

Allen-Bradley® Kinetix® 5300 and Kinetix 5100 Servo Drives & Kinetix TLP Servo Motor

Versatile motion control solutions for small to medium machines

THE TOTAL PACKAGE

Kinetix 5300 and Kinetix 5100 servo drives are designed to be paired with the Kinetix TLP servo motor, delivering complete motion control solutions that are right-sized for small to medium machines. These drive-motor pairings are designed with all the essential features to help machine builders deliver innovative and competitive solutions.



Kinetix TLP Servo Motor

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.

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.



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.

Kinetix 5300 Servo Drive



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.

Learn more [online](#)

Kinetix 5100 Servo Drive



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.

Learn more [online](#)

Kinetix TLP Servo Motor & 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 50 W 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.

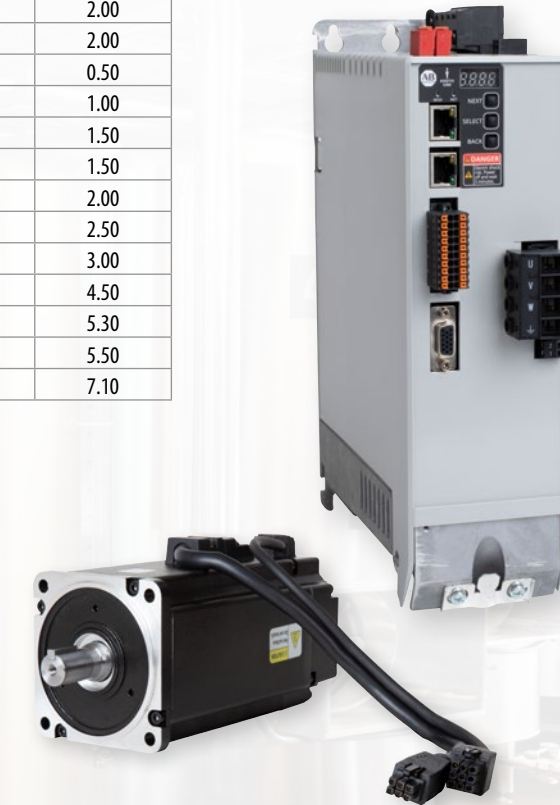
Perfect Fit – Wide selection of cable lengths (up to 50 meters) in both flexible and non-flexible options to meet varying space requirements and machine designs.

Learn more [online](#)

Kinetix 5300 Servo Drive and Kinetix TLP Servo Motor

Motor Catalog	Drive Catalog	Rated Speed	Max Speed	Continuous Stall Torque Nm	Peak Stall Torque Nm	Rated Output kW
TLP-A046-005	2198-C1004-ERS	3000	6000	0.16	0.447	0.05
TLP-A046-010	2198-C1004-ERS	3000	6000	0.32	1.034	0.10
TLP-A070-020	2198-C1004-ERS	3000	6000	0.64	2.16	0.20
TLP-A070-040	2198-C1004-ERS	3000	6000	1.27	4.275	0.40
TLP-A090-075	2198-C1007-ERS	3000	6000	2.39	7.505	0.75
TLP-A100-100	2198-C1015-ERS	3000	3000	3.18	8.74	1.00
TLP-A115-100	2198-C1015-ERS	3000	5000	3.18	8.455	1.00
TLP-A115-200	2198-C1020-ERS	3000	5000	6.22	17.48	1.95
	2198-C2030-ERS	3000	5000	6.37	17.48	2.00
TLP-A145-050	2198-C1007-ERS	2000	3000	2.39	6.81	0.50
TLP-A145-090	2198-C1015-ERS	1000	2000	8.59	20.52	0.90
TLP-A145-100	2198-C1015-ERS	2000	3000	4.77	13.30	1.00
TLP-A145-150	2198-C1015-ERS	2000	3000	6.92	19.66	1.45
	2198-C1020-ERS	2000	3000	7.16	19.66	1.50
TLP-A145-250	2198-C2030-ERS	3000	4500	7.96	24.51	2.50
TLP-A200-200	2198-C1020-ERS	2000	3000	9.50	21.85	1.98
	2198-C2030-ERS	2000	3000	9.55	21.85	2.00
TLP-A200-300	2198-C2030-ERS	1500	2500	18.49	47.03	2.90
	2198-C2055-ERS	1500	2500	19.10	47.03	3.00
TLP-A200-350	2198-C2055-ERS	2000	3000	16.71	43.23	3.50
TLP-A200-450	2198-C2055-ERS	1500	3000	28.65	64.04	4.50
TLP-A200-550	2198-C2055-ERS	1500	3000	34.22	79.96	5.38
	2198-C2075-ERS	1500	3000	35.01	79.96	5.50
TLP-A200-750	2198-C2075-ERS	1500	2500	45.72	104.30	7.18

