**Technical Data**
Original Instructions

# CompactLogix 5390 Controllers Selection and Specifications

Bulletin 5034

**Topics**


CompactLogix 5390 Systems on page 2

Available CompactLogix 5390 Controllers on page 3

CompactLogix 5390 and CompactLogix 5380 Comparison on page 4

CompactLogix 5390 Integrated Motion on page 5

CompactLogix 5390 Safety Systems on page 6

I/O Modules in a CompactLogix 5390 System on page 7

CompactLogix 5390 Controller Technical Features on page 8

CompactLogix 5390 Controller Technical Specifications on page 9

CompactLogix 5390 Controller Environmental Specifications on page 11

CompactLogix 5390 Controller Certifications on page 13

CompactLogix 5390 Controller Dimensions on page 14

CompactLogix 5390 System Minimum Space Requirements on page 15

Rack Orientation on page 16

Additional Resources on page 17

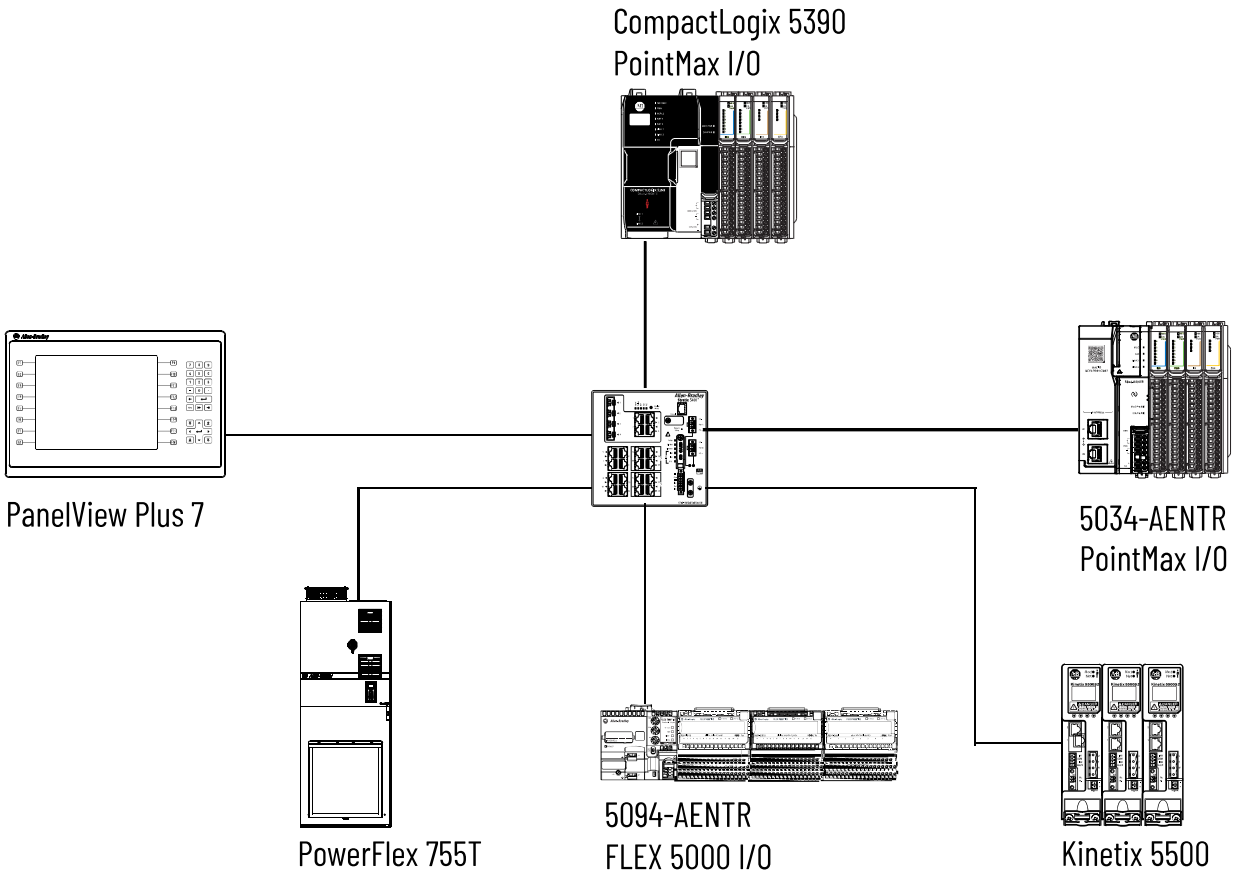
# CompactLogix 5390 Systems

CompactLogix® 5390 systems provide discrete, drives, motion, and safety control together with communication and state-of-the-art I/O in a small, cost-competitive package. The system is modular, so you can design, build, and modify it efficiently with significant savings in training and engineering.

A CompactLogix 5390 system consists of the following:

- A CompactLogix 5390 controller
- 5034 PointMax™ I/O modules as local I/O
- External power supplies to provide system power and field power
- Removable Terminal Block to connect power
- DIN rail on which the system resides
- Access to remote I/O modules on an EtherNet/IP networks
- Support for integrated motion, safety and security applications

**Figure 1. CompactLogix 5390 System**



# Available CompactLogix 5390 Controllers

CompactLogix® 5390 controllers include these catalog numbers:

- 5034-L9004TS, 5034-L9004TSXT
- 5034-L9006TS, 5034-L9006TSXT
- 5034-L9010TS, 5034-L9010TSXT, 5034-L9010TNSXT
- 5034-L9020TS, 5034-L9020TSXT
- 5034-L9030TS, 5034-L9030TSXT
- 5034-L9050TS, 5034-L9050TSXT
- 5034-L9100TS, 5034-L9100TSXT

CompactLogix® 5390 controllers offer these advantages:

- CompactLogix® 5390 controllers offer enhanced performance over previous models. They are up to 2x faster than the CompactLogix® 5380, have a higher execution speed, and a faster safety reaction time.
- Each controller can be chosen based on application needs to optimize performance and are designed to work in a wide range of applications.
- CompactLogix® 5390 controllers are also offered in XT options to meet harsh environment requirements.
- CompactLogix® 5390 controllers support any mounting orientations without derating and require only 1-inch spacing when mounted in a cabinet.
- CompactLogix® 5390 controllers contribute to up to 50% in space savings. They also have lower power consumption and power dissipation helping to reduce the carbon footprint.
- You can migrate from CompactLogix® 5380 controllers, 5370 controllers, and MicroLogix™ 1400 to CompactLogix® 5390 controllers.
- All CompactLogix® 5390 controllers support motion applications and are safety (SIL 2) enabled by default. As a result, there are fewer catalog numbers to choose from.

## CompactLogix 5390 Standard Controllers

CompactLogix® 5390 standard controllers are part of the Logix 5000® family of controllers. The controllers provide a scalable controller solution to address a wide variety of applications. The applications range from standalone systems to more complex systems with devices that are connected to the controller via an EtherNet/IP™ network.

