

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | | | | |
|--|---|-----------------------------|---------------------------|--|-------------------------|-------------------------|------------------------|------|
| Customer : | | | | | | | | |
| Product line | : ODP NEMA Premium Efficiency Three-Phase | Product code : | 10555137 | | | | | |
| Frame | : 404/5TS | 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 ² | : 433 kg | | | | | |
| Protection degree | : IP23 | Moment of inertia (J) | : 0.4305 kgm ² | | | | | |
| Design | : B | | | | | | | |
| Output [HP] | 125 | 100 | 100 | 100 | 125 | 125 | 125 | |
| Poles | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| Frequency [Hz] | 60 | 50 | 50 | 50 | 50 | 50 | 50 | |
| Rated voltage [V] | 230/460 | 380 | 400 | 415 | 380 | 400 | 415 | |
| Rated current [A] | 266/133 | 132 | 126 | 122 | 162 | 154 | 151 | |
| L. R. Amperes [A] | 1729/865 | 792 | 832 | 891 | 778 | 816 | 876 | |
| LRC [A] | 6.5x(Code F) | 6.0x(Code F) | 6.6x(Code G) | 7.3x(Code H) | 4.8x(Code D) | 5.3x(Code E) | 5.8x(Code F) | |
| No load current [A] | 56.0/28.0 | 25.0 | 27.0 | 30.0 | 25.0 | 27.0 | 30.0 | |
| Rated speed [RPM] | 3560 | 2965 | 2965 | 2970 | 2950 | 2955 | 2960 | |
| Slip [%] | 1.11 | 1.17 | 1.17 | 1.00 | 1.67 | 1.50 | 1.33 | |
| Rated torque [kgfm] | 25.5 | 24.5 | 24.5 | 24.4 | 30.8 | 30.7 | 30.6 | |
| Locked rotor torque [%] | 180 | 210 | 229 | 240 | 170 | 180 | 190 | |
| Breakdown torque [%] | 280 | 229 | 260 | 280 | 180 | 210 | 220 | |
| 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 | 19s (cold) 11s (hot) | 21s (cold) 12s (hot) | 18s (cold) 10s (hot) | 14s (cold) 8s (hot) | 21s (cold) 12s (hot) | 18s (cold) 10s (hot) | 14s (cold) 8s (hot) | |
| Noise level ² | 84.0 dB(A) | | | | | | | |
| Efficiency (%) | 25% | 94.0 | 91.1 | 91.0 | 90.9 | 92.9 | 93.4 | 93.4 |
| | 50% | 94.1 | 92.6 | 92.5 | 92.4 | 93.0 | 93.0 | 93.0 |
| | 75% | 94.5 | 93.1 | 93.1 | 93.1 | 93.0 | 93.0 | 93.0 |
| | 100% | 94.5 | 94.7 | 94.7 | 94.7 | 93.0 | 92.4 | 92.4 |
| Power Factor | 25% | 0.62 | 0.62 | 0.59 | 0.56 | 0.68 | 0.66 | 0.65 |
| | 50% | 0.83 | 0.80 | 0.79 | 0.77 | 0.85 | 0.84 | 0.86 |
| | 75% | 0.88 | 0.88 | 0.88 | 0.87 | 0.89 | 0.89 | 0.88 |
| | 100% | 0.90 | 0.91 | 0.91 | 0.90 | 0.91 | 0.91 | 0.90 |
| Bearing type | : 6314 C3 | Drive end | Non drive end | Foundation loads | | | | |
| Sealing | : Without | Without | Without | Max. traction | : 446 kgf | | | |
| | | Bearing Seal | Bearing Seal | Max. compression | : 880 kgf | | | |
| Lubrication interval | : 14418 h | 14418 h | 14418 h | | | | | |
| Lubricant amount | : 27 g | 27 g | 27 g | | | | | |
| Lubricant type | : Mobil Polyrex EM | | | | | | | |
| Notes | | | | | | | | |
| USABLE @208V 301A SF 1.15 SFA 346A | | | | | | | | |
| 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 | 05/02/2024 | | | | | 1 / 8 | | |

