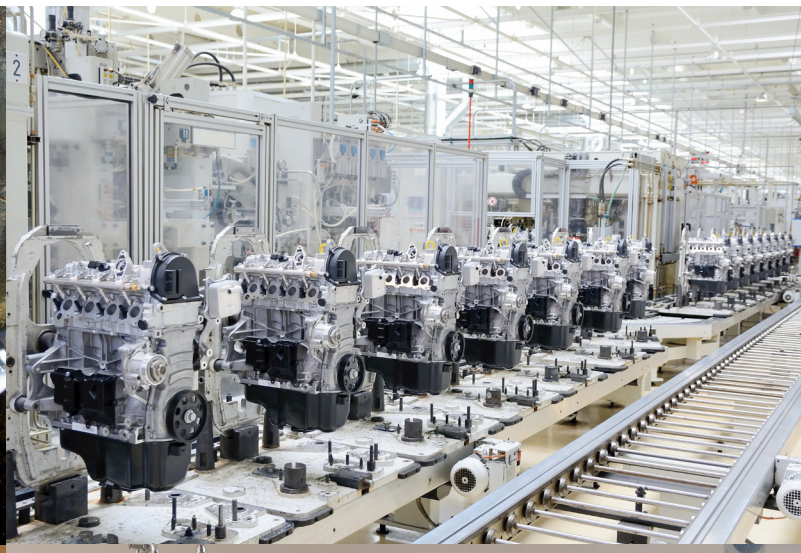
Allen-Bradley

Micro Control

Scale Your Control and Connect All Your Components at Ease



LISTEN.
THINK.
SOLVE.®

Allen-Bradley • Rockwell Software

Rockwell Automation

Overview

As market needs of industry and application requirements evolve, and as available technology improves, we have enhanced our Micro Control capabilities. Designed for large standalone machine applications, our Micro Control system offers a cost-effective and customizable solution for machine and equipment builders. It helps to reduce development time and improve productivity with easy network connectivity at the convenience of one programming software.

The core elements supporting the solution are micro controllers, drives, operator interface, safety, motion and one application software.

Improve Machine Performance with Customizable and Cost-effective Products

- Customize your controller to exactly what you need with Micro800® plug-in and expansion I/O modules
- Remote monitor at your convenience with PanelView™ 800 graphic terminals through Virtual Network Computing (VNC) server
- Optimize panel space with PowerFlex® AC drives which offer innovative, modular design that supports fast and easy installation and configuration

Simplify Standalone Machine Development with One Programming Software

- Convenience of Connected Components Workbench™ software for all your configuration, programming, and visualization
- Scalability and reusability with Logix Theme and code share between application software
- Save time through the support for direct reference of Micro800 variables when creating HMI tags

Ship Your Machine Anywhere in the World

- Products comply with the latest global standards
- Software available in many languages
- Rockwell Automation offers support across the globe