## CompactLogix-NSE 5390 Controllers

The 5034-L9010TNSXT No Stored Energy (NSE) controller is intended for use in applications that require the installed controller to deplete its residual stored energy to specific levels before transporting it into or out of your application.

## CompactLogix 5390 XT Controllers

The CompactLogix® 5390 XT controllers function in the same way and have the same features as standard CompactLogix® controllers. You can enable these controllers for safety.

The controllers have an extra degree of protection when exposed to harsh, corrosive gas environments. While standard CompactLogix® controllers can withstand temperatures from -25...+60 °C (-13...140 °F), CompactLogix® 5390 XT controllers can withstand temperatures from -40...+70 °C (-40...+158 °F).

# CompactLogix 5390 and CompactLogix 5380 Comparison

## CompactLogix 5390 and CompactLogix 5380 Performance and Features

| Feature | CompactLogix 5390 | CompactLogix 5380 |
|---|---|---|
| Performance | 2x CompactLogix® 5380 controllers | 5...20x CompactLogix® 5370 controllers |
| User memory | 400 KB...10 MB | 600 KB...10 MB |
| Axis per controller | 128 axis maximum | 32 axis maximum |
| Number of EtherNet/IP™ nodes | 60...300 | 16...180 |
| Number of connections for MSG instructions | 384 | 256 In |
| Total number of messaging/HMI connections (inbound and outbound) | 768 | 520 |
| Tag-based alarms | 20,000 | 10,000 |
| Embedded Ethernet port(s) | 2 | 2 |
| TCP connections | 1024 | 512 |
| Ethernet I/O (Class 0/1) packets/sec | 164,000 without CIP Security™<br>60,000 with integrity<br>30,000 with integrity and confidentiality | 128,000 without CIP Security™<br>40,000 with integrity<br>20,000 with integrity and confidentiality |
| Ethernet messaging (Class 3) messages/sec | 4000 without CIP Security™<br>3000 with integrity<br>2700 with integrity and confidentiality | 2000 without CIP Security™<br>1500 with integrity<br>900 with integrity and confidentiality |
| Studio 5000 Logix Designer® version | Version 39 and later | Version 29 and later |

## CompactLogix 5390 Capacity

In the following table:

- The total number of EtherNet/IP nodes is dependent upon which controller is used and the number of available controller resources remaining.
- The column **Drive Axes, max** refers to the maximum number of Integrated Motion on EtherNet/IP drive axes (configured for Position Loop) that can be included in the total integrated motion axes count for a controller.

| User Memory | Safety Memory | EtherNet/IP Nodes | OPC/UA Nodes | Drive Axes, max | CompactLogix 5390 Standard | CompactLogix 5390-XT |
|---|---|---|---|---|---|---|
| 400KB | 400KB | 60 | 300 | 8 | 5034-L9004TS | 5034-L9004TSXT |
| 600KB | 600KB | 60 | 300 | 8 | 5034-L9006TS | 5034-L9006TSXT |
| 1MB | 1MB | 60 | 300 | 8 | 5034-L9010TS | 5034-L9010TSXT,<br>5034-L9010TNSXT |
| 2 MB | 2 MB | 200 | 2000 | 32 | 5034-L9020TS | 5034-L9020TSXT |
| 3 MB | 3 MB | 200 | 2000 | 32 | 5034-L9030TS | 5034-L9030TSXT |
| 5MB | 5MB | 200 | 2000 | 32 | 5034-L9050TS | 5034-L9050TSXT |

| User Memory | Safety Memory | EtherNet/IP Nodes | OPC/UA Nodes | Drive Axes, max | CompactLogix 5390 Standard | CompactLogix 5390-XT |
|---|---|---|---|---|---|---|
| 10MB | 10MB | 300 | 4000 | 128 | 5034-L9100TS | 5034-L9100TSXT |

For detailed specifications, see the CompactLogix 5390, CompactLogix 5380, Compact GuardLogix 5380, and CompactLogix 5480 Controllers Technical Data, publication 5069-TD002.

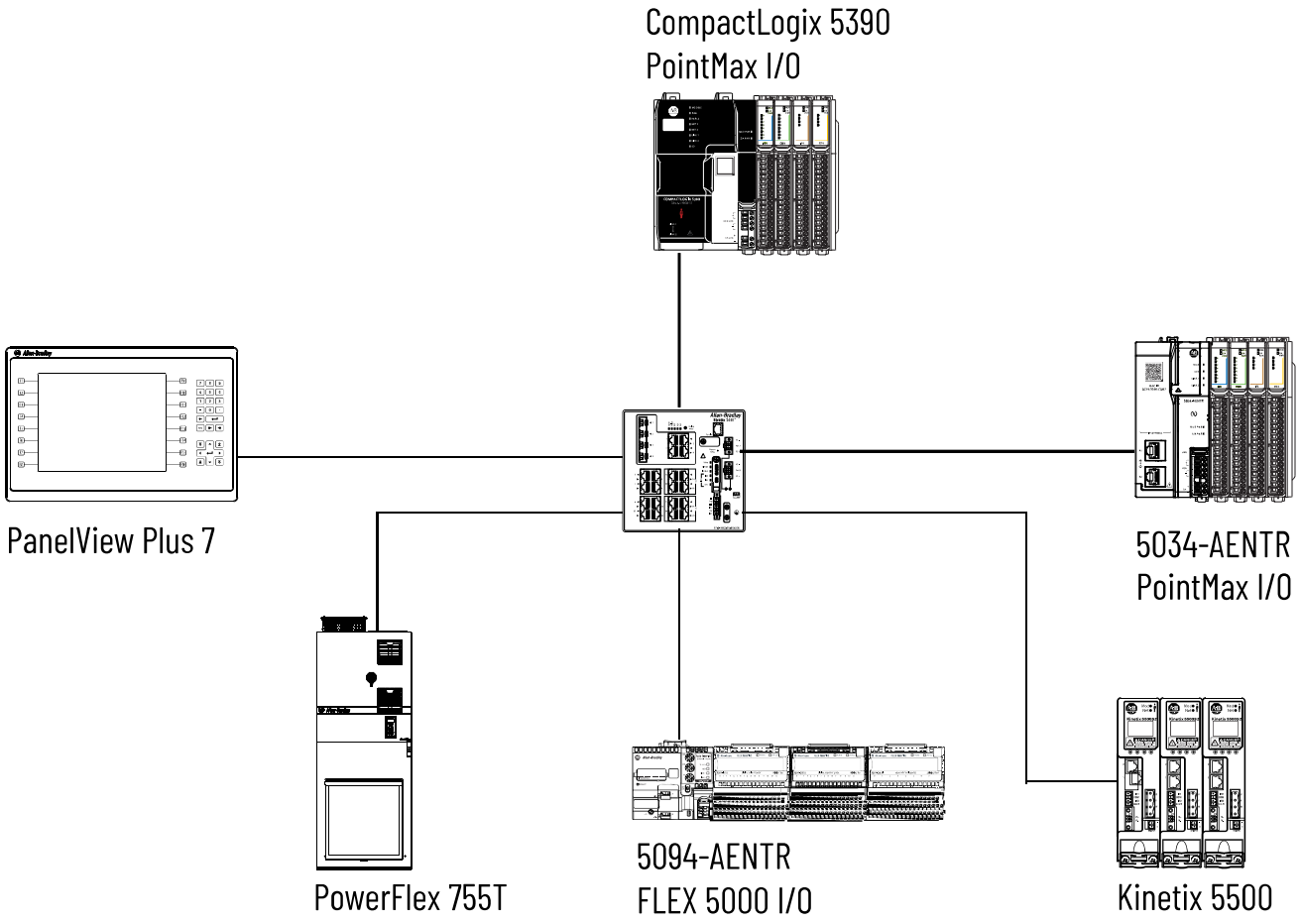
# CompactLogix 5390 Integrated Motion

The CompactLogix 5390 architecture supports motion control components that work in a wide variety of machine architectures:

- Integrated motion on the EtherNet/IP network supports a connection to Ethernet drives.
- The Kinetix® integrated-motion solution uses an EtherNet/IP interface to perform multi-axis, synchronized motion.
- Logix integrated motion supports the analog family of servo modules for controlling drives/actuators.

For more information, see:

- FactoryTalk Motion Analyzer at https://motionanalyzer.rockwellautomation.com/
- Kinetix Motion Control Selection Guide, publication KNX-SG001, to verify drive, motor, and accessory specifications



# CompactLogix 5390 Safety Systems

You can enable all CompactLogix® 5390 controllers for safety. A safety-enabled controller is designed to support up to SIL 2/PLd (Category 3) safety applications with the use of the safety task and safety I/O.

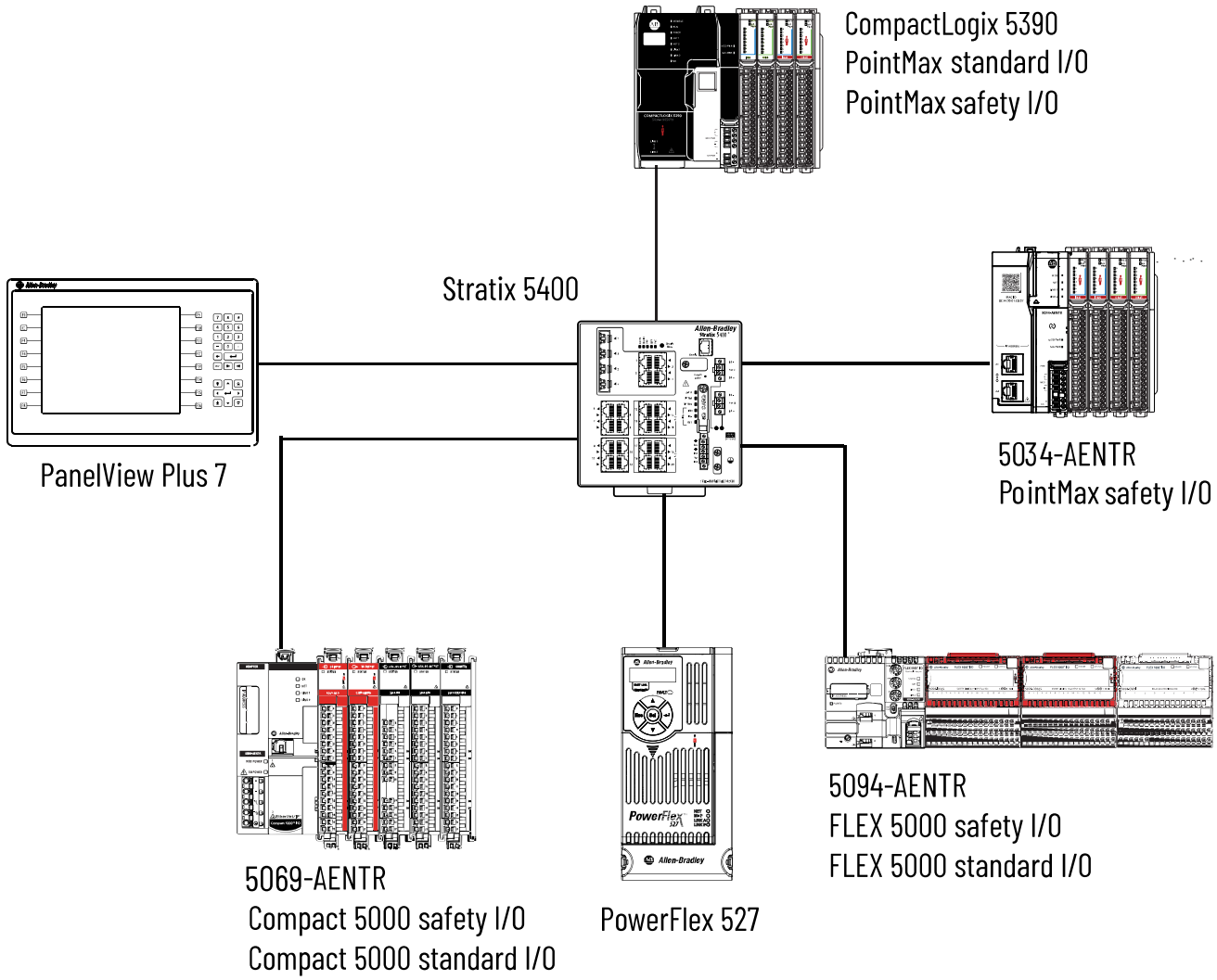
A controller that is enabled for safety can communicate with safety I/O devices via CIP Safety™ over an EtherNet/IP™ network (safety I/O modules, integrated safety drives, integrated safety components). You can interface to local standard and safety I/O in the backplane while your interface with remote safety I/O through the Ethernet ports.

For standard tasks, a safety-enabled controller supports:

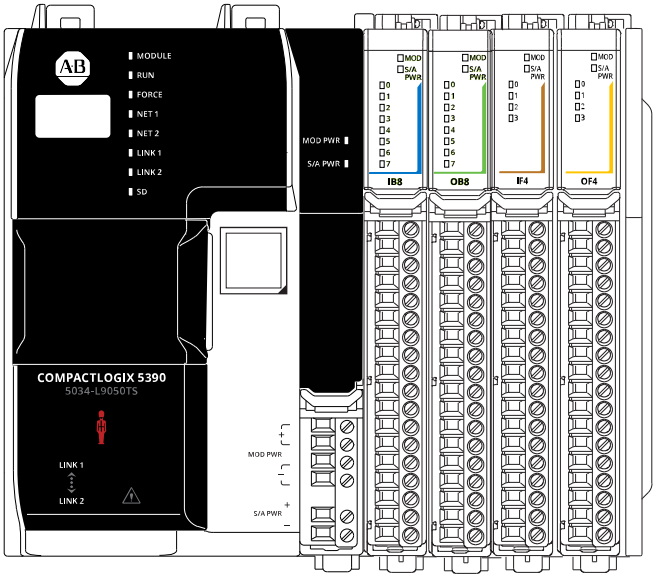
- Ladder Diagram (LD)
- Structured Text (ST)
- Function Block Diagram (FBD)
- Sequential Function Chart (SFC)

For the safety task, safety-enabled controllers support Ladder Diagram only.