LOAD PERFORMANCE CURVE

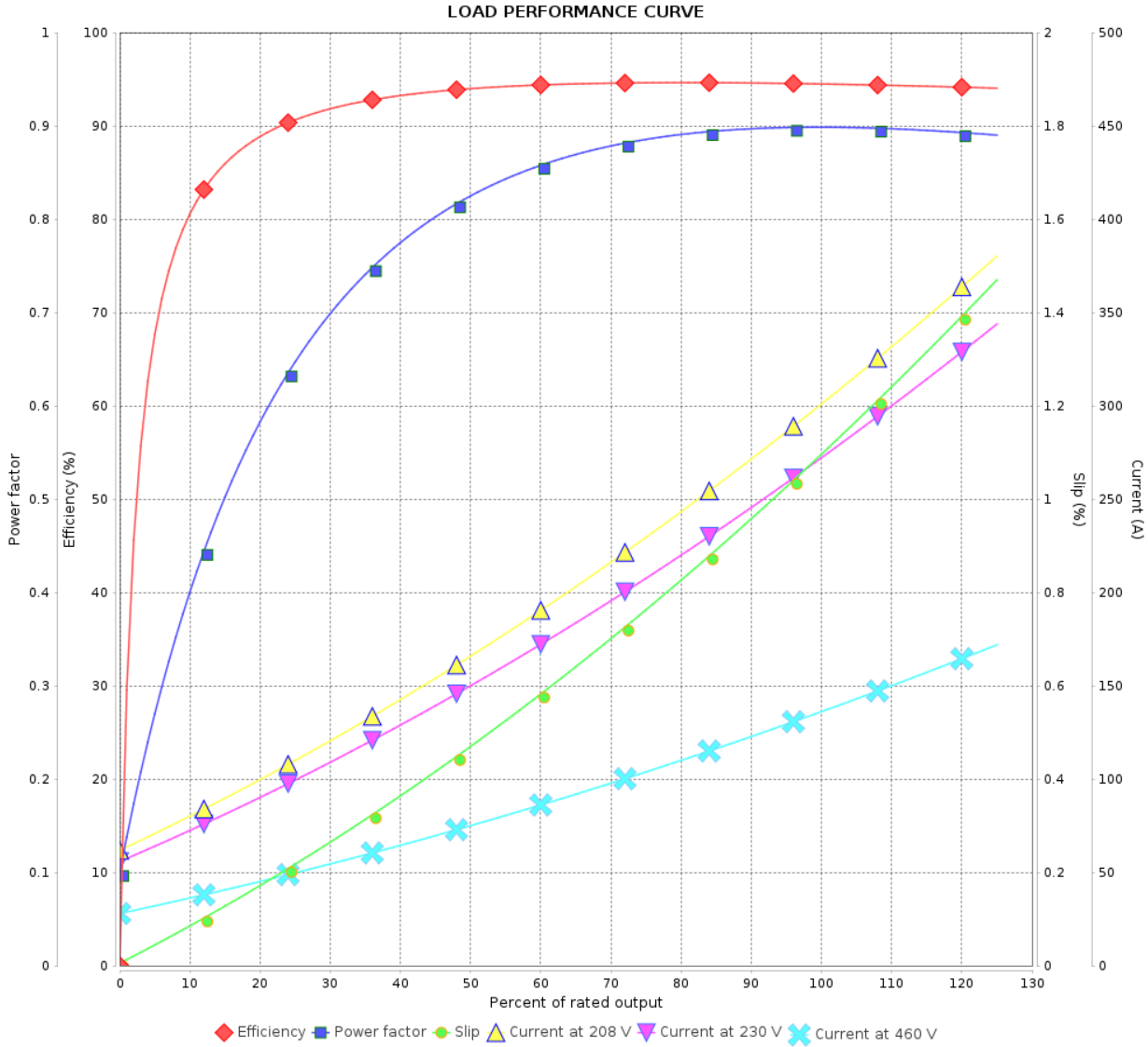
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10555137



Performance : 230/460 V 60 Hz 2P

Rated current : 266/133 A
 LRC : 6.5
 Rated torque : 25.5 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 280 %
 Rated speed : 3560 rpm

Moment of inertia (J) : 0.4305 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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| Date | 05/02/2024 | | | |

