

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | |
|--|---|--|---------------------------|-------------------------|
| Customer : | | | | |
| Product line | | : W40 JM Pump NEMA Premium Efficiency Three-Phase | | Product code : 14484696 |
| Frame | : 284JM | 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 | : 146 kg | |
| Protection degree | : IP23 | Moment of inertia (J) | : 0.0669 kgm ² | |
| Design | : B | | | |
| Output [HP] | 30 | 25 | 25 | 25 |
| Poles | 2 | 2 | 2 | 2 |
| Frequency [Hz] | 60 | 50 | 50 | 50 |
| Rated voltage [V] | 230/460 | 380 | 400 | 415 |
| Rated current [A] | 70.0/35.0 | 35.0 | 34.0 | 33.6 |
| L. R. Amperes [A] | 441/221 | 217 | 228 | 232 |
| LRC [A] | 6.3x(Code G) | 6.2x(Code G) | 6.7x(Code H) | 6.9x(Code H) |
| No load current [A] | 25.0/12.5 | 11.7 | 13.5 | 15.3 |
| Rated speed [RPM] | 3545 | 2940 | 2950 | 2955 |
| Slip [%] | 1.53 | 2.00 | 1.67 | 1.50 |
| Rated torque [kgfm] | 6.14 | 6.17 | 6.15 | 6.14 |
| Locked rotor torque [%] | 180 | 170 | 190 | 200 |
| Breakdown torque [%] | 260 | 240 | 260 | 270 |
| Service factor | 1.25 | 1.00 | 1.00 | 1.00 |
| Temperature rise | 80 K | 80 K | 80 K | 80 K |
| Locked rotor time | 18s (cold) 10s (hot) | 12s (cold) 7s (hot) | 12s (cold) 7s (hot) | 16s (cold) 9s (hot) |
| Noise level ² | 73.0 dB(A) | | | |
| Efficiency (%) | 25% | 90.0 | 88.0 | 88.2 |
| | 50% | 90.2 | 89.7 | 89.8 |
| | 75% | 91.7 | 90.7 | 90.8 |
| | 100% | 91.7 | 92.4 | 92.4 |
| Power Factor | 25% | 0.48 | 0.50 | 0.45 |
| | 50% | 0.73 | 0.75 | 0.70 |
| | 75% | 0.82 | 0.83 | 0.80 |
| | 100% | 0.86 | 0.87 | 0.85 |
| Bearing type | : <u>Drive end</u> 6311 Z C3 <u>Non drive end</u> 6211 Z C3 | Foundation loads | | |
| Sealing | : Without Bearing Seal Without Bearing Seal | Max. traction Max. compression | | |
| Lubrication interval | : 20000 h 20000 h | | | |
| Lubricant amount | : 18 g 11 g | | | |
| Lubricant type | : Mobil Polyrex EM | | | |
| Notes USABLE @208V 77.4A SF 1.15 SFA 89.0A | | | | |
| 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 | 22/10/2023 | | Page 1 / 5 | Revision |