Motor Catalog	Drive Catalog	Rated Speed	Max Speed	Continuous Stall Torque Nm	Peak Stall Torque Nm	Rated Output kW
TLP-B070-040	2198-C4004-ERS	3000	6000	1.27	4.250	0.40
TLP-B090-075	2198-C4007-ERS	3000	6000	2.32	6.900	0.73
	2198-C4015-ERS	3000	6000	2.39	8.05	0.75
TLP-B115-100	2198-C4015-ERS	3000	5000	3.18	9.340	1.00
TLP-B115-200	2198-C4020-ERS	3000	5000	6.37	17.90	2.00
	2198-C4030-ERS	3000	5000	6.37	19.10	2.00
TLP-B145-050	2198-C4007-ERS	2000	3000	2.39	6.93	0.50
TLP-B145-100	2198-C4015-ERS	2000	3000	4.77	13.03	1.00
TLP-B145-150	2198-C4015-ERS	2000	3000	7.16	20.16	1.50
	2198-C4020-ERS	2000	3000	7.16	20.54	1.50
TLP-B145-200	2198-C4020-ERS	2000	3000	9.55	24.40	2.00
TLP-B145-250	2198-C4030-ERS	3000	4500	7.96	26.30	2.50
TLP-B200-300	2198-C4030-ERS	1500	2500	19.10	47.80	3.00
TLP-B200-450	2198-C4055-ERS	1500	3000	28.70	67.60	4.50
TLP-B200-550	2198-C4055-ERS	1500	3000	33.49	73.60	5.30
	2198-C4075-ERS	1500	3000	35.00	83.80	5.50
TLP-B200-750	2198-C4075-ERS	1500	2500	45.40	101.30	7.10







Kinetix 5100 Servo Drive and Kinetix TLP Servo Motor System Pairing

Motor Catalog	Drive Catalog	Rated Speed	Max Speed	Continuous Stall Torque Nm	Peak Stall Torque Nm	Rated Output kW
TLP-A046-005	2198-E1004-ERS	3000	6000	0.16	0.447	0.05
TLP-A046-010	2198-E1004-ERS	3000	6000	0.32	1.034	0.10
TLP-A070-020	2198-E1004-ERS	3000	6000	0.64	2.16	0.20
TLP-A070-040	2198-E1004-ERS	3000	6000	1.22	2.91	0.38
	2198-E1007-ERS	3000	6000	1.27	4.275	0.40
TLP-A090-075	2198-E1007-ERS	3000	6000	2.39	7.505	0.75
TLP-A100-100	2198-E1007-ERS	3000	3000	3.18	8.74	1.00
	2198-E1015-ERS	3000	3000	3.18	8.74	1.00
TLP-A115-100	2198-E1015-ERS	3000	5000	3.18	8.455	1.00
TLP-A115-200	2198-E1020-ERS	3000	5000	6.37	17.48	2.00
TLP-A145-050	2198-E1007-ERS	2000	3000	2.39	6.81	0.50
TLP-A145-090	2198-E1015-ERS	1000	2000	8.3	20.52	0.87
	2198-E1020-ERS	1000	2000	8.59	20.52	0.90
TLP-A145-100	2198-E1015-ERS	2000	3000	4.77	13.3	1.00
TLP-A145-150	2198-E1015-ERS	2000	3000	6.22	15.92	1.30
	2198-E1020-ERS	2000	3000	7.16	19.66	1.50
TLP-A200-200	2198-E1020-ERS	2000	3000	9.55	33.66	2.00
TLP-A200-300	2198-E2030-ERS	1500	2500	16.81	45.62	2.64
	2198-E2055-ERS	1500	2500	19.1	47.03	3.00
TLP-A200-350	2198-E2055-ERS	2000	3000	16.71	43.23	3.50
TLP-A200-450	2198-E2055-ERS	1500	3000	28.65	64.04	4.50
TLP-A200-550	2198-E2055-ERS	1500	3000	35.01	67.67	5.50
	2198-E2075-ERS	1500	3000	35.01	79.96	5.50
TLP-A200-750	2198-E2075-ERS	1500	2500	45.36	104.3	7.12
	2198-E2150-ERS	1500	2500	47.74	104.3	7.50
TLP-A235-11K	2198-E2150-ERS	1500	2000	70.0	144.3	11.00
TLP-A235-15K	2198-E2150-ERS	1500	2000	95.4	184.6	15.00

