

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | | | | |
|--|---|-----------------------------|-----------------------------|--|-------------------------|-------------------------|------------------------|------|
| Customer : | | | | | | | | |
| Product line | : ODP NEMA Premium Efficiency Three-Phase | Product code : | 10705409 | | | | | |
| Frame | : 404/5T | Cooling method | : IC01 - ODP | | | | | |
| 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 | : 454 kg | | | | | |
| Protection degree | : IP23 | Moment of inertia (J) | : 0.9623 kgm ² | | | | | |
| Design | : B | | | | | | | |
| Output [HP] | 100 | 75 | 75 | 75 | 100 | 100 | 100 | |
| 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] | 226/113 | 99.3 | 96.5 | 95.2 | 136 | 131 | 127 | |
| L. R. Amperes [A] | 1514/757 | 804 | 859 | 904 | 830 | 878 | 927 | |
| LRC [A] | 6.7x(Code G) | 8.1x(Code H) | 8.9x(Code J) | 9.5x(Code K) | 6.1x(Code F) | 6.7x(Code G) | 7.3x(Code H) | |
| No load current [A] | 84.0/42.0 | 38.6 | 42.2 | 45.8 | 38.6 | 42.2 | 45.8 | |
| Rated speed [RPM] | 1780 | 1480 | 1480 | 1485 | 1475 | 1475 | 1480 | |
| Slip [%] | 1.11 | 1.33 | 1.33 | 1.00 | 1.67 | 1.67 | 1.33 | |
| Rated torque [kgfm] | 40.8 | 36.8 | 36.8 | 36.7 | 49.2 | 49.2 | 49.0 | |
| Locked rotor torque [%] | 229 | 270 | 280 | 290 | 200 | 210 | 220 | |
| Breakdown torque [%] | 270 | 320 | 360 | 400 | 240 | 270 | 300 | |
| Service factor | 1.15 | 1.15 | 1.15 | 1.15 | 1.15 | 1.15 | 1.15 | |
| Temperature rise | 80 K | 80 K | 80 K | 80 K | 80 K | 80 K | 80 K | |
| Locked rotor time | 18s (cold) 10s (hot) | 19s (cold) 11s (hot) | 18s (cold) 10s (hot) | 16s (cold) 9s (hot) | 19s (cold) 11s (hot) | 18s (cold) 10s (hot) | 16s (cold) 9s (hot) | |
| Noise level ² | 69.0 dB(A) | | | | | | | |
| Efficiency (%) | 25% | 94.9 | 91.4 | 91.0 | 90.8 | 93.7 | 93.7 | 93.7 |
| | 50% | 95.0 | 92.2 | 91.9 | 91.7 | 93.9 | 93.9 | 93.9 |
| | 75% | 95.4 | 93.9 | 93.9 | 93.9 | 94.0 | 94.0 | 94.0 |
| | 100% | 95.4 | 94.6 | 94.6 | 94.6 | 94.1 | 94.1 | 94.1 |
| Power Factor | 25% | 0.49 | 0.48 | 0.44 | 0.40 | 0.58 | 0.53 | 0.49 |
| | 50% | 0.77 | 0.75 | 0.71 | 0.66 | 0.84 | 0.80 | 0.76 |
| | 75% | 0.84 | 0.85 | 0.83 | 0.79 | 0.88 | 0.87 | 0.85 |
| | 100% | 0.87 | 0.89 | 0.87 | 0.85 | 0.89 | 0.88 | 0.87 |
| Bearing type | : Drive end : NU-316 C3 | : Non drive end : 6314 C3 | Foundation loads | | | | | |
| Sealing | : Without | : Without | Max. traction : 1220 kgf | | | | | |
| | : Bearing Seal | : Bearing Seal | Max. compression : 1674 kgf | | | | | |
| Lubrication interval | : 20000 h | : 20000 h | | | | | | |
| Lubricant amount | : 34 g | : 27 g | | | | | | |
| Lubricant type | : Mobil Polyrex EM | | | | | | | |
| Notes USABLE @208V 254A SF 1.15 SFA 292A | | | | | | | | |
| 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 | | | | | | | | |
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| Date | 05/02/2024 | | | | | 1 / 8 | | |