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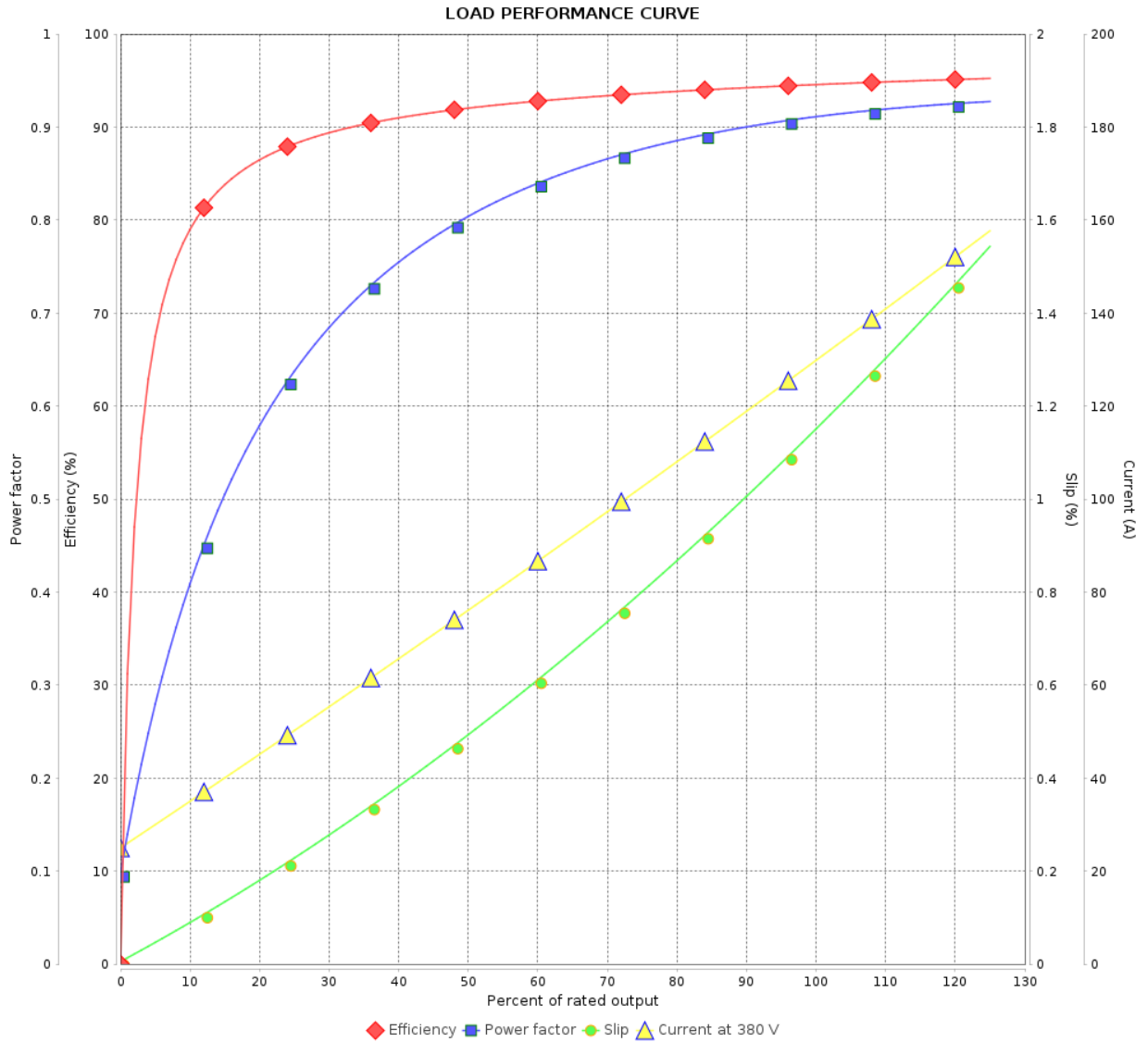
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10555137



Performance : 380 V 50 Hz 2P IE3

Rated current : 132 A
 LRC : 6.0
 Rated torque : 24.5 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 229 %
 Rated speed : 2965 rpm