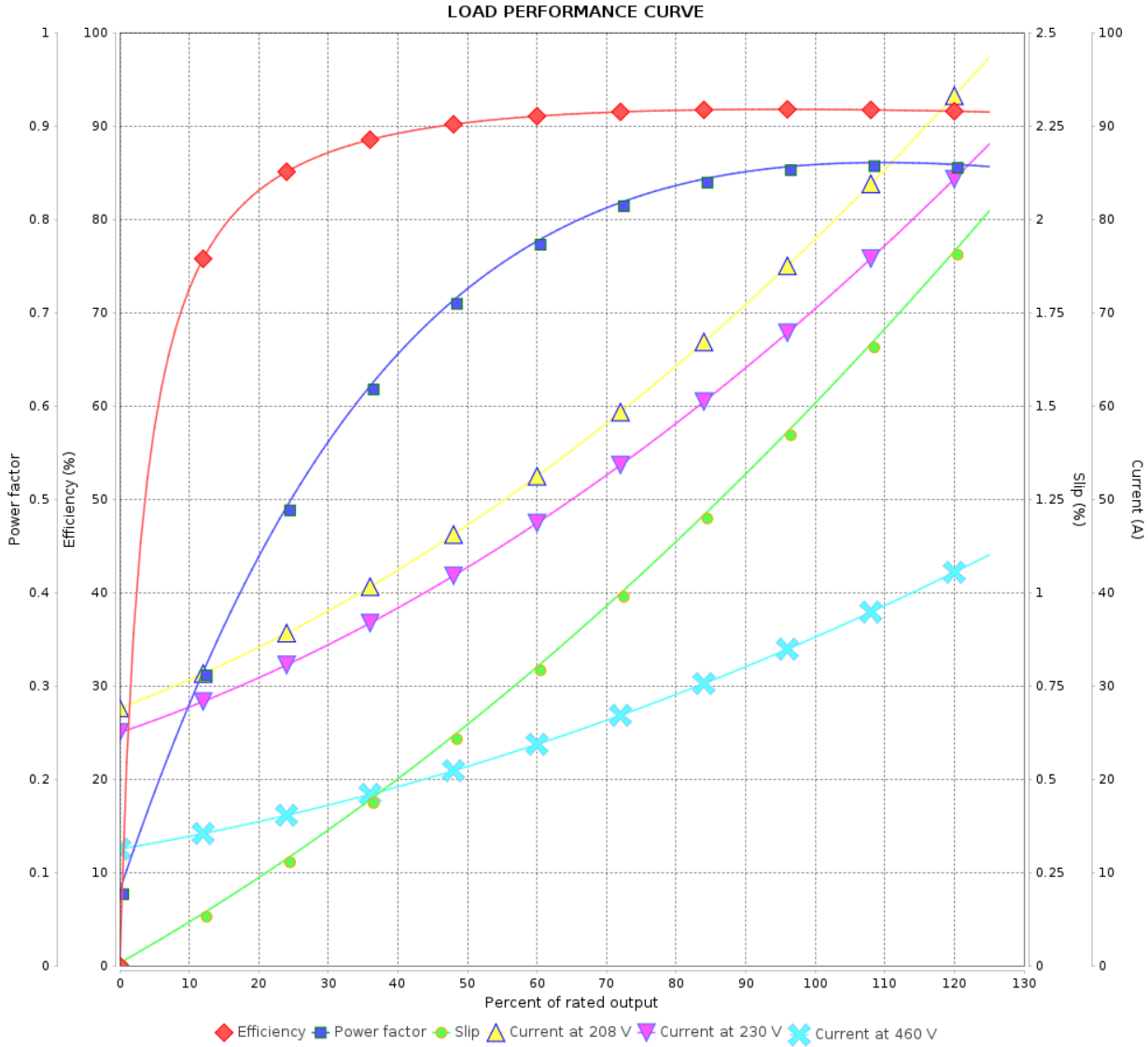
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W40 JM Pump NEMA Premium Efficiency Three-Phase Product code : 14484696



Performance : 230/460 V 60 Hz 2P

| | | | |
|---------------------|---------------|-----------------------|---------------------------|
| Rated current | : 70.0/35.0 A | Moment of inertia (J) | : 0.0669 kgm ² |
| LRC | : 6.3 | Duty cycle | : Cont.(S1) |
| Rated torque | : 6.14 kgfm | Insulation class | : F |
| Locked rotor torque | : 180 % | Service factor | : 1.25 |
| Breakdown torque | : 260 % | Temperature rise | : 80 K |
| Rated speed | : 3545 rpm | Design | : B |

| Rev. | Changes Summary | Performed | Checked | Date |
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| Date | 22/10/2023 | | | |

