

**RADIAL LOAD CAPACITY (Kgs) -
NO AXIAL LOAD - FOR L10 LIFE OF 10,000 HOURS**
Radial Load Capacity at the End of the Shaft (Kgs)

2500 RPM	1750 RPM	1150 RPM	850 RPM
580	660	660	660

**AXIAL THRUST CAPACITY (Kgs) -
NO RADIAL LOAD - FOR L10 LIFE OF 10,000 HOURS**
Horizontal Mounting Load Capacity at the End of the Shaft (Kgs)

2500 RPM	1750 RPM	1150 RPM	850 RPM
310	370	460	530

Notes: Print or enlarge waveforms for improved clarity.
For additional specifications see 10000000353

REFERENCES		DESCRIPTION		CAD DOCUMENT			
VERSION / CHANGE NUMBER		HPK-E2010C-SB44BA,ESE		CONFIDENTIAL AND PROPRIETARY INFORMATION			
00	10000019			THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION OF ROCKWELL AUTOMATION, INC. AND MAY NOT BE USED, COPIED OR DISCLOSED TO OTHERS, EXCEPT WITH THE AUTHORIZED WRITTEN PERMISSION OF ROCKWELL AUTOMATION, INC.			
				PARTS MUST CONFORM TO APPLICABLE ROCKWELL AUTOMATION MANUFACTURING STANDARDS			
				DR.	VS	DATE	9/20/2006
						SHEET 1 OF 4	
				DOCUMENT NUMBER			
				10000000333			

Specifications:


1. Motor type: 4 pole, 3 phase, asynchronous, ventilated
2. Base speed: 1480 RPM.
3. Maximum speed: 3000 RPM.
4. Continuous stall torque: 482 Nm (4266 lb-in) max at 155C winding temperature in a 40C
5. Peak stall torque: 870 Nm (7700 lb-in) max.
6. Continuous output rating: 75 kW (hp) max at 1480 RPM. Continuous current @ 1480 RPM 243 Amps 0 to peak max.(172.5 Amps.RMS)
7. Operating voltage: 400 VAC RMS Ref. (Not for direct connection to AC line).
8. Continuous stall current: 243 Amps 0 to peak max.(172.5 Amps.RMS)
9. Magnetizing current: 82.5 Amps. RMS ref.
10. Peak stall current: 440 Amps 0 to peak max.(312 Amps. RMS)
11. Insulation class: 180 (H).
12. Housing temperature: 125C max.
13. Winding resistance: .025 Nom. Ohms, phase to phase at 20C to 30C.
14. Winding inductance: 1.46 mH, phase to phase Ref.
15. Dielectric rating of motor power connections (U,V,W), and thermostat connections (TS+, TS-) to ground: 2350 VAC RMS 50/60 Hz for 1 second.
16. Rotor inertia: .885 kg-m2 Ref.
17. Rotor balancing: Quality grade G-6.3.
18. Product weight: 351 kg (1170 lb) Ref.
19. Operating ambient temperature: 0C to 40C (32F to 104F).
20. Storage ambient temperature: -30C to 70C (-22F to 158F).
21. Relative humidity: 5% to 95% non-condensing.
22. Liquid / dust protection: IP54 w/lt blower installed..
23. Shock: 10 g peak max, 6 msec duration (18 occurances tested).
24. Vibration: 2.5 g peak max, 30 to 2000 Hz.
25. Shaft material: Steel, grade 1040/1045.
26. Paint: Black. Shaft, key (if provided), front mounting surface, and connectors are not painted.

Equivalent circuit parameters

X1: .0736 Ohms/phs Ref at 20C to 30C.
X2: .0995 Ohms/phs Ref at 20C to 30C.
Xm : 2.26 Ohms/phs Ref at 20C to 30C
R1: .0124 Ohms/phs Ref at 20C to 30C
R2: .00984 Ohms/phs Ref at 20C to 30C

BRAKE: 460VAC 48Nm max. holding torque

Notes: "Ref" denotes untoleranced specifications, provided for reference only.
Speed, torque and current specifications are for motor operation with Allen Bradley drives.

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Feedback Specifications:


Electrical Hardware:

1. SIN, COS waveform output: 1024 sinusoids/rev.
2. SIN, COS waveform amplitude: 0.9 to 1.1 Volts peak to peak.
3. SIN -, COS - voltage offset with respect to power input common: 2.2 to 2.8 VDC.
4. +5VDC voltage input: 4.5 to 12.0 VDC.
5. +5VDC current input: 125 mA DC max continuous, 1.0 A DC max inrush.
6. TS+, TS- thermostat operating voltage: 250 Volts max.
7. TS+, TS- thermostat operating current: 1.6/2.5 Amps max at 0.6/1.0 power factor.

