

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14407503

| | | | |
|-----------------------|---------------------------|-----------------------------|------------------------|
| Frame | : 254TC | Locked rotor time | : 46s (cold) 26s (hot) |
| Output | : 15 HP (11 kW) | Temperature rise | : 80 K |
| Poles | : 4 | 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 | : 14.7 A | Protection degree | : IP55 |
| L. R. Amperes | : 107 A | Cooling method | : IC411 - TEFC |
| LRC | : 7.3x(Code J) | Mounting | : F-1 |
| No load current | : 6.88 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 1770 rpm | Noise level ² | : 69.0 dB(A) |
| Slip | : 1.67 % | Starting method | : Direct On Line |
| Rated torque | : 6.15 kgfm | Approx. weight ³ | : 150 kg |
| Locked rotor torque | : 300 % | | |
| Breakdown torque | : 300 % | | |
| Insulation class | : F | | |
| Service factor | : 1.15 | | |
| Moment of inertia (J) | : 0.0974 kgm ² | | |
| Design | : B | | |

| | | | | | |
|----------------|------|------|------|------------------|-----------|
| Output | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 90.2 | 91.7 | 92.4 | Max. traction | : 214 kgf |
| Power Factor | 0.65 | 0.75 | 0.81 | Max. compression | : 366 kgf |

| | Drive end | Non drive end |
|----------------------|------------------|---------------|
| Bearing type | : 6309 C3 | 6209 C3 |
| Sealing | : Oil Seal | Lip Seal |
| Lubrication interval | : 20000 h | 20000 h |
| Lubricant amount | : 13 g | 9 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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| Checked by | | | | |
| Date | 28/10/2024 | | | |

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Customer :

Thermal protection

| ID | Application | Type | Quantity | Sensing Temperature |
|----|-------------|----------------------|-----------|---------------------|
| 1 | Winding | Thermostat - 2 wires | 1 x Phase | 155 °C |

| | | | | | |
|--------------|-----------------|--|-----------|-----------------------|------|
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| Date | 28/10/2024 | | | | |

LOAD PERFORMANCE CURVE

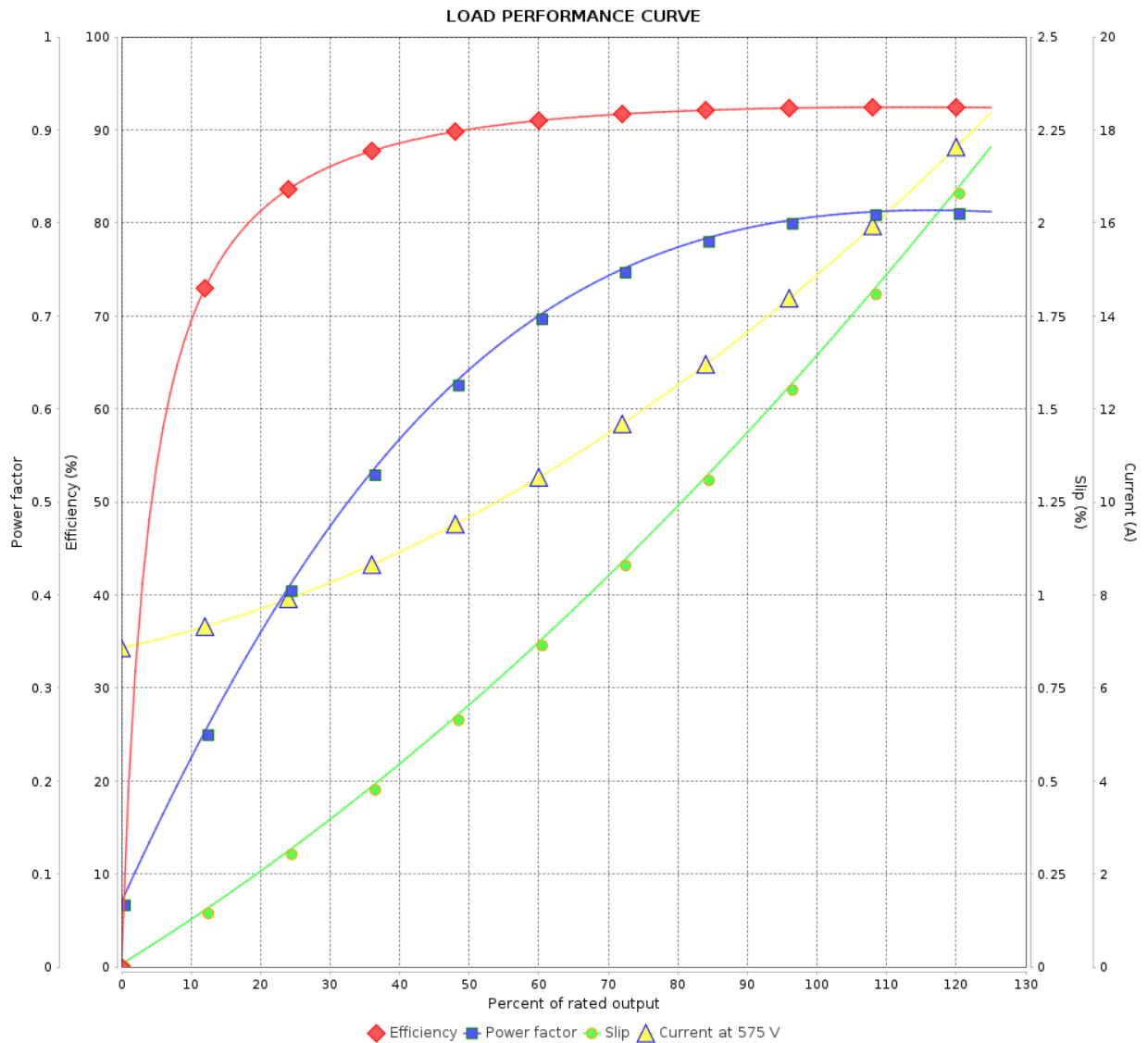
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA
Premium Efficiency Three-Phase

Product code : 14407503



Performance : 575 V 60 Hz 4P

| | | | |
|---------------------|-------------|-----------------------|---------------------------|
| Rated current | : 14.7 A | Moment of inertia (J) | : 0.0974 kgm ² |
| LRC | : 7.3 | Duty cycle | : Cont.(S1) |
| Rated torque | : 6.15 kgfm | Insulation class | : F |
| Locked rotor torque | : 300 % | Service factor | : 1.15 |
| Breakdown torque | : 300 % | Temperature rise | : 80 K |
| Rated speed | : 1770 rpm | Design | : B |

| Rev. | Changes Summary | Performed | Checked | Date |
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| | | Revision | | |