

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



| | | | | | |
|--|-----------------------|-----------------------------|--|---------|----------|
| Customer : | | | | | |
| Product line : Multimounting IE3 Three-Phase | | Product code : 13983263 | | | |
| Frame | : 132S | Cooling method | : IC411 - TEFC | | |
| Insulation class | : F | Mounting | : B3L(E) | | |
| Duty cycle | : 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 | : 62.7 kg | | |
| Protection degree | : IP55 | Moment of inertia (J) | : 0.0252 kgm ² | | |
| Design | : N | | | | |
| Output [HP] | 10 | 10 | 10 | | |
| Poles | 2 | 2 | 2 | | |
| Frequency [Hz] | 50 | 50 | 60 | | |
| Rated voltage [V] | 380 | 415 | 230/460 | | |
| Rated current [A] | 14.3 | 13.8 | 24.6/12.3 | | |
| L. R. Amperes [A] | 122 | 126 | 239/119 | | |
| LRC [A] | 8.5 | 9.1 | 9.7 | | |
| No load current [A] | 5.00 | 6.00 | 10.4/5.20 | | |
| Rated speed [RPM] | 2935 | 2945 | 3550 | | |
| Slip [%] | 2.17 | 1.83 | 1.39 | | |
| Rated torque [kgfm] | 2.47 | 2.46 | 2.04 | | |
| Locked rotor torque [%] | 220 | 270 | 300 | | |
| Breakdown torque [%] | 300 | 370 | 400 | | |
| Service factor | 1.25 | 1.25 | 1.25 | | |
| Temperature rise | 80 K | 80 K | 80 K | | |
| Locked rotor time | 21s (cold) 0s (hot) | 18s (cold) 0s (hot) | 23s (cold) 0s (hot) | | |
| Noise level ² | 67.0 dB(A) | 67.0 dB(A) | 67.0 dB(A) | | |
| Efficiency (%) | 25% | | | | |
| | 50% | 89.6 | 88.6 | 86.5 | |
| | 75% | 90.6 | 90.3 | 89.5 | |
| | 100% | 90.6 | 90.8 | 90.2 | |
| Power Factor | 25% | | | | |
| | 50% | 0.74 | 0.65 | 0.68 | |
| | 75% | 0.84 | 0.77 | 0.79 | |
| | 100% | 0.88 | 0.83 | 0.85 | |
| Losses at normative operating points (speed;torque), in percentage of rated output power | | | | | |
| Losses (%) | P1 (0,9;1,0) | 9.9 | 12.1 | 10.4 | |
| | P2 (0,5;1,0) | 7.4 | 8.6 | 7.8 | |
| | P3 (0,25;1,0) | 6.6 | 7.1 | 6.9 | |
| | P4 (0,9;0,5) | 6.0 | 6.5 | 6.3 | |
| | P5 (0,5;0,5) | 3.6 | 3.9 | 3.8 | |
| | P6 (0,5;0,25) | 2.8 | 2.8 | 2.9 | |
| | P7 (0,25;0,25) | 1.7 | 1.7 | 1.8 | |
| Bearing type | : Drive end : 6308 ZZ | Non drive end : 6207 ZZ | Foundation loads | | |
| Sealing | : V'Ring | V'Ring | Max. traction : 120 kgf | | |
| Lubrication interval | : - | - | Max. compression : 182 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. (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 | | | | | |
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Notes

