

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | |
|--|----------------------------|---------------------------------------|--|---------------------|----------|
| Customer : | | | | | |
| Product line | | : General High Efficiency Three-Phase | Product code : 11996047 | | |
| Frame | : 184TC | Cooling method | : IC01 - ODP | | |
| 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 | : 31.6 kg | | |
| Protection degree | : IP21 | Moment of inertia (J) | : 0.0069 kgm ² | | |
| Design | : B | | | | |
| Output [HP] | 7.5 | 7.5 | 7.5 | 7.5 | |
| Poles | 2 | 2 | 2 | 2 | |
| Frequency [Hz] | 60 | 50 | 50 | 50 | |
| Rated voltage [V] | 230/460 | 380 | 400 | 415 | |
| Rated current [A] | 17.9/8.97 | 11.1 | 10.6 | 10.3 | |
| L. R. Amperes [A] | 126/62.8 | 59.9 | 63.6 | 65.9 | |
| LRC [A] | 7.0x(Code H) | 5.4x(Code F) | 6.0x(Code G) | 6.4x(Code H) | |
| No load current [A] | 6.20/3.10 | 3.00 | 3.50 | 4.00 | |
| Rated speed [RPM] | 3485 | 2835 | 2855 | 2870 | |
| Slip [%] | 3.19 | 5.50 | 4.83 | 4.33 | |
| Rated torque [kgfm] | 1.56 | 1.92 | 1.91 | 1.90 | |
| Locked rotor torque [%] | 220 | 150 | 180 | 190 | |
| Breakdown torque [%] | 300 | 210 | 229 | 250 | |
| Service factor | 1.15 | 1.00 | 1.00 | 1.00 | |
| Temperature rise | 105 K | 105 K | 105 K | 105 K | |
| Locked rotor time | 23s (cold) 13s (hot) | 21s (cold) 12s (hot) | 18s (cold) 10s (hot) | 14s (cold) 8s (hot) | |
| Noise level ² | 65.0 dB(A) | | | | |
| Efficiency (%) | 25% | | | | |
| | 50% | 86.5 | 85.5 | 85.5 | |
| | 75% | 87.5 | 85.5 | 86.5 | |
| | 100% | 87.5 | 84.0 | 85.5 | |
| Power Factor | 25% | | | | |
| | 50% | 0.75 | 0.78 | 0.74 | |
| | 75% | 0.84 | 0.87 | 0.85 | |
| | 100% | 0.88 | 0.90 | 0.89 | |
| Bearing type | : <u>Drive end</u> 6206 ZZ | <u>Non drive end</u> 6205 ZZ | Foundation loads | | |
| Sealing | : Without | Without | Max. traction | : 83 kgf | |
| | Bearing Seal | Bearing Seal | Max. compression | : 115 kgf | |
| Lubrication interval | : - | - | | | |
| Lubricant amount | : - | - | | | |
| Lubricant type | : Mobil Polyrex EM | | | | |
| Notes USABLE @208V 19.8A SF 1.15 SFA 22.8A | | | | | |
| 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 | | | | | |
| Checked by | | | | Page | Revision |
| Date | 22/11/2024 | | | 1 / 5 | |

