

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code : 11355139

| | | | |
|-----------------------|-----------------|-----------------------------|------------------------|
| Frame | : 364/5T | Locked rotor time | : 28s (cold) 16s (hot) |
| Output | : 40 HP (30 kW) | Temperature rise | : 80 K |
| Poles | : 6 | 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 | : 37.7 A | Protection degree | : IP55 |
| L. R. Amperes | : 234 A | Cooling method | : IC411 - TEFC |
| LRC | : 6.2x(Code G) | Mounting | : F-1 |
| No load current | : 13.6 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 1180 rpm | Noise level ² | : 66.0 dB(A) |
| Slip | : 1.67 % | Starting method | : Direct On Line |
| Rated torque | : 178 ft.lb | Approx. weight ³ | : 889 lb |
| Locked rotor torque | : 190 % | | |
| Breakdown torque | : 229 % | | |
| Insulation class | : F | | |
| Service factor | : 1.25 | | |
| Moment of inertia (J) | : 23.5 sq.ft.lb | | |
| Design | : B | | |

Output 50% 75% 100%

Efficiency (%) 93.0 93.0 93.0
Power Factor 0.74 0.83 0.86

Foundation loads

Max. traction : 957 lb
Max. compression : 1846 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) |
|--------------|--------------|---------------|--------------|--------------|---------------|----------------|
| 7.3 | 6.2 | 5.6 | 3.3 | 2.3 | 1.4 | 1.0 |

| | Drive end | Non drive end |
|----------------------|------------------|---------------|
| Bearing type | : 6314 C3 | 6314 C3 |
| Sealing | : WSeal | WSeal |
| Lubrication interval | : 17000 h | 17000 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.

- (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 | 29/03/2024 | | | |
| | | | Page | Revision |
| | | | 1 / 1 | |