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LOAD PERFORMANCE CURVE

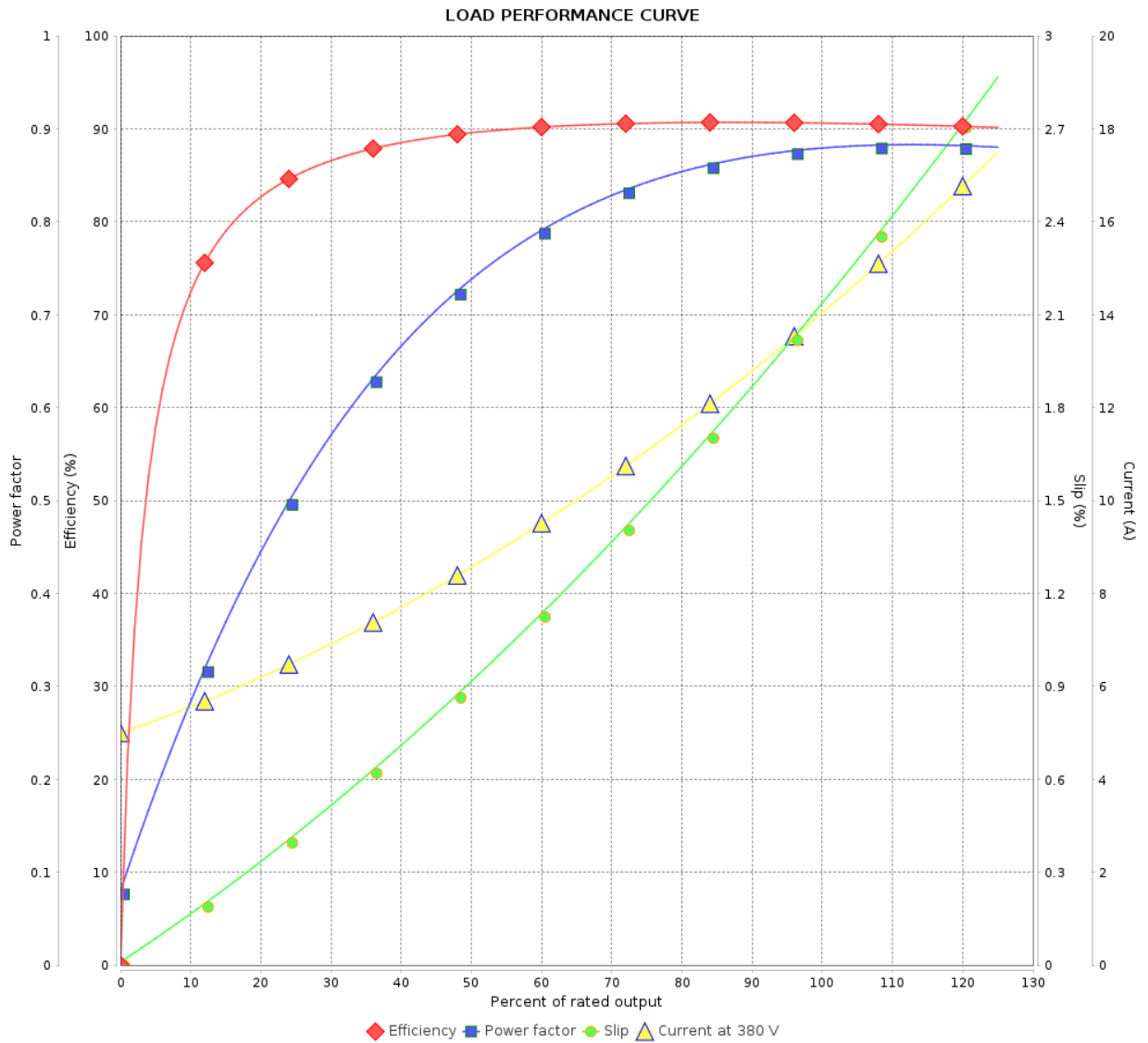
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : Multimounting IE3 Three-Phase

Product code : 13983263



Performance : 380 V 50 Hz 2P

Rated current : 14.3 A
 LRC : 8.5
 Rated torque : 2.47 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 300 %
 Rated speed : 2935 rpm

Moment of inertia (J) : 0.0252 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : N

