

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 11556413

| | | | |
|-----------------------|---------------------------|-----------------------------|------------------------|
| Frame | : 324/6TC | Locked rotor time | : 27s (cold) 15s (hot) |
| Output | : 50 HP (37 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 | : 47.4 A | Protection degree | : IP55 |
| L. R. Amperes | : 294 A | Cooling method | : IC411 - TEFC |
| LRC | : 6.2x(Code G) | Mounting | : F-1 |
| No load current | : 18.8 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 1775 rpm | Noise level ² | : 70.0 dB(A) |
| Slip | : 1.39 % | Starting method | : Direct On Line |
| Rated torque | : 20.4 kgfm | Approx. weight ³ | : 277 kg |
| Locked rotor torque | : 229 % | | |
| Breakdown torque | : 270 % | | |
| Insulation class | : F | | |
| Service factor | : 1.25 | | |
| Moment of inertia (J) | : 0.3861 kgm ² | | |
| Design | : B | | |

| | | | | | | |
|----------------|-------|------|------|------|------------------|-----------|
| Output | 25% | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 0.000 | 93.0 | 94.1 | 94.5 | Max. traction | : 557 kgf |
| Power Factor | 0.00 | 0.66 | 0.77 | 0.83 | Max. compression | : 833 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) |
|--------------|--------------|---------------|--------------|--------------|---------------|----------------|
| 5.7 | 4.9 | 4.7 | 2.7 | 1.9 | 1.2 | 0.9 |

| | Drive end | Non drive end |
|----------------------|------------------|---------------|
| Bearing type | : 6312 C3 | 6212 C3 |
| Sealing | : V'Ring | V'Ring |
| 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 | | | | |
| Date | 19/10/2024 | | Page 1 / 2 | Revision |

LOAD PERFORMANCE CURVE

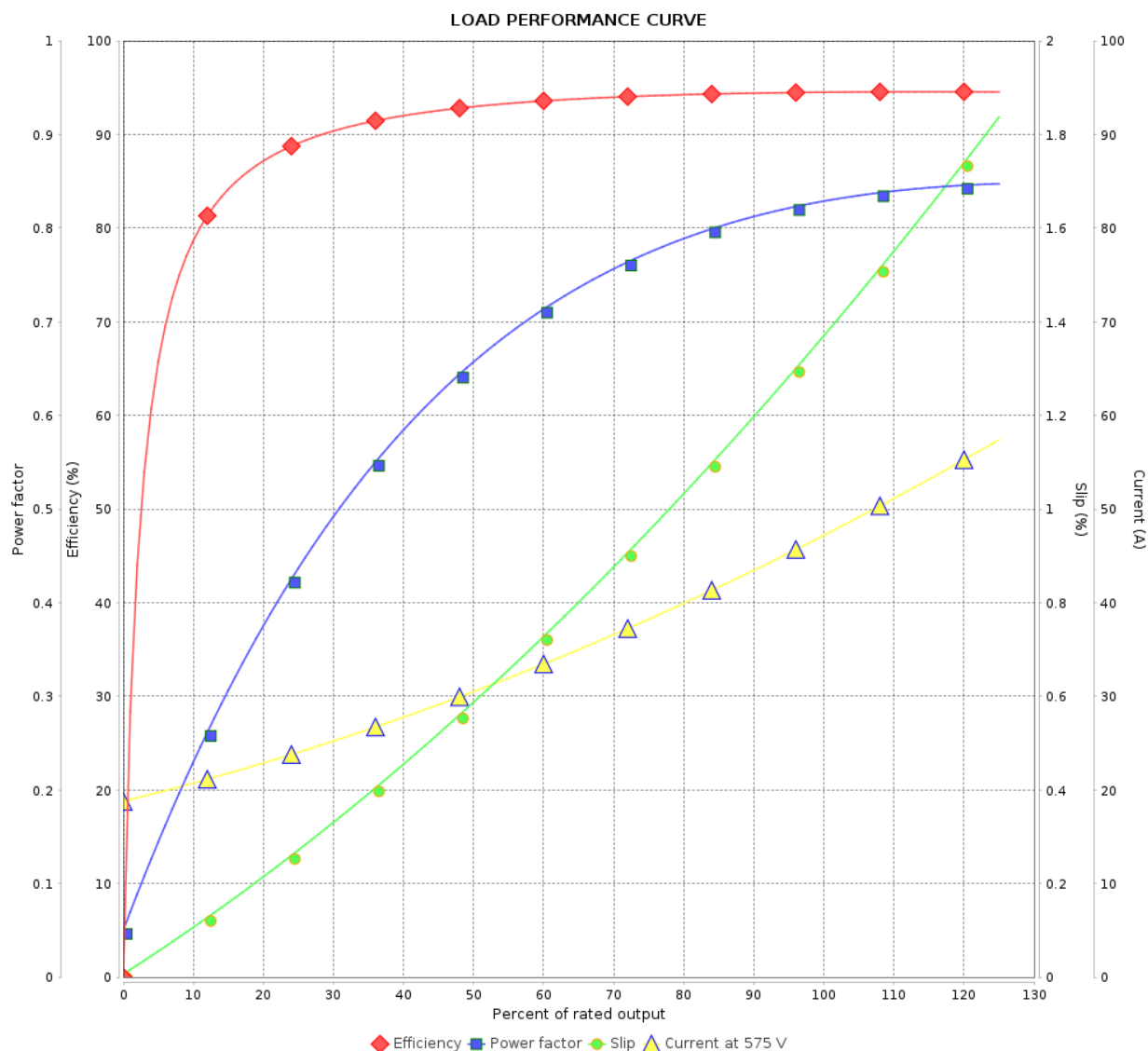
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Three-Phase