LOAD PERFORMANCE CURVE

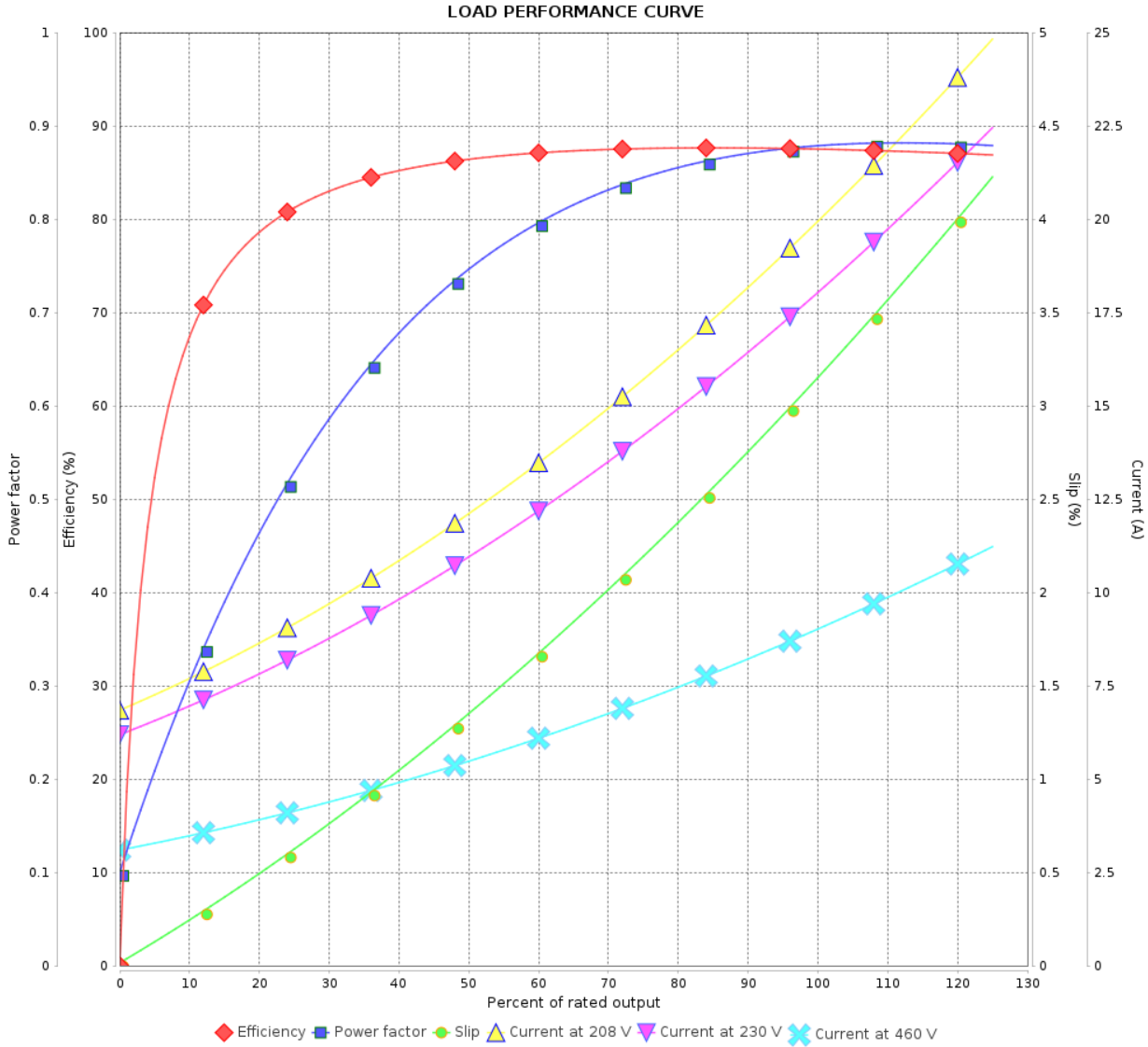
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : General High Efficiency Three-Phase

Product code : 11996047



Performance : 230/460 V 60 Hz 2P

Rated current : 17.9/8.97 A
 LRC : 7.0
 Rated torque : 1.56 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 300 %
 Rated speed : 3485 rpm

Moment of inertia (J) : 0.0069 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 105 K
 Design : B

