

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



| | | | | | |
|---|-------------------|---|--|------------------|---------------------|
| Customer : | | | | | |
| Product line | | : W22 NEMA Premium Efficiency Three-Phase | | Product code : | 11679203 |
| | | | | Catalog # : | 50036ET3G586/7S-W22 |
| Frame | : 586/7TS | Locked rotor time | : 70s (cold) 39s (hot) | | |
| Output | : 500 HP (370 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 | : 530 A | Protection degree | : IP55 | | |
| L. R. Amperes | : 4505 A | Cooling method | : IC411 - TEFC | | |
| LRC | : 8.5x(Code J) | Mounting | : F-1 | | |
| No load current | : 100 A | Rotation ¹ | : Both (CW and CCW) | | |
| Rated speed | : 3580 rpm | Noise level ² | : 84.0 dB(A) | | |
| Slip | : 0.56 % | Starting method | : Direct On Line | | |
| Rated torque | : 733 ft.lb | Approx. weight ³ | : 4334 lb | | |
| Locked rotor torque | : 220 % | | | | |
| Breakdown torque | : 240 % | | | | |
| Insulation class | : F | | | | |
| Service factor | : 1.15 | | | | |
| Moment of inertia (J) | : 143 sq.ft.lb | | | | |
| Design | : B | | | | |
| Output | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 95.8 95.8 | 96.2 95.8 | 96.2 95.8 | Max. traction | : 2134 lb |
| | 95.8 95.8 | 96.2 96.2 | 95.8 96.2 | Max. compression | : 6468 lb |
| Power Factor | 0.88 0.89 | 0.90 0.90 | 0.91 0.91 | | |
| | 0.88 0.87 | 0.90 0.89 | 0.91 0.90 | | |
| Losses at normative operating points (speed;torque), in percentage of rated output power | | | | | |
| Losses (%) | P1 (0,9;1,0) | 4.0 | 4.0 | 4.0 | 4.0 |
| | P2 (0,5;1,0) | 2.8 | 2.8 | 2.8 | 2.8 |
| | P3 (0,25;1,0) | 2.2 | 2.2 | 2.2 | 2.2 |
| | P4 (0,9;0,5) | 2.3 | 2.3 | 2.3 | 2.3 |
| | P5 (0,5;0,5) | 1.3 | 1.3 | 1.3 | 1.3 |
| | P6 (0,5;0,25) | 0.9 | 0.9 | 0.9 | 0.9 |
| | P7 (0,25;0,25) | 0.5 | 0.5 | 0.5 | 0.5 |
| Drive end | | | | | |
| Bearing type | : | 6314 C3 | 6314 C3 | | |
| Sealing | : | Taconite Labyrinth | Taconite Labyrinth | | |
| Lubrication interval | : | 4000 h | 4000 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. | | | 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 | | | | | Revision |
| Date | 29/03/2024 | | | | 1 / 2 |

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Space heater information

Voltage: 200 - 240 V

| Rev. | Changes Summary | | Performed | Checked | Date |
|--------------|-----------------|--|-----------|---------|----------|
| | | | | | |
| Performed by | | | | | |
| Checked by | | | | Page | Revision |
| Date | 29/03/2024 | | | 2 / 2 | |