

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



| | | | |
|--|---------------------------------------|--|---------------------------|
| Customer | : | | |
| Product line | : NEMA Premium Efficiency Three-Phase | Product code : | 12675361 |
| 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 ³ | : 17.5 kg |
| Protection degree | : IP55 | Moment of inertia (J) | : 0.0046 kgm ² |
| Design | : B | | |
| Output [HP] | 1.5 | 1.5 | 1.5 |
| Poles | 4 | 4 | 4 |
| Frequency [Hz] | 60 | 50 | 50 |
| Rated voltage [V] | 230/460 | 190-220/380 | 415 |
| Rated current [A] | 4.04/2.02 | 4.82-4.16/2.41 | 2.27 |
| L. R. Amperes [A] | 33.1/16.6 | 29.4-25.4/14.7 | 16.3 |
| LRC [A] | 8.2x(Code K) | 6.1x(Code H) | 7.2x(Code J) |
| No load current [A] | 2.17/1.08 | 2.13-1.84/1.07 | 1.26 |
| Rated speed [RPM] | 1750 | 1420 | 1435 |
| Slip [%] | 2.78 | 5.33 | 4.33 |
| Rated torque [kgfm] | 0.622 | 0.767 | 0.759 |
| Locked rotor torque [%] | 270 | 210 | 260 |
| Breakdown torque [%] | 300 | 250 | 300 |
| Service factor | | 1.15 | 1.15 |
| Temperature rise | 80 K | 105 K | 80 K |
| Locked rotor time | 37s (cold) 21s (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% | | |
| | 50% | 85.5 | 83.5 |
| | 75% | 86.5 | 84.9 |
| | 100% | 86.5 | 84.1 |
| Power Factor | 25% | | |
| | 50% | 0.59 | 0.59 |
| | 75% | 0.72 | 0.72 |
| | 100% | 0.79 | 0.80 |
| 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 : 56 kgf |
| Lubrication interval | : - | - | Max. compression : 73 kgf |
| Lubricant amount | : - | - | |
| Lubricant type | : Mobil Polyrex EM | | |
| Notes USABLE @208V 4.47A SF 1.00 SFA 4.47A | | | |
| 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 |
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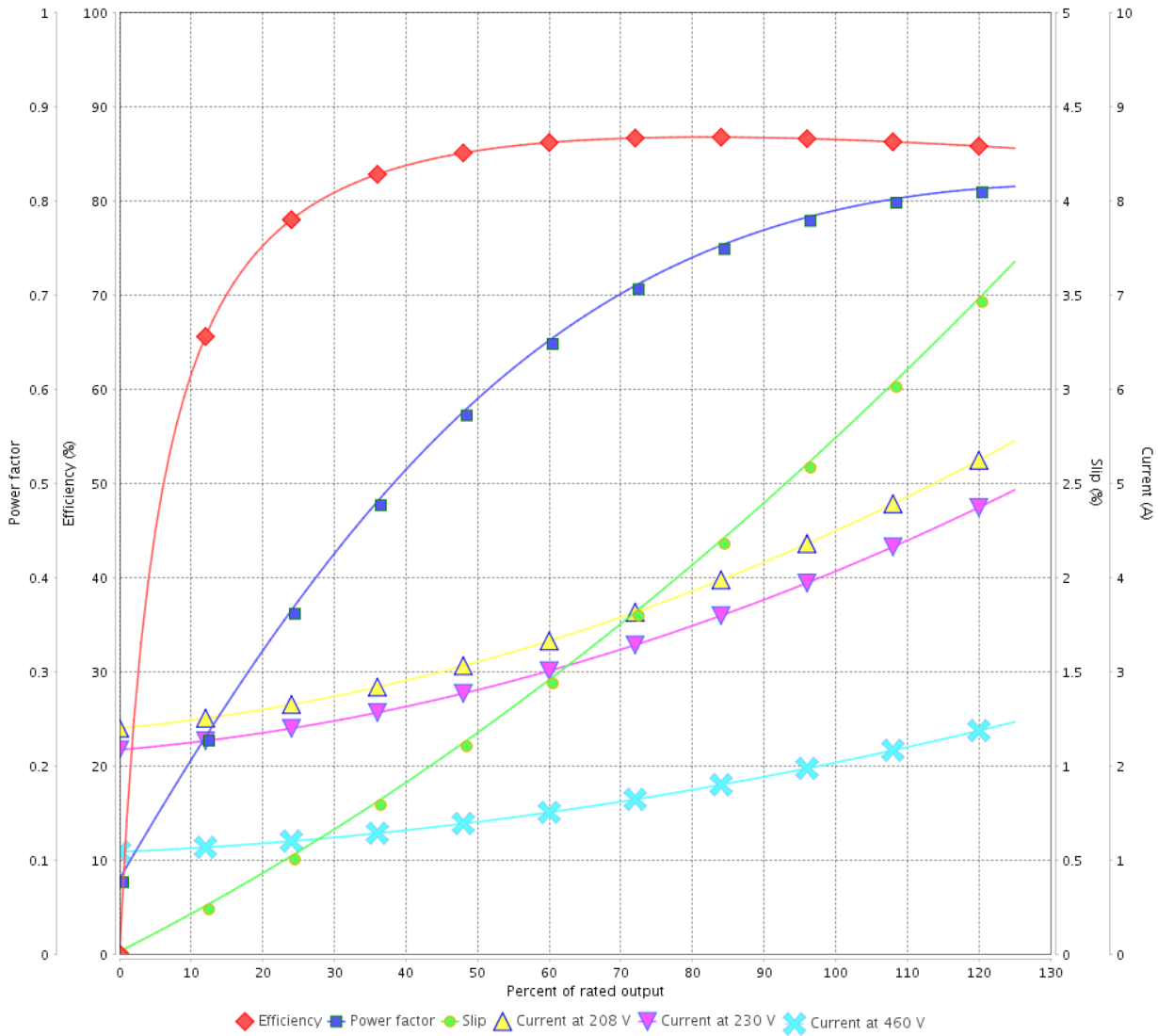
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase Product code : 12675361

