

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



| | | | | |
|--|----------------------|---|--|--------------------|
| Customer : | | | | |
| Product line | | : JM Pump NEMA Premium Efficiency Three-Phase | Product code : 12676963 | |
| Frame | | : 143/5JM | Cooling method | |
| Insulation class | | : F | : IC01 - ODP | |
| Duty cycle | | : Cont.(S1) | Mounting | |
| Ambient temperature | | : -20°C to +40°C | : F-1 | |
| Altitude | | : 1000 m.a.s.l. | Rotation ¹ | |
| Design | | : B | : Both (CW and CCW) | |
| | | | Starting method | |
| | | | : Direct On Line | |
| | | | Approx. weight ³ | |
| | | | : 18.8 kg | |
| | | | Moment of inertia (J) | |
| | | | : 0.0049 kgm ² | |
| Output [HP] | 2 | | 2 | 2 |
| Poles | 4 | | 4 | 4 |
| Frequency [Hz] | 60 | | 50 | 50 |
| Rated voltage [V] | 230/460 | | 190/380 | 220/415 |
| Rated current [A] | 5.38/2.69 | | 6.52/3.26 | 5.90/3.13 |
| L. R. Amperes [A] | 41.4/20.7 | | 36.5/18.3 | 36.6/19.4 |
| LRC [A] | 7.7x(Code K) | | 5.6x(Code G) | 6.2x(Code H) |
| No load current [A] | 2.75/1.38 | | 2.70/1.35 | 2.82/1.49 |
| Rated speed [RPM] | 1740 | | 1410 | 1420 |
| Slip [%] | 3.33 | | 6.00 | 5.33 |
| Rated torque [kgfm] | 0.834 | | 1.03 | 1.02 |
| Locked rotor torque [%] | 260 | | 200 | 220 |
| Breakdown torque [%] | 320 | | 229 | 260 |
| Service factor | | | 1.00 | 1.00 |
| Temperature rise | 80 K | | 105 K | 80 K |
| Locked rotor time | 30s (cold) 17s (hot) | | 0s (cold) 0s (hot) | 0s (cold) 0s (hot) |
| Noise level ² | 52.0 dB(A) | | 49.0 dB(A) | 49.0 dB(A) |
| Efficiency (%) | 25% | 85.2 | 88.2 | 86.4 |
| | 50% | 85.5 | 85.9 | 85.2 |
| | 75% | 86.5 | 85.0 | 85.2 |
| | 100% | 86.5 | 82.2 | 83.4 |
| Power Factor | 25% | 0.36 | 0.42 | 0.38 |
| | 50% | 0.61 | 0.69 | 0.64 |
| | 75% | 0.74 | 0.80 | 0.77 |
| | 100% | 0.81 | 0.85 | 0.83 |
| Bearing type | | : Drive end 6206 ZZ Non drive end 6203 ZZ | Foundation loads | |
| Sealing | | : Without Without Bearing Seal Bearing Seal | Max. traction : 66 kgf | |
| Lubrication interval | | : - - | Max. compression : 85 kgf | |
| Lubricant amount | | : - - | | |
| Lubricant type | | : Mobil Polyrex EM | | |
| Notes USABLE @208V 5.95A SF 1.00 SFA 5.95A | | | | |
| 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 |
| | | | | |
| Performed by | | | | |
| Checked by | | | Page | Revision |
| Date | 16/05/2022 | | 1 / 4 | |

