

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | | | |
|--|---|-----------------------------|---------------------------|--|------------------------|------------------------|------------------------|
| Customer : | | | | | | | |
| Product line | : Close Coupled Pump NEMA Premium Efficiency Three-Phase | Product code : | 11138439 | | | | |
| Frame | : 213/5JM | Cooling method | : IC01 - ODP | | | | |
| 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 ³ | : 49.5 kg | | | | |
| Protection degree | : IP21 | Moment of inertia (J) | : 0.0388 kgm ² | | | | |
| Design | : B | | | | | | |
| Output [HP] | 7.5 | 5.5 | 5.5 | 5.5 | 7.5 | 7.5 | 7.5 |
| 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] | 18.1/9.03 | 8.57 | 8.57 | 8.60 | 11.2 | 10.9 | 10.7 |
| L. R. Amperes [A] | 135/67.7 | 71.1 | 74.6 | 79.1 | 72.8 | 76.3 | 80.2 |
| LRC [A] | 7.5x(Code J) | 8.3x(Code K) | 8.7x(Code L) | 9.2x(Code M) | 6.5x(Code H) | 7.0x(Code H) | 7.5x(Code J) |
| No load current [A] | 7.60/3.80 | 3.70 | 4.10 | 4.50 | 3.70 | 4.10 | 4.50 |
| Rated speed [RPM] | 1765 | 1470 | 1475 | 1475 | 1450 | 1455 | 1460 |
| Slip [%] | 1.94 | 2.00 | 1.67 | 1.67 | 3.33 | 3.00 | 2.67 |
| Rated torque [kgfm] | 3.08 | 2.72 | 2.71 | 2.71 | 3.75 | 3.74 | 3.73 |
| Locked rotor torque [%] | 200 | 280 | 300 | 330 | 200 | 220 | 240 |
