

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | |
|---|---|-----------------------------|--|----------------------|----------|
| Customer : | | | | | |
| Product line | : W22 Close Coupled Pump JM NEMA Premium Efficiency Three-Phase | Product code : | 12775267 | | |
| Frame | : 182/4JM | 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 | : 42.6 kg | | |
| Protection degree | : IP55 | Moment of inertia (J) | : 0.0206 kgm ² | | |
| Design | : B | | | | |
| Output [HP] | 1.5 | 1.5 | 1.5 | 1.5 | |
| Poles | 6 | 6 | 6 | 6 | |
| Frequency [Hz] | 60 | 50 | 50 | 50 | |
| Rated voltage [V] | 230/460 | 380 | 400 | 415 | |
| Rated current [A] | 5.08/2.54 | 2.68 | 2.62 | 2.64 | |
| L. R. Amperes [A] | 39.6/19.8 | 16.9 | 18.1 | 19.5 | |
| LRC [A] | 7.8x(Code M) | 6.3x(Code J) | 6.9x(Code K) | 7.4x(Code L) | |
| No load current [A] | 3.25/1.63 | 1.60 | 1.71 | 1.80 | |
| Rated speed [RPM] | 1170 | 955 | 960 | 965 | |
| Slip [%] | 2.50 | 4.50 | 4.00 | 3.50 | |
| Rated torque [kgfm] | 0.930 | 1.14 | 1.13 | 1.13 | |
| Locked rotor torque [%] | 320 | 250 | 300 | 330 | |
| Breakdown torque [%] | 400 | 290 | 330 | 370 | |
| Service factor | 1.25 | 1.00 | 1.00 | 1.00 | |
| Temperature rise | 80 K | 80 K | 80 K | 80 K | |
| Locked rotor time | 28s (cold) 16s (hot) | 25s (cold) 14s (hot) | 25s (cold) 14s (hot) | 25s (cold) 14s (hot) | |
| Noise level ² | 52.0 dB(A) | 49.0 dB(A) | 49.0 dB(A) | 49.0 dB(A) | |
| Efficiency (%) | 25% | 82.8 | 86.0 | 84.1 | 82.8 |
| | 50% | 84.0 | 85.5 | 84.5 | 84.0 |
| | 75% | 86.5 | 86.5 | 86.5 | 85.5 |
| | 100% | 87.5 | 85.5 | 86.5 | 86.5 |
| Power Factor | 25% | 0.25 | 0.29 | 0.27 | 0.25 |
| | 50% | 0.45 | 0.52 | 0.48 | 0.45 |
| | 75% | 0.54 | 0.63 | 0.60 | 0.57 |
| | 100% | 0.62 | 0.73 | 0.70 | 0.67 |
| Losses at normative operating points (speed;torque), in percentage of rated output power | | | | | |
| Losses (%) | P1 (0,9;1,0) | 13.4 | 13.4 | 13.4 | 13.4 |
| | P2 (0,5;1,0) | 10.3 | 10.3 | 10.3 | 10.3 |
| | P3 (0,25;1,0) | 9.3 | 9.3 | 9.3 | 9.3 |
| | P4 (0,9;0,5) | 8.8 | 8.8 | 8.8 | 8.8 |
| | P5 (0,5;0,5) | 5.8 | 5.8 | 5.8 | 5.8 |
| | P6 (0,5;0,25) | 4.8 | 4.8 | 4.8 | 4.8 |
| | P7 (0,25;0,25) | 3.5 | 3.5 | 3.5 | 3.5 |
| Bearing type | : Drive end 6307 ZZ Non drive end 6206 ZZ | Foundation loads | | | |
| Sealing | : V'Ring V'Ring | Max. traction : 66 kgf | | | |
| Lubrication interval | : - - | Max. compression : 108 kgf | | | |
| Lubricant amount | : - - | | | | |
| Lubricant type | : Mobil Polyrex EM | | | | |
| 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. | | | 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 : _____

