

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

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|--|--|------------|---------|----------|-----|-----|-----|-----|
| Customer : | | | | | | | | |
| Product line | : W22 IEEE 841 NEMA Premium Efficiency Three-Phase | | | | | | | |
| Product code : | 12109400 | | | | | | | |
| Catalog # : | 04012ST3QIE364T-W22 | | | | | | | |
| Frame : 364/5T Output : 40 HP (30 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 460 V Rated current : 46.5 A L. R. Amperes : 298 A LRC : 6.4x(Code G) No load current : 16.5 A Rated speed : 1183 rpm Slip : 1.42 % Rated torque : 178 ft.lb Locked rotor torque : 200 % Breakdown torque : 240 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 29.0 sq.ft.lb Design : B | Locked rotor time : 37s (cold) 21s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP56 Cooling method : IC411 - TEFC Mounting : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 66.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 898 lb | | | | | | | |
| Output | 25% 50% 75% 100% | | | | | | | |
| Efficiency (%) | 93.0 92.5 93.6 92.4 93.6 92.8 94.1 92.5 92.2 91.5 92.3 91.9 93.1 93.0 93.0 93.2 93.5 93.4 93.0 93.0 92.4 93.0 91.7 92.4 92.9 93.0 93.0 93.0 93.0 | | | | | | | |
| Power Factor | 0.48 0.44 0.73 0.68 0.82 0.80 0.86 0.84 0.42 0.39 0.66 0.63 0.79 0.76 0.83 0.82 0.54 0.51 0.78 0.76 0.84 0.83 0.86 0.85 0.49 0.73 0.82 0.84 | | | | | | | |
| Foundation loads | Max. traction : 1235 lb Max. compression : 2133 lb | | | | | | | |
| Losses at normative operating points (speed;torque), in percentage of rated output power | | | | | | | | |
| Losses (%) | P1 (0,9;1,0) | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 |
| | P2 (0,5;1,0) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| | P3 (0,25;1,0) | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 |
| | P4 (0,9;0,5) | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| | P5 (0,5;0,5) | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| | P6 (0,5;0,25) | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| | P7 (0,25;0,25) | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| Bearing type | : 6314 C3 | 6314 C3 | | | | | | |
| Sealing | : Inpro/Seal | Inpro/Seal | | | | | | |
| Lubrication interval | : 17000 h | 17000 h | | | | | | |
| Lubricant amount | : 27 g | 27 g | | | | | | |
| Lubricant type | : Mobil Polyrex EM | | | | | | | |
| Notes: | | | | | | | | |
| This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process. (4) At 100% of full load. | These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1. | | | | | | | |
| Rev. | Changes Summary | Performed | Checked | Date | | | | |
| Performed by | | | | | | | | |
| Checked by | | | Page | Revision | | | | |
| Date | 25/03/2024 | | 1 / 1 | | | | | |