| Breakdown torque [%] | 270 | 360 | 400 | 440 | 260 | 290 | 320 |
| 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 | 21s (cold) 12s (hot) | 12s (cold) 7s (hot) | 10s (cold) 6s (hot) | 10s (cold) 6s (hot) | 12s (cold) 7s (hot) | 10s (cold) 6s (hot) | 10s (cold) 6s (hot) |
| Noise level ² | 58.0 dB(A) | | | | | | |
| Efficiency (%) | 25% | | | | | | |
| | 50% | 89.0 | 84.7 | 83.7 | 82.8 | 86.5 | 86.5 |
| | 75% | 90.2 | 87.0 | 86.8 | 86.6 | 87.5 | 87.5 |
| | 100% | 91.0 | 88.6 | 88.6 | 88.6 | 86.5 | 87.7 |
| Power Factor | 25% | | | | | | |
| | 50% | 0.68 | 0.57 | 0.53 | 0.50 | 0.68 | 0.64 |
| | 75% | 0.79 | 0.71 | 0.67 | 0.63 | 0.80 | 0.76 |
| | 100% | 0.84 | 0.80 | 0.76 | 0.73 | 0.86 | 0.83 |
| Bearing type | : Drive end : 6209 ZZ Non drive end : 6206 ZZ | Foundation loads | | Max. traction : 196 kgf | | | |
| Sealing | : Without Bearing Seal | Without Bearing Seal | | Max. compression : 245 kgf | | | |
| Lubrication interval | : - | - | | | | | |
| Lubricant amount | : - | - | | | | | |
| Lubricant type | : Mobil Polyrex EM | | | | | | |
| Notes USABLE @208V 20.0A SF 1.15 SFA 23.0A | | | | | | | |
| 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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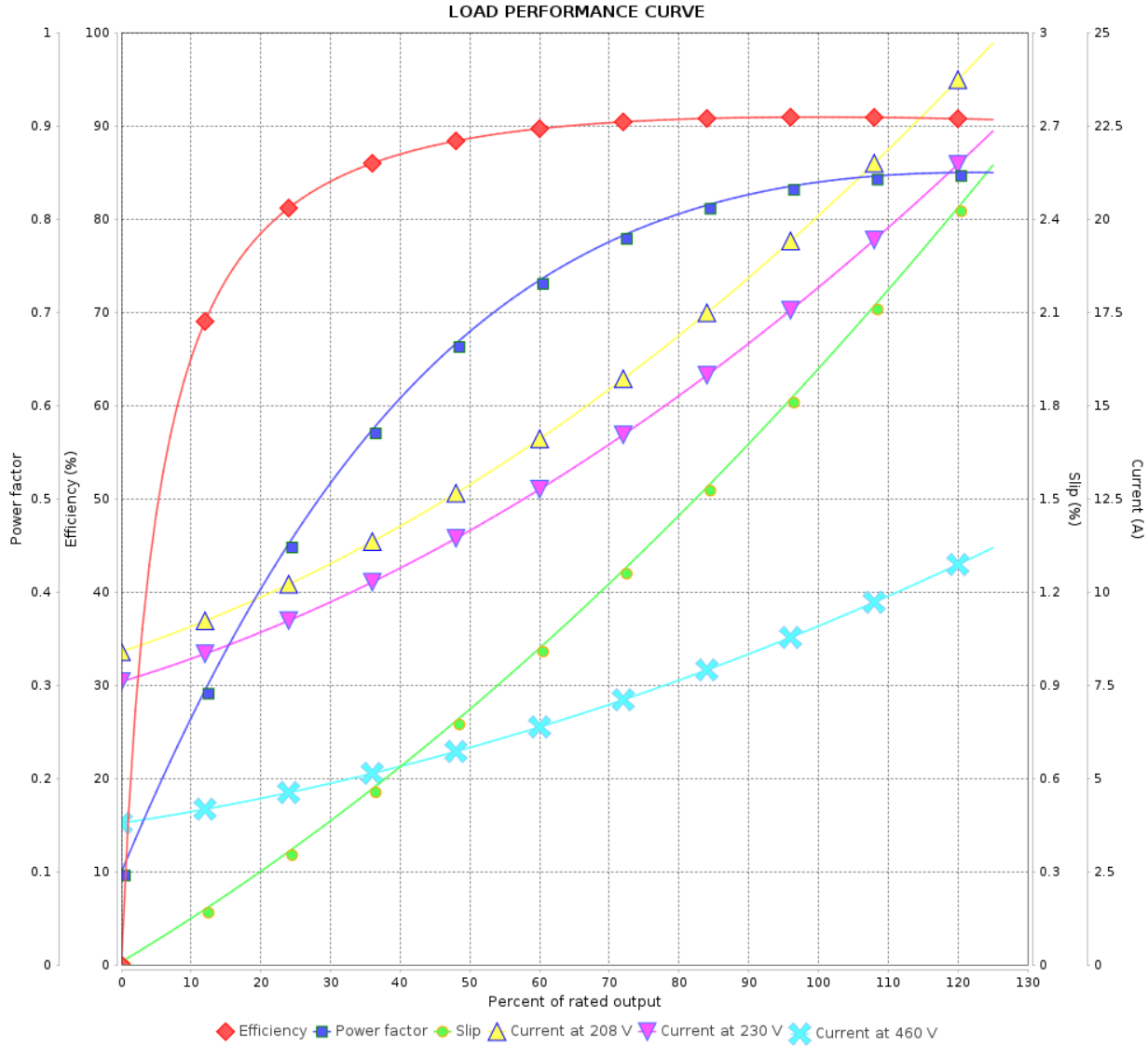
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA Premium
Efficiency Three-Phase

