

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 P Base NEMA Premium Efficiency Three-Phase Product code : 14168114

| | | | |
|---------------------|------------------|-----------------------------|-------------------------|
| Frame | : 444/5HP | Cooling method | : IC411 - TEFC |
| Insulation class | : F | Mounting | : W-6 |
| 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 | : 860 kg |
| Protection degree | : IP55 | Moment of inertia (J) | : 2.81 kgm ² |
| Design | : B | | |

| | | | | | | | |
|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Output [HP] | 150 | 125 | 125 | 125 | 150 | 150 | 150 |
| 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] | 340/170 | 169 | 160 | 156 | 205 | 194 | 189 |
| L. R. Amperes [A] | 2244/1122 | 1183 | 1104 | 1170 | 1189 | 1125 | 1191 |
| LRC [A] | 6.6x(Code G) | 7.0x(Code G) | 6.9x(Code G) | 7.5x(Code H) | 5.8x(Code F) | 5.8x(Code F) | 6.3x(Code G) |
| No load current [A] | 116/58.0 | 58.0 | 61.2 | 64.0 | 58.0 | 61.2 | 64.0 |
| Rated speed [RPM] | 1784 | 1484 | 1486 | 1487 | 1475 | 1480 | 1482 |
| Slip [%] | 0.89 | 1.07 | 0.93 | 0.87 | 1.67 | 1.33 | 1.20 |
| Rated torque [kgfm] | 61.0 | 61.1 | 61.0 | 61.0 | 73.8 | 73.6 | 73.5 |
| Locked rotor torque [%] | 200 | 190 | 220 | 229 | 160 | 180 | 190 |
| Breakdown torque [%] | 250 | 240 | 260 | 290 | 200 | 220 | 240 |
| Service factor | 1.15 | 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 | 48s (cold) 27s (hot) | 32s (cold) 18s (hot) | 32s (cold) 18s (hot) | 32s (cold) 18s (hot) | 32s (cold) 18s (hot) | 32s (cold) 18s (hot) | 32s (cold) 18s (hot) |
| Noise level ² | 73.0 dB(A) | 69.0 dB(A) | 69.0 dB(A) | 69.0 dB(A) | 69.0 dB(A) | 69.0 dB(A) | 69.0 dB(A) |
| Efficiency (%) | 25% | | | | | | |
| | 50% | 95.4 | 95.1 | 95.1 | 94.8 | 95.4 | 95.4 |
| | 75% | 95.8 | 95.5 | 95.5 | 95.5 | 95.4 | 95.4 |
| | 100% | 95.8 | 95.3 | 95.3 | 95.5 | 95.0 | 95.4 |
| Power Factor | 25% | | | | | | |
| | 50% | 0.74 | 0.73 | 0.70 | 0.68 | 0.79 | 0.76 |
| | 75% | 0.82 | 0.83 | 0.81 | 0.79 | 0.85 | 0.83 |
| | 100% | 0.85 | 0.85 | 0.85 | 0.84 | 0.86 | 0.86 |

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

| | | | | | | | |
|------------|----------------|-----|-----|-----|-----|-----|-----|
| Losses (%) | P1 (0,9;1,0) | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| | P2 (0,5;1,0) | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| | P3 (0,25;1,0) | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 |
| | P4 (0,9;0,5) | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 |
| | P5 (0,5;0,5) | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| | P6 (0,5;0,25) | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| | P7 (0,25;0,25) | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |

| | | |
|----------------------|--|---|
| Bearing type | : Drive end 6319 C3 Non drive end 6316 C3 | Foundation loads Max. traction Max. compression |
| Sealing | : Viton Lip Seal Viton Seal | |
| Lubrication interval | : 4000 h 5000 h | |
| Lubricant amount | : 45 g 34 g | |
| Lubricant type | : Mobil Polyrex EM | |

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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Notes
USABLE @208V 376A SF 1.00 SFA 376A