LOAD PERFORMANCE CURVE

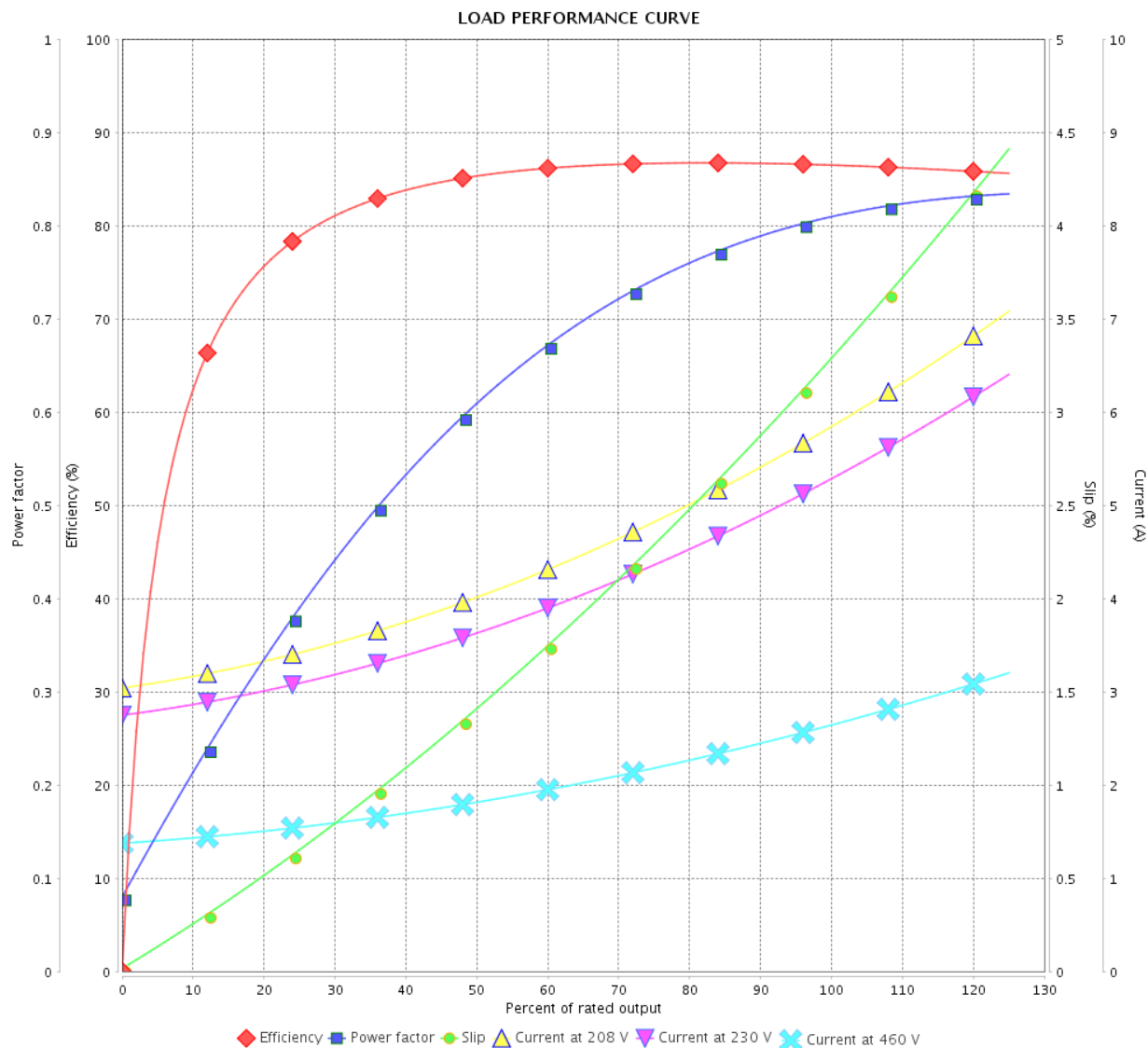
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 12676963



Performance : 230/460 V 60 Hz 4P

Rated current : 5.38/2.69 A
 LRC : 7.7
 Rated torque : 0.834 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 320 %
 Rated speed : 1740 rpm

