

Power your production with FLEXLINE 3500 motor control centers

Advance your manufacturing with greater
flexibility, visibility and plant safety



Allen-Bradley

by ROCKWELL AUTOMATION

Flexible. Smarter. Safer. And much more

The world you operate in is changing. And so is the technology that keeps it running.

But one thing is certain – greater visibility, automation and control of your operation gives you an advantage.

Get ahead with FLEXLINE™ motor control centers

We can help you unlock data, connect systems and increase productivity with our broad product and service portfolio, integration expertise and global partner network.

Built around your needs, FLEXLINE 3500 low voltage motor control centers (MCCs) can help:

- ✓ Increase speed to market
- ✓ Reduce energy use
- ✓ Increase uptime and production throughput
- ✓ Deliver critical production and asset data
- ✓ Reduce maintenance time and expense
- ✓ Improve plant safety

Increasing productivity is just the start

If you want to integrate motor control, power distribution and switchgear needs into one centralized package, FLEXLINE 3500 MCCs are engineered for demanding industries and applications – and meet stringent IEC 61439-1 & 2 standards. Plus, you can design your motor control centers to fit specific applications and plant floor needs.

FLEXLINE 3500 MCCs deliver unparalleled flexibility to scale with reliable motor control components, smart operating systems, real-time data visibility and safety features that increase peace of mind.

Moreover, FLEXLINE 3500 MCCs are available around the globe. And they come with industry-leading support. There is no smarter motor control solution that can meet your needs.



Ask any manufacturer about their top challenges

Most likely, they'll say boost productivity from existing operations, reduce energy consumption and improve safety. Plus, increase uptime and access data to make better decisions.

FLEXLINE motor control centers can help meet your challenges.

Built with dependable Allen-Bradley® components, FLEXLINE MCCs are designed to improve your production. Starting with design and installation through operation and maintenance.

And they're ready for your most demanding motor control, power distribution and switchgear needs, meeting IEC 61439-1 & 2.

Flexibility

FLEXLINE MCCs offer unmatched design versatility to meet your application requirements with flexible motor control capabilities. You can build the MCC to meet your current plant floor requirements, and scale it in the future for new production requirements.

Smart technology

The Allen-Bradley IntelliCENTER® technology provides a window into your motor control center with real-time diagnostics. Having operation and process control data at your fingertips can make the difference between annual profit and loss.

Enhanced safety


Beyond meeting IEC safety standards, the MCC is designed with first-level protection to reduce electrical exposure. Plus, 100% remote monitoring and troubleshooting are available.

Reliability

Our MCCs are designed to maximize uptime. Rockwell Automation is a global supplier of integrated automation hardware, software and lifecycle solutions. You can count on our experience – building smart motor control solutions for more than 100 years.

Sustainability

Smart MCC components can increase motor control energy efficiency and reduce power consumption across your operations. Allen-Bradley Variable Frequency Drives (VFDs) deliver precise control over motor speed, reducing your energy use and carbon footprint.



// The new plant **delivers more than twice the output** after adding smart drives, motor control centers and real-time process visibility to larger production machinery."

– Global paper manufacturer

Flexible and scalable solutions designed for tomorrow

Turn your plant into a strategic advantage.

The design possibilities of the modular FLEXLINE 3500 motor control center are unparalleled. You can turn increasingly complex electrical systems into a modular enclosure that provides simple solutions. The structure can be designed to fit into existing floor space to meet your current manufacturing, motor control and electrical distribution needs – and can scale or pivot quickly to meet your future production requirements.

