

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

| | | | | | | | | | | | | | | | | | | | |
|---|--|----------------------|------------------|----------------------|----------------|---------|---------|-----------|----------------------|----------------------|------------------------|---|---|--------------------|---|---|------------------|------------------|--|
| Customer : | | | | | | | | | | | | | | | | | | | |
| Product line | : NEMA Premium Efficiency Three-Phase | | | | | | | | | | | | | | | | | | |
| Product code : | 12682577 | | | | | | | | | | | | | | | | | | |
| Catalog # : | 00236OT3H145T-S | | | | | | | | | | | | | | | | | | |
| Frame : 143/5T Output : 2 HP (1.5 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 1.94 A L. R. Amperes : 17.2 A LRC : 8.9x(Code K) No load current : 0.734 A Rated speed : 3510 rpm Slip : 2.50 % Rated torque : 2.99 ft.lb Locked rotor torque : 220 % Breakdown torque : 330 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1151 sq.ft.lb Design : B | Locked rotor time : 25s (cold) 14s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Cooling method : IC01 - ODP Mounting : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 62.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 37.1 lb | | | | | | | | | | | | | | | | | | |
| Output | 25% 50% 75% 100% | | | | | | | | | | | | | | | | | | |
| Efficiency (%) | 83.7 84.0 85.5 85.5 | | | | | | | | | | | | | | | | | | |
| Power Factor | 0.49 0.77 0.86 0.91 | | | | | | | | | | | | | | | | | | |
| Foundation loads | | | | | | | | | | | | | | | | | | | |
| Max. traction | : 67 lb | | | | | | | | | | | | | | | | | | |
| Max. compression | : 104 lb | | | | | | | | | | | | | | | | | | |
| | <table border="0" style="width:100%;"> <tr> <td style="width: 50%;"></td> <td style="text-align: center;"><u>Drive end</u></td> <td style="text-align: center;"><u>Non drive end</u></td> </tr> <tr> <td>Bearing type :</td> <td style="text-align: center;">6205 ZZ</td> <td style="text-align: center;">6203 ZZ</td> </tr> <tr> <td>Sealing :</td> <td style="text-align: center;">Without Bearing Seal</td> <td style="text-align: center;">Without Bearing Seal</td> </tr> <tr> <td>Lubrication interval :</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Lubricant amount :</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Lubricant type :</td> <td colspan="2" style="text-align: center;">Mobil Polyrex EM</td> </tr> </table> | | <u>Drive end</u> | <u>Non drive end</u> | Bearing type : | 6205 ZZ | 6203 ZZ | Sealing : | Without Bearing Seal | Without Bearing Seal | Lubrication interval : | - | - | Lubricant amount : | - | - | Lubricant type : | Mobil Polyrex EM | |
| | <u>Drive end</u> | <u>Non drive end</u> | | | | | | | | | | | | | | | | | |
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| Sealing : | Without Bearing Seal | Without Bearing 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 | 13/04/2022 | | 1 / 6 | | | | | | | | | | | | | | | | |

