

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | | |
|--|---------------------------|------------------|--------------|--|------------------------|----------------|
| Customer : | | | | | | |
| Product line : W22 Brake Motor NEMA Premium Efficiency Three-Phase Product code : 16812341 | | | | | | |
| Frame | : 143/5TC | | | Locked rotor time | : 30s (cold) 17s (hot) | |
| Output | : 2 HP (1.5 kW) | | | Temperature rise | : 80 K | |
| Poles | : 2 | | | Duty cycle | : Cont.(S1) | |
| Frequency | : 60 Hz | | | Ambient temperature | : -20°C to +40°C | |
| Rated voltage | : 575 V | | | Altitude | : 1000 m.a.s.l. | |
| Rated current | : 2.05 A | | | Protection degree | : IP55 | |
| L. R. Amperes | : 18.2 A | | | Cooling method | : IC411 - TEFC | |
| LRC | : 8.9x(Code L) | | | Mounting | : F-1 | |
| No load current | : 0.720 A | | | Rotation ¹ | : Both (CW and CCW) | |
| Rated speed | : 3475 rpm | | | Noise level ² | : 68.0 dB(A) | |
| Slip | : 3.47 % | | | Starting method | : Direct On Line | |
| Rated torque | : 0.415 kgfm | | | Approx. weight ³ | : 28.2 kg | |
| Locked rotor torque | : 350 % | | | | | |
| Breakdown torque | : 380 % | | | | | |
| Insulation class | : F | | | | | |
| Service factor | : 1.25 | | | | | |
| Moment of inertia (J) | : 0.0026 kgm ² | | | | | |
| Design | : B | | | | | |
| Output | 50% | 75% | 100% | Foundation loads | | |
| Efficiency (%) | 82.5 | 85.5 | 85.5 | Max. traction | : 31 kgf | |
| Power Factor | 0.71 | 0.80 | 0.86 | Max. compression | : 59 kgf | |
| Losses at normative operating points (speed;torque), in percentage of rated output power | | | | | | |
| P1 (0,9;1,0) | P2 (0,5;1,0) | P3 (0,25;1,0) | P4 (0,9;0,5) | P5 (0,5;0,5) | P6 (0,5;0,25) | P7 (0,25;0,25) |
| 15.9 | 12.2 | 10.9 | 8.2 | 4.8 | 3.1 | 1.9 |
| | | <u>Drive end</u> | | <u>Non drive end</u> | | |
| Bearing type | : | 6205 ZZ | | 6204 ZZ | | |
| Sealing | : | V'Ring | | Lip Seal | | |
| Lubrication interval | : | - | | - | | |
| Lubricant amount | : | - | | - | | |
| Lubricant type | : | Mobil Polyrex EM | | | | |
| Notes | | | | | | |
| 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 | 22/10/2023 | | | | 1 / 3 | |

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Brake information

Voltage: 525-575 V
Brake Torque: 1.63 kgfm

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| Performed by | | | | |
| Checked by | | | Page | Revision |
| Date | 22/10/2023 | | 2 / 3 | |

