

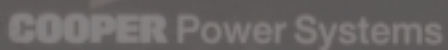
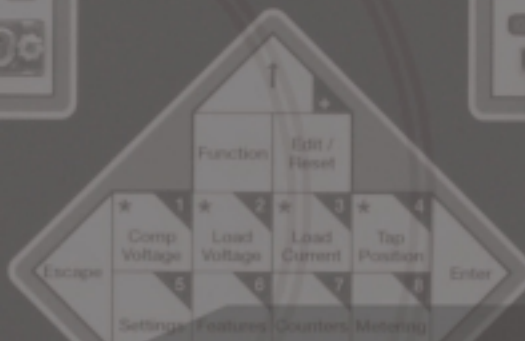
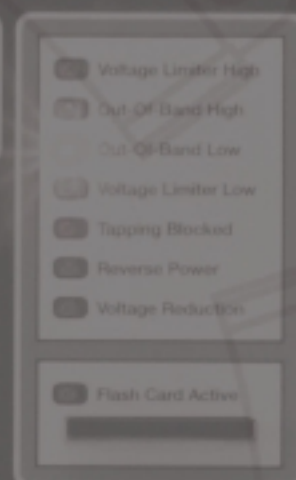
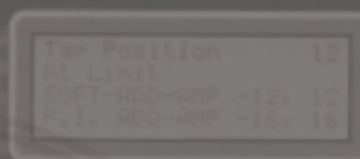
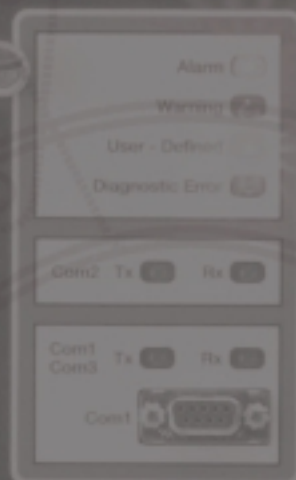
CL-6A Regulator Control and Quik-Drive™ Tap-Changer System



Innovative Changes

333 Contact Duty
Cycle Monitor
36.492 %

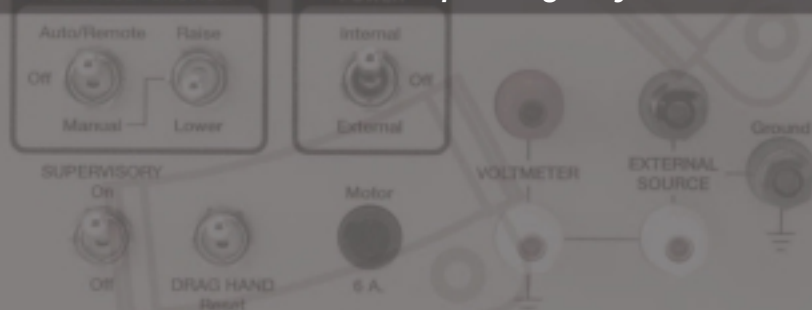



CL-6A
Regulator Control


CL-6A Regulator Control and Quik-Drive™ Tap-Changer System

For decades we've led the industry with new and innovative ways of supplying our customers with reliable products and superior solutions. Our commitment to quality design methodologies, best manufacturing practices, and real-life testing means you can trust new and innovative technology from Cooper Power Systems.

So you shouldn't be surprised that we're leading industry advances—yet again—with the CL-6A Regulator Control and Quik-Drive™ Tap-Changer System.



Operational Efficiency Makes Cents

Prediction Increases Proceeds

Save time and money, while improving maintenance crew efficiency and scheduling, with the exclusive **Duty Cycle Monitor** predictive maintenance feature.

Leading the industry, the CL-6A Regulator Control and Quik-Drive System allows you to collect data to predict and accurately measure the tap-changer contact wear.