Watch Video

Micro Control

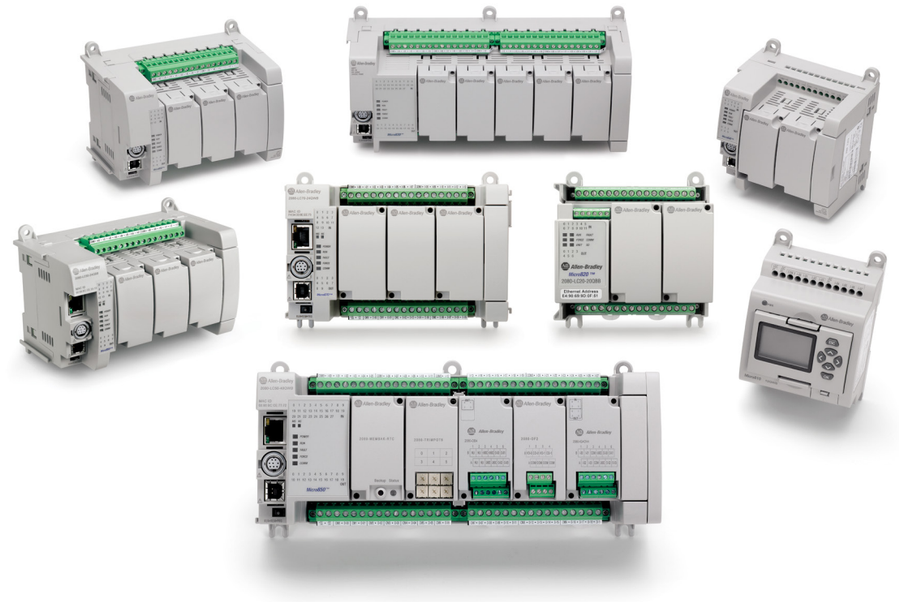
Range of Products

Micro800 Programmable Logic Controllers (PLCs)

Each controller is optimized for cost and performance for specific applications with customization and flexibility in mind.

The Allen-Bradley® Micro800 PLC family, together with the Connected Components Workbench software, sets a new global standard for ease of use, while providing enough control capability to match your application requirements. With a wide range of network protocols, finding the right controller to fit your communication needs is easy. TouchProbe provides a cost-effective method for achieving exact position registration.

With greater flexibility in mind, Micro800 plug-in and expansion I/O modules extend the functionality of embedded I/O without increasing the footprint of your controller.



Micro810® Controller
Smart Relay

Micro810

Micro820® Controller
Ethernet Enabled for Remote Automation

Micro820

Micro830® Controller
Flexible with Simple Motion

Micro830

Micro850® Controller
Expandable with Ethernet

Micro850

Micro870® Controller
Scalable with Ethernet

Micro870

PanelView 800 Graphic Terminals

Optimized compatibility with Micro800 controllers and extended connectivity to CompactLogix™ 5370 controllers, these graphic terminals offer built-in Ethernet and Serial communication ports to support a variety of protocols.

The PanelView 800 family from Rockwell Automation® provides a compact space-saving design with high-speed processor and high-resolution touch screen display with 65K colors. Preferred integration with Allen-Bradley micro controllers offers you an ideal control and visualization solution for a wide variety of applications.

PanelView 800 offers the fundamental features that you need in a full line of displays in 4 inch, 7 inch, and 10 inch sizes. Fast and easy installation with quick lever clips.

Product Details

PowerFlex AC Drives

Designed for ease of use, this general-purpose class of drives provides a compact package to optimize panel space and application versatility.

PowerFlex Compact-class AC drives deliver a powerful performance and flexible control solution for standalone machine level applications or simple system integration. Supports easy, simultaneous installation and software configuration with its innovative and modular design.

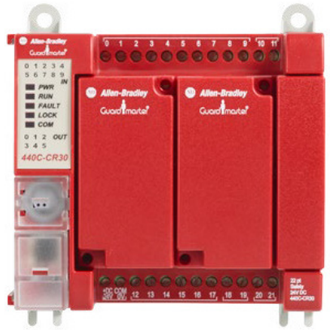
PowerFlex 4M | PowerFlex 525
PowerFlex 523 | PowerFlex 755T

GuardShield POC Safety Light Curtains

The enhanced GuardShield™ 450L-E light curtain system which has extended features and functionality from the 450L-B, is ideal for special applications requiring advanced functions such as muting and blanking.

The GuardShield Point of Operation Control (POC) safety light curtains are designed based on separate transmitter and receiver units. Its patented technology allows each transceiver to be used as a transmitter or receiver via an innovative plug-in module. The 450L-B is the basic model with on/off functionality while the advanced 450L-E model extends those features and functionality to include integrated laser alignment and cascading. It can be set up easily through DIP switches on dedicated plug-in modules.

Product Details



Guardmaster 440C-CR30 Software Configurable Safety Relay

This relay is ideal for applications requiring as many as ten dual-channel safety circuits and controlling as many as five output zones.