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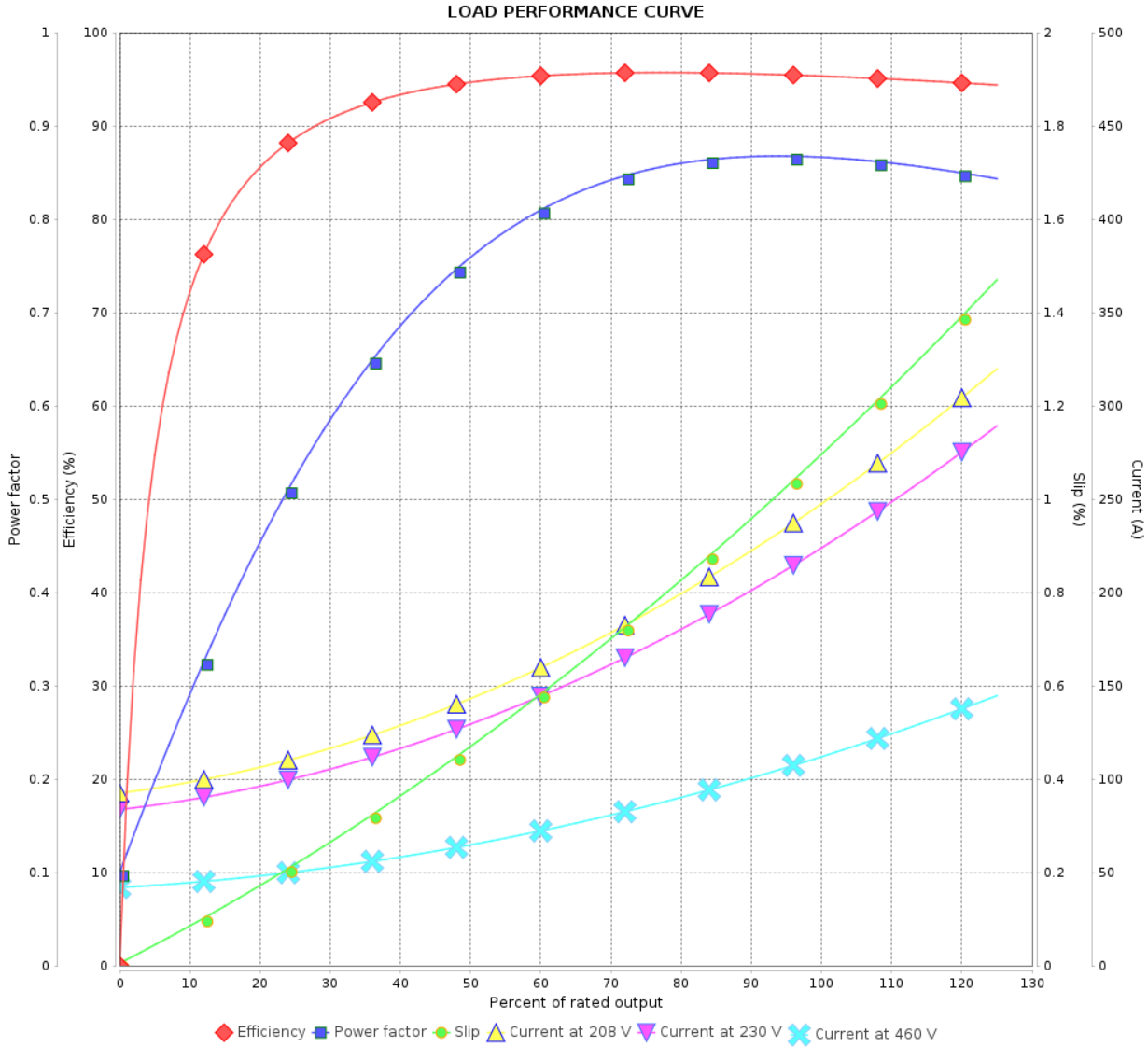
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10705409



Performance : 230/460 V 60 Hz 4P

Rated current : 226/113 A
 LRC : 6.7
 Rated torque : 40.8 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 270 %
 Rated speed : 1780 rpm

