

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12810972

| | | | |
|-----------------------|---------------------------|-----------------------------|------------------------|
| Frame | : 143/5T | Locked rotor time | : 37s (cold) 21s (hot) |
| Output | : 1.5 HP (1.1 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 | : 1.57 A | Protection degree | : IP55 |
| L. R. Amperes | : 14.0 A | Cooling method | : IC411 - TEFC |
| LRC | : 8.9x(Code L) | Mounting | : F-1 |
| No load current | : 0.664 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 3480 rpm | Noise level ² | : 68.0 dB(A) |
| Slip | : 3.33 % | Starting method | : Direct On Line |
| Rated torque | : 0.313 kgfm | Approx. weight ³ | : 23.7 kg |
| Locked rotor torque | : 310 % | | |
| Breakdown torque | : 370 % | | |
| Insulation class | : F | | |
| Service factor | : 1.25 | | |
| Moment of inertia (J) | : 0.0020 kgm ² | | |
| Design | : B | | |

| | | | | | |
|----------------|------|------|------|------------------|----------|
| Output | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 81.5 | 84.0 | 84.0 | Max. traction | : 21 kgf |
| Power Factor | 0.68 | 0.78 | 0.84 | Max. compression | : 45 kgf |

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) |
|--------------|--------------|---------------|--------------|--------------|---------------|----------------|
| 17.7 | 13.3 | 12.1 | 9.8 | 5.6 | 3.8 | 2.4 |

| | | |
|----------------------|----------------------|----------------------|
| | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type | : 6205 C3 | : 6204 C3 |
| Sealing | : Taconite Labyrinth | : Taconite Labyrinth |
| Lubrication interval | : 20000 h | : 20000 h |
| Lubricant amount | : 4 g | : 4 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 |
|--------------|-----------------|-----------|---------|----------|
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| Date | 13/01/2024 | | | |
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LOAD PERFORMANCE CURVE

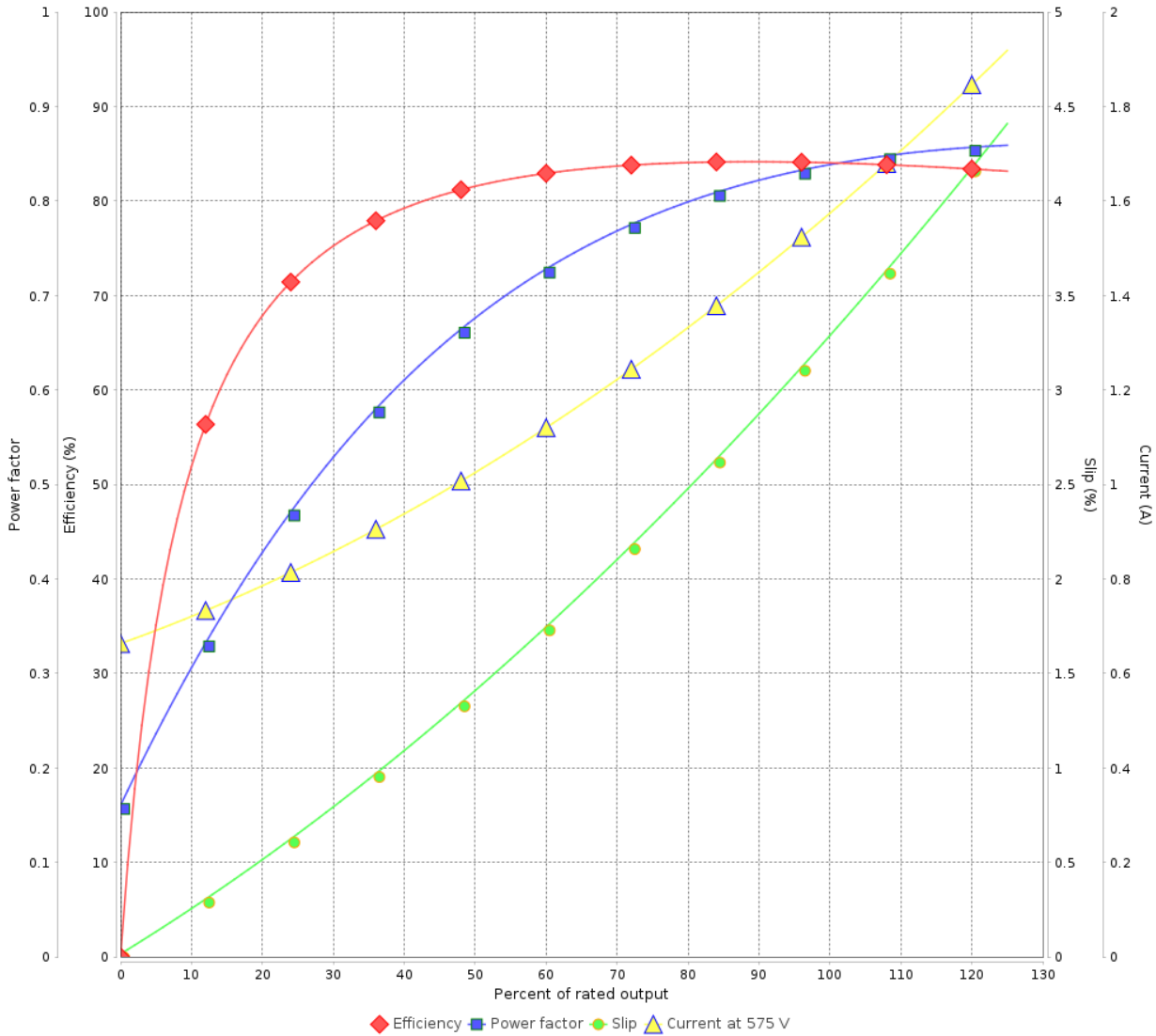
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Performance : 575 V 60 Hz 2P

| | | | |
|---------------------|--------------|-----------------------|---------------------------|
| Rated current | : 1.57 A | Moment of inertia (J) | : 0.0020 kgm ² |
| LRC | : 8.9 | Duty cycle | : Cont.(S1) |
| Rated torque | : 0.313 kgfm | Insulation class | : F |
| Locked rotor torque | : 310 % | Service factor | : 1.25 |
| Breakdown torque | : 370 % | Temperature rise | : 80 K |
| Rated speed | : 3480 rpm | Design | : B |

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