

1. Motor type: 3 phase, we winding, permanent magnet rotor, totally enclosed, non-ventilated. 8 2. Motor poles: 4000 RPM 3. Operating Speed, max 4000 RPM 4. Base speed it pesk torque), Ref. 3000 RPM 5. Operating voltage at base speed: 440 VAC RMS 6. Continuous stall torque, max, at max winding temperature in a 40C ambient: 28.8 Nm (237 lb-in) 7. Winding temperature, max, in a 40C ambient: 34.94 Amps 0 to peak 8. Continuous stall current, max: 34.94 Amps 0 to peak 9. Heatsink size, atuminum, attached to front mounting flange for continuous torque specifications: 305 x 305 x 12.7mm (12 x 12 x 0.5 inch) 10. Peak stall current, max: 34.94 Amps 0 to peak 2. Rated Speed (Speed tamax continuous power) 3000 13. Continuous torque, max, at rated speed: 50.10 kW (6.84 hp) 14. Continuous output rating, max at rated speed: 16.1 Nm (142 lb-in) 15. Continuous output rating, max at rated speed: 16.1 Nm (142 lb-in) 16. Operating voltage. Ref (Not for direct connection to AC line): 480 VAC RMS 17. Insulation class: 125C (Cass F) 18. Amps 0 to peak 145C (Cass F) 19. Ke, +/-10%, phase to phase at 25C +/- 5C: 0.98 Nm/Amp (8.49 lb-in/Amp) 0 to peak <tr< th=""><th>General Specifications:</th><th></th></tr<>	General Specifications:	
9. Operating Speed, max 4000 RPM 4. Base speed (max speed at peak torque), Ref. 3000 RPM 5. Operating voltage at base speed. 440 VAC RMS 6. Continuous stall torque, max, at max winding temperature in a 40C ambient: 26.8 Mm (237 lb-in) 7. Winding temperature, max, in a 40C ambient: 26.8 Mm (237 lb-in) 7. Winding temperature, max, in a 40C ambient: 34.94 Amps 0 to peak 9. Heatsink size, aluminum, attached to front mounting flange for continuous torque specifications: 305 x 305 x 12.7 mm (12 x 12 x 0.5 inch) 10. Peak stall corruent, max: 94.36 Amps 0 to peak 11. Peak stall corruent, max: 94.36 Amps 0 to peak 12. Rated Speed (Speed C) 510 kW (6.84 hp) 13. Continuous output rating, max at rated speed: 510 kW (6.84 hp) 14. Continuous courtent, Ref, at rated speed: 161 Nm (142 lb-in) 15. Continuous output rating, max: 150 kW (6.84 hp) 14. Continuous courtent, Ref, at rated speed: 150 kW (6.48 hp) 15. Continuous courtent, Ref, at rated speed: 150 kW (6.48 hp) 16. Operating voltage, Ref (Not for direct connection to AC line): 480 VAC RMS 17. Isould and chases 150 kC (Class F) 18. Housing temperature, max: 125 kL (see f) 19. Ke, +/-10%, phase to phase at 25C +/- 5C: 0.96 Mm/Amp (4.24 Bi-In/Amp) 0 to peak 20. Winding reastance, k-I, 10% chas	1. Motor type: 3 phase, wye winding, permanent magnet rotor, totally enclosed, non-ventilated.	
absets byted (in tax speed a pase torque), Ref. 500 kPrim 5. Operating voltage at base speed: 400 VAC RMS 6. Continuous stall torque, max, at max winding temperature in a 40C ambient: 26.8 Nm (237 lb-in) 7. Winding temperature, max, in a 40C ambient: 40 degrees C 8. Continuous stall current, max: 30.94 Amps 0 to peak 9. Heatsink size, aluminum, attached to front mounting flange for continuous torque specifications: 305 x 305 x 12.7mm (12 x 12 x 0.5 inch) 10. Peak stall current, max: 94.36 Amps 0 to peak 11. Peak stall current, max: 94.36 Amps 0 to peak 12. Rated Speed (Speed at max continous power) 3000 13. Continuous output rating, max at rated speed: 16.1 Nm (142 lb-in) 14. Continuous output rating, max at rated speed: 16.1 Nm (142 lb-in) 15. Continuous output rating, max at rated speed: 16.0 Nm (420 lb-in) 16. Operating voltage, Ref (Not for direct connection to AC line): 400 VAC RMS 17. Insulation class: 155C (Class F) 18. Housing temperature, max: 155C (Class F) 19. Housing temp	2. Motor poles:	8
absets byted (in tax speed a pase torque), Ref. 500 kPrim 5. Operating voltage at base speed: 400 VAC RMS 6. Continuous stall torque, max, at max winding temperature in a 40C ambient: 26.8 Nm (237 lb-in) 7. Winding temperature, max, in a 40C ambient: 40 degrees C 8. Continuous stall current, max: 30.94 Amps 0 to peak 9. Heatsink size, aluminum, attached to front mounting flange for continuous torque specifications: 305 x 305 x 12.7mm (12 x 12 x 0.5 inch) 10. Peak stall current, max: 94.36 Amps 0 to peak 11. Peak stall current, max: 94.36 Amps 0 to peak 12. Rated Speed (Speed at max continous power) 3000 13. Continuous output rating, max at rated speed: 16.1 Nm (142 lb-in) 14. Continuous output rating, max at rated speed: 16.1 Nm (142 lb-in) 15. Continuous output rating, max at rated speed: 16.0 Nm (420 lb-in) 16. Operating voltage, Ref (Not for direct connection to AC line): 400 VAC RMS 17. Insulation class: 155C (Class F) 18. Housing temperature, max: 155C (Class F) 19. Housing temp	3. Operating Speed, max	4000 RPM