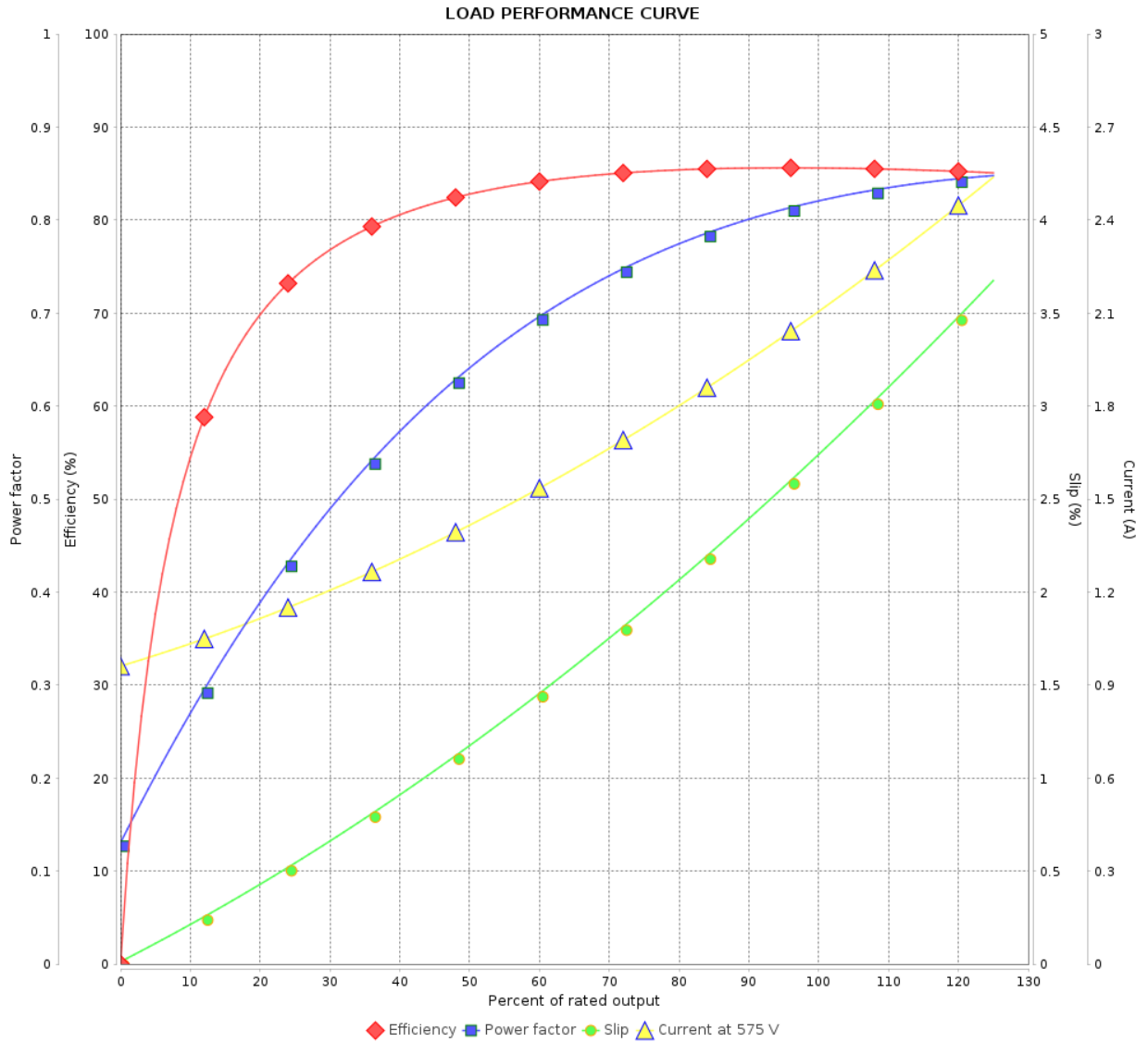
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Brake Motor NEMA Premium Efficiency Product code : 16812341
Three-Phase



Performance : 575 V 60 Hz 2P

| | | | |
|---------------------|--------------|-----------------------|---------------------------|
| Rated current | : 2.05 A | Moment of inertia (J) | : 0.0026 kgm ² |
| LRC | : 8.9 | Duty cycle | : Cont.(S1) |
| Rated torque | : 0.415 kgfm | Insulation class | : F |
| Locked rotor torque | : 350 % | Service factor | : 1.25 |
| Breakdown torque | : 380 % | Temperature rise | : 80 K |
| Rated speed | : 3475 rpm | Design | : B |

| Rev. | Changes Summary | Performed | Checked | Date |
|--------------|-----------------|-----------|---------|----------|
| | | | | |
| Performed by | | | Page | Revision |
| Checked by | | | 3 / 3 | |
| Date | 22/10/2023 | | | |