Product code : 11138439



Performance : 230/460 V 60 Hz 4P

Rated current : 18.1/9.03 A
LRC : 7.5
Rated torque : 3.08 kgfm
Locked rotor torque : 200 %
Breakdown torque : 270 %
Rated speed : 1765 rpm

Moment of inertia (J) : 0.0388 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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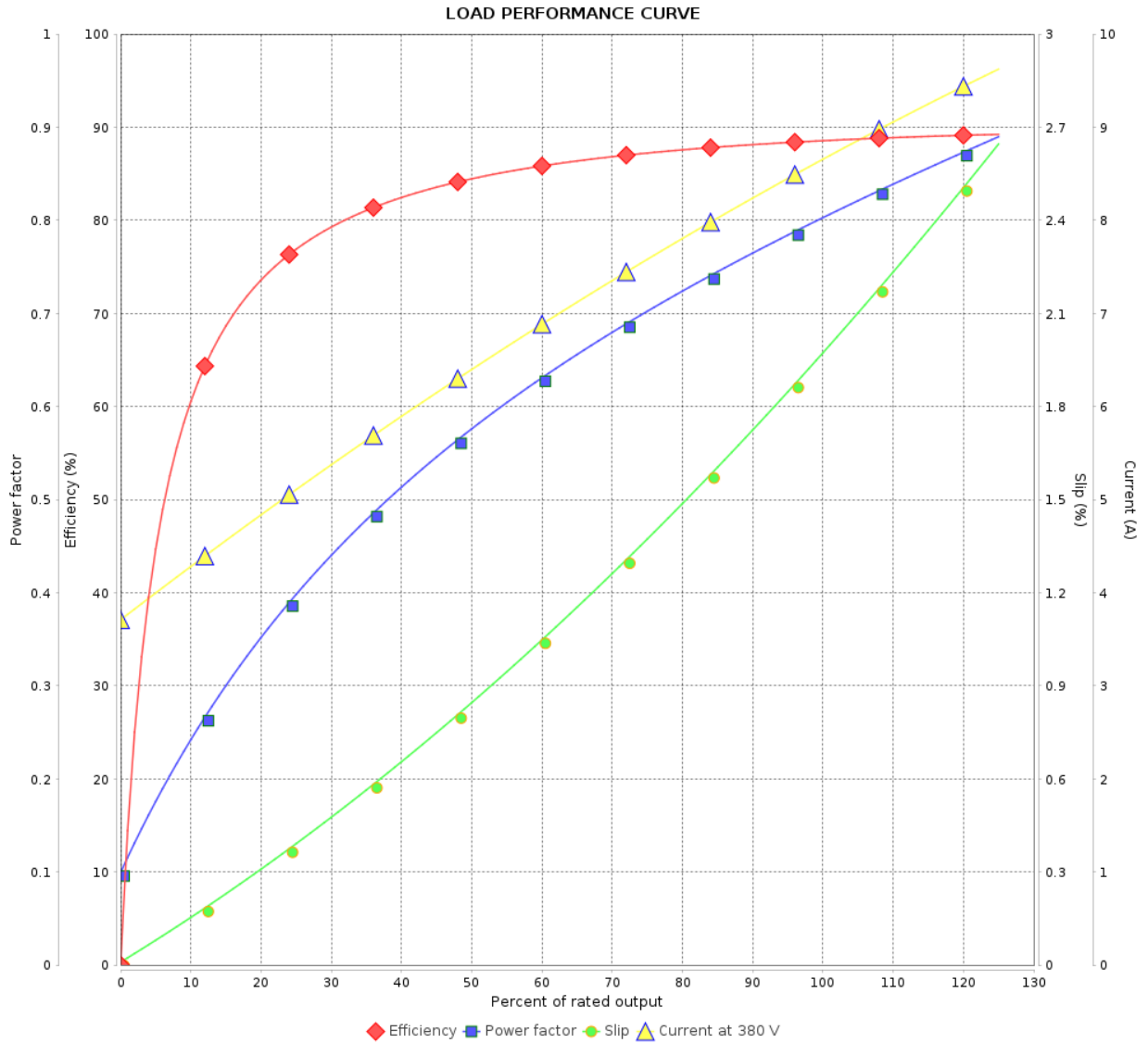
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : Close Coupled Pump NEMA Premium
Efficiency Three-Phase