b) Optiming Lingues and an advecting temperature in a 40C ambient: 26.8 Nm (237 lb-in) c) Continuous stall current, max; 140 degrees C a) A 94 Amps 0 to peak b) Heatsink size, aluminum, attached to front mounting flange for continuous torque specifications: 56 Nm (496 lb-in) 10 Peak stall current, max; 94 Asp 0 to peak 11 Peak stall current, max; 94 Asp 0 to peak 12 Rated Speed (Speed at max continuous power) 3000 13 Continuous output rating, max at rated speed: 16.1 Nm (142 lb-in) 14 Continuous current, Ref, at rated speed: 16.1 Nm (142 lb-in) 15 Continuous output rating outgae, Ref (Not for direct connection to AC line): 480 VAC RMS 16 Operating voitage, Ref (Not for direct connection to AC line): 480 VAC RMS 17 Insulation class: 155C (Class F) 186 Amps 0 to peak 20 Vac RMS 150 Vac RMS 150 Vac RMS 17 Insulation class: 155C (Class F) 186 Amps 0 to peak 20 Vac RMS 150 Vac RMS 150 Vac RMS 17 Insulation class: 150 Vac RMS 150 Vac RMS	4. Base speed (max speed at peak torque), Ref:	3000 RPM
6. Continuous stall torque, max, at max winding temperature in a 40C ambient: 26.8 Mm (237 lb-in) 7. Winding temperature, max, in a 40C ambient: 140 degrees C 8. Continuous stall current, max: 34.94 Amps 0 to peak 9. Heatsink size, aluminum, attached to front mounting flange for continuous torque specifications: 305 x 305 x 12.7mm (12 x 12 x 0.5 inch) 10. Peak stall current, max: 94.38 Amps 0 to peak 11. Peak stall current, max: 94.38 Amps 0 to peak 12. Rated Speed (Speed at max continous power) 3000 13. Continuous strature, max at rated speed: 5.10 kW (6.84 hp) 14. Continuous output rating, max at rated speed: 16.1 Nm (142 lb-in) 15. Continuous output rating, max at rated speed: 16.1 Nm (142 lb-in) 16. Operating voltage, Ref (Not for direct connection to AC line): 480 VAC RMS 17. Insulation class: 155C (Class F) 18. Houging temperature, max. 125C (257 F) 19. Ke, +/10%, phase to phase at 25C +/-5C: 0.98 Nm/Amp (8.49 lb-in/Amp) 0 to peak 20. Winding inductance, Ref, phase to phase at 25C +/-5C: 0.288 ohms 21. Winding resistance, +1 10%, phase to phase at 25C +/-5C: 0.288 ohms 22. Winding inductance, Ref, phase to phase, at 25C +/-5C: 0.288 ohms 23. Dielectric ratin	J. Operaling vollage al base speed.	440 VAC RMS
7. Winding temperature, max, in a 402 ambient: 140 degrees C 8. Continuous stall current, max; 34.94 Amps 0 to peak 9. Heatsink size, aluminum, attached to front mounting flange for continuous torque specifications; 305 x 305 x 12.7mm (12 x 12 x 0.5 inch) 10. Peak stall torque, max; 56 Nm (496 lb-in) 11. Peak stall current, max; 94.36 Amps 0 to peak 12. Rated Speed (Speed at max continuous power) 3000 13. Continuous output rating, max at rated speed; 16.1 Nm (142 lb-in) 14. Continuous output rating, max at rated speed; 16.1 Nm (142 lb-in) 15. Continuous output rating, max at rated speed; 16.1 Nm (142 lb-in) 16. Operating voltage, Ref (Not for direct connection to AC line): 480 VAC RMS 17. Insulation class; 155C (Class F) 18. Housing temperature, max; 155C (Class F) 19. Housing temperature, max; 16.1 Nm/ (84 lb-in/Amp) 0 to peak 20. Winding inductance, Ref, phase to phase at 25C +/- 5C: 268 ohms 21. Winding inductance, Ref, phase to phase at 25C +/- 5C: 268 ohms 22. Winding inductance, Ref, phase to phase at 25C +/- 5C: 268 ohms 23. Winding inductance, Ref, phase to phase at 25C +/- 5C: 268 ohms 23. Rotor inertia, +/ 10%, phase to phase at 25C +/- 5C: <t< td=""><td>6. Continuous stall torque, max, at max winding temperature in a 40C ambient:</td><td>26.8 Nm (237 lb-in)</td></t<>	6. Continuous stall torque, max, at max winding temperature in a 40C ambient:	26.8 Nm (237 lb-in)
c. Collimitude start current, max.	7. Winding temperature, max, in a 40C ambient:	140 degrees C
