

# Improve system reliability and lower grid costs

*Realize the economy of Eaton's Cooper Power series Single-tank Triple-Single (STS) recloser—based on the field-tested NOVA™ recloser technology. Reduce costs with simplified installation, maintenance advantages from durable construction and cost savings from standardized training.*

Improve customer reliability and lower total life-cycle costs:

- Lower installation and maintenance costs
- Lower operating costs
- Improve MAIFI reliability up to 62%
- Improve SAIFI reliability up to 32%

#### Easy installation

The single-tank design reduces installation time:

- More compact
  - Lighter unit
  - Takes less space on the pole

#### Reduced maintenance costs

Based on proven NOVA recloser technology, the NOVA STS recloser provides durable service and reliability:

- Solid cycloaliphatic epoxy
  - No gas, oil or foam to check and maintain
  - No noxious by-products to dispose
- Vacuum interruption with axial-magnetic field for extended contact and mechanical life
- Magnetic-actuator-operated mechanism for reliable operation, year after year

#### Reduce training costs

The NOVA STS recloser is controlled by the Form 6 Triple-Single control:

- Standardize on one control platform for all system reclosers
- Less training needed for familiar control operation

#### Easy operation

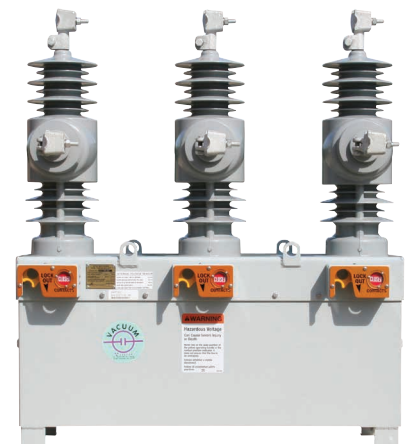
Each phase of the NOVA STS recloser has:

- Dedicated manual trip lever for quick, on-the-spot, single-phase tripping
- Front panel of the control allows the user to open and close any phase independently without any menu navigation

#### Equipment durability

Improved system margin of protection:

- For 38 kV applications, 170 kV BIL reduces the potential for external flashovers



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### Proven reliability

Based on field-tested NOVA recloser technology.

- 15, 27 and 38 kV voltage distribution class
- 12.5 and 16 kA (15 and 27 kV) interrupting current
- 630 or 800 A continuous current
- Three operation modes
- Form 6 Triple-Single control operation

### Operation flexibility

The triple-single design provides the flexibility to adapt to your system and your needs.

The NOVA STS recloser has three operating modes:

- Single-phase trip, single-phase lockout: Each individual phase trips and sequences to lockout independent of each other.
  - This is primarily for residential loads and/or where single-phasing of three-phase loads is protected by other means
- Single-phase trip, three-phase lockout: Each phase senses line current and only the phase corresponding to the faulted phase will trip
  - If any one phase sequences to lockout, the other two phases also open, eliminating permanent single-phasing of three-phase loads
- Three-phase trip, three-phase lockout: All three phases simultaneously trip on an over-current, reclose and sequence together

Dynamic phase tripping is configurable to trip and lockout all three phases in the event a phase-to-phase or three-phase fault is detected on the system.

### Reduce system costs and improve system reliability

The NOVA STS recloser can be programmed to isolate faults on an individual phase basis, even in multiple-fault scenarios.

For example, load-side fuse protection is maintained even if two faults occur on different phases prior to resetting the control.

Single-phase tripping improves reliability indices, including SAIFI, SAIDI, CAIFI and MAIFI:

- Improve MAIFI reliability by up to 62% for single-phase trip/three-phase lockout performance
- Improve SAIFI reliability by up to 32% for single-phase-to-ground, line-to-line and three-phase faults by changing a three-phase/three-phase mode of operation to single-phase/single-phase mode of operation

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