Serial Communication:

1. DATA+, DATA- signal type, rate: RS 485, 9600 baud, asynchronous.
2. Communication hierarchy: Encoder is slave, communication is externally initiated.
3. Single turn absolute position value range: 0 to 32,767 steps (12 bit).
4. Absolute position data: Binary, value increases with CW shaft rotation viewing motor mounting face.
5. Data (byte) format: Start bit, 8 data bits, parity bit, stop bit.
6. Memory storage capacity: 128 bytes, EEPROM.
7. Encoder temperature data: Binary value of encoder temperature in degrees C.

Note: "Ref" denotes untoleranced specifications, provided for reference only.

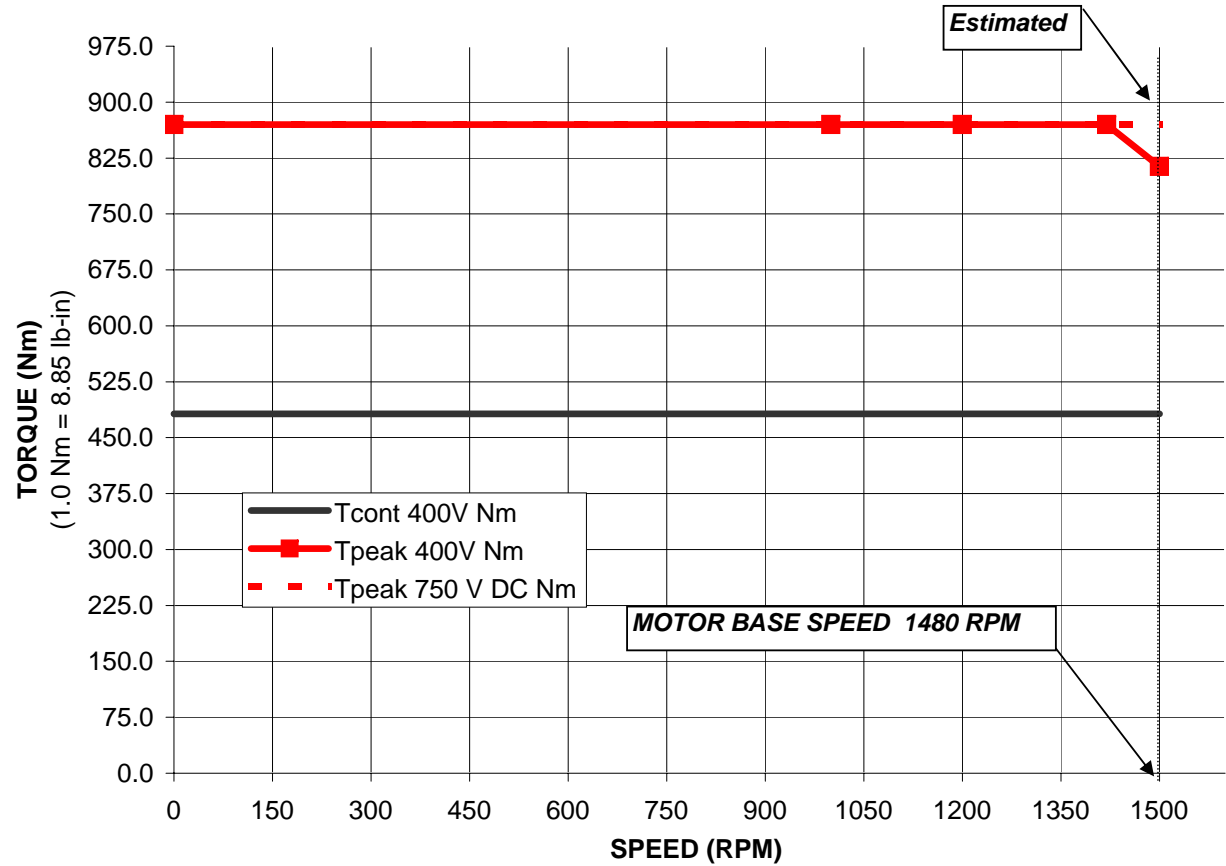
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SPEED RPM	TORQUE		
	Tcont 400V	Tpeak 400V	Tpeak 750 V DC
	Nm	Nm	Nm
0	482.0	870.1	870.1
1000	482.0	870.1	870.1
1200	482.0	870.1	870.1
1420	482.0	870.1	870.1
1500	482.0	813.6	870.1

SPEED RPM	TORQUE		
	Tcont 400V	Tpeak 400V	Tpeak 750 V DC
	lb-in	lb-in	lb-in
0	4266.0	7700	7700
1000	4266.0	7700	7700
1200	4266.0	7700	7700
1420	4266.0	7700	7700
1500	4266.0	7200	7700

Note: Nm torque values shown are converted from tested lb-in data.

**HPK-E2010C-SB44BA Performance with 2099-BM11
at 400 VAC and 750 V DC Drive Input, 40C Motor Ambient**



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