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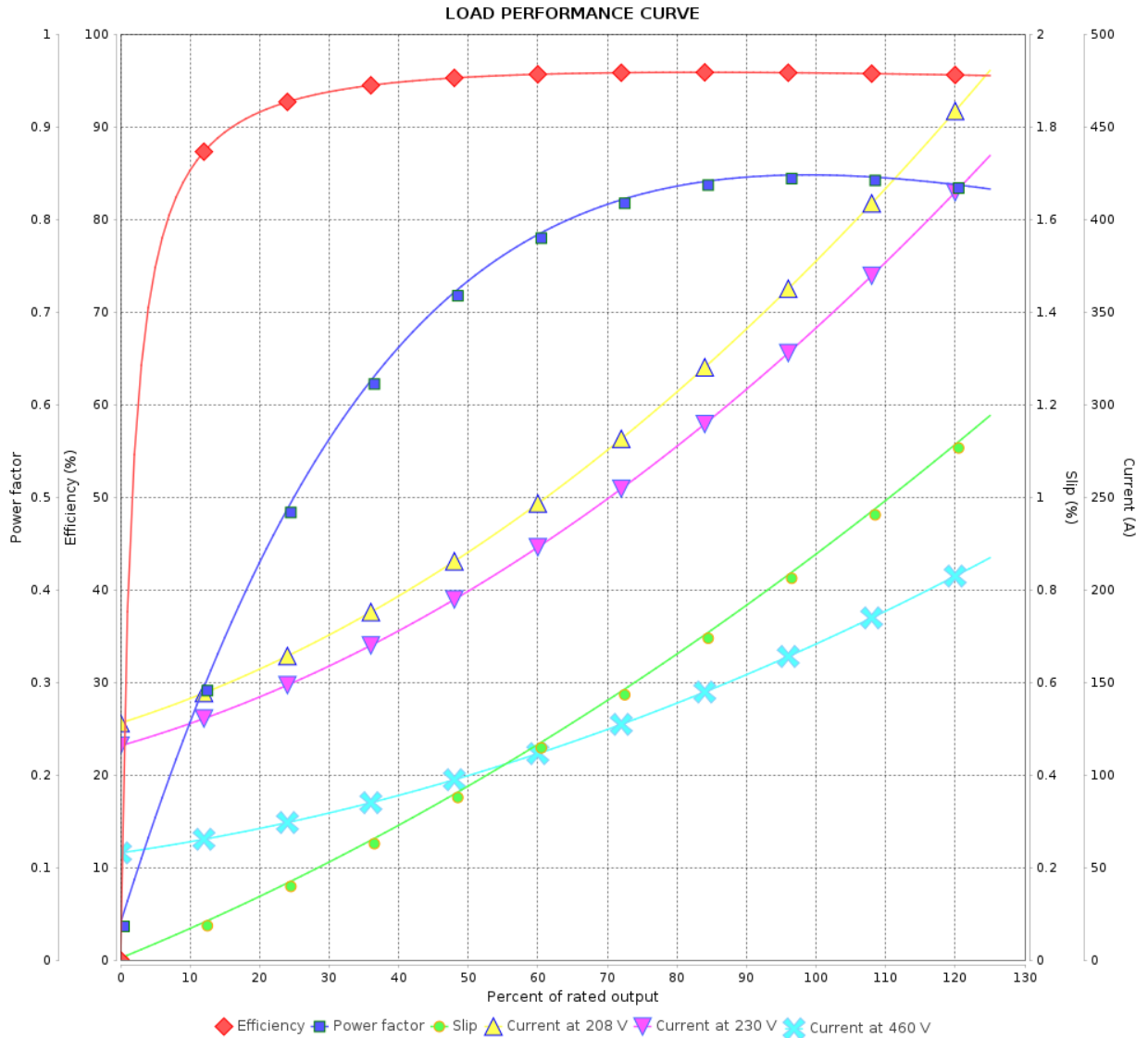
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 P Base NEMA Premium Efficiency
Three-Phase

Product code : 14168114



Performance : 230/460 V 60 Hz 4P

Rated current : 340/170 A
 LRC : 6.6
 Rated torque : 61.0 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 250 %
 Rated speed : 1784 rpm

