

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11457542

| | | | |
|-----------------------|-------------------|-----------------------------|------------------------|
| Frame | : 182T | Locked rotor time | : 73s (cold) 41s (hot) |
| Output | : 3 HP (2.2 kW) | Temperature rise | : 80 K |
| Poles | : 2 | Duty cycle | : Cont.(S1) |
| Frequency | : 60 Hz | Ambient temperature | : -20°C to +40°C |
| Rated voltage | : 575 V | Altitude | : 1000 m.a.s.l. |
| Rated current | : 2.90 A | Protection degree | : IP55 |
| L. R. Amperes | : 25.0 A | Cooling method | : IC411 - TEFC |
| LRC | : 8.6x(Code K) | Mounting | : F-1 |
| No load current | : 1.04 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 3510 rpm | Noise level ² | : 66.0 dB(A) |
| Slip | : 2.50 % | Starting method | : Direct On Line |
| Rated torque | : 4.49 ft.lb | Approx. weight ³ | : 91.3 lb |
| Locked rotor torque | : 250 % | | |
| Breakdown torque | : 380 % | | |
| Insulation class | : F | | |
| Service factor | : 1.25 | | |
| Moment of inertia (J) | : 0.1889 sq.ft.lb | | |
| Design | : B | | |

| | | | | | | |
|----------------|------|------|------|------|------------------|----------|
| Output | 25% | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 82.0 | 82.5 | 86.5 | 86.5 | Max. traction | : 63 lb |
| Power Factor | 0.50 | 0.75 | 0.84 | 0.88 | Max. compression | : 154 lb |

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

| P1 (0,9;1,0) | P2 (0,5;1,0) | P3 (0,25;1,0) | P4 (0,9;0,5) | P5 (0,5;0,5) | P6 (0,5;0,25) | P7 (0,25;0,25) |
|--------------|--------------|---------------|--------------|--------------|---------------|----------------|
| 14.1 | 9.5 | 8.5 | 8.7 | 4.4 | 3.3 | 1.7 |

| | | | |
|----------------------|---|------------------|----------------------|
| | | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type | : | 6207 ZZ | 6206 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 | | Page Revision 1 / 1 | | |
| Checked by | | | | |
| Date | 28/03/2024 | | | |