

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase
Product code : 11355267

| | | | |
|---------------------|------------------|-----------------------------|---------------------------|
| Frame | : 364/5TC | Cooling method | : IC411 - TEFC |
| Insulation class | : F | Mounting | : F-1 |
| Duty cycle | : Cont.(S1) | Rotation ¹ | : Both (CW and CCW) |
| Ambient temperature | : -20°C to +40°C | Starting method | : Direct On Line |
| Altitude | : 1000 m.a.s.l. | Approx. weight ³ | : 430 kg |
| Protection degree | : IP55 | Moment of inertia (J) | : 0.9798 kgm ² |
| Design | : B | | |

| | | | | | | | |
|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Output [HP] | 75 | 60 | 60 | 60 | 75 | 75 | 75 |
| Poles | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Frequency [Hz] | 60 | 50 | 50 | 50 | 50 | 50 | 50 |
| Rated voltage [V] | 230/460 | 380 | 400 | 415 | 380 | 400 | 415 |
| Rated current [A] | 174/87.2 | 88.5 | 84.9 | 82.7 | 106 | 102 | 98.7 |
| L. R. Amperes [A] | 1116/558 | 620 | 637 | 662 | 541 | 571 | 602 |
| LRC [A] | 6.4x(Code G) | 7.0x(Code H) | 7.5x(Code J) | 8.0x(Code J) | 5.1x(Code E) | 5.6x(Code F) | 6.1x(Code G) |
| No load current [A] | 66.0/33.0 | 33.0 | 35.0 | 38.0 | 33.0 | 35.0 | 38.0 |
| Rated speed [RPM] | 1780 | 1480 | 1480 | 1485 | 1470 | 1475 | 1480 |
| Slip [%] | 1.11 | 1.33 | 1.33 | 1.00 | 2.00 | 1.67 | 1.33 |
| Rated torque [kgfm] | 30.6 | 29.4 | 29.4 | 29.3 | 37.0 | 36.9 | 36.8 |
| Locked rotor torque [%] | 240 | 210 | 240 | 260 | 170 | 200 | 210 |
| Breakdown torque [%] | 260 | 250 | 280 | 310 | 200 | 220 | 240 |
| Service factor | 1.25 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Temperature rise | 80 K | 80 K | 80 K | 80 K | 105 K | 105 K | 105 K |
| Locked rotor time | 25s (cold) 14s (hot) | 18s (cold) 10s (hot) | 18s (cold) 10s (hot) | 18s (cold) 10s (hot) | 18s (cold) 10s (hot) | 18s (cold) 10s (hot) | 18s (cold) 10s (hot) |
| Noise level ² | 67.0 dB(A) | 63.0 dB(A) | 63.0 dB(A) | 63.0 dB(A) | 63.0 dB(A) | 63.0 dB(A) | 63.0 dB(A) |
| Efficiency (%) | 25% | 0.000 | | | 0.000 | | |
| | 50% | 94.5 | 93.7 | 93.6 | 93.5 | 94.5 | 94.1 |
| | 75% | 95.0 | 94.2 | 94.2 | 94.2 | 94.1 | 94.5 |
| | 100% | 95.4 | 94.2 | 94.4 | 94.6 | 93.6 | 94.5 |
| Power Factor | 25% | 0.00 | | | 0.00 | | |
| | 50% | 0.68 | 0.68 | 0.64 | 0.61 | 0.75 | 0.67 |
| | 75% | 0.78 | 0.78 | 0.75 | 0.73 | 0.82 | 0.78 |
| | 100% | 0.83 | 0.82 | 0.81 | 0.80 | 0.84 | 0.82 |

Losses at normative operating points (speed;torque), in percentage of rated output power

| | | | | | | | |
|------------|----------------|-----|-----|-----|-----|-----|-----|
| Losses (%) | P1 (0,9;1,0) | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 | 4.7 |
| | P2 (0,5;1,0) | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 |
| | P3 (0,25;1,0) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| | P4 (0,9;0,5) | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 |
| | P5 (0,5;0,5) | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| | P6 (0,5;0,25) | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| | P7 (0,25;0,25) | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |

| | | | | |
|--------------|--------------------|----------|------------------|-----------------------------|
| Bearing type | : 6314 C3 | 6314 C3 | Foundation loads | |
| | : Oil Seal | Oil Seal | | Max. traction : 776 kgf |
| | : 12000 h | 12000 h | | Max. compression : 1206 kgf |
| | : 27 g | 27 g | | |
| | : Mobil Polyrex EM | | | |

This revision replaces and cancel the previous one, which must be eliminated.