Notes
USABLE @208V 5.62A SF 1.15 SFA 6.46A

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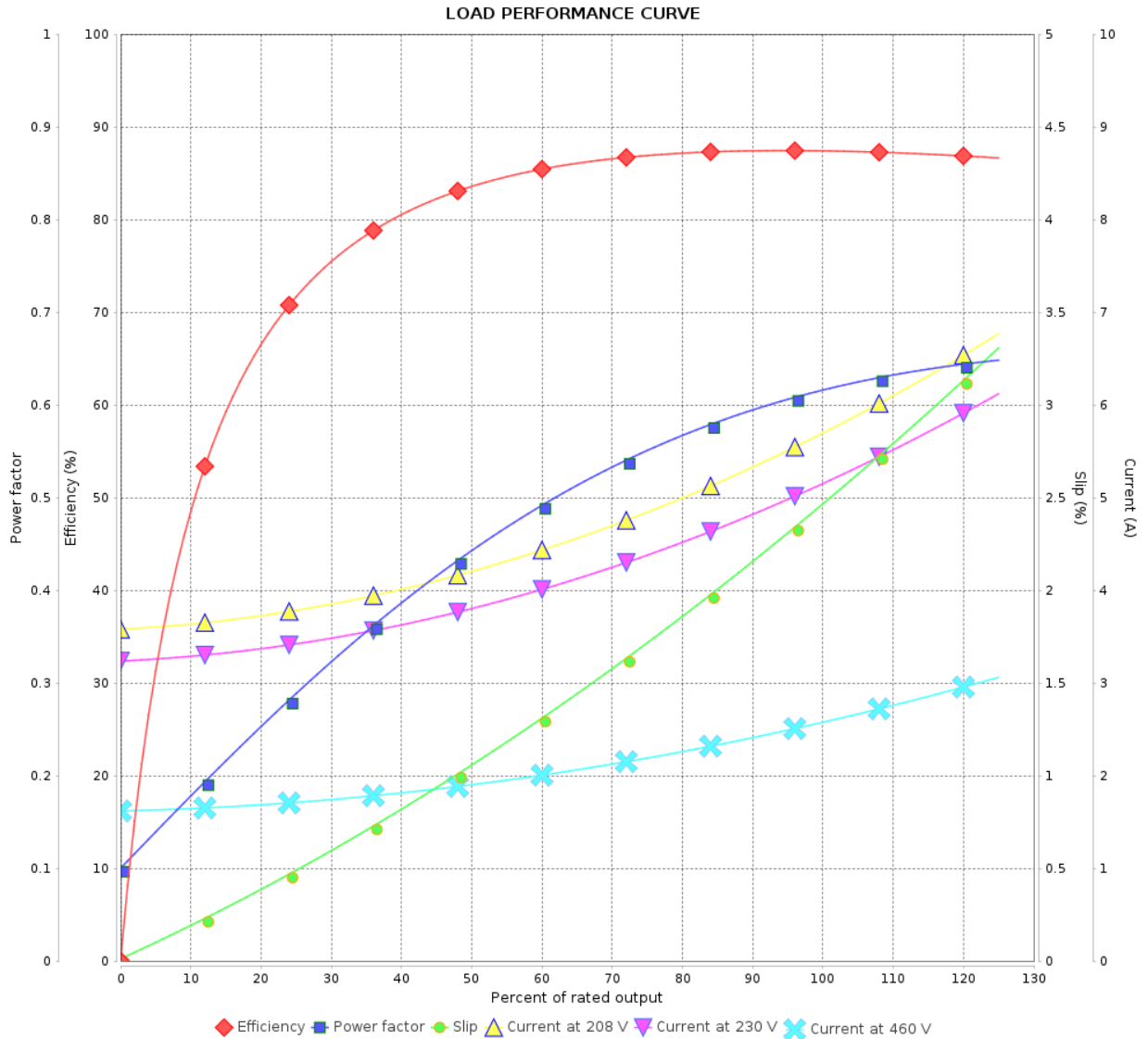
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM NEMA
Premium Efficiency Three-Phase

Product code : 12775267



Performance : 230/460 V 60 Hz 6P

Rated current : 5.08/2.54 A
 LRC : 7.8
 Rated torque : 0.930 kgfm
 Locked rotor torque : 320 %
 Breakdown torque : 400 %
 Rated speed : 1170 rpm

Moment of inertia (J) : 0.0206 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

