EMCP 4.4 Upgrade Kit

For use with generator sets developed with the upgradeable packaging design.

Caterpillar is leading the power generation marketplace with Power Solutions engineered to deliver unmatched flexibility, expandability, reliability, and cost-effectiveness.

**GENERAL DESCRIPTION**

The Cat® EMCP 4.4 offers fully featured power metering, protective relaying and engine and generator controls, diagnostics, and operating information accessible via control panel keypads; diagnostics from the EMCP 4 optional modules can be viewed and reset through the EMCP 4.4.

The EMCP 4.4 upgrade kit is compatible with the Cat generator sets with the upgradeable packaging design for emerging markets. The upgrade will work with both the symmetrical and asymmetrical terminal box designs.

The kit consists of the EMCP 4.4 controller and all associated wiring to easily upgrade the existing EMCP 4.2. Refer to Special Instructions REHS8840 for upgrade parts list, tool list, and upgrade instructions.

**FEATURES**

- Automatic frequency synchronization and voltage matching for paralleling multiple generator sets.
- Real (kW) and reactive (kVA) load sharing via digital and redundant analog communications.
- Load control through multiple load shed/load add steps.
- Automatic cycling of generator sets based on site load.
- An easy to operate 480 x 320 pixel, 5.5 inch (140 mm), white backlit graphical display.
- Display includes text alarm/event descriptions, set points, engine and generator monitoring, and is visible in all lighting conditions.
- Support for multiple languages, including character languages such as Arabic, Chinese, and Japanese.
- Fully featured power metering, protective relaying, engine and generator parameter viewing, and expanded AC metering are all integrated into this controller.
- Real-time clock allows for date and time stamping of diagnostics and events in the control's logs as well as service maintenance reminders based on engine operating hours or calendar days.
- Status event log that displays a chronological listing of events to aid in troubleshooting.
- Modbus RTU communications.
- High speed Modbus TCP/IP communication interface for remote monitoring by building SCADA systems.
- Reduced power mode offers a low power state to minimize battery power requirements.
- Three levels of security allow for configurable operator privileges.
- Ability to expand functionality through local and remote annunciator modules, I/O expansion modules, and generator temperature monitoring.

For additional information on the EMCP 4.4 controller, refer to LEHE0135.