10. Peak stall orque, max: 56 Nm (496 lb-in) 11. Peak stall ourrent, max: 94.36 Amps 0 to peak 12. Rated Speed (Speed at max continous power) 3000 13. Continuous output rating, max at rated speed: 5.10 kW (6.84 hp) 14. Continuous output rating, max at rated speed: 16.1 Nm (142 lb-in) 15. Continuous output, max, at rated speed: 18.6 Amps 0 to peak 16. Operating voltage, Ref (Not for direct connection to AC line): 480 VAC RMS 17. Insulation class: 125C (257F) 18. Housing temperature, max: 122C (257F) 19. Ke, +/-10%, phase to phase at 25C +/- 5C: 0.46 knms 20. Wriding resistance, +/- 10%, phase to phase at 25C +/- 5C: 0.268 ohms 21. Winding inductance, Ref, phase to phase at 25C +/- 5C: 0.268 ohms 22. Winding inductance, Ref, phase to phase at 25C +/- 5C: 0.268 ohms 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 balancing quality grade: 0.36 Nm (3.23 lb-in) 26. Rotor inertia, +/ 10%: 0.360 Nm (3.23 lb-in) 25. Product weight, Ref: 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal time constant, Ref, winding	8. Continuous stall current, max:	34.94 Amps 0 to peak
10. Peak stall orque, max: 56 Nm (496 lb-in) 11. Peak stall ourrent, max: 94.36 Amps 0 to peak 12. Rated Speed (Speed at max continous power) 3000 13. Continuous output rating, max at rated speed: 5.10 kW (6.84 hp) 14. Continuous output rating, max at rated speed: 16.1 Nm (142 lb-in) 15. Continuous output, max, at rated speed: 18.6 Amps 0 to peak 16. Operating voltage, Ref (Not for direct connection to AC line): 480 VAC RMS 17. Insulation class: 125C (257F) 18. Housing temperature, max: 122C (257F) 19. Ke, +/-10%, phase to phase at 25C +/- 5C: 0.46 knms 20. Wriding resistance, +/- 10%, phase to phase at 25C +/- 5C: 0.268 ohms 21. Winding inductance, Ref, phase to phase at 25C +/- 5C: 0.268 ohms 22. Winding inductance, Ref, phase to phase at 25C +/- 5C: 0.268 ohms 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 balancing quality grade: 0.36 Nm (3.23 lb-in) 26. Rotor inertia, +/ 10%: 0.360 Nm (3.23 lb-in) 25. Product weight, Ref: 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal time constant, Ref, winding	9. Heatsink size, aluminum, attached to front mounting flange for continuous torque specifications:	305 x 305 x 12.7mm (12 x 12 x 0.5 inch)
11. Peak stall current, max: 94.36 Amps 0 to peak 12. Rated Speed (Speed at max continous power) 3000 13. Continuous output rating, max at rated speed: 16.1 Nm (142 lb-in) 14. Continuous current, Ref, at rated speed: 16.1 Nm (142 lb-in) 15. Continuous current, Ref, at rated speed: 18.6 Amps 0 to peak 16. Optimus current, Ref, at rated speed: 18.6 Amps 0 to peak 17. Insulation class: 155C (Class F) 18. Housing temperature, max: 125C (257F) 19. Ke, +/-10%, phase to phase at 25C +/- 5C: 0.96 Nm/Amp (8.49 lb-in/Amp) 0 to peak 20. Kt (sine), Ref, at 25C +/- 5C: 0.96 Nm/Amp (8.49 lb-in/Amp) 0 to peak 21. Winding inductance, Ref, phase to phase: 5.7 mH 23. Dielectric rating of motor power connections (U,V,W), to ground for 1 second: 1200 VAC RMS 50/60 Hz 24. Audible noise, Ref, at 1 meter distance: XX dBA 25. Rotor inertia, +/- 10%: 0.008165 kg-m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref: 0.32 Nm (3.23 lb-in) 28. Friction torque, Ref: 0.28 Mg (2.54 lb-in) peak to peak 30. Thermal tries constant, Ref, winding to ambient: 0.28 Mg (2.54 lb-in) peak to peak 32. Friction torque, Ref	10. Peak stall torque, max:	56 Nm (496 lb-in)
12. Rated Speed (Speed at max continous power) 3000 13. Continuous output rating, max at rated speed: 5.10 kW (6.84 hp) 14. Continuous current, Ref, at rated speed: 16.1 Nm (142 lb-in) 15. Continuous current, Ref, at rated speed: 18.6 Amps 0 to peak 16. Operating voltage, Ref (Not for direct connection to AC line): 480 VAC RMS 17. Insulation class: 155C (Class F) 18. Housing temperature, max: 125C (257F) 19. Ke, +/10%, phase to phase at 25C +/- 5C: 0.96 Nm/Amp (8.49 lb-in/Amp) 0 to peak 20. Winding resistance, +/- 10%, phase to phase at 25C +/- 5C: 0.268 ohms 21. Winding resistance, +/- 10%, phase to phase at 25C +/- 5C: 0.268 ohms 22. Winding inductance, Ref, phase to phase at 25C +/- 5C: 0.268 ohms 23. Winding inductance, Ref, at 1 meter distance: XX dBA 24. Audible noise, Ref, at 1 meter distance: XX dBA 25. Rotor inertia, +/- 10%: 0.008165 kg-m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref: 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref, with shaft seal option installed: 0.37 Nm (3.27 lb-in) 29. Friction torque, Ref, winding to ambient: 0.28 Nm (2.54 lb-in) peak to peak	11. Peak stall current, max:	94.36 Amps 0 to peak
