

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 13246835

| | | | |
|---------------------|------------------|-----------------------------|---------------------------|
| Frame | : 200L | 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 | : 261 kg |
| Protection degree | : IP55 | Moment of inertia (J) | : 0.3468 kgm ² |
| Design | : N | | |

| | | | |
|--------------------------|----------------------|---------------------|----------------------|
| Output [HP] | 40 | 40 | 40 |
| Poles | 4 | 4 | 4 |
| Frequency [Hz] | 50 | 50 | 60 |
| Rated voltage [V] | 380 | 415 | 230/460 |
| Rated current [A] | 58.0 | 55.7 | 98.8/49.4 |
| L. R. Amperes [A] | 423 | 457 | 909/454 |
| LRC [A] | 7.3 | 8.2 | 9.2 |
| No load current [A] | 24.5 | 27.0 | 51.0/25.5 |
| Rated speed [RPM] | 1480 | 1485 | 1785 |
| Slip [%] | 1.33 | 1.00 | 0.83 |
| Rated torque [kgfm] | 19.6 | 19.5 | 16.3 |
| Locked rotor torque [%] | 250 | 310 | 340 |
| Breakdown torque [%] | 280 | 310 | 350 |
| Service factor | 1.00 | 1.00 | 1.25 |
| Temperature rise | 80 K | 80 K | 80 K |
| Locked rotor time | 19s (cold) 11s (hot) | 16s (cold) 9s (hot) | 23s (cold) 13s (hot) |
| Noise level ² | 63.0 dB(A) | 63.0 dB(A) | 66.0 dB(A) |
| Efficiency (%) | 25% | | |
| | 50% | 93.4 | 92.8 |
| | 75% | 93.7 | 93.3 |
| | 100% | 93.6 | 93.6 |
| Power Factor | 25% | | |
| | 50% | 0.69 | 0.60 |
| | 75% | 0.79 | 0.72 |
| | 100% | 0.84 | 0.80 |

Losses at normative operating points (speed;torque), in percentage of rated output power

| | | | | |
|------------|----------------|-----|-----|-----|
| Losses (%) | P1 (0,9;1,0) | 6.6 | 6.6 | 6.0 |
| | P2 (0,5;1,0) | 5.1 | 5.1 | 4.7 |
| | P3 (0,25;1,0) | 4.7 | 4.7 | 4.3 |
| | P4 (0,9;0,5) | 3.9 | 3.9 | 3.5 |
| | P5 (0,5;0,5) | 2.5 | 2.5 | 2.3 |
| | P6 (0,5;0,25) | 1.9 | 1.9 | 1.8 |
| | P7 (0,25;0,25) | 1.3 | 1.3 | 1.2 |

| | | | |
|----------------------|--------------------|---------------|----------------------------|
| | Drive end | Non drive end | Foundation loads |
| Bearing type | : 6312 C3 | 6212 C3 | Max. traction : 585 kgf |
| Sealing | : V'Ring | V'Ring | Max. compression : 846 kgf |
| Lubrication interval | : 20000 h | 20000 h | |
| Lubricant amount | : 21 g | 13 g | |
| 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 | | | | |
| Checked by | | | | |
| Date | 25/10/2024 | | | |

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Revision

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Customer :

Notes

| Rev. | Changes Summary | | Performed | Checked | Date |
|--------------|-----------------|--|-----------|---------|----------|
| | | | | | |
| Performed by | | | Page | | Revision |
| Checked by | | | | | |
| Date | 25/10/2024 | | | | |

