

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Multimounting IE3 Three-Phase

Product code : 13984000
Catalog # : 7512ET3WAL90S-W22

| | | | |
|-----------------------|-------------------|-----------------------------|------------------------|
| Frame | : 90S/L | Locked rotor time | : 73s (cold) 41s (hot) |
| Output | : 1 HP (0.75 kW) | Temperature rise | : 80 K |
| Poles | : 6 | Duty cycle | : S1 |
| Frequency | : 50 Hz | Ambient temperature | : -20°C to +40°C |
| Rated voltage | : 220/380 V | Altitude | : 1000 m.a.s.l. |
| Rated current | : 3.28/1.90 A | Protection degree | : IP55 |
| L. R. Amperes | : 18.1/10.5 A | Cooling method | : IC411 - TEFC |
| LRC | : 5.5 | Mounting | : B3L(E) |
| No load current | : 1.90/1.10 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 945 rpm | Noise level ² | : 45.0 dB(A) |
| Slip | : 5.50 % | Starting method | : Direct On Line |
| Rated torque | : 5.56 ft.lb | Approx. weight ³ | : 46.1 lb |
| Locked rotor torque | : 220 % | | |
| Breakdown torque | : 220 % | | |
| Insulation class | : F | | |
| Service factor | : 1.25 | | |
| Moment of inertia (J) | : 0.1561 sq.ft.lb | | |
| Design | : N | | |

| | | | | | | | | | | |
|----------------|------|------|------|------|------------------|------|------|------|------------------|----------|
| Output | 25% | 50% | 75% | 100% | Foundation loads | | | | | |
| Efficiency (%) | 79.0 | 76.3 | 78.9 | 77.2 | 80.5 | 80.2 | 79.8 | 80.8 | Max. traction | : 103 lb |
| | 75.7 | | 77.0 | | 81.5 | | 82.5 | | | |
| Power Factor | 0.30 | 0.26 | 0.52 | 0.47 | 0.67 | 0.60 | 0.75 | 0.70 | Max. compression | : 149 lb |
| | 0.25 | | 0.46 | | 0.59 | | 0.68 | | | |

Losses at normative operating points (speed;torque), in percentage of rated output power

| | | | | |
|------------|----------------|------|------|------|
| Losses (%) | P1 (0,9;1,0) | 23.9 | 22.5 | 20.1 |
| | P2 (0,5;1,0) | 19.5 | 18.3 | 16.3 |
| | P3 (0,25;1,0) | 18.4 | 17.3 | 15.5 |
| | P4 (0,9;0,5) | 15.7 | 14.7 | 13.1 |
| | P5 (0,5;0,5) | 11.2 | 10.5 | 9.4 |
| | P6 (0,5;0,25) | 9.4 | 8.8 | 7.9 |
| | P7 (0,25;0,25) | 7.1 | 6.7 | 6.0 |

| | | | |
|----------------------|---|------------------|----------------------|
| | | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type | : | 6205 ZZ | 6204 ZZ |
| Sealing | : | V'Ring | V'Ring |
| Lubrication interval | : | - | - |
| Lubricant amount | : | - | - |
| 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 | | | | |
| Date | 26/03/2024 | | | |
| | | | Page | Revision |
| | | | 1 / 1 | |