Product code : 11138439



Performance : 380 V 50 Hz 4P IE3

Rated current : 8.57 A
 LRC : 8.3
 Rated torque : 2.72 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 360 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.0388 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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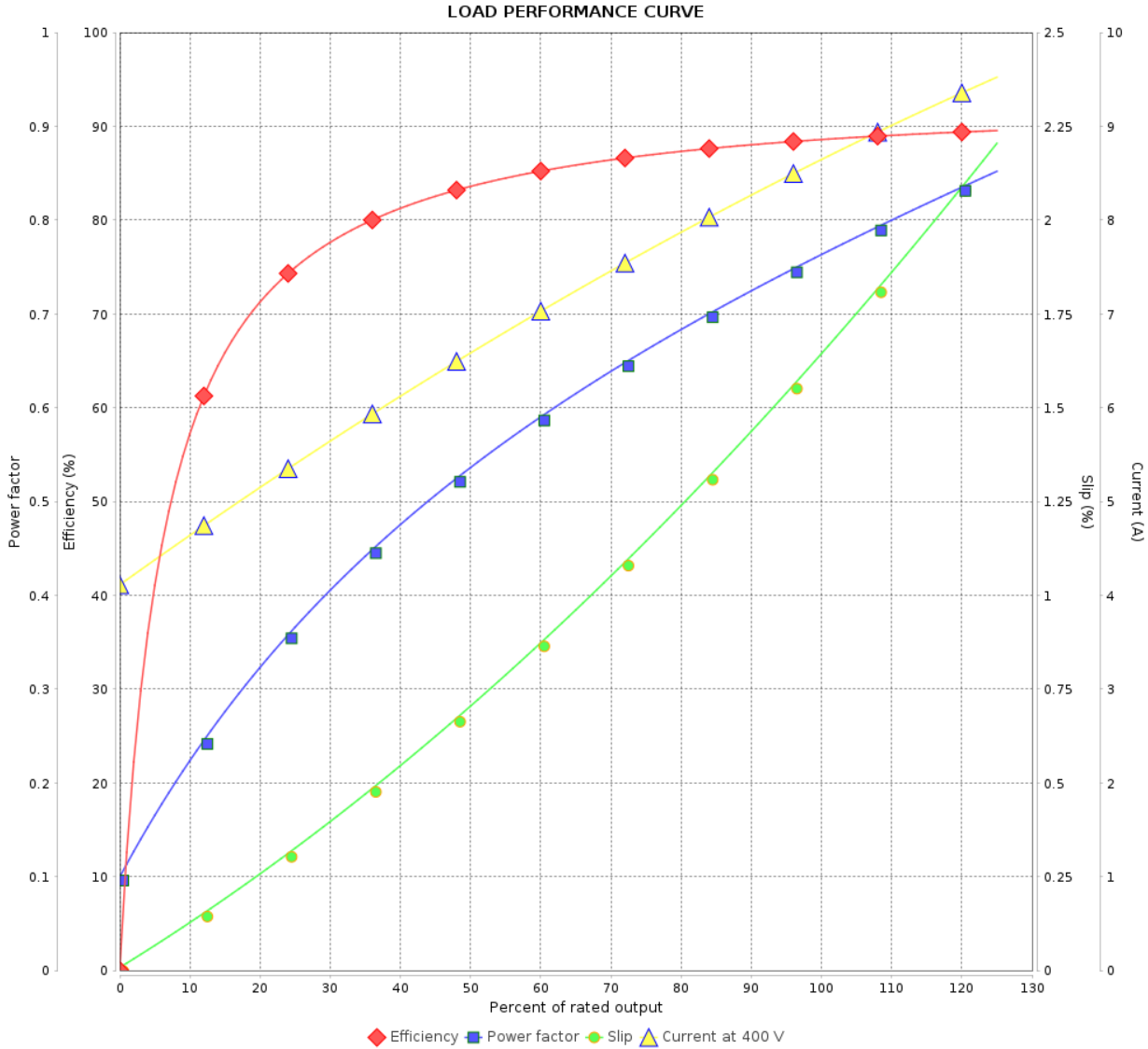
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA Premium
Efficiency Three-Phase

Product code : 11138439



Performance : 400 V 50 Hz 4P IE3

Rated current : 8.57 A
LRC : 8.7
Rated torque : 2.71 kgfm
Locked rotor torque : 300 %
Breakdown torque : 400 %
Rated speed : 1475 rpm