(1) Looking the motor from the shaft end.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Notes
USABLE @208V 186A SF 1.10 SFA 205A

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LOAD PERFORMANCE CURVE

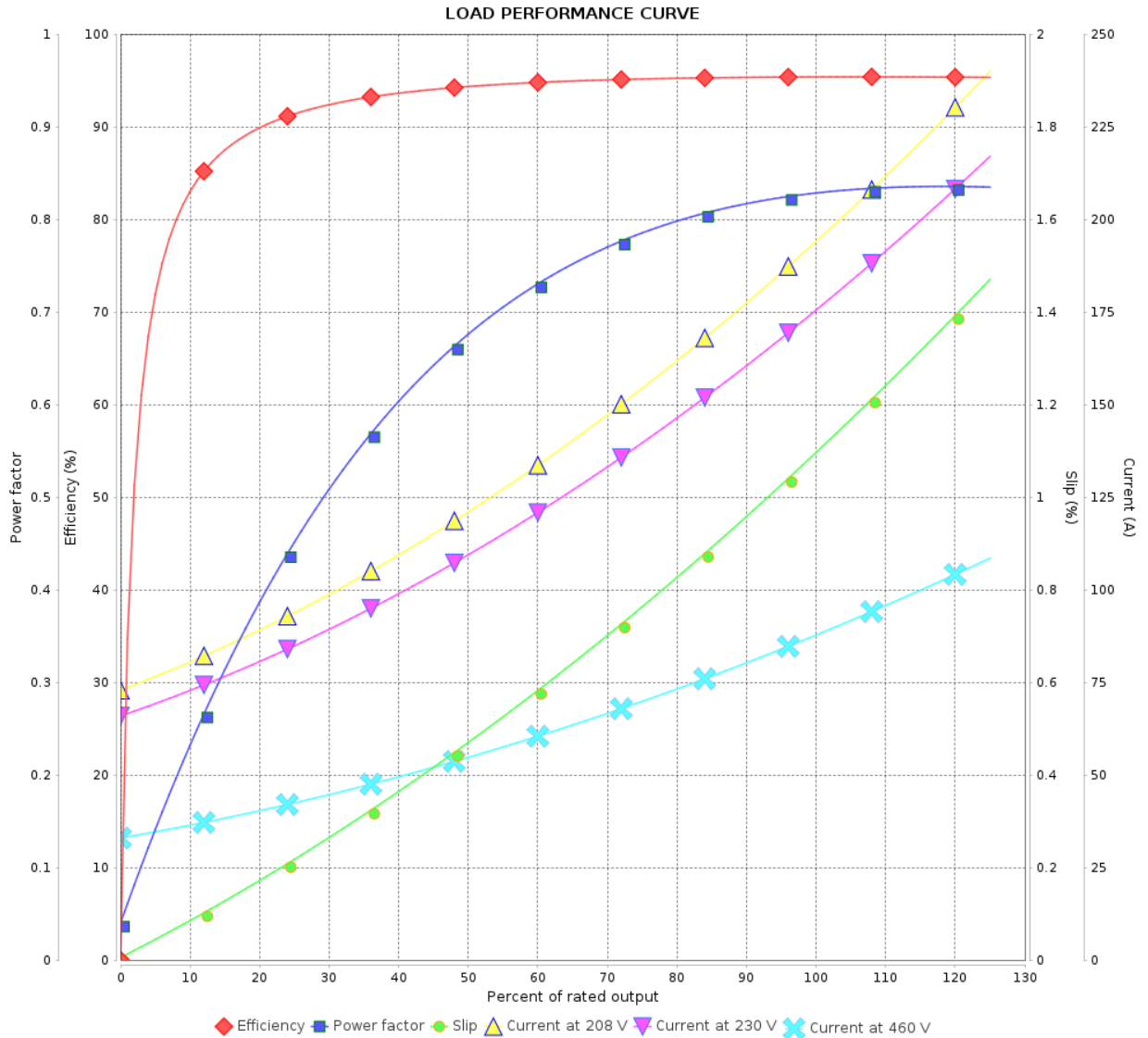
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355267



