

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

|  |   |
|--|---|
| Customer :   |   |
| Product line   | : NEMA Premium Efficiency Three-Phase   |
| Product code :   | 12792416  |
| Catalog # :  | 00118OT3V143T-SG  |
| Frame : 143/5T<br>Output : 1 HP (0.75 kW)<br>Poles : 4<br>Frequency : 60 Hz<br>Rated voltage : 200/400 V<br>Rated current : 3.47/1.74 A<br>L. R. Amperes : 27.8/13.9 A<br>LRC : 8.0x(Code L)<br>No load current : 2.20/1.10 A<br>Rated speed : 1760 rpm<br>Slip : 2.22 %<br>Rated torque : 2.98 ft.lb<br>Locked rotor torque : 290 %<br>Breakdown torque : 360 %<br>Insulation class : F<br>Service factor : 1.15<br>Moment of inertia (J) : 0.1101 sq.ft.lb<br>Design : B | Locked rotor time : 39s (cold) 22s (hot)<br>Temperature rise : 80 K<br>Duty cycle : Cont.(S1)<br>Ambient temperature : -20°C to +40°C<br>Altitude : 1000 m.a.s.l.<br>Cooling method : IC01 - ODP<br>Mounting : F-1<br>Rotation <sup>1</sup> : Both (CW and CCW)<br>Noise level <sup>2</sup> : 52.0 dB(A)<br>Starting method : Direct On Line<br>Approx. weight <sup>3</sup> : 34.9 lb |
| Output   | 25% 50% 75% 100%  |
| Efficiency (%)   | 79.9 81.5 84.0 85.5   |
| Power Factor   | 0.29 0.51 0.65 0.73   |
| Foundation loads   |   |
| Max. traction  | : 76 lb   |
| Max. compression   | : 111 lb  |
| Bearing type   | : <u>Drive end</u> 6205 ZZ <u>Non drive end</u> 6203 ZZ   |
| 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.<br>(1) Looking the motor from the shaft end.<br>(2) Measured at 1m and with tolerance of +3dB(A).<br>(3) Approximate weight subject to changes after manufacturing process.<br>(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 by   | Performed   |
| Checked by   | Checked   |
| Date   | Date  |
| 14/04/2022   |   |
| Page   | Revision  |
| 1 / 6  |   |

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



