

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | |
|--|---------------------------------------|--|---------------------------|
| Customer | : | | |
| Product line | : NEMA Premium Efficiency Three-Phase | Product code : | 12529433 |
| Frame | : 143/5TC | 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 ² | : 19.7 kg |
| Protection degree | : IP55 | Moment of inertia (J) | : 0.0055 kgm ² |
| Design | : B | | |
| 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] | 5.44/2.72 | 6.50/3.25 | 5.89/3.12 |
| L. R. Amperes [A] | 44.6/22.3 | 39.0/19.5 | 39.4/20.9 |
| LRC [A] | 8.2x(Code K) | 6.0x(Code H) | 6.7x(Code J) |
| No load current [A] | 2.80/1.40 | 2.75/1.37 | 2.87/1.52 |
| Rated speed [RPM] | 1745 | 1415 | 1425 |
| Slip [%] | 3.06 | 5.67 | 5.00 |
| Rated torque [kgfm] | 0.832 | 1.03 | 1.02 |
| Locked rotor torque [%] | 270 | 210 | 240 |
| Breakdown torque [%] | 300 | 240 | 270 |
| Service factor | | 1.00 | 1.00 |
| Temperature rise | 80 K | 105 K | 105 K |
| Locked rotor time | 27s (cold) 15s (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% | 86.0 | 86.0 |
| | 50% | 85.5 | 84.9 |
| | 75% | 87.5 | 85.2 |
| | 100% | 86.5 | 83.6 |
| Power Factor | 25% | 0.35 | 0.38 |
| | 50% | 0.60 | 0.64 |
| | 75% | 0.73 | 0.76 |
| | 100% | 0.80 | 0.83 |
| Bearing type | : <u>Drive end</u> 6205 ZZ | <u>Non drive end</u> 6203 ZZ | Foundation loads |
| Sealing | : V'Ring | Without Bearing Seal | Max. traction : 68 kgf |
| Lubrication interval | : - | - | Max. compression : 88 kgf |
| Lubricant amount | : - | - | |
| Lubricant type | : Mobil Polyrex EM | | |
| Notes USABLE @208V 6.02A SF 1.00 SFA 6.02A | | | |
| 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 | | | |
| Date | 13/05/2022 | | |
| | | Page | Revision |
| | | 1 / 4 | |

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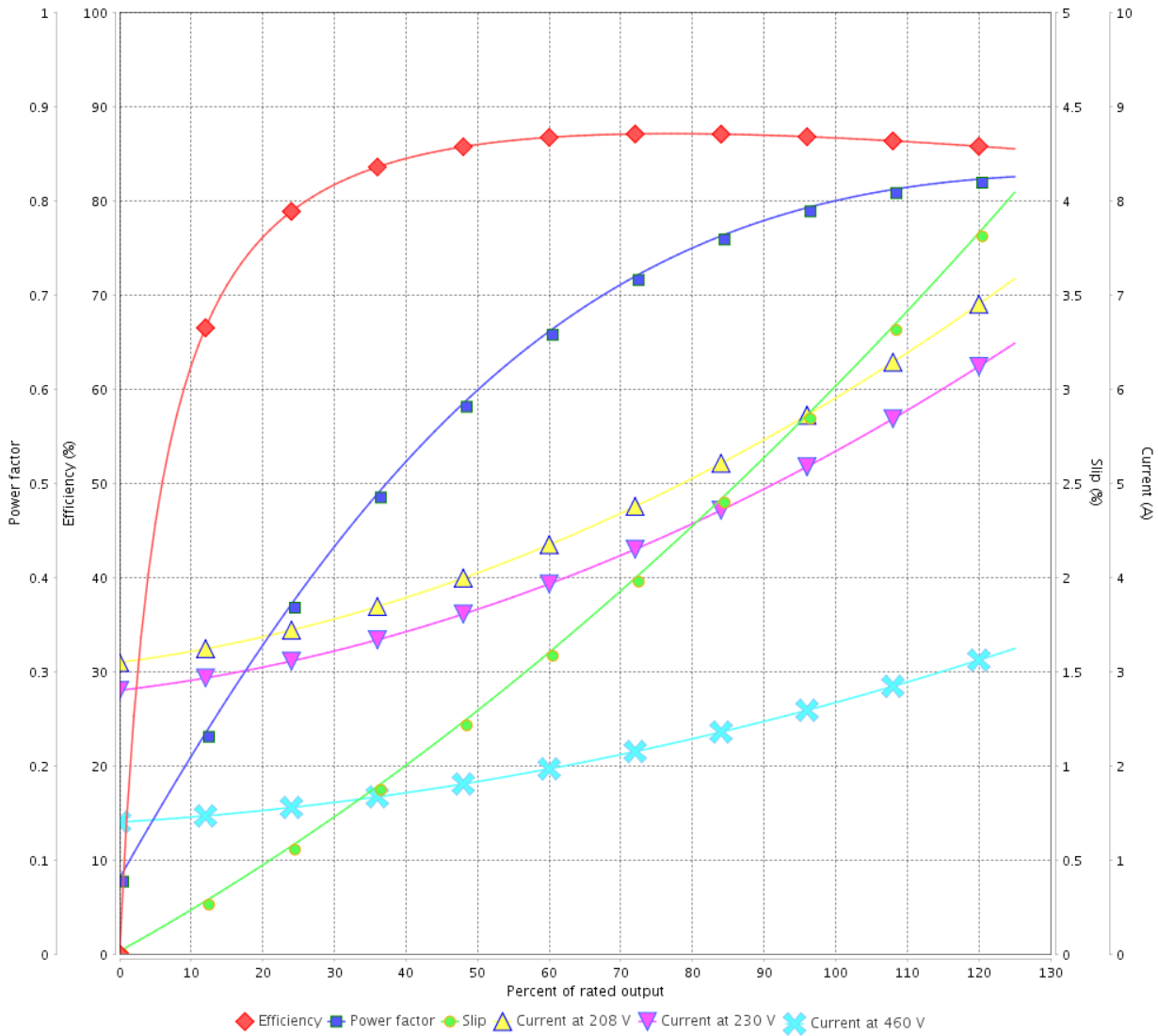
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase Product code : 12529433

