

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase Product code : 14217807

| | | | |
|-----------------------|---------------------------|-----------------------------|------------------------|
| Frame | : 143/5TC | Locked rotor time | : 36s (cold) 20s (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 | : 1.64 A | Protection degree | : IP55 |
| L. R. Amperes | : 15.1 A | Cooling method | : IC411 - TEFC |
| LRC | : 9.2x(Code M) | Mounting | : F-1 |
| No load current | : 0.800 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 3500 rpm | Noise level ² | : 68.0 dB(A) |
| Slip | : 2.78 % | Starting method | : Direct On Line |
| Rated torque | : 0.311 kgfm | Approx. weight ³ | : 32.9 kg |
| Locked rotor torque | : 340 % | | |
| Breakdown torque | : 440 % | | |
| Insulation class | : F | | |
| Service factor | : 1.15 | | |
| Moment of inertia (J) | : 0.0017 kgm ² | | |
| Design | : B | | |

| | | | | | |
|----------------|------|------|------|------------------|----------|
| Output | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 78.5 | 82.5 | 84.0 | Max. traction | : 22 kgf |
| Power Factor | 0.62 | 0.73 | 0.80 | Max. compression | : 55 kgf |

| | Drive end | Non drive end |
|----------------------|------------------|---------------|
| Bearing type | : 6205 2RS | : 6204 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 | 15/01/2024 | | | |

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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 | |
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| Date | 15/01/2024 | | | | |

LOAD PERFORMANCE CURVE

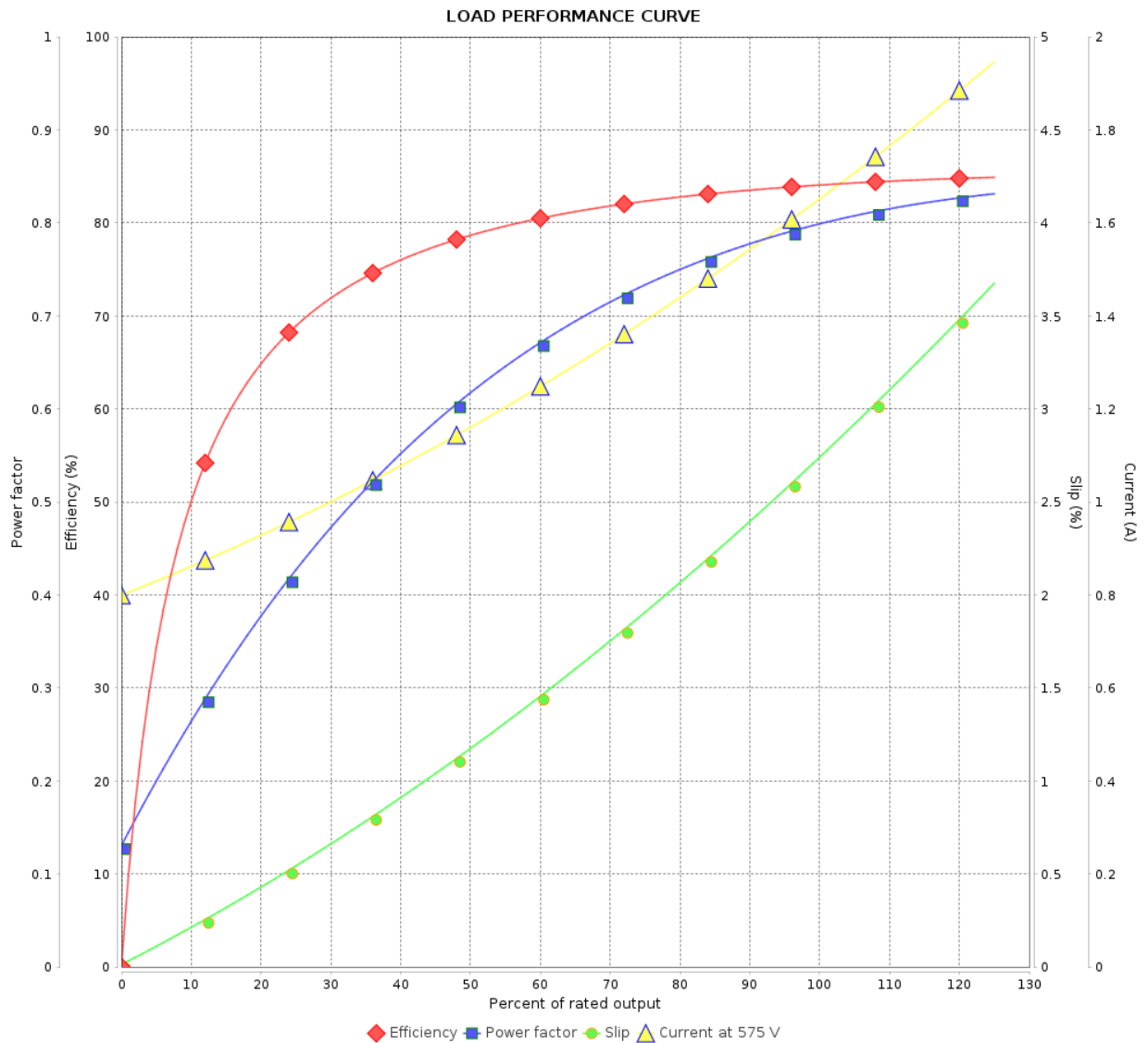
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Customer :

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

Product code : 14217807



Performance : 575 V 60 Hz 2P

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|---------------------|--------------|-----------------------|---------------------------|
| Rated current | : 1.64 A | Moment of inertia (J) | : 0.0017 kgm ² |
| LRC | : 9.2 | Duty cycle | : Cont.(S1) |
| Rated torque | : 0.311 kgfm | Insulation class | : F |
| Locked rotor torque | : 340 % | Service factor | : 1.15 |
| Breakdown torque | : 440 % | Temperature rise | : 80 K |
| Rated speed | : 3500 rpm | Design | : B |

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