Performance : 230/460 V 60 Hz 4P

Rated current : 174/87.2 A
 LRC : 6.4
 Rated torque : 30.6 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 260 %
 Rated speed : 1780 rpm

Moment of inertia (J) : 0.9798 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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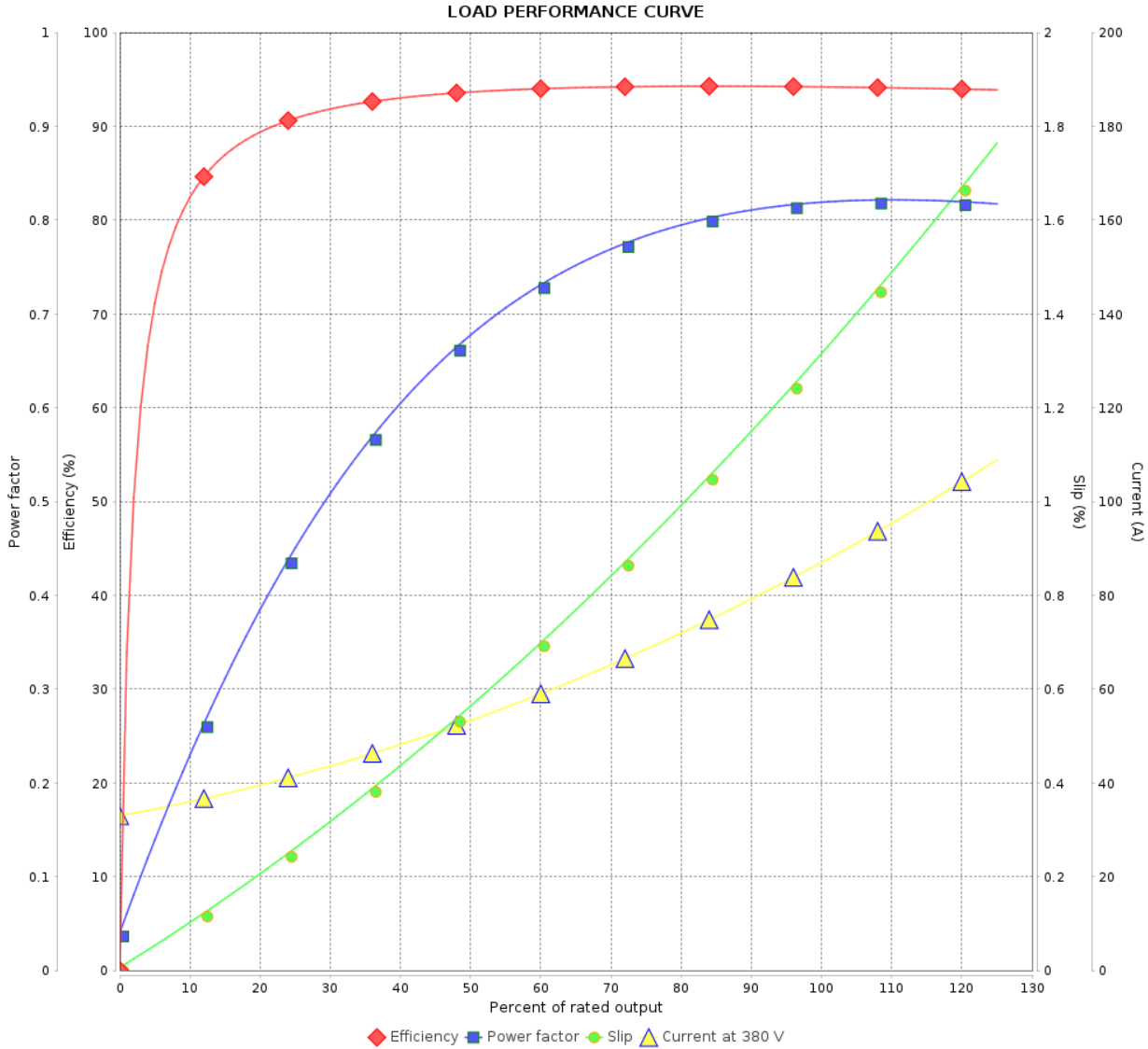
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355267



