

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11455588

| | | | |
|-----------------------|-------------------------|-----------------------------|------------------------|
| Frame | : 404/5T | Locked rotor time | : 23s (cold) 13s (hot) |
| Output | : 60 HP (45 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 | : 58.4 A | Protection degree | : IP55 |
| L. R. Amperes | : 380 A | Cooling method | : IC411 - TEFC |
| LRC | : 6.5x(Code H) | Mounting | : F-1 |
| No load current | : 24.0 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 880 rpm | Noise level ² | : 60.0 dB(A) |
| Slip | : 2.22 % | Starting method | : Direct On Line |
| Rated torque | : 49.8 kgfm | Approx. weight ³ | : 523 kg |
| Locked rotor torque | : 180 % | | |
| Breakdown torque | : 270 % | | |
| Insulation class | : F | | |
| Service factor | : 1.25 | | |
| Moment of inertia (J) | : 1.69 kgm ² | | |
| Design | : B | | |

| | | | | | |
|----------------|------|------|------|------------------|------------|
| Output | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 93.0 | 93.0 | 93.0 | Max. traction | : 1054 kgf |
| Power Factor | 0.68 | 0.78 | 0.83 | Max. compression | : 1578 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) |
|--------------|--------------|---------------|--------------|--------------|---------------|----------------|
| 7.3 | 6.4 | 6.4 | 3.1 | 2.3 | 1.3 | 1.0 |

| | | | |
|----------------------|---|------------------|----------------------|
| | | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type | : | NU-316 C3 | 6314 C3 |
| Sealing | : | WSeal | WSeal |
| Lubrication interval | : | 17000 h | 20000 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 | | Page Revision 1 / 2 | | |
| Checked by | | | | |
| Date | 21/10/2024 | | | |

LOAD PERFORMANCE CURVE

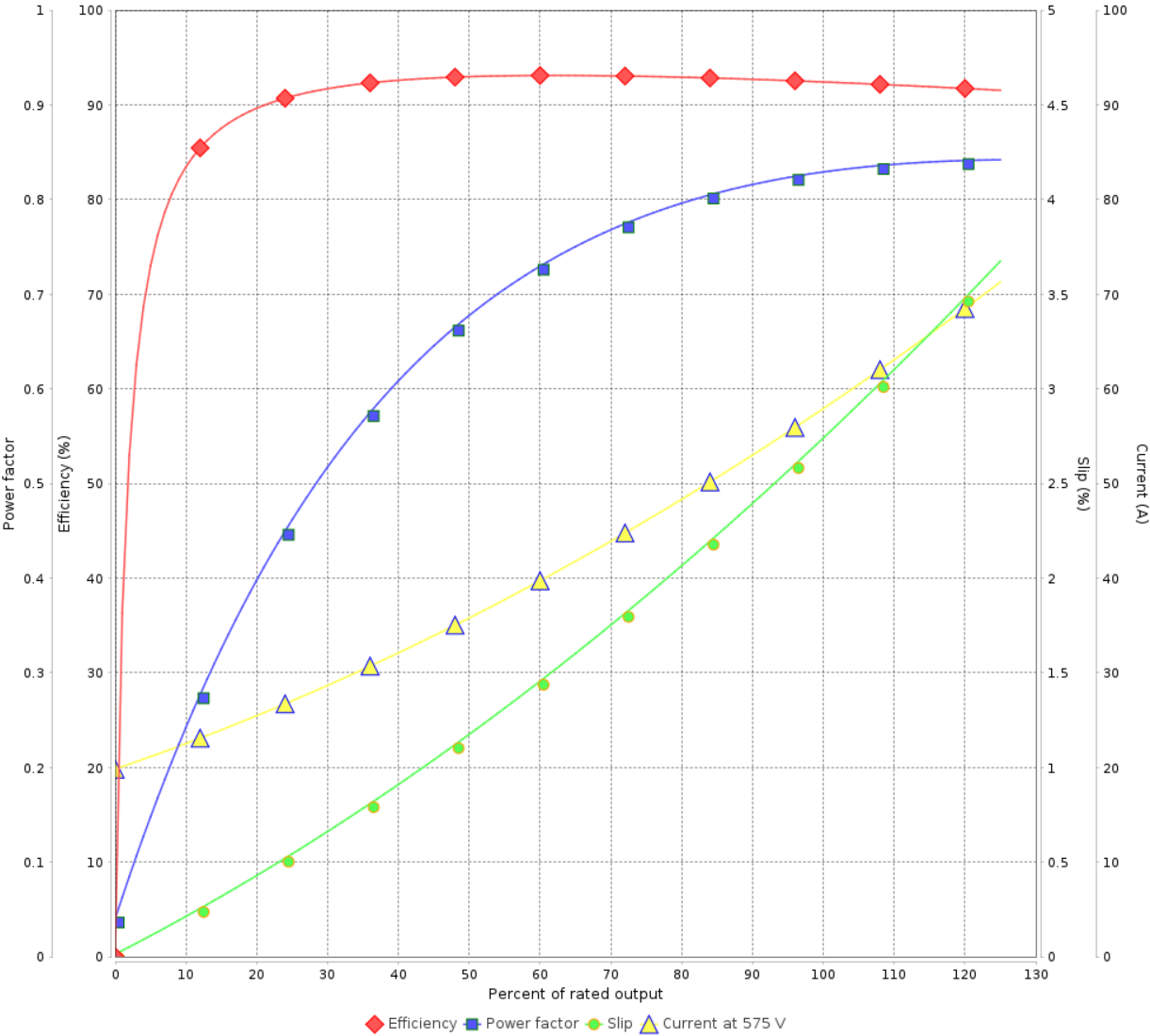
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| | | | |
|------------------------------|-------------|-----------------------|-------------------------|
| Performance : 575 V 60 Hz 8P | | | |
| Rated current | : 58.4 A | Moment of inertia (J) | : 1.69 kgm ² |
| LRC | : 6.5 | Duty cycle | : Cont.(S1) |
| Rated torque | : 49.8 kgfm | Insulation class | : F |
| Locked rotor torque | : 180 % | Service factor | : 1.25 |
| Breakdown torque | : 270 % | Temperature rise | : 80 K |
| Rated speed | : 880 rpm | Design | : B |

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| Performed by | | | | Page 2 / 2 | Revision |
| Checked by | | | | | |
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