

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14283706

| | | | |
|-----------------------|---------------------------|-----------------------------|-------------------------|
| Frame | : 213/5T | Locked rotor time | : 104s (cold) 58s (hot) |
| Output | : 3 HP (2.2 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 | : 3.53 A | Protection degree | : IP55 |
| L. R. Amperes | : 24.7 A | Cooling method | : IC411 - TEFC |
| LRC | : 7.0x(Code K) | Mounting | : F-1 |
| No load current | : 2.08 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 1180 rpm | Noise level ² | : 55.0 dB(A) |
| Slip | : 1.67 % | Starting method | : Direct On Line |
| Rated torque | : 1.85 kgfm | Approx. weight ³ | : 89.4 kg |
| Locked rotor torque | : 180 % | | |
| Breakdown torque | : 290 % | | |
| Insulation class | : F | | |
| Service factor | : 1.15 | | |
| Moment of inertia (J) | : 0.0504 kgm ² | | |
| Design | : B | | |

| | | | | | |
|----------------|------|------|------|------------------|-----------|
| Output | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 86.5 | 88.5 | 89.5 | Max. traction | : 53 kgf |
| Power Factor | 0.50 | 0.62 | 0.70 | Max. compression | : 144 kgf |

| | | | |
|----------------------|---|------------------|----------------------|
| | | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type | : | 6308 2RS | 6207 2RS |
| Sealing | : | Oil Seal | Lip Seal |
| 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 |
|--------------|-----------------|---------------------------|---------|------|
| | | | | |
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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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| Performed by | | | | Page 2 / 3Revision | |
| Checked by | | | | | |
| Date | 28/10/2024 | | | | |

LOAD PERFORMANCE CURVE

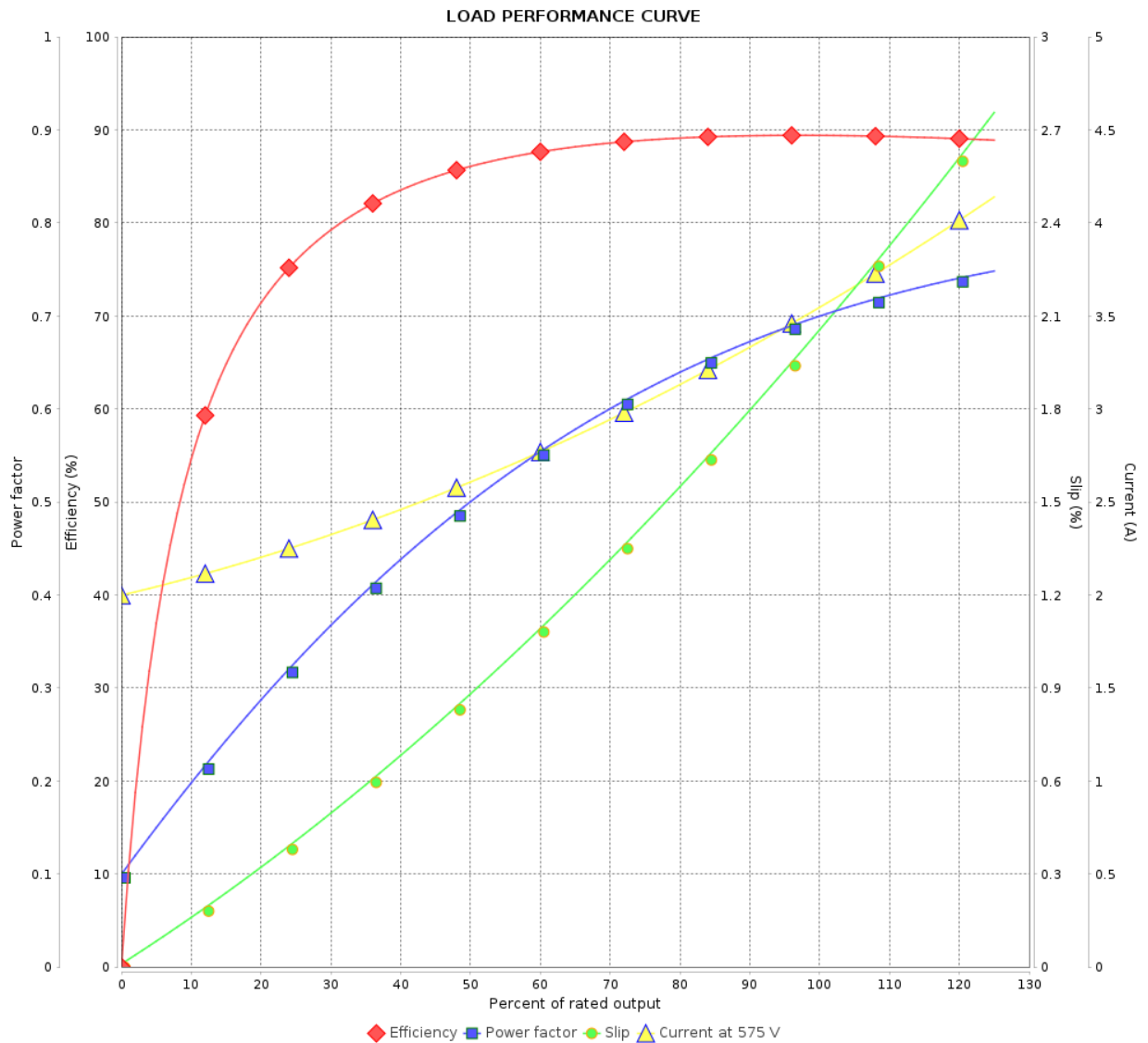
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Customer :

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

Product code : 14283706



Performance : 575 V 60 Hz 6P

| | | | |
|---------------------|-------------|-----------------------|---------------------------|
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| LRC | : 7.0 | Duty cycle | : Cont.(S1) |
| Rated torque | : 1.85 kgfm | Insulation class | : F |
| Locked rotor torque | : 180 % | Service factor | : 1.15 |
| Breakdown torque | : 290 % | Temperature rise | : 80 K |
| Rated speed | : 1180 rpm | Design | : B |

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| | | Revision | | |