13. Continuous output rating, max at rated speed: 5.10 kW (6.44 lp) 14. Continuous torque, max, at rated speed: 16.1 Nm (142 lb-in) 15. Continuous current, Ref, at rated speed: 18.6 Amps 0 to peak 16. Operating voltage, Ref (Not for direct connection to AC line): 480 VAC RMS 17. Insulation class: 155C (Class F) 18. Housing temperature, max: 125C (257F) 19. Ke, +/-10%, phase to phase at 25C +/- 5C: 0.96 Nm/Amp (8.49 lb-in/Amp) 0 to peak 20. Kt (sine), Ref, at 25C +/- 5C: 0.268 ohms 21. Winding resistance, +/- 10%, phase to phase at 25C +/- 5C: 0.268 ohms 22. Winding inductance, Ref, phase to phase at 25C +/- 5C: 0.268 ohms 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%: 0.008165 kg-m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref: 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref, winding to ambient: 0.28 degrees C/watt 30. Thermal time constant, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 0.28 degrees C/watt	12. Rated Speed (Speed at max continous power)	3000
14. Continuous turque, nika, at rated speed: 16. Amps 0 to peak 15. Continuous current, Ref, at rated speed: 18.6 Amps 0 to peak 16. Operating voltage, Ref (Not for direct connection to AC line): 480 VAC RMS 17. Insulation class: 155C (Class F) 18. Housing temperature, max: 125C (257F) 19. Ke, +/-10%, phase to phase at 25C +/- 5C: 116 V/kRPM 0 to peak 20. Kt (sine), Ref, at 25C +/- 5C: 0.96 Nm/Amp (8.49 lb-in/Amp) 0 to peak 21. Winding resistance, +/- 10%, phase to phase at 25C +/- 5C: 0.268 ohms 22. Winding inductance, Ref, phase to phase at 25C +/- 5C: 0.268 ohms 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%: 0.008165 kg-m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref: 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref: 0.28 degrees C/watt 30. Thermal time constant, Ref, winding to ambient: 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 0.28 degrees C/watt <td>13. Continuous output rating, max at rated speed:</td> <td>5.10 kW (6.84 hp)</td>	13. Continuous output rating, max at rated speed:	5.10 kW (6.84 hp)
16. Continuous current, Ret, at rated speed: 16.0 Arms of to peak 16. Operating voltage, Ref (Not for direct connection to AC line): 480 VAC RMS 17. Insulation class: 155C (Class F) 18. Housing temperature, max: 125C (257F) 19. Ke, +/-10%, phase to phase at 25C +/- 5C: 0.96 Nm/Amp (8.49 lb-in/Amp) 0 to peak 20. Kt (sine), Ref, at 25C +/- 5C: 0.268 ohms 21. Winding resistance, +/- 10%, phase to phase at 25C +/- 5C: 0.268 ohms 22. Winding notic rating of motor power connections (U,V,W), to ground for 1 second: 1800 VAC RMS 50/60 Hz 23. Rotor inertia, +/- 10%; 0.008165 kg-m² (0.07227 lb-in-sec²) 24. Rotor inertia, +/- 10%; 0.008165 kg-m² (0.07227 lb-in-sec²) 25. Rotor inertia, +/- 10%; 0.308 hs fs g-m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref: 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref: 0.37 Nm (3.27 lb-in) 29. Cogging torque, Ref. 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 0.28 kg (62.1 lb) 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient te	14. Commuous lorque, max, al faleu speeu.	
17. Instluction class: 1350 (Class F) 18. Housing temperature, max: 125C (257F) 19. Ke, +/10%, phase to phase at 25C +/- 5C: 0.96 Nm/Amp (8.49 lb-in/Amp) 0 to peak 20. Kt (sine), Ref, at 25C +/- 5C: 0.268 ohms 21. Winding resistance, +/- 10%, phase to phase at 25C +/- 5C: 0.268 ohms 22. Winding inductance, Ref, phase to phase: 5.7 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%: 0.008165 kg-m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref. 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref. 0.366 Nm (3.27 lb-in) 29. Cogging torque, Ref. 0.28 degrees C/watt 30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 0.28 degrees C/watt 32. Product weight, Ref: 31.46 kg (69.3 lb) 33. Shipping weight, Ref: 0.14 kG (69.3 lb) 34. Operating ambient temperature: OC to 40C (32F to 104F)	15. Continuous current, Ref, at rated speed:	18.6 Amps 0 to peak
17. Instluction class: 1350 (Class F) 18. Housing temperature, max: 125C (257F) 19. Ke, +/10%, phase to phase at 25C +/- 5C: 0.96 Nm/Amp (8.49 lb-in/Amp) 0 to peak 20. Kt (sine), Ref, at 25C +/- 5C: 0.268 ohms 21. Winding resistance, +/- 10%, phase to phase at 25C +/- 5C: 0.268 ohms 22. Winding inductance, Ref, phase to phase: 5.7 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%: 0.008165 kg-m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref. 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref. 0.366 Nm (3.27 lb-in) 29. Cogging torque, Ref. 0.28 degrees C/watt 30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 0.28 degrees C/watt 32. Product weight, Ref: 31.46 kg (69.3 lb) 33. Shipping weight, Ref: 0.14 kG (69.3 lb) 34. Operating ambient temperature: OC to 40C (32F to 104F)	16. Operating voltage, Ref (Not for direct connection to AC line):	480 VAC RMS