**Figure 2. CompactLogix 5390 Safety System**



# I/O Modules in a CompactLogix 5390 System




## Local I/O Modules

A CompactLogix® 5390 system uses 5034 PointMax™ I/O modules as local I/O modules.

PointMax™ I/O modules provide a wide range of input and output modules to span many applications, such as machine, hybrid, and process control. The architecture uses Producer/Consumer technology to share input information and output status.

PointMax™ I/O modules that are used as local I/O are mounted on the same DIN rail on which a CompactLogix® 5390 controller resides. You can use up to 32 I/O modules in the local system, and you configure the modules with the Studio 5000 Logix Designer® application.

For more information, see the PointMax™ I/O System Specifications Technical Data, 5034-TD001.

## Remote I/O Modules

A 5034 PointMax™ EtherNet/IP™ adapter lets the CompactLogix® 5390 controller connect to PointMax™ I/O modules as remote I/O modules. The EtherNet/IP™ adapter supports Producer/Consumer communication that facilitates the exchange of input information and output status across EtherNet/IP™ networks.

The PointMax™ EtherNet/IP™ adapter and PointMax™ I/O modules are mounted on a DIN rail. You can use up to 32 I/O modules in a remote PointMax™ system, and you configure the modules with the Studio 5000 Logix Designer® application.

For more information, see the PointMax™ I/O System Specifications Technical Data, 5034-TD001.

CompactLogix® 5390 controllers can connect to other remote I/O modules via an EtherNet/IP™ network.

# CompactLogix 5390 Accessories

## Removable Terminal Block (RTB)

You connect power to CompactLogix® 5390 controllers through a removable terminal block (5034-RTB6 Screw or 5034-RTB6S Spring). You connect external PELV/SELV-listed power supplies for module power (MOD power) or sensor actuator power (SA power).

## Memory Cards

You can use these microSD™ cards with the controller:

- 8 GB microSD™ cards: 1784-MSD8, 1784-MSD8XT, or 9509-CMSDMICRO
- 32 GB microSD™ card: 1784-MSDHC32

**IMPORTANT:** You must order the Removable Terminal Block and microSD™ card separately.

# CompactLogix 5390 Controller Technical Features

| Feature | 5034-L9004TS, 5034-L9004T SXT | 5034-L9006TS, 5034-L9006T SXT | 5034-L9010TS, 5034-L9010TS XT, 5034-L9010TN SXT | 5034-L9020TS, 5034-L9020T SXT | 5034-L9030TS, 5034-L9030T SXT | 5034-L9050TS, 5034-L9050T SXT | 5034-L9100TS, 5034-L9100T SXT |
|---|---|---|---|---|---|---|---|
| Controller tasks Continuous Periodic Event | 32 tasks, including a combination of one continuous, periodic, and event tasks 1000 programs/task | | | | | | |
| Built-in communication ports | 1 - USB port<br>2 - Embedded Ethernet ports<br>**IMPORTANT**: Consider the following:<br>When the controller operates in Dual-IP mode, each Ethernet port requires a unique IP address. When the controller operates in Linear/DLR mode, the controller uses only one IP address. | | | | | | |
| USB port communication | USB 2.0 Type-C (does not support powering external devices)<br>Full Speed (12 Mbps) and High Speed (480 Mbps)<br>Programming, configuration, firmware update, and online edits only | | | | | | |
| Ethernet performance | 10 Mbps, 100 Mbps, 1 Gbps Full-duplex only | | | | | | |
| I/O Capacity (Class 0/1) | 164,000 without CIP Security™<br>60,000 with integrity<br>30,000 with integrity and confidentiality<br>**Note:** I/O numbers are maximums; they assume no HMI/MSG. HMI/MSG numbers are maximums, they assume no I/O. Maximums assume that the processor is the target, not the originator. Packet rates vary depending on packet size. For more details, see Troubleshoot EtherNet/IP Application Technique, publication ENET-AT003, and the EDS file for a specific catalog number. | | | | | | |
| Message Rate Capacity HMI/MSG (Class 3) | 4000 without CIP Security<br>3000 with integrity<br>2700 with integrity and confidentiality<br>**Note:** I/O numbers are maximums; they assume no HMI/MSG. HMI/MSG numbers are maximums, they assume no I/O. Maximums assume that the processor is the target, not the originator. Packet rates vary depending on packet size. For more details, see Troubleshoot EtherNet/IP Application Technique, publication ENET-AT003, and the EDS file for a specific catalog number. | | | | | | |
| EtherNet/IP™ modes and network topologies supported | Dual-IP mode (Available with the Studio 5000 Logix Designer® application, version 39.00.00 or later)<br>DLR, Star, and Linear topologies | | | | | | |
| EtherNet/IP™ nodes supported, max | 60 | 60 | 60 | 200 | 200 | 200 | 300 |
| OPC UA nodes supported max | 300 | 300 | 300 | 2000 | 2000 | 2000 | 4000 |
| Integrated motion | Integrated Motion on the EtherNet/IP™ network | | | | | | |

| Feature | 5034-L9004TS, 5034-L9004T SXT | 5034-L9006TS, 5034-L9006T SXT | 5034-L9010TS, 5034-L9010TS XT, 5034-L9010TN SXT | 5034-L9020TS, 5034-L9020T SXT | 5034-L9030TS, 5034-L9030T SXT | 5034-L9050TS, 5034-L9050T SXT | 5034-L9100TS, 5034-L9100T SXT |
|---|---|---|---|---|---|---|---|
| Number of axes supported, max | 512 (any combination of Integrated Motion on EtherNet/IP drive, Virtual, Consumed, Regenerative AC/DC Converter and Non-Regenerative AC/DC Converter axis types) | | | | | | |
| Number of Integrated Motion on EtherNet/IP™ drive axes (Position loop-configured) supported, max<br>**Note:** The maximum number of Integrated Motion on EtherNet/IP drive axes (configured for Position Loop) that can be included in the total integrated motion axes count for a controller. | 8 | 8 | 8 | 32 | 32 | 32 | 128 |
| Programming languages | Ladder Diagram (LD)<br>Structured Text (ST)<br>Function Block Diagram (FBD)<br>Sequential Function Chart (SFC)<br>Safety tasks support only Ladder Diagram and the additional safety application instructions. | | | | | | |

