

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



| | | | | |
|--|--|-----------------------------|--|-----------|
| Customer : | | | | |
| Product line | : W22 IEEE 841 NEMA Premium Efficiency Three-Phase | Product code : | 12039625 | |
| | | Catalog # : | 04009ST3QIE365TC-W22 | |
| Frame | : 364/5TC | Locked rotor time | : 46s (cold) 26s (hot) | |
| Output | : 40 HP (30 kW) | Temperature rise | : 80 K | |
| Poles | : 8 | Duty cycle | : Cont.(S1) | |
| Frequency | : 60 Hz | Ambient temperature | : -20°C to +40°C | |
| Rated voltage | : 460 V | Altitude | : 1000 m.a.s.l. | |
| Rated current | : 50.9 A | Protection degree | : IP55 | |
| L. R. Amperes | : 300 A | Cooling method | : IC411 - TEFC | |
| LRC | : 5.9x(Code G) | Mounting | : F-1 | |
| No load current | : 21.5 A | Rotation ¹ | : Both (CW and CCW) | |
| Rated speed | : 882 rpm | Noise level ² | : 60.0 dB(A) | |
| Slip | : 2.00 % | Starting method | : Direct On Line | |
| Rated torque | : 238 ft.lb | Approx. weight ³ | : 914 lb | |
| Locked rotor torque | : 170 % | | | |
| Breakdown torque | : 210 % | | | |
| Insulation class | : F | | | |
| Service factor | : 1.25 | | | |
| Moment of inertia (J) | : 29.0 sq.ft.lb | | | |
| Design | : B | | | |
| Output | 25% | 50% | 75% | 100% |
| Efficiency (%) | 92.7 92.0 92.4 91.5 93.0 91.6 92.4 90.9 91.7 90.8 91.5 90.9 91.9 91.8 91.5 91.7 92.9 92.8 91.7 91.7 91.0 91.7 89.5 90.2 92.1 91.7 91.7 91.0 | Foundation loads | | |
| Power Factor | 0.40 0.37 0.65 0.60 0.75 0.71 0.80 0.77 0.33 0.31 0.55 0.52 0.68 0.65 0.75 0.73 0.46 0.42 0.70 0.66 0.78 0.76 0.81 0.80 0.39 0.62 0.74 0.79 | Max. traction | : 1611 lb | |
| Losses at normative operating points (speed;torque), in percentage of rated output power | | | | |
| Losses (%) | P1 (0,9;1,0) | 8.1 | 8.1 | 8.1 |
| | P2 (0,5;1,0) | 7.1 | 7.1 | 7.1 |
| | P3 (0,25;1,0) | 6.5 | 6.5 | 6.5 |
| | P4 (0,9;0,5) | 3.6 | 3.6 | 3.6 |
| | P5 (0,5;0,5) | 2.6 | 2.6 | 2.6 |
| | P6 (0,5;0,25) | 1.6 | 1.6 | 1.6 |
| | P7 (0,25;0,25) | 1.2 | 1.2 | 1.2 |
| | | | | |
| Drive end | | | | |
| Bearing type | : 6314 C3 | Non drive end | | |
| Sealing | : Inpro/Seal | 6314 C3 | | |
| Lubrication interval | : 20000 h | Inpro/Seal | | |
| Lubricant amount | : 27 g | 20000 h | | |
| Lubricant type | : Mobil Polyrex EM | 27 g | | |
| Notes: | | | | |
| This revision replaces and cancel the previous one, which must be eliminated. | | | These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1. | |
| (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. | | | | |
| Rev. | Changes Summary | | | Performed |
| | | | | Checked |
| Performed by | | | | |
| Checked by | | | | |
| Date | 25/03/2024 | | | |
| | | | Page | Revision |
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