Moment of inertia (J) : 0.0388 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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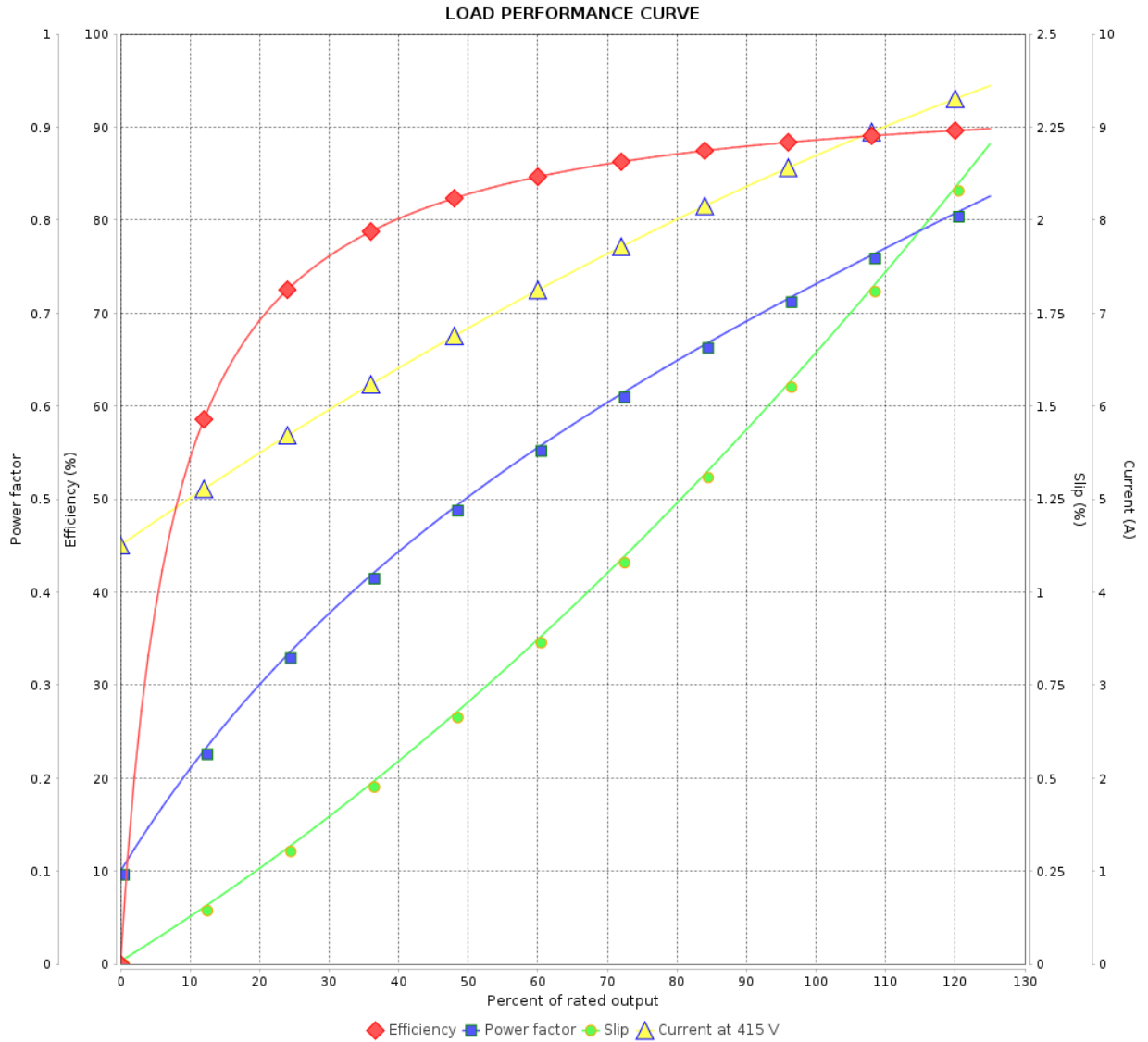
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : Close Coupled Pump NEMA Premium
Efficiency Three-Phase