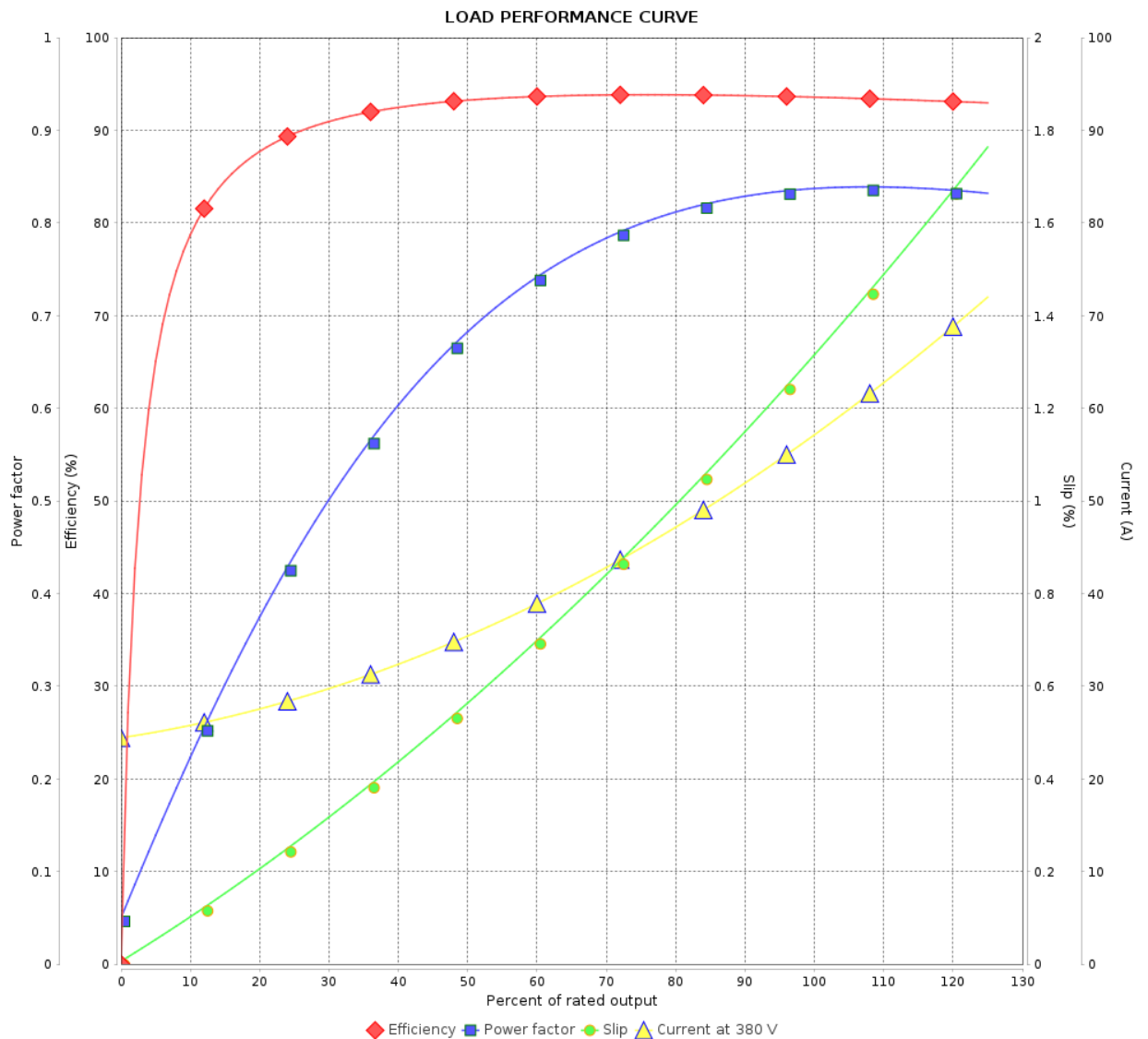
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 13246835



Performance : 380 V 50 Hz 4P

| | | | |
|---------------------|-------------|-----------------------|---------------------------|
| Rated current | : 58.0 A | Moment of inertia (J) | : 0.3468 kgm ² |
| LRC | : 7.3 | Duty cycle | : S1 |
| Rated torque | : 19.6 kgfm | Insulation class | : F |
| Locked rotor torque | : 250 % | Service factor | : 1.00 |
| Breakdown torque | : 280 % | Temperature rise | : 80 K |
| Rated speed | : 1480 rpm | Design | : N |