Moment of inertia (J) : 0.9623 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
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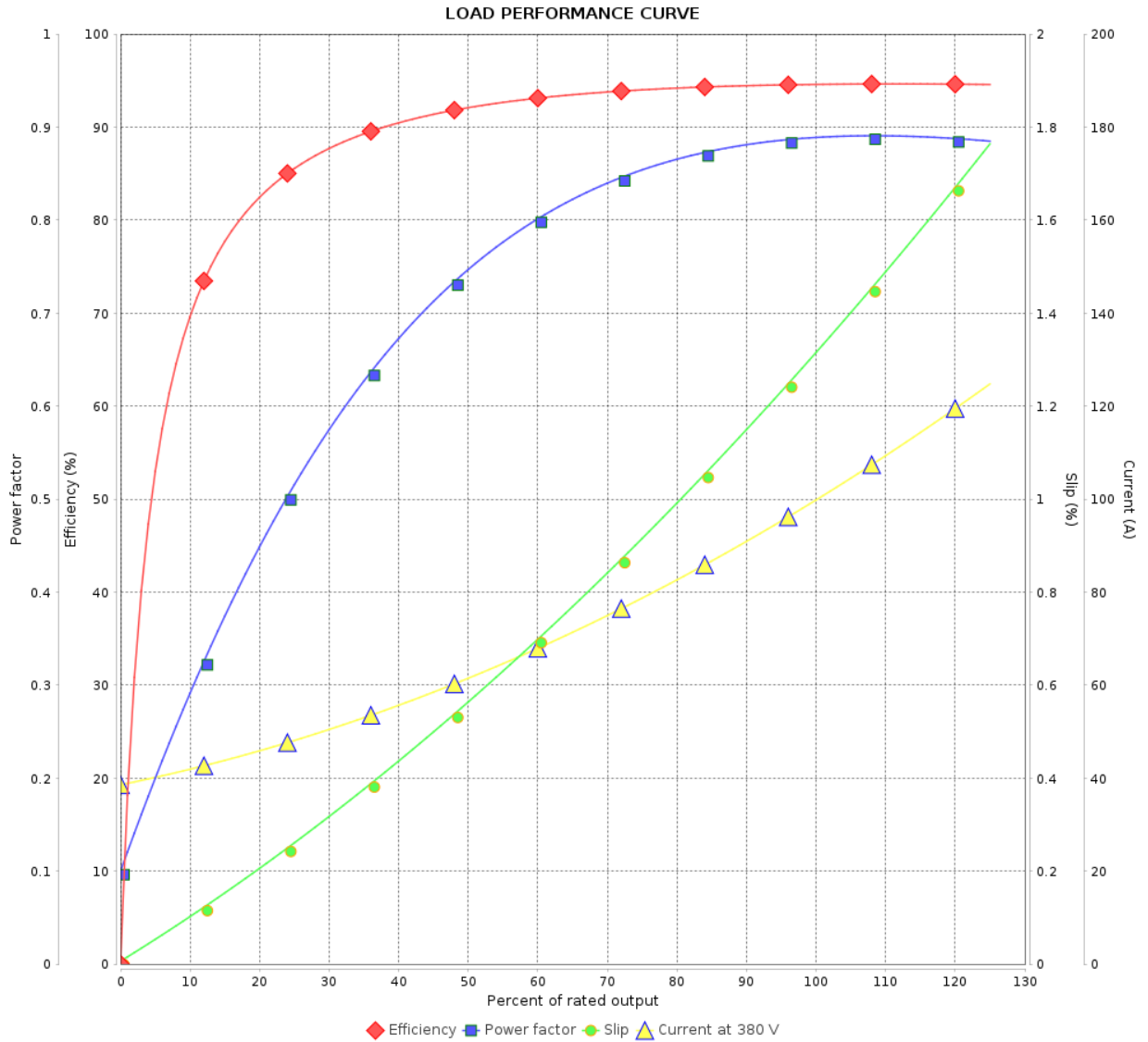
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10705409