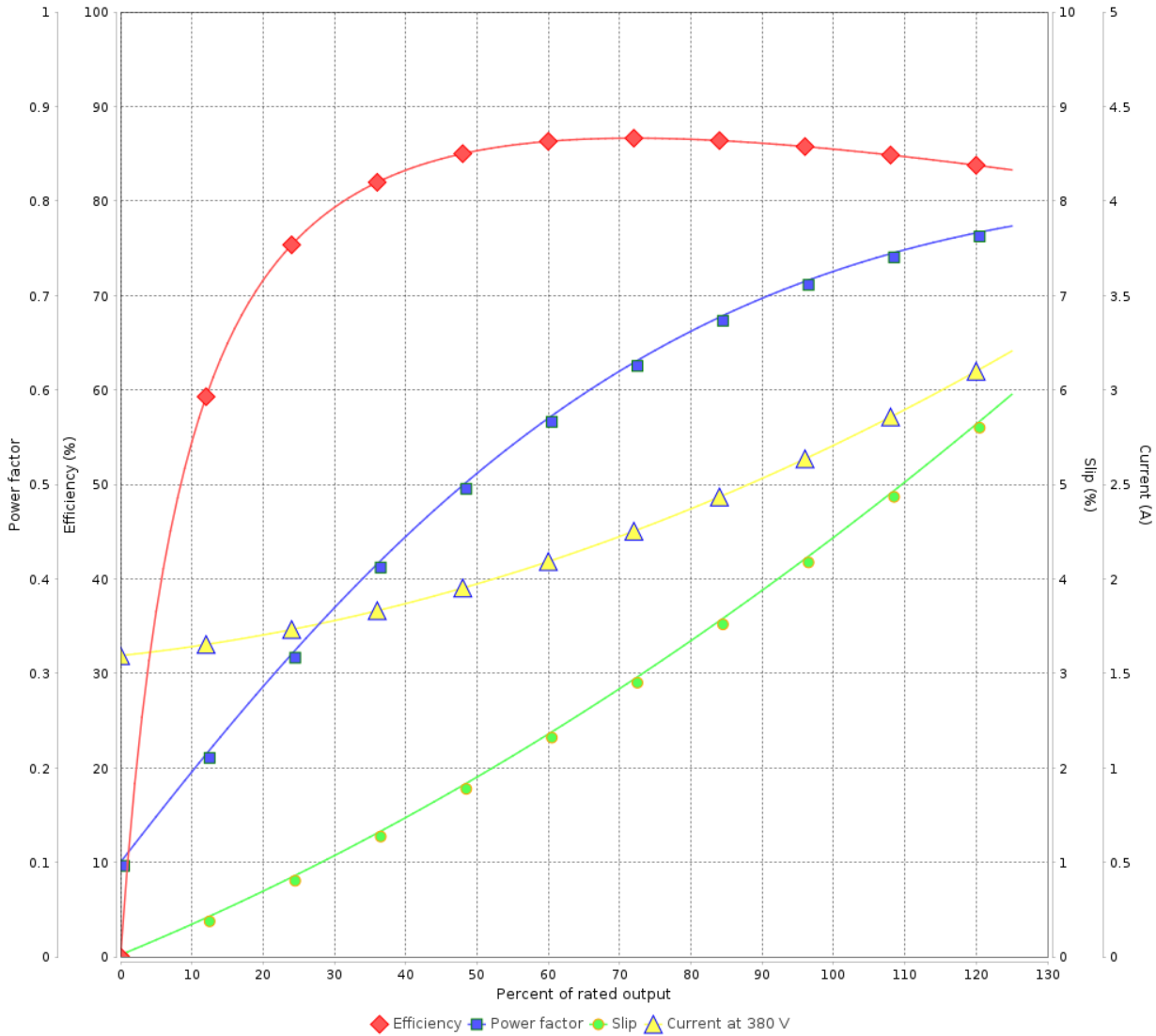


Customer :

Product line : W22 Close Coupled Pump JM NEMA
Premium Efficiency Three-Phase

Product code : 12775267

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Performance : 380 V 50 Hz 6P IE4

| | | | |
|---------------------|-------------|-----------------------|---------------------------|
| Rated current | : 2.68 A | Moment of inertia (J) | : 0.0206 kgm ² |
| LRC | : 6.3 | Duty cycle | : Cont.(S1) |
| Rated torque | : 1.14 kgfm | Insulation class | : F |
| Locked rotor torque | : 250 % | Service factor | : 1.00 |
| Breakdown torque | : 290 % | Temperature rise | : 80 K |
| Rated speed | : 955 rpm | Design | : B |