Product code : 11556413

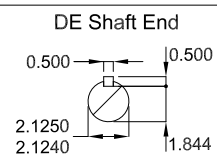
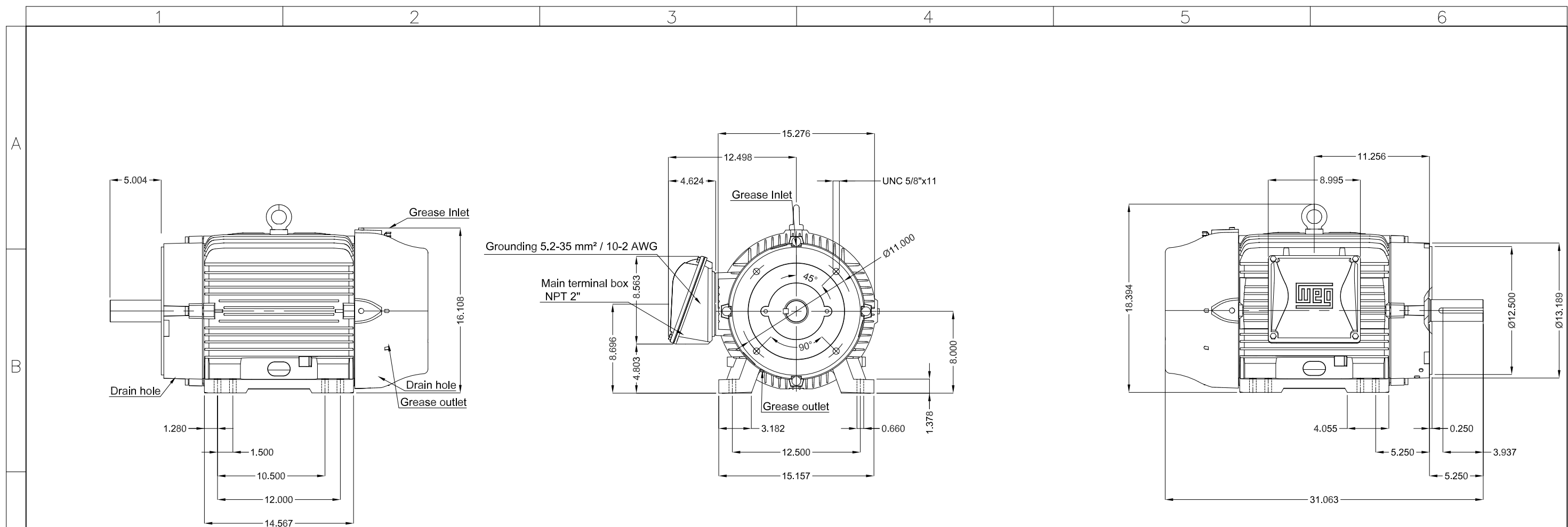


Performance : 575 V 60 Hz 4P



Rated current : 47.4 A
LRC : 6.2
Rated torque : 20.4 kgfm
Locked rotor torque : 229 %
Breakdown torque : 270 %
Rated speed : 1775 rpm

Moment of inertia (J) : 0.3861 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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|-----------------------------|
| Without vertical jackscrews |
| Color RAL 5009 |
| Painting plan 203A |
| Mounting B34R(D) |

| | | | | | | | | | | |
|--------------------------|------------|---|--|--|--|------------|---------------------|----------|---|-----|
| 50 HP 04 Poles 60 Hz | | | | | | | | | | A |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | HYBRISUSER | | | | 00 |
| ECM | LOC | SUMMARY OF MODIFICATIONS | | | | EXECUTED | CHECKED | RELEASED | DATE | VER |
| EXECUTED | HYBRISUSER |  | THREE PH. MOTOR W22 NEMA PREM. EFF. FRAME 324/6TC IP55 TEFC | | | | PREVIEW WDD 00 | |  | |
| CHECKED | | | | | | | | | | |
| RELEASED | | | | | | | | | | |
| REL. DATE | | | | | | | | | | |
| | | | | | | SHEET | | / | | |