Performance : 380 V 50 Hz 4P IE3

Rated current : 99.3 A
 LRC : 8.1
 Rated torque : 36.8 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 320 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.9623 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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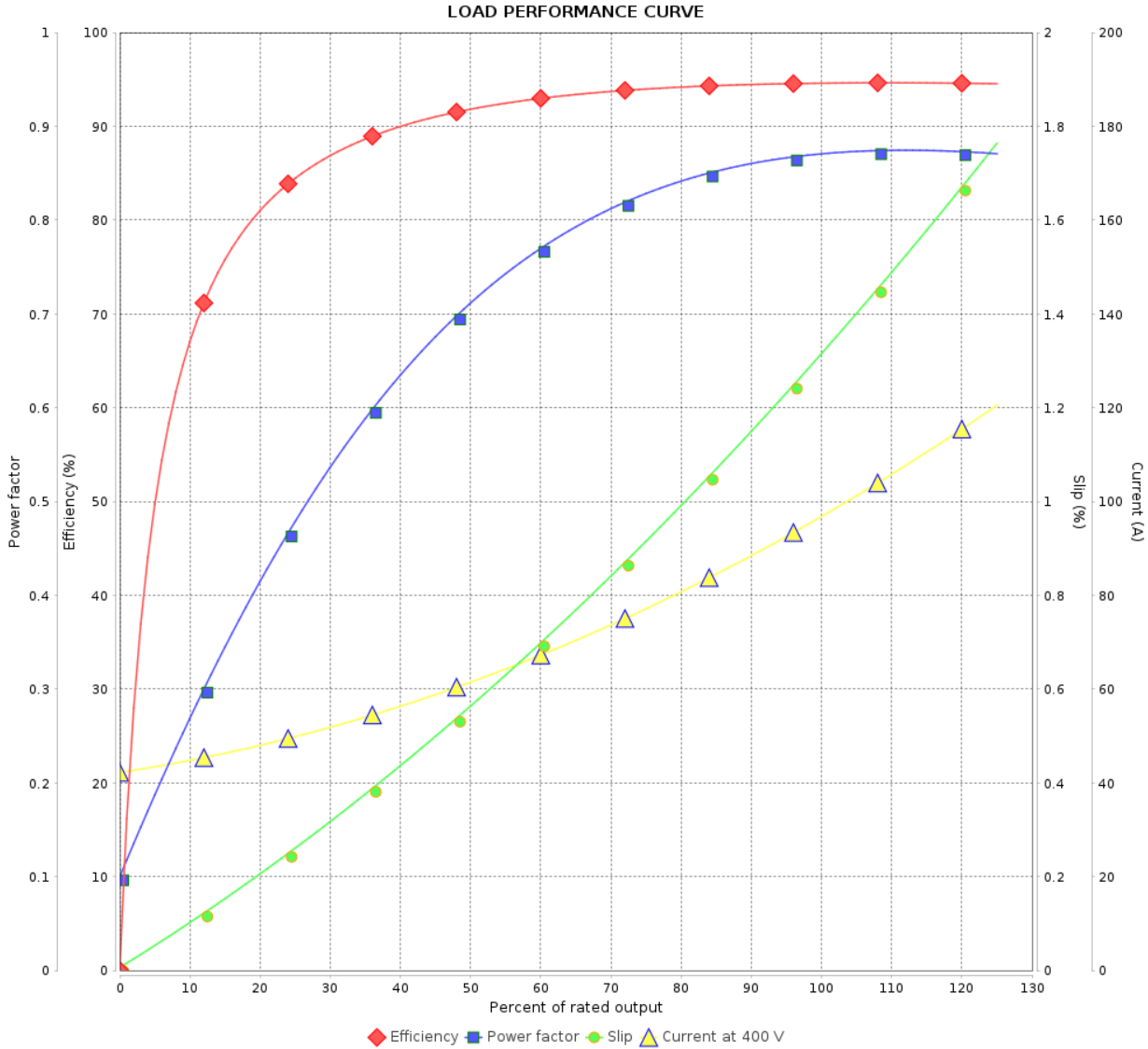
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10705409



