

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



| | | | | | |
|---|---|-----------------------------|--|----------------------|----------|
| Customer : | | | | | |
| Product line | : W22 NEMA Premium Efficiency Three-Phase | Product code : | 12717200 | | |
| Frame | : 182/4TC | 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 | : 41.6 kg | | |
| Protection degree | : IP55 | Moment of inertia (J) | : 0.0143 kgm ² | | |
| Design | : B | | | | |
| Output [HP] | 3 | 3 | 3 | 3 | |
| Poles | 4 | 4 | 4 | 4 | |
| Frequency [Hz] | 60 | 50 | 50 | 50 | |
| Rated voltage [V] | 230/460 | 380 | 400 | 415 | |
| Rated current [A] | 7.82/3.91 | 4.78 | 4.54 | 4.43 | |
| L. R. Amperes [A] | 63.3/31.7 | 30.1 | 32.2 | 33.7 | |
| LRC [A] | 8.1x(Code K) | 6.3x(Code H) | 7.1x(Code J) | 7.6x(Code K) | |
| No load current [A] | 4.00/2.00 | 2.00 | 2.10 | 2.25 | |
| Rated speed [RPM] | 1760 | 1445 | 1450 | 1455 | |
| Slip [%] | 2.22 | 3.67 | 3.33 | 3.00 | |
| Rated torque [kgfm] | 1.24 | 1.51 | 1.50 | 1.50 | |
| Locked rotor torque [%] | 220 | 220 | 220 | 240 | |
| Breakdown torque [%] | 330 | 250 | 290 | 320 | |
| Service factor | 1.25 | 1.25 | 1.25 | 1.25 | |
| Temperature rise | 80 K | 80 K | 80 K | 80 K | |
| Locked rotor time | 41s (cold) 23s (hot) | 32s (cold) 18s (hot) | 32s (cold) 18s (hot) | 32s (cold) 18s (hot) | |
| Noise level ² | 56.0 dB(A) | 56.0 dB(A) | 56.0 dB(A) | 56.0 dB(A) | |
| Efficiency (%) | 25% | | | | |
| | 50% | 87.5 | 87.5 | 87.5 | |
| | 75% | 88.5 | 87.5 | 87.5 | |
| | 100% | 89.5 | 87.5 | 87.5 | |
| Power Factor | 25% | | | | |
| | 50% | 0.61 | 0.68 | 0.64 | |
| | 75% | 0.71 | 0.77 | 0.75 | |
| | 100% | 0.79 | 0.80 | 0.80 | |
| Losses at normative operating points (speed;torque), in percentage of rated output power | | | | | |
| Losses (%) | P1 (0,9;1,0) | 11.0 | 13.4 | 13.4 | 13.4 |
| | P2 (0,5;1,0) | 8.9 | 10.8 | 10.8 | 10.8 |
| | P3 (0,25;1,0) | 8.8 | 10.7 | 10.7 | 10.7 |
| | P4 (0,9;0,5) | 6.1 | 7.4 | 7.4 | 7.4 |
| | P5 (0,5;0,5) | 4.0 | 4.9 | 4.9 | 4.9 |
| | P6 (0,5;0,25) | 3.0 | 3.6 | 3.6 | 3.6 |
| | P7 (0,25;0,25) | 2.1 | 2.6 | 2.6 | 2.6 |
| Bearing type | : Drive end : 6207 ZZ | Non drive end : 6206 ZZ | Foundation loads | | |
| Sealing | : V'Ring | V'Ring | Max. traction | : 79 kgf | |
| Lubrication interval | : - | - | Max. compression | : 121 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. | | | 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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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Notes
USABLE @208V 8.65A SF 1.15 SFA 9.95A

