



ENGINEER . IMPLEMENT . MAINTAIN



Vacuum Fault Interrupter
(VFI) Service Entrance Protection for:
Indoor or outdoor transformers
Oil / dry or Cast transformers • 12.5 and / or 25kV
Single Radial, Loop or dual Radial Feeds



The Prime Engineering Solution

The Visual Break Technology is a step forward in safety. With the Visible Break assembly from Prime Engineering and Cooper Power Systems, operators can easily verify an electrical disconnect through the viewing window. The Prime Intelligent Unitized Substation is a complete substation, switch, breaker, transformer, and optional secondary board, all in one small, green, safe unitized substation.

- **Green** – E200 Less flammable fluid. Good for indoor or outdoor applications Due to the higher fire point of the oil;
- **Safety**;
 - » Lower Arc Flash Incident Energy on the secondary, due to the inrush restraint feature in the primary built in breaker;
 - » The primary switch is interlocked with the breaker, preventing the switch contacts from ever making or breaking the transformer current;
 - » The switch and breaker are inside a heavy steel tank and under oil. The heavier metal walls of the transformer will provide better fault containment for the operator than any indoor or outdoor metal enclosed switchgear.
 - » The weather cannot impact the breaker, switch, or transformer.
 - » Visible Break provides isolation as per BCH, CEC, CSA & WCB requirements.
 - » Eliminates single-phasing of three-phase loads and associated Ferro-resonance problems
- **Performance** - C802.1
- E200 fluid combines superior fire resistance (fire point above 300 °C), 'best in class' dielectric fluid, environmentally friendly, clear as water, E200 can be applied in climates reaching temperatures well below -40 °C, and above 30 degrees C.
- **Coordination** - Tripping can approximate either an S & C "E" fuse, a McGraw Edison® "K" or "T" link fuse, or a relay curve for guaranteed coordination to the utility fuses and relays.

Approvals

- cUL - The entire assembly is covered by cUL for Canadian Approval as a listed product.
- Breaker and switch are ANSI C37.60 approved thru 35kV,
- The transformer is approved for construction through ANSI C57.12.00, C57.12.26, C57.12.28, C57.12.9;
- Utility Incoming Cell – Built to BCH standards with insulated grounding balls, cable supports, secured pentabolts restricting access, and cable heights as per BCH standards PG C1-01.01, .02, .03, & C1-02.01, .02.
- Built in accordance with the Safety Authority Directive No: D-E3 0903131;

Maintenance Free

- Cooper Power Systems recommends dissolved gas analysis tests regularly, but no maintenance for the breaker and switch for the life of the unit;
- Resettable fault protection eliminates the need to replace fuses and reduces outage time;

Industry Proven

Cooper Power Products have been a trusted name in the power industry for over 60 years and has 15 years experience with this design solution. Cooper has roughly 1000 unitized substations such as this in service without a single breaker failure to date.

Product Scope

kVA range	250 through 7,500
Primary voltage	Up to 35 kV (150 kV BIL)
Breaker rating	600 A continuous; 12,000 Arms interrupting
Motor operator for SCADA control	(optional)
SCADA accessory	(optional)
FM Approved “Listed and labeled”	(optional)



Custom graphics can be applied to each unit to beautify the Substation in any location. (Images can be picked from www.Dreamstime.com)