

Only One Control — for Easy, Cost-Efficient Control Replacement

The Control Replacement Assembly (CRA) is designed by Cooper Power Systems (Cooper) to be compatible with every U.S. manufactured single-phase voltage regulator* regardless of size or capacity made in the last 40 years allowing you to standardize on one control the same control provided on all new Cooper Voltage Regulators.

One Complete Package

The Cooper CRA comes complete with the latest control, enclosure, mounting brackets, hardware, and optional accessories, in addition to an installation and operations manual. Plus we've added a handy Quik-Study card, outlining common operations and functions, with every unit.

Simplified Installation

Well-identified terminals and step-by-step instructions guide an experienced technician through a retrofit in less than an hour—successive installations take only 15-30 minutes—in the shop, in a substation, or even on a pole! And since the work area is now confined to the control end of the control cable—there is no need to untank the regulator.

Universal mounting brackets make installation of the control replacement assembly quick and

easy. And to simplify it even more—we pre-tap the holes for mounting accessories.

No adapter panels, fasteners, cords, or hinge adapters are needed and there are *no holes* to drill.

For Unmatched Versatility — There Is Only One

The CRA retrofits GE[®], Siemens[®], and Allis-Chalmers[®] regulators — quickly, easily, and reliably. So whether you use one or all of these brands, you'll find the CRA is the most adaptable, functional, and easy to maintain control available.

- * Unless noted as optional, the following signals are necessary for proper operation of the CRA. For full functionality of the control, all the signals must be utilized:
- · Control or load-side voltage
- Operations counter
- · Motor raise and lower circuits
- Common or ground
- CT current signal (optional)
- Neutral light (optional)
- Source-side voltage signal (optional)
- Drag Hand reset (optional)

Label	G	R	L	OC	DHR
Siemens	E	J	K	U10	U11
G. E.	10	27	28	30	29
C. P. S.	G	RAISE	LOWER	OPCNTR	DHR

The easy-to-read label and new modular DIN-rail provide for simplified installation and easy-to-access connections.

Advanced Regulation, Multiple Communication Options, Convenient Adaptability — All From One Control

One control provides significant benefits allowing you to utilize enhancements to control features such as reverse power flow, reduce operating and programming training, provide consistent control programming, and reduce overall inventory—saving you time and money.

Quickly read, write, and transfer data with the new **flash card** capability of the CL-6A control panel. For standard or custom configurations, firmware revisions, and for metering data, one flash card has the memory to store hundreds of control files.

The **Metering-PLUS**[™] one-touch queries provide full-text displays to speed trouble-shooting.

Easily accessed through the scrollable and hotkeyed numeric touch-pad, function codes and a nested menu support basic front-panel programming in just minutes.

Two standard, **resident protocols**, DNP3 and 2179, are user-selectable, configurable, and field-upgradeable. A SCADA relay option enables remote tap-changer control for analog SCADA operations. Also available are four standard Form C contact outputs and four contact inputs for discrete status and control of your regulator.

Customized Communication

The Cooper[™] Control Interface (CCI[™]) software lets users communicate settings and readings via PC, through permanent communications channels or a temporary front-panel RS232 connection. You can even reset metering, block automatic operation, and operate the tap-changer with the Windows[®]-based CCI[™] software.

Accessorize with One Control

Order a CRA to fit your specific application needs. Standard features and room for up to three accessories are accommodated in our Short Box. The optional Long Box provides additional room to expand. Factory-installed or field-retrofitted accessories include a communications card interface, a SCADA relay, and a thermostatically controlled heater.



Standard CRA back panel

Fully Compatible—Backward and Forward

The CL-6A Regulator Control is designed to be used with every U.S. manufactured regulator, including the Cooper regulator with the Quik-Drive[™] Tap-Changer. In fact, the CRA is designed to be backward and forward compatible with any of the Cooper CL series control panels, from the CL-2A to—our newest release—the CL-6A.

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.

Local Service Near You

Cooper Power Systems Authorized Service Centers are ready to offer quick and reliable maintenance and repairs. These centers provide prompt support using only factory-trained, qualified technicians to meet all of your needs.

Please visit www.cooperpower.com/servicecenters to locate an Authorized Service Center near you.

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

Intelligent Solutions. Endless Possibilities.

© 2004 Cooper Power Systems or its affiliates. Cooper[®] Control Interface, CCI[®], Metering-PLUS[®], and Quik-Drive[®] are trademarks of Cooper Power Systems or its affiliates. GE[®] is a registered trademark of General Electric Company. Siemens[®] is a registered trademark of Siemens Aktiengesellschaft. Allis-Chalmers[®] is a registered trademark of Allis-Chalmers Corporation. Microsoft[®] Windows[®] is either a registered trademark of trademark of Microsoft Corporation in the United States and/or other countries.



1045 Hickory Street Pewaukee, WI 53072 USA www.cooperpower.com

Bulletin 04030 · August 2004 · New Issue