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



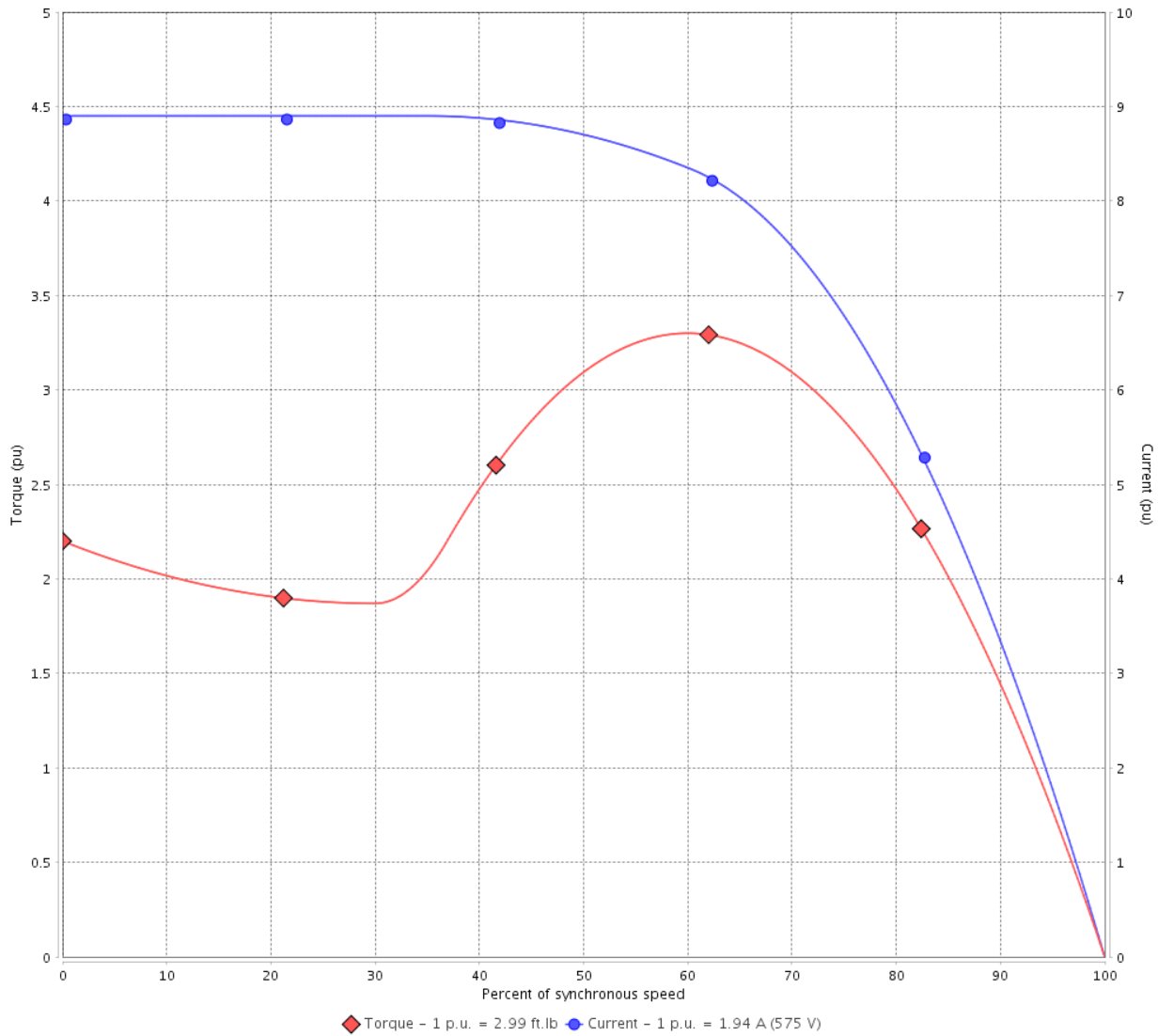
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12682577

Catalog # : 00236OT3H145T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

| | | | |
|---------------------|--------------|-----------------------|-------------------|
| Rated current | : 1.94 A | Moment of inertia (J) | : 0.1151 sq.ft.lb |
| LRC | : 8.9 | Duty cycle | : Cont.(S1) |
| Rated torque | : 2.99 ft.lb | Insulation class | : F |
| Locked rotor torque | : 220 % | Service factor | : 1.15 |
| Breakdown torque | : 330 % | Temperature rise | : 80 K |
| Rated speed | : 3510 rpm | Design | : B |

Locked rotor time : 25s (cold) 14s (hot)

| Rev. | Changes Summary | Performed | Checked | Date |
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| Performed by | | | Page 2 / 6 | Revision |
| Checked by | | | | |
| Date | 13/04/2022 | | | |