Performance : 380 V 50 Hz 4P IE3

Rated current : 88.5 A
 LRC : 7.0
 Rated torque : 29.4 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 250 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.9798 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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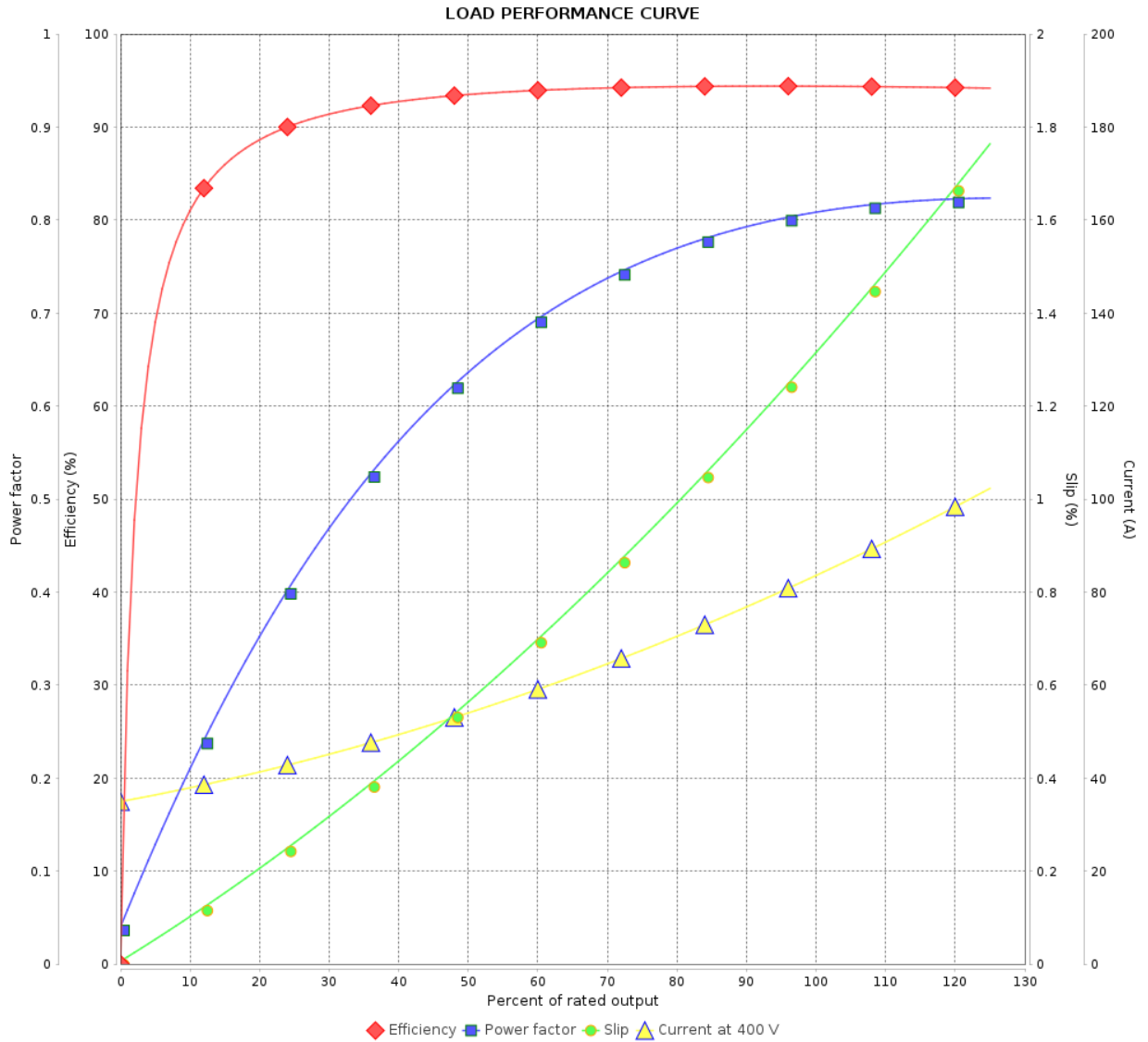
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355267



