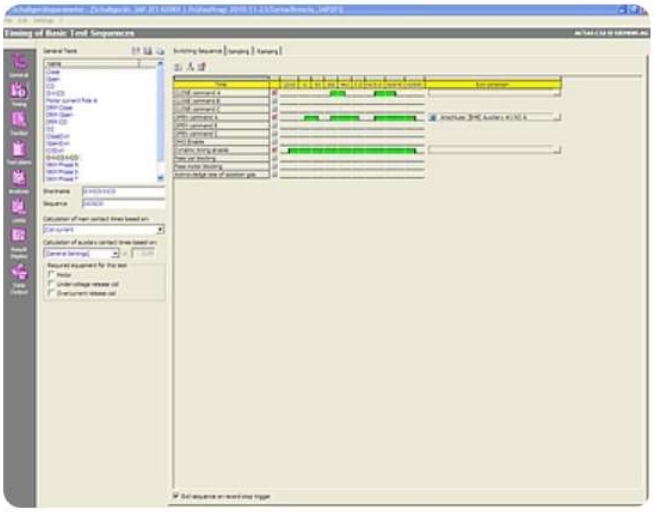
Variable times and control signals allow switching sequences to be defined freely.

Once defined, individual switching operations can be combined to form a series of repetitive operating sequences with an almost infinite number of operating cycles.

Any result likely to be required in practice can be selected from a pool of over 1000 pre-defined evaluation algorithms for the purposes of automatic test evaluation. The software also features versatile instruments for the analysis of results. The superimposition of various measurement curves and the assessment of signals using idealized reference characteristics are just two examples.

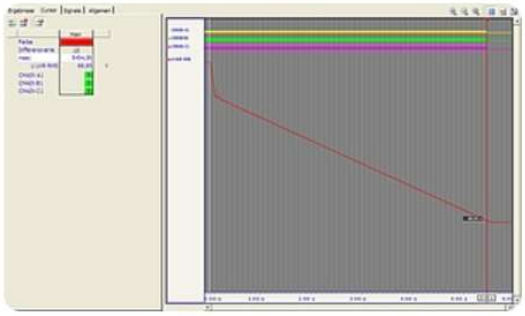
A wide range of trigger options allow the automatic issue of control commands. Recording can be started or stopped in response to the occurrence of specific events, for example.

In order to reduce the volume of data in a recording, triggers can be used to vary the sample rate dynamically. The sample rate can be decreased for those parts of the test which are of little relevance and increased for areas of particular interest.



Software modules for ACTAS 2.60

Control & Automation

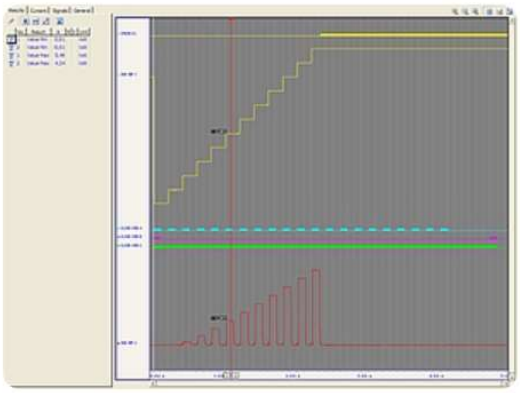


The Control & Automation software module includes a wide variety of monitoring and control functions for automated switchgear testing in a test, factory and on-site environment.

Various internal and external actuators and sources for the provision of configurable test conditions, such as coil system selection, coil or motor voltage or drive pressure, for example, can be controlled via analog and binary channels or logical interfaces. Ramp signal characteristics can be issued to test undervoltage and overcurrent releases. A number of other useful automatic functions for monitoring the operating counter (including an alarm function) and for isolation tests complete the package.