Performance : 400 V 50 Hz 4P IE3

Rated current : 96.5 A
 LRC : 8.9
 Rated torque : 36.8 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 360 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.9623 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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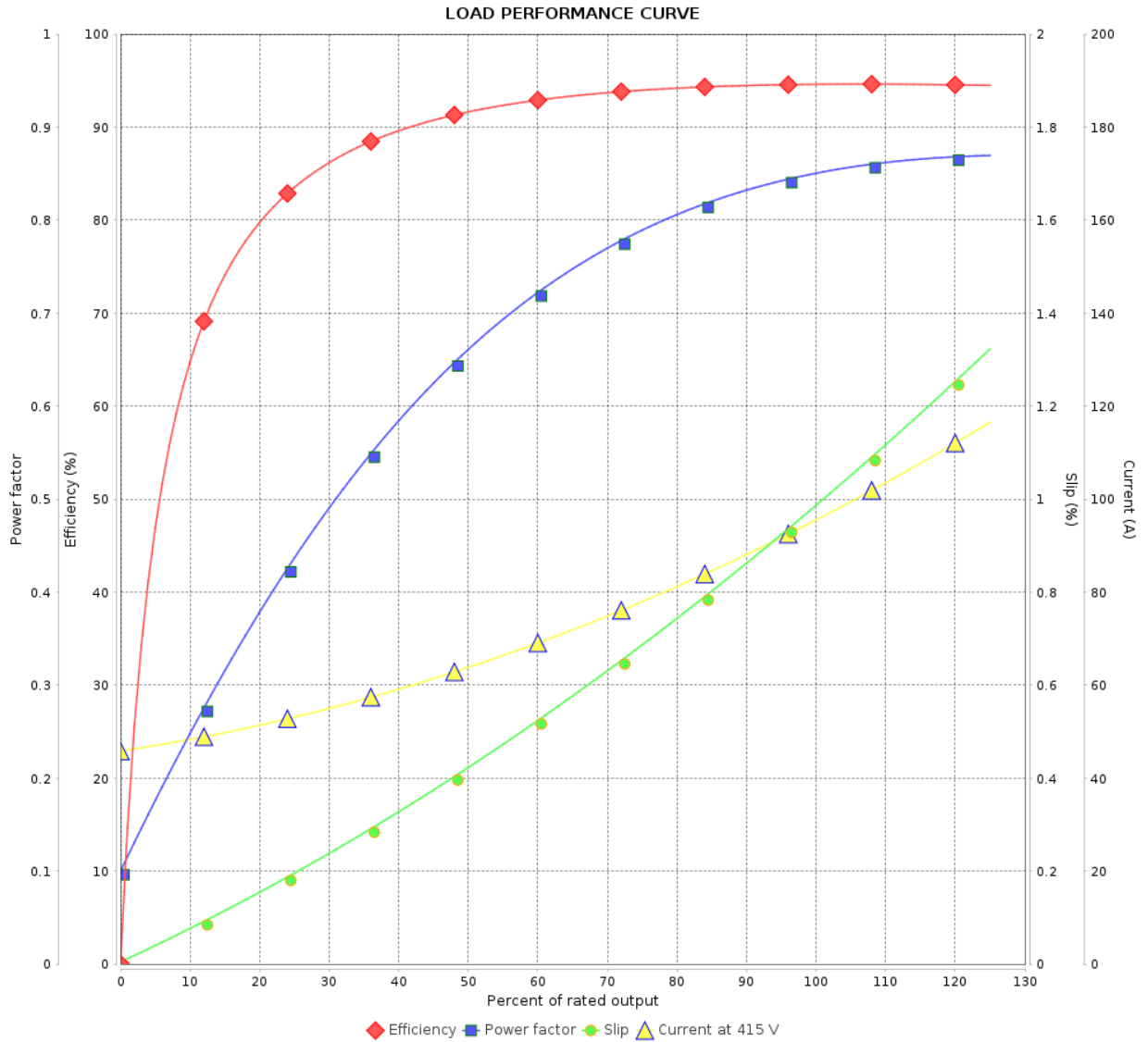
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10705409