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Performance : 230/460 V 60 Hz 4P

Rated current : 4.04/2.02 A
 LRC : 8.2
 Rated torque : 0.622 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 300 %
 Rated speed : 1750 rpm

Moment of inertia (J) : 0.0046 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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| Date | 13/05/2022 | | | |

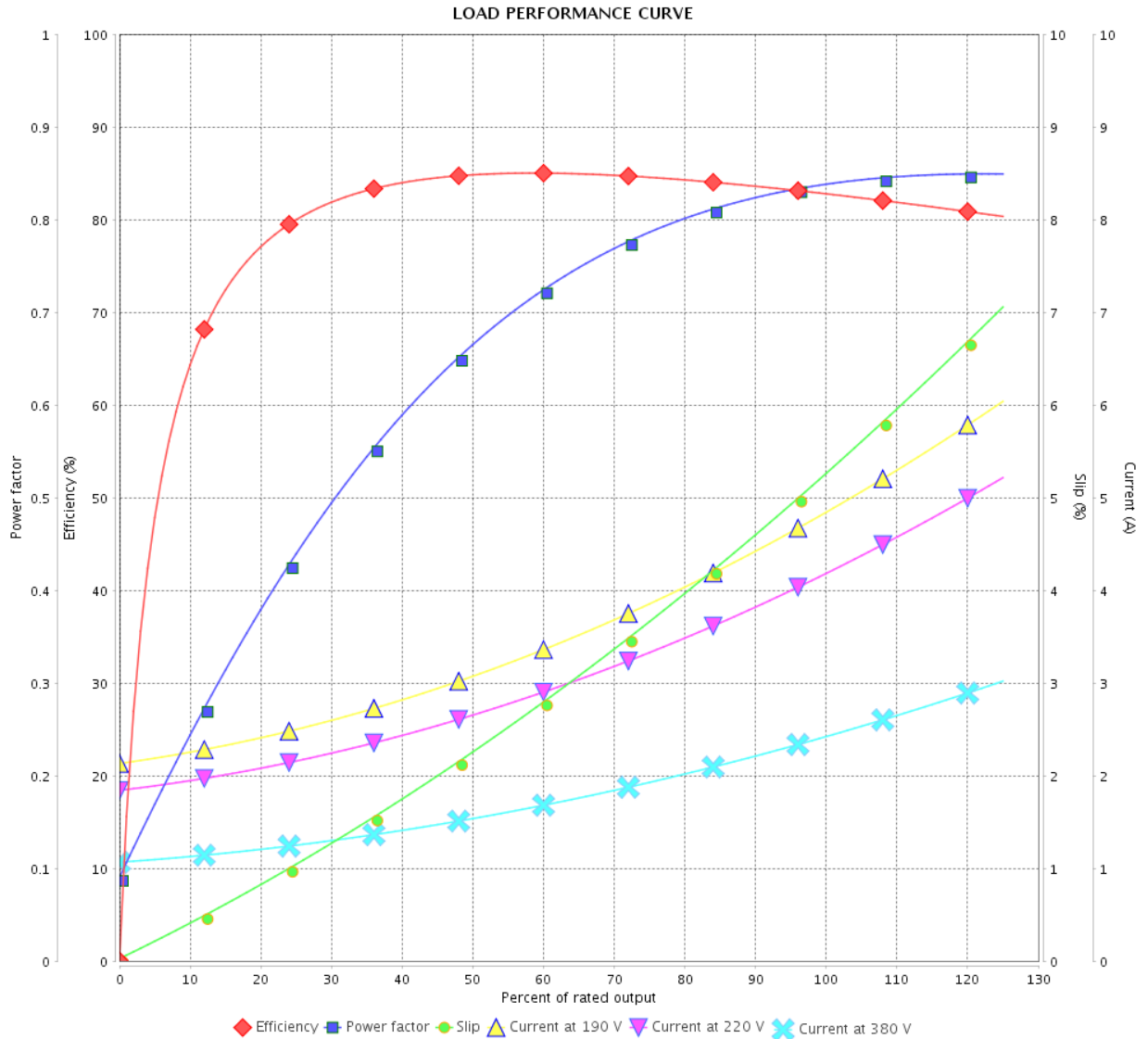
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : NEMA Premium Efficiency Three-Phase Product code : 12675361