Compact footprint conserves floor space

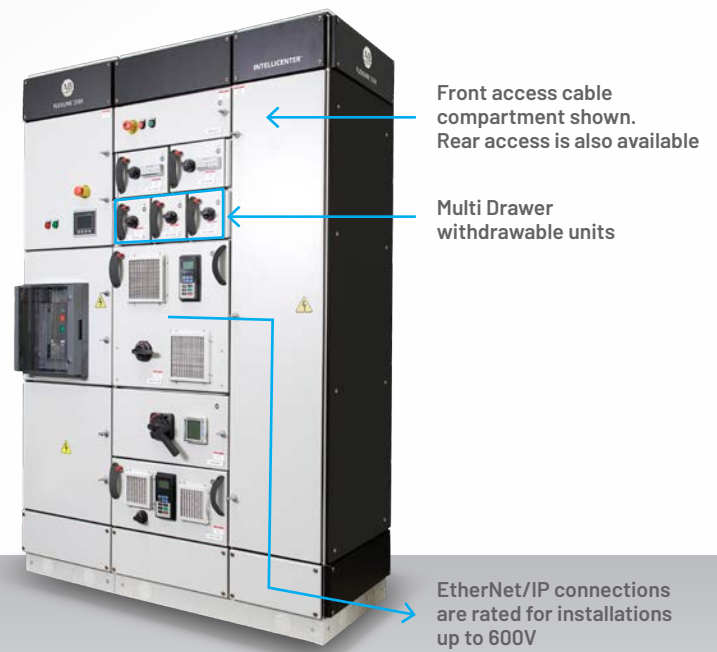
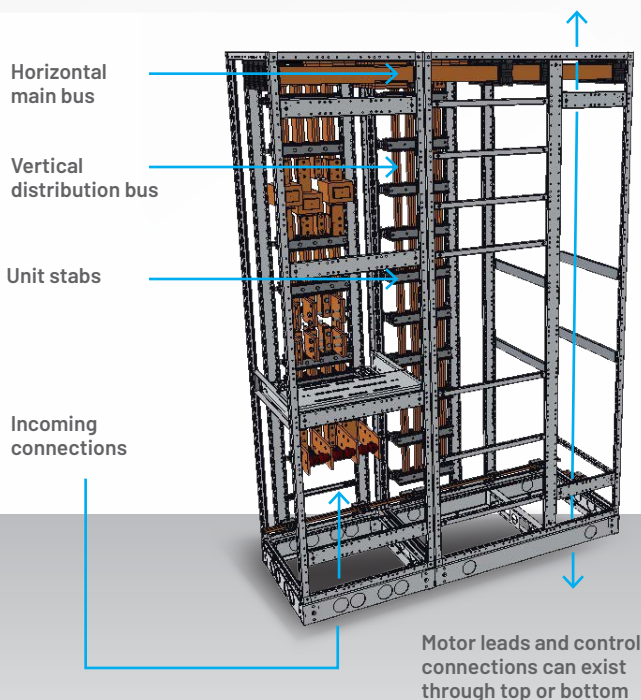
- More control units in a column
- Up to three Multi Drawer units across a column and 27 drawers per column
- Complete distribution solutions integrate easily into existing motor control or switchgear
- Efficient design maximizes space utilization without compromising functionality

Many options for unit configurations, and line and load wiring

- Select front or rear cable access to meet floor space needs
- Multiple wireway sizes reduce the lineup size
- Fixed or withdrawable units
- Flexible motor control capabilities
- Allen-Bradley technology controls small or large low voltage motors, from 0.06...270 kW

Scale to meet future growth

- Change motor control technology, such as from direct on-line to variable frequency drive, with minimal impact
- Add columns to meet new motor control or power demand
- Add units without service interruption



Robust ratings to match your application needs

- Main bus: 485...6000 A
- Vertical bus: 770...2000 A
- Fixed and withdrawable units
- Withdrawable units' current capacity up to 630 A
- Control power: 24V DC, 110...240V AC
- Frequency: 50/60 Hz
- Short time rating (I_{cw}): up to 100 kA
- Operating voltage up to 690V
- Meets IEC 61439-1 & 2
- Enclosure rating up to IP54

Smart IntelliCENTER technology

This smart MCC features built-in EtherNet/IP and intelligent motor controls, all preconfigured and tested at the factory.

With its integrated network infrastructure and intelligent motor control devices, you can monitor and diagnose your MCC from anywhere.

- Reduce integration and setup time to your control system
- Get visibility to real-time data from each device
- Troubleshoot and diagnose information more quickly
- Configurable warning and alarm setpoints

Built-in EtherNet/IP network

Your startup is faster with built-in cabling. Complex inter-wiring is reduced to a single 600V-rated Ethernet cable.

Because the network is preconfigured and validated, device connections, IP addresses, subnet masks, custom parameter settings for PowerFlex® drives, E300™ electronic overload relay, and port settings are already set.



Safety solutions that help save lives

We take your safety seriously.

Allen-Bradley products offer industry-leading safety and power control solutions for factories around the globe.

Our safety offering is a powerful tool that benefits your workers, operations and bottom line.

Plus, we can work with you to find new ways to improve safety and reduce risk while enhancing workforce and asset productivity.

Built in ISO 9001 facilities, FLEXLINE 3500 MCCs are designed to meet or exceed IEC 61439-1 & 2 standards.