Moment of inertia (J) : 2.81 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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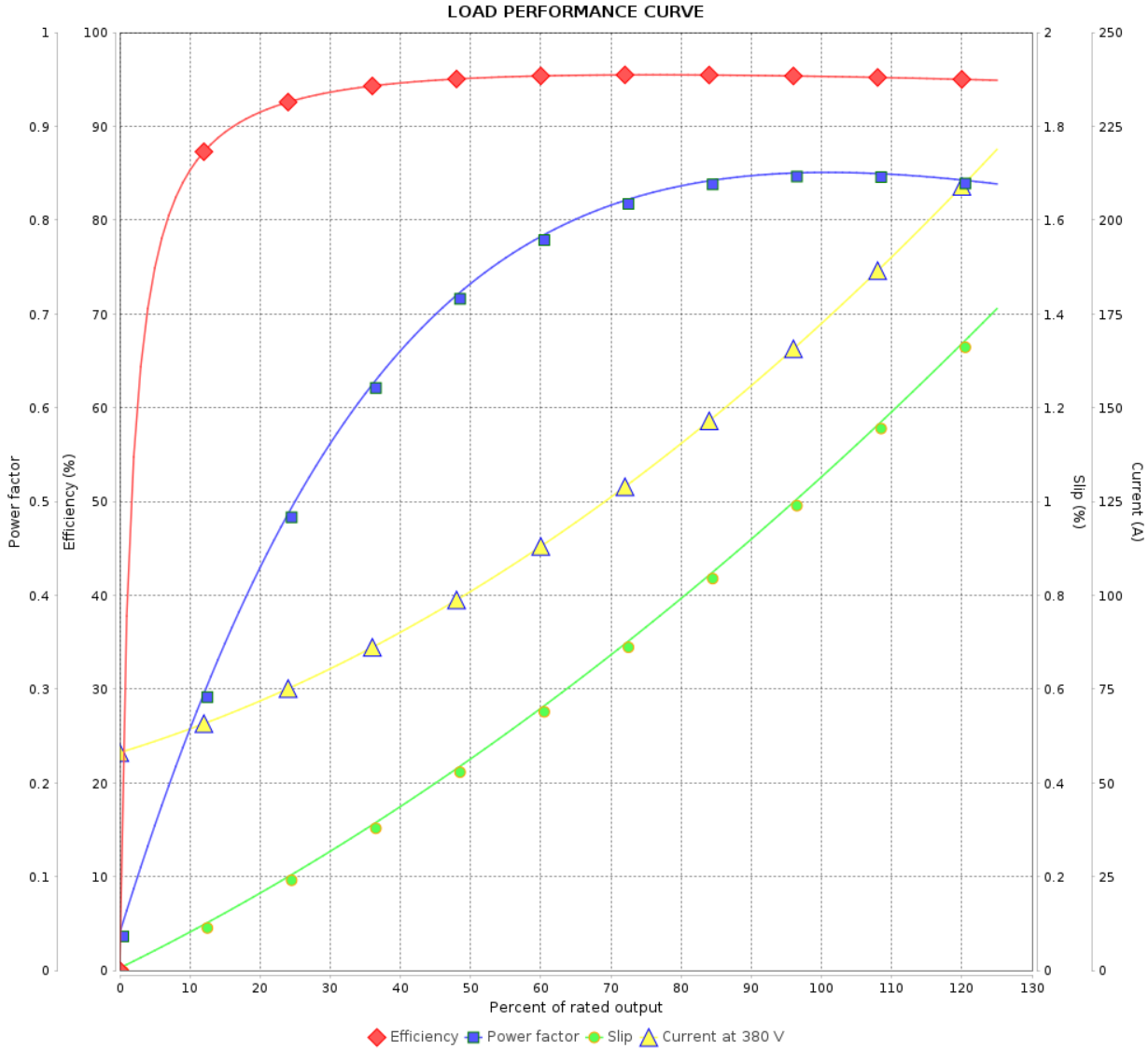
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium Efficiency Three-Phase

Product code : 14168114



Performance : 380 V 50 Hz 4P IE3

| | | | |
|---------------------|-------------|-----------------------|-------------------------|
| Rated current | : 169 A | Moment of inertia (J) | : 2.81 kgm ² |
| LRC | : 7.0 | Duty cycle | : Cont.(S1) |
| Rated torque | : 61.1 kgfm | Insulation class | : F |
| Locked rotor torque | : 190 % | Service factor | : 1.00 |
| Breakdown torque | : 240 % | Temperature rise | : 80 K |
| Rated speed | : 1484 rpm | Design | : B |

