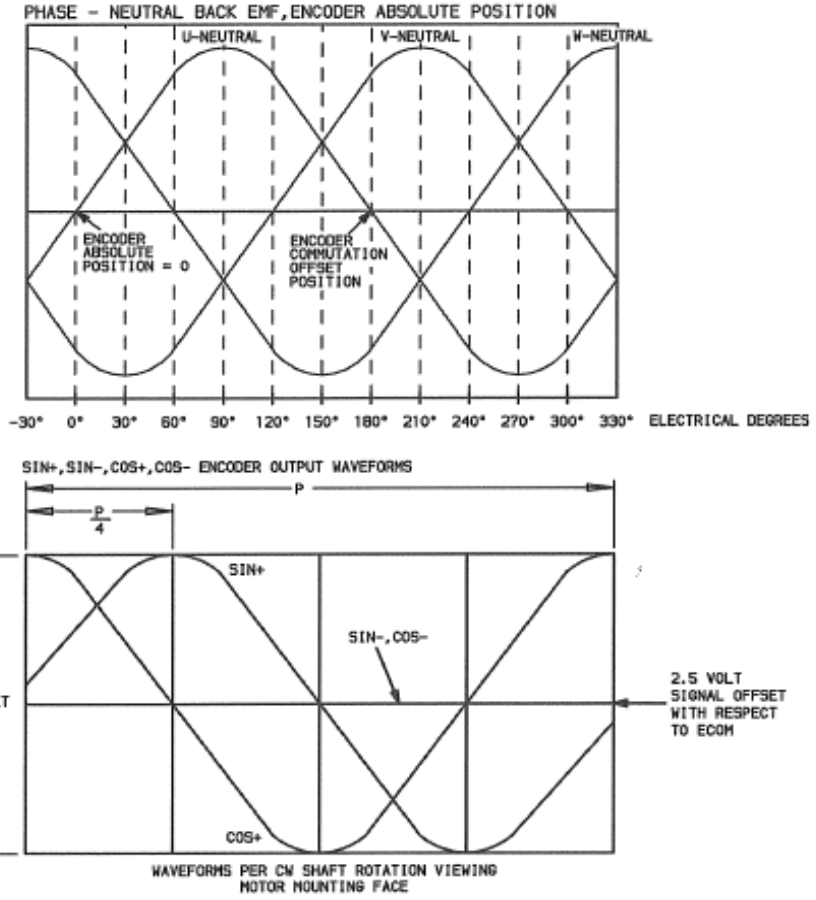
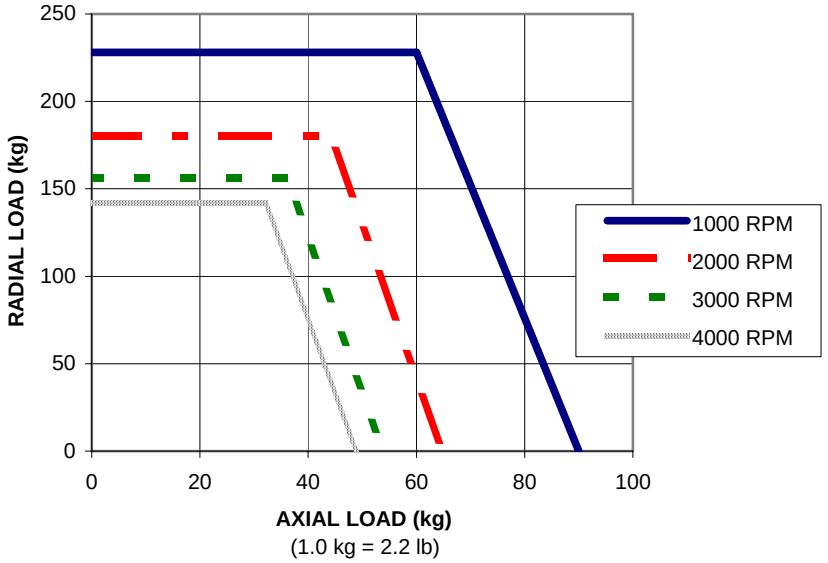