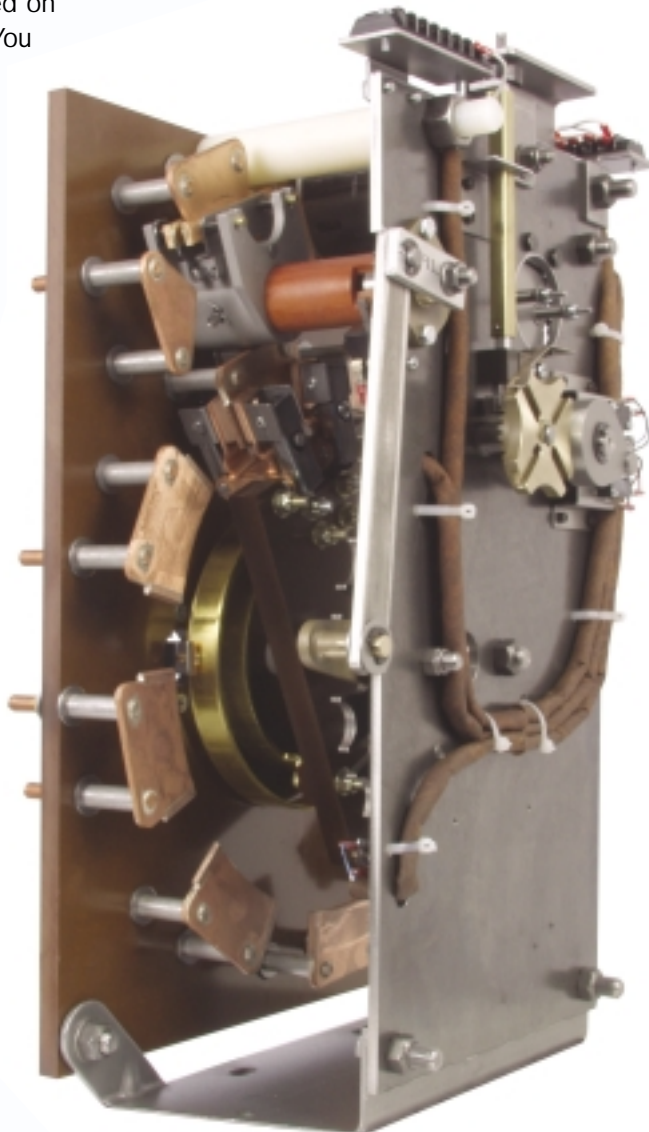
Now you can schedule maintenance based on actual need rather than calendar cycles. You can properly align and better plan your resources. Imagine, a maintenance interval based upon real contact life data rather than guesswork—don't be caught by unplanned outages.

Profit from Preventive Maintenance

The CL-6A Regulator Control in combination with the Quik-Drive Tap-Changer also allows for **Preventive Maintenance Tapping (PMT™)**. To minimize the effects of coking on tap-changer contacts and provide a periodic operational check, you no longer need to send a technician to the voltage regulator. The two modes of the PMT feature tap automatically, using criteria you establish, such as when load is low—at your convenience, day or night.

Automation Payback

The CL-6A Regulator Control is easily retrofittable into existing digital and discrete SCADA systems, minimizing your automation costs. Additionally, the CL-6A Regulator Control is able to emulate CL-5 Series controls. Two digital channels with the ability to communicate simultaneously using different protocols (DNP3 and 2179) are also available on the CL-6A Regulator Control, increasing user-flexibility and application design.



Pertinent Performance

Find Confidence in Metering-PLUS™

Now, view commonly accessed parameters with the simple-to-use Metering-PLUS feature. This allows for groups of associated settings to be displayed on one screen—with a simple touch of the key-pad—for rapid interrogation and troubleshooting.

For front panel interrogation of the common regulator functions, this system quickly connects the operator to the performance information on the distribution system and regulator status, allowing for easy access and simplifying problem solving.

Eliminate the frustration of "hunt and search" scrolling through various screens and keypads to find and record basic data. The Metering-PLUS feature provides the confidence of knowing the correct display is selected every time.

