

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



| | | | | | |
|--|---------------------------------------|---|--|---|----------|
| Customer : | | | | | |
| Product line : W22 Tru-Metric IE3 Three-Phase | | Product code : 13029969 | | | |
| Frame : 112M | Insulation class : F | Duty cycle : S1 | Ambient temperature : -20°C to +40°C | Altitude : 1000 m.a.s.l. | |
| Protection degree : IP55 | Design : N | Cooling method : IC411 - TEFC | Mounting : B3L(E) | Rotation ¹ : Both (CW and CCW) | |
| Starting method : Direct On Line | Approx. weight ² : 42.8 kg | Moment of inertia (J) : 0.0080 kgm ² | | | |
| Output [HP] | 5.5 | 5.5 | 5.5 | | |
| Poles | 2 | 2 | 2 | | |
| Frequency [Hz] | 50 | 50 | 60 | | |
| Rated voltage [V] | 380 | 415 | 230/460 | | |
| Rated current [A] | 7.83 | 7.49 | 13.3/6.67 | | |
| L. R. Amperes [A] | 60.3 | 63.7 | 127/63.4 | | |
| LRC [A] | 7.7 | 8.5 | 9.5 | | |
| No load current [A] | 2.80 | 3.30 | 5.80/2.90 | | |
| Rated speed [RPM] | 2890 | 2910 | 3515 | | |
| Slip [%] | 3.67 | 3.00 | 2.36 | | |
| Rated torque [kgfm] | 1.38 | 1.37 | 1.14 | | |
| Locked rotor torque [%] | 229 | 280 | 280 | | |
| Breakdown torque [%] | 310 | 380 | 440 | | |
| Service factor | 1.25 | 1.25 | 1.25 | | |
| Temperature rise | 80 K | 80 K | 80 K | | |
| Locked rotor time | 25s (cold) 14s (hot) | 25s (cold) 14s (hot) | 28s (cold) 16s (hot) | | |
| Noise level ² | 64.0 dB(A) | 64.0 dB(A) | 64.0 dB(A) | | |
| Efficiency (%) | 25% | | | | |
| | 50% | 88.0 | 87.5 | 85.5 | |
| | 75% | 88.2 | 88.0 | 87.5 | |
| | 100% | 88.2 | 88.4 | 88.5 | |
| Power Factor | 25% | | | | |
| | 50% | 0.73 | 0.65 | 0.67 | |
| | 75% | 0.83 | 0.77 | 0.79 | |
| | 100% | 0.88 | 0.84 | 0.85 | |
| Losses at normative operating points (speed;torque), in percentage of rated output power | | | | | |
| Losses (%) | P1 (0,9;1,0) | 12.6 | 12.4 | 12.3 | |
| | P2 (0,5;1,0) | 9.9 | 9.7 | 9.6 | |
| | P3 (0,25;1,0) | 9.6 | 9.5 | 9.4 | |
| | P4 (0,9;0,5) | 7.3 | 7.1 | 7.0 | |
| | P5 (0,5;0,5) | 4.5 | 4.4 | 4.4 | |
| | P6 (0,5;0,25) | 3.3 | 3.2 | 3.2 | |
| | P7 (0,25;0,25) | 2.2 | 2.1 | 2.1 | |
| Bearing type | Drive end : 6207 ZZ | Non drive end : 6206 ZZ | Foundation loads | | |
| Sealing | : V'Ring | : V'Ring | Max. traction | : 83 kgf | |
| Lubrication interval | : - | : - | Max. compression | : 126 kgf | |
| Lubricant amount | : - | : - | | | |
| Lubricant type | : Mobil Polyrex EM | | | | |
| 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 | 14/01/2024 | | | 1 / 5 | |

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Notes

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| Performed by | | | | |
| Checked by | | | Page | Revision |
| Date | 14/01/2024 | | 2 / 5 | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