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

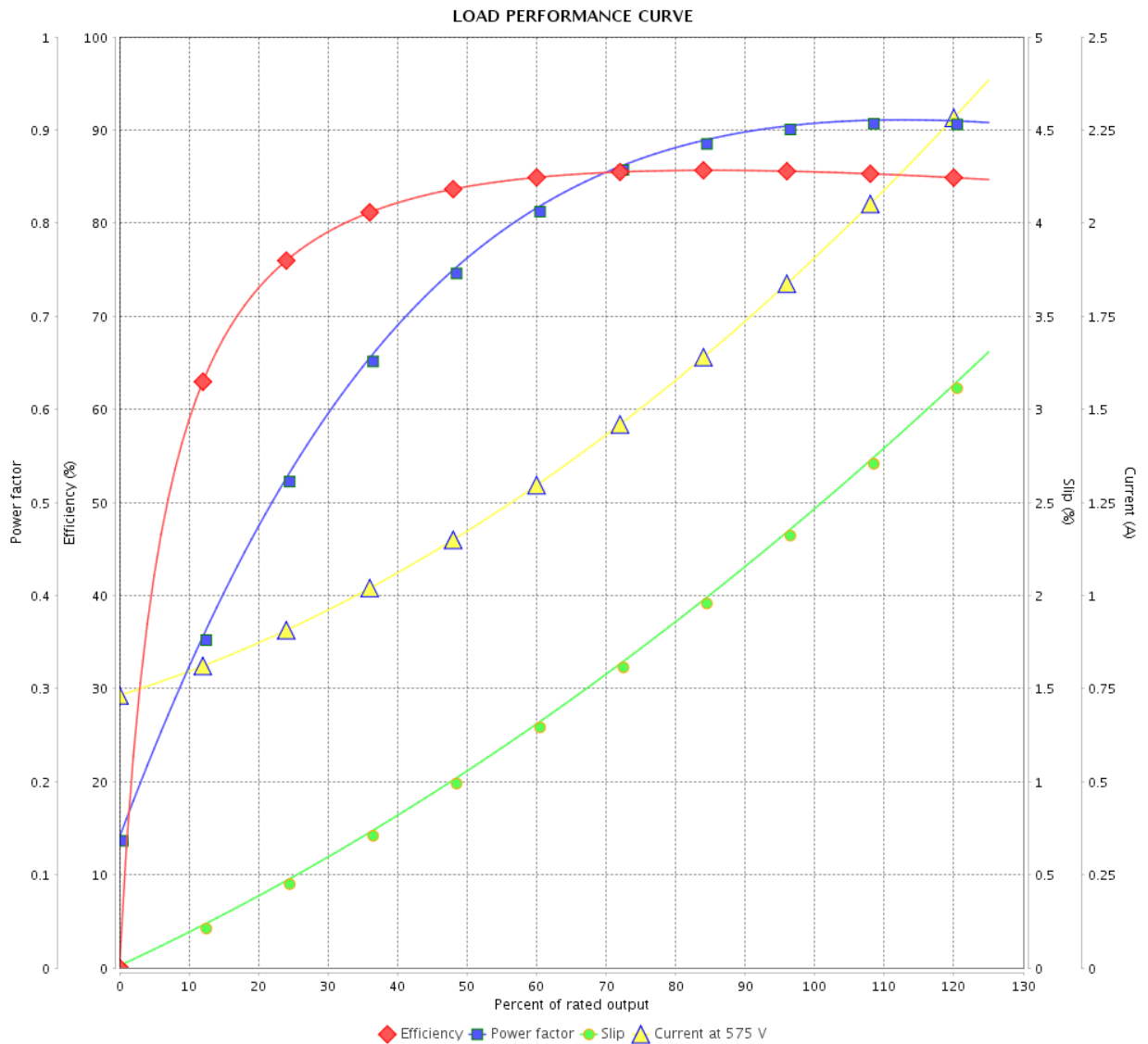


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

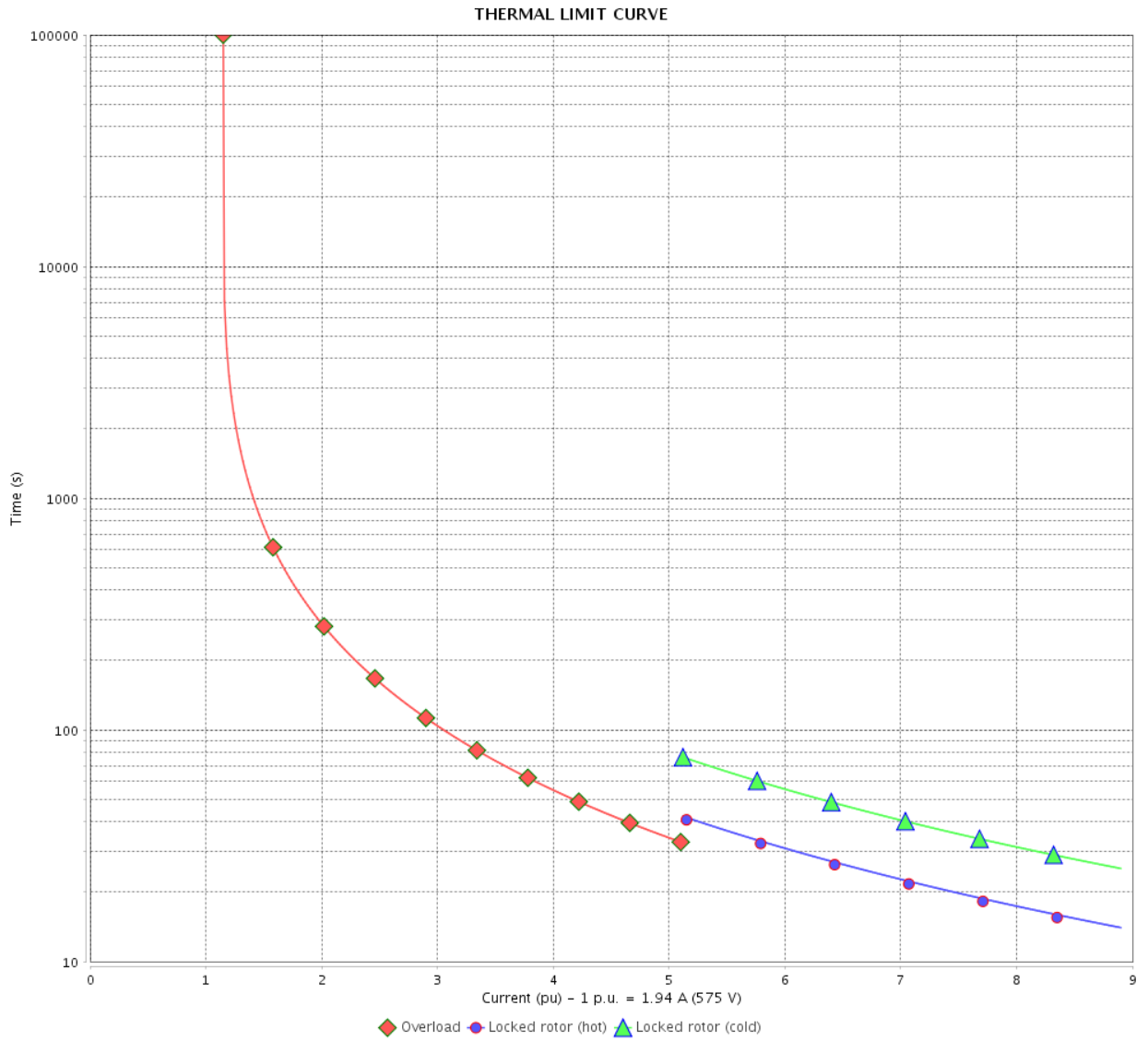
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| Date | 13/04/2022 | | 4 / 6 | |

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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| Checked by | | | | |
| Date | | | | |
| | | | 5 / 6 | |

