

PRODUCT PROFILE

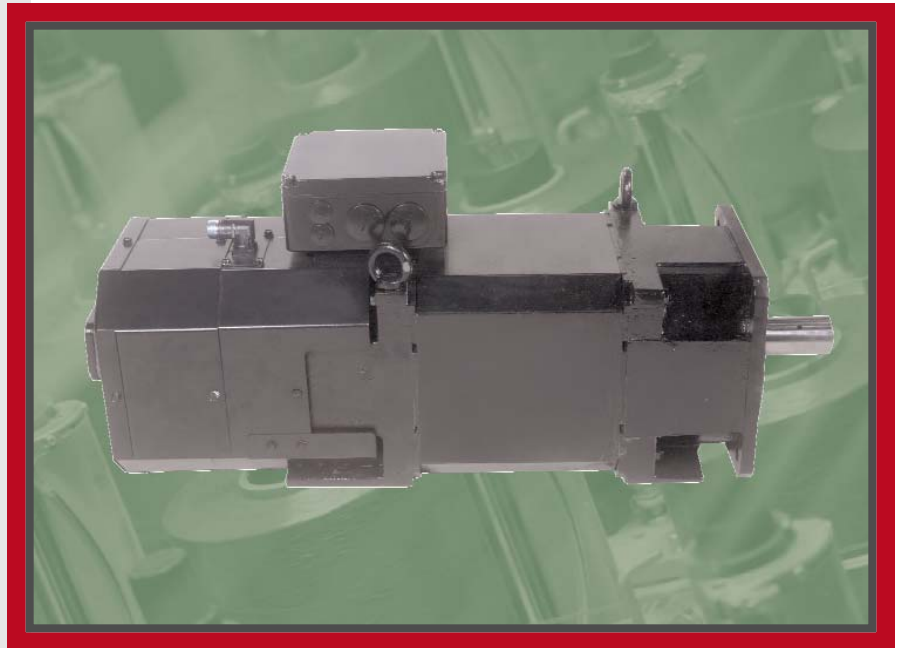
HPK-SERIES HIGH POWER ASYNCHRONOUS MOTORS

To get the power your application requires, you may be sacrificing the tight control and high performance required for increased throughput. Finding a servo solution which combines high power with precise positioning capability would provide significant advantages. Now, Rockwell Automation can help you achieve those competitive advantages with the Allen-Bradley HPK-Series High Power Induction Servo Motors. Unlike typical induction motors, the HPK-Series Servo Motors feature windings that are optimized for servo control coupled with high resolution feedback to provide the precision your application requires. These high horsepower motors employ proven induction motor technology providing high reliability and durability in demanding applications.

These AC motors were specifically engineered for optimized performance when used with the Allen-Bradley Kinetix 7000 High Power Servo Drive. When you team HPK-Series Motors with Kinetix 7000 drives, you're getting products that have been performance tested as a system. The motor and drive are designed to work together to provide a superior solution and extend the range of Kinetix Integrated Motion solutions up to 112 kW.

Available in five frame sizes, these 400 and 460 volt motors provide continuous stall torque from 96 to 482 Nm (849-4266 lb-in.) and peak torque from 2192 to 964 Nm (1699 to 8531 lb-in.)

INDUCTION MOTOR TECHNOLOGY OPTIMIZED FOR SERVO SYSTEMS



The HPK-Series effectively combines the high power of induction motors with the precise positioning and rapid acceleration capability of a servo motor for increased throughput.

HPK-SERIES MOTOR FEATURES

- High resolution feedback (up to 2 million counts per revolution) provides smooth, precise control. Multi-turn absolute feedback option eliminates homing routines.
- Kinetix Servo Motors use Smart Motor Technology to provide automatic identification of correct motor-to-drive connectivity, reducing commissioning time.
- Motor winding optimized to provide constant torque over a wide speed range.
- Continuous torque from 96 to 482 Nm (849 to 4266 lb-in.) and peak torque from 192 to 964 Nm (1699 to 8531 lb-in.) with base speeds of 1500 and 3000 rpm.
- Low rotor inertia for higher acceleration rates
- Rated for 200% service factor
- Standard DIN feedback connector and junction box for power connections simplify installation wiring.
- Motors are equipped with shaft seal, automatic T-drains, corrosion resistant hardware, and gasketed junction box for improved environmental protection.
- Integral blower cooling allows higher performance in a compact package.
- Standard IEC flange and/or foot mount.

