

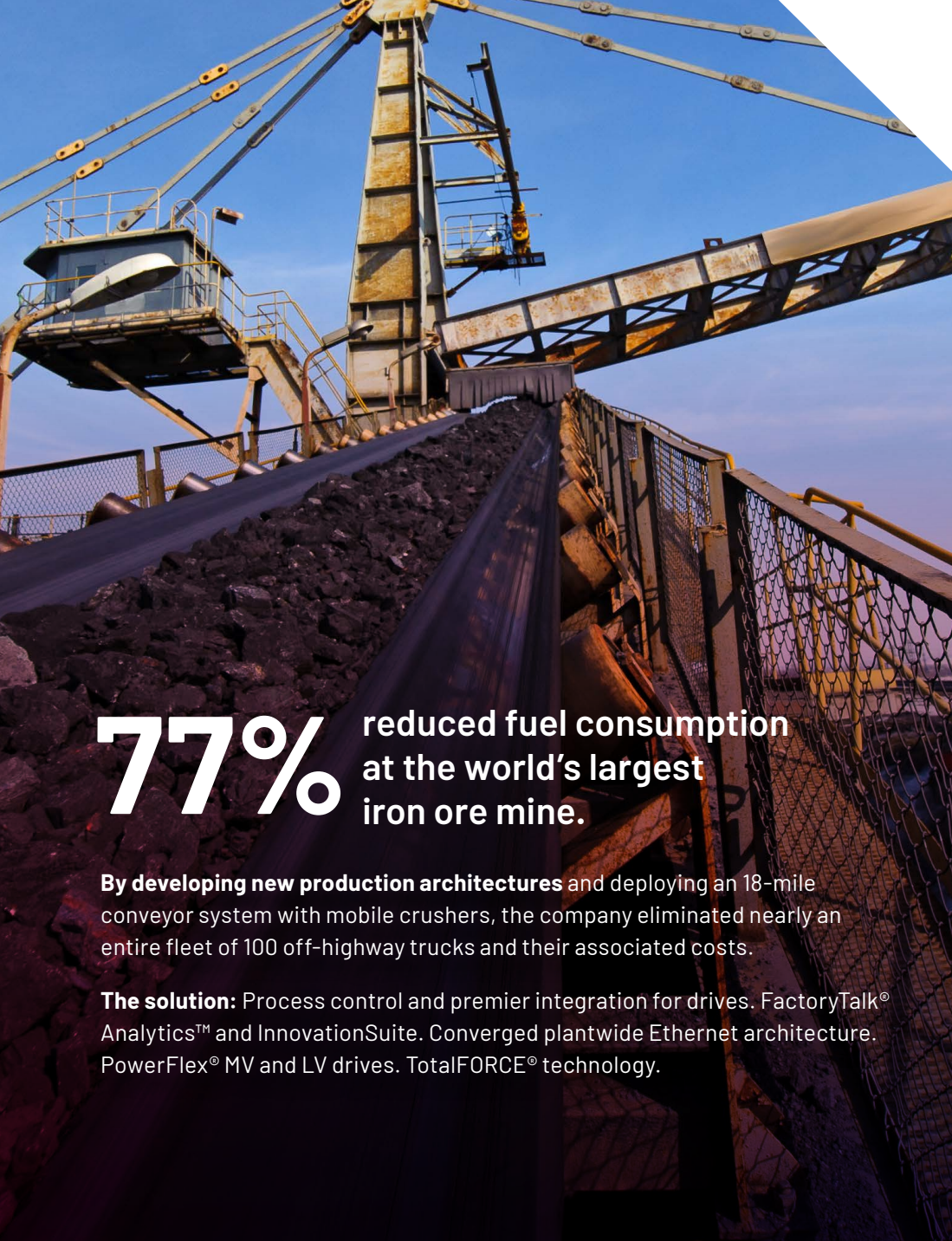


**Rockwell  
Automation**

# Revolutionize your business

with better data and connected processes





**77%** reduced fuel consumption  
at the world's largest  
iron ore mine.

**By developing new production architectures** and deploying an 18-mile conveyor system with mobile crushers, the company eliminated nearly an entire fleet of 100 off-highway trucks and their associated costs.