FLEXLINE 3500 MCCs help mitigate safety risk by

- Offering remote monitoring and troubleshooting
- Integrating motor control into a contained centralized package, away from personnel
- Delivering superior design and materials that provide the first level of protection
- Delivering full isolation of electrical components from the front side of the enclosure
- Reducing maintenance frequency and electrical exposure

Torqued, two-bolt fastening system for bus connections reduces maintenance and exposure to hazardous power.



Lockout/Tagout locks unit in a safe position so it cannot be moved.



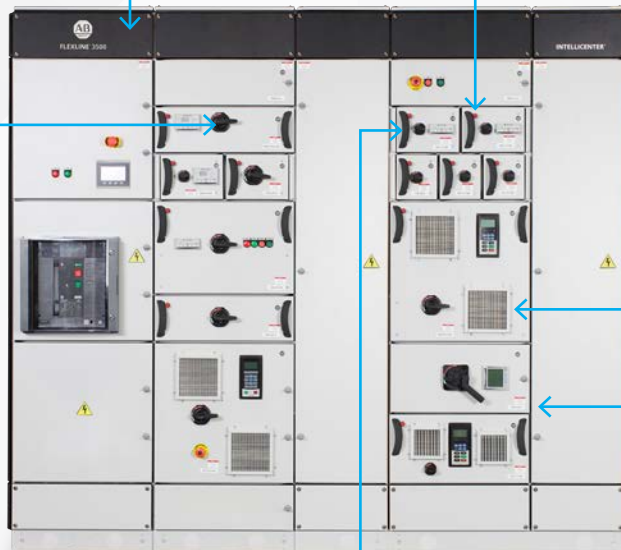
Solid top and bottom unit support pans isolate units to help prevent a single fault from cascading throughout the enclosure and limit equipment damage.



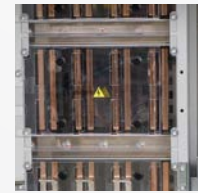
Interlock mechanism helps prevent units from being withdrawn or inserted when the disconnect handle is on.



Safer by design



Automatic shutters isolate the vertical bus when the unit is removed.



Test the control and networked circuits without power connections.



Form 4B separation isolates dangerous load connections while maintenance is performed.



Additional features enhance arc flash safety

In addition to the standard safety features built into every FLEXLINE 3500 motor control center, optional ArcShield technology provides enhanced arc resistance capabilities to meet your safety program.

Our arc flash containment technology helps mitigate and protect personnel and equipment from the dangers of an arc flash incident. The solution helps contain an arc fault for the entire duration it takes the protective device to clear the fault.

Motor control centers with ArcShield technology are tested with third-party validation against the IEC/TR 61641 standard that defines tests under conditions of arcing due to internal fault.

To increase safety and performance, an MCC with ArcShield technology features:

- ✓ Reinforced bracing at the top
- ✓ Exhaust gas channeling to the top of the MCC
- ✓ Pressure relief systems for managed emissions
- ✓ Reinforced latches that keep the MCC doors closed
- ✓ Patented arc-resistant baffles that allow ventilation, yet provide arc resistance
- ✓ Optional optical- and current-sensing technologies for added MCC protection

Consult the factory to discuss available ArcShield safety options.

Globally designed to improve safety

Across the globe, FLEXLINE motor control centers meet the following electrical, performance and safety requirements:

EU Directives

- 2011/65/EU RoHS Directive
- 2014/30/EU EMC Directive
- 2014/35/EU Low Voltage Directive