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|--------------------------|---------|------|
| | | | | |
| Performed by | | Page 3 / 5 Revision | | |
| Checked by | | | | |
| Date | 25/10/2024 | | | |

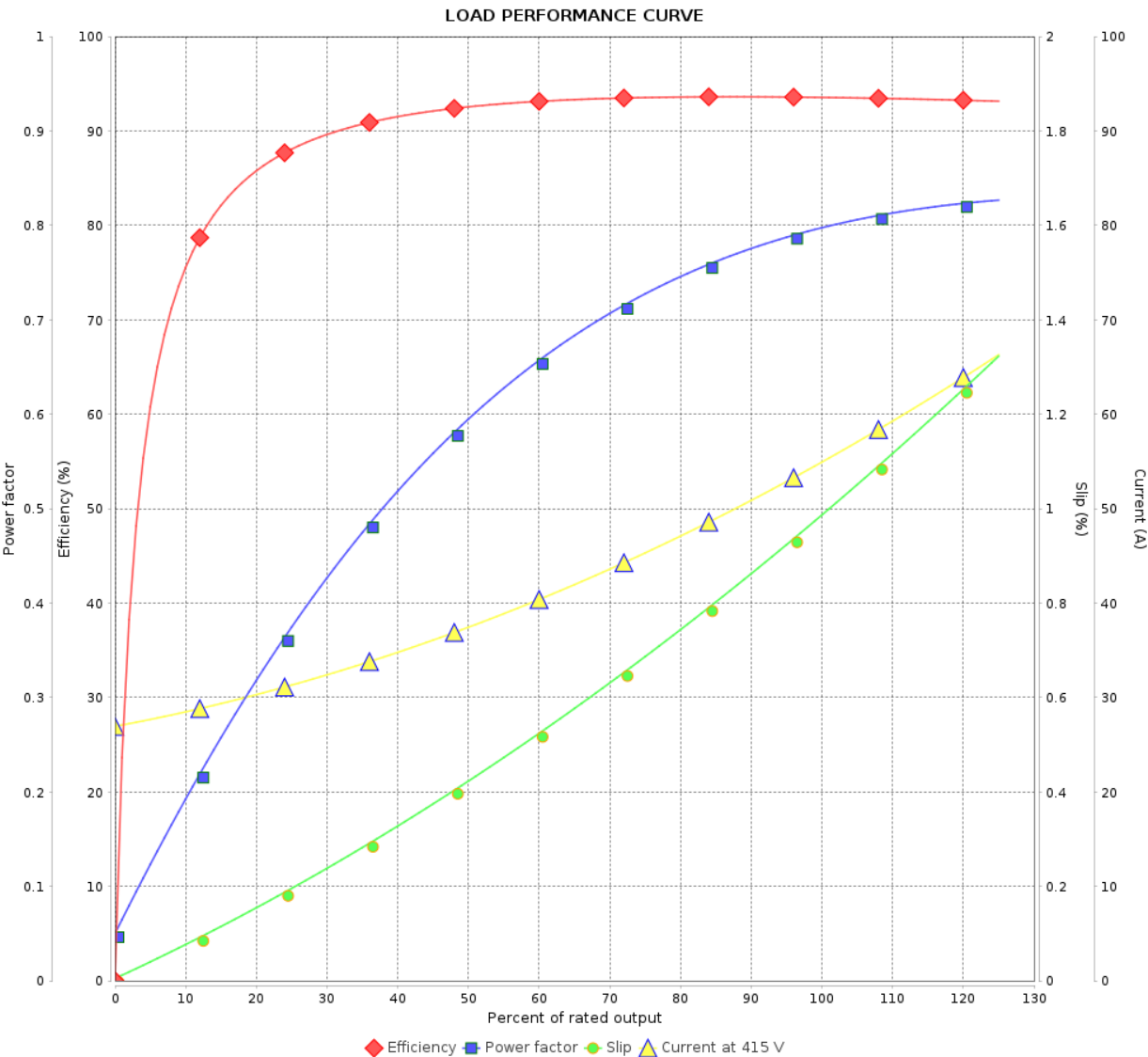
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 13246835