**The solution:** Process control and premier integration for drives. FactoryTalk® Analytics™ and InnovationSuite. Converged plantwide Ethernet architecture. PowerFlex® MV and LV drives. TotalFORCE® technology.

# Integrated systems boost productivity


**Ask industrial manufacturers about their top challenges.**

Most likely, they'll say boost productivity from existing operations, reduce energy consumption and increase safety. Plus, obtain data to make better business decisions. Simplify operating systems. And increase uptime.

**We can help.**

Rockwell Automation is North America's leading supplier of integrated factory automation hardware, software and lifecycle solutions. We've been building smart manufacturing systems for more than 100 years. And we're pros at connecting data and processes.

Integrating data and processes across your enterprise is your gateway to smart manufacturing. It can revolutionize your business.



# Connected, information-driven plants and teams

**Smart operating systems provide data to make better business decisions.**

By connecting systems throughout your enterprise, you'll turn manufacturing into a strategic advantage.

**Simplify operating systems**

**Increase output, uptime, safety, security and quality**

**Reduce energy consumption and lead time**

And nobody delivers a broader suite of smart solutions than Rockwell Automation.

Working with us, you can improve the operating system across your plant – or your entire enterprise.

**[Click to read](#) about Toyota, Caterpillar and Georgia-Pacific.**

**Smart operating systems increase  
productivity.  
And much more.**

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# Agile solutions for your enterprise

Many manufacturing plants are designed with independent electrical power distribution and automation control systems. But a two-system approach increases complexity and cost.

Rockwell Automation's **single network approach** can simplify your supply chain, unify power and control systems – and deliver extraordinary benefits.

Digital technology lowers costs and improves performance from process control and the electrical system:

**Lower** engineering, wiring, equipment, installation and testing costs

**Faster** commissioning and startup

**Increase** productivity and safety with remote monitoring

**Reduce** downtime with real-time access to operating conditions, faults, alarms and events

Calculate your savings [here](#).

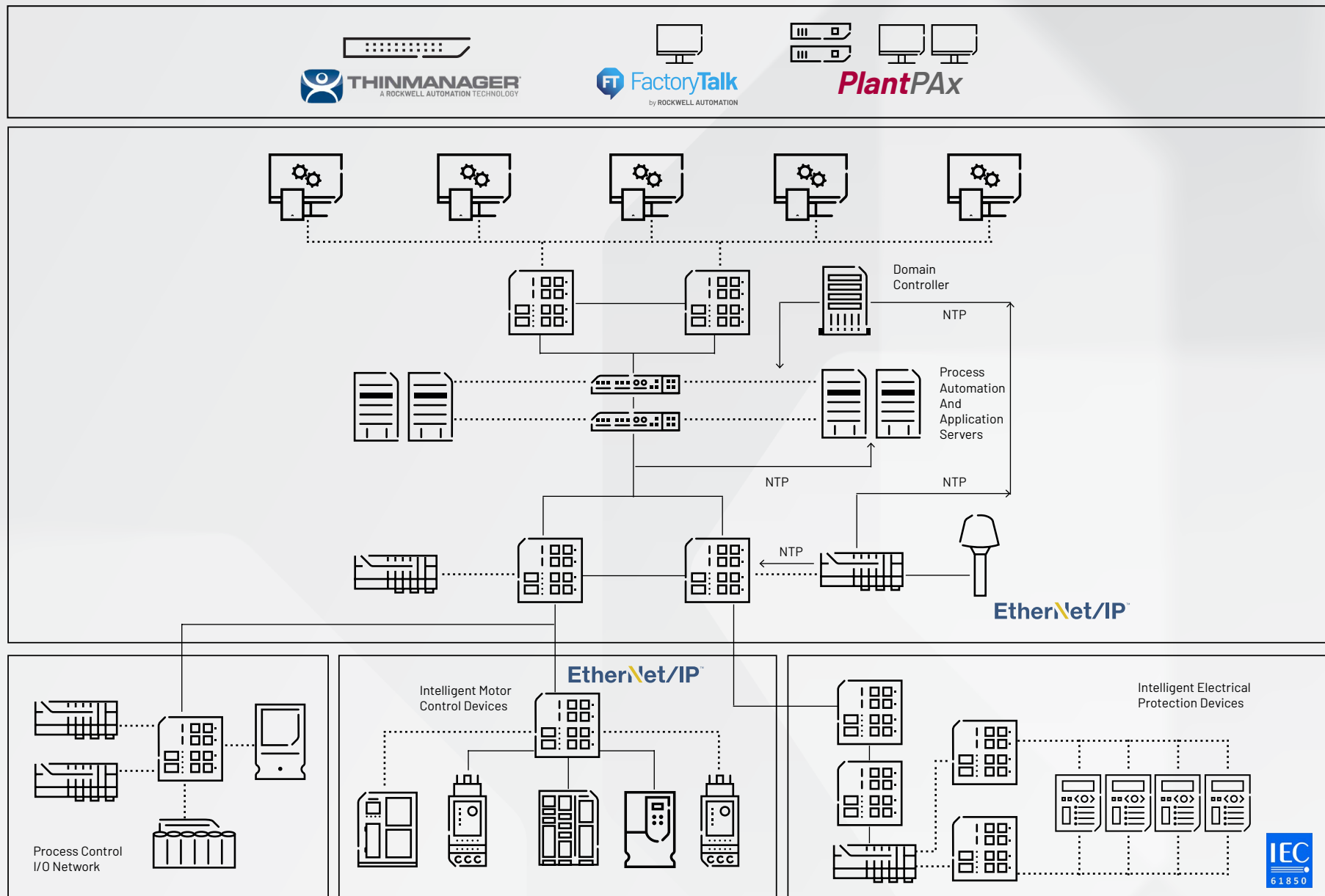
## An integrated system can save:

**Up to 15%** in equipment costs with system packaging

**Over 25%** in installation costs through digital technology

**70% to 90%** in integration costs by unifying your system

# A connected enterprise boosts productivity, operating efficiencies and safety



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# One infrastructure, greater visibility and better control

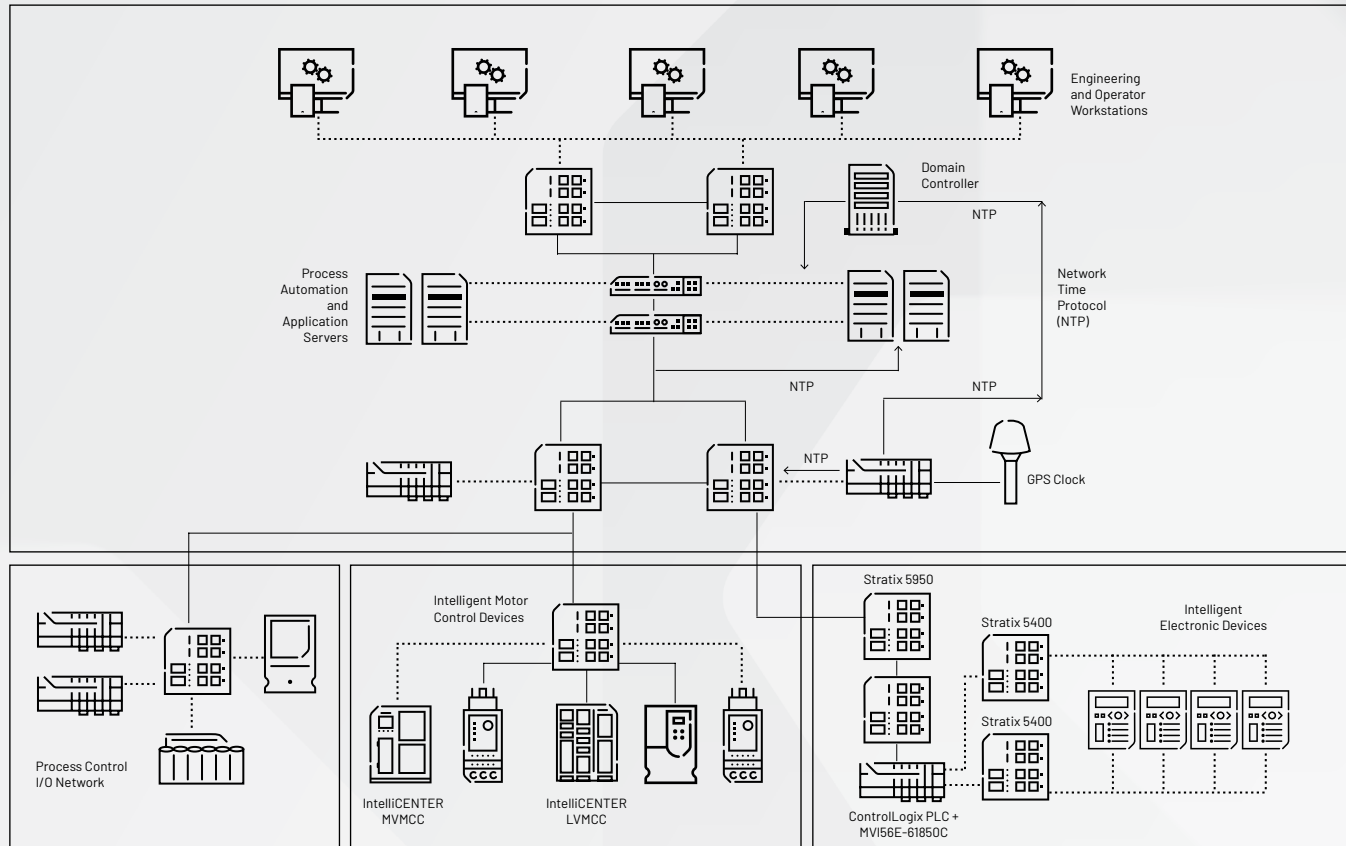
**Electrical protection devices, intelligent motor control devices and process equipment** are easily integrated into the PlantPax® system – providing a complete view of plant operations from power infrastructure through process control equipment