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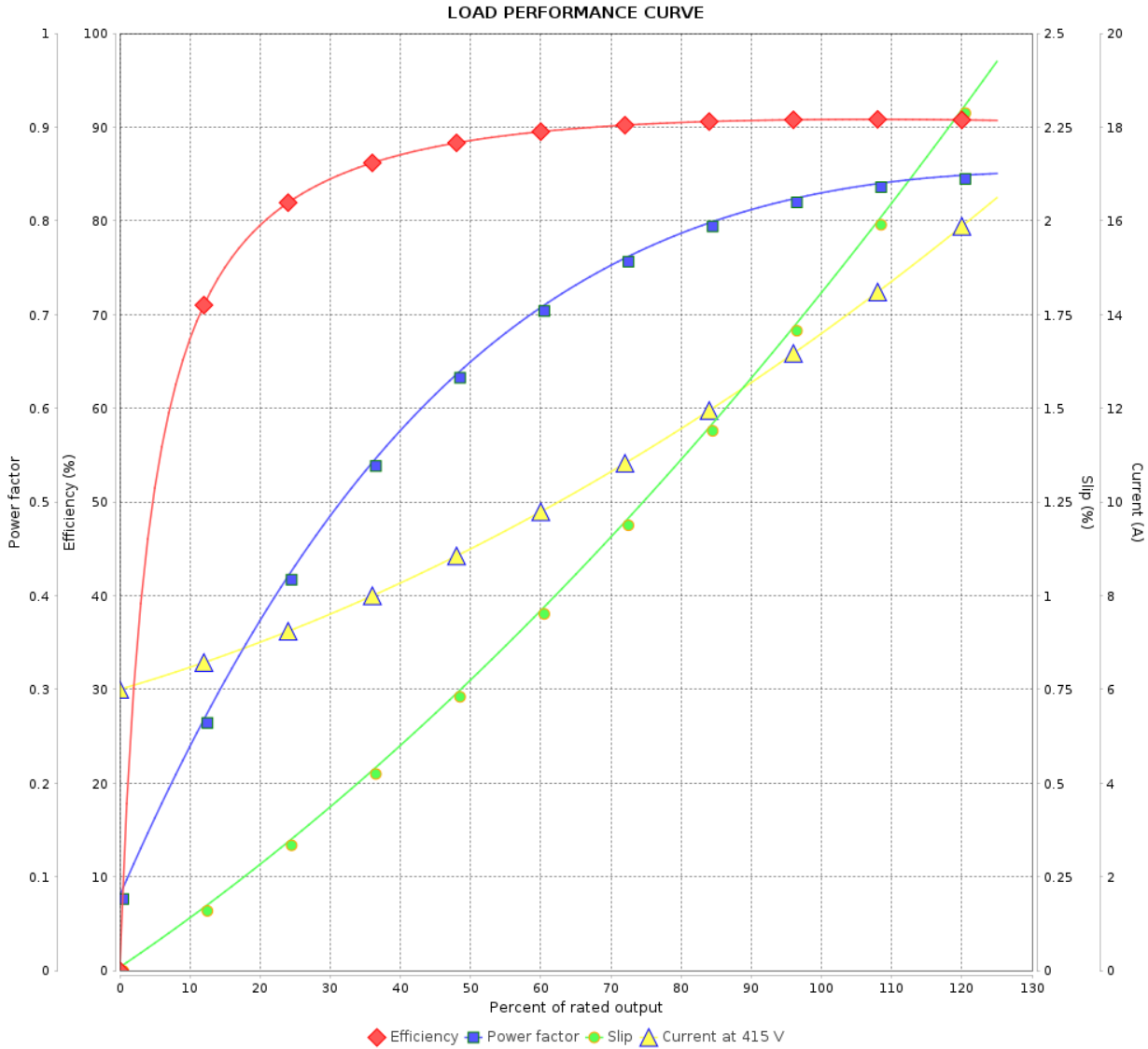
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Customer :

Product line : Multimounting IE3 Three-Phase

Product code : 13983263



Performance : 415 V 50 Hz 2P

Rated current : 13.8 A
 LRC : 9.1
 Rated torque : 2.46 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 370 %
 Rated speed : 2945 rpm

Moment of inertia (J) : 0.0252 kgm²
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : N

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