

Guardmaster 440C-CR30

Description

The new Allen-Bradley Guardmaster 440C-CR30 is a flexible, cost-effective and easy-to-use software-configurable safety relay ideal for applications requiring four to ten safety circuits and control of up to five zones. The Guardmaster 440C-CR30 is configured through Connected Components Workbench™ (CCW) software—the same programming environment used by the Micro800™ family of controllers, PanelView™ Component HMIs and PowerFlex drives—for simple and seamless programming of standard and safety logic in separate devices. The distinct graphical user interface and drag-and-drop capabilities of CCW help guide users through a simple process of selecting certified safety function blocks for the 440C-CR30. This means users can create, control, and monitor a safety system in the same software environment as their standard control, resulting in increased productivity and reduced programming time.



An embedded Modbus interface allows the Guardmaster 440C-CR30 to easily communicate diagnostic data to an Allen-Bradley Micro800, PanelView Component or CompactLogix™. By leveraging the features of CCW and the embedded communication capabilities of the Guardmaster 440C-CR30, users can monitor, troubleshoot, and modify their applications quickly and easily for increased uptime. Five status and 16 user configurable LEDs on the Guardmaster 440C-CR30 relay's faceplate provide local diagnostics to further aid in status reporting and troubleshooting.

With 22 on-board safety I/O points, including six configurable I/O, the Guardmaster 440C-CR30 is a flexible solution for applications requiring multiple safety zones. Without increasing the footprint, the 440C-CR30 can also be expanded with two standard Micro800 plug-in modules to support 16 additional standard I/O points, saving valuable safety I/O points for your safety system.

Features

- PLe, SIL3 per EN ISO 13849-1, IEC 62061
- Twenty-two embedded Safety I/O
- · Embedded Modbus communicates with Allen-Bradley Connected Components for efficient monitoring and troubleshooting
- Two plug-in ports supporting Micro800 (2080) plug-ins
- Quick and easy configuration via Connected Components Workbench—a single software environment for standard and safety control
- Predefined drag-and-drop safety function blocks simplify programming
- · Advanced diagnostics enable increased productivity and enhanced safety
- Compact design optimizes panel space
- Bidirectional RS232, 2400, 4800, 9600, 19200 baud

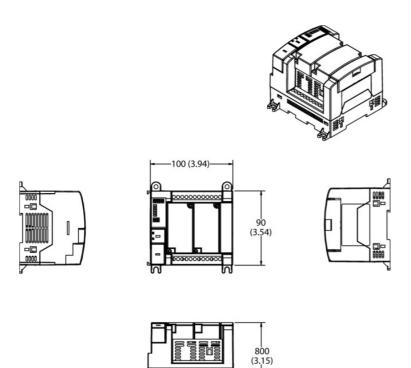
Specifications

| Cat. No. | Description |
|-----------------|--|
| 440C-CR30-22BBB | Guardmaster Software Configurable Safety Relay |

| Safety Ratings | |
|--|--|
| Safety Classification | SIL CL3 per EN IEC 62061, PLe per ISO 13849-1 |
| Certifications | cULus Listed and CE Marked for all applicable directives |
| General | |
| Number of I/O | 22 |
| Embedded Communication | USB, R232 |
| Power Supply | 20.426.4V DC UL Class 1, Div 2, PELV/SELV |
| Power Consumption | 5.28 W |
| I/O Rating | Input 24V DC, 4 mA Output 24V DC, Class 2, 0.5 A per point |
| Environmental | |
| Operating Temperature [C (F)] | -5+55° (+23+131°) |
| Relative Humidity | 90% |
| Vibration | 1055 Hz, 0.35 mm (0.014 in.) |
| Shock | 10 g, 16 ms |
| Pollution Degree | 2 |
| Inputs | |
| Number of Inputs | Up to 18 embedded 12 dedicated inputs 6 configurable as safety inputs for N.C., OSSD or N.O., test output, safety output |
| Off-state Voltage, max. | 5V DC |
| Off-state Current, max. | 2 mA DC |
| On-state Voltage, max. | 26.4V DC |
| On-state Voltage, min. | 11V DC |
| On-state Current, nominal | 11 mA @ 24V DC |
| Outputs | |
| Number of Outputs | Up to 10 |
| Output Signals | Standard, OSSD and Single-Wire Safety |
| Continuous output current | 0.5 A |
| Aggregate current of outputs per device (max.) | 5 A |
| Surge Output Current | 1 A |
| Surge Output Current Duration | 5 ms |
| Off-State Leakage Current (max.) | < 0.1 mA |

Approximate Dimensions

 $\ \, \hbox{Dimensions are shown in mm (in.). Dimensions are not intended to be used for installation purposes. }$



Accessories

Communication Cables

| Description | Length | Cat. No. |
|----------------------------------|----------------|---------------|
| 8-pin Mini DIN to 8-pin Mini DIN | 0.5 m (1.5 ft) | 1761-CBL-AM00 |
| | 2 m (6.5 ft) | 1761-CBL-HM02 |
| 8-pin Mini DIN to 9-pin D Shell | 0.5 m (1.5 ft) | 1761-CBL-AP00 |
| | 2 m (6.5 ft) | 1761-CBL-PM02 |

Plug-In Modules

| Description | on | Cat. No. |
|--------------|------------------------------------|-------------|
| © Mahaday 11 | 8-point digital combination module | 2080-IQ4OB4 |

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