Performance : 415 V 50 Hz 4P

| | | | |
|---------------------|-------------|-----------------------|---------------------------|
| Rated current | : 55.7 A | Moment of inertia (J) | : 0.3468 kgm ² |
| LRC | : 8.2 | Duty cycle | : S1 |
| Rated torque | : 19.5 kgfm | Insulation class | : F |
| Locked rotor torque | : 310 % | Service factor | : 1.00 |
| Breakdown torque | : 310 % | Temperature rise | : 80 K |
| Rated speed | : 1485 rpm | Design | : N |

| Rev. | Changes Summary | | Performed | Checked | Date |
|--------------|-----------------|-----------------------|-----------|---------|------|
| | | | | | |
| Performed by | | Page 4 / 5Revision | | | |
| Checked by | | | | | |
| Date | 25/10/2024 | | | | |

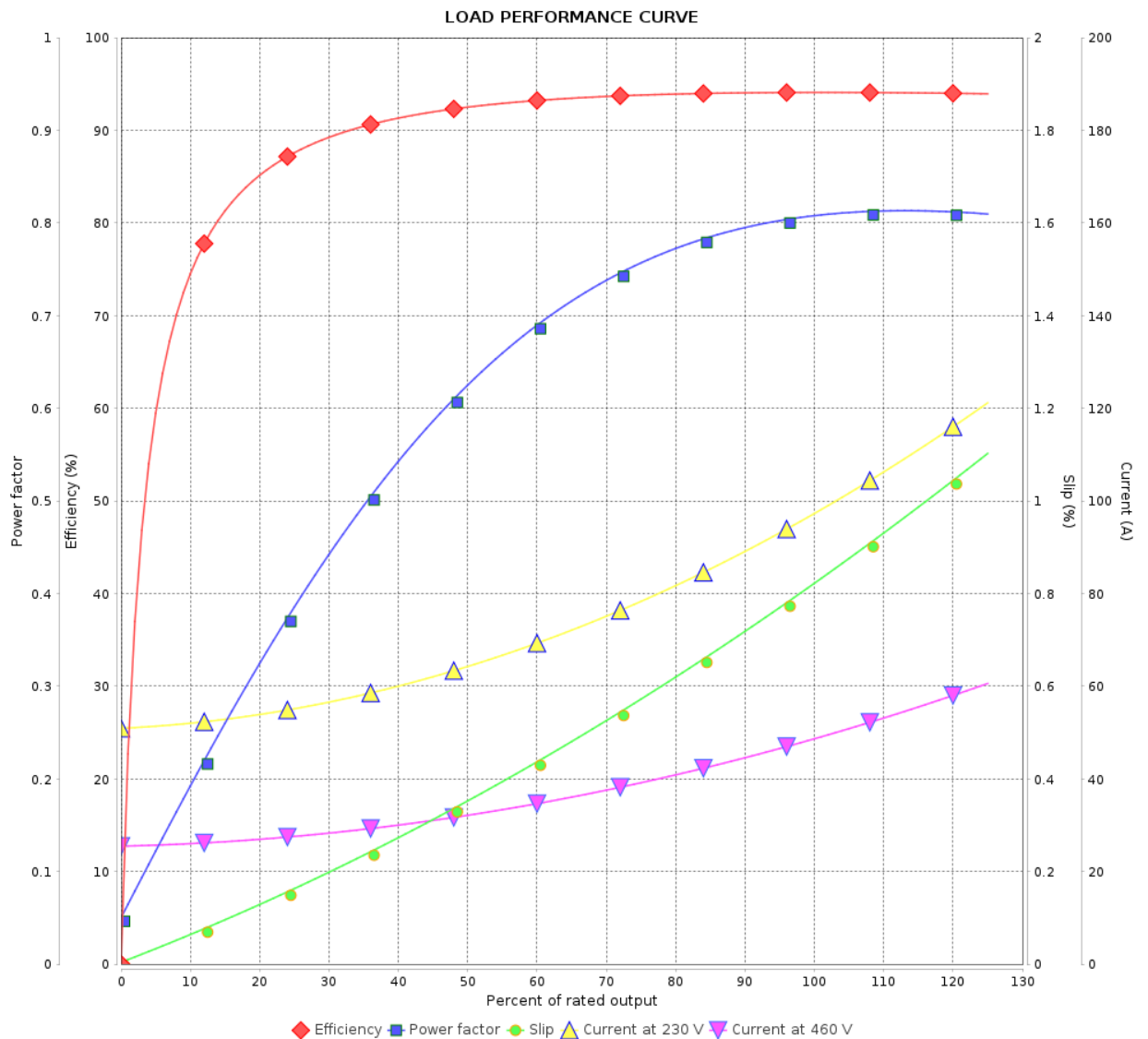
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Product line : W22 Tru-Metric IE3 Three-Phase Product code : 13246835