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

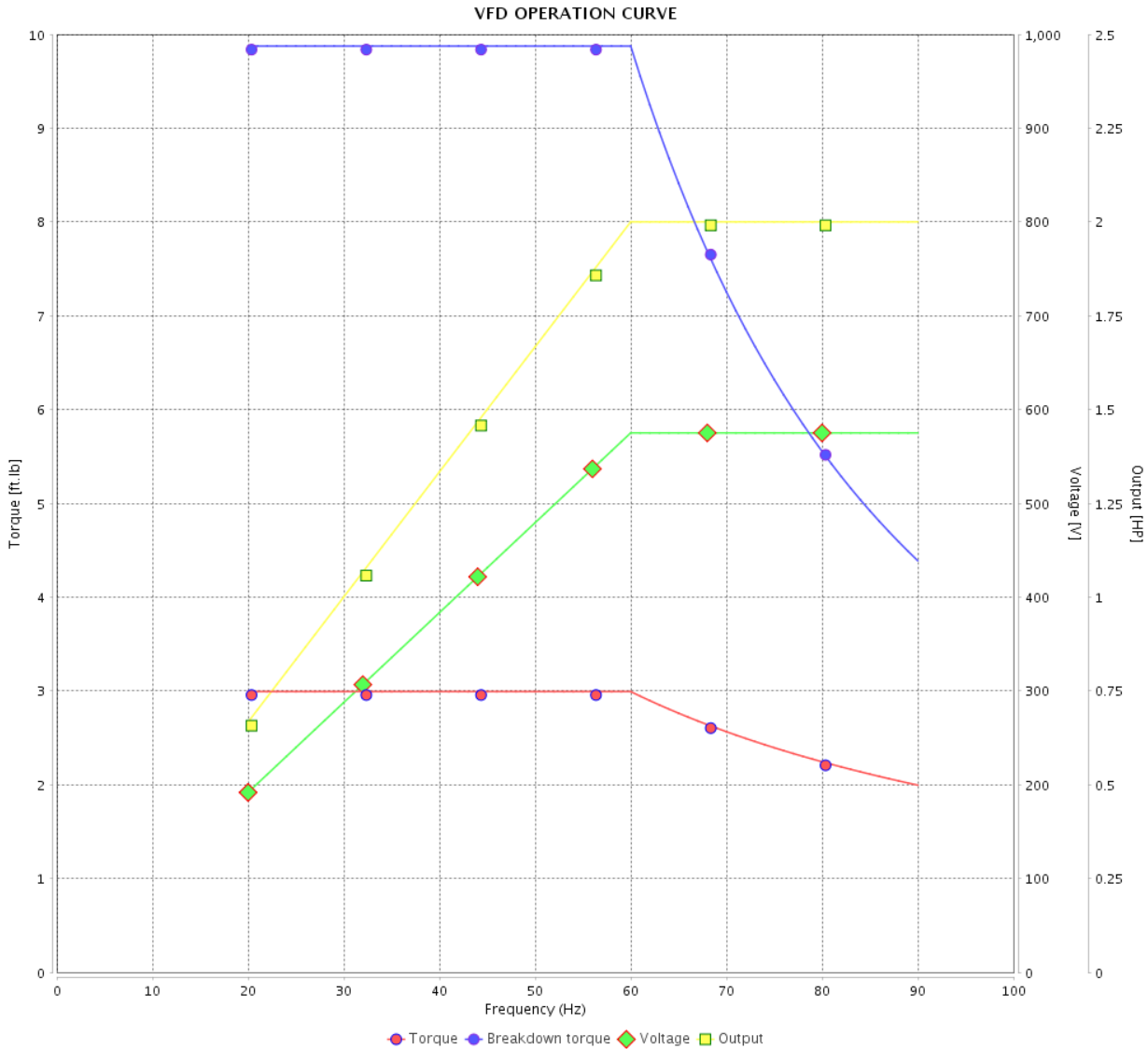


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1 2 3 4 5 6

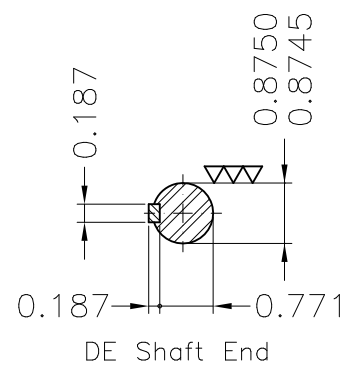