# CompactLogix 5390 Controller Technical Specifications

**NOTE:** A 5034-EXP or 5034-EXPXT PointMax™ I/O System Module is required when using more than 16 I/O modules.

| Attribute | 5034-L9004TS, 5034-L9004T SXT | 5034-L9006TS, 5034-L9006TSXT | 5034-L9010TS, 5034-L9010TS XT, 5034-L9010TN SXT | 5034-L9020TS, 5034-L9020T SXT | 5034-L9030TS, 5034-L9030T SXT | 5034-L9050TS, 5034-L9050T SXT | 5034-L9100TS, 5034-L9100T SXT |
|---|---|---|---|---|---|---|---|
| Standard memory | 400 KB | 600 KB | 1 MB | 2 MB | 3 MB | 5 MB | 10 MB |
| Safety memory | 400 KB | 600 KB | 1 MB | 2 MB | 3 MB | 5 MB | 10 MB |
| Optional nonvolatile memory | Orderable separately: 8 GB microSD™ card (1784-MSD8, 1784-MSD8XT) or 32 GB microSD™ card (1784-MSDHC32) | | | | | | |
| Local I/O modules, max | 16 | 16 | 16 | 32 | 32 | 32 | 32 |
| Number of Mounting Bases supported | With up to 8 mounting bases: 10...30V DC<br>With up to 16 mounting bases: 18...30V DC | | | | | | |
| MOD Power voltage range | 10...30V DC SELV/PELV | | | | | | |

| Attribute | 5034-L9004TS, 5034-L9004T SXT | 5034-L9006TS, 5034-L9006TSXT | 5034-L9010TS, 5034-L9010TS XT, 5034-L9010TN SXT | 5034-L9020TS, 5034-L9020T SXT | 5034-L9030TS, 5034-L9030T SXT | 5034-L9050TS, 5034-L9050T SXT | 5034-L9100TS, 5034-L9100T SXT |
|---|---|---|---|---|---|---|---|
| MOD Power current, max | 1.5 A | | | | | | |
| MOD Power inrush | 4.5 A | | | | | | |
| SA Power voltage ranges | 10...30V DC SELV/PELV | | | | | | |
| SA Power current, max | 10 A (DC power)<br>Do not exceed 10 A current draw at the SA Power RTB | | | | | | |
| SA Power passthrough | 0...30V DC @ 9.99 A (Maximum level of SA and MOD Power current that the controller can pass through to the next module in the system. The specific level of current passed through varies based on system configuration.) | | | | | | |
| Power dissipation, max | 12.5W | | | | | | |
| Thermal dissipation, max | 42.7 BTU/hr | | | | | | |
| Isolation voltage | 250V (continuous), Basic Insulation Type, SA Power to MOD Power<br>250V (continuous), Basic Insulation Type, SA Power to Backplane<br>60V (continuous), Basic Insulation Type, MOD Power to Backplane<br>60V (continuous), Basic Insulation Type, Ethernet to SA Power<br>60V (continuous), Basic Insulation Type, Ethernet to MOD Power<br>60V (continuous), Basic Insulation Type, Ethernet to Backplane<br>60V (continuous), Basic Insulation Type, USB to SA Power<br>60V (continuous), Basic Insulation Type, USB to MOD Power<br>60V (continuous), Basic Insulation type, USB to Backplane<br>60V (continuous), Basic Insulation Type, USB to Ethernet<br>250V (continuous), Basic Insulation Type, all other circuits to Functional Earth (FE)<br>No isolation between Ethernet ports | | | | | | |
| Weight, approx | 0.584 kg (1.287 lb) | | | | | | |
| Dimensions (HxWxD), approx | 125 x 85 x 95 mm (4.92 x 3.34 x 3.74 in.) | | | | | | |
| Location | DIN rail mount (any mounting orientation) | | | | | | |
| DIN rail | Compatible zinc-plated, chromate steel DIN rail. EN50022 - 35 x 7.5 mm (1.38 x 0.30 in.) | | | | | | |
| Removable terminal block | 5034-RTB6 (screw-type), 5034-RTB6S (push-in spring-type). **IMPORTANT:** You must order RTBs separately. | | | | | | |
| Terminal block torque | 5034-RTB6: 0.4 N•m (3.5 lb•in)<br>5034-RTB6S: Torque does not apply | | | | | | |
| Wire size | 5034-RTB6 connections: 0.5...1.5 $mm^2$ (22...16 AWG) solid or stranded copper wire that is rated at 105 °C (221 °F), or greater, 3.5 mm (0.14 in.) max diameter including insulation, single wire connection only<br>5034-RTB6S connections: 0.5...1.5 $mm^2$ (22...16 AWG) solid or stranded copper wire that is rated at 105 °C (221 °F), or greater, 2.9 mm (0.11 in.) max diameter including insulation, single wire connection only<br>Ethernet connections: Ethernet Cabling and Installation according to IEC 61918 and IEC 61784-5-2 | | | | | | |

| Attribute | 5034-L9004TS, 5034-L9004T SXT | 5034-L9006TS, 5034-L9006TSXT | 5034-L9010TS, 5034-L9010TS XT, 5034-L9010TN SXT | 5034-L9020TS, 5034-L9020T SXT | 5034-L9030TS, 5034-L9030T SXT | 5034-L9050TS, 5034-L9050T SXT | 5034-L9100TS, 5034-L9100T SXT |
|---|---|---|---|---|---|---|---|
| | Wire conductor and insulation rating support a minimum temperature rating of 105°C (211°F) at ambient 60°C(144°F). Lower temperature rating wire of 75°C (167°F) is also supported at ambient 40°C(104°F) . | | | | | | |
| Insulation stripping length | 5034-RTB6 connections: 12 mm (0.47 in.)<br>5034-RTB6S connections: 10 mm (0.39 in.) | | | | | | |
| Wire category | 3 - on USB port<br>1 - on power ports<br>2 - on Ethernet ports<br>**Note:** Use this Conductor Category information to plan conductor routing. See the Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1. | | | | | | |
| Enclosure | None (open-style) | | | | | | |
| North American temperature code | T4 | | | | | | |
| UKEX/ATEX temperature code | T4 | | | | | | |
| IECEx temperature code | T4 | | | | | | |

# CompactLogix 5390 Controller Environmental Specifications

CompactLogix® 5390 controllers are designed to support the environmental specification values in the following table. This publication will be updated if any of the specification values change. We recommend that you periodically consider checking this publication number at rok.auto/literature for newer publication revisions.