Performance : 400 V 50 Hz 4P IE3

Rated current : 84.9 A
 LRC : 7.5
 Rated torque : 29.4 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 280 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.9798 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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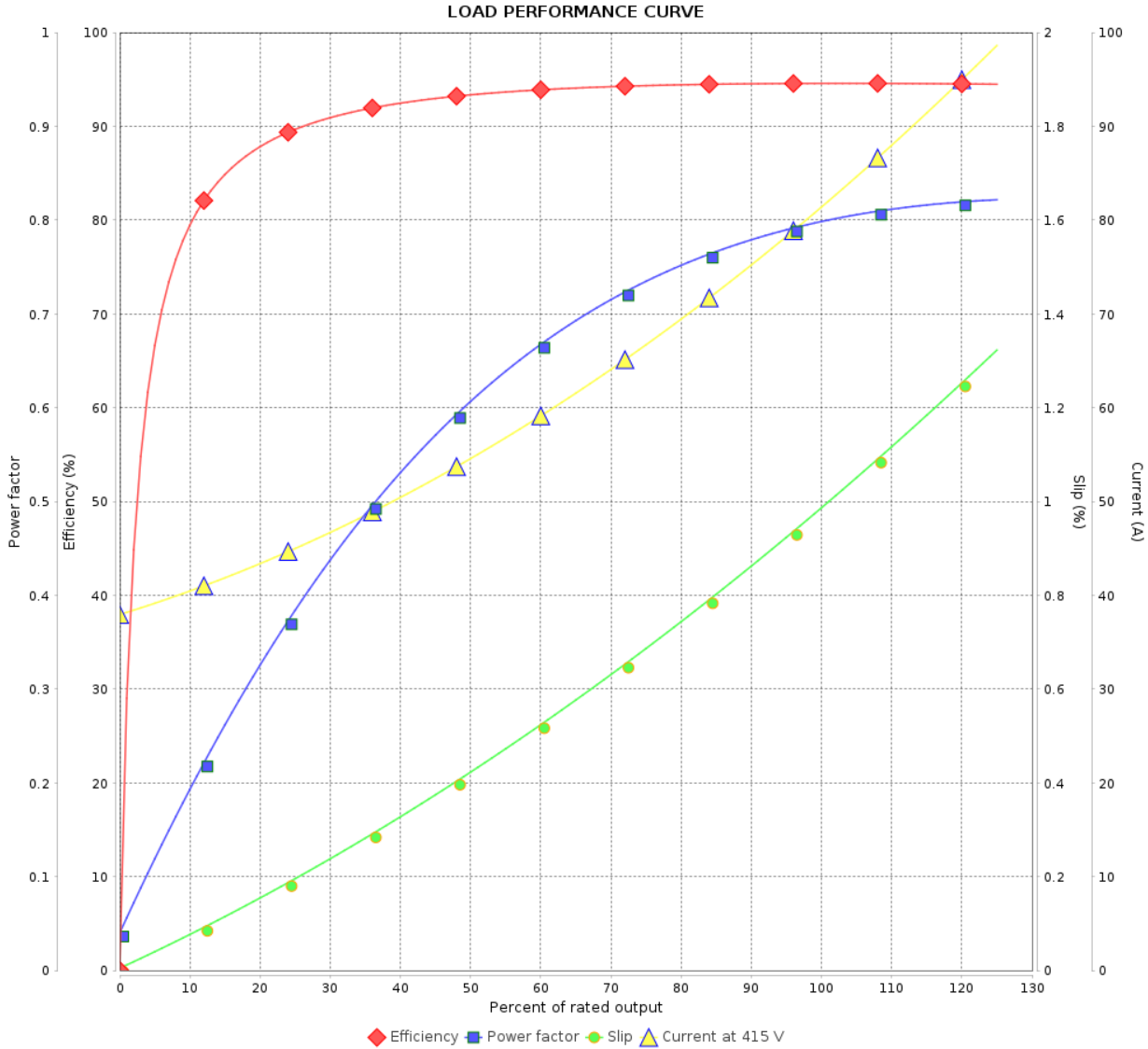
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355267