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LOAD PERFORMANCE CURVE

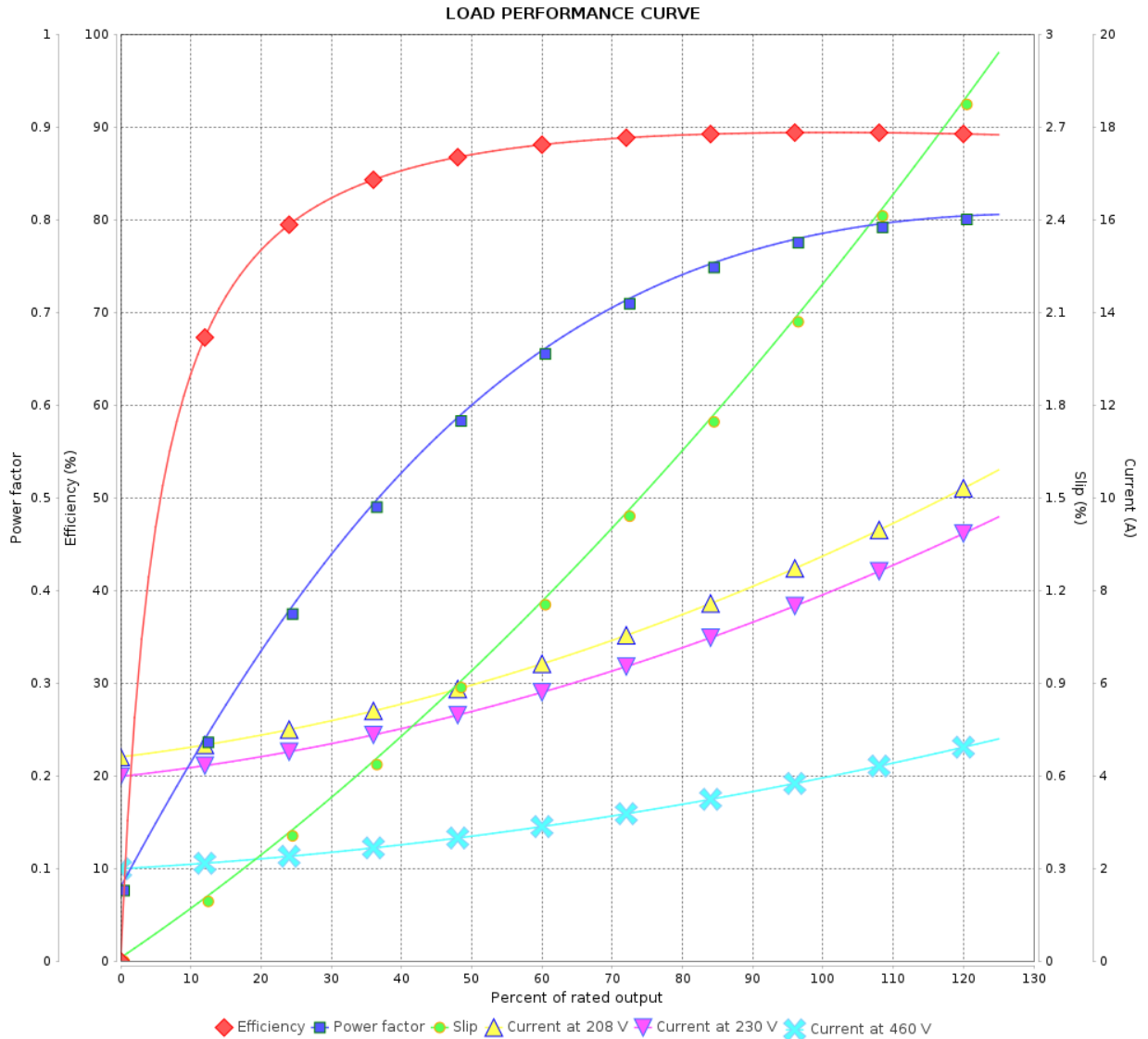
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12717200