Product code : 11138439



Performance : 415 V 50 Hz 4P IE3

Rated current : 8.60 A
 LRC : 9.2
 Rated torque : 2.71 kgfm
 Locked rotor torque : 330 %
 Breakdown torque : 440 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 0.0388 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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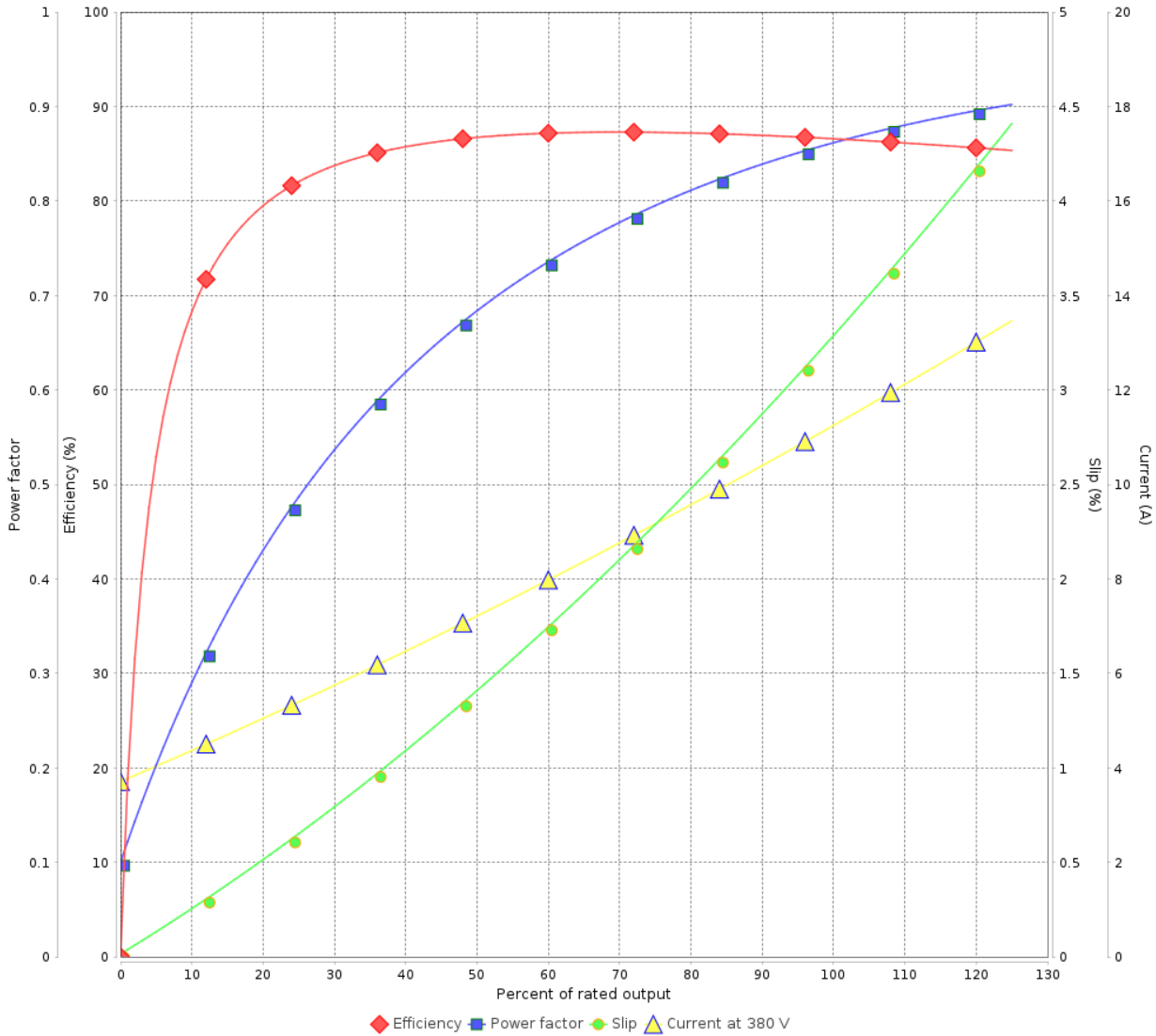


Customer :

Product line : Close Coupled Pump NEMA Premium
Efficiency Three-Phase

Product code : 11138439

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 4P IE1

Rated current : 11.2 A
LRC : 6.5
Rated torque : 3.75 kgfm
Locked rotor torque : 200 %
Breakdown torque : 260 %
Rated speed : 1450 rpm

