

**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
450	530	530	530

**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
260	310	380	440

Notes: Print or enlarge waveforms for improved clarity.
For additional specifications see 10000000391

REFERENCES		DESCRIPTION		CAD DOCUMENT			
VERSION / CHANGE NUMBER		HPK-E1815C-SC44BA,ESE		CONFIDENTIAL AND PROPRIETARY INFORMATION			
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				PARTS MUST CONFORM TO APPLICABLE ROCKWELL AUTOMATION MANUFACTURING STANDARDS			
				DR.	VS	DATE	9/20/2006
						SHEET 1 OF 4	
				DOCUMENT NUMBER			
00	10000024			1000000371			

Specifications:


1. Motor type: 4 pole, 3 phase, asynchronous, ventilated
2. Base speed: 1480 RPM.
3. Maximum speed: 3000 RPM.
4. Continuous stall torque: 360 Nm (3186 lb-in) max at 155C winding temperature in a 40C
5. Peak stall torque: 840 Nm (7434 lb-in) max.
6. Continuous output rating: 55.9 kW (hp) max at 1480 RPM. Continuous current @ 1480 RPM 187 Amps 0 to peak max.(132.5 Amps.RMS)
7. Operating voltage: 400 VAC RMS Ref. (Not for direct connection to AC line).
8. Continuous stall current: 187 Amps 0 to peak max.(132 Amps.RMS)
9. Magnetizing current: 64.3 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: .036 Nom. Ohms, phase to phase at 20C to 30C.
14. Winding inductance: 2.15 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: .468 kg-m2 Ref.
17. Rotor balancing: Quality grade G-6.3.
18. Product weight: 474 kg (1045lb) 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

Equivalent circuit parameters

X1: .108 Ohms/phs Ref at 20C to 30C.
X2: .153 Ohms/phs Ref at 20C to 30C.
Xm : 2.89 Ohms/phs Ref at 20C to 30C
R1: .0179 Ohms/phs Ref at 20C to 30C
R2: .0134 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.

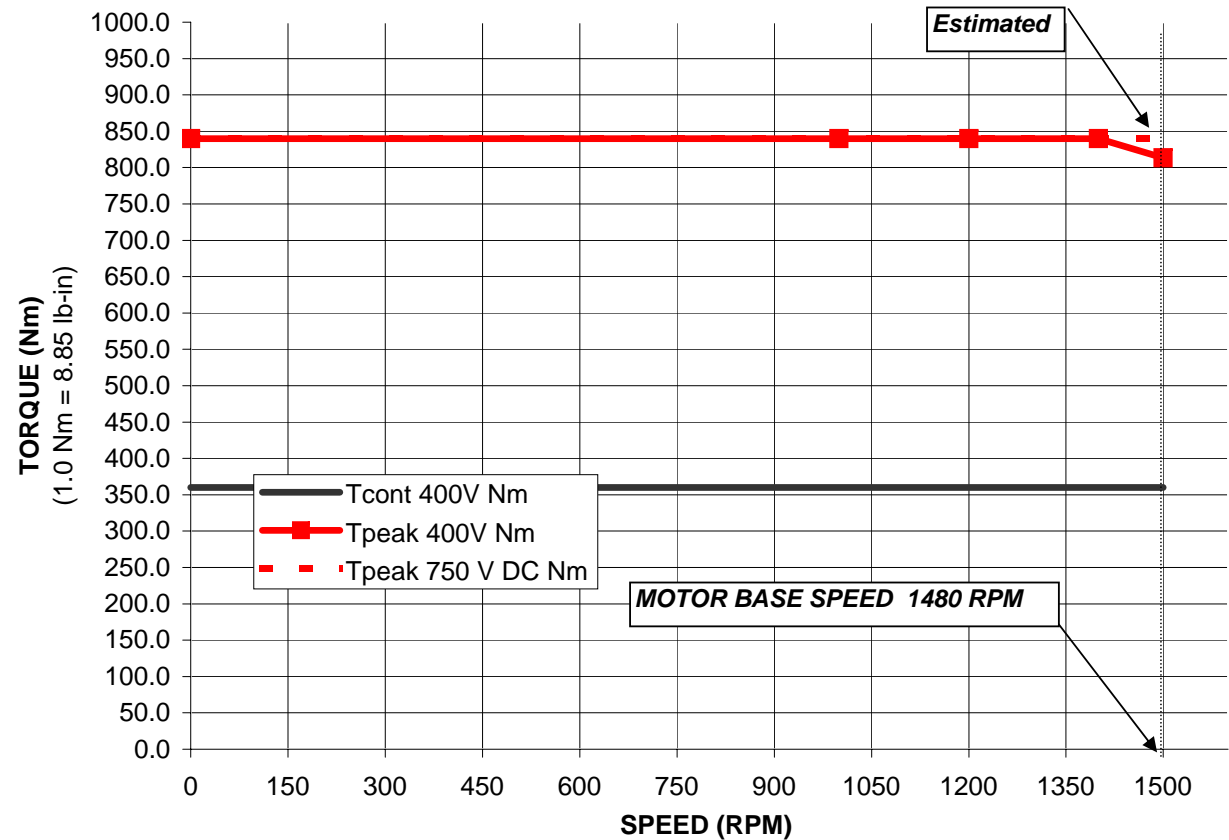
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SPEED RPM	TORQUE		
	Tcont 400V	Tpeak 400V	Tpeak 750 V DC
	Nm	Nm	Nm
0	360.0	840.0	840.0
1000	360.0	840.0	840.0
1200	360.0	840.0	840.0
1400	360.0	840.0	840.0
1500	360.0	813.6	840.0

SPEED RPM	TORQUE		
	Tcont 400V	Tpeak 460V	Tpeak 750 V DC
	lb-in	lb-in	lb-in
0	3186.0	7434	7434
1000	3186.0	7434	7434
1200	3186.0	7434	7434
1400	3186.0	7434	7434
1500	3186.0	7200	7434

**HPK-E1815C-SC44BA Performance with 2099-BM11
at 400 VAC and 750 V DC Drive Input, 40C Motor Ambient**



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

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