Performance : 230/460 V 60 Hz 4P

Rated current : 7.82/3.91 A
 LRC : 8.1
 Rated torque : 1.24 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 330 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0143 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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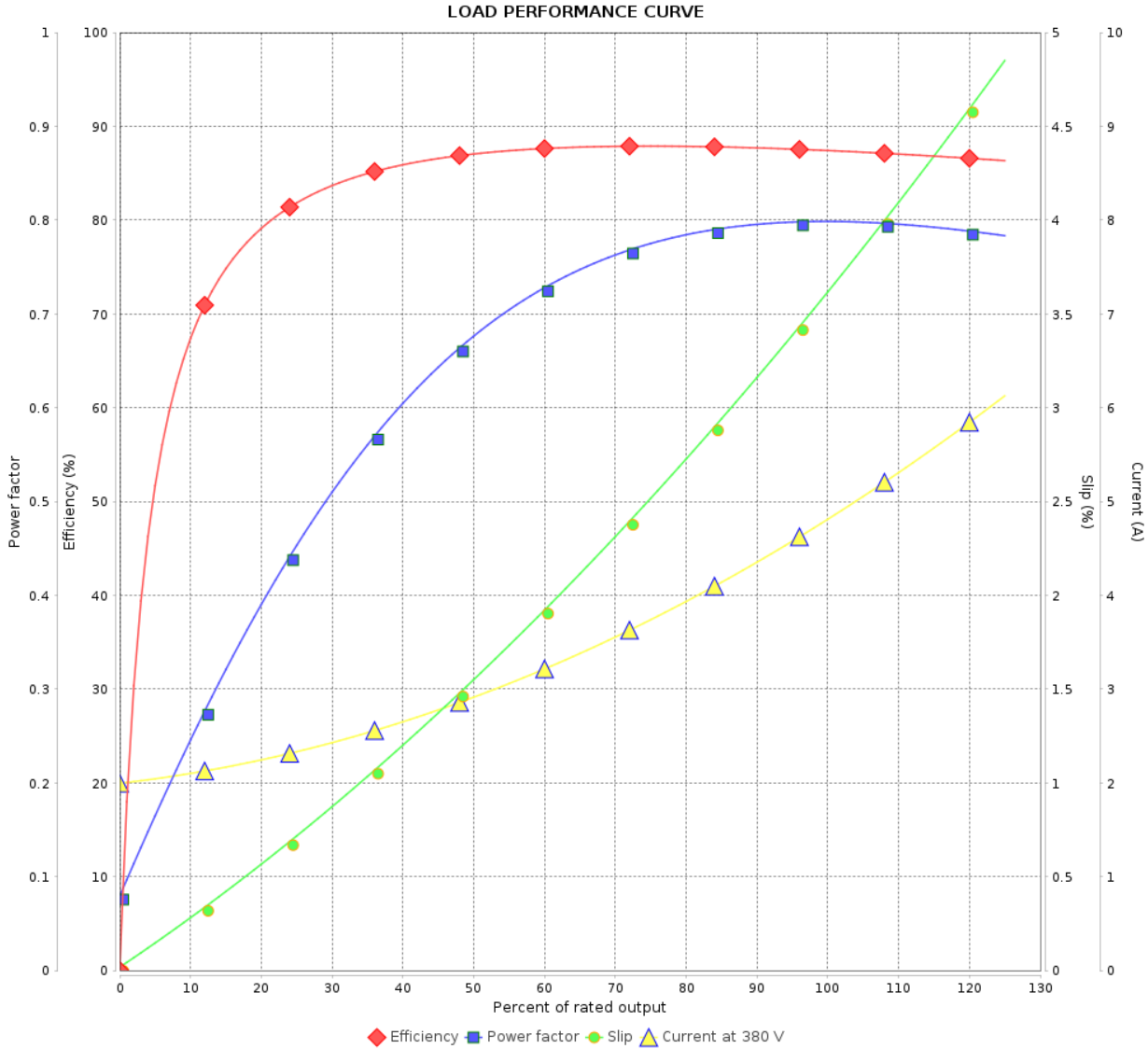
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12717200



Performance : 380 V 50 Hz 4P IE3

Rated current : 4.78 A
 LRC : 6.3
 Rated torque : 1.51 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 250 %
 Rated speed : 1445 rpm