18. Housing temperature, max: 125C (257F) 19. Ke, +/-10%, phase to phase at 25C +/- 5C: 116 V/kRPM 0 to peak 20. Kt (sine), Ref, at 25C +/- 5C: 0.96 Nm/Amp (8.49 lb-in/Amp) 0 to peak 21. Winding resistance, +/- 10%, phase to phase at 25C +/- 5C: 0.268 ohms 22. Winding inductance, Ref, phase to phase: 5.7 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%: 0.008165 kg-m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref: 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref: 0.37 Nm (3.27 lb-in) 29. Cogging torque, Ref: 0.28 degrees C/watt 30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 0.28 kg (62.1 lb) 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient temperature: OC to 40C (32F to 104F)		155C (Class F)
20. Kt (she), Ref. at 25C +/- 5C: 0.368 NH7AHIP (6.49 ID-HIVAHIP) 0.10 peak 21. Winding resistance, +/- 10%, phase to phase at 25C +/- 5C: 0.268 ohms 22. Winding inductance, Ref, phase to phase: 5.7 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%: 0.008165 kg-m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref: 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref: 0.37 Nm (3.27 lb-in) 29. Cogging torque, Ref: 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal resistance, Ref, winding to ambient: 0.29 Nm (2.54 lb-in) peak to peak 31. Thermal time constant, Ref, winding to ambient: 0.28 degrees C/watt 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient temperature: OC to 40C (32F to 104F) Notes:	18. Housing temperature, max:	125C (257F)
20. Kt (she), Ref. at 25C +/- 5C: 0.368 NH7AHIP (6.49 ID-HIVAHIP) 0.10 peak 21. Winding resistance, +/- 10%, phase to phase at 25C +/- 5C: 0.268 ohms 22. Winding inductance, Ref, phase to phase: 5.7 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%: 0.008165 kg-m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref: 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref: 0.37 Nm (3.27 lb-in) 29. Cogging torque, Ref: 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal resistance, Ref, winding to ambient: 0.29 Nm (2.54 lb-in) peak to peak 31. Thermal time constant, Ref, winding to ambient: 0.28 degrees C/watt 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient temperature: OC to 40C (32F to 104F) Notes:	19. Ke, +/-10%, phase to phase at 25C +/- 5C:	116 V/kRPM 0 to peak
21. Winding feisitiance, Ref, Phase to phase at 25C +/- 5C: 0.200 offinis 22. Winding inductance, Ref, phase to phase: 5.7 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%: 0.008165 kg·m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref: 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref: 0.37 Nm (3.27 lb-in) 29. Cogging torque, Ref: 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 28.2 kg (62.1 lb) 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient temperature: 0C to 40C (32F to 104F) Notes:	20. Kt (sine), Kei, at 25C +/- 5C.	0.96 Nm/Amp (8.49 lb-in/Amp) 0 to peak
22. Winding inductance, Ref, phase to phase: 5.7 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%: 0.008165 kg-m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref. 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref. 0.37 Nm (3.27 lb-in) 29. Cogging torque, Ref. 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 0.28 kg (62.1 lb) 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient temperature: OC to 40C (32F to 104F)	21. Winding resistance, +/- 10%, phase to phase at 25C +/- 5C:	0.268 ohms
23. Detective rating of motor power connections (0, v, w), to ground for 1 second: 1800 VAC RMS 50/60 H2 24. Audible noise, Ref, at 1 meter distance: XX dBA 25. Rotor inertia, +/- 10%: 0.008165 kg-m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref: 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref: 0.37 Nm (3.27 lb-in) 29. Cogging torque, Ref: 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 60 minutes 32. Product weight, Ref: 31.46 kg (69.3 lb) 33. Shipping weight, Ref: 0.24 to 104F) Notes: 0.02 to 40C (32F to 104F)	22. Winding inductance, Ref, phase to phase:	