Performance : 415 V 50 Hz 4P IE3

Rated current : 82.7 A
 LRC : 8.0
 Rated torque : 29.3 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 310 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 0.9798 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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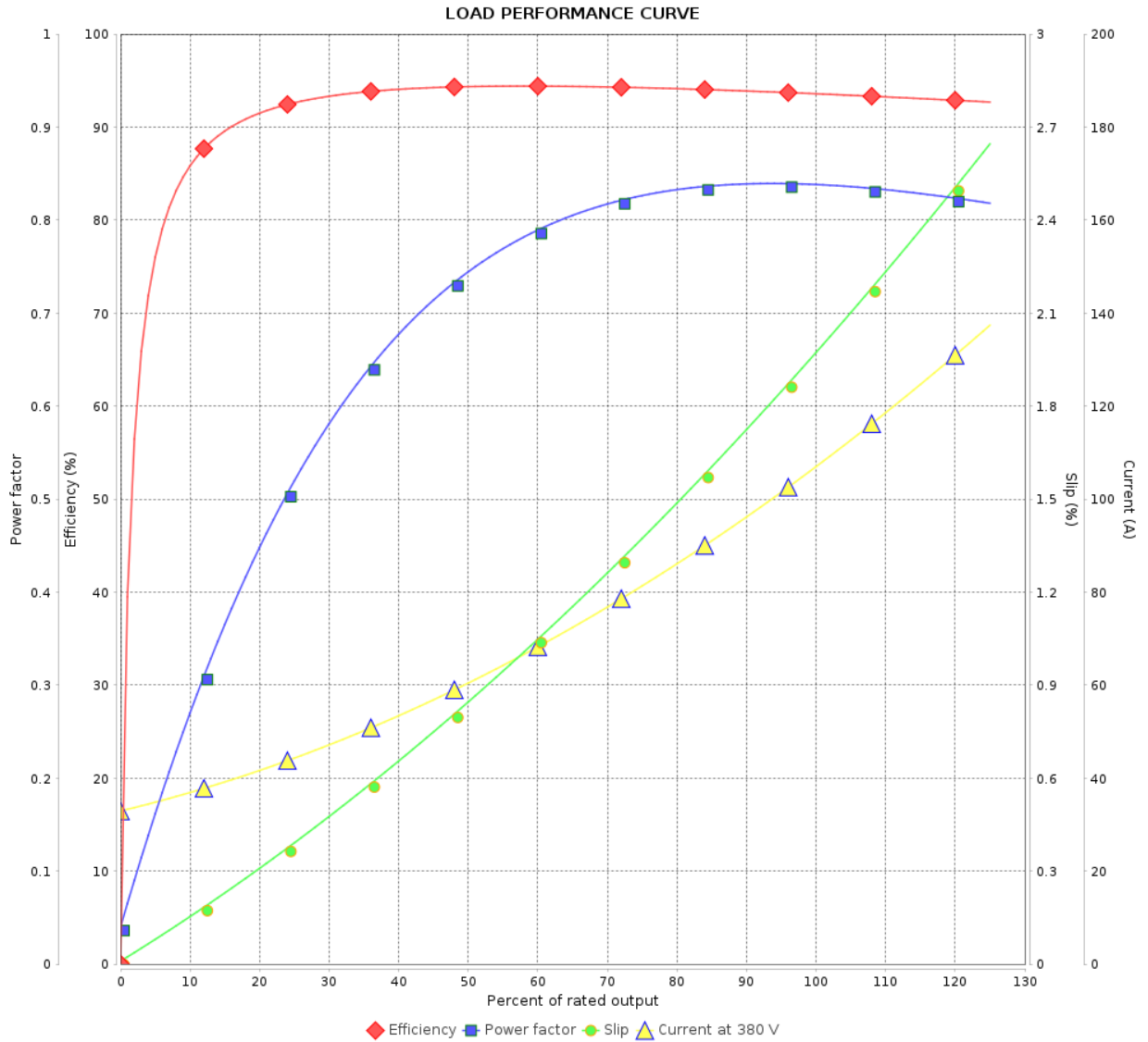
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355267