Performance : 415 V 50 Hz 4P IE3

Rated current : 95.2 A
 LRC : 9.5
 Rated torque : 36.7 kgfm
 Locked rotor torque : 290 %
 Breakdown torque : 400 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 0.9623 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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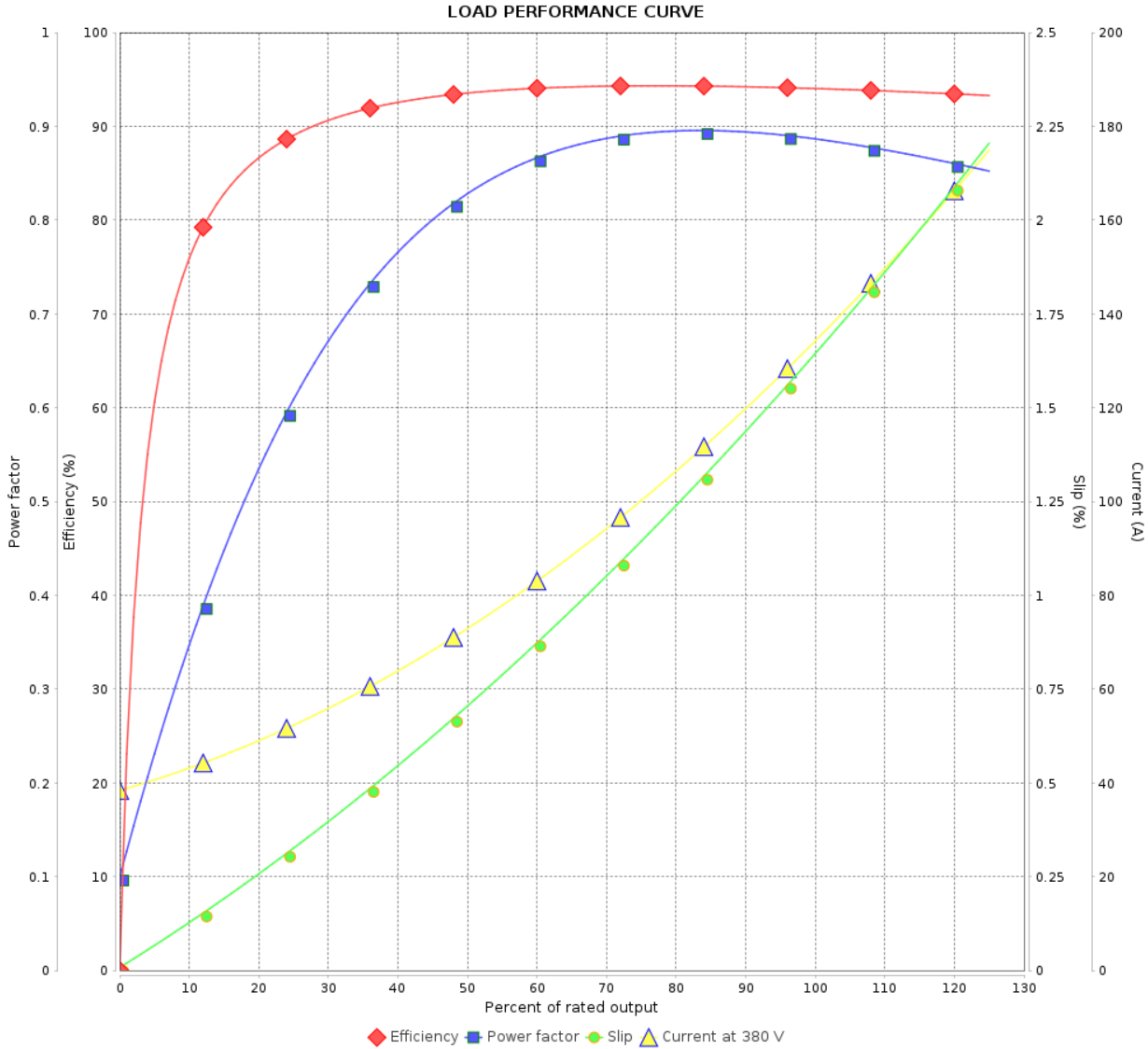
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10705409