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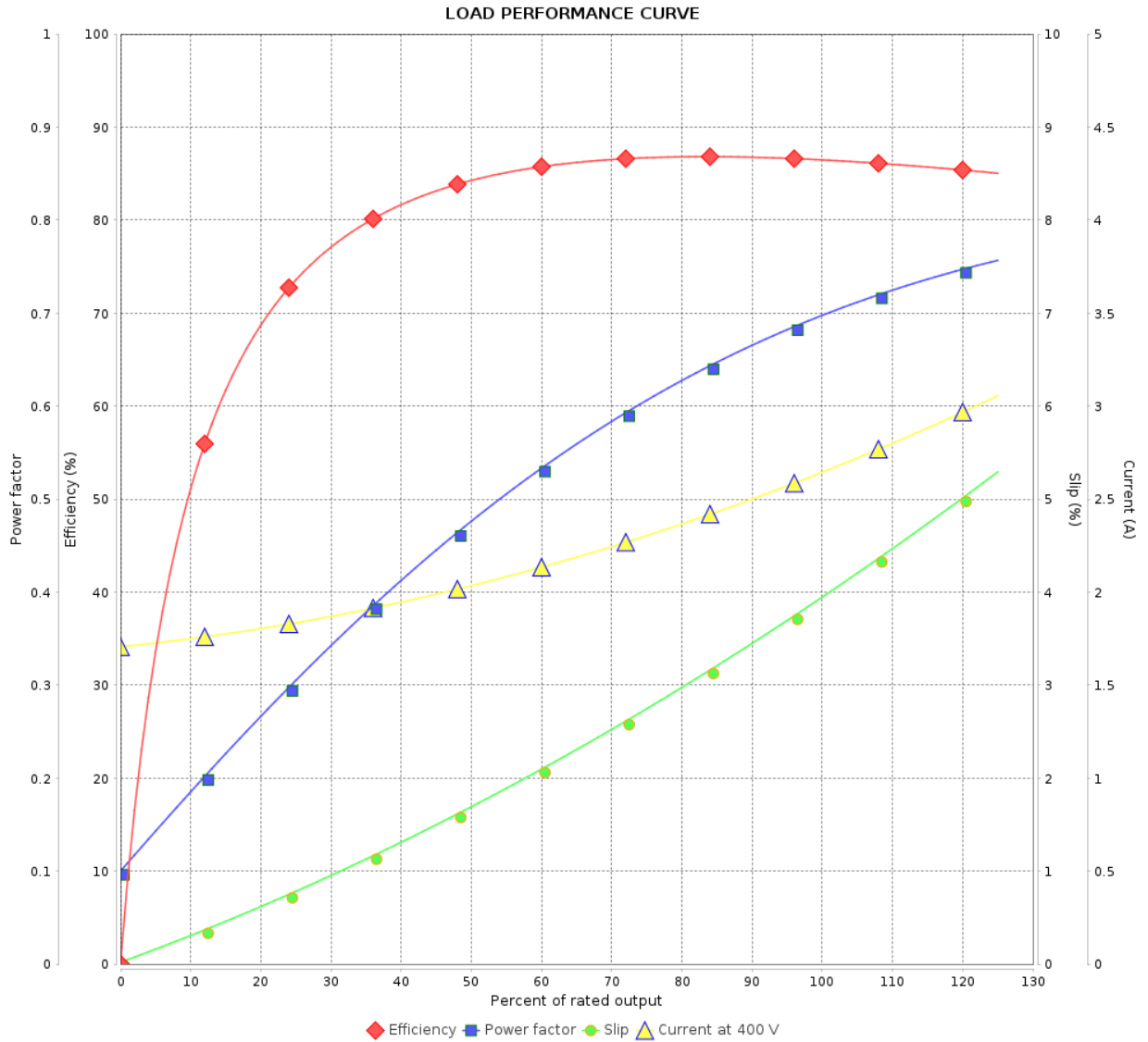
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Close Coupled Pump JM NEMA
Premium Efficiency Three-Phase

Product code : 12775267



Performance : 400 V 50 Hz 6P IE4

Rated current : 2.62 A
LRC : 6.9
Rated torque : 1.13 kgfm
Locked rotor torque : 300 %
Breakdown torque : 330 %
Rated speed : 960 rpm

Moment of inertia (J) : 0.0206 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