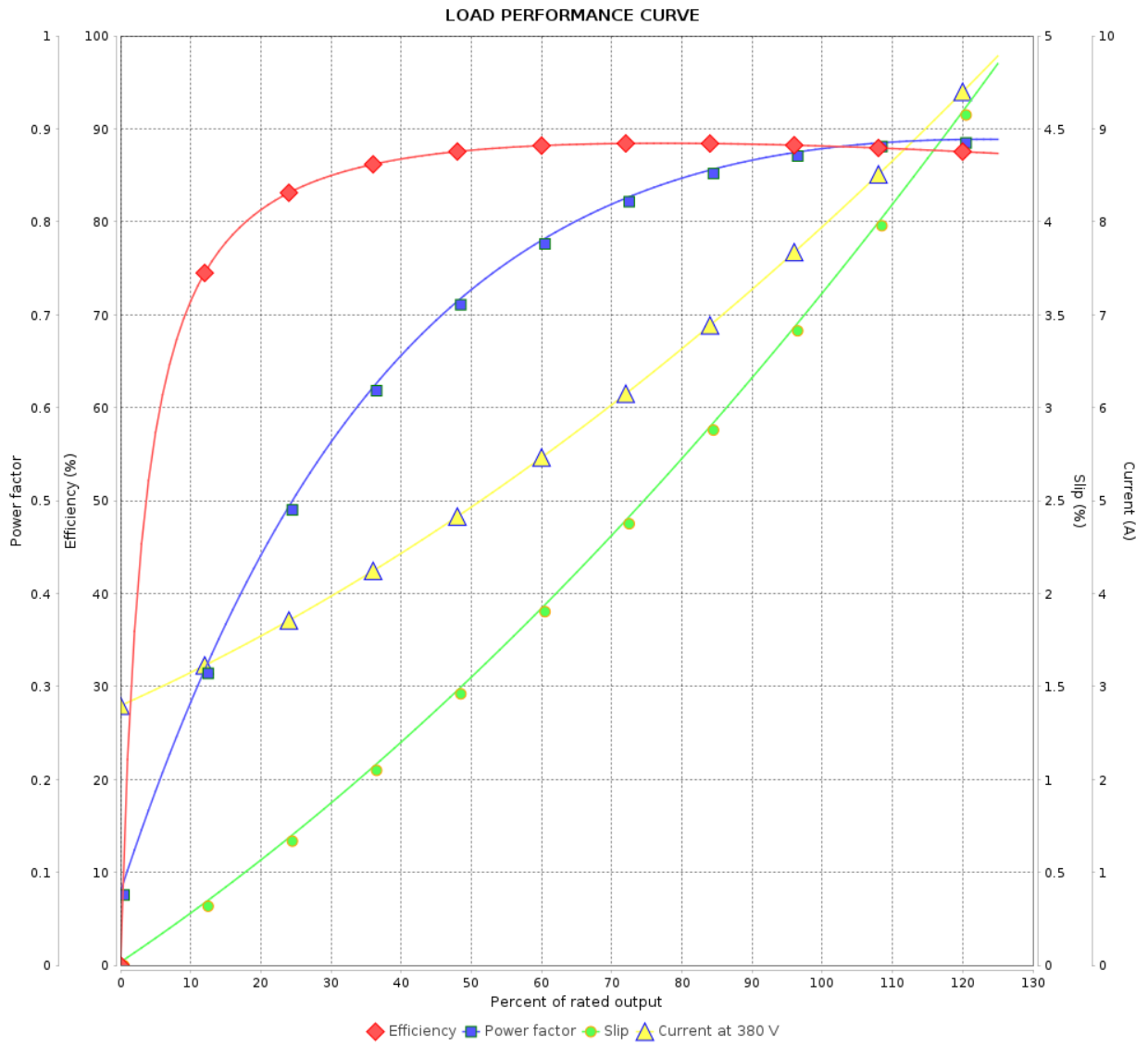


Customer : _____

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

13029969



Performance : 380 V 50 Hz 2P

Rated current : 7.83 A
 LRC : 7.7
 Rated torque : 1.38 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 310 %
 Rated speed : 2890 rpm

Moment of inertia (J) : 0.0080 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : N