Moment of inertia (J) : 0.0143 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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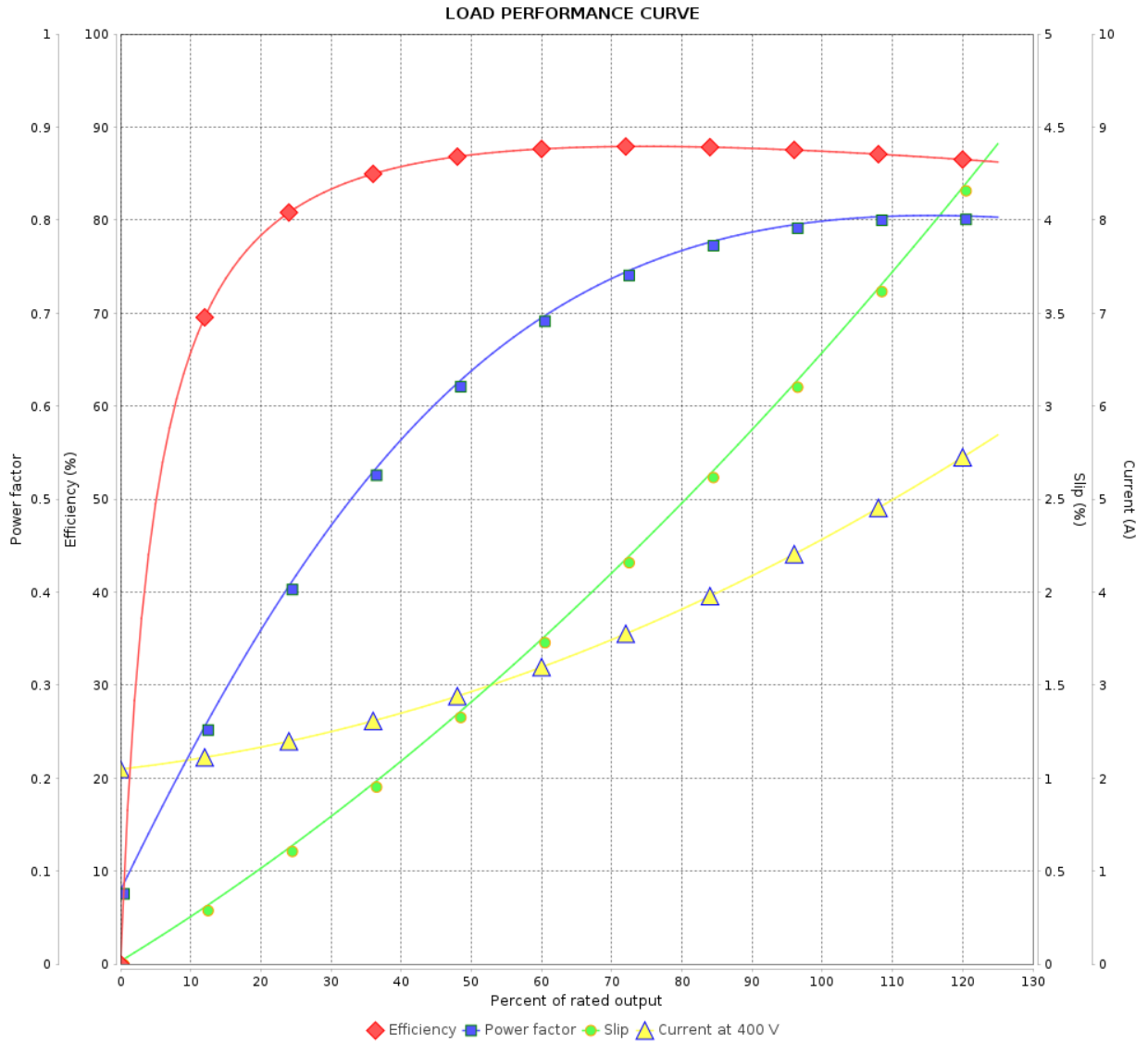
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12717200