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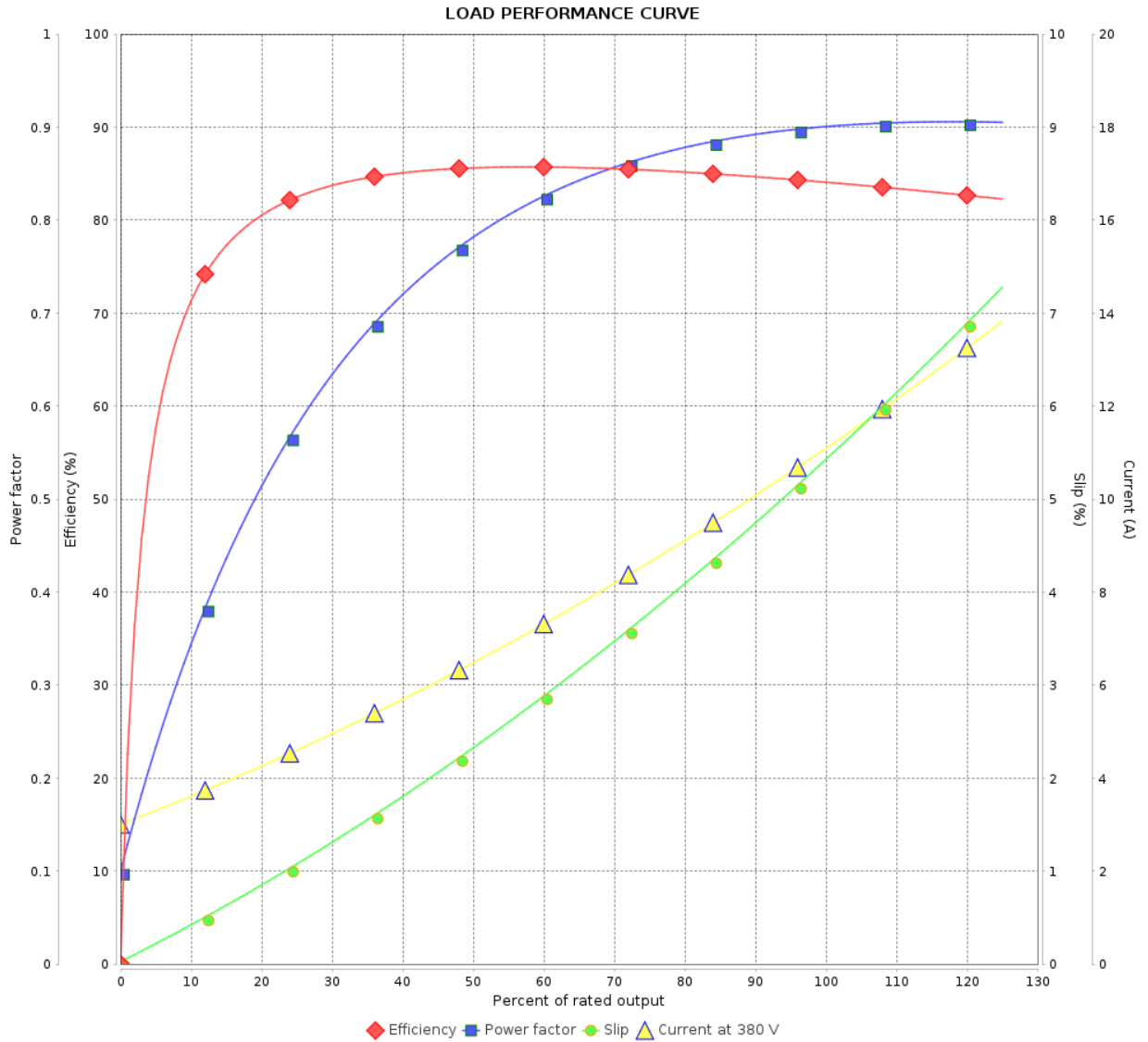
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : General High Efficiency Three-Phase

Product code : 11996047



Performance : 380 V 50 Hz 2P

Rated current : 11.1 A
 LRC : 5.4
 Rated torque : 1.92 kgfm
 Locked rotor torque : 150 %
 Breakdown torque : 210 %
 Rated speed : 2835 rpm