Performance : 380 V 50 Hz 4P IE2

Rated current : 106 A
 LRC : 5.1
 Rated torque : 37.0 kgfm
 Locked rotor torque : 170 %
 Breakdown torque : 200 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.9798 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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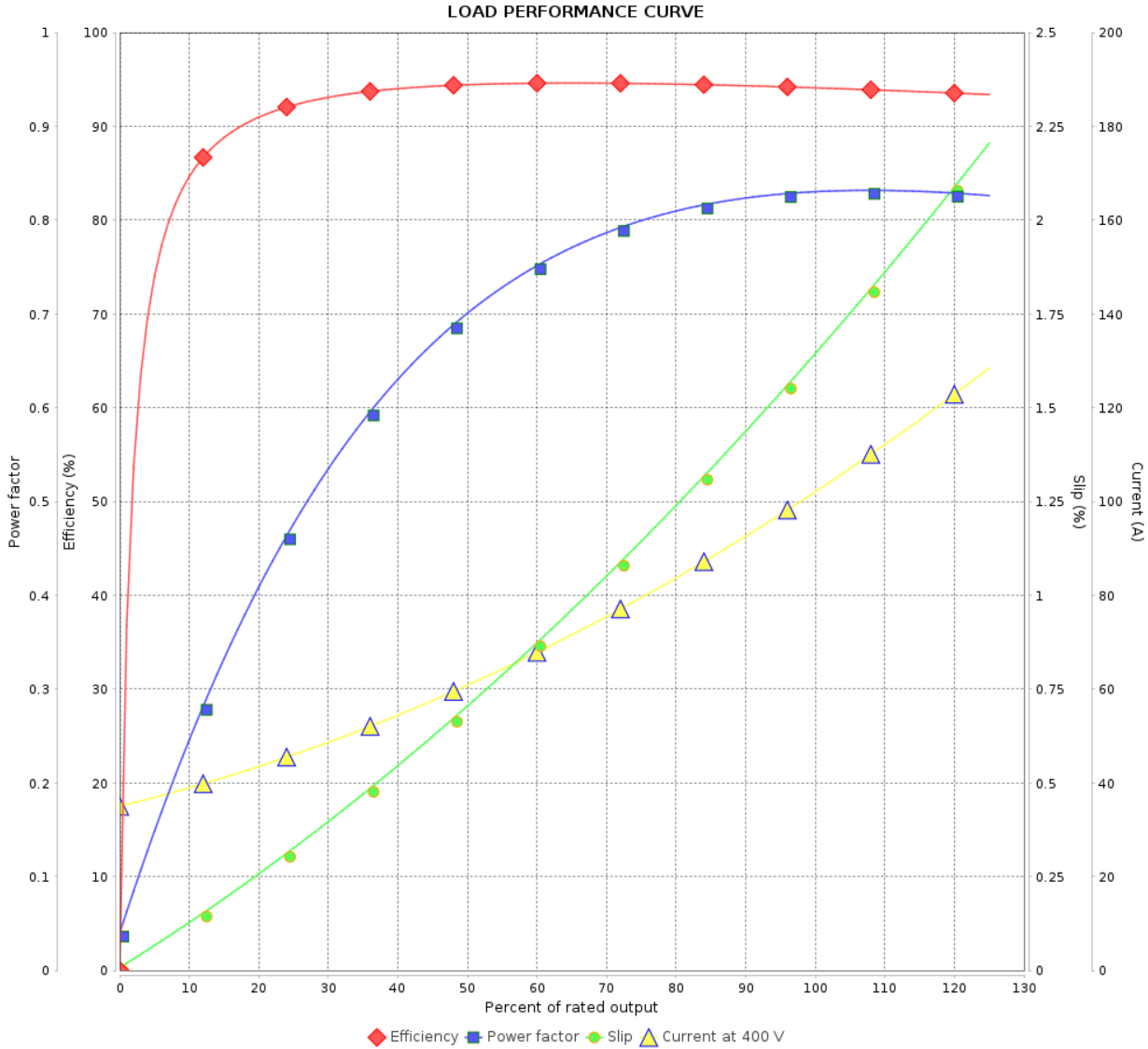
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355267