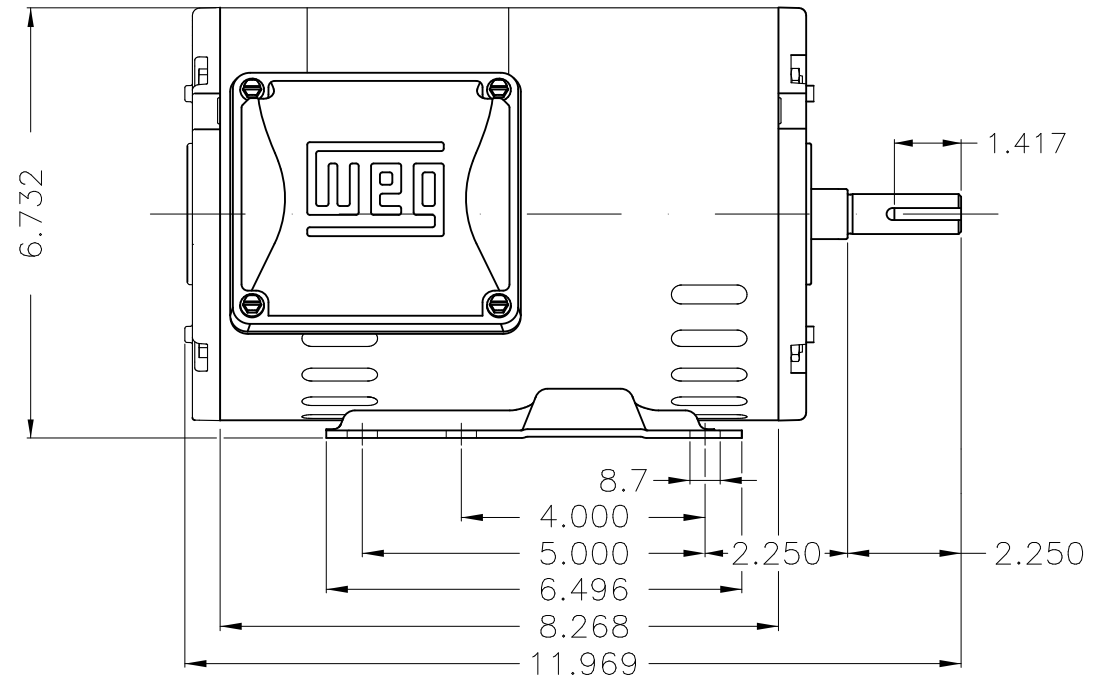
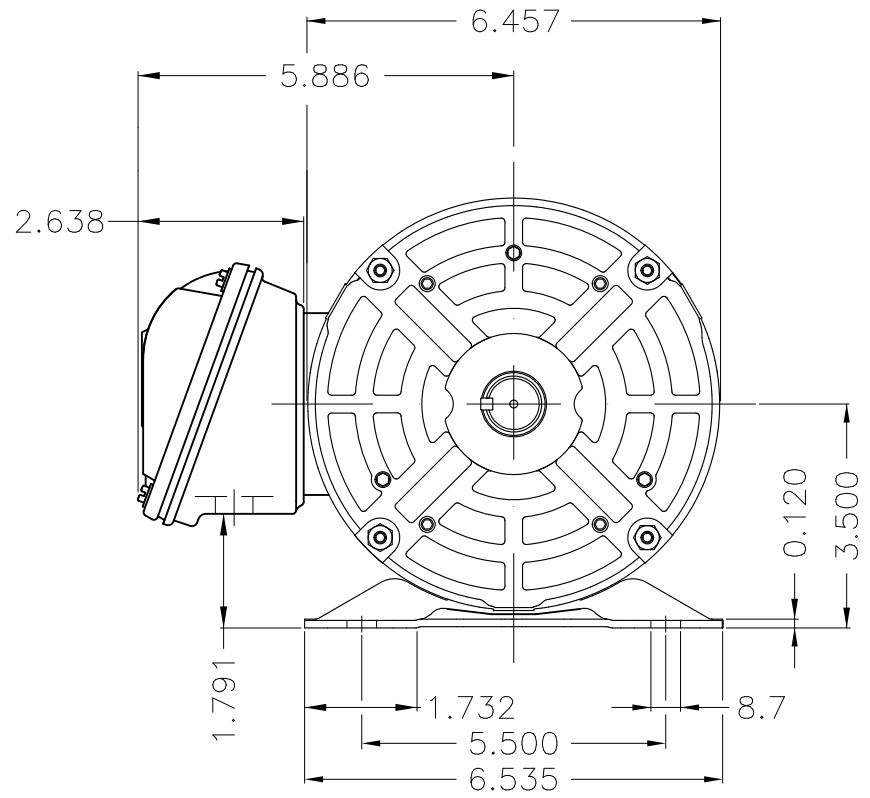
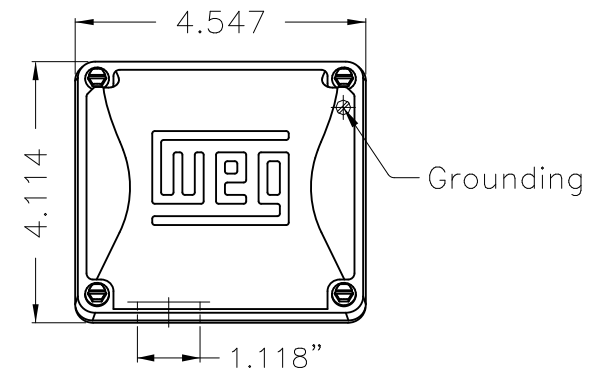
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B