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 5.44/2.72 A
 LRC : 8.2
 Rated torque : 0.832 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 300 %
 Rated speed : 1745 rpm

Moment of inertia (J) : 0.0055 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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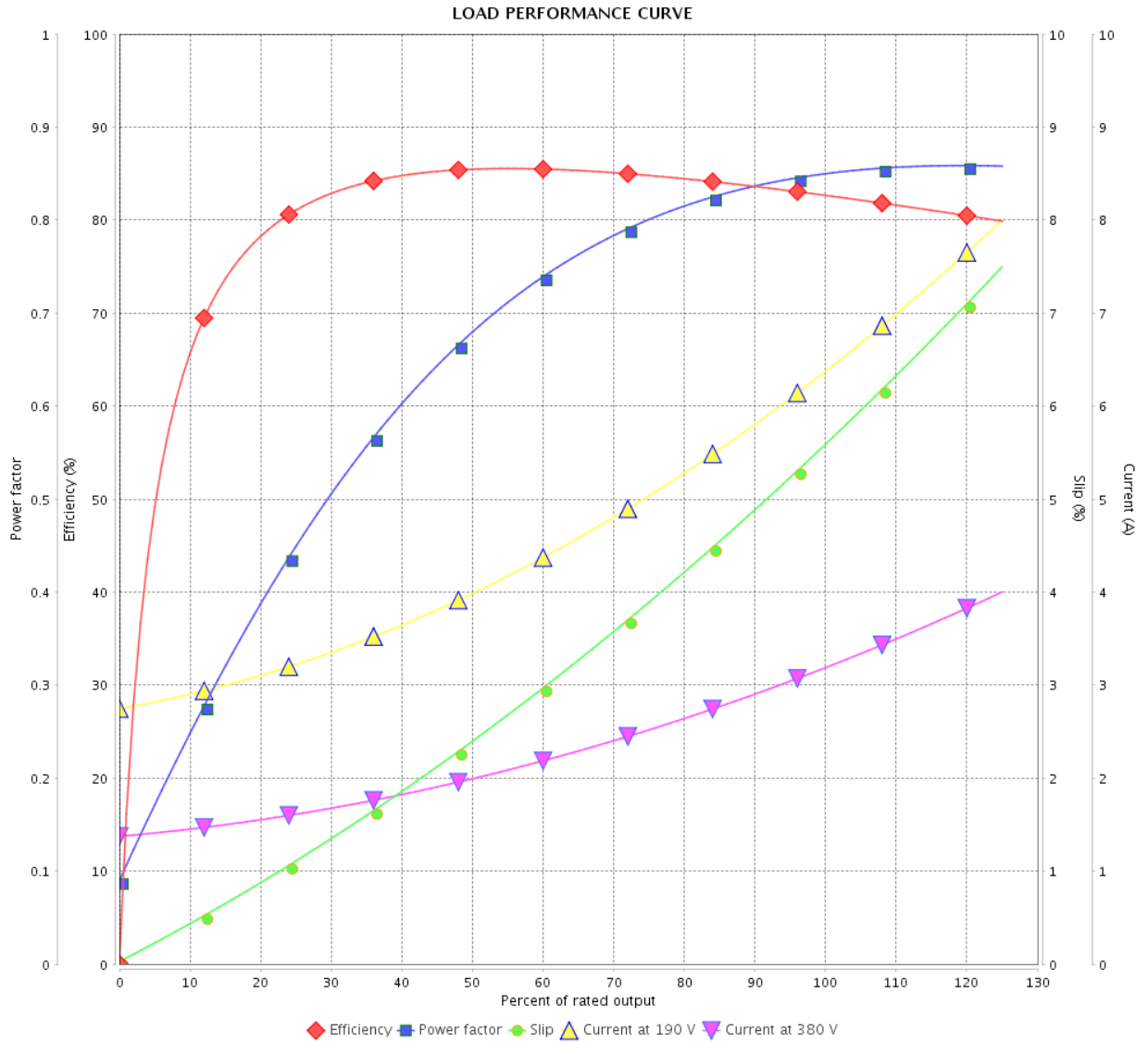
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : NEMA Premium Efficiency Three-Phase Product code : 12529433