Motor Catalog	Drive Catalog	Rated Speed	Max Speed	Continuous Stall Torque Nm	Peak Stall Torque Nm	Rated Output kW
TLP-B070-040	2198-E4004-ERS	3000	6000	1.27	4.25	0.40
TLP-B090-075	2198-E4007-ERS	3000	6000	2.39	5.93	0.75
	2198-E4015-ERS	3000	6000	2.39	8.05	0.75
TLP-B115-100	2198-E4015-ERS	3000	5000	3.18	9.34	1.00
TLP-B115-200	2198-E4020-ERS	3000	5000	6.37	15.62	2.00
	2198-E4030-ERS	3000	5000	6.37	19.10	2.00
TLP-B145-050	2198-E4007-ERS	2000	3000	2.39	6.93	0.50
TLP-B145-100	2198-E4015-ERS	2000	3000	4.77	13.03	1.00
TLP-B145-150	2198-E4015-ERS	2000	3000	7.16	16.92	1.50
	2198-E4020-ERS	2000	3000	7.16	20.54	1.50
TLP-B145-200	2198-E4020-ERS	2000	3000	9.55	23.74	2.00
	2198-E4030-ERS	2000	3000	9.55	24.40	2.00
TLP-B145-250	2198-E4030-ERS	3000	4500	7.96	20.51	2.50
	2198-E4055-ERS	3000	4500	7.96	26.30	2.50
TLP-B200-300	2198-E4030-ERS	1500	2500	19.10	36.57	3.00
	2198-E4055-ERS	1500	2500	19.10	47.80	3.00
TLP-B200-450	2198-E4055-ERS	1500	3000	28.70	43.60	4.50
	2198-E4150-ERS	1500	3000	28.70	67.60	4.50
TLP-B200-550	2198-E4055-ERS	1500	3000	35.00	47.35	5.50
	2198-E4150-ERS	1500	3000	35.00	83.80	5.50
TLP-B200-750	2198-E4075-ERS	1500	2500	47.70	77.20	7.50
	2198-E4150-ERS	1500	2500	47.70	101.30	7.50
TLP-B235-11K	2198-E4150-ERS	1500	2000	70.00	158.50	11.00
TLP-B235-14K	2198-E4150-ERS	1500	2000	89.10	143.60	14.00



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) 2 663 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

Allen-Bradley, expanding human possibility, Kinetix, Micro800 and Rockwell Automation are trademarks of Rockwell Automation, Inc.

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

Publication KNETIX-PP001B-EN-P - November 2020 | Supersedes Publication KNETIX-PP001A-EN-P - October 2019

Copyright © 2020 Rockwell Automation, Inc. All Rights Reserved. Printed in USA.