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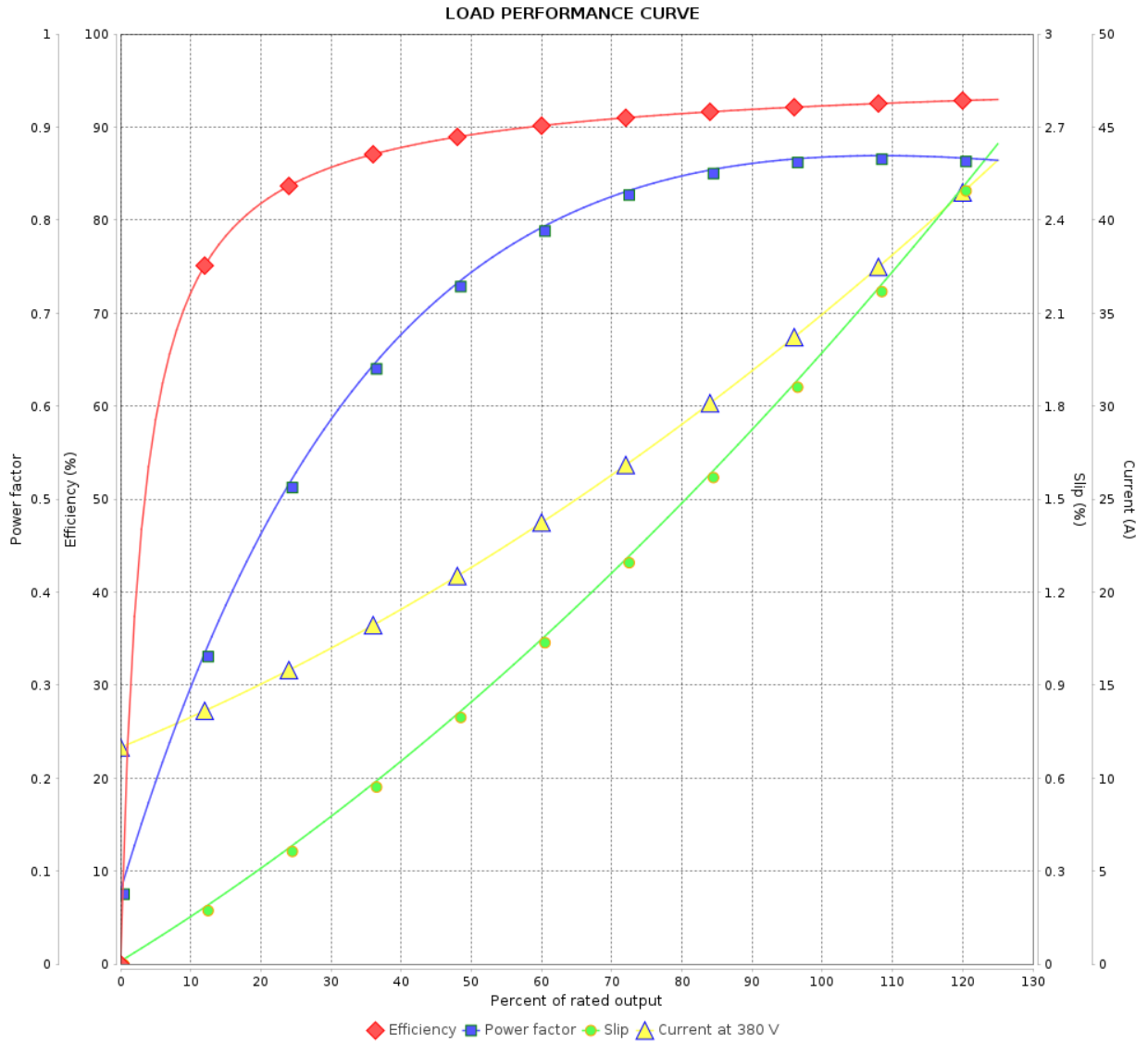
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14484696



Performance : 380 V 50 Hz 2P IE3

Rated current : 35.0 A
 LRC : 6.2
 Rated torque : 6.17 kgfm
 Locked rotor torque : 170 %
 Breakdown torque : 240 %
 Rated speed : 2940 rpm