Moment of inertia (J) : 0.0069 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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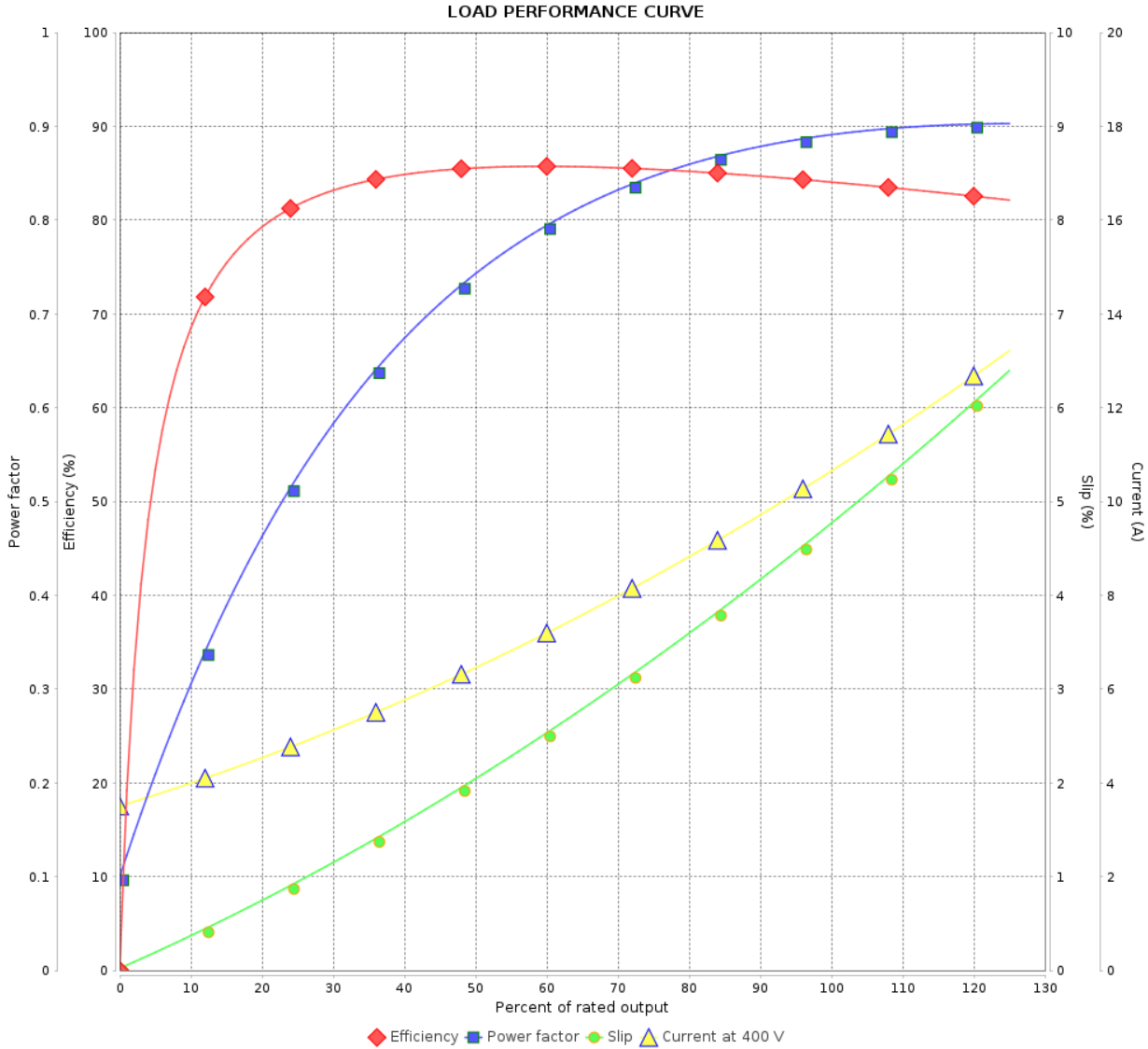
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : General High Efficiency Three-Phase

Product code : 11996047



Performance : 400 V 50 Hz 2P

Rated current : 10.6 A
 LRC : 6.0
 Rated torque : 1.91 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 229 %
 Rated speed : 2855 rpm

