

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | |
|--|---------------------------|---|--|-------------------------|----------|
| Customer : | | | | | |
| Product line | | : W21 Explosion Proof NEMA Premium Efficiency Three-Phase | | Product code : 14407389 | |
| Frame | : 286T | | Locked rotor time | : 39s (cold) 22s (hot) | |
| Output | : 20 HP (15 kW) | | Temperature rise | : 80 K | |
| Poles | : 6 | | Duty cycle | : Cont.(S1) | |
| Frequency | : 60 Hz | | Ambient temperature | : -20°C to +40°C | |
| Rated voltage | : 230/460 V | | Altitude | : 1000 m.a.s.l. | |
| Rated current | : 48.4/24.2 A | | Protection degree | : IP55 | |
| L. R. Amperes | : 348/174 A | | Cooling method | : IC411 - TEFC | |
| LRC | : 7.2x(Code H) | | Mounting | : F-1 | |
| No load current | : 18.0/9.00 A | | Rotation ¹ | : Both (CW and CCW) | |
| Rated speed | : 1175 rpm | | Noise level ² | : 59.0 dB(A) | |
| Slip | : 2.08 % | | Starting method | : Direct On Line | |
| Rated torque | : 12.4 kgfm | | Approx. weight ³ | : 225 kg | |
| Locked rotor torque | : 250 % | | | | |
| Breakdown torque | : 260 % | | | | |
| Insulation class | : F | | | | |
| Service factor | : 1.15 | | | | |
| Moment of inertia (J) | : 0.3381 kgm ² | | | | |
| Design | : B | | | | |
| Output | 25% | 50% | 75% | 100% | |
| Efficiency (%) | 91.5 | 91.7 | 91.7 | 91.7 | |
| Power Factor | 0.45 | 0.70 | 0.80 | 0.85 | |
| Foundation loads | | | | | |
| Max. traction : 420 kgf | | | | | |
| Max. compression : 645 kgf | | | | | |
| | | <u>Drive end</u> | <u>Non drive end</u> | | |
| Bearing type | : | 6311 C3 | 6211 C3 | | |
| Sealing | : | Oil Seal | Lip Seal | | |
| Lubrication interval | : | 20000 h | 20000 h | | |
| Lubricant amount | : | 18 g | 11 g | | |
| Lubricant type | : | Mobil Polyrex EM | | | |
| Notes: USABLE @208V 53.5A SF 1.15 SFA 61.5A | | | | | |
| 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 | | | | | |
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Customer : _____

Thermal protection

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

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| Performed by | | | | |
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LOAD PERFORMANCE CURVE

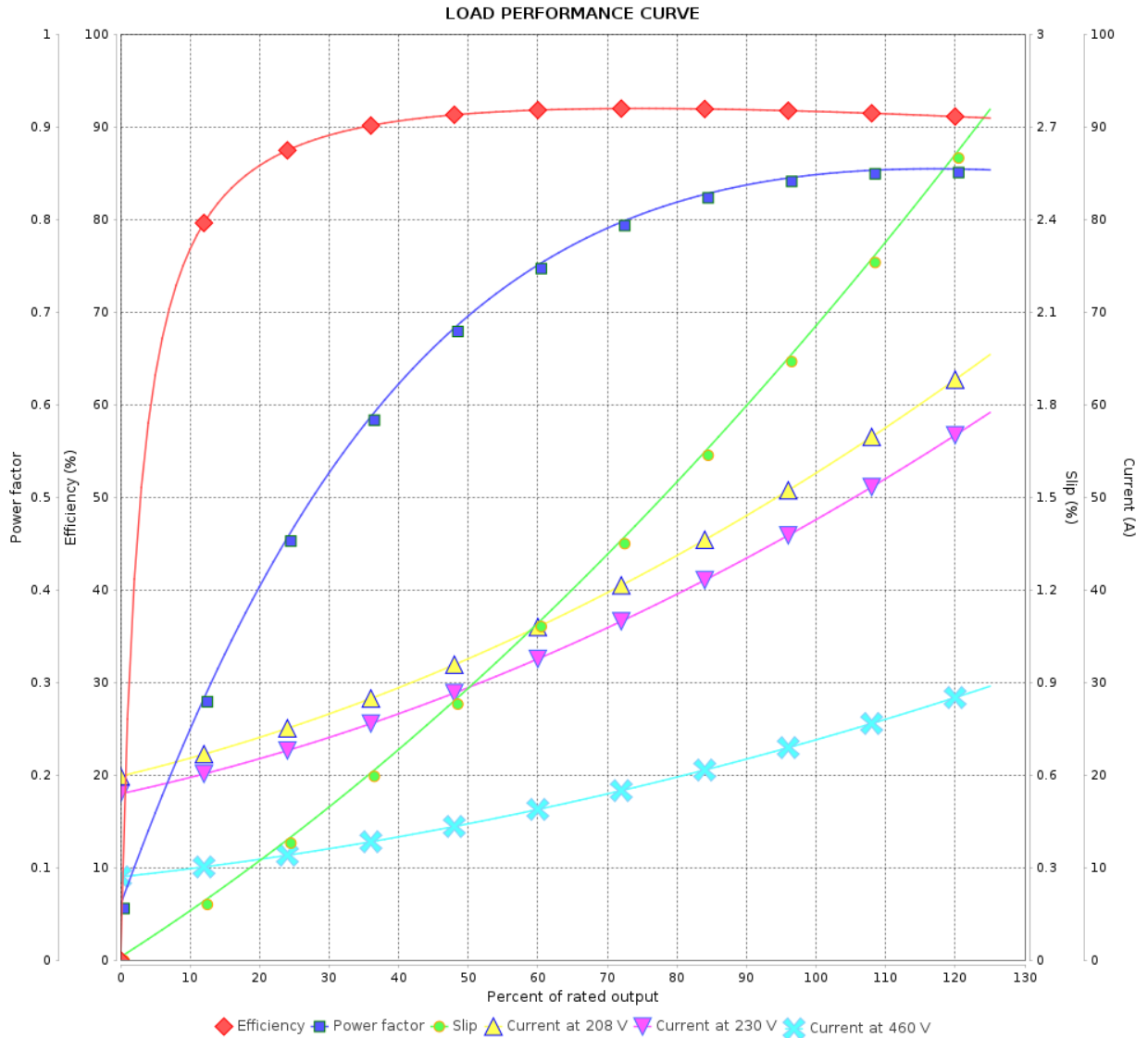
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14407389



Performance : 230/460 V 60 Hz 6P

Rated current : 48.4/24.2 A
LRC : 7.2
Rated torque : 12.4 kgfm
Locked rotor torque : 250 %
Breakdown torque : 260 %
Rated speed : 1175 rpm

Moment of inertia (J) : 0.3381 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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