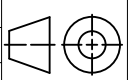
C

D

E



Color Munsell N 1 matte black
 Painting plan 207N
 Mounting F-1/B3R(D)

| ECM | LOC | SUMMARY OF MODIFICATIONS | EXECUTED | CHECKED | RELEASED | DATE | VER |
|----------|-----------|--|---------------------|-------------|----------|------|-----|
| EXECUTED | PIRWBUSER |  THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 143/5T IP21 ODP | | | | | |
| CHECKED | | | | | | | |
| RELEASED | | | | | | | |
| REL DT. | WMO | Jaragua do Sul | Product Engineering | SHEET 1 / 1 | | | |

2 HP 02 Poles 60 Hz

A

PREVIEW
WDD





NEMA
Premium



MADE IN BRAZIL

MAT: 12682577 CC029A

W01.T00IC0X0N

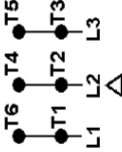
DP002502NPW01

06AUG2021 B/N:

| | | |
|--------------------------|---------------|-----------------------|
| PH 3 | Hz 60 | HP 2.0 |
| FR 143/5T | | KW 1.5 |
| DUTY CONT. | | V 575 |
| ALT 1000 m.a.s.l. | | A 1.94 |
| INS CL F AT 80K | | SFA 2.23 |
| AMB 40°C | DES B | SF 1.15 |
| ENCL ODP | CODE K | PF 0.91 |
| | | RPM 3510 |
| | | NEMA |
| | | NOM. EFF 85.5% |

Inverter duty motor For use on VPWM 1000:1 VT, 3:1 CT

DE 6205-ZZ ODE 6203-ZZ MOBIL POLYREX EM



T1-BLU
T2-WHT
T3-ORG
T4-YEL
T5-BLK
T6-GRY

INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

WARNING: Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical shocks. Disconnect power source before servicing unit.



AVERTISSEMENT: Le moteur doit être mis à la terre

conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.