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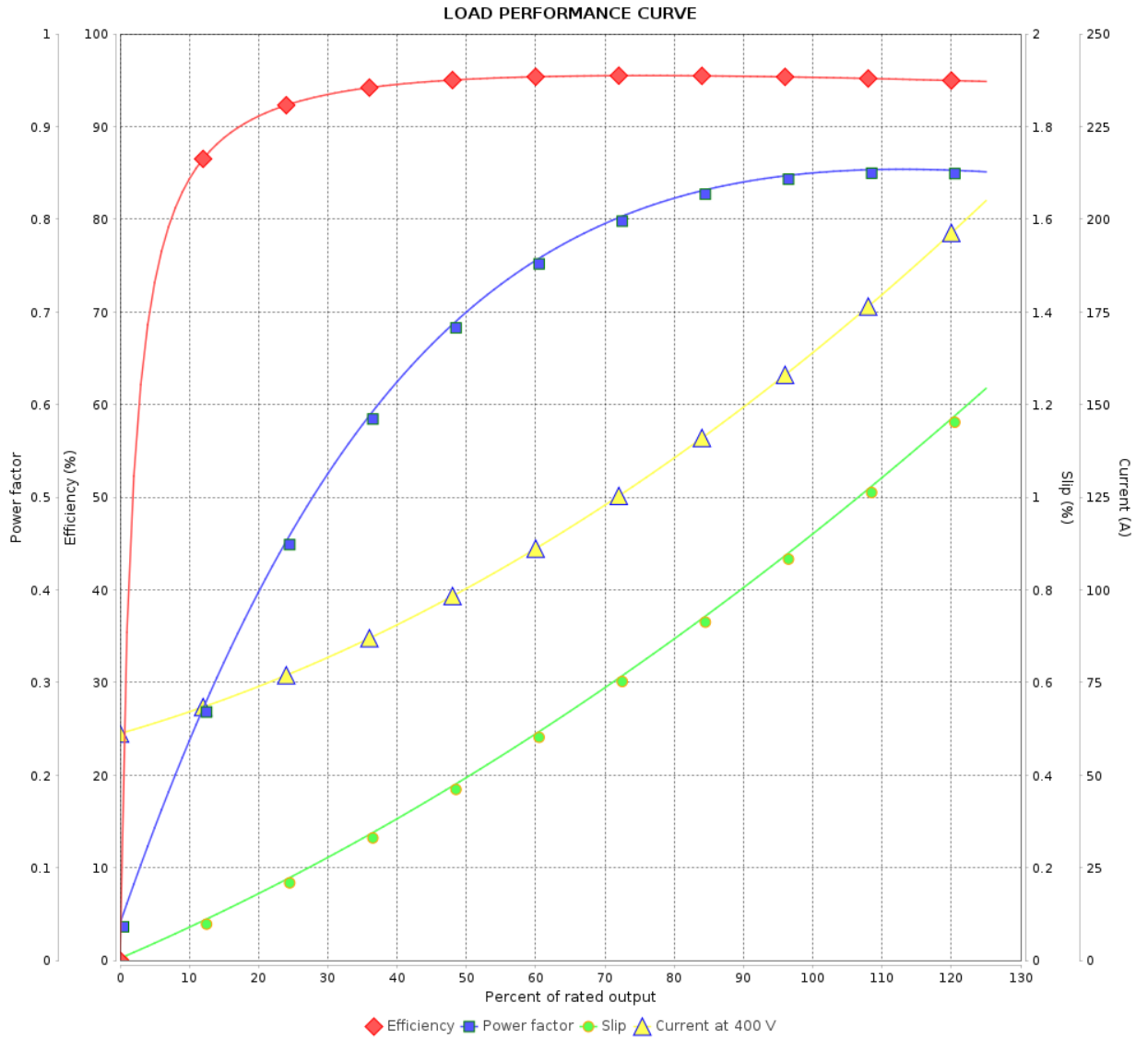
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 P Base NEMA Premium Efficiency
Three-Phase

Product code : 14168114



Performance : 400 V 50 Hz 4P IE3

Rated current : 160 A
 LRC : 6.9
 Rated torque : 61.0 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 260 %
 Rated speed : 1486 rpm