Moment of inertia (J) : 0.4305 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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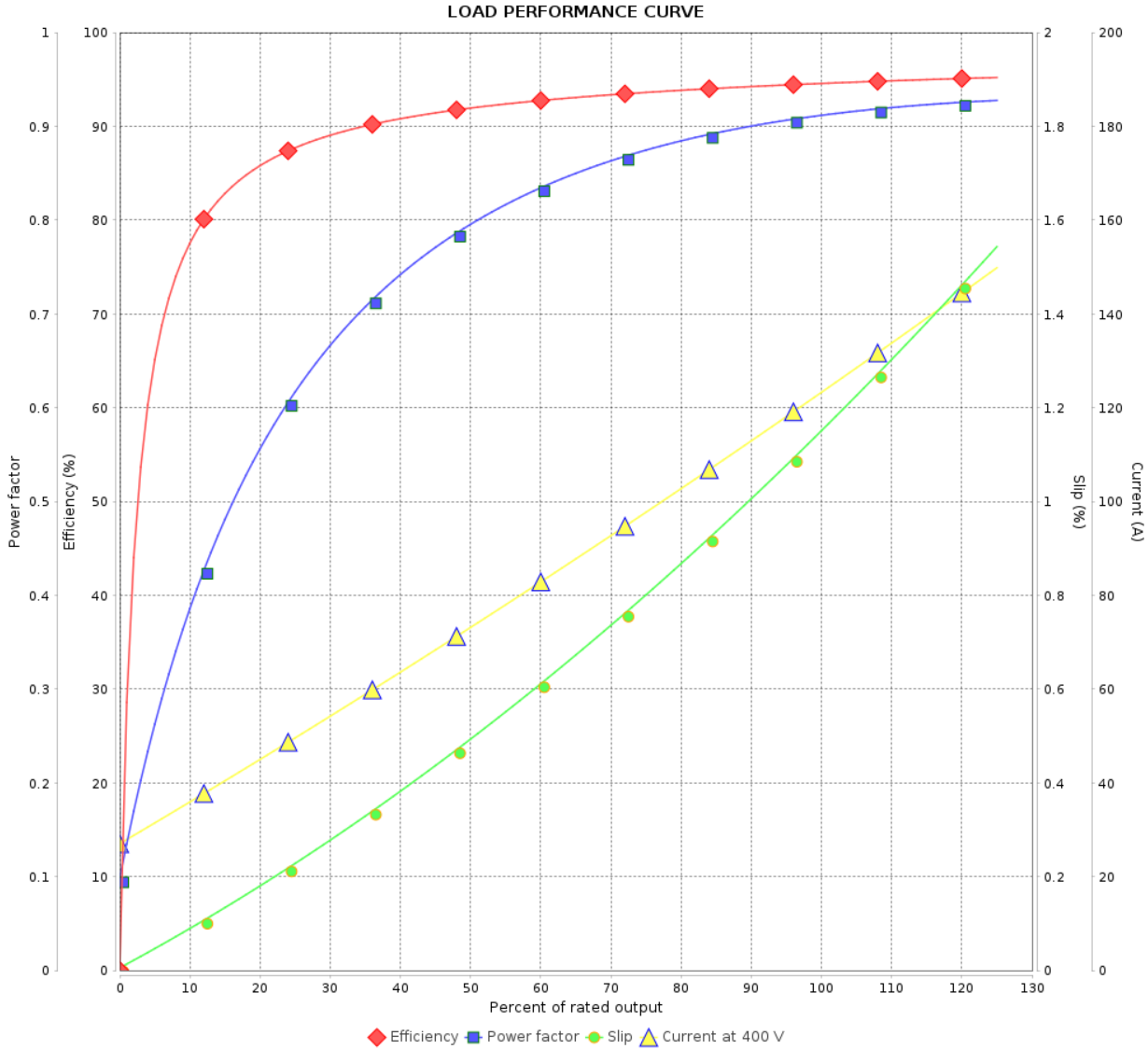
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10555137



Performance : 400 V 50 Hz 2P IE3

Rated current : 126 A
 LRC : 6.6
 Rated torque : 24.5 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 260 %
 Rated speed : 2965 rpm

