

# Allen-Bradley<sup>®</sup> Kinetix<sup>®</sup> 5300 and Kinetix 5100 Servo Drives & Kinetix TLP Servo Motor

Versatile motion control solutions  
for small to medium machines



One stop solution for industrial  
products and services



## Kinetix 5100 Servo Drive

Designed for versatility, the Kinetix 5100 provides a large range of power options to fit the unique needs of every individual application. With a wider choice of power range than comparable alternatives – up to 15 kW – Kinetix 5100 drives can be used in standalone mode or with Micro800™ or Logix controllers.

### Features and Benefits

**Safety, Simply** – Hardwired Safe Torque Off is standard on all units, providing safety features without any additional parts or labor.

**IO** – Ten freely assignable digital inputs (two can be used as fast digital input functions) and five freely assignable digital outputs.

**Quick Change** – Control mode changes (i.e. Speed to Torque) on the fly, so the control system can switch modes without stopping the running condition.

**Smooth Sailing** – Optimized machine performance with reduced manual tuning effort, minimizes vibration without slowing down system response time.

**Power Range** – More comprehensive power range than comparable solutions (0.05...2 kW at 120...230V, 3...15 kW at 230V and 0.4...15 kW at 460V) to tailor power to the application.

**More Action, Less Distraction** – Indexing and eCAM function to provide more motion commands than other products without the need for separate control systems.

**Stands Alone, Fits Together** – Choose your own control with three options: standalone control, connectivity to Micro800 controllers or connectivity to Logix controllers. Quick and easy setup. Kinetix 5100 drives seamlessly integrate into Logix applications with specially designed AOIs.



## Kinetix 5300 Servo Drive

Seamless integration with Rockwell Automation® Logix control offers flexibility in design for small to medium machines in a variety of motion control applications.

Designed with all the essentials covered – comprehensive power range, dual Ethernet ports, and hardwired Safe Torque Off, the Kinetix 5300 proves to be an excellent choice right-sized for building or modernizing machines with lower axes count.





## Features and Benefits

**Safety, Simply** – Hardwired Safe Torque Off comes standard, providing safety features without any additional parts or labor.

**Get Connected** – EtherNet/IP with Device Level Ring (DLR) eliminates the need for additional accessories.

**IO** – Four digital inputs, two of which can be used as fast digital input functions. Auxilliary feedback wiring is included as part of the IO connector.

**Power Range** – Rated power of 0.05...2 kW at 120...230V, 3...7.5 kW at 230V and 0.4...7.5 kW at 460V. Rated power references the output power at the motor, which simplifies and facilitates sizing efforts.

**Logix Integration** – Integration with Logix as single control engine – and Studio 5000 as single design environment – streamlining the design, implementation and control of the machine.

**Tuningless Startup** – Features like Tracking Notch Filters and Load Observers help simplify commissioning and keep the machine running smoothly with automatic adjustments.



## Kinetix TLP Servo Motor & Accessories

Tested and validated for optimized performance with Kinetix 5100 and Kinetix 5300 servo drives, this motor is available in eight frame sizes and ranges from 50 W to 15 kW. Complete the customization of your system with a range of motor cables and accessories.

## Features and Benefits

**Size Options** – Available in eight frame sizes ranging from 46 mm to 235 mm and options for 200V or 400V.

**Resolution** – 24-bit high resolution absolute feedback.

**Power Range** – Rated power ranging from 50W to 15 kW – a wider range than comparable motors.

**Proven Performance, Global Use** – The Kinetix TLP servo motor is UL/CSA Recognized and CE marked.

**Brake Option** – Integral 24V DC brake option for machine customization.

**Perfect Fit** – Wide selection of cable lengths (up to 50 meters) in both flexible and non-flexible options to meet varying space requirements and machine designs.