Performance : 400 V 50 Hz 4P IE3

Rated current : 4.54 A
 LRC : 7.1
 Rated torque : 1.50 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 290 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0143 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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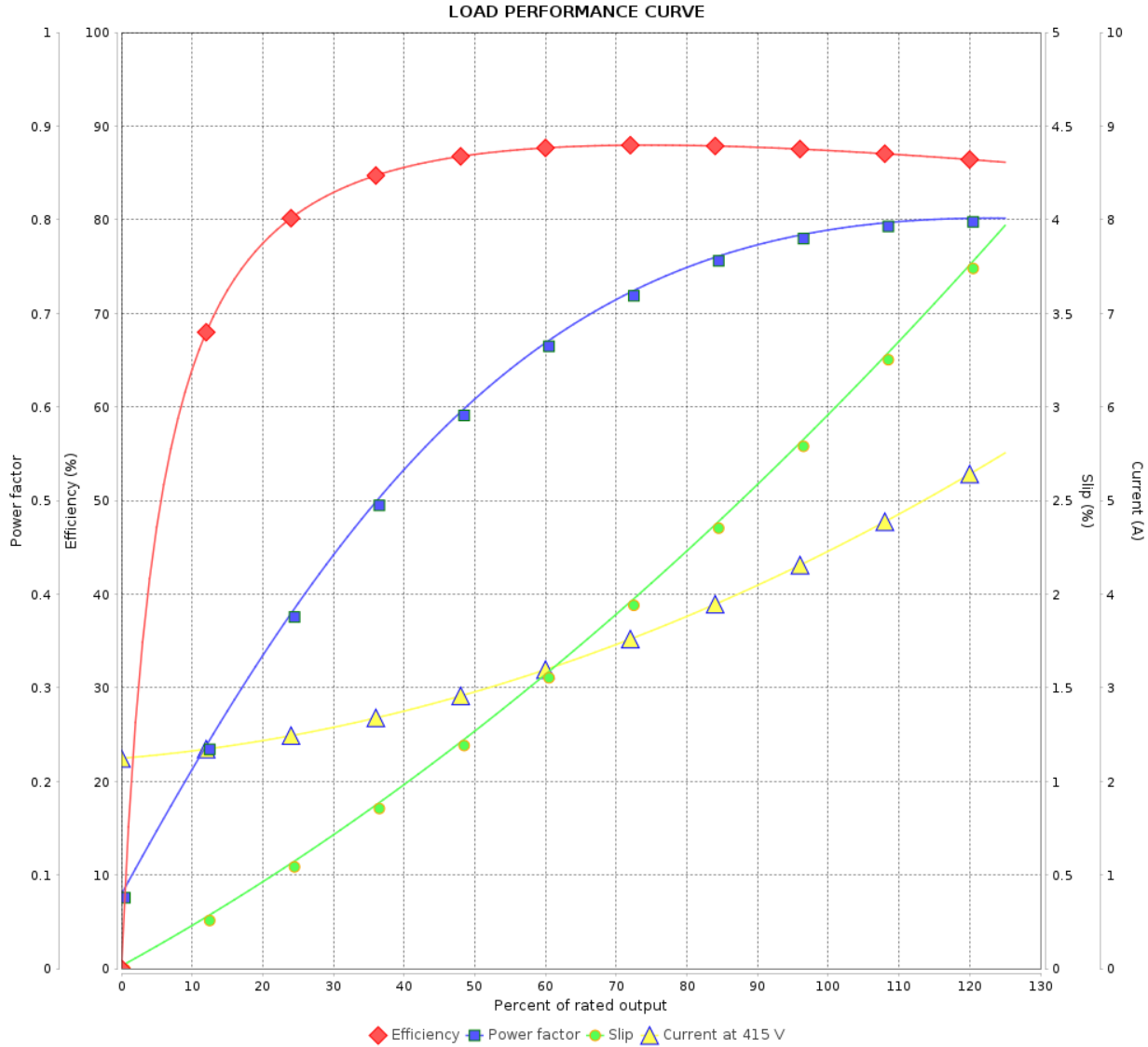
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12717200



Performance : 415 V 50 Hz 4P IE3

Rated current : 4.43 A
 LRC : 7.6
 Rated torque : 1.50 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 320 %
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0143 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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