Performance : 190/380 V 50 Hz 4P

Rated current : 6.50/3.25 A
 LRC : 6.0
 Rated torque : 1.03 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 240 %
 Rated speed : 1415 rpm

Moment of inertia (J) : 0.0055 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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| Date | | 13/05/2022 | | |

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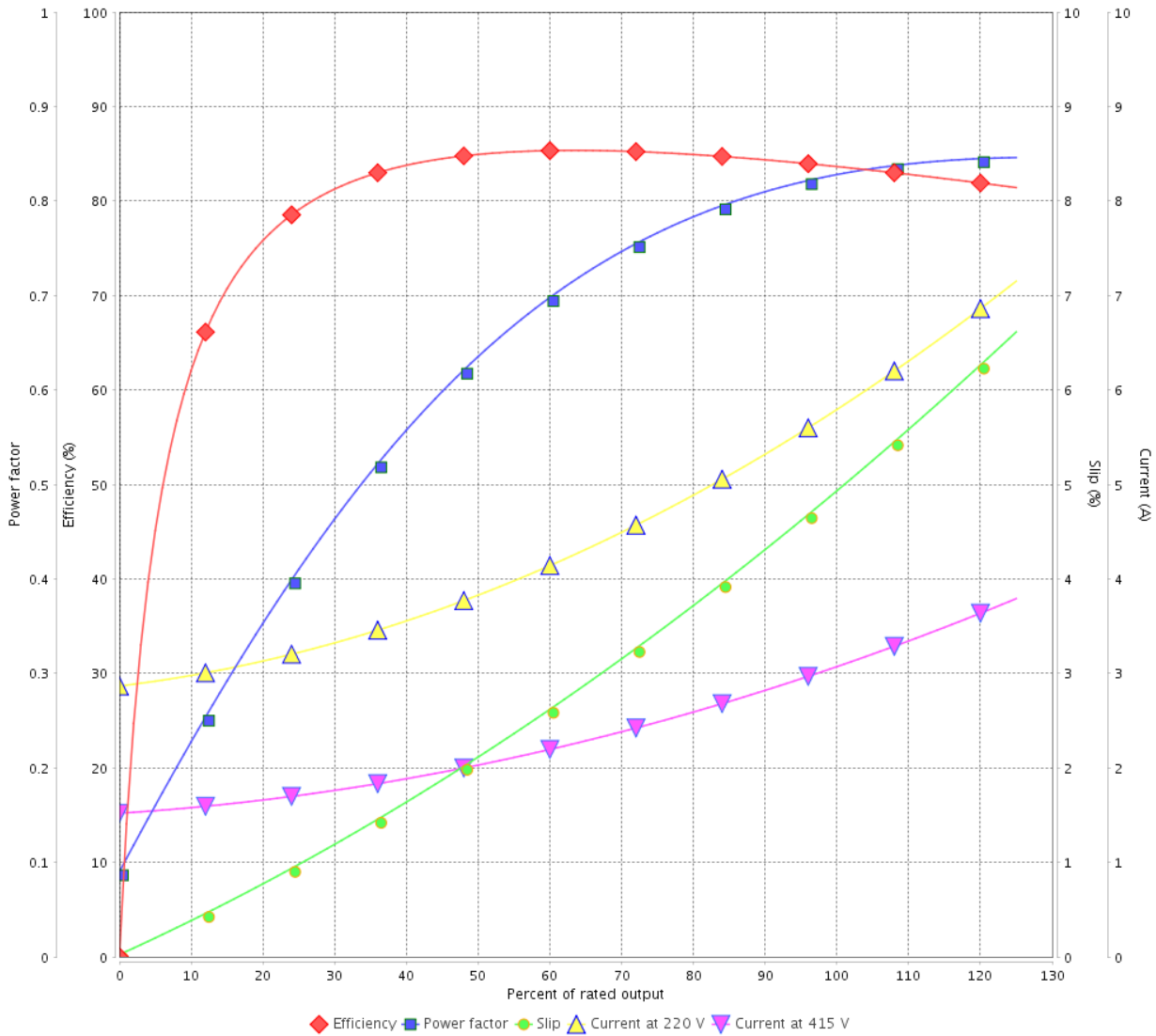
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase Product code : 12529433

LOAD PERFORMANCE CURVE



Performance : 220/415 V 50 Hz 4P

Rated current : 5.89/3.12 A
 LRC : 6.7
 Rated torque : 1.02 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 270 %
 Rated speed : 1425 rpm

Moment of inertia (J) : 0.0055 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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