

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | | |
|--|-----------------|--|--------------------|--|---------------|----------------------|
| Customer : | | | | | | |
| Product line | | : W22 IEEE 841 NEMA Premium Efficiency Three-Phase | | Product code : | | 12811040 |
| Frame | : | 324/6T | | Locked rotor time | : | 48s (cold) 27s (hot) |
| Output | : | 20 HP (15 kW) | | Temperature rise | : | 80 K |
| Poles | : | 8 | | 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 | : | 22.6 A | | Protection degree | : | IP55 |
| L. R. Amperes | : | 113 A | | Cooling method | : | IC411 - TEFC |
| LRC | : | 5.0x(Code G) | | Mounting | : | F-1 |
| No load current | : | 12.8 A | | Rotation ¹ | : | Both (CW and CCW) |
| Rated speed | : | 880 rpm | | Noise level ² | : | 56.0 dB(A) |
| Slip | : | 2.22 % | | Starting method | : | Direct On Line |
| Rated torque | : | 16.5 kgfm | | Approx. weight ³ | : | 231 kg |
| Locked rotor torque | : | 190 % | | | | |
| Breakdown torque | : | 220 % | | | | |
| Insulation class | : | F | | | | |
| Service factor | : | 1.25 | | | | |
| Moment of inertia (J) | : | 0.3946 kgm ² | | | | |
| Design | : | B | | | | |
| Output | 50% | 75% | 100% | Foundation loads | | |
| Efficiency (%) | 89.5 | 91.0 | 91.0 | Max. traction | : | 341 kgf |
| Power Factor | 0.54 | 0.66 | 0.73 | Max. compression | : | 572 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) |
| 9.5 | 8.0 | 7.7 | 5.2 | 3.7 | 2.8 | 2.0 |
| Bearing type | | | <u>Drive end</u> | <u>Non drive end</u> | | |
| : | | | 6312 C3 | 6212 C3 | | |
| Sealing | | | Taconite Labyrinth | Taconite Labyrinth | | |
| Lubrication interval | | | 20000 h | 20000 h | | |
| Lubricant amount | | | 21 g | 13 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 | 13/01/2024 | | | | 1 / 2 | |

LOAD PERFORMANCE CURVE

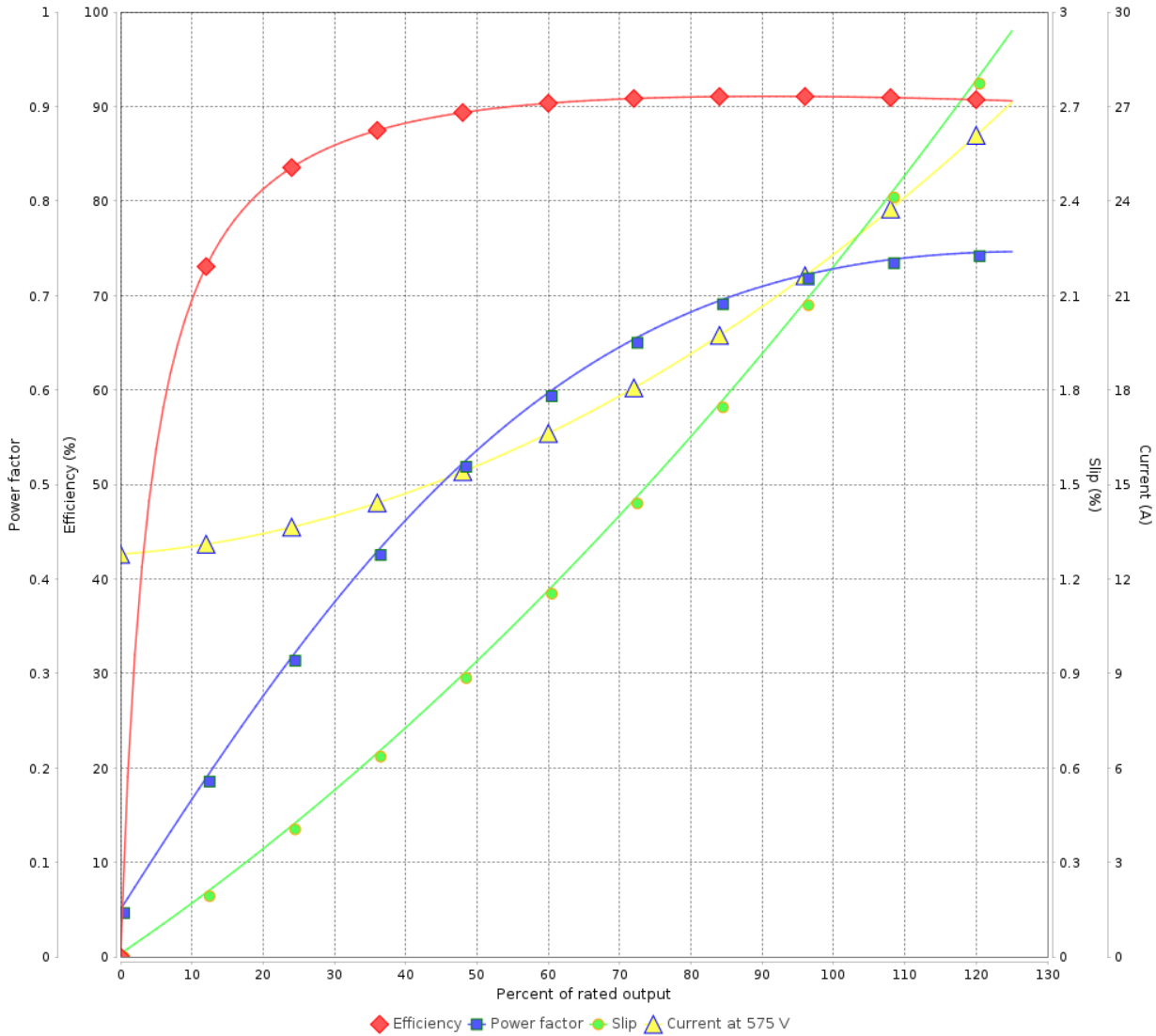
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12811040

LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 8P

| | | | |
|---------------------|-------------|-----------------------|---------------------------|
| Rated current | : 22.6 A | Moment of inertia (J) | : 0.3946 kgm ² |
| LRC | : 5.0 | Duty cycle | : Cont.(S1) |
| Rated torque | : 16.5 kgfm | Insulation class | : F |
| Locked rotor torque | : 190 % | Service factor | : 1.25 |
| Breakdown torque | : 220 % | Temperature rise | : 80 K |
| Rated speed | : 880 rpm | Design | : B |

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