

Reduce maintenance and operating costs

Eaton's Cooper Power™ series external visible loadbreak option offers easy access to verify isolation of internal transformer circuitry without exposure to the risk of dangerous arc flash in the low-voltage transformer compartment. Order your next transformer with the external visible loadbreak option for easier and safer transformer operation.

System challenge

Nearly every maintenance procedure requires verification of visible disconnect and grounding in the electrical circuit before working on a piece of mediumvoltage equipment. Every day, operators are exposed to the risk of dangerous arc flash when breaking load inside the transformer compartment. In addition, maintenance on traditional three-phase pad-mounted transformers can be a time-consuming and costly process.

Eaton's solution

With Eaton's Cooper Power series external visible loadbreak option, operators can easily and safely verify an electrical disconnection through an external viewing window.

The external visible loadbreak switch box mounts on the side of the transformer, away from live circuits. The viewing window allows for a clear view of the disconnected switch without having to go into the live cabinet. Staying out of the transformer cabinet reduces the need for wearing additional protective equipment. An authorized individual can simply open the externally operable loadbreak switch to easily verify, through the external viewing window, that the low-voltage bushings have been de-energized.

The on/off/ground feature also allows the end user to internally ground the transformer windings to the tank, using the loadbreak switch

Note: The transformer tank must be externally grounded.

The visible loadbreak assembly includes:

- Large viewing window for quick verification of circuit isolation
- Rotary handle for operating the isolating contacts
- Optional gauges mounted on box, shielded with padlockable cover, for easy access





Note: Covers for switch, viewing window and gauges not shown.

Reduced time in the field

- Simplified workplace safety and operating procedures
- Reduced periodic maintenance expense

Increased safety

- · Disconnect status verification
- Safer loadbreak operation
- Convenient tool that simplifies operating procedures
- Eliminates need to break cable terminations
- · Creates a safer work environment

Typical applications

- · Data centers
- · Mining, oil and gas
- · Manufacturing and industrial
- · Wind and solar
- Military and educational campuses

Product scope

- · Three-phase pad-mounted transformers
- Applications up to 3 MVA
- Voltage class: 15 through 35 kV (150 kV BIL)
- Envirotemp™ FR3™ fluid (indoor/outdoor 1) or mineral oil filled
- Continuous current: 600 A maximum
- Option available with external gauges (shown)
- Overcurrent protection is required in the transformer
- As the Envirotemp FR3 fluid temperature approaches -10 °C, visibility thru the window will diminish. If this occurs, it may be necessary to warm the transformer by energizing until clarity returns.



Legend

- 1. Viewing window
- Liquid temperature
- Pressure relief valve
- Pressure and vacuum
- Liquid level
- Half-inch oil sampler 6.
- 7. Loadbreak switch

Note: Covers for switch, viewing window and gauges not shown.

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