24. Audible noise, Ref, at 1 meter distance: XX dBA 25. Rotor inertia, +/- 10%: 0.008165 kg-m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref: 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref, with shaft seal option installed: 0.37 Nm (3.27 lb-in) 29. Cogging torque, Ref: 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 28.2 kg (62.1 lb) 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient temperature: 0C to 40C (32F to 104F)	23. Dielectric rating of motor power connections (U,V,VV), to ground for 1 second:	1800 VAC RMS 50/60 Hz
25. Rotor inertia, 4/- 10%: 0.008 res kg-m² (0.07227 lb-in-sec²) 26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref: 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref: 0.37 Nm (3.27 lb-in) 29. Cogging torque, Ref: 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 28.2 kg (62.1 lb) 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient temperature: 0C to 40C (32F to 104F) Notes:	24. Audible noise, Ref, at 1 meter distance:	XX dBA
26. Rotor balancing quality grade: G-6.3 27. Friction torque, Ref: 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref, with shaft seal option installed: 0.37 Nm (3.27 lb-in) 29. Cogging torque, Ref: 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 60 minutes 32. Product weight, Ref: 28.2 kg (62.1 lb) 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient temperature: 0C to 40C (32F to 104F) Notes:	25. Rotor inertia, +/- 10%:	0.008165 kg-m² (0.07227 lb-in-sec²)
27. Friction torque, Ref: 0.366 Nm (3.23 lb-in) 28. Friction torque, Ref, with shaft seal option installed: 0.37 Nm (3.27 lb-in) 29. Cogging torque, Ref: 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 60 minutes 32. Product weight, Ref: 28.2 kg (62.1 lb) 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient temperature: 0C to 40C (32F to 104F) Notes: Notes:	26. Rotor balancing quality grade:	G-6.3
28. Friction torque, Ref, with shaft seal option installed: 0.37 Nm (3.27 lb-in) 29. Cogging torque, Ref: 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 60 minutes 32. Product weight, Ref: 28.2 kg (62.1 lb) 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient temperature: 0C to 40C (32F to 104F) Notes: Notes:		0.366 Nm (3.23 lb-in)
29. Cogging torque, Ref: 0.29 Nm (2.54 lb-in) peak to peak 30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 60 minutes 32. Product weight, Ref: 28.2 kg (62.1 lb) 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient temperature: 0C to 40C (32F to 104F) Notes:	00 Existing tensors. Definities define a legities in stalled	0.37 Nm (3.27 lb-in)
30. Thermal resistance, Ref, winding to ambient: 0.28 degrees C/watt 31. Thermal time constant, Ref, winding to ambient: 60 minutes 32. Product weight, Ref: 28.2 kg (62.1 lb) 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient temperature: 0C to 40C (32F to 104F) Notes: 0C to 40C (32F to 104F)	29. Cogging torque, Ref:	0.29 Nm (2.54 lb-in) peak to peak
31. Thermal time constant, Ref, winding to ambient: 60 minutes 32. Product weight, Ref: 28.2 kg (62.1 lb) 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient temperature: 0C to 40C (32F to 104F) Notes: 0C to 40C (32F to 104F)	30. Thermal resistance, Ref, winding to ambient:	0.28 degrees C/watt
32. Product weight, Ref: 28.2 kg (62.1 lb) 33. Shipping weight, Ref: 31.46 kg (69.3 lb) 34. Operating ambient temperature: 0C to 40C (32F to 104F) Notes: 0	31. Thermal time constant, Ref, winding to ambient:	60 minutes
33. Shipping weight, Ref	32. Product weight, Ref:	÷ · · ·
34. Operating ambient temperature:0C to 40C (32F to 104F) Notes:	33. Shipping weight, Rei.	
Notes.	34. Operating ambient temperature:	0C to 40C (32F to 104F)
1. "Ref" denotes untoleranced specifications, provided for reference only.	Notes.	
	1. "Ref" denotes untoleranced specifications, provided for reference only.	
2. Speed, torque and current specifications are for operation with Allen Bradley drives.		
CONFIDENTIAL AND PROPRIETARY INFORMATION Engineering Specification Electrical Sheet 2 of 5	CONFIDENTIAL AND PROPRIETARY INFORMATION Engineering Specification Electrical	
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Dr. Scott Johnson Date 08-26-09	Dr. Scott Johnson Date 08-26-09	