## Kinetix 5500 Servo Drive

- Innovative common AC/DC bus eliminates hardware – reducing installation time and lowering costs
- Dual port Ethernet allows for both line and Device Level Ring topologies
- Targeted for use with Logix family of controllers supporting CIP Motion
- Disturbance observer allowing for up to 80-1 inertia mismatch

## Kinetix 5500 with Integrated Safety

- Integrated safety over EtherNet/IP
  - Safe Torque Off -SIL3PLe
  - Complete project integration in Logix Designer for control, safety and motion
- Hardwired safety
  - Safe Torque Off – SIL2PLd

## VPL Servo Motor

- Windings optimized to match drive ratings allowing for efficient system sizing
- Digital feedback device provides real-time motor performance information to the control system

## VPF Food-Grade Motor

- Designed to meet the unique needs of many food and beverage applications.
- Six frame sizes from 63mm to 165mm frame sizes (Continuous torque range of .93-19.4 Nm)
- Durable food grade white paint with premium white paint adhesion



## Single Cable

- One cable between motor and drive yields simplification in inventory and installation
- Cables meet the requirements of your machine, including:
  - UL AWM 1000V, 105° C construction
  - UL Listed PLTC-ER construction
  - CSA AWM, I/II A/B 1000V 105° C construction
  - CSA FT-4 vertical tray flame test
  - DESINA compliant jacket
- Standard and flex cables available to optimize your solution
- Configurable in 1m increments

## DSL Converter Kit

- Designed to convert Hiperface to DSL feedback
- Use the Kinetix 5500 Servo Drive with 460V Hiperface feedback MP-Series motors and actuators to solve additional motion applications
- Attaches directly to the drive's DSL feedback port and equipped with an adjustable mounting bracket to fit all Kinetix 5500 frame sizes Single cable provides feedback, motor brake and motor power simplifying wiring and reducing inventory

## Integrated Motion on EtherNet/IP Encoder

- Provides auxiliary feedback to the control system through the EtherNet/IP network – for feedback only applications.
- Uses the motion device axis profile to provide auxiliary feedback to the system.
- Uses CIP Sync and CIP Motion technology to provide a timed synchronization of data to and from controller.





# Allen-Bradley Kinetix 5700 Servo Drive Helping to Deliver an Innovative Motion Control System

The Kinetix® 5700 helps expand the value of integrated motion on EtherNet/IP to large custom machine builder applications.

With Logix as a single control engine, and one design environment – Studio 5000® – machine builders now have more flexibility to scale, design and control to help meet their needs. The Kinetix 5700 can help reduce commissioning time and improve machine performance. It offers the simplicity, power and space savings you need to help get your machine up and running faster.

The Kinetix 5700 is designed for machines with large axis counts with higher power requirements. It is available in single and dual axis servos with integrated and hardwired Safe Torque-Off.



## Features and Benefits

- Features dual axis modules
- Provides a large 1.6 to 60kW power range
- Controls servo and induction motors
- Wide range of feedback types supported
- Includes dual ethernet ports to support linear and device level ring topologies
- Reduces wiring with single cable technology
- Tuning-less commissioning for most axes
- Delivers best-in-class power density that reduces cabinet space requirements
- Offers innovative snapfit bus system
- Capacitor modules help reduce energy consumption
- Extension modules provide installation flexibility

## Integrated Safety

The Kinetix 5700 servo drive with integrated safety on EtherNet/IP, eliminates the need to separately wire the drive for safety. It reduces overall system wiring, saves time and money in installation and helps remove potential points of failure, thus resulting in less down time and troubleshooting. Integrated safety provides the capability to change the safety zoning and configurations, without needing to physically rewire the devices. Other features:

- Reduces Complexity with a single Network, EtherNet/IP for motion and safety functions
- Use EtherNet/IP to provide rich diagnostic data
- Simplifies zoning and reduces changeover time
- Integrated or hardwired safety - Safe Torque Off – SIL3 Plc
- Advanced safety with five safe stop functions and three safe monitoring functions

## Save time and enhance machine performances with tuning-less operation features

Traditionally, tuning the axis on a machine was a special art. Whether it was commissioning a machine or providing maintenance due to changing mechanics over time - tuning has been a time consuming job. The use of Load Observer real time tuning technology:

- Helps save time by eliminating the need for tuning each axis
- Automatically compensates for unknown mechanics, and compliance – such as in belts, flexible couplings, and shafts
- Automatically adjusts for applications where inertia varies during operation
- Enhances machine performance



Scan here to know more about

## Motion Control Systems



Learn from the experts!  
Register for Webinars & Workshops



Scan here to know more about  
our product range



Follow us on 



### Corporate Office

SUDHA CENTRE  
New No.31, Old No.19, 1st Floor  
Dr. Radha Krishnan Salai, Mylapore, Chennai  
Tamil Nadu - 600 004 T: +91 44 4003 0401

customercare@multivistaglobal.com  
+91 44 42030400

servicecare@multivistaglobal.com  
+91 44 40030400

[www.multivistaglobal.com](http://www.multivistaglobal.com)