Moment of inertia (J) : 0.0049 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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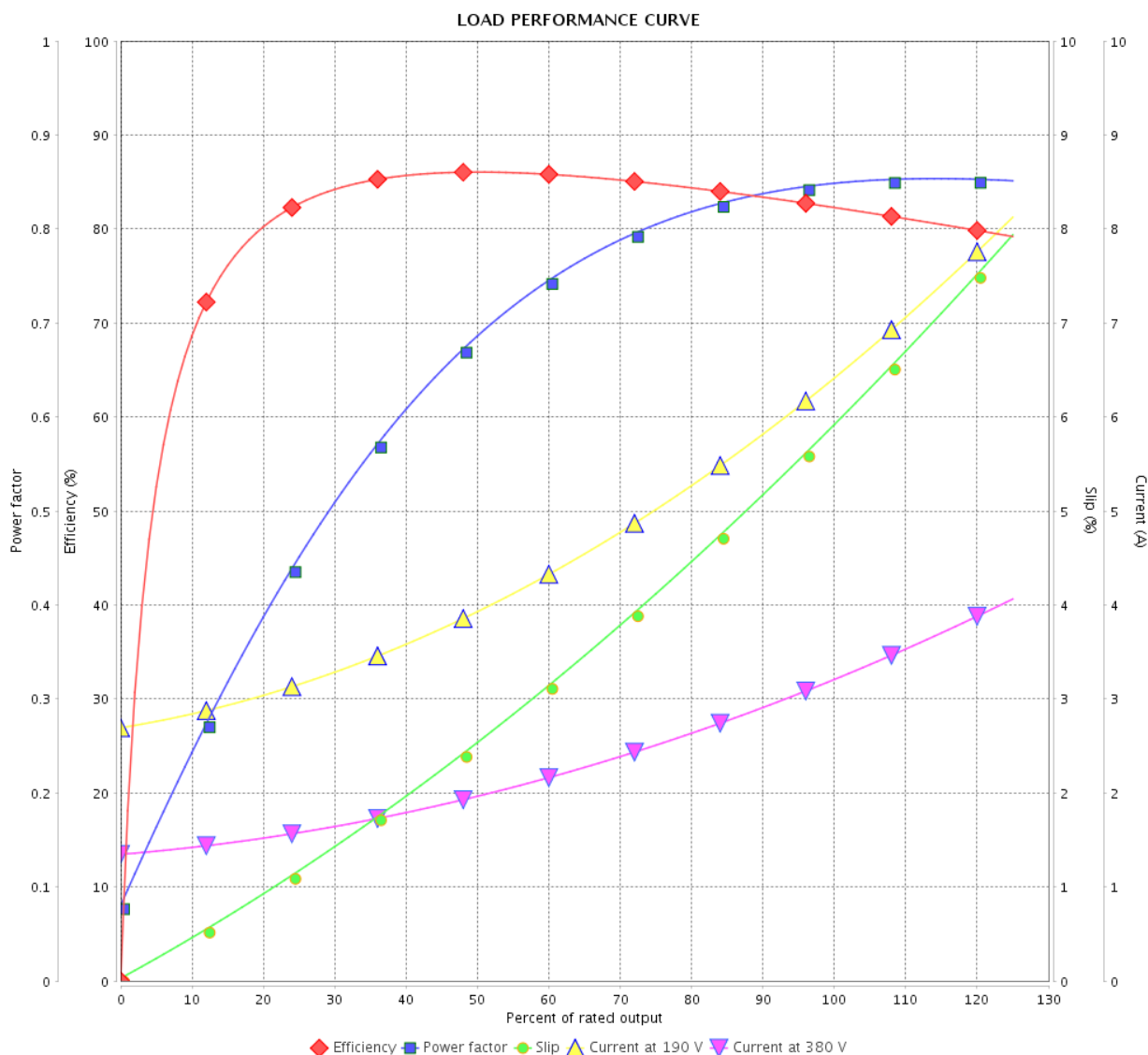
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 12676963



Performance : 190/380 V 50 Hz 4P

Rated current : 6.52/3.26 A
LRC : 5.6
Rated torque : 1.03 kgfm
Locked rotor torque : 200 %
Breakdown torque : 229 %
Rated speed : 1410 rpm

