

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 12737211

| | | | |
|-----------------------|-------------------------|-----------------------------|------------------------|
| Frame | : 445/7TSD | Locked rotor time | : 36s (cold) 20s (hot) |
| Output | : 150 HP (110 kW) | Temperature rise | : 80 K |
| Poles | : 6 | Duty cycle | : Cont.(S1) |
| Frequency | : 60 Hz | Ambient temperature | : -20°C to +40°C |
| Rated voltage | : 460 V | Altitude | : 1000 m.a.s.l. |
| Rated current | : 176 A | Protection degree | : IP55 |
| L. R. Amperes | : 1091 A | Cooling method | : IC411 - TEFC |
| LRC | : 6.2x(Code G) | Mounting | : W-6 |
| No load current | : 70.0 A | Rotation ¹ | : Both (CW and CCW) |
| Rated speed | : 1187 rpm | Noise level ² | : 69.0 dB(A) |
| Slip | : 1.08 % | Starting method | : Direct On Line |
| Rated torque | : 91.6 kgfm | Approx. weight ³ | : 1058 kg |
| Locked rotor torque | : 240 % | | |
| Breakdown torque | : 250 % | | |
| Insulation class | : F | | |
| Service factor | : 1.15 | | |
| Moment of inertia (J) | : 5.63 kgm ² | | |
| Design | : B | | |

| | | | | | |
|----------------|------|------|------|------------------|------------|
| Output | 50% | 75% | 100% | Foundation loads | |
| Efficiency (%) | 95.0 | 95.4 | 95.8 | Max. traction | : 1885 kgf |
| Power Factor | 0.67 | 0.78 | 0.82 | Max. compression | : 2943 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 | 3.4 | 2.4 | 1.7 | 1.2 | 0.7 |

| | | | |
|----------------------|---|------------------|----------------------|
| | | <u>Drive end</u> | <u>Non drive end</u> |
| Bearing type | : | 6314 C3 | 6314 C3 |
| Sealing | : | Viton Oil Seal | Viton Oil Seal |
| Lubrication interval | : | 8000 h | 8000 h |
| Lubricant amount | : | 27 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 |
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| Checked by | | | | |
| Date | 30/10/2024 | | | |
| | | | Revision | |

Customer :

Space heater information

Voltage: 110 - 127 V

| Rev. | Changes Summary | | Performed | Checked | Date |
|--------------|-----------------|--|---------------|---------|----------|
| | | | | | |
| Performed by | | | Page 2 / 3 | | Revision |
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| Date | 30/10/2024 | | | | |

LOAD PERFORMANCE CURVE

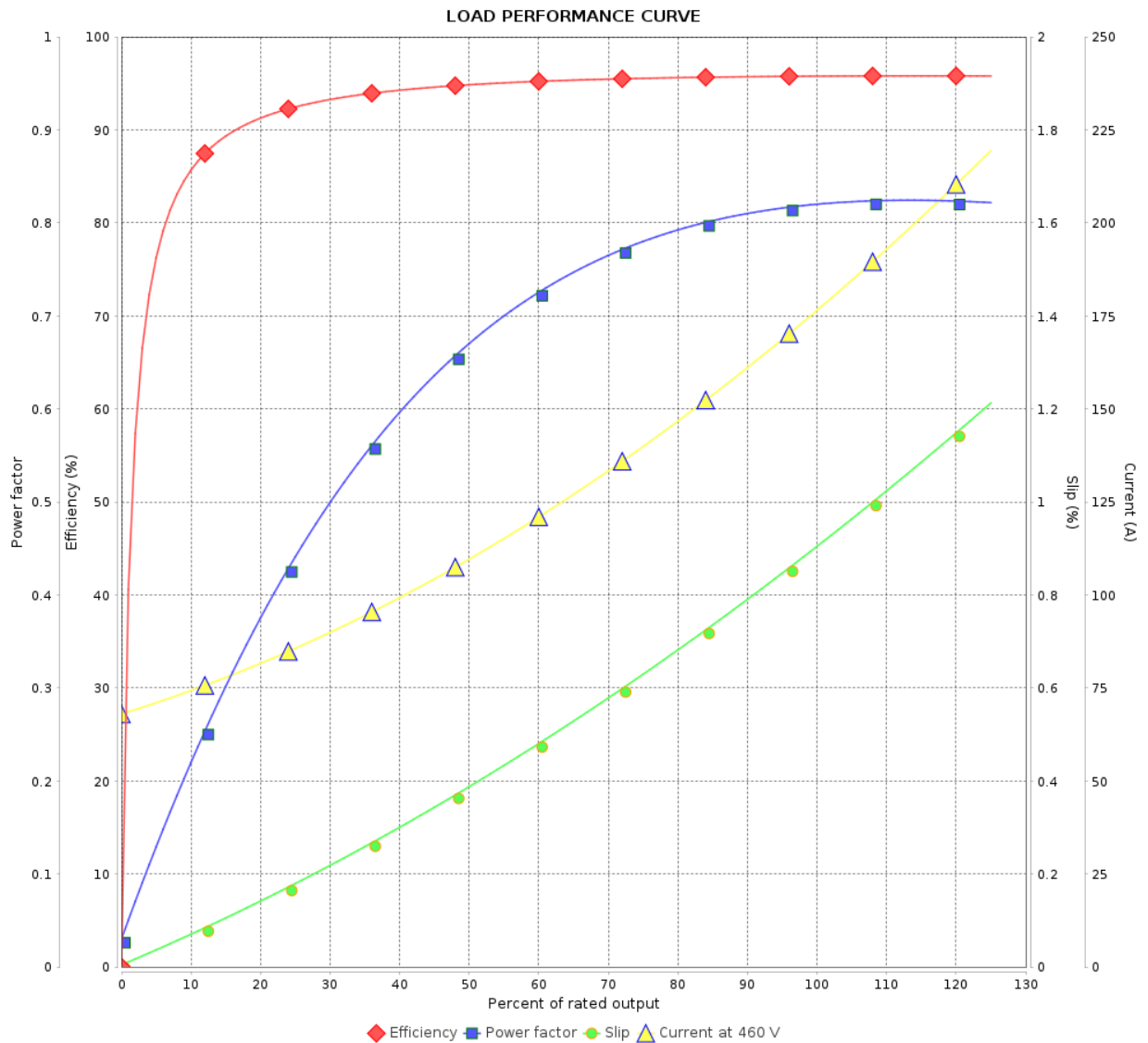
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Three-Phase

Product code : 12737211



Performance : 460 V 60 Hz 6P

Rated current : 176 A
LRC : 6.2
Rated torque : 91.6 kgfm
Locked rotor torque : 240 %
Breakdown torque : 250 %
Rated speed : 1187 rpm

Moment of inertia (J) : 5.63 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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