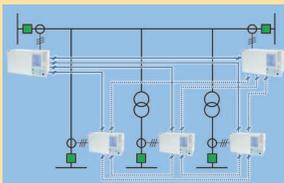


ABB launches protection and control products designed for IEC 61850



ABB's new IED670 protection and control product series for transmission applications is the first in the market to implement all aspects of the new IEC 61850 standard. "The full implementation of the standard ensures open, future-proof and flexible system architectures with state-of-the art performance", says Stig Holst, senior specialist from ABB Power Technologies in Sweden.

Example 1: Line differential protection IED RED670



Picture: RED670 for five line-terminal application in master-master or master-slave configuration.

RED670 is designed for protection, monitoring and control of overhead lines and cables with up to five line terminals. The phase segregated line differential protection enables reliable single/two/three pole trip and auto-reclosing with synchoclock. RED670 features integrated distance protection and is capable of handling also transformer feeders, and generator and transformer blocks. It provides absolutely selective protection without time grading. The high sensitivity of RED670 allows for detection of small fault currents, which in turn allows high resistive phase to earth faults to be detected.

Designed to communicate

The IED670 products meet the high requirements of the IEC 61850 standard in every respect. They can e.g. interoperate with other IEC 61850 compliant IEDs (IED= Intelligent Electronic Device), tools and systems. Their performance fulfils the needs of the extensive communication tasks, e.g. GOOSE messaging for horizontal communication.

Based on both standard and ABB protocols, the 670 IEDs provide extensive communication capabilities and interfaces – enabling unrivalled compatibility. The IED670 products can be combined with ABB's earlier IEDs in automation systems for retrofit and new substations – thus ensuring the maximum performance enabled by today's technologies. Additionally, existing ABB IEDs, such as REB500, are IEC 61850-8-1 enabled, and can thus be part of an IEC 61850 system.

The technology of IED670 products constitutes the next step in protection, control and monitoring. The IED670 products have inherited proven algorithms from previous generation of successful IEDs from ABB that have now been further developed to provide state-of-the art performance.

Easy to handle

The IED670 products are delivered pre-configured, type tested and with default parameters, which makes their handling easy from ordering, engineering and commissioning to reliable operation. The IEDs are

equipped with complete functionality adapted for different applications, which if needed can be easily adapted to meet the specific power system requirements.

New application opportunities and cost-efficiency

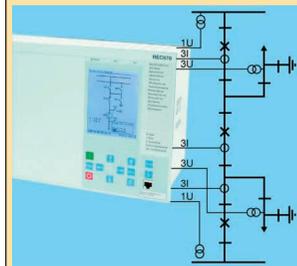
The IED670 products are based on a powerful hardware platform and hardware independent modular function library. This enables whole new application opportunities and unrivalled cost-performance ratio through multi-object protection and control capability. "The IED670 product platform will serve as the basis for the totally integrated protection and control systems that facilitate new substation automation solutions with interesting future benefits", Stig Holst says.

The IED670 products utilize ABB's new and advanced IED tool, which increases the efficiency of working procedures, for instance, through automatic disturbance reporting.

Commitment to reliability

ABB is the source of many innovations that help utilities enhance the reliability, availability and security of their power systems. Our protection, control, automation and monitoring solutions range from multifunction units to fully integrated, comprehensive substation automation systems serving with the highest performance and quality standards in the field.

Example 2: Bay Control IED REC670



Picture: One REC670 IED is capable of handling control of all apparatuses in one entire diameter in 1 1/2 breaker arrangement.

REC670 provides extensive application opportunities for the control, monitoring and protection of circuit breakers, disconnectors, and earthing switches in any type of switchgear and different switchgear configurations. With versatile functionality the REC670 IEDs can be applied to both single and multiple bay arrangements.

Visit www.abb.com/substationautomation or contact your local ABB for more information.