SHAFT LOAD RATING for 20,000 hour L10 bearing life
and RADIAL LOAD applied mid-way along shaft extension



NOTES:

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General Specifications:

1. Motor type: 3 phase, wye winding, permanent magnet rotor, totally enclosed, non-ventilated.
2. Motor poles: 8
3. Operating Speed, max 3600 RPM
4. Base speed (max speed at peak torque), Ref: 3000 RPM
5. Operating voltage at base speed: 220 VAC RMS
6. Continuous stall torque, max, at max winding temperature in a 40C ambient: 34 Nm (301 lb-in)
7. Winding temperature, max, in a 40C ambient: 140 degrees C
8. Continuous stall current, max: 59.65 Amps 0 to peak
9. Heatsink size, aluminum, attached to front mounting flange for continuous torque specifications: 305 x 305 x 25.4mm (12 x 12 x 1.0 inch)
10. Peak stall torque, max: 58 Nm (513 lb-in)
11. Peak stall current, max: 120.47 Amps 0 to peak
12. Rated Speed (Speed at max continous power) 2000
13. Continuous output rating, max at rated speed: 5.80 kW (7.77 hp)
14. Continuous torque, max, at rated speed: 27.6 Nm (244 lb-in)
15. Continuous current, Ref, at rated speed: 46.4 Amps 0 to peak
16. Operating voltage, Ref (Not for direct connection to AC line): 240 VAC RMS
17. Insulation class: 155C (Class F)
18. Housing temperature, max: 125C (257F)
19. Ke, +/-10%, phase to phase at 25C +/- 5C: 80 V/kRPM 0 to peak
20. Kt (sine), Ref, at 25C +/- 5C: 0.66 Nm/Amp (5.86 lb-in/Amp) 0 to peak
21. Winding resistance, +/- 10%, phase to phase at 25C +/- 5C: 0.067 ohms
22. Winding inductance, Ref, phase to phase: 1.57 mH
23. Dielectric rating of motor power connections (U,V,W), to ground for 1 second: 1800 VAC RMS 50/60 Hz
24. Audible noise, Ref, at 1 meter distance: XX dBA
25. Rotor inertia, +/- 10%: 0.02254 kg-m² (0.19950 lb-in-sec²)
26. Rotor balancing quality grade: G-6.3
27. Friction torque, Ref: 0.67 Nm (5.9 lb-in)
28. Friction torque, Ref, with shaft seal option installed: 1.0 Nm (8.85 lb-in)
29. Cogging torque, Ref: 0.46 Nm (4.13 lb-in) peak to peak
30. Thermal resistance, Ref, winding to ambient: 0.37 degrees C/watt
31. Thermal time constant, Ref, winding to ambient: 83 minutes
32. Product weight, Ref: 52.6 kg (115.8 lb)
33. Shipping weight, Ref: 57.16 kg (125.9 lb)
34. Operating ambient temperature: 0C to 40C (32F to 104F)

Notes:

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

General Specifications, continued:

35. Storage ambient temperature:	-30C to 70C (-22F to 158F)
36. Relative humidity, non-condensing:	5% to 95%
37. Liquid / dust protection:	IP66
38. Shock, max, 6 msec duration:	20 g peak
39. Vibration, max, 30 to 2000 Hz:	2.5 g peak
40. Shaft material:	Steel, 1144
41. Paint, color:	Black

42. Shaft, key (if provided), front mounting surface, and connector mating surfaces are not painted.

Feedback Specifications:

1. SIN, COS waveform output:	1024 sinusoids/rev
2. SIN, COS waveform amplitude, ± 10%:	1.0 VAC peak to peak
3. SIN -, COS - voltage offset with respect to ECOM ±0.3 VDC:	2.2 to 2.8 VDC
4. EPWR 5V (encoder power) input voltage:	N/A
5. EPWR 5V continuous input current,max, at 5.0 VDC:	N/A
6. EPWR 5V inrush input current, max, when connected to Kinetix6000 drive:	N/A
7. EPWR 9V (encoder power) input voltage:	7.0 to 12.0 VDC
8. EPWR 9V continuous input current,max, at 9.0 VDC:	80 mADC
9. EPWR 9V inrush input current, max, when connected to Kinetix6000 drive:	3.9 ADC
10. TS+, TS- thermostat operating voltage, max:	250 Volts
11. TS+, TS- thermostat continuous current, max, at 0.6 power factor:	1.6 Amps
12. TS+, TS- thermostat continuous current, max, at 1.0 power factor:	2.5 Amps
13. DATA+, DATA- signal type, rate, asynchronous:	RS 485, 9600 baud

14. Communication hierarchy: Encoder is slave, communication is externally initiated.

15. Single turn absolute position value range:	0 to 32,767 (15 bit)

16. Absolute position data: Binary, value increases with CW shaft rotation viewing motor mounting face.
17. Data (byte) format: Start bit, 8 data bits, parity bit, stop bit.

18. Memory storage capacity, EEPROM:	128 bytes

19. Encoder temperature data: Binary value of encoder temperature in degrees C.

Notes:

1. "Ref" denotes untoleranced specifications, provided for reference only.

Brake Specifications:

1. Type: Spring-set holding brake, releases when voltage applied.
2. Holding torque, max: ..... 70 Nm (619 lb-in)
3. Voltage input, +15/-10%, may be applied either polarity: ..... 24 VDC
4. Current input, +/- 10%, at 24 VDC, at 25C +/- 5C: ..... 2.05 ADC
5. Coil resistance, +/-10%, at 25C +/- 5C: ..... 11.76 Ohms
6. Coil resistance, +/-10%, with motor operating at max continuous stall torque rating in a 40C ambient: ..... 16.46 Ohms
7. Release time delay (when voltage applied), Ref: ..... 200 msec
8. Engage time delay, (when voltage removed), Ref, with diode used as arc suppression device in external control circuit: ..... 900 msec
9. Engage time delay, (when voltage removed), Ref, with MOV used as arc suppression device in external control circuit: ..... 120 msec
10. Rotational backlash, Ref, with brake engaged: ..... 25 arc minutes
11. Dielectric rating of brake connections (MBRK+, MBRK-) to ground for 1 second: ..... 1200 VAC RMS 50/60 Hz