Performance : 190-220/380 V 50 Hz 4P

Rated current : 4.82-4.16/2.41 A
 LRC : 6.1
 Rated torque : 0.767 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 250 %
 Rated speed : 1420 rpm

Moment of inertia (J) : 0.0046 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 105 K
 Design : B

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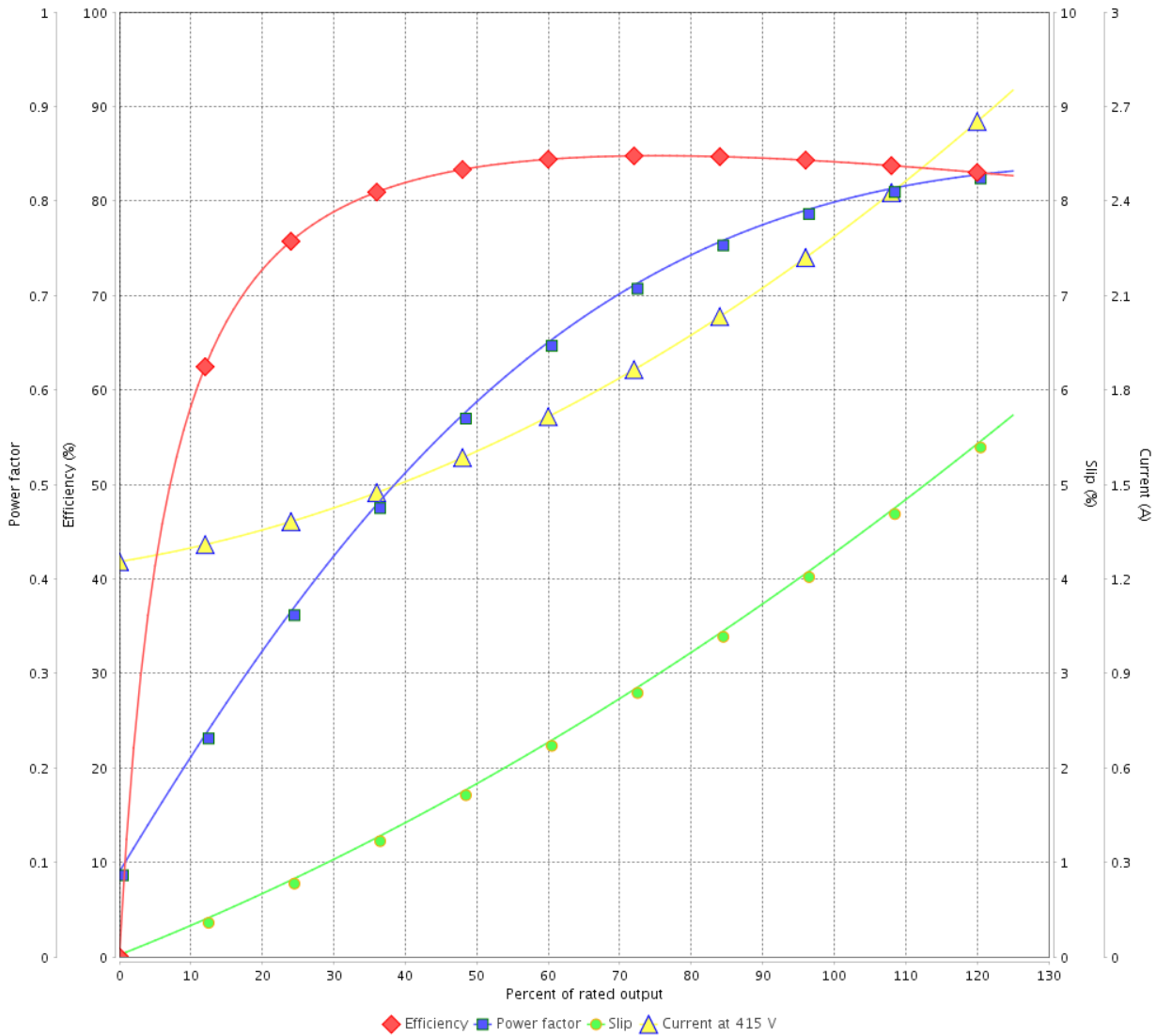
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : NEMA Premium Efficiency Three-Phase Product code : 12675361

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Performance : 415 V 50 Hz 4P

| | | | |
|---------------------|--------------|-----------------------|---------------------------|
| Rated current | : 2.27 A | Moment of inertia (J) | : 0.0046 kgm ² |
| LRC | : 7.2 | Duty cycle | : Cont.(S1) |
| Rated torque | : 0.759 kgfm | Insulation class | : F |
| Locked rotor torque | : 260 % | Service factor | : 1.15 |
| Breakdown torque | : 300 % | Temperature rise | : 80 K |
| Rated speed | : 1435 rpm | Design | : B |

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| Date | 13/05/2022 | | | |