

Relion® ANSI product family

The ideal choice for a great variety of applications



What sets ABB apart?

ABB can partner with you to provide all of your power protection solution needs, big or small. In doing so, ABB delivers the highest quality, reliability, and customer lifetime value possible.

With the Relion product family, features that should come standard do come standard

ABB saves you money by reducing the need for cost options. The configured Relion 615 series and 620 series will have a lower final cost because more of your protection requirements come standard:

- DNP 3.0, Modbus, and IEC 61850 – no add-ons required
- Front Ethernet port for relay configuration
- Large matrix display and 11 user-programmable LEDs
- Digital inputs with programmable thresholds
- User programmable CT inputs for 1 A or 5 A – no variants
- Two ranges of universal power supply
- Six setting groups – store multiple protection settings
- Configurable single line diagram – view protection onscreen
- Type tested to global standards – includes ANSI and UL
- Circuit breaker monitoring – increase circuit breaker lifetime
- Compact draw-out case – minimize maintenance and test time (< 6 minutes Mean Time To Repair)

More standard features mean more applications are covered with fewer configurations

A full range of protection and control applications are covered easily within the Relion product family with only a handful of models and configurations.

Relion delivers the most powerful options

The standard features don't cover your unique application needs? Don't worry, Relion packs some of the most functional and innovative options available:

- Arc fault detection and mitigation (AFD)
- High speed (< 1 ms) outputs
- Power quality – TDD, THD, sags, swells, and interrupts
- Reclosing – available on select feeder protection models
- Unique phase discontinuity (46PD) function
- Underground and overhead cable fault detection (CFD)
- High impedance (HIZ) fault detection
- 1½ and 2 breaker schemes
- Fit, form, function and wire-alike replacement for DPU2000 and DPU2000R – with PCMU and REF615R, respectively

ABB is the best in communication

- Relion's native language is GOOSE (< 10 ms delivery)
- GOOSE vs. MIRRORED BITS®
 - Communicate peer-to-many and many-to-peer with GOOSE vs. peer-to-peer only with MIRRORED BITS
 - Allows 256+ simultaneous signals vs. a max of 16
 - Only GOOSE is brand independent for true device interoperability within the substation network
- Communicate with DNP 3.0/Modbus to SCADA while simultaneously GOOSE messaging between relays
- Achieve superior busbar protection using Relion relays at incoming and outgoing feeders with GOOSE messaging
- Make substantial reductions in hard-wiring needs
- No more proprietary cables, ABB uses off-the-shelf Ethernet

Metering, monitoring, and recording solutions

Relion was designed to provide a comprehensive solution for fault analysis and pre-emptive condition monitoring. See the powerful features ABB built in to lead the industry in saving you time and money:

- Monitor relay, trip circuit, and circuit breaker health
- Auto email disturbance records – save time retrieving data
- Use simplified and/or customized report templates
- Up to 14 analog inputs
- Up to 32 binary inputs – all with programmable thresholds
- Sequence of events recorder – 1024 event record
- Fault recorder – 128 records
- Review COMTRADE format recordings in Wavewin® software with exceptional clarity, yielding true insight

Comprehensive software solution: PCM600

- Program substation logic and configure all Relion relays with a single, easy to use software tool

- Build and debug relay logic quicker and more accurately using PCM600's interactive block diagram configuration when compared to conventional Boolean design
- Animated simulation tool helps to confirm logic design
- Industry unique WebHMI and the local HMI offer "ease of use" for relay applications
- PCM600 provides direct access to relay technical literature
- New connectivity packages and updates are readily available with Update Manager

ABB is a global leader in power, control, and automation

- 120 years of experience – unique, deep-rooted knowledge
- Low, medium, and high voltage experts – from generation to distribution, ABB undoubtedly covers the solution you need
- ABB's global size and range present the best access to knowledge, applications, products, services, and support
- With a long history of success forging synergetic customer relationships, ABB is fully committed to creating and maintaining positive partnership
- Complete ABB solutions provide better results because ABB relays were designed alongside ABB breakers – but Relion is still highly compatible with 3rd party devices

You can depend on ABB

- 12-year "no questions asked" warranty policy
- 24/7 technical support 1-800-222-1946
- Consists of a national team of highly experienced technical personnel for local support
- Comprehensive product training – free and on demand at customer site or at ABB facilities
- MEOST (Multiple Environment Over Stress Testing)
- Relion reliability means fewer product advisories and firmware updates so your operations can run uninterrupted
- ABB's microprocessor relays have > 160 years MTBF
- Over 500,000 Relion relays installed worldwide