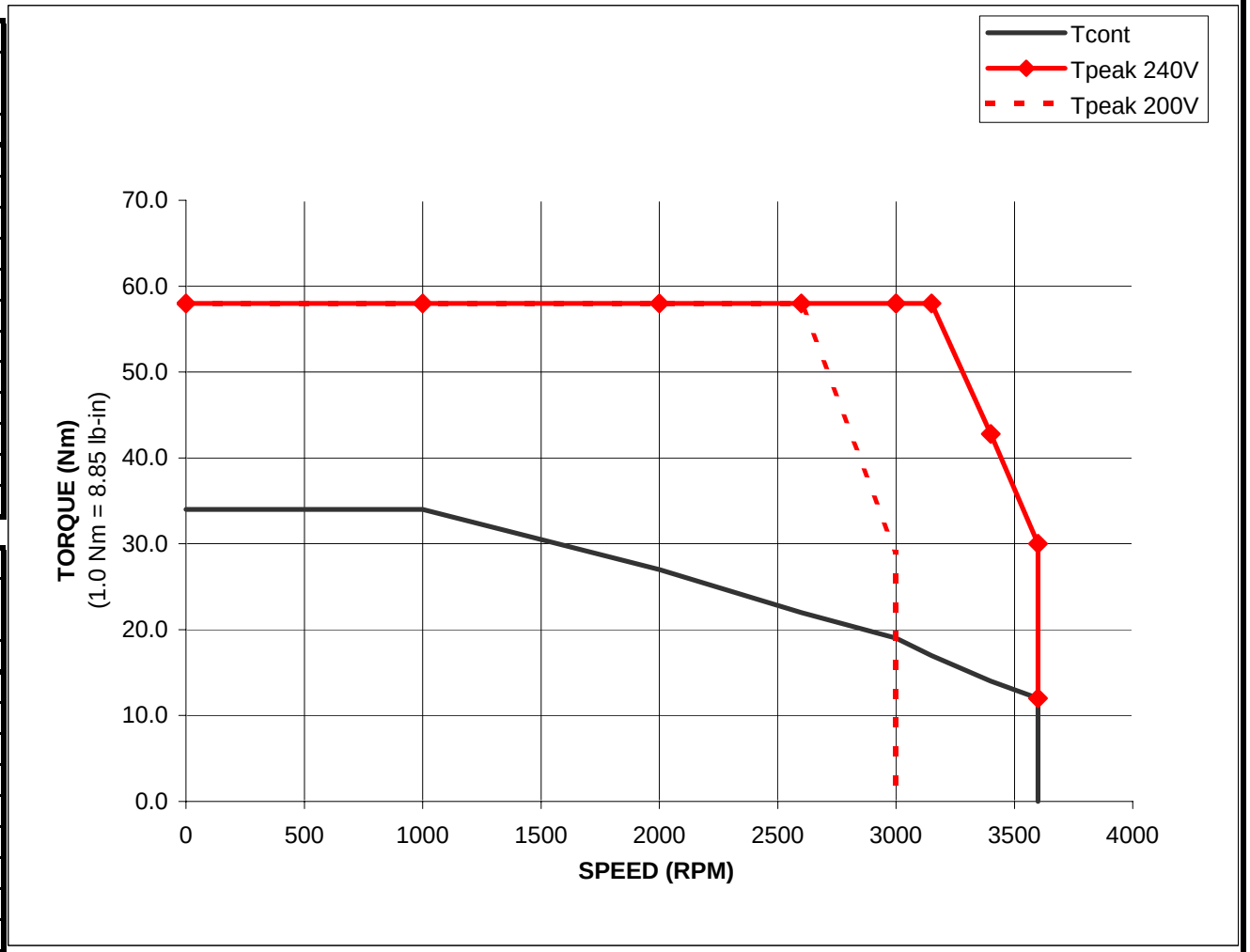
Notes:

1. "Ref" denotes untoleranced specifications, provided for reference only.

MPM-A2153F-Sxx4xx Performance with 2098-DSD-150, 3 Phase at 240 VAC Drive Input, 40C Motor Ambient

SPEED RPM	TORQUE		
	Tcont	Tpeak 240V	Tpeak 200V
	Nm	Nm	Nm
0	34	58	58
1000	34	58	58
2000	27	58	58
2600	22	58	58
3000	19	58	29
3000	19	58	0
3150	17	58	#N/A
3400	14	42.8	#N/A
3600	12	30	#N/A
3600	0	12	#N/A
#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A

SPEED RPM	TORQUE		
	Tcont	Tpeak 240V	Tpeak 200V
	lb-in	lb-in	lb-in
0	300.9	513.3	513.3
1000	300.9	513.3	513.3
2000	239.0	513.3	513.3
2600	194.7	513.3	513.3
3000	168.2	513.3	256.7
3000	168.2	513.3	0.0
3150	150.5	513.3	#N/A
3400	123.9	378.8	#N/A
3600	106.2	265.5	#N/A
3600	0.0	106.2	#N/A
#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A



Notes:

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

Engineering Specification Electrical

MPM-A2153F-SJ74AA

Dr. Scott Johnson | Date 08-26-09