Moment of inertia (J) : 0.0069 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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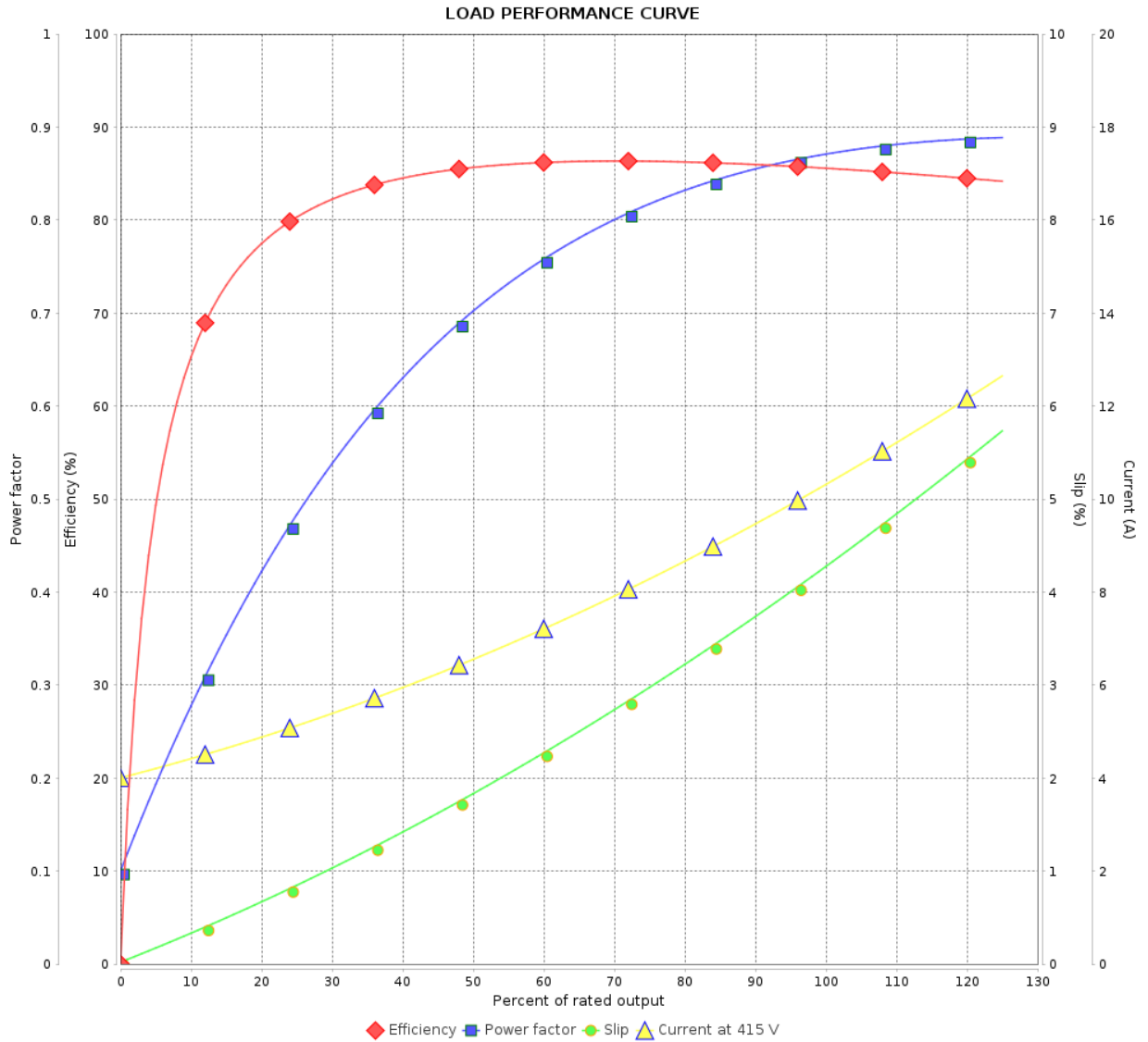
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : General High Efficiency Three-Phase

Product code : 11996047



Performance : 415 V 50 Hz 2P IE1

Rated current : 10.3 A
 LRC : 6.4
 Rated torque : 1.90 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 250 %
 Rated speed : 2870 rpm

Moment of inertia (J) : 0.0069 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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