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|--------------|-----------------|-----------|---------|----------|
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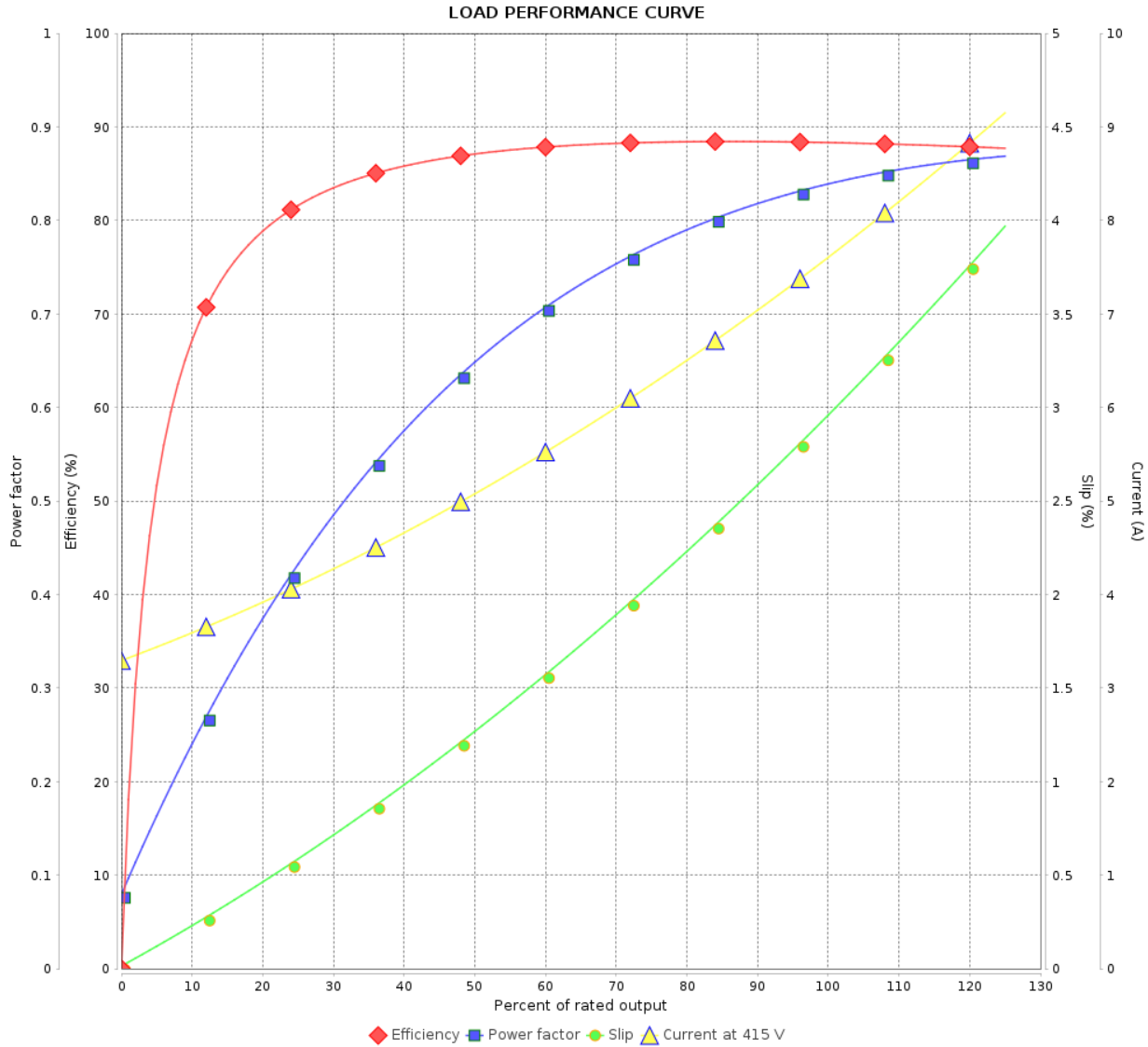
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 13029969



Performance : 415 V 50 Hz 2P

Rated current : 7.49 A
 LRC : 8.5
 Rated torque : 1.37 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 380 %
 Rated speed : 2910 rpm

Moment of inertia (J) : 0.0080 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : N