Moment of inertia (J) : 0.4305 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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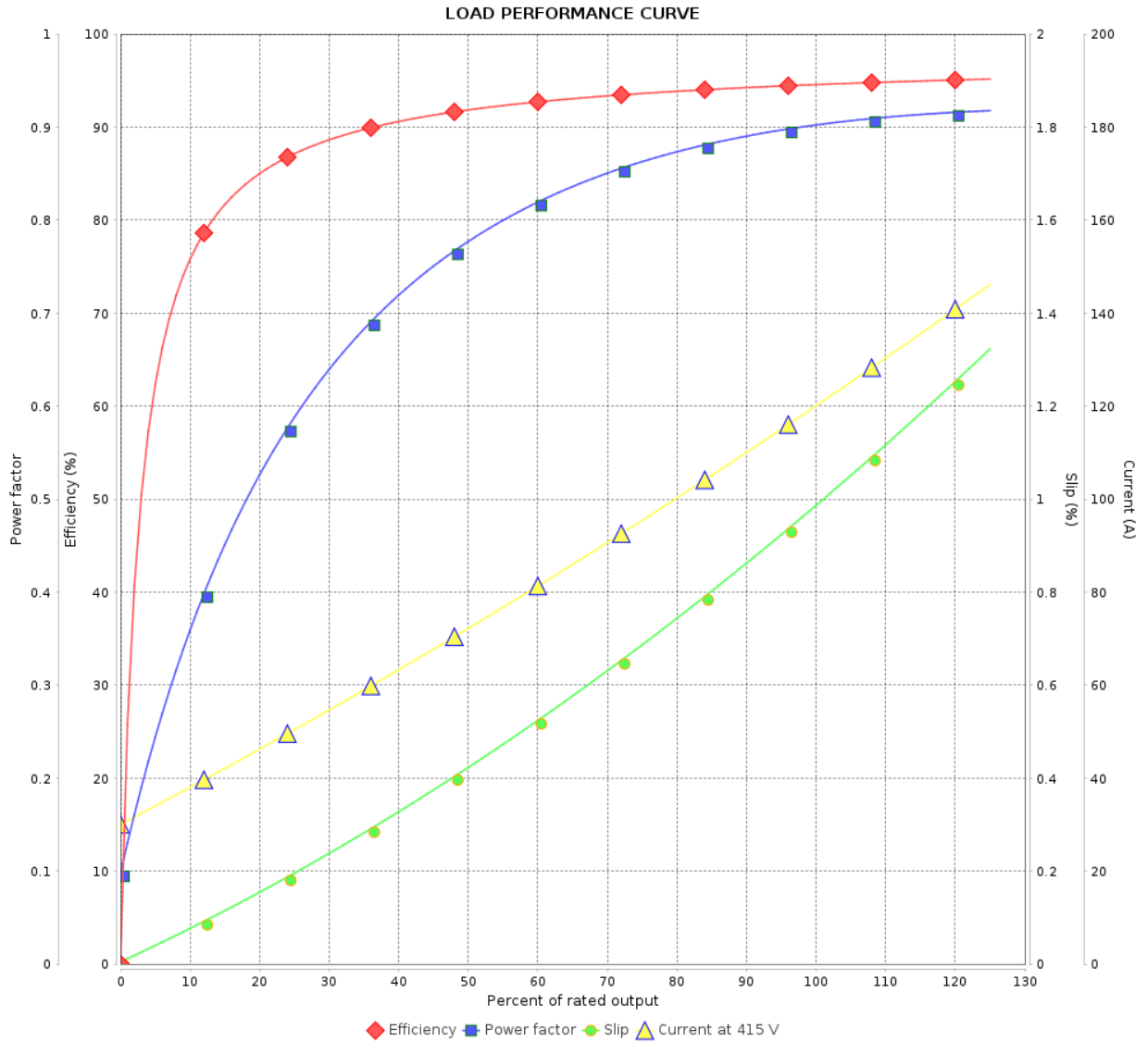
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10555137



Performance : 415 V 50 Hz 2P IE3

Rated current : 122 A
 LRC : 7.3
 Rated torque : 24.4 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 280 %
 Rated speed : 2970 rpm