Performance : 380 V 50 Hz 4P IE2

Rated current : 136 A
 LRC : 6.1
 Rated torque : 49.2 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.9623 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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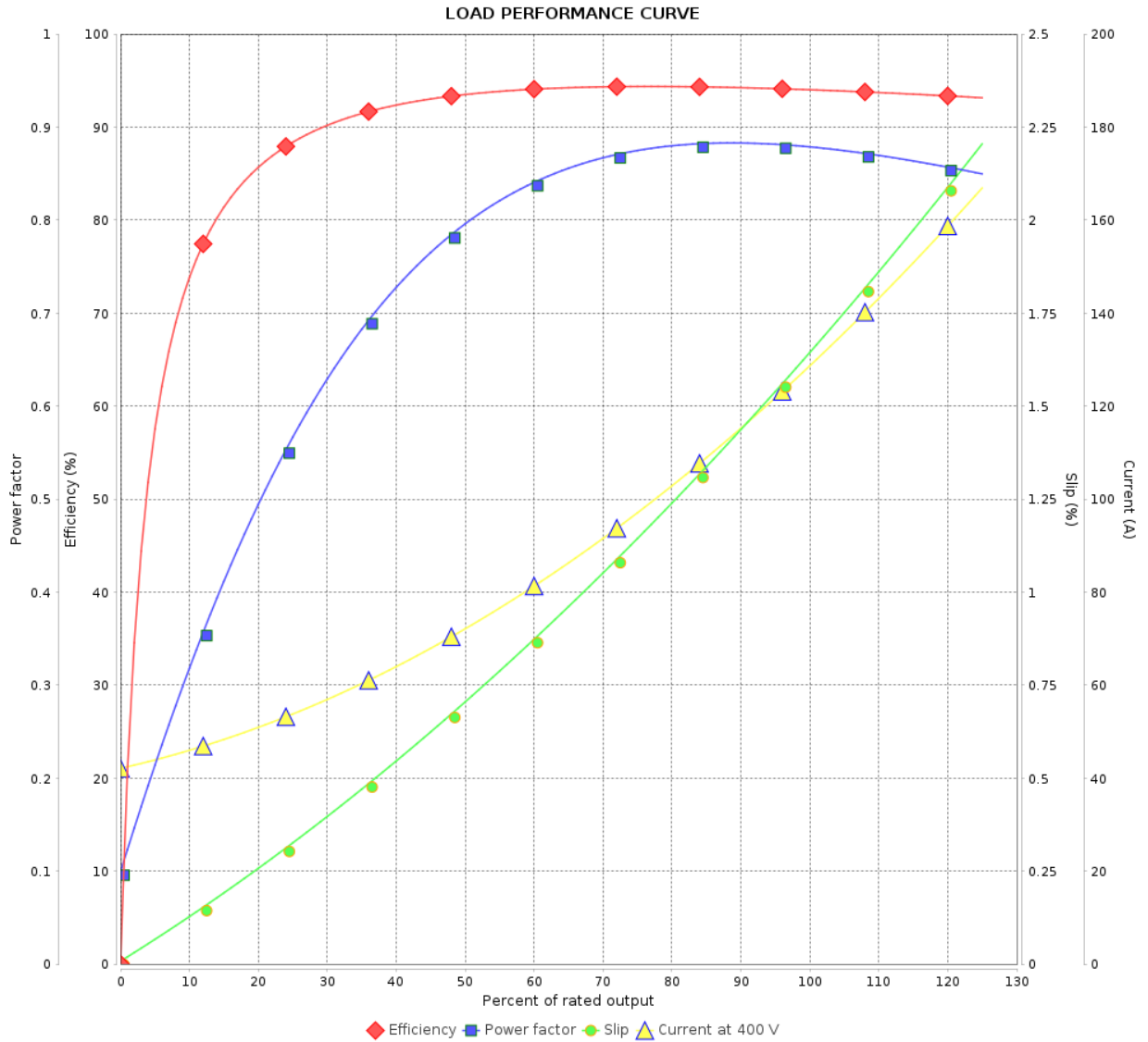
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10705409