Performance : 400 V 50 Hz 4P IE2

Rated current : 102 A
 LRC : 5.6
 Rated torque : 36.9 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 220 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.9798 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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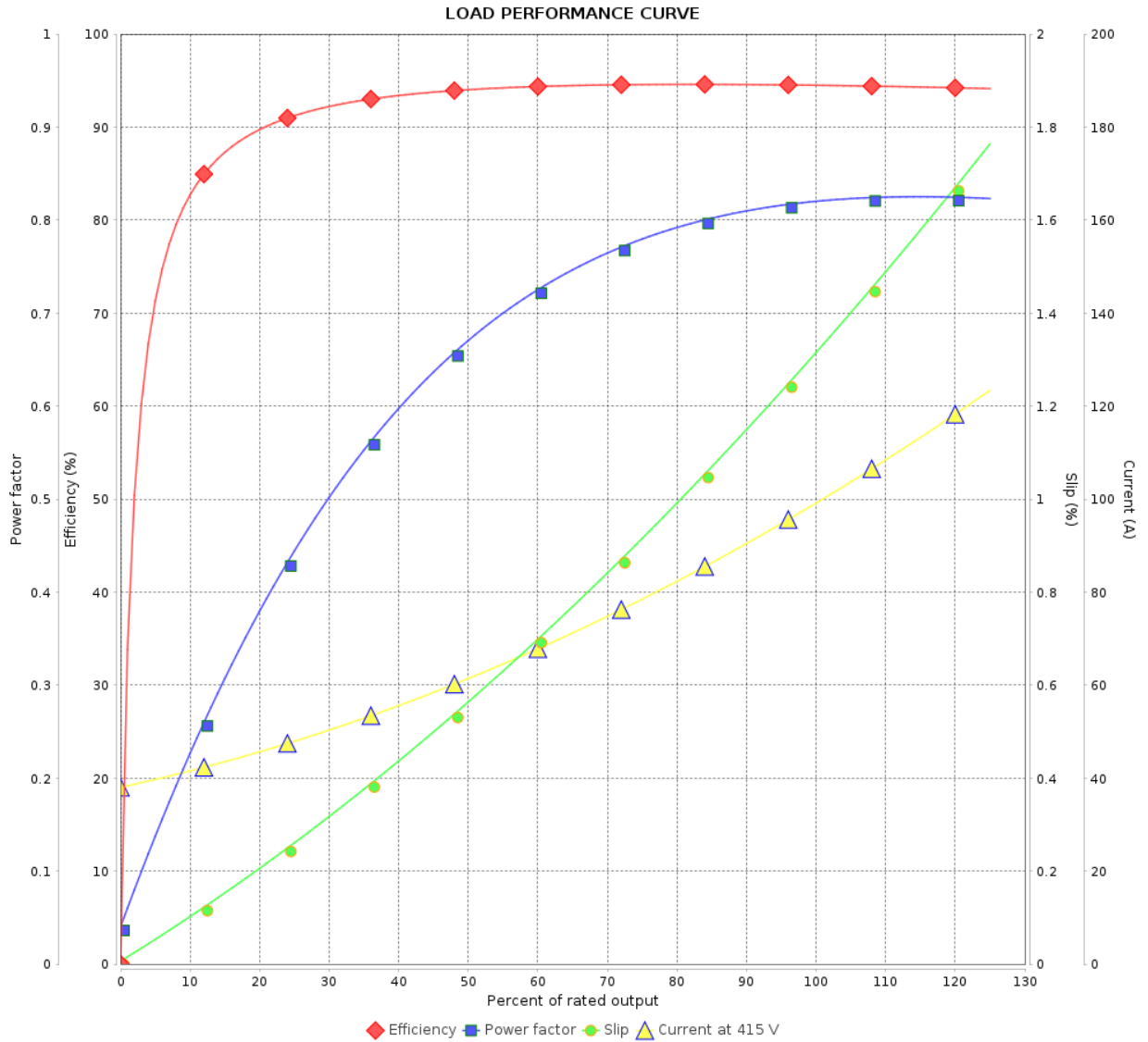
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355267



Performance : 415 V 50 Hz 4P IE2

Rated current : 98.7 A
 LRC : 6.1
 Rated torque : 36.8 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 240 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.9798 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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