Moment of inertia (J) : 0.4305 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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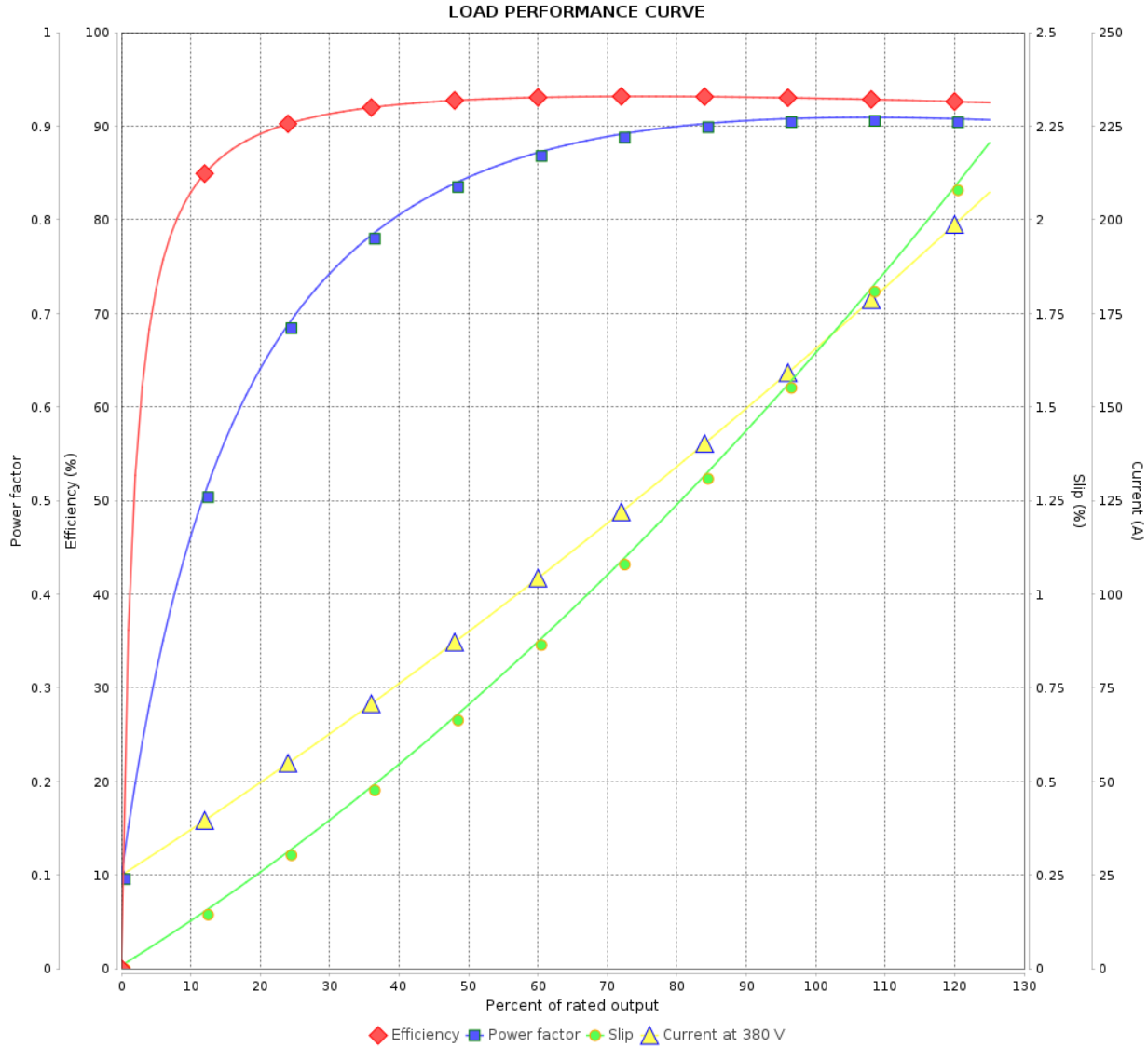
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10555137



Performance : 380 V 50 Hz 2P IE1

Rated current : 162 A
 LRC : 4.8
 Rated torque : 30.8 kgfm
 Locked rotor torque : 170 %
 Breakdown torque : 180 %
 Rated speed : 2950 rpm