Moment of inertia (J) : 2.81 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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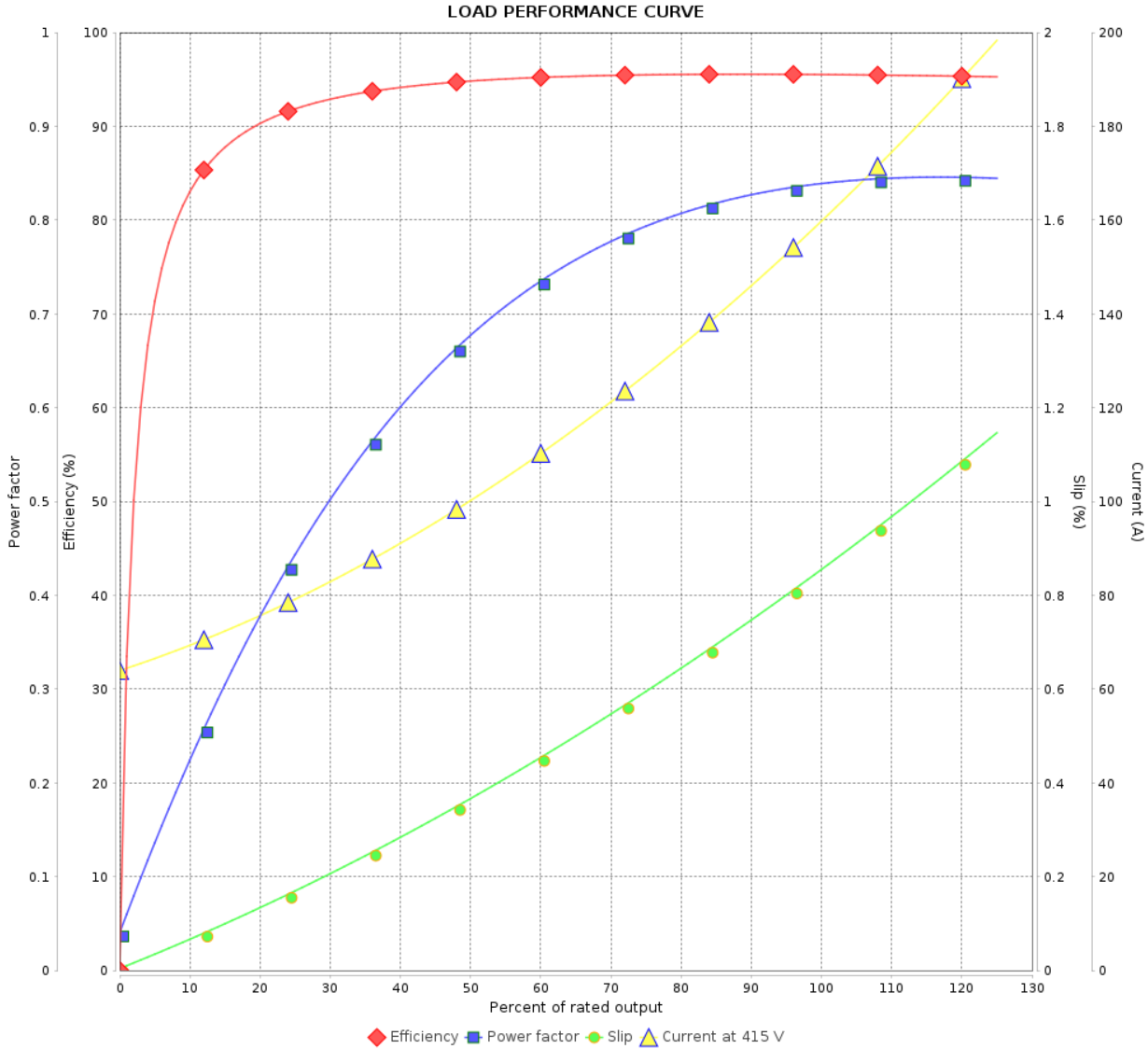
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Customer : _____

Product line : W22 P Base NEMA Premium Efficiency
Three-Phase

Product code : 14168114



Performance : 415 V 50 Hz 4P IE3

| | | | |
|---------------------|-------------|-----------------------|-------------------------|
| Rated current | : 156 A | Moment of inertia (J) | : 2.81 kgm ² |
| LRC | : 7.5 | Duty cycle | : Cont.(S1) |
| Rated torque | : 61.0 kgfm | Insulation class | : F |
| Locked rotor torque | : 229 % | Service factor | : 1.00 |
| Breakdown torque | : 290 % | Temperature rise | : 80 K |
| Rated speed | : 1487 rpm | Design | : B |