| Attribute | 5034-L9004TS, 5034-L9006TS, 5034-L9010TS, 5034-L9020TS, 5034-L9030TS, 5034-L9050TS, 5034-L9100TS | 5034-L9004TSXT, 5034-L9006TSXT, 5034-L9010TSXT, 5034-L9010TNSXT, 5034-L9020TSXT, 5034-L9030TSXT, 5034-L9050TSXT, 5034-L9100TSXT |
|---|---|---|
| Temperature, operating<br>IEC 60068-2-1 (Test Ae, Operating Cold),<br>IEC 60068-2-2(Test Be, Operating Dry Heat),<br>IEC 60068-2-14 (Test Nb, Operating Change of Temperature) | -25...+60 °C (-13...+140 °F) | -40...+70 °C (-40...+158 °F) |
| Temperature, nonoperating<br>IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold), IEC 60068-2-2 (Test Bb, | -40...+85 °C (-40...+185 °F) | |

| Attribute | 5034-L9004TS, 5034-L9006TS, 5034-L9010TS, 5034-L9020TS, 5034-L9030TS, 5034-L9050TS, 5034-L9100TS | 5034-L9004TSXT, 5034-L9006TSXT, 5034-L9010TSXT, 5034-L9010TNSXT, 5034-L9020TSXT, 5034-L9030TSXT, 5034-L9050TSXT, 5034-L9100TSXT |
|---|---|---|
| Unpackaged Nonoperating Dry Heat),<br>IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock) | | |
| Relative humidity, operating<br>IEC 60068-2-78 (Test Cab, Operating Damp Heat) | 5...93% noncondensing | |
| Relative humidity, nonoperating<br>IEC 60068-2-30 (Test Db, Unpackaged Nonoperating Damp Heat) | 5...95% noncondensing | |
| Conformal coated | No | Yes |
| Vibration<br>IEC 60068-2-6 (Test Fc, Operating) | 5 g @ 10...500 Hz | |
| Shock, operating<br>IEC 60068-2-27 (Test Ea, Unpackaged Shock) | 30 g | |
| Shock, nonoperating<br>IEC 60068-2-27 (Test Ea, Unpackaged Shock) | 50 g | |
| Emissions<br>IEC 61000-6-4 | 30...6000 MHz | |
| ESD immunity<br>IEC 61000-4-2 | ± 6 kV contact discharges<br>± 8 kV air discharges | |
| Radiated RF immunity<br>IEC 61000-4-3 | 10V/m with 1 kHz sinewave 80% AM from 80...6000 MHz | |
| EFT/B Immunity<br>IEC 61000-4-4 | ± 2 kV at 5 kHz on power ports<br>± 1 kV at 5 kHz on Ethernet ports<br>**Note:** Shielded cable is recommended for a coarse Update Rate (CUR)/ Requested Packet Interval (RPI) of 6ms or less. To use unshielded cable, the CUR/RPI must be at least 8ms. | |
| Surge Transient Immunity<br>IEC 61000-4-5 | ± 1 kV line-line (DM) and ± 2 kV line-earth (CM) on power ports<br>± 2 kV line-earth (CM) on Ethernet ports | |
| Conducted RF Immunity | 10Vrms with 1 kHz sinewave 80% AM from 150 kHz...80 MHz | |

| Attribute | 5034-L9004TS, 5034-L9006TS, 5034-L9010TS, 5034-L9020TS, 5034-L9030TS, 5034-L9050TS, 5034-L9100TS | 5034-L9004TSXT, 5034-L9006TSXT, 5034-L9010TSXT, 5034-L9010TNSXT, 5034-L9020TSXT, 5034-L9030TSXT, 5034-L9050TSXT, 5034-L9100TSXT |
|---|---|---|
| IEC 61000-4-6 | | |
| Voltage dip<br>IEC 61000-4-29 | 10 ms interruption at MOD Power port | |

# CompactLogix 5390 Controller Certifications

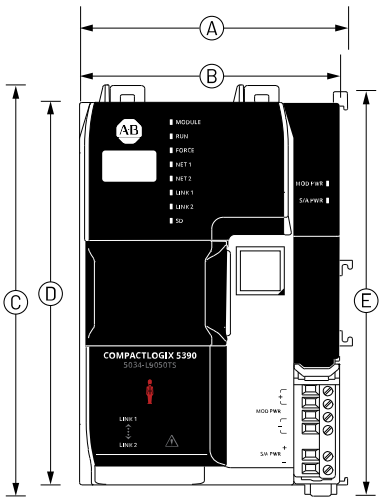
CompactLogix® 5390 controllers are designed to support the certifications in the following table. This publication will be updated if any of the certifications change. We recommend that you periodically consider checking this publication number at rok.auto/literature for newer publication revisions.

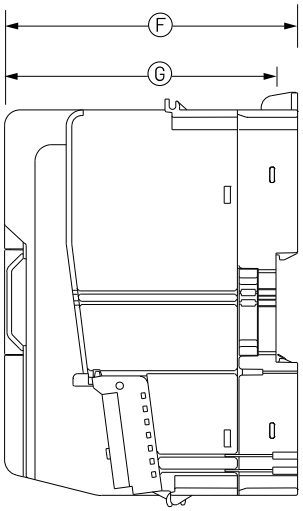
See the Product Certification website at rok.auto/certifications for Declarations of Conformity, Certificates, and other certification details.

| Certification | 5034-L9004TS, 5034-L9004TSXT, 5034-L9006TS, 5034-L9006TSXT, 5034-L9010TS, 5034-L9010TSXT, 5034-L9010TNSXT, 5034-L9020TS, 5034-L9020TSXT, 5034-L9030TS, 5034-L9030TSXT, 5034-L9050TS, 5034-L9050TSXT, 5034-L9100TS, 5034-L9100TSXT |
|---|---|
| c-UL-us | UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E322657.<br>UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E334470. |
| UKCA and CE | UK Statutory Instrument 2016 No. 1091 and European Union 2014/30/EU EMC Directive, compliant with:<br>• EN 61326-1; Meas./Control/Lab., Industrial Requirements<br>• EN 61000-6-2; Industrial Immunity<br>• EN 61000-6-4; Industrial Emissions<br>• EN 61131-2; Programmable Controllers (Clause 8, Zone A & B)<br>UK Statutory Instrument 2008 No. 1597 and European Union 2006/42/EC MD, compliant with:<br>• EN 60204-1; Electrical equipment of machines<br>• EN ISO 13849-1; Safety-related parts of control systems<br>• EN 62061; Functional safety of safety-related control systems<br>• Cat. 3/PL d according to EN ISO 13849-1, and SIL 2 according to EN 62061/IEC 61508<br>UK Statutory Instrument 2012 No. 3032 and European Union 2011/65/EU RoHS, compliant with:<br>• EN IEC 63000; Technical documentation |
| RCM | Australian Radiocommunications Act, compliant with EN 61000-6-4; Industrial Emissions |
| IECEx | IECEx System, compliant with:<br>• IEC 60079-0; General Requirements<br>• IEC 60079-7; Explosive Atmospheres, Protection "e"<br>• II 3 G Ex ec IIC T4 Gc<br>• IECEx UL 26.0066X |
| Ex | UK Statutory Instrument 2016 No. 1107 and European Union 2014/34/EU ATEX Directive, compliant with:<br>EN IEC 60079-0; General Requirements<br>EN IEC 60079-7; Explosive Atmospheres, Protection "e"<br>II 3 G Ex ec IIC T4 Gc<br>UL 26 ATEX 3605X and UL26UKEX3030X |

| | |
|---|---|
| **Certification** | **5034-L9004TS, 5034-L9004TSXT, 5034-L9006TS, 5034-L9006TSXT, 5034-L9010TS, 5034-L9010TSXT, 5034-L9010TNSXT, 5034-L9020TS, 5034-L9020TSXT, 5034-L9030TS, 5034-L9030TSXT, 5034-L9050TS, 5034-L9050TSXT, 5034-L9100TS, 5034-L9100TSXT** |
| KC | Korean Registration of Broadcasting and Communications Equipment, compliant with:<br>• Article 58-2 of Radio Waves Act, Clause 4 |
| Morocco | In conformity with the following regulations:<br>• Arrêté ministériel n° 6404-15 du 1 er muharram 1437<br>• Arrêté ministériel n° 6404-15 du 29 ramadan 1436 |
| CCC | CNCA-C23-01 强制性产品认证实施规则 防爆电气<br>CNCA-C23-01 CCC Implementation Rule Explosion-Proof Electrical Products 2026 |