**Industrial data centers** are used for virtual data management with remote support services to keep critical power infrastructure running efficiently

**Operator workstations** are responsible for monitoring system operations while providing control of assets and parameter adjustments

**Engineering workstations** designed for configuration, maintenance and diagnostics of both the power and process control systems

**An intelligent electrical house** is a turnkey solution that consolidates power distribution and process automation equipment into a single factory-engineered and assembled structure. All equipment arrives installed, tested and ready to use for your specific needs



The IEC 61850 module for ControlLogix® system seamlessly integrates into the Studio 5000 Logix Designer® environment with a full Add-on Profile. IEC 61850 data is mapped to CIP across the backplane

**Stratix® 5400 managed Ethernet switches** support the IEC 61850 protocol and the IEEE 1588 Power Profile for consistent and reliable network time distribution for power applications

**Parallel redundancy protocol** provides zero-time recovery while maintaining installation flexibility

**Process controllers** are responsible for the control and data collection of the process equipment, including motor control centers

**CENTERLINE® motor control centers with IntelliCENTER® technology** feature built-in EtherNet/IP networks to connect intelligent devices to advanced monitoring software for plant-wide integration of process data. IntelliCENTER technology is pre-configured and pre-tested to reduce integration and commissioning time, improve visibility into diagnostic information and provide maintenance and troubleshooting data

**Intelligent electrical devices (IEDs)** provide electrical protective functions or metering capabilities. These devices communicate via the IEC 61850 standard. The PlantPax® Library of Electrical Protection Devices houses a variety of faceplates that visually represent the IEDs

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# Boost productivity from a unified plant infrastructure

**A connected solution changes the way companies analyze electrical supervisory control and data acquisition (eSCADA) and process control systems.**

Our packaged solution replaces independent eSCADA and process control systems with a unified digital system, based on unmodified Ethernet.

Using the EtherNet/IP protocol, motor control devices communicate and work as a part of the process control system. Simultaneously, critical substation equipment communicates with intelligent electrical devices (IEDs) over unmodified Ethernet, based on the IEC-61850 standard.

With open automation architecture, our solution maps substation data directly to the control environment to enable seamless communication between the IEDs and the control platform.