SPECIFICATIONS

Catalog Number	Base Speed rpm	Continuous Stall Torque Nm (lb-in.)	Peak Stall Torque Nm (lb-in.)	Output Power at Base Speed kW (Hp)	Rotor Inertia* kg-m ² (lb-in.-s ²)	Continuous Stall Current Amperes (0-peak)	Peak Stall Current Amperes (0-peak)	
HPK-B1307C	1500	112 (991)	260 (2301)	17.1 (22.9)	0.081 (0.7168)	34.2	80	460 voltage ↓
HPK-B1308C	1500	141 (1248)	282 (2496)	21.6 (28.9)	0.098 (0.8673)	59.6	119.3	
HPK-B1310C	1500	155 (1372)	310 (2743)	23.9 (32.0)	0.111 (0.9823)	64.9	144	
HPK-B1613C	1500	71 (2398)	542 (4797)	41.8 (56.0)	0.206 (1.8231)	109.8	217	
HPK-B1815C	1500	360 (3186)	720 (6372)	55.9 (74.9)	0.468 (4.1418)	153.7	402	
HPK-B2010C	1500	482 (4266)	964 (8531)	75.0 (100.5)	0.885 (7.8322)	196.4	440	
HPK-B2212C	1500	607 (5371)	1105 (9780)	94.0 (127)	1.9 (16.8149)	254	440	
HPK-B1307E	3000	96 (849)	192 (1699)	26.1 (34.9)	0.081 (0.7168)	81	146.6	
HPK-B1308E	3000	115 (1018)	230 (2035)	33.5 (44.9)	0.098 (0.8673)	91.4	190.3	
HPK-B1609E	3000	156 (1380)	312 (2761)	48.5 (65.0)	0.147 (1.3009)	124.4	217	
HPK-B1611E	3000	183 (1319)	366 (3239)	57.0 (76.4)	0.177 (1.5664)	149	338.4	
HPK-B1613E	3000	241 (2133)	482 (4266)	75.0 (100.5)	0.206 (1.8231)	191	440	
HPK-B2010E	3000	295(2610)	500 (4425)	92.0 (125.0)	0.885 (7.8322)	180	312	400 voltage ↓
HPK-E1307C	1500	112 (991)	263 (2327)	17.1 (22.9)	0.081 (0.7168)	41.5	100	
HPK-E1310C	1500	155(1372)	380 (3363)	23.8 (31.9)	0.111 (0.9823)	57.6	142	
HPK-E1613C	1500	271(2398)	625 (5531)	41.7 (55.9)	0.206 (1.8231)	94.0	220	
HPK-E1815C	1500	360(3186)	840 (7434)	55.9 (74.9)	0.468 (4.1418)	132.0	312	
HPK-E2010C	1500	482 (4266)	870 (7700)	75 (100.5)	0.885 (7.8322)	172.5	312	
HPK-E1308E	3000	107 (947)	200 (1770)	33.2 (44.5)	0.098 (0.8673)	80.0	154	
HPK-E1609E	3000	156 (1381)	359 (3176)	48.4 (64.9)	0.147 (1.3009)	109.0	253	
HPK-E1611E	3000	183(1619)	430 (3805)	57.0 (76.4)	0.177 (1.5664)	131.0	312	
HPK-E1613E	3000	237(2097)	430 (3805)	73.7 (98.8)	0.206 (1.8231)	172.0	312	

* Rotor inertia may vary slightly depending upon feedback and brake options.

TYPICAL APPLICATIONS

Applications that need both high power and precision will benefit from the HPK-Series Motors. Examples include:

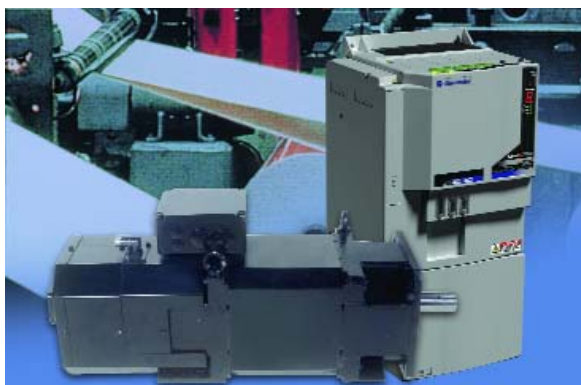
- High power packaging
- Material handling
- Converting
- Metal forming
- Wind/unwind/rewind
- Injection molding
- Sheeters
- Flying knife

UL AND CSA INFORMATION

Motor is a UL recognized component to applicable UL and CSA standards. CE marked for all applicable directives.

OPERATING TEMPERATURE RANGE

0 - 40° C (32 - 104° F)



A High Performance Solution

Combine the HPK-Series Motors with the Kinetix 7000 High Power Servo Drive for a high performance solution reaching up to 112 kW. As part of Kinetix Integrated Motion, they fit seamlessly into the Rockwell Automation Integrated Architecture, allowing you to save time and money throughout the machine lifecycle – from design and installation through operation and maintenance.

For more information, refer to our web site: www.ab.com/motion, or the Kinetix selection guide, GMC-SG001x

www.rockwellautomation.com

Power, Control and Information Solutions Headquarters

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, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, 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