

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



| | | | | | | | | |
|---|-------------------|--|--|----------------|--------------------|-----------|--|--|
| Customer : | | | | | | | | |
| Product line | | : W22 Super Premium Efficiency Three-Phase | | Product code : | 11792551 | | | |
| | | | | Catalog # : | 20036EG3G447TS-W22 | | | |
| Frame | : 445/7TS | Locked rotor time | : 50s (cold) 28s (hot) | | | | | |
| Output | : 200 HP (150 kW) | Temperature rise | : 80 K | | | | | |
| Poles | : 2 | 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 | : 217 A | Protection degree | : IP55 | | | | | |
| L. R. Amperes | : 1584 A | Cooling method | : IC411 - TEFC | | | | | |
| LRC | : 7.3x(Code H) | Mounting | : F-1 | | | | | |
| No load current | : 53.0 A | Rotation ¹ | : Both (CW and CCW) | | | | | |
| Rated speed | : 3575 rpm | Noise level ² | : 81.0 dB(A) | | | | | |
| Slip | : 0.69 % | Starting method | : Direct On Line | | | | | |
| Rated torque | : 294 ft.lb | Approx. weight ³ | : 2153 lb | | | | | |
| Locked rotor torque | : 240 % | | | | | | | |
| Breakdown torque | : 290 % | | | | | | | |
| Insulation class | : F | | | | | | | |
| Service factor | : 1.25 | | | | | | | |
| Moment of inertia (J) | : 41.6 sq.ft.lb | | | | | | | |
| Design | : A | | | | | | | |
| Output | 25% | 50% | 75% | 100% | Foundation loads | | | |
| Efficiency (%) | 95.3 | 95.3 | 95.4 | 95.4 | | | | |
| | 95.7 | 95.7 | 95.8 | 95.8 | | | | |
| Power Factor | 0.60 | 0.65 | 0.83 | 0.86 | Max. traction | : 1559 lb | | |
| | 0.62 | 0.60 | 0.85 | 0.83 | Max. compression | : 3711 lb | | |
| Losses at normative operating points (speed;torque), in percentage of rated output power | | | | | | | | |
| Losses (%) | P1 (0,9;1,0) | 4.2 | 4.6 | 4.2 | 4.2 | | | |
| | P2 (0,5;1,0) | 2.9 | 3.2 | 2.9 | 2.9 | | | |
| | P3 (0,25;1,0) | 2.2 | 2.4 | 2.2 | 2.2 | | | |
| | P4 (0,9;0,5) | 2.7 | 3.0 | 2.7 | 2.7 | | | |
| | P5 (0,5;0,5) | 1.5 | 1.7 | 1.5 | 1.5 | | | |
| | P6 (0,5;0,25) | 1.2 | 1.3 | 1.2 | 1.2 | | | |
| | P7 (0,25;0,25) | 0.6 | 0.6 | 0.6 | 0.6 | | | |
| Bearings | | | Drive end | | | | | |
| | | | 6314 C3 | Non drive end | | | | |
| | | | WSeal | 6314 C3 | | | | |
| | | | 4000 h | WSeal | | | | |
| | | | 27 g | 4000 h | | | | |
| | | | Mobil Polyrex EM | | | | | |
| 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 | | | | | Page | | | |
| Checked by | | | | | | | | |
| Date | 29/03/2024 | | | | | | | |