

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------|----------------|
| Customer : | | | | | | |
| Product line : W22 NEMA Premium Efficiency Three-Phase | | | Product code : 11413206 | | | |
| Frame | : 404/5TC | | | Locked rotor time | : 23s (cold) 13s (hot) | |
| Output | : 100 HP (75 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 | : 90.4 A | | | Protection degree | : IP55 | |
| L. R. Amperes | : 660 A | | | Cooling method | : IC411 - TEFC | |
| LRC | : 7.3x(Code H) | | | Mounting | : F-1 | |
| No load current | : 30.4 A | | | Rotation ¹ | : Both (CW and CCW) | |
| Rated speed | : 1780 rpm | | | Noise level ² | : 68.0 dB(A) | |
| Slip | : 1.11 % | | | Starting method | : Direct On Line | |
| Rated torque | : 40.8 kgfm | | | Approx. weight ³ | : 542 kg | |
| Locked rotor torque | : 240 % | | | | | |
| Breakdown torque | : 260 % | | | | | |
| Insulation class | : F | | | | | |
| Service factor | : 1.25 | | | | | |
| Moment of inertia (J) | : 1.26 kgm ² | | | | | |
| Design | : B | | | | | |
| Output | 25% | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 0.000 | 95.0 | 95.0 | 95.4 | Max. traction | : 773 kgf |
| Power Factor | 0.00 | 0.77 | 0.84 | 0.87 | Max. compression | : 1315 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) |
| 4.7 | 3.8 | 3.7 | 2.2 | 1.5 | 0.9 | 0.6 |
| | | <u>Drive end</u> | | <u>Non drive end</u> | | |
| Bearing type | : | 6316 C3 | | 6314 C3 | | |
| Sealing | : | Oil Seal | | Oil Seal | | |
| Lubrication interval | : | 10000 h | | 12000 h | | |
| Lubricant amount | : | 34 g | | 27 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 |
| Performed by | | | | | | |
| Checked by | | | | | Page | Revision |
| Date | 18/03/2024 | | | | 1 / 2 | |

LOAD PERFORMANCE CURVE

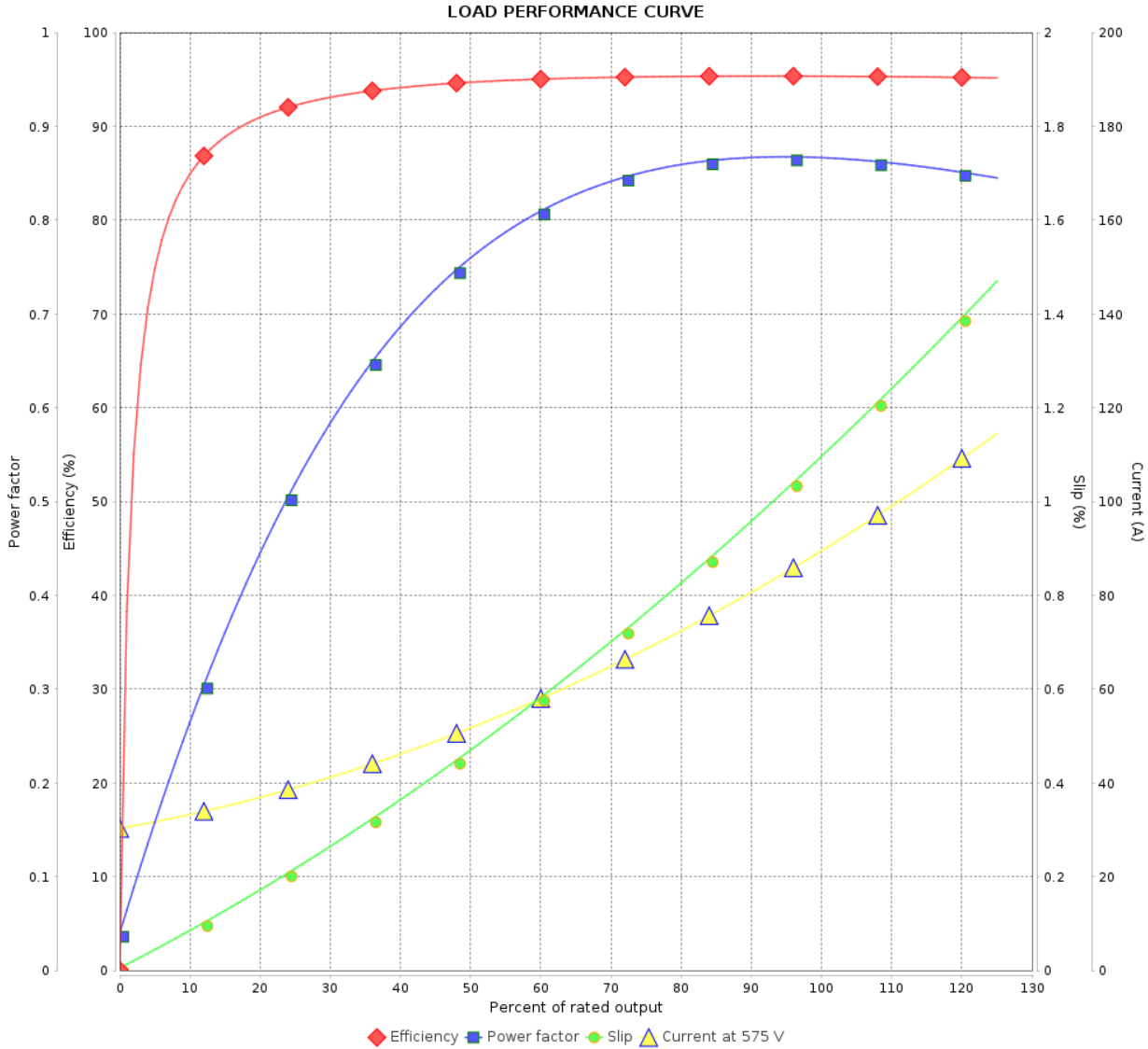
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Product code : 11413206



Performance : 575 V 60 Hz 4P

Rated current : 90.4 A
 LRC : 7.3
 Rated torque : 40.8 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 260 %
 Rated speed : 1780 rpm

Moment of inertia (J) : 1.26 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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