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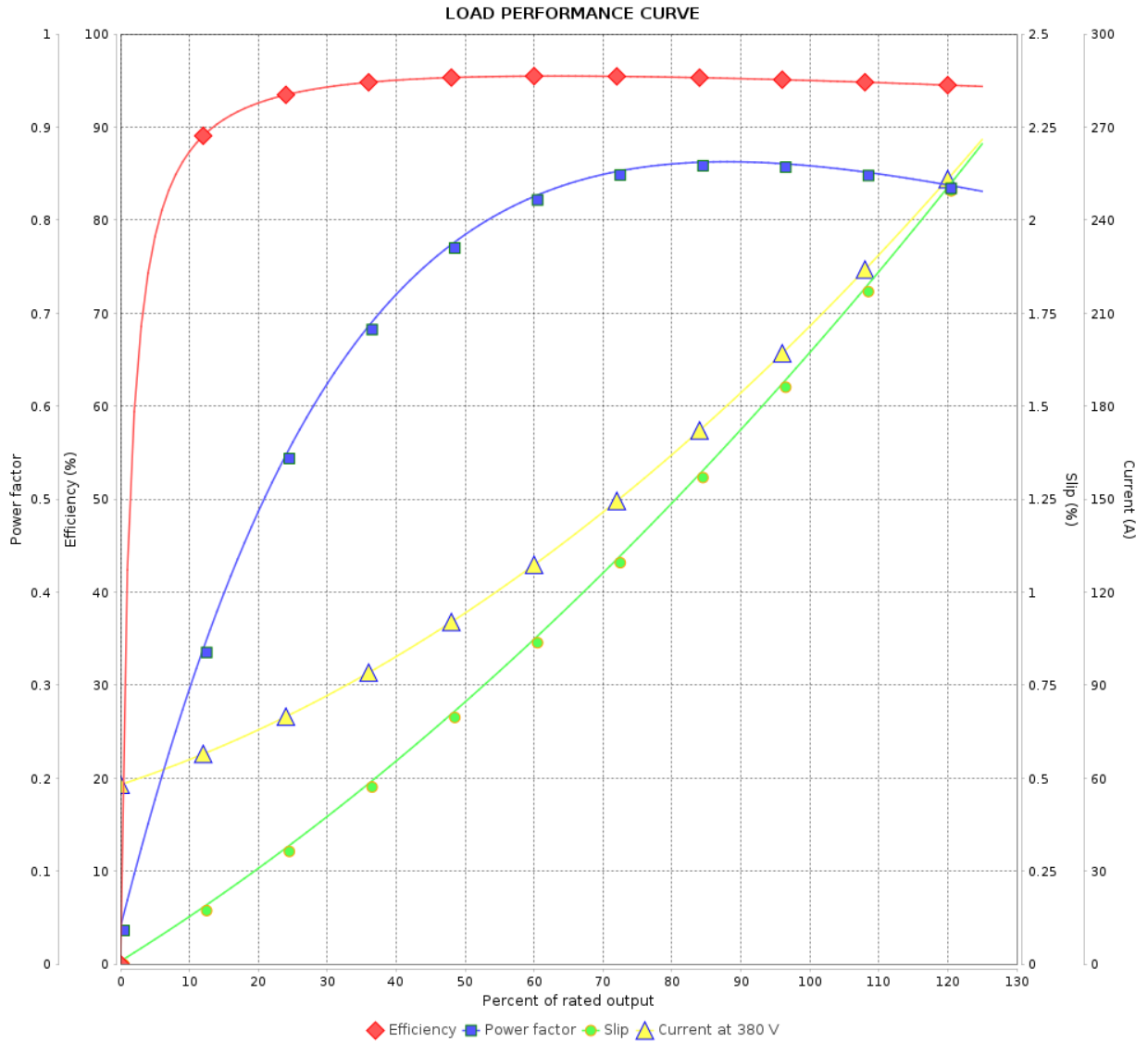
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 P Base NEMA Premium Efficiency Three-Phase