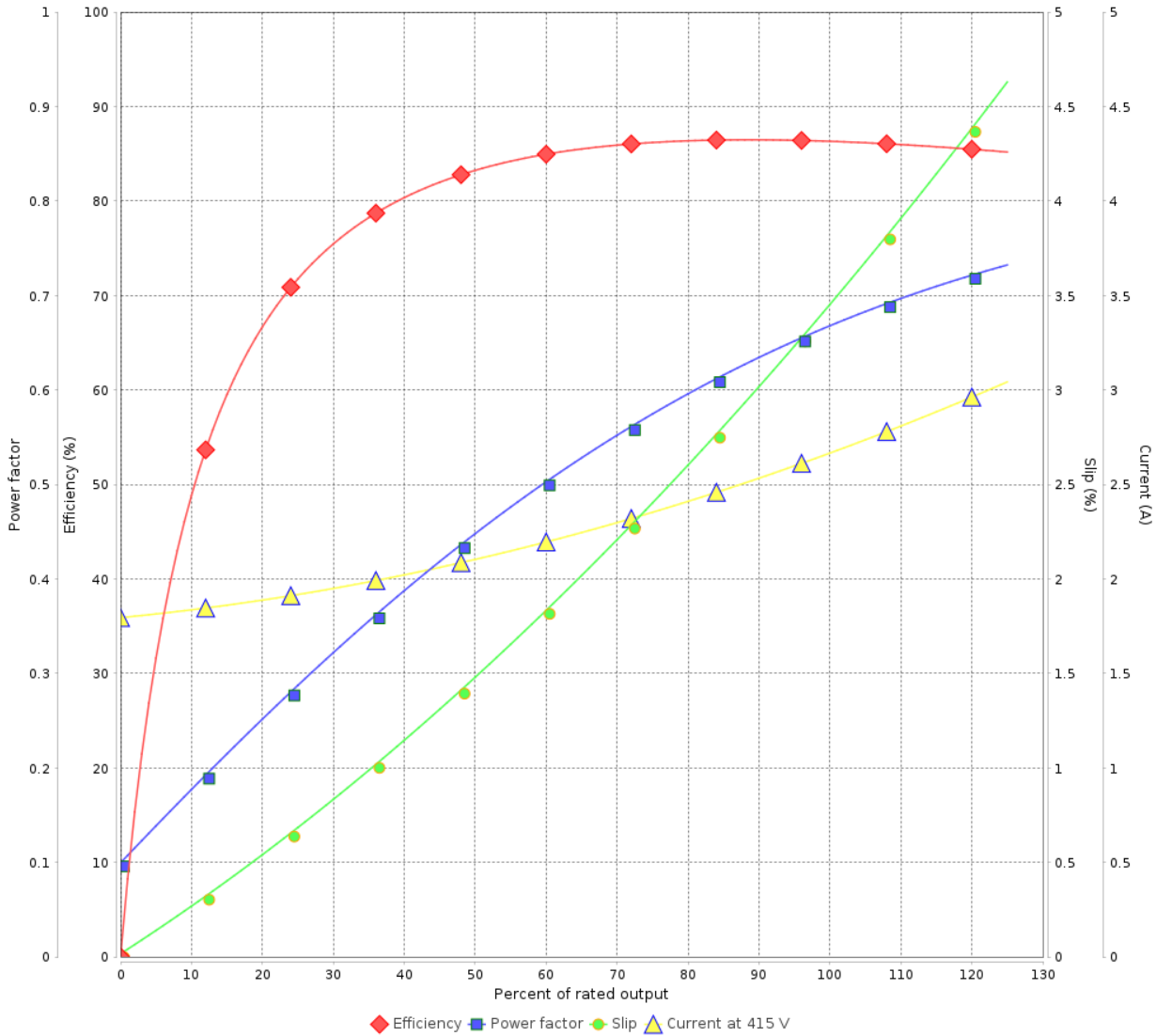


Customer : _____

Product line : W22 Close Coupled Pump JM NEMA
Premium Efficiency Three-Phase

Product code : 12775267

LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 6P IE4

Rated current : 2.64 A
LRC : 7.4
Rated torque : 1.13 kgfm
Locked rotor torque : 330 %
Breakdown torque : 370 %
Rated speed : 965 rpm

Moment of inertia (J) : 0.0206 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

| Rev. | Changes Summary | Performed | Checked | Date |
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| Checked by | | | | |
| Date | 13/01/2024 | | | |