

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | | |
|--|-------------------------|------------------|-----------------------------|--|---------------|----------------|
| Customer : | | | | | | |
| Product line : W22 NEMA Premium Efficiency Three-Phase | | | Product code : 14089955 | | | |
| Frame | : L447/9T | | Locked rotor time | : 39s (cold) 22s (hot) | | |
| Output | : 500 HP (370 kW) | | Temperature rise | : 105 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 | : 454 A | | Protection degree | : IP55 | | |
| L. R. Amperes | : 3999 A | | Cooling method | : IC411 - TEFC | | |
| LRC | : 8.8x(Code J) | | Mounting | : F-1 | | |
| No load current | : 180 A | | Rotation ¹ | : Both (CW and CCW) | | |
| Rated speed | : 1789 rpm | | Noise level ² | : 79.0 dB(A) | | |
| Slip | : 0.61 % | | Starting method | : Direct On Line | | |
| Rated torque | : 203 kgfm | | Approx. weight ³ | : 1563 kg | | |
| Locked rotor torque | : 300 % | | | | | |
| Breakdown torque | : 280 % | | | | | |
| Insulation class | : F | | | | | |
| Service factor | : 1.00 | | | | | |
| Moment of inertia (J) | : 6.73 kgm ² | | | | | |
| Design | : B | | | | | |
| Output | 50% | 75% | 100% | Foundation loads | | |
| Efficiency (%) | 95.4 | 96.2 | 96.2 | Max. traction : 4187 kgf | | |
| Power Factor | 0.72 | 0.81 | 0.85 | Max. compression : 5750 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) |
| 4.5 | 3.3 | 2.7 | 2.5 | 1.5 | 1.1 | 0.6 |
| | | <u>Drive end</u> | | <u>Non drive end</u> | | |
| Bearing type | : | 6322 C3 | | 6319 C3 | | |
| Sealing | : | WSeal | | WSeal | | |
| Lubrication interval | : | 6000 h | | 8000 h | | |
| Lubricant amount | : | 60 g | | 45 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 | 22/10/2023 | | | | 1 / 2 | |

LOAD PERFORMANCE CURVE

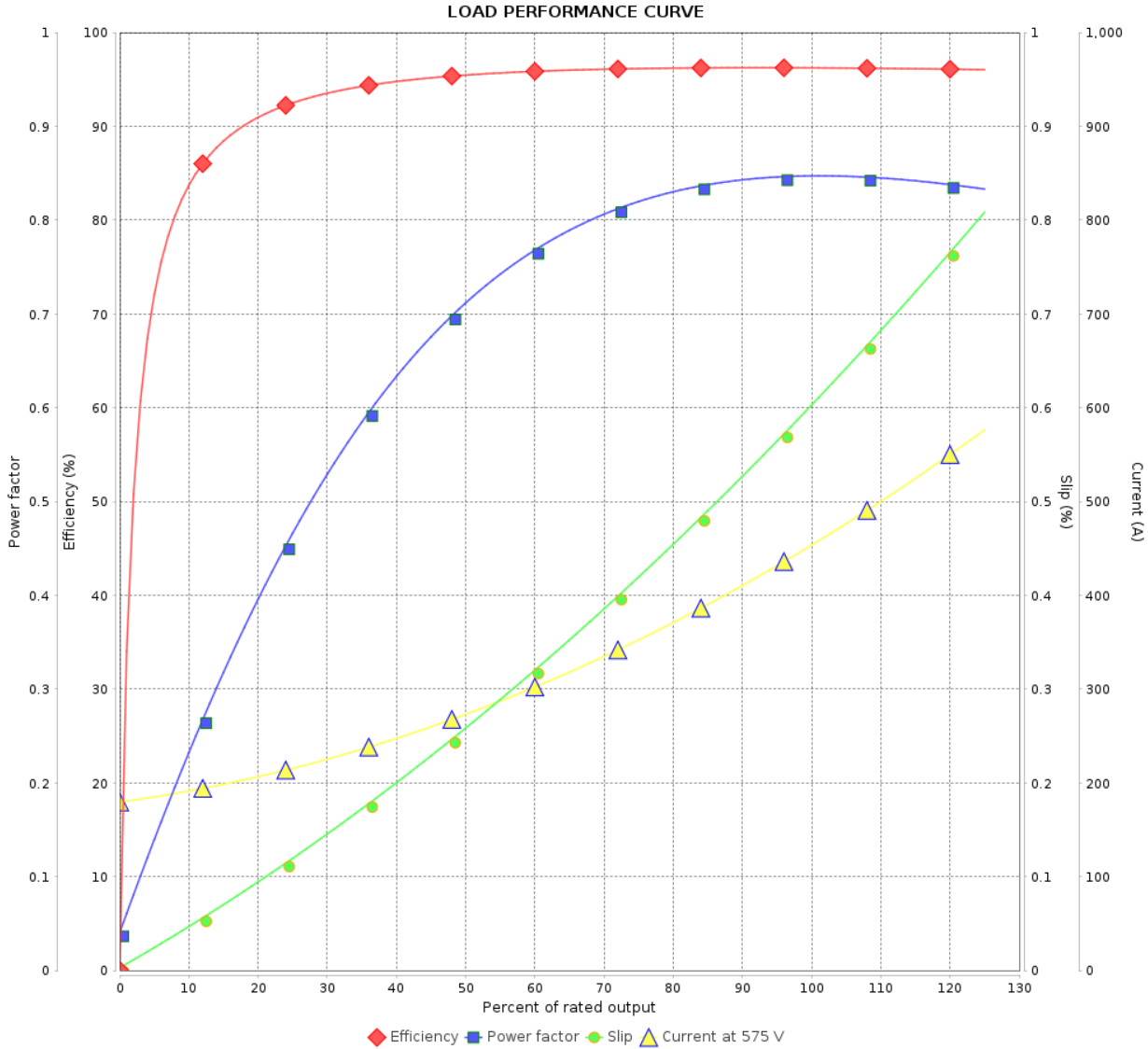
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 14089955



Performance : 575 V 60 Hz 4P

Rated current : 454 A
 LRC : 8.8
 Rated torque : 203 kgfm
 Locked rotor torque : 300 %
 Breakdown torque : 280 %
 Rated speed : 1789 rpm

Moment of inertia (J) : 6.73 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------------|----------|
| | | | | |
| Performed by | | | Page 2 / 2 | Revision |
| Checked by | | | | |
| Date | 22/10/2023 | | | |