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
40. Objects loss (if a new ideal) from the constinue configuration of the construction	

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

Feedback Specifications:

Automation	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.	MPM-B165 Dr. Scott Johnson	3F-MJ74AA Date 08-26-09	Size	10000073	3869	Ver 01
Rockwell	CONFIDENTIAL AND PROPRIETARY INFORMATION	Engineering Specificati	on Electrical	She	eet 3	of	5
<u>Notes:</u> 1. "Ref" denotes untoleranced s	pecifications, provided for reference onl	у.					
 Data (byte) format: Start bi Memory storage capacity, E 	· · · · ·		10	8 bytes			
15. Single turn absolute positio				o 32,767 (1	15 bit)		
13. DATA+, DATA- signal type,	rate, asynchronous:			485, 9600) baud		
12. TS+, TS- thermostat contin	uous current, max, at 1.0 power factor:		2.5	Amps			
11. TS+, TS- thermostat contin	uous current, max, at 0.6 power factor:		1.6	Amps			
TS+. TS- thermostat operat	ing voltage, max:		250) Volts			
9. EPWR 9V inrush input curre	nt, max, when connected to Kinetix6000	drive:	3.9	ADC			
8. EPWR 9V (encoder power) 1	nput voltage:		0.7 80	mADC			
6. EPWR 5V inrush input curre				∙ ⊨to 12.0 VI			
5. EPWR 5V continuous input of	current,max, at 5.0 VDC:		N/A	4			
4. EPWR 5V (encoder power) I	nput voitage:		IN/F	-			
3. SIN -, COS - voltage offset w	de, ± 10%: vith respect to ECOM ±0.3 VDC:		2.5	VDC			
2. SIN, COS waveform amplitude	1 100/		4.0	VAC peak	k to peak		
1. SIN, COS waveform output:			102	24 sinusoid	ds/rev		

