

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | | | | |
|---|--|-----------|---------|----------|-----|-----|-----|-----|
| Customer : | | | | | | | | |
| Product line | : W22 NEMA Premium Efficiency Three-Phase | | | | | | | |
| Product code : | 12439905 | | | | | | | |
| Catalog # : | 05018ET3E326TF3-W22 | | | | | | | |
| Frame : 326T Output : 50 HP (37 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 230/460 V Rated current : 118/59.2 A L. R. Amperes : 734/367 A LRC : 6.2x(Code G) No load current : 47.0/23.5 A Rated speed : 1775 rpm Slip : 1.39 % Rated torque : 148 ft.lb Locked rotor torque : 229 % Breakdown torque : 270 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 9.16 sq.ft.lb Design : B | Locked rotor time : 27s (cold) 15s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : F-3 Rotation ¹ : Both (CW and CCW) Noise level ² : 70.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 595 lb | | | | | | | |
| Output | 25% 50% 75% 100% | | | | | | | |
| Efficiency (%) | 92.5 91.9 93.0 92.5 94.1 93.1 94.5 93.6 90.6 90.8 91.5 91.5 92.8 93.0 93.6 93.6 93.3 92.2 93.0 92.4 93.0 93.0 92.4 93.0 91.8 92.4 93.0 93.5 | | | | | | | |
| Power Factor | 0.42 0.41 0.66 0.64 0.77 0.77 0.83 0.83 0.38 0.35 0.60 0.57 0.73 0.70 0.81 0.79 0.48 0.45 0.72 0.68 0.81 0.79 0.85 0.84 0.42 0.65 0.76 0.83 | | | | | | | |
| Foundation loads | Max. traction : 1485 lb Max. compression : 2080 lb | | | | | | | |
| Losses at normative operating points (speed;torque), in percentage of rated output power | | | | | | | | |
| Losses (%) | P1 (0,9;1,0) | 5.7 | 5.7 | 5.7 | 5.7 | 5.7 | 5.7 | 5.7 |
| | P2 (0,5;1,0) | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 |
| | P3 (0,25;1,0) | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 |
| | P4 (0,9;0,5) | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| | P5 (0,5;0,5) | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| | P6 (0,5;0,25) | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| | P7 (0,25;0,25) | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| Bearing type | : 6312 C3 | 6212 C3 | | | | | | |
| Sealing | : V'Ring | V'Ring | | | | | | |
| Lubrication interval | : 20000 h | 20000 h | | | | | | |
| Lubricant amount | : 21 g | 13 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 | 29/03/2024 | | 1 / 1 | | | | | |