Moment of inertia (J) : 0.0388 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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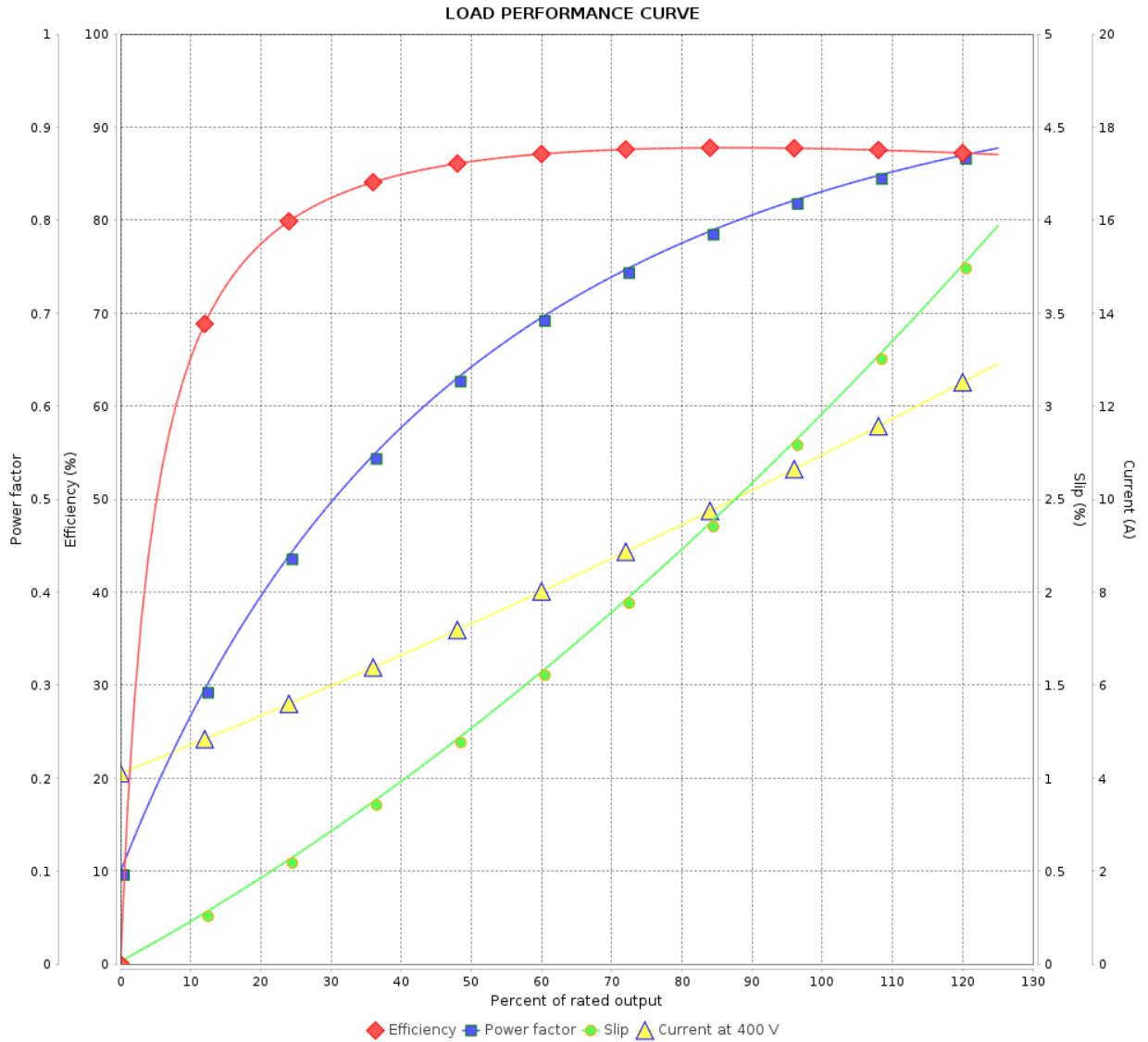
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : Close Coupled Pump NEMA Premium
Efficiency Three-Phase