Moment of inertia (J) : 0.0049 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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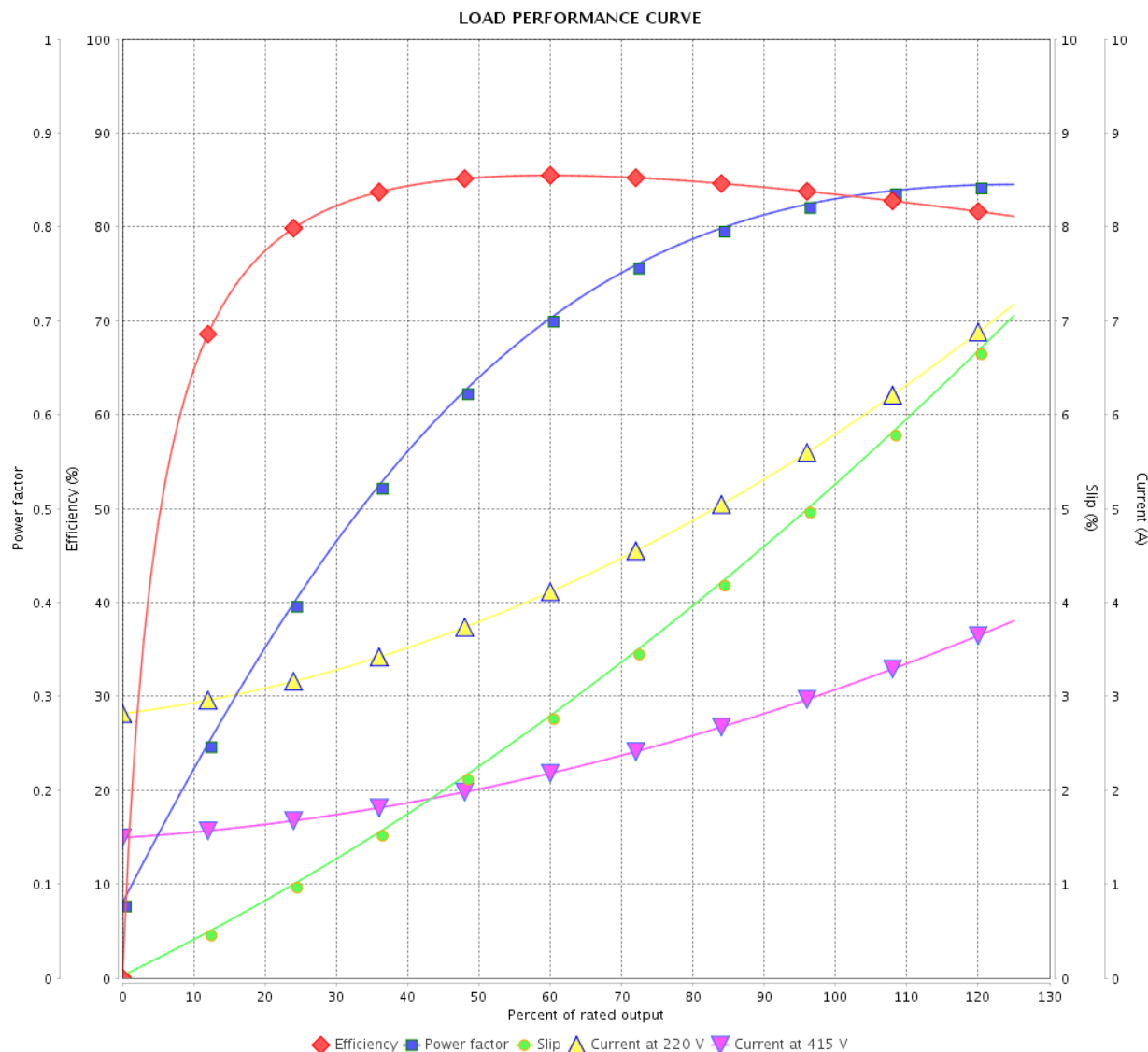
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 12676963



Performance : 220/415 V 50 Hz 4P

Rated current : 5.90/3.13 A
LRC : 6.2
Rated torque : 1.02 kgfm
Locked rotor torque : 220 %
Breakdown torque : 260 %
Rated speed : 1420 rpm

Moment of inertia (J) : 0.0049 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 | 16/05/2022 | | | |