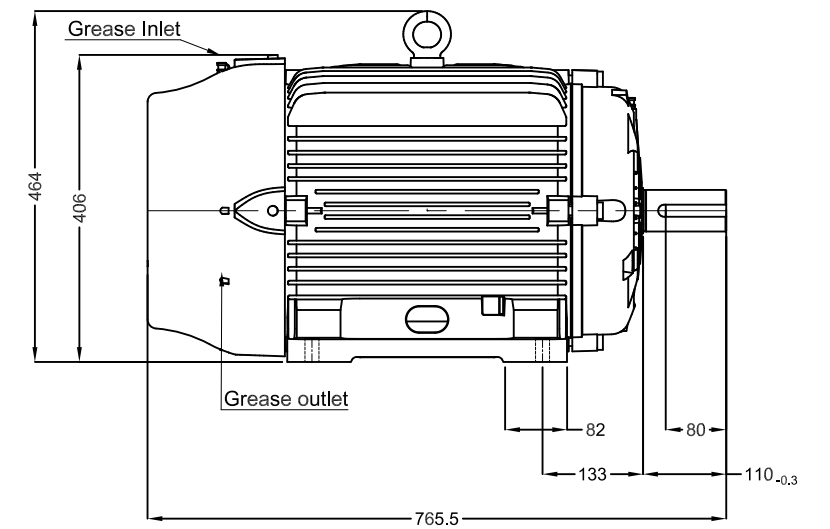
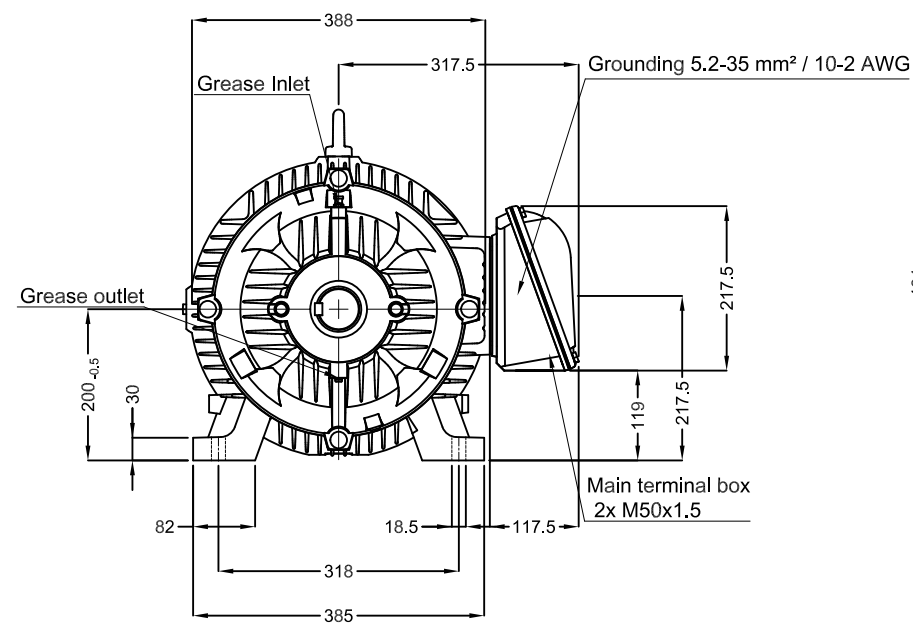
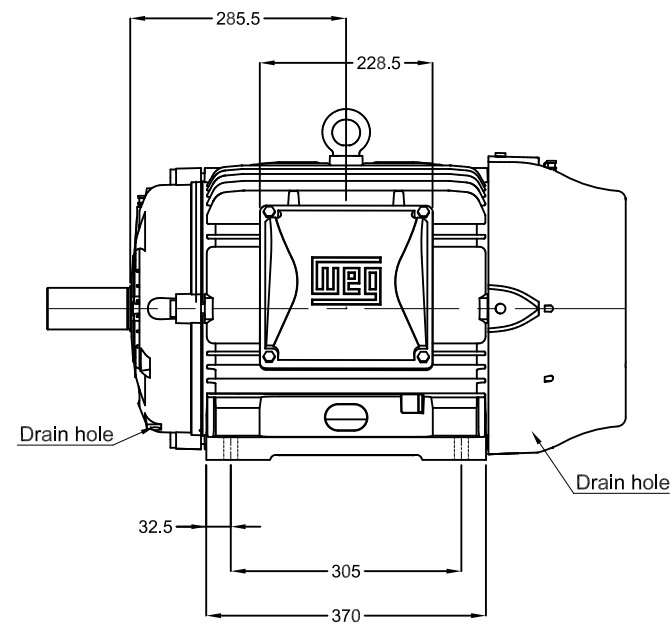