Moment of inertia (J) : 0.4305 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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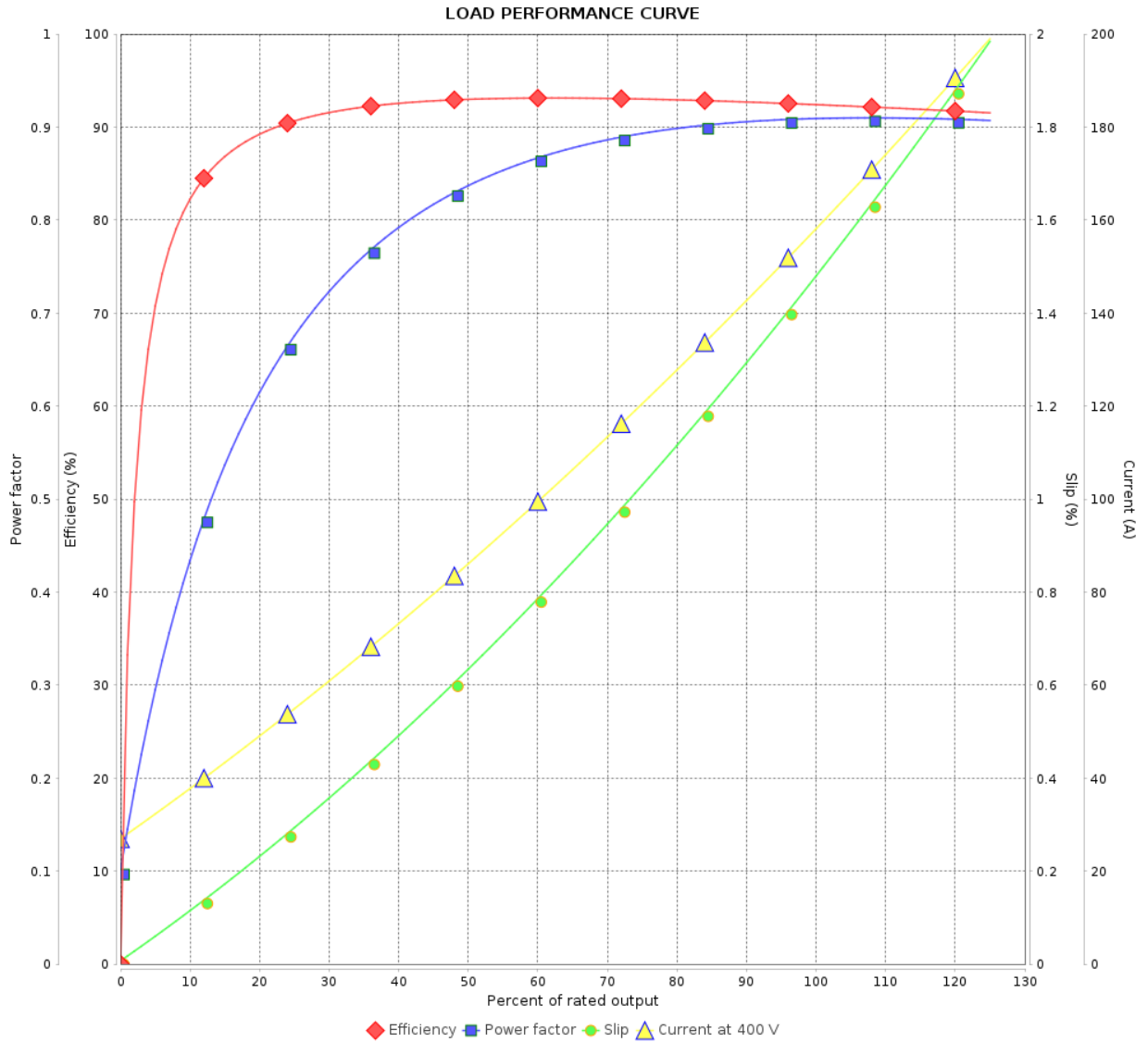
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10555137



Performance : 400 V 50 Hz 2P

Rated current : 154 A
 LRC : 5.3
 Rated torque : 30.7 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 210 %
 Rated speed : 2955 rpm