The Guardmaster® 440C-CR30 software configurable safety relay is flexible, cost-effective, and easy to use, with rapid configuration via certified safety function blocks. The complete integration with Allen-Bradley Logix controllers allows the relay to be configured in one software environment for standard and safety control, using the Studio 5000 Logix Designer® application or Connected Components Workbench software.

Product Details

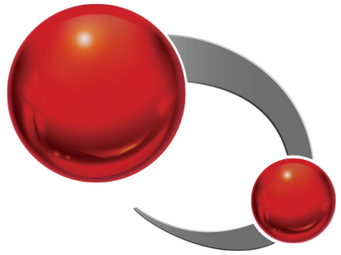
Kinetix 3 Component Servo Drives

The Kinetix® 3 drives are ideally suited for low-axis count machines and offer models with output power as low as 50 Watts.

Kinetix 3 component servo drives allow the user to tailor the axes in their machine to the actual power requirement, which will minimize system size and cost. The drives also help to provide easier configuration, startup and commissioning by allowing standardization on one communication network.

Product Details

Connected Components Workbench Software



Simplify Standalone Machine Development

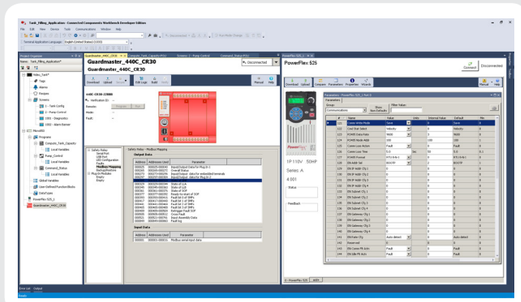
The Connected Components Workbench software provides device configuration, controller programming, and integration with Human Machine Interface (HMI) editor, which reduces initial machine development time and cost.

Overview

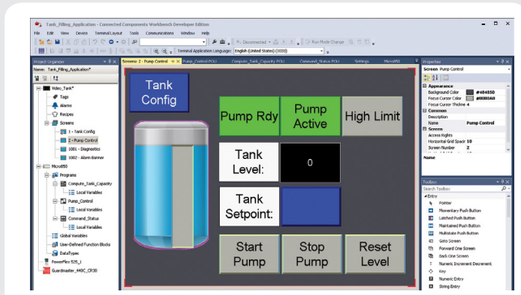
Minimize Start-up Time at Ease

- Configure multiple devices for standalone machines with one software
- Connect to devices with ease through various serial and network options
- Simplify programming process with sample code, user-defined functions (UDFs) and user-defined function blocks (UDFBs)
- Scale controllers and applications with converter tool and copy/paste feature