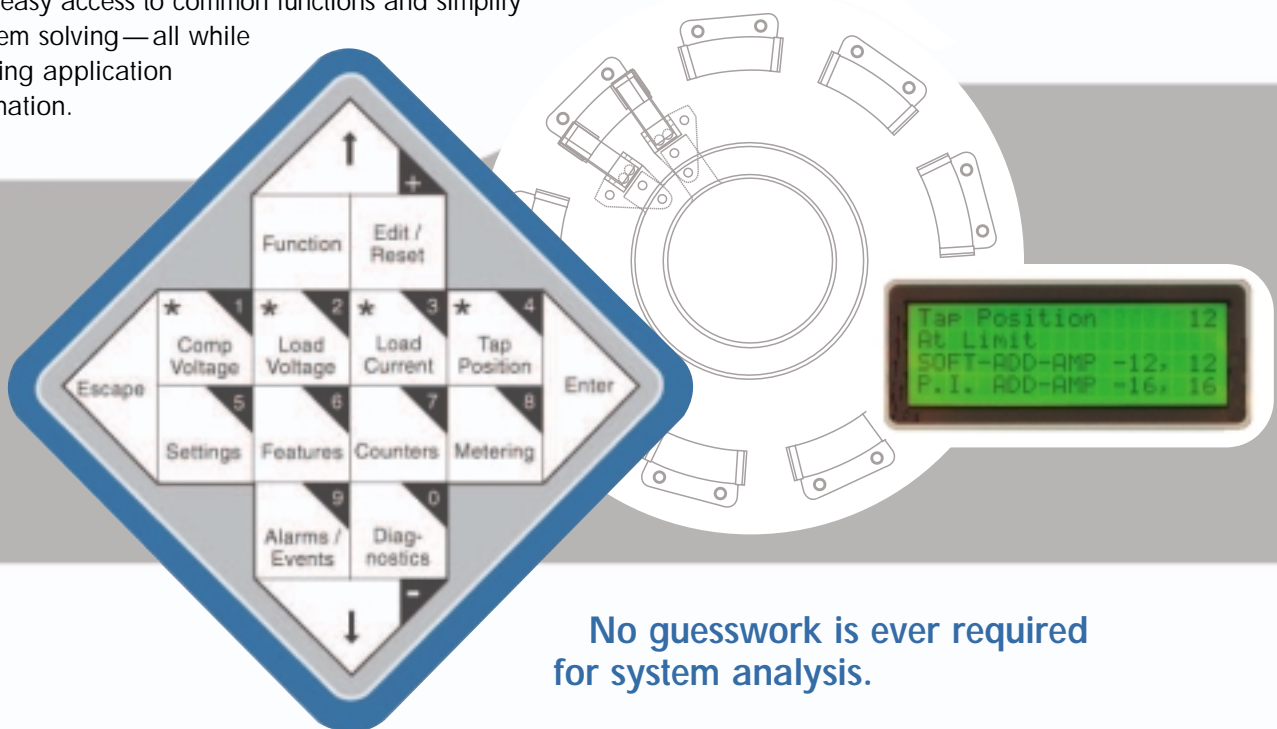
Gain easy access to common functions and simplify problem solving—all while verifying application information.

The Metering-PLUS feature is designed to coordinate with the voltage limiter, out-of-band, reverse power, tapping blocked, and voltage reduction status indicators.

TIME-ON-TAP™ Simplified System Planning

Easily expand your distribution system knowledge and monitor regulator performance with the new TIME-ON-TAP capability. The actual time the contacts are on each tap position is recorded and analyzed using Cooper™ Control Interface (CCI™) software.

Now, unusual voltage regulation patterns are easily detected and corrected, reducing extensive voltage swings, reducing system losses, and increasing your revenue.



No guesswork is ever required
for system analysis.

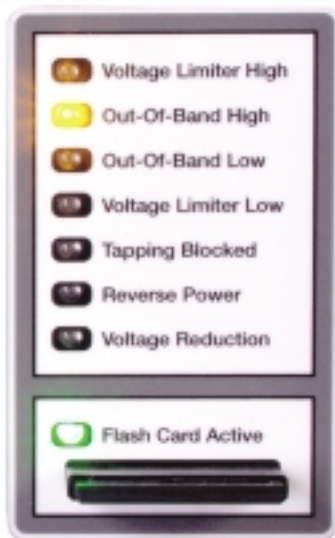
Instant system knowledge is easily accessible via individual front
panel keys with direct links to multiple parameters.

Sensible Design

Unparalleled Speed

The CL-6A Regulator Control was designed with speed in mind—speed of learning, programming, and data transfer—all facilitated by the exclusive flash card technology. Lower installation and operation costs with the ability to download data, upload settings, and transfer settings from one control to another—and better yet, *shrink a standard 2-minute download to seconds*—saving time and money.

Store programming and data for hundreds of controls on one memory card for easy retrieval, data storage, and record documentation—all at your fingertips.



Best of all, the flash card uses One-Step Configuration for setting all your controls, all at a fraction of the cost and effort of connecting via a PC or front panel programming—saving significant time at a substation.

Configurable Alarms and Events with LED Indicators

Chose which occurrences will trigger an Alarm, Event, Recorder, or a Profiler snapshot. You can even program an alarm as input to the Programmable I/O feature, initiating actions such as a contact closure or a digital SCADA message—allowing increased flexibility and system control.



Practical Display Options

Communication is essential. The backlit, 4 X 20 LCD screen, with user-adjustable contrast, provides easy and immediate viewing of status, settings, metering, and alarms—*day or night*.

User-selectable display options include four languages and three date and time formats. Languages include English, Spanish, French, and Portuguese, making it easier to read, understand, and interpret.

Utilities around the world can eliminate special labeling, coding, and additional training costs to easily configure and monitor the regulator.