# CompactLogix 5390 Controller Dimensions

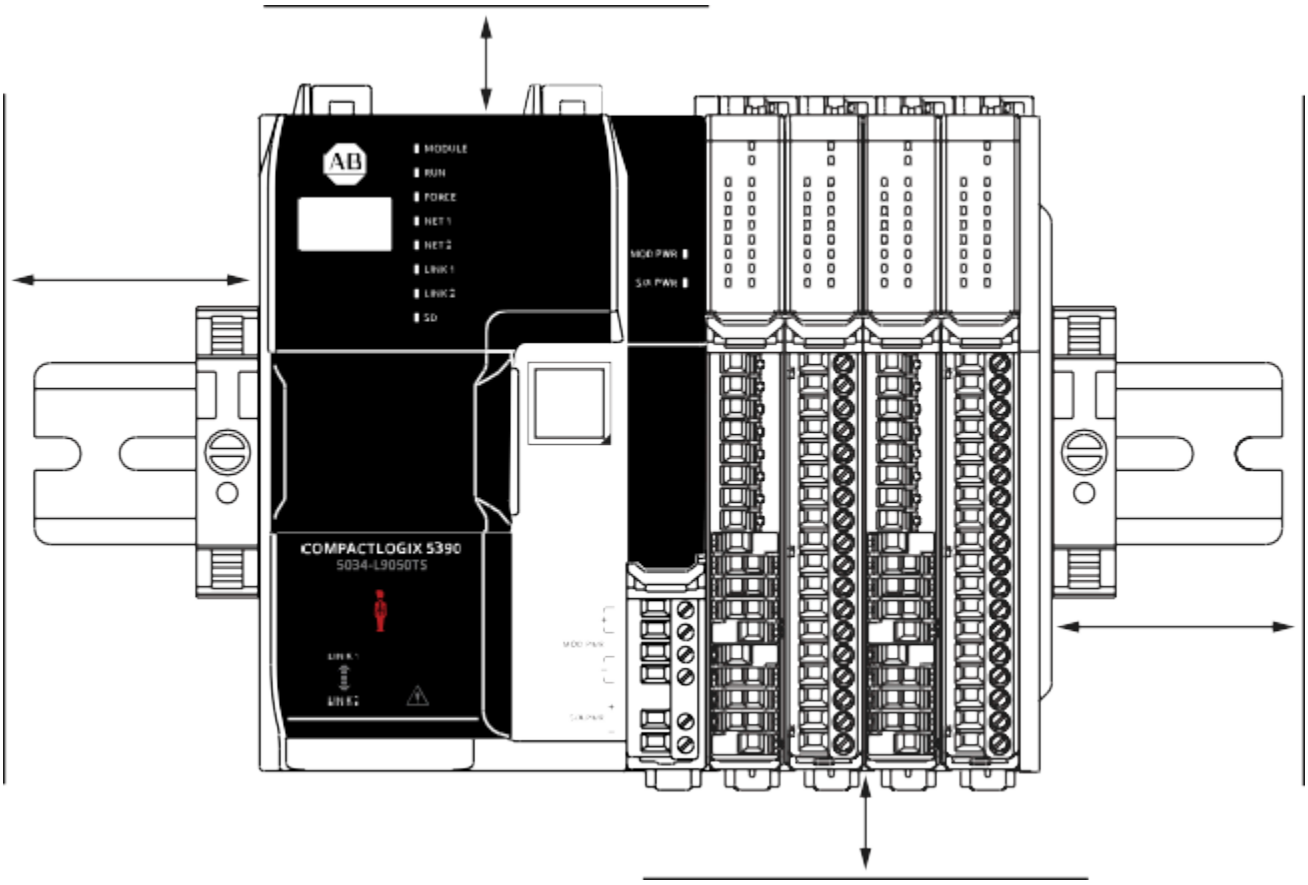



| Letter | Dimension |
|---|---|
| A | 87.65 mm (4.92 in.) |
| B | 85 mm (3.34 in.) |
| C | 134.44 mm (5.29 in.) |
| D | 125 mm (4.92 in.) |
| E | 132.2 mm (5.20 mm) |
| F | 95 mm (3.74 in.) |
| G | 88 mm (3.46 in.) |

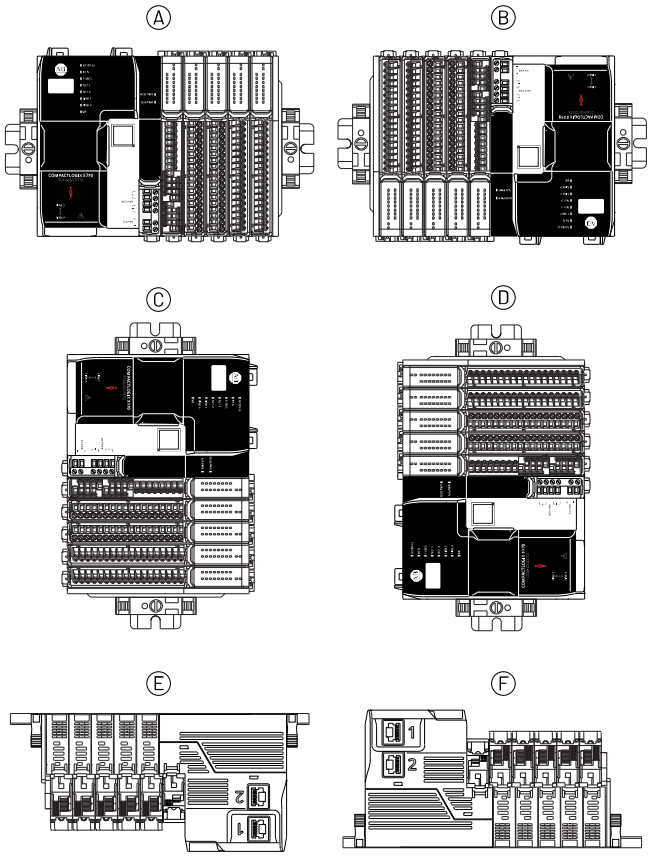
# CompactLogix 5390 System Minimum Space Requirements

Maintain spacing from enclosure walls, wireways, and adjacent equipment. Allow 25.4 mm (1 in.) of space on all sides for adequate ventilation.