Moment of inertia (J) : 0.4305 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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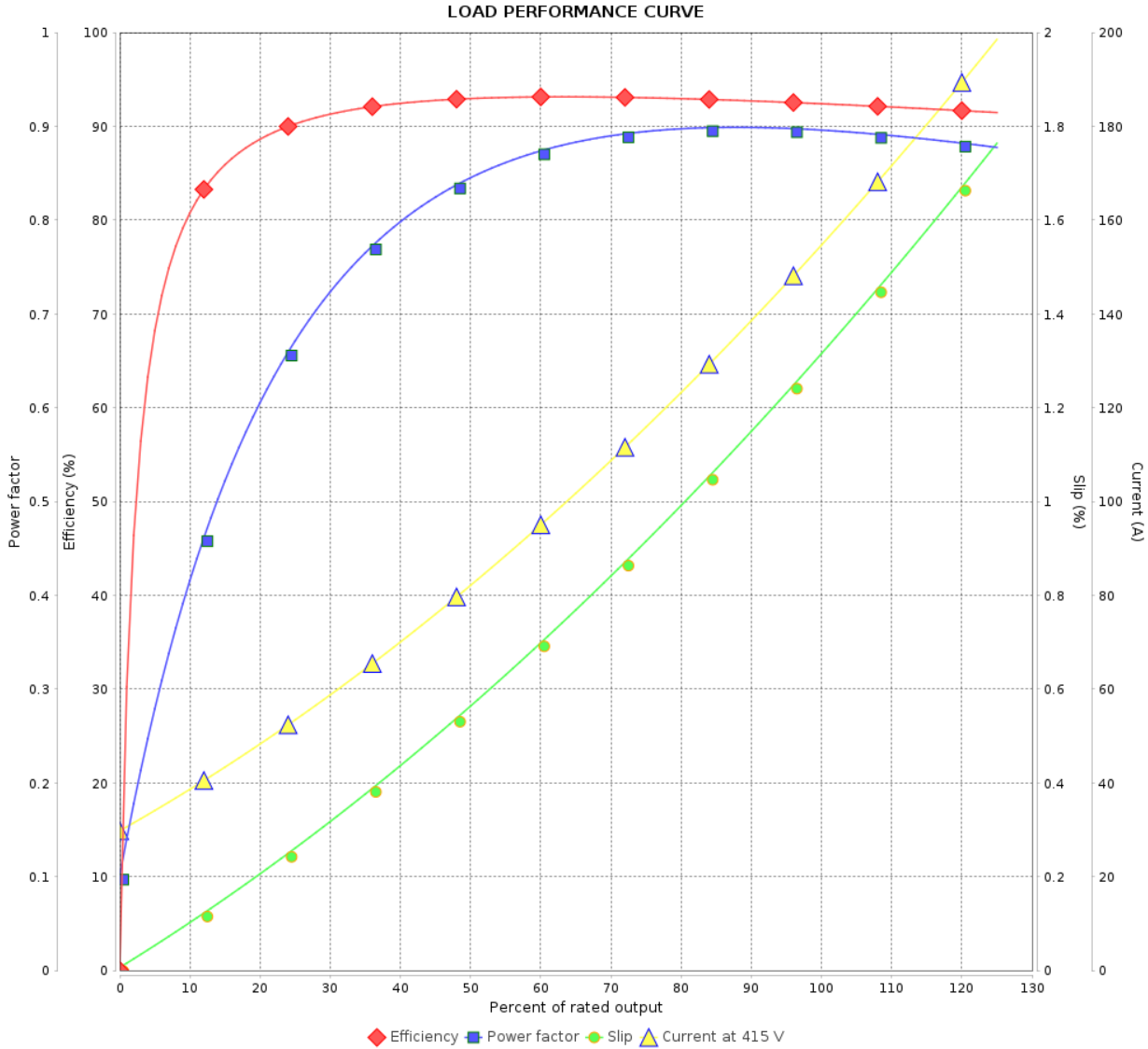
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : ODP NEMA Premium Efficiency Three-Phase

Product code : 10555137



Performance : 415 V 50 Hz 2P

Rated current : 151 A
 LRC : 5.8
 Rated torque : 30.6 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 220 %
 Rated speed : 2960 rpm

Moment of inertia (J) : 0.4305 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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