Moment of inertia (J) : 0.0669 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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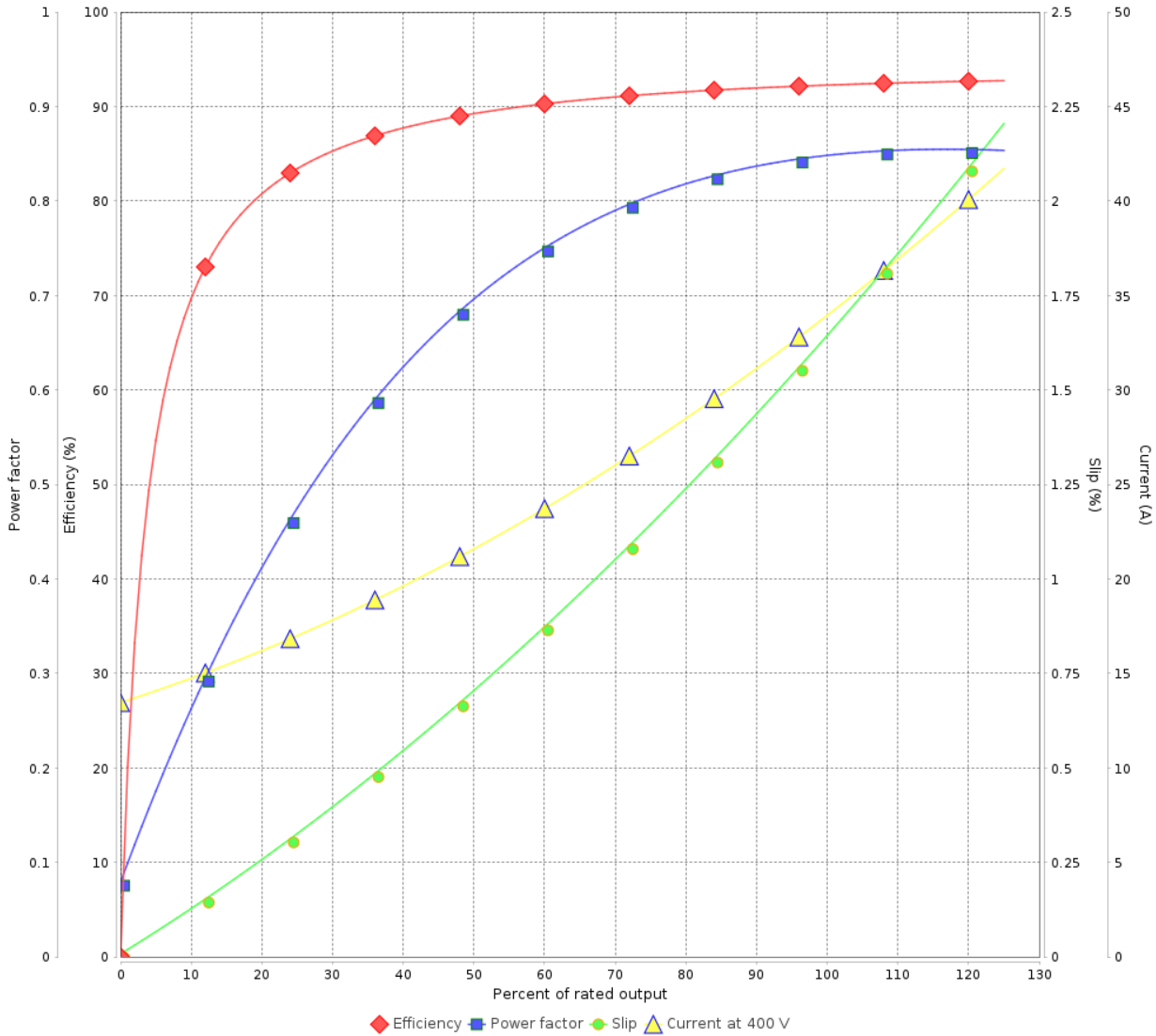
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JM Pump NEMA Premium Efficiency Three-Phase Product code : 14484696

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 2P IE3

| | | | |
|---------------------|-------------|-----------------------|---------------------------|
| Rated current | : 34.0 A | Moment of inertia (J) | : 0.0669 kgm ² |
| LRC | : 6.7 | Duty cycle | : Cont.(S1) |
| Rated torque | : 6.15 kgfm | Insulation class | : F |
| Locked rotor torque | : 190 % | Service factor | : 1.00 |
| Breakdown torque | : 260 % | Temperature rise | : 80 K |
| Rated speed | : 2950 rpm | Design | : B |

| Rev. | Changes Summary | Performed | Checked | Date |
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| Checked by | | | | |
| Date | 22/10/2023 | | | |