Certifications

- CE
- Seismic
- UKCA
- DEKRA

Standards

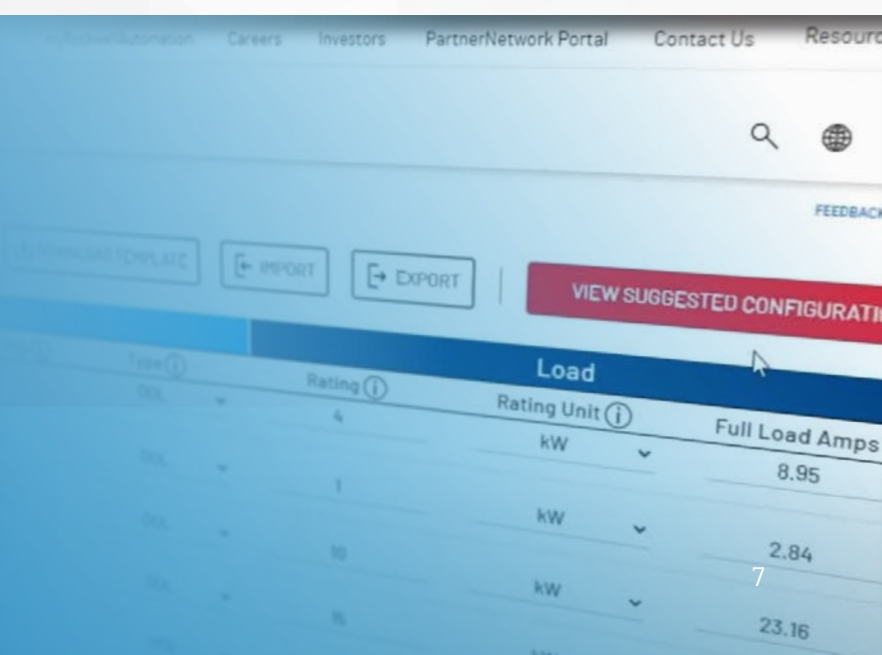
- IEC 61439-1 & 2:2020
- AS/NZS 61439 1:2016
- IEC 60204-1:2016 + A1:2021
- IEC 60529:2013
- IEC 60068-s-57; IEEE Std 693-19947; AS 1170.4-1993

RA Advisor

Use our online tool to quickly configure a FLEXLINE 3500 motor control center

Easy as 1-2-3, you can create a custom FLEXLINE 3500 motor control center lineup and receive configuration specifications and initial pricing for your project

[Start Designing](#)



Superior reliability increases peace of mind

You can depend on smart technology to help improve productivity, performance, quality and safety.

Customers have been buying Allen-Bradley motor control centers for more than 50 years.

The Allen-Bradley components inside FLEXLINE MCCs are found in the largest manufacturing and processing plants around the globe – from aerospace and automotive to water and wastewater to oil and gas. And these smart components help increase system reliability, uptime and throughput.

EtherNet/IP connectivity

Startup is faster and more reliable with built-in network cabling. This reduces network noise interference for your MCC control and provides higher system reliability.

Dedicated control and network connection circuits

- Network and control wiring is identified separately from power wiring
- Industrial designed 600V network cabling
- Reduce noise and nuisance faults
- Limit personnel exposure to power wire

Reliability of the bus

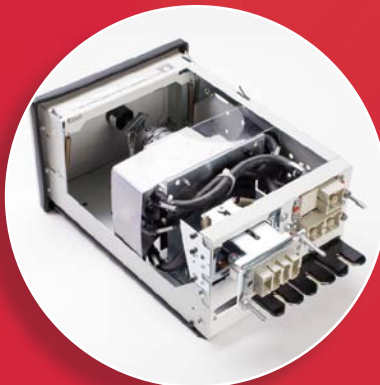
- A two-bolt connection for bus connections reduces the likelihood of hotspots
- Maintenance-free nuts never need to be retorqued

The FLEXLINE motor control center offers up to IP54 ingress protection to protect the contents.

Quality Allen-Bradley components

FLEXLINE motor control centers are optimized with Allen-Bradley IEC-certified components that work together to maximize safety, efficiency and performance. Designs include:

- E100 and E300 Overload Relays
- 100-C and 100-E Contactors
- 140MT Motor Protection Circuit Breakers or 140MG Motor Circuit Protectors
- 140UT Motor Protection Circuit Breakers
- 140G Molded Case Circuit Breakers
- PowerFlex 520 or 750-series drives, with a patented fan/filter assembly to manage heat and dust
- Plus, power supplies, power monitors and Stratix® network switches that deliver proven and predictive performance over the full life of the product





Reduce maintenance time and cost

Maintain production with little or no unplanned downtime. The intelligent devices in your MCC can deliver predictive maintenance information, letting you see problems and take action before they happen.

When a device needs replacement, save time with Premier Integration to a Logix controller. Automatic Device Configuration lets you exchange the device quickly, and the controller automatically recognizes and configures it.

Advanced Multi Drawer withdrawable units deliver the highest level of personnel and plant safety.