 Type: Spring-set holding brake, releases when voltage applied. 	
2. Holding torque, max:	28.3 Nm (250 lb-in)
 Voltage input, +15/-10%, may be applied either polarity: 	24 VDC
4. Current input, +/- 10%, at 24 VDC, at 25C +/- 5C:	1.17 ADC
5. Coil resistance, +/-10%, at 25C +/- 5C:	20.5 Ohms
5. Coil resistance, +/-10%, with motor operating at max continuous stall torque rating in a 40C ambient:	26.7 Ohms
7. Release time delay (when voltage applied), Ref:	70 msec
3. Engage time delay, (when voltage removed), Ref, with diode used as arc suppression device	
in external control circuit:	250 msec
9. Engage time delay, (when voltage removed), Ref, with MOV used as arc suppression device	
in external control circuit:	50 msec
 Rotational backlash, Ref, with brake engaged: 	25 arc minutes
 Dielectric rating of brake connections (MBRK+, MBRK-) to ground for 1 second: 	1200 VAC RMS 50/60 H

Notes:

1. "Ref" denotes untoleranced specifications, provided for reference only. Engineering Specification Electrical CONFIDENTIAL AND PROPRIETARY INFORMATION 4 5 Sheet of Rockwell Automation Size Ver THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATIC OF ROCKWELL AUTOMATION, INC. AND MAY NOT BE USED, COPIED OR DISCLOSED TO OTHERS, EXCEPT WITH THE AUTHORIZED WRITTEN PERMISSION OF ROCKWELL AUTOMATION, INC. MPM-B1653F-MJ74AA 10000073869 Α 01 Dr. Scott Johnson Date 08-26-09

TORQUE SPEED Tcont Tpeak 480V Tpeak 400V RPM Nm Nm Nm 0 31 56 56 28.3 56 1000 56 2000 22.2 56 56 2600 18.54 56 56 3000 16.1 56 52.8 3250 14.6 56 50.8 50 4000 10 44.8 10 #N/A 4000 0 #N/A TORQUE SPEED Tcont Tpeak 480V Tpeak 400V RPM lb-in lb-in lb-in 274.4 495.6 495.6 0 1000 250.5 495.6 495.6 495.6 2000 196.5 495.6 2600 164.1 495.6 495.6 495.6 467.3 3000 142.5 3250 129.2 495.6 449.6 88.5 442.5 396.5 4000 4000 0.0 88.5 #N/A #N/A

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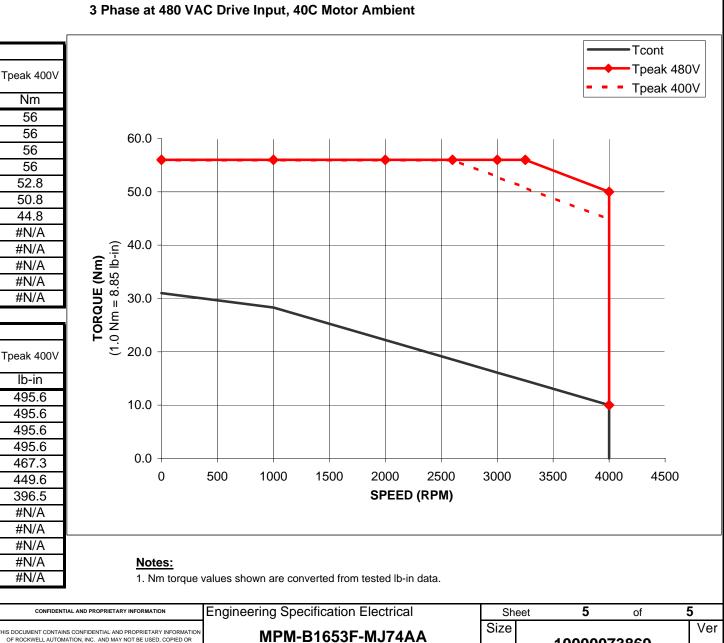
PERMISSION OF ROCKWELL AUTOMATION, INC.

Dr.

Scott Johnson

Date

08-26-09



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Α

MPM-B1653F-Mxx4xx Performance with 2094-BC07-M05, 3 Phase at 480 VAC Drive Input, 40C Motor Ambient