# Rack Orientation

The controller and PointMax™ I/O modules can be mounted in the following positions:




| Letter | Orientation |
|---|---|
| A | Horizontal |
| B | Horizontal and inverted |
| C | Vertical |
| D | Vertical and inverted |
| E | Front side down |
| F | Front side up |

**IMPORTANT:** 5034 PointMax™ I/O modules may require derating for C, D, E, F orientations. For more information, see the PointMax I/O System Specifications Technical Data, 5034-TD001.

# Additional Resources

These documents contain additional information concerning related products from Rockwell Automation. You can view or download publications at rok.auto/literature.

**Table 1. CompactLogix 5390 Controllers**

| Resource | Description |
|---|---|
| CompactLogix 5390 Controllers Installation Instructions, 5034-IN900 | Provides installation instructions for CompactLogix® 5390 controllers. |
| CompactLogix 5390 Controllers User Manual, 5034-UM900 | Provides information on how to configure, select I/O modules, manage communication, develop applications, and troubleshoot CompactLogix® 5390 controllers. |
| CompactLogix 5390 Selection and Specifications, publication 5034-TD900. | Provides specifications for CompactLogix® controllers. |
| Logix 5000 Controllers Design Considerations Reference Manual, 1756-RM094 | Provides information to help design and plan Logix 5000® systems. |
| Replacement Guidelines: Logix 5000® Controllers Reference Manual, 1756-RM100 | Compares Logix 5000® controllers, and provides guidelines on the features, functions, instruction updates, and differences between controllers. |
| System Security Design Guidelines Reference Manual, SECURE-RM001 | Provides guidance on how to conduct security assessments, implement Rockwell Automation products in a secure system, harden the control system, manage user access, and dispose of equipment. |
| Security Configuration User Manual, SECURE-UM001 | Describes how to configure and use Rockwell Automation products to improve the security of your industrial automation system. |
| CIP Security with Rockwell Automation Products Application Technique, SECURE-AT001 | Describes how to implement the CIP Security™ standard in your control system. |
| FactoryTalk Security Application Technique, SECURE-AT002 | Describes how to use FactoryTalk® Security to implement authentication and authorization in your industrial automation system and enforce product-specific security for Studio 5000 Logix Designer® FactoryTalk® View, and FactoryTalk® AssetCentre |
| CompactLogix Controllers Technical Documentation | Access manuals to help you install, configure, and use your CompactLogix® small control system. |
| Industrial Automation Wiring and Grounding Guidelines, 1770-4.1 | Provides general guidelines for installing a Rockwell Automation industrial system. |
| Product Certifications website, rok.auto/certifications. | Provides declarations of conformity, certificates, and other certification details. |

**Table 2. PointMax I/O**

| Resources | Description |
|---|---|
| PointMax I/O System Specifications Technical Data, publication 5034-TD001 | Provides PointMax™ I/O system specifications. |
| PointMax I/O System Installation Instructions, publication 5034-IN001 | Provides instructions on installing a complete PointMax™ I/O system. |

**Table 2. PointMax I/O (continued)**

| Resources | Description |
|---|---|
| PointMax EtherNet/IP Adapter User Manual, publication 5034-UM001 | Provides information on how to configure and operate PointMax™ EtherNet/IP adapters. |
| PointMax Digital I/O Modules User Manual, publication 5034-UM002 | Provides information on how to configure and operate PointMax™ digital I/O modules. |
| PointMax Analog I/O Modules User Manual, publication 5034-UM003 | Provides information on how to configure and operate PointMax™ analog I/O modules. |
| PointMax 4-Channel IO-Link Master Module User Manual, publication 5034-UM004 | Provides information on how to configure and operate the PointMax™ IO-Link master module. |
| PointMax Serial Module User Manual, publication 5034-UM005 | Provides information on how to configure and operate the PointMax™ serial module. |
| PointMax High-speed Counter/SSI Encoder Module User Manual, publication 5034-UM006 | Provides information on how to configure and operate the PointMax™ high-speed counter/SSI encoder module. |
| PointMax Analog HART I/O Modules User Manual, publication 5034-UM007 | Provides information on how to configure and operate the PointMax™ analog HART I/O modules. |
| PointMax Dual Stepper Drive User Manual 5034-UM008 | Provides information on how to configure and operate PointMax™ dual stepper drive. |

# Rockwell Automation Support

Use these resources to access support information.

| | | |
|---|---|---|
| Technical Support Center | Find help with how-to videos, FAQs, chat, user forums, and product notification updates. | rok.auto/support |
| Local Technical Support Phone Numbers | Locate the telephone number for your country. | rok.auto/phonesupport |
| Technical Documentation Center | Quickly access and download technical specifications, installation instructions, and user manuals. | rok.auto/techdocs |
| Literature Library | Find installation instructions, manuals, brochures, and technical data publications. | rok.auto/literature |
| Product Compatibility and Download Center (PCDC) | Get help determining how products interact, check features and capabilities, and find associated firmware. | rok.auto/pcdc |

# Documentation Feedback

Your comments help us serve your documentation needs better. If you have any suggestions on how to improve our content, complete the form at rok.auto/docfeedback.

# Waste Electrical and Electronic Equipment (WEEE)

At the end of life, this equipment should be collected separately from any unsorted municipal waste.

Rockwell Automation maintains current product environmental information on its website at rok.auto/pec.

Allen-Bradley, Armor, ArmorBlock, ArmorBlock MaXum, ArmorPOINT, CompactBlock, Compact I/O, CompactLogix, ControlLogix, ControlLogix-XT, Data Highway Plus, DH+, DriveLogix, expanding human possibility, FLEX, FLEX Ex, FlexLogix, Guard I/O, GuardLogix, GuardLogix-XT, InView, MicroLogix, On-Machine, PanelView, PLC-2, PLC-3, PLC-5, POINT I/O, POINT Guard I/O, PointMax, PowerFlex, Rockwell Automation, RSLogix 5000, SCANport, SLC, and SoftLogix are trademarks of Rockwell Automation, Inc.

CIP, CIP Security, ControlNet, DeviceNet, and EtherNet/IP are trademarks of ODVA, Inc.

microSD is a trademark of SD-3C.

Trademarks not belonging to Rockwell Automation are property of their respective companies.

Rockwell Automation NV Commercial Registration Number 0424.293.935

Rockwell Otomasyon Ticaret A.Ş. Kar Plaza İş Merkezi E Blok Kat:6 34752 İçerenköy, İstanbul, Tel: +90 (216) 5698400 EEE Yönetmeliğine Uygundur

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
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

Publication 5034-TD900B-EN-P - July 2026
Supersedes Publication 5034-TD900A-EN-P - July 2026

Copyright © 2026, Rockwell Automation, Inc. All rights reserved. Printed in the U.S.A.