Product code : 14168114



Performance : 380 V 50 Hz 4P IE2

Rated current : 205 A
 LRC : 5.8
 Rated torque : 73.8 kgfm
 Locked rotor torque : 160 %
 Breakdown torque : 200 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 2.81 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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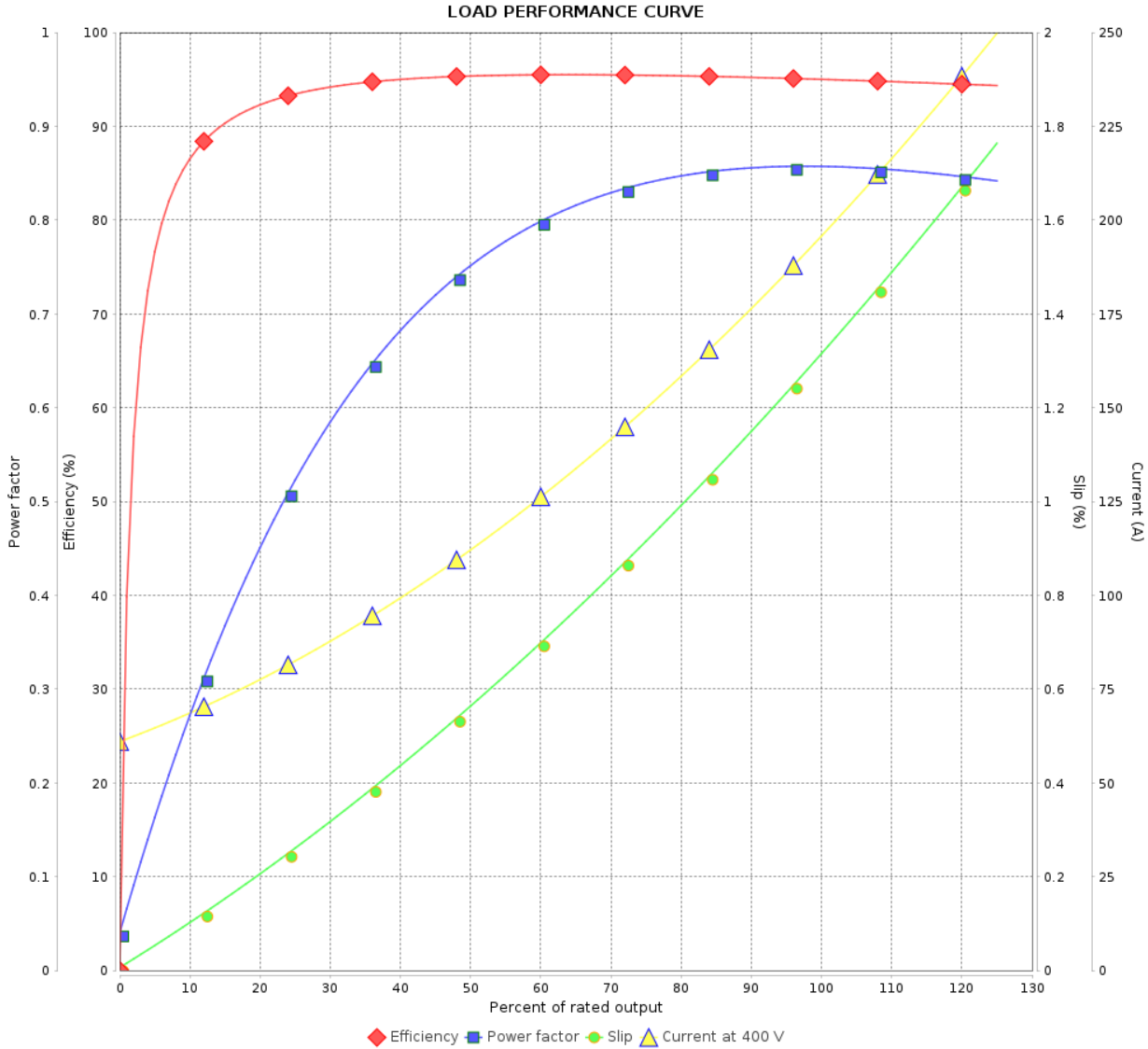
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium Efficiency Three-Phase

Product code : 14168114



Performance : 400 V 50 Hz 4P IE2

| | | | |
|---------------------|-------------|-----------------------|-------------------------|
| Rated current | : 194 A | Moment of inertia (J) | : 2.81 kgm ² |
| LRC | : 5.8 | Duty cycle | : Cont.(S1) |
| Rated torque | : 73.6 kgfm | Insulation class | : F |
| Locked rotor torque | : 180 % | Service factor | : 1.00 |
| Breakdown torque | : 220 % | Temperature rise | : 105 K |
| Rated speed | : 1480 rpm | Design | : B |