Performance : 400 V 50 Hz 4P IE2

Rated current : 131 A
 LRC : 6.7
 Rated torque : 49.2 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 270 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.9623 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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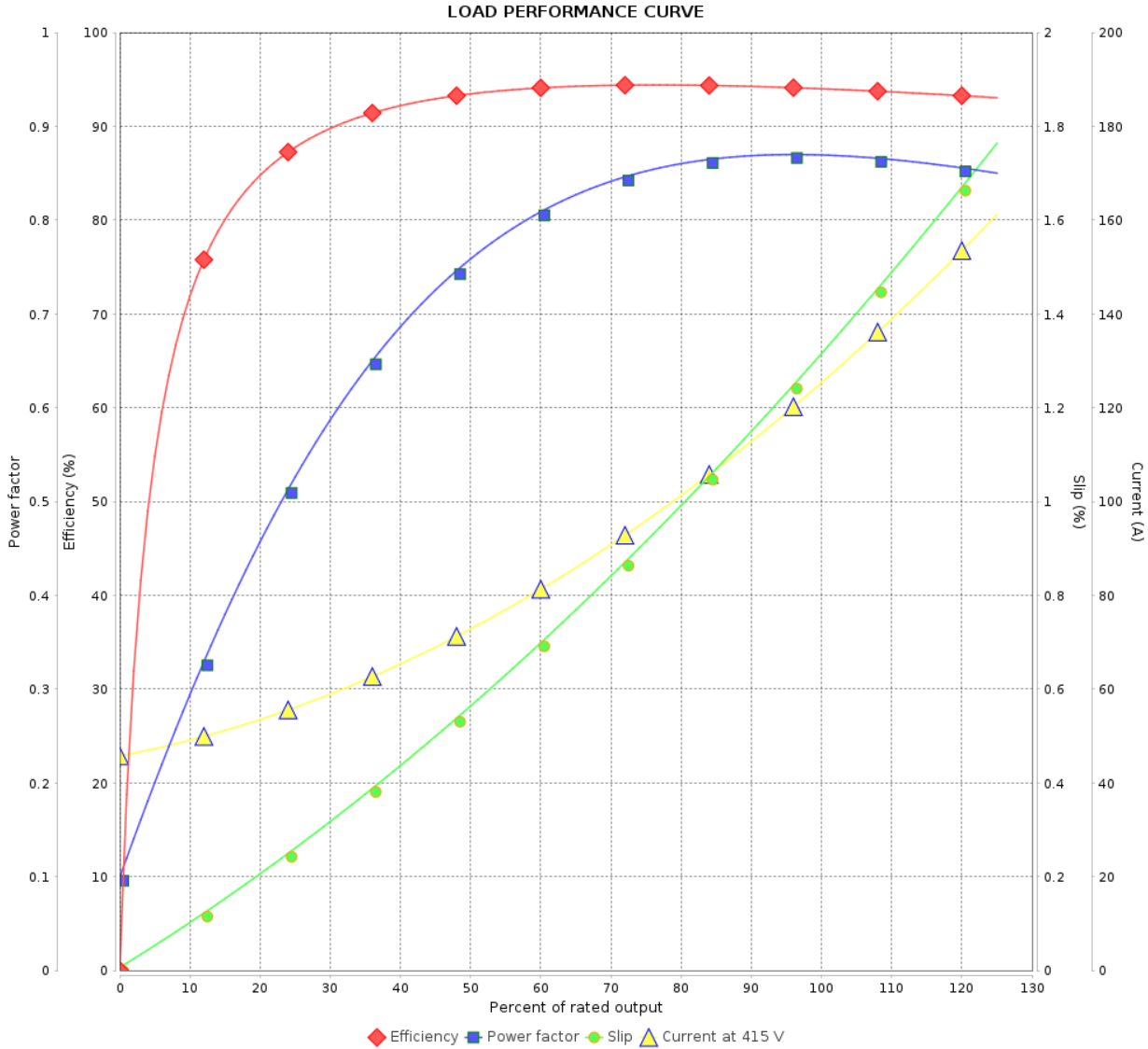
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10705409



Performance : 415 V 50 Hz 4P IE2

Rated current : 127 A
 LRC : 7.3
 Rated torque : 49.0 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 300 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.9623 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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