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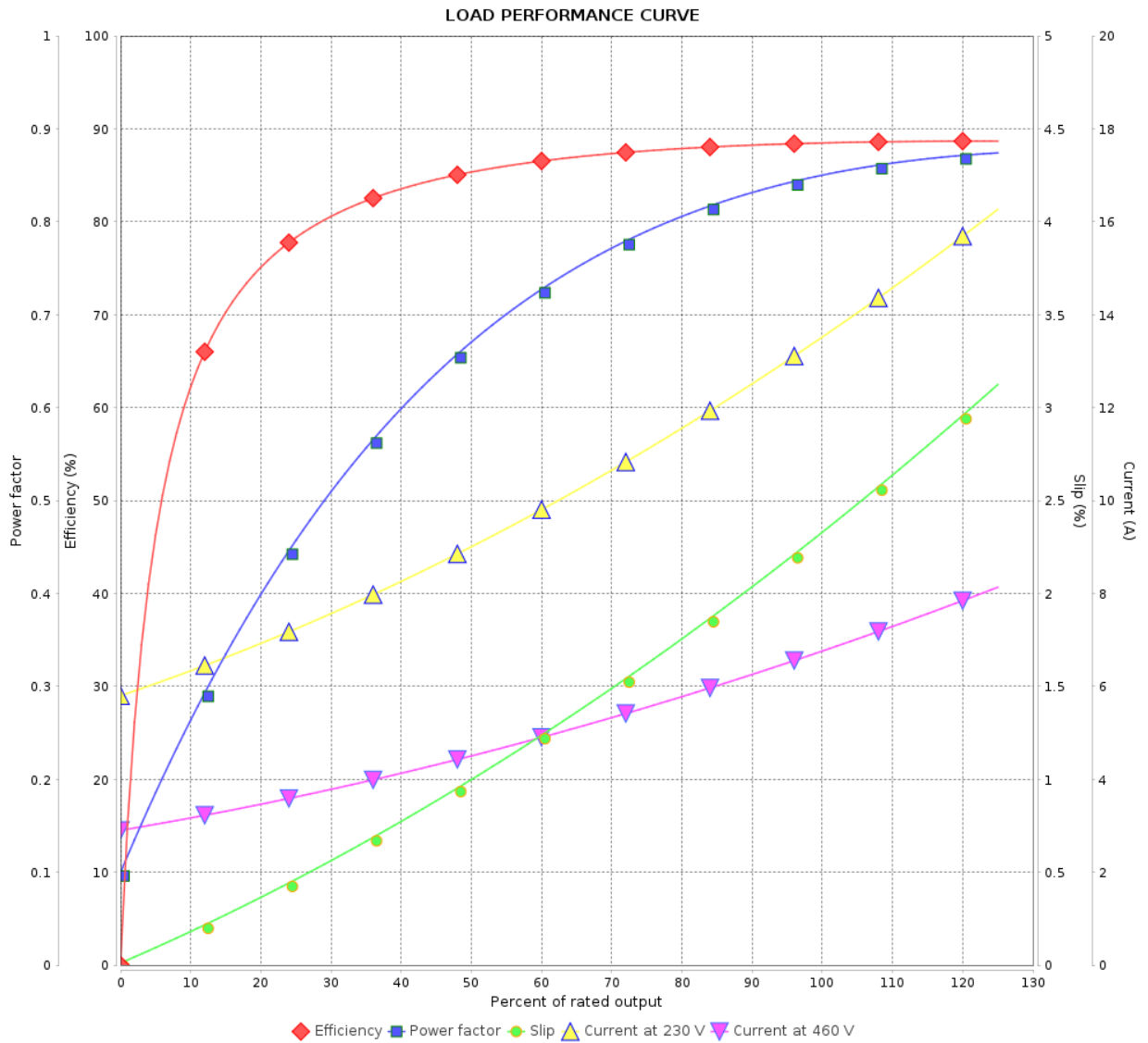
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 13029969



Performance : 230/460 V 60 Hz 2P

Rated current : 13.3/6.67 A
 LRC : 9.5
 Rated torque : 1.14 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 440 %
 Rated speed : 3515 rpm

Moment of inertia (J) : 0.0080 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : N

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| Performed by | | | Page | Revision |
| Checked by | | | | |
| Date | | | | |
| | | | 5 / 5 | |