This unified and digitally enabled system provides integrated substation visibility through the same system that runs the rest of the plant. Benefits include:

**Better load management and energy management**

**Real-time monitoring of electrical and process systems from anywhere**

**One network, visualization, archiving and reporting platform**

**Access to synchronized, time-stamped data from a single source**

**Faster and easier system modification and expansion**



# Complete visibility to your operating system

**With operating data and process control status at your fingertips, it can make the difference between profit and loss.**

Exclusively from Rockwell Automation, IntelliCENTER® software provides a window into motor control centers (MCCs) with real-time diagnostics.

The technology captures information for predictive maintenance, process monitoring and advanced diagnostics to see the condition of your motors, control devices and application performance – including remote devices. Plus, IntelliCENTER technology uses secure EtherNet/IP network protocol.

## **So, you'll reduce startup time**

**Eliminate up to 90% of hardwiring installation time**

**MCCs are preconfigured and validated.** Service connections, IP addresses, subnet masks, custom parameter settings for PowerFlex® drives and E300™ electronic overload relay, and advanced port settings are preset

## **And increase uptime**

**MCCs are quickly integrated** into a Logix-based PlantPax® distributed control system

**Remote monitoring and access to maintenance data** help you identify, diagnose or reset device faults, and safely deploy resources



# Your single-source provider

**With Rockwell Automation, you'll receive unparalleled support from the industry's leading single-source automation supplier.**

Our teams have years of experience and are ready to assist. We also work seamlessly with OEM partners and system integrators.

Our control system integrations are implemented in sprints, so the process is manageable and cost effective. Results are quickly visible and measurable.

## **Unleash the power of digital transformation.**

Rockwell Automation technology is found in many of the largest manufacturing and processing plants around the globe. With more than 24,000 employees, we serve customers in more than 100 countries. And our experience spans dozens of industries like yours – from aerospace and automotive to water and wastewater.

## **Let's take the next step.**

[Call](#) a Rockwell Automation representative or [visit](#) our website for more information. We'd like to learn about your needs.

**"We have information at our fingertips now.** From my desktop, I can see hundreds of motors, control points, temperatures – everything that's happening and whatever shouldn't be happening."

**–Director of Engineering**

**"Productivity increased annually.** Quality improvements cut defects in half. On-time delivery increased to 96%. And waste reduction saved hundreds of thousands of dollars."

**– VP of Operations**

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# The right expertise, at the right time.

We empower your lifecycle and digital transformation journey with our expansive domain knowledge.



## CONSULTING SERVICES

Digital transformation  
& The Connected  
Enterprise

Data science &  
analytics

Enterprise technology

Automation FEED / FEL

Safety &  
risk management



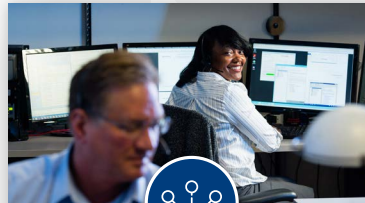
## PROFESSIONAL SERVICES

Main Automation  
Contractor (MAC)

Modernization & migration  
engineering

Program and project  
management &  
implementation

Global rollouts



## CONNECTED SERVICES

OT networks &  
cybersecurity

Managed services

OT infrastructure as  
a service

Remote support

Predictive/prescriptive  
analytics



## FIELD SERVICES

Asset repair,  
remanufacturing and  
management

Safety assessment and  
remediation

On-site technical support



## WORKFORCE SERVICES

E-learning





Instructor-led &  
virtual training

Workforce assessments

Virtual reality /  
augmented reality

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**.



Connect with us.    

**rockwellautomation.com** — expanding **human possibility**®

AMERICAS: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

EUROPE/MIDDLE EAST/AFRICA: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2663 0600, Fax: (32) 2 663 0640

ASIA PACIFIC: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

UNITED KINGDOM: Rockwell Automation Ltd., Pitfield, Kiln Farm, Milton Keynes, MK11 3DR, United Kingdom, Tel: (44)(1908) 838-800, Fax: (44)(1908) 261-917

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