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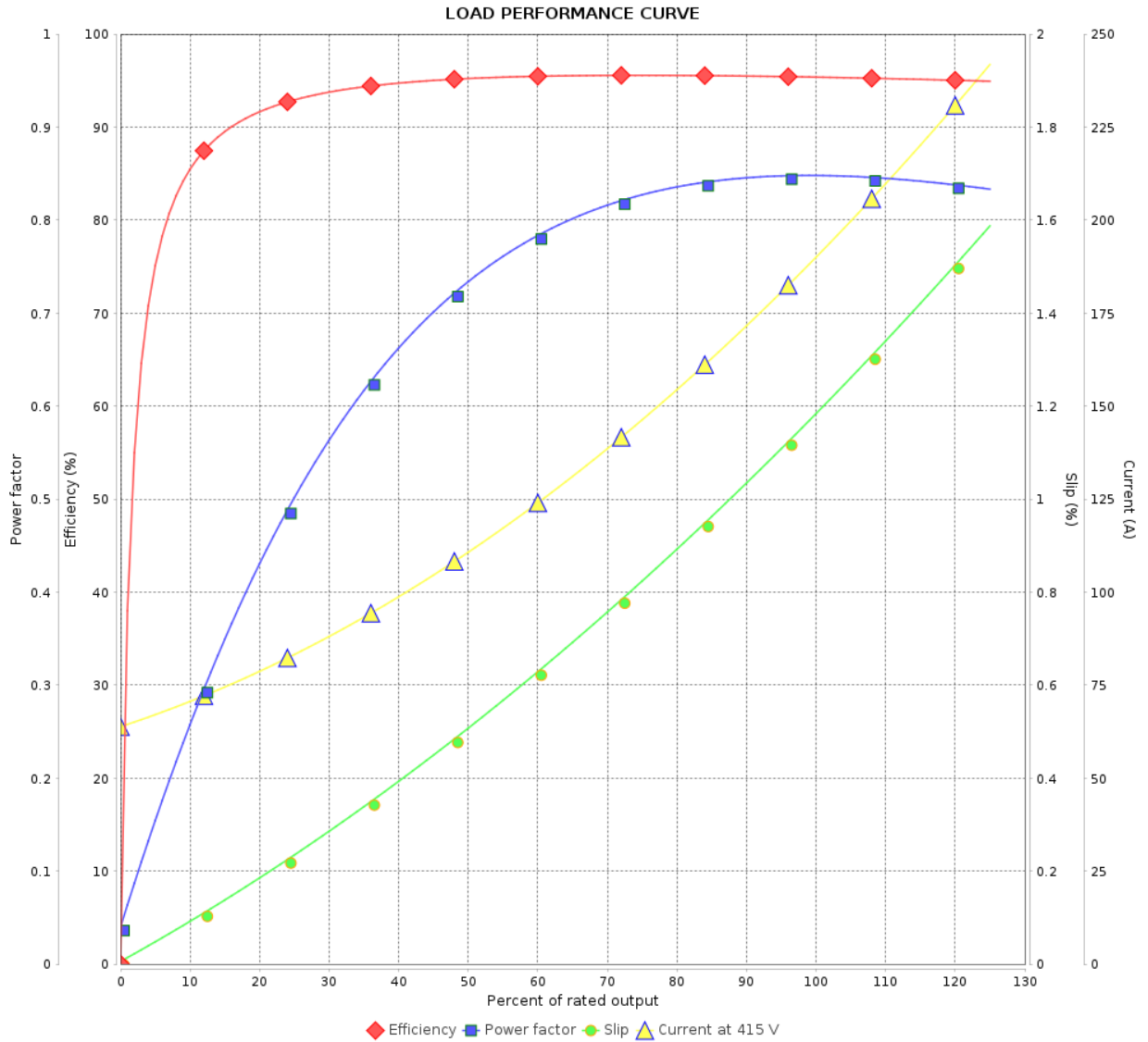
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 P Base NEMA Premium Efficiency
Three-Phase

Product code : 14168114



Performance : 415 V 50 Hz 4P IE3

Rated current : 189 A
 LRC : 6.3
 Rated torque : 73.5 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 240 %
 Rated speed : 1482 rpm

Moment of inertia (J) : 2.81 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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