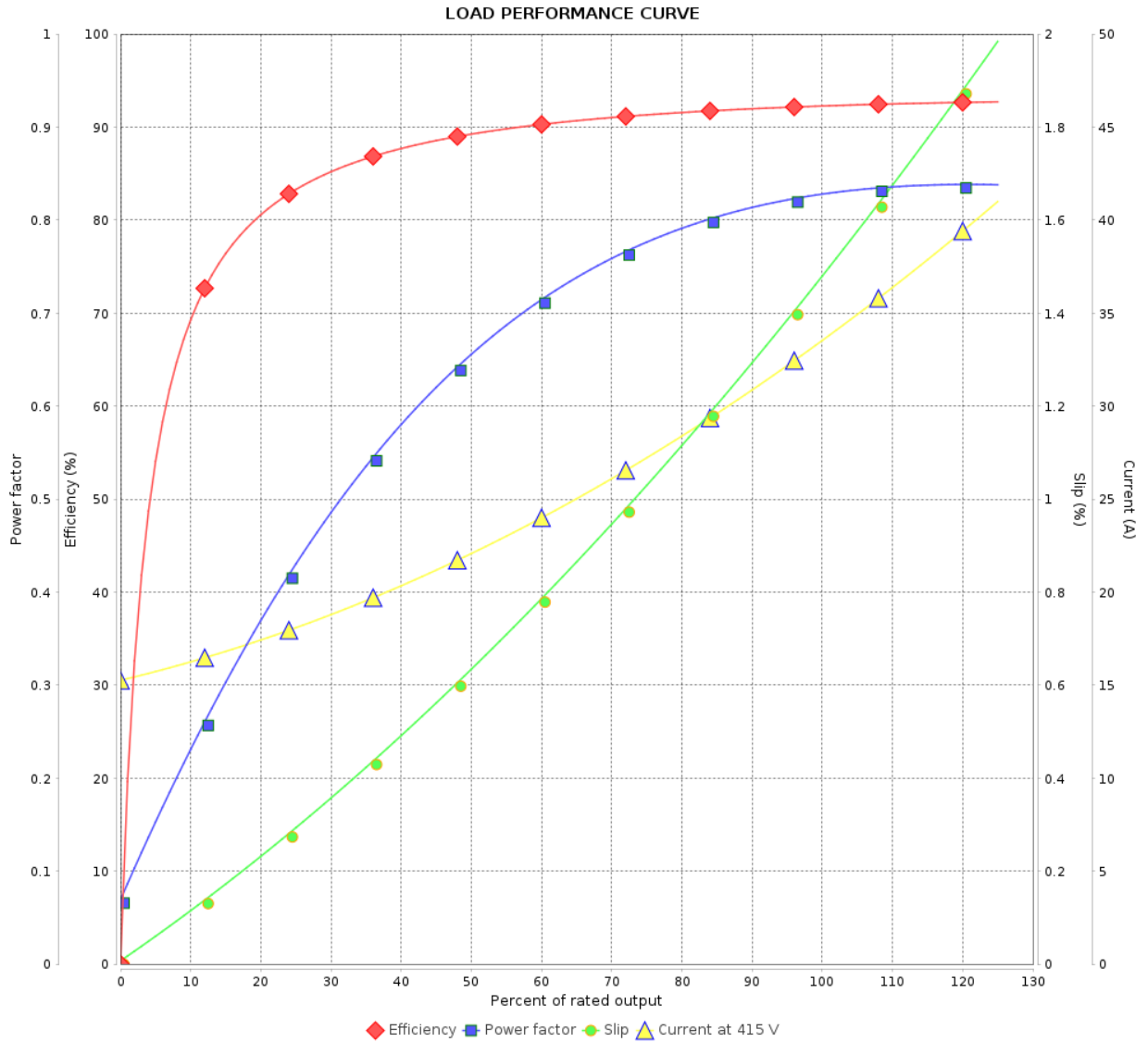
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W40 JM Pump NEMA Premium Efficiency Three-Phase Product code : 14484696



Performance : 415 V 50 Hz 2P IE3

| | | | |
|---------------------|-------------|-----------------------|---------------------------|
| Rated current | : 33.6 A | Moment of inertia (J) | : 0.0669 kgm ² |
| LRC | : 6.9 | Duty cycle | : Cont.(S1) |
| Rated torque | : 6.14 kgfm | Insulation class | : F |
| Locked rotor torque | : 200 % | Service factor | : 1.00 |
| Breakdown torque | : 270 % | Temperature rise | : 80 K |
| Rated speed | : 2955 rpm | Design | : B |

| Rev. | Changes Summary | Performed | Checked | Date |
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| Performed by | | | Page 5 / 5 | Revision |
| Checked by | | | | |
| Date | 22/10/2023 | | | |