- The door remains closed during removal or insertion
- Clear indications and labels with positive stop at each position
- No tools are required for operation

Multi Drawer positions

Test the control and networked circuits without line or load connections

	Connected	Test	Disconnected	Withdrawn
Line	Connected	Disconnected	Disconnected	Disconnected
Load	Connected	Disconnected*	Disconnected	Disconnected
Auxiliary	Connected	Connected	Disconnected	Disconnected
Network	Connected	Connected	Disconnected	Disconnected
Protective Earth (grounding)	Connected	Connected	Connected	Disconnected
Lockout/Tagout	Yes	Yes	Yes	Yes

* with most configurations

- Lockout/Tagout provisions in all four positions provides more options to increase personnel safety
 - Unit in test, disconnected and detached position can be locked by turning the red button
 - In detached state, unit can be blocked for insertion with a padlock through the closing device
 - While withdrawn, cover plates ensure you maintain IP and arc flash enclosure rating
 - Unit and covering can be blocked against insertion with a padlock
- The breaker can be locked in the ON or OFF position
- Unit coding to restrict unit insertion to specified location within the lineup

Sustainable solutions increase business value

Investing in sustainability improves your financial outcome.

The industrial sector consumes nearly 40% of global energy and produces more than 30% of global greenhouse gas emissions.

Progress starts with visibility.

The combined use of Allen-Bradley smart VFDs to control your applications and visibility inside your FLEXLINE MCC to monitor your equipment status delivers uptime and energy savings you can count on.

For example, PowerFlex® variable frequency drives with TotalFORCE® technology have demonstrated energy payback in as little as 6 months.

The benefit of getting real-time MCC predictive maintenance data helps avoid costly production shutdowns.

Support sustainable lifecycle solutions

For more than 120 years, Rockwell Automation has improved the efficiency of industrial processes. Today, they help customers be more resilient, agile and sustainable by delivering digital transformation and industrial automation solutions.

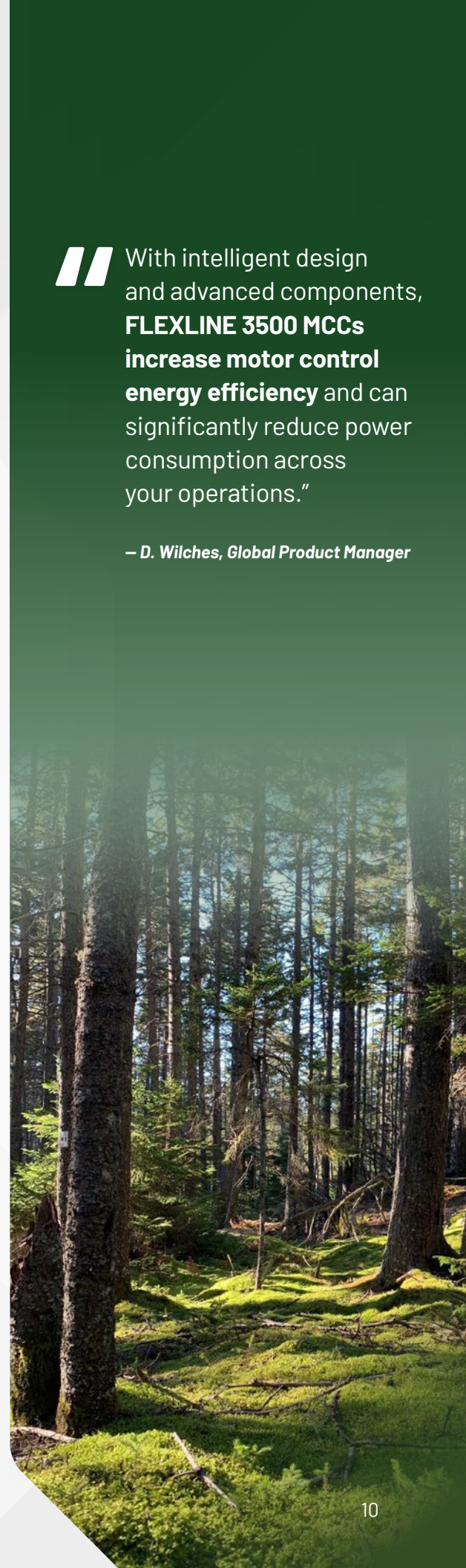
Sustainability is central to the company's purpose.

"Providing energy-saving products and solutions – and prolonging the value of your assets – are tangible ways that Rockwell Automation helps industry transform in a positive way."

Learn about the wide-ranging sustainability initiatives that Rockwell Automation is committed to and see the impact of other solutions at customer facilities around the world at rok.auto/sustainability.