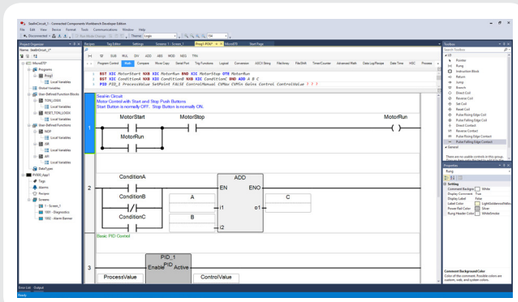
Configure



Visualize

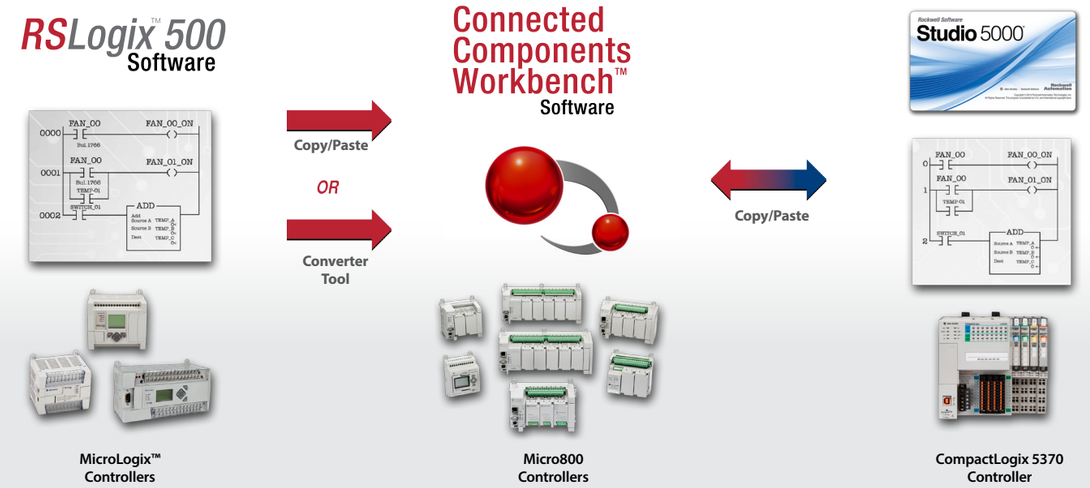


Program



Connected Components Workbench Software

Scalability and Reusability At-A-Glance



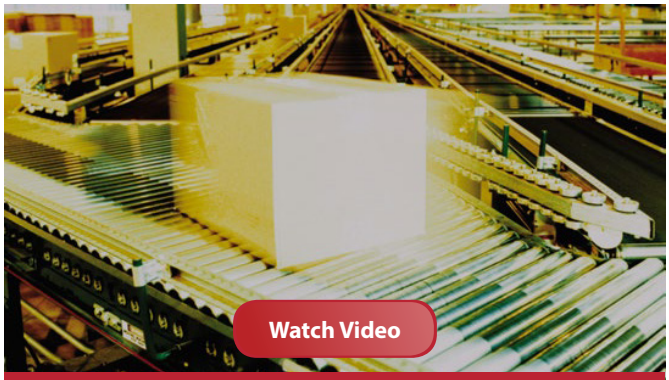
Scalability and reusability features are available from Version 11 Feature Pack onwards

Scalability and Reusability with Logix Theme and Code Share between Application Software

- Program in your preferred environment by switching instruction names between default IEC and Logix themes
- Shorten Micro800 controller programming time by entering and modifying ladder rungs quickly using similar workflows as RSLogix 500® and Studio 5000 Logix Designer software
- Search for and add instructions with ease using Instruction Toolbar
- Reuse your RSLogix 500 code within Connected Components Workbench program using copy and paste or converter tool
- Share code between Connected Components Workbench and Studio 5000 Logix Designer software using copy and paste

Key Applications with Micro Control

Packaging



Material Handling

Converting, Print, Web

Process Skid

Manufacturing & Assembly

Energy

End users want equipment delivered quickly and at a reasonable price. They rely on their machine and equipment builders to deliver high-performing, flexible machines that offer machine-to-machine communication to easily integrate into a facility while offering the business agility to react to changing market demands.

To respond, machine builders must evaluate strategic ways to reduce costs and time to market while innovating to stay ahead of the competition.

Rockwell Automation offers standardized, scalable control, and information solutions allowing machine builders to scale their equipment designs quickly to meet changing requirements. These innovative automation systems packaged with design tools, support machine builders at every stage of their machinery lifecycle to lower the cost to design, develop, deliver and engage with their customers.

Resources

Videos

Micro Control

Micro800 Controllers

Connected Components Workbench Software

PanelView 800 Graphic Terminals

PowerFlex Drives

Safety Components

Applications

Literature

MicroLogix 1100 and MicroLogix 1200 Controllers to Micro870 Controller Migration Profile

Connected Components Workbench Software Quick Tips

Connected Components Workbench Software Guide for Studio 5000 Logix Designer Software Users

Essential Components Selection Guide

Tools

Sample Code Library

Integrated Architecture® Builder

Visit rok.auto/microcontrol

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