Control & Automation - Article No. #6131

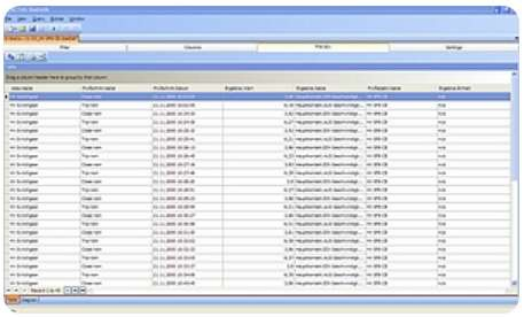
Extended Testing & Analysis

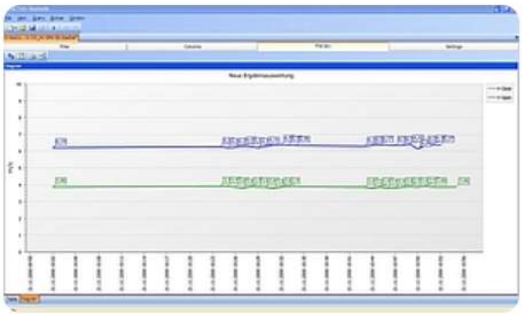


The Extended Testing & Analysis module provides extended test and analysis functions. These include the unsupervised execution and statistical evaluation of life tests. The module also features tools for testing and assessing special drive types such as pneumatic or magnet drives, for example. Advanced mathematical methods are also included, such as the calculation of virtual channels for power analyses and the assessment of recorded signal characteristics using reference character-istics in accordance with IEC 62271 or custom reference curves, for example.

Extended Testing & Analysis - Article No. #6132

Statistics





The Statistics software module contains functions for logging and carrying out statistical analyses of switchgear faults identified by the test system or tester.

A freely configurable input dialogue box makes it easy to enter and classify any kind of fault types or causes. Entries are all made in a separate database and can be subjected to statistical analysis in accordance with various criteria. Another excellent feature is the attractive presentation of the evaluation in both text and graphical form.

Accumulations of faults in particular areas can be detected, making it possible to draw conclusions as to the constructional or functional weak points of specific types of switchgear.

Statistics - Article No. #6133

Data Interfaces

The Data Interfaces software module offers various interfaces for the import and export of measurement data, test results and test object data.

Using this module, records can be exported to text files and then processed further in external programmes, such as MS Excel.

Test results and test object data can be exported to MS Access databases for statistical purposes. In addition to data export, this software module also enables measurement data to be imported from various external systems for analysis in ACTAS. Connection to external database systems, such as SAP, is also possible via structured XML files, for the automatic generation of test jobs, for example.

Data Interfaces - Article No. #6130

Extended Data Management

The Extended Data Management software module provides extended possibilities for handling test data and results, particularly when using ACTAS in a stationary, network-supported environment. Test data can be compressed and archived automatically.

Extended Data Management - Article No. #6134

Applications

The test systems of the ACTAS product range have been specially developed to perform automatic general operating tests on all types of breaker, regardless of the type of drive unit, including, for example,

- circuit breakers
- load switches
- disconnectors and earthing
- switches

The first operating tests are carried out during breaker development. Once final factory tests and inspections have been carried out and the breaker has been installed, regular, on-site service tests safeguard the full operationality of a breaker.

All the different models are suitable for both manual and automated tests. Freely configurable test plans make it possible to pre-define all the test steps and analysis functions for a wide variety of different types of breaker. As a result, the tests themselves can be carried out quickly and efficiently. Incorrect evaluations resulting from false operation or configuration can be almost completely ruled out.

The ACTAS range includes a broad spectrum of compact, portable test systems for on-site tests. The basic difference between the various devices lies in the number of measurement inputs for analog and binary signals. Stationary test systems with customer-specific configurations are currently being used by leading breaker manufacturers for final tests. Installation in 19" racks allows the integration of automatically controlled voltage sources for supplying releases and drive units. Simulation of the plant conditions prevailing at future breaker locations makes it possible to test breakers under realistic and extreme fault conditions even before they have left the factory.

Both the stationary and portable test systems are also suitable for use in the laboratory for breaker development or type tests, for example. The freely programmable sequence control system makes it possible to simulate all kinds of switching operations and to repeat them almost indefinitely within the framework of fully automated repetitive operations. Even life tests with 10000 or more operating cycles present no problem.

Compatibility

All the test systems of the ACTAS product range are based on identical functional principles and are operated via the same software. This means that measurement results obtained in the factory can be compared with the results of subsequent on-site tests at any time, regardless of which ACTAS model was used at the time.

CHESS CONTROLS

Toll free 1 800 461 4076
www.chesscontrols.com

Tel 705 682 2828
sales@chesscontrols.com