“ With intelligent design and advanced components, **FLEXLINE 3500 MCCs increase motor control energy efficiency** and can significantly reduce power consumption across your operations.”

– D. Wilches, Global Product Manager





A family of global motor control solutions from Rockwell Automation

Whether you need medium voltage or low voltage motor control centers, power distribution or switchgear, we have a solution.

- **CENTERLINE® 2100 MCC** – The industry-leading MCC delivers integrated low voltage control and power in a rugged, centralized package. Meets UL 845 and NEMA standards and offers superior safety, performance and reliability. Available to direct ship.
- **CENTERLINE® 1500 MCC** – Available in a wide range of configurations from across-the-line to solid-state SMC™ starters, the medium voltage NEMA MCCs provide the flexibility to select the best match for your application.
- **FLEXLINE™ 3500 MCC** – This low voltage IEC MCC integrates smart motor control and power distribution in a central package. It combines Allen-Bradley® components with a modular system to create an intelligent MCC with the flexibility to fit your plant floor and applications. Meets IEC 61439-1&2.
- **CENTERLINE® 2500 MCC** – Addressing a wide range of IEC application requirements throughout the world, the low voltage MCC offers fixed or withdrawable units, high-density columns and fully type-tested standard designs. Meets IEC 61439-1&2.

Nobody delivers a broader suite of motor control and factory automation solutions than Rockwell Automation.

Let's start designing a solution for your plant – or your entire enterprise.

Learn more by contacting Rockwell Automation [here](#).

The right expertise, at the right time.

Professional and managed services that expand your capabilities to help you achieve business outcomes.



DIGITAL THREAD

Connect business processes, systems, equipment and products with data

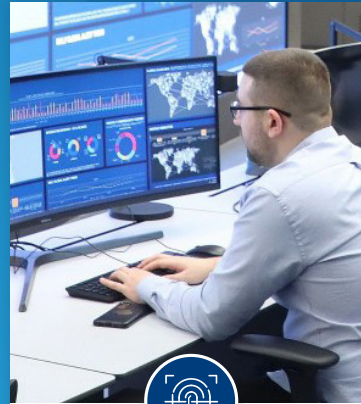
- Digital strategy & organizational change management
- Data science & artificial intelligence
- Manufacturing execution systems (MES)
- Product lifecycle management (PLM)
- Extended reality (AR/VR/MR)
- Supply chain management (SCM)
- Enterprise resource planning (ERP)



PRODUCTION AUTOMATION

Automate manufacturing and production operations

- Industrial automation control systems
- Distributed control systems (DCS)
- Power systems
- Drive systems
- Safety systems
- Custom/configured panel solutions



CYBERSECURITY & NETWORK INFRASTRUCTURE

Enable and secure industrial network connectivity

- Industrial cybersecurity
- Industrial network infrastructure & remote support
- Industrial data centers



ASSET OPTIMIZATION & WORKFORCE

Optimize performance of machines, equipment, systems and people

- Equipment repair & remanufacturing
- Asset & equipment inventory management
- Remote support & monitoring
- On-site & field services
- Safety solutions
- Training & learning

To learn how we can help you solve your unique business challenges, contact your local authorized Allen-Bradley® distributor or Rockwell Automation sales office, or visit [rok.auto/lifecycle](https://www.rockwellautomation.com/rok.auto/lifecycle).



Connect with us. [f](#) [i](#) [in](#) [X](#)

[rockwellautomation.com](https://www.rockwellautomation.com)

expanding human possibility®

AMERICAS: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000

EUROPE/MIDDLE EAST/AFRICA: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2663 0600

ASIA PACIFIC: Rockwell Automation SEA Pte Ltd, 2 Corporation Road, #04-05, Main Lobby, Corporation Place, Singapore 618494, Tel: (65) 6510 6608

UNITED KINGDOM: Rockwell Automation Ltd., Pitfield, Kiln Farm, Milton Keynes, MK11 3DR, United Kingdom, Tel: (44)(1908) 838-800

Allen-Bradley, ArcShield, CENTERLINE, expanding human possibility, FLEXLINE, PowerFlex, and TotalFORCE are trademarks of Rockwell Automation Inc. Trademarks not belonging to Rockwell Automation are property of their respective companies.

Publication FLXLN-BR001A-EN-P - March 2024

Copyright © 2024 Rockwell Automation, Inc. All Rights Reserved. Printed in USA.