Data Profiler and Histograms

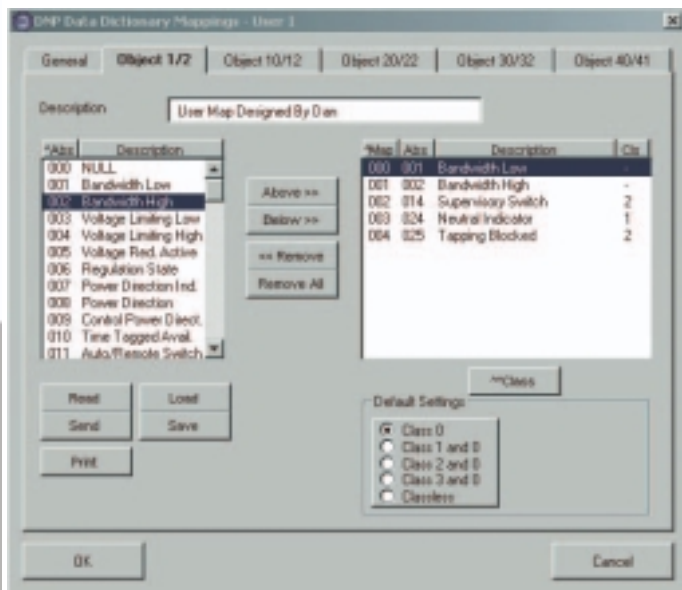
The data profiler and histogram features, both user-configured, provide interval sampling and graphic displays of critical analog data, including voltage, current, and power data.

Customized Communication

Cooper™ Control Interface (CCI™) Software

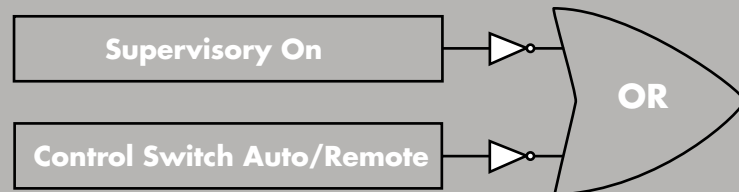
This Windows®-based configuration software package is an advanced tool to harness the power in the CL-6A Regulator Control and Quik-Drive Tap-Changer. Both the front data port and serial communication ports can quickly interface with CCI software.

Easily create control settings, upload settings, download readings, provide output of settings and readings, reset the metering, block automatic operation, display Histograms of metering data, and operate the tap-changer.



Programmable I/O

Extend operation capabilities to adapt for specific applications, another opportunity to improve power quality and customize performance with the CL-6A Regulator Control.



CCI Software now includes an easy set-up screen and expanded, user-customized capabilities for easier, quicker installation with additional functionality.

User-defined equations combining inputs and outputs can generate control actions, communications status point changes, or discrete contact closures, as outputs. Using logical AND and OR operators, programmable I/O is a powerful tool.

Keeping It Simple

THE CHALLENGE: Designing a new, sophisticated control for a large audience that is simple and familiar to all—yet provides one intelligent solution.

THE SOLUTION: Keeping it simple means providing the familiar numeric keypad and function code access of prior Cooper controls and providing a logical three-tiered menu capability. Menu short-cut keys and wrap-around scrolling further make parameter access simple. And, Status LEDs and Metering-PLUS short-cut keys make operation checks easy to do.

Clarity is provided to all users with the full-word parameter descriptions (in any of four languages) displayed on the backlit LCD.

But wait—we didn't stop there. We also made sure that the advanced features would not compromise the simplicity of the control. All keypad-programmable advanced features are located in one section of the menu, and no programming is necessary unless the feature is desired.

So what does this mean to you?

First of all, it means we are listening to you—as we continue with improvements to our designs. It also means lower training costs for your linemen, quicker installation, and easier set-up and control programming.

It means we are committed to developing stronger relationships, learning about your challenges and successes, and sharing in product and service analysis.

And what we have learned in this process—input from our customers and technology advancements drive improvements into products that improve user-efficiency and lower costs, while providing pertinent, sensible, customizable, and yet simple solutions.



Our commitment to innovative changes means you can trust new technology from Cooper Power Systems.

Unparalleled Quality, Superior Service

We have the team to meet your needs. Our regionally located apparatus and application engineers have the technical expertise to understand your challenges. Our design engineers have the experience and access to advanced facilities, such as the Thomas A. Edison Technical Center, to develop practical solutions. And our customer support, as always, will continue beyond the sale, through the life of the product.

For more information, visit us at: www.cooperpower.com

Intelligent Solutions. Endless Possibilities.

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The logo for Cooper Power Systems features a red parallelogram icon above the company name. The word "COOPER" is in a bold, black, sans-serif font, and "Power Systems" is in a regular weight of the same font.

COOPER Power Systems

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