Pad-mounted voltage regulator

COOPER POWER SERIES

Get the functionality of traditional regulators with the convenience of pad-mounting

Eaton's Cooper Power™ series pad-mounted regulators are outdoor, oil-immersed, step-type voltage regulators that provide 10% regulation in thirty-two (32) steps of approximately 5/8% each.

Add a new dimension to underground system planning and design with Eaton's Cooper Power™ series pad-mounted voltage regulators. They give you new freedom to improve safety, reliability and power quality in existing and new underground systems. The regulator helps reduce installation costs and preserves a more aesthetically pleasing environment.

Eaton's single-phase and three-in-one pad-mounted voltage regulators have all the functionality of traditional medium voltage overhead and substation regulators, with the convenience of pad-mounting.

- Improved power quality
- More economical
- Improved system reliability
- Increased safety
- Better aesthetics
- Less maintenance

Pad-mounted look and feel

- Substation designers now have a full complement of product to install a complete, modular pad-mounted substation
  - Construction costs are reduced
  - Land requirements are smaller
  - Physical profile is smaller and more attractive
  - Deadfront design
- No riser-pole location approvals required, often a difficult process in congested or residential areas
- No exposure of cables to weather the added risk of lightning surges
- Quik-Drive™ tap-changer
- CL-7 control for optimum performance
- SCADA communications
- Ease of operation
- ProView® NXG software

Single-phase pad-mounted regulator with CL-7 control

3-in-1 single-phase pad-mounted voltage regulators

This unique-to-the-industry offering incorporates three single-phase regulators contained within a single tank, each utilizing a single multi-phase CL-7 control. The 3-in-1 unit provides an alternative to the installation of three single-phase pad-mounted regulators.

- The 3-in-1 unit provides a smaller footprint–less than one-third the space
- Uses less than two-thirds the oil volume
- Uses a single steel tank which is a significant cost reduction when compared to three single-phase regulators

CL-7 multi-phase control as the 3-in-1 standard

Utilizing the multi-phase control as the Eaton standard for the 3-in-1 regulator allows the user to take full advantage of enhanced Leader/Follower features for unique three-phase coordination not possible from any other medium voltage three-phase regulating device.

- Ganged mode – for regulation of balanced three-phase loads
- True independent mode – for single-phase regulation
- Maximum deviation mode – for three-phase regulation with minor single-phase deviations

Powering Business Worldwide

Ideal for underground applications

- Schools
- Hospitals
- Data centers
- Malls
- Industrial parks
- Mining operations
- ANY other underground application

Standard gauges and provisions for single-phase pad-mounted regulator

Door-mounted CL-7 single-phase control

Low-profile installations

Utility substation placed in the middle of a suburb without the need for fencing and overhead lines

3-in-1 advantage

3-in-1 pad-mounted regulator with pad-mounted switchgear for bypassing to replace traditional overhead style regulators

Think Modular Integrated Transportable Substation (MITS) for convenience and adaptability

MITS installation in place of traditional overhead substation

Bypass switch module option (single-phase only)

As with round-tank regulators, bypassing a pad-mounted voltage regulator is an option in system operation. Installing or removing the pad-mounted regulator from the circuit is accomplished with a stand-alone bypass switch module. This switch module fits inside the secure pad-mounted regulator cabinet during normal operation. When the regulator needs to be removed for normal servicing, the bypass module provides hot stick operable sectionalizing switches to disconnect the regulator from the system without causing interruption to the downstream load.

Single-phase bypass module

Optional features

- 2X control box for applications requiring communications, battery back-up, and monitoring devices
- Bypass switch module (550 A ratings and below, grounded-wye systems only)
- Envirotemp™ FR3™ dielectric fluid
- 41" deep cabinet for applications >200 A
- Side-mounted gauges for NFPA-70E arc flash protection
- Pressure/vacuum gauge
- Pressure/vacuum switches with contacts
- Dial-type thermometer (with or without alarm contacts)
- Liquid level gauge with alarm contacts
- Pressure transducer
- Under-oil shunt arresters

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