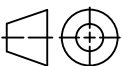

Performance : 230/460 V 60 Hz 4P

Rated current : 98.8/49.4 A
LRC : 9.2
Rated torque : 16.3 kgfm
Locked rotor torque : 340 %
Breakdown torque : 350 %
Rated speed : 1785 rpm

Moment of inertia (J) : 0.3468 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : N

| Rev. | Changes Summary | | Performed | Checked | Date |
|--------------|-----------------|--|-----------|---------------|----------|
| | | | | | |
| Performed by | | | | Page 5 / 5 | Revision |
| Checked by | | | | | |
| Date | 25/10/2024 | | | | |



| | | | | | | | | | | |
|----------------------------|------------|---|---|--|--|------------|---------------------|----------|---|-----|
| 40 HP 04 Poles 60 Hz | | | | | | | | | | A |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | HYBRISUSER | | | | 00 |
| ECM | LOC | SUMMARY OF MODIFICATIONS | | | | EXECUTED | CHECKED | RELEASED | DATE | VER |
| EXECUTED | HYBRISUSER |  | THREE PH. MOTOR W22 IE3 FRAME 200L IP55 TEFC | | | | PREVIEW WDD 00 | |  | |
| CHECKED | | | | | | | | | | |
| RELEASED | | | | | | | | | | |
| REL. DATE | | | | | | | | | | |

| |
|-----------------------------|
| Without vertical jackscrews |
| Color RAL 5009 |
| Painting plan 203A |
| Mounting B3L(E) |