Product code : 11138439



Performance : 400 V 50 Hz 4P IE2

Rated current : 10.9 A
 LRC : 7.0
 Rated torque : 3.74 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 290 %
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0388 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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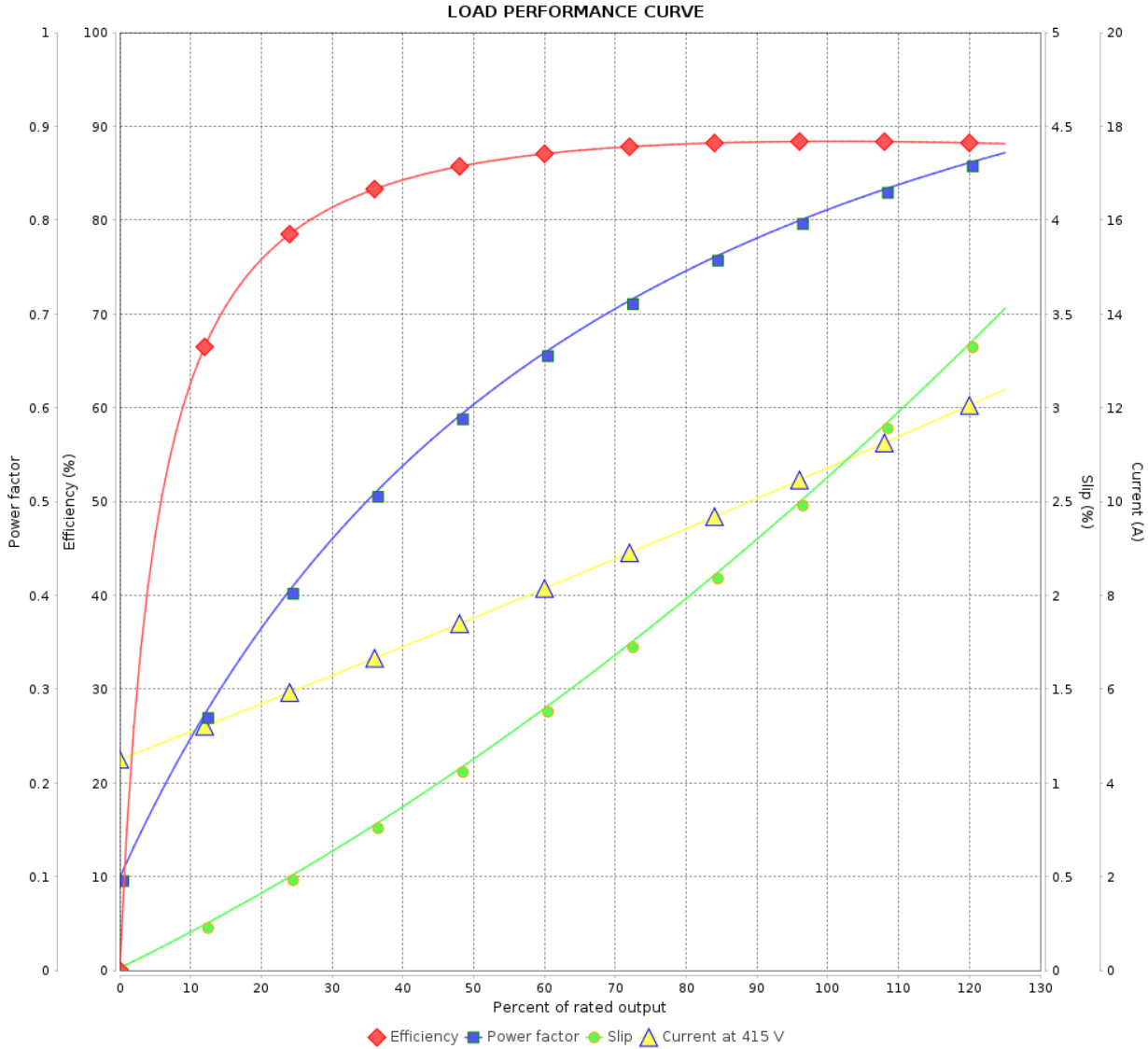
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Close Coupled Pump NEMA Premium
Efficiency Three-Phase

Product code : 11138439



Performance : 415 V 50 Hz 4P IE2

Rated current : 10.7 A
 LRC : 7.5
 Rated torque : 3.73 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 320 %
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.0388 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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