1 2 3 4 5 6

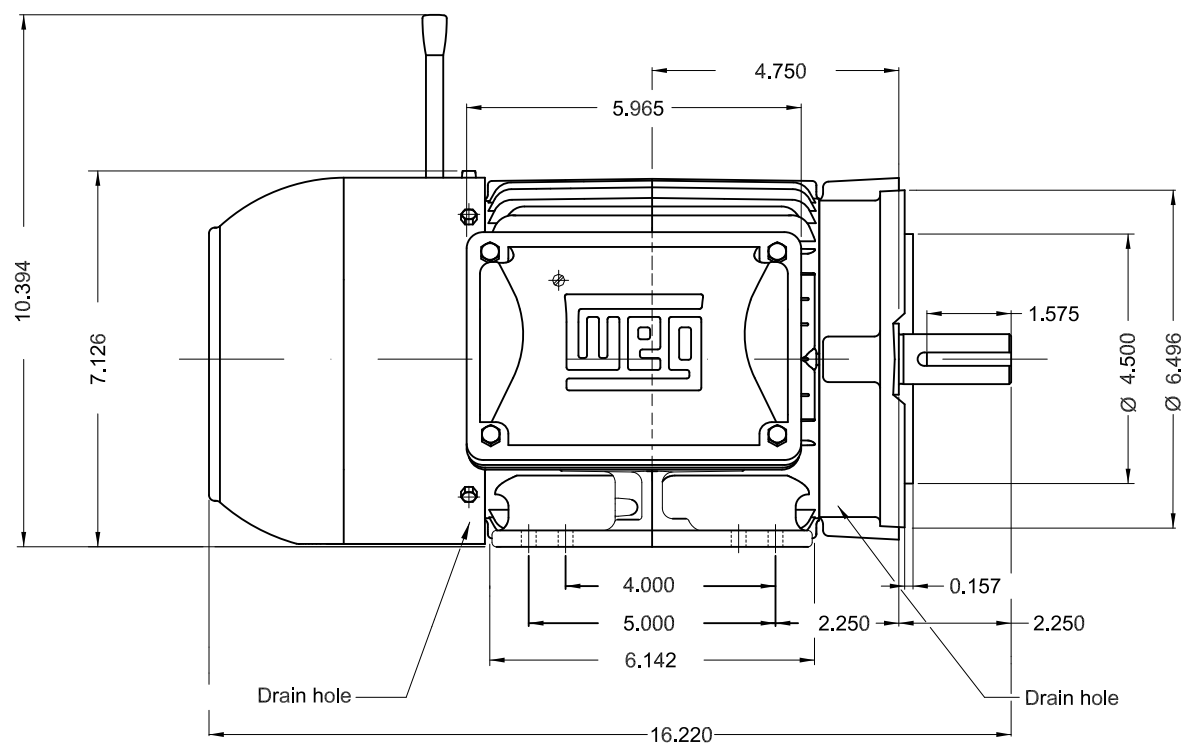
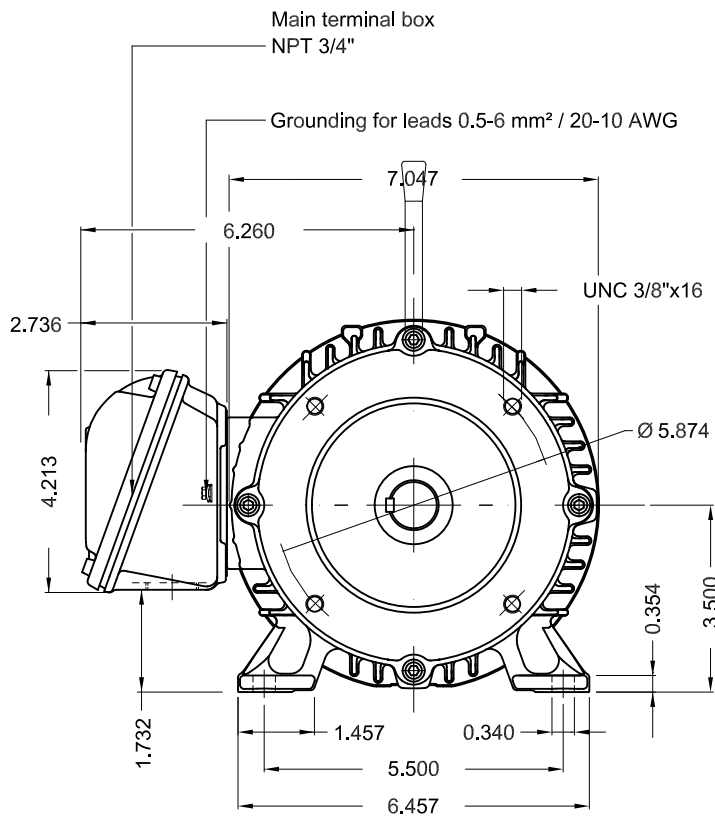
A

B

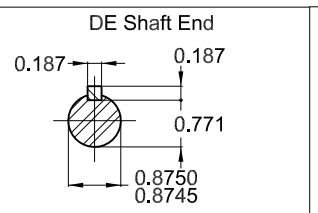
C

D

E



| |
|-------------------------|
| Brake voltage 525-575 V |
| With brake 10 (16 Nm) |
| Color RAL 5009 |
| Painting plan 207A |
| Mounting NEMA F-1 |
| Mounting B34R(D) |



2 HP 02 Poles 60 Hz A

| ECM | LOC | SUMMARY OF MODIFICATIONS | EXECUTED | CHECKED | RELEASED | DATE | VER |
|----------|----------------|--|---------------------|---------|----------|------|-----|
| EXECUTED | DATAVIEWERUSER | THREE PH. MOTOR W22 BRAKE MOTOR PREM. EFF. | | | | | |
| CHECKED | | FRAME 143/5TC IP55 TEFC | | | | | |
| RELEASED | | | | | | | |
| REL DT. | WMO | Jaragua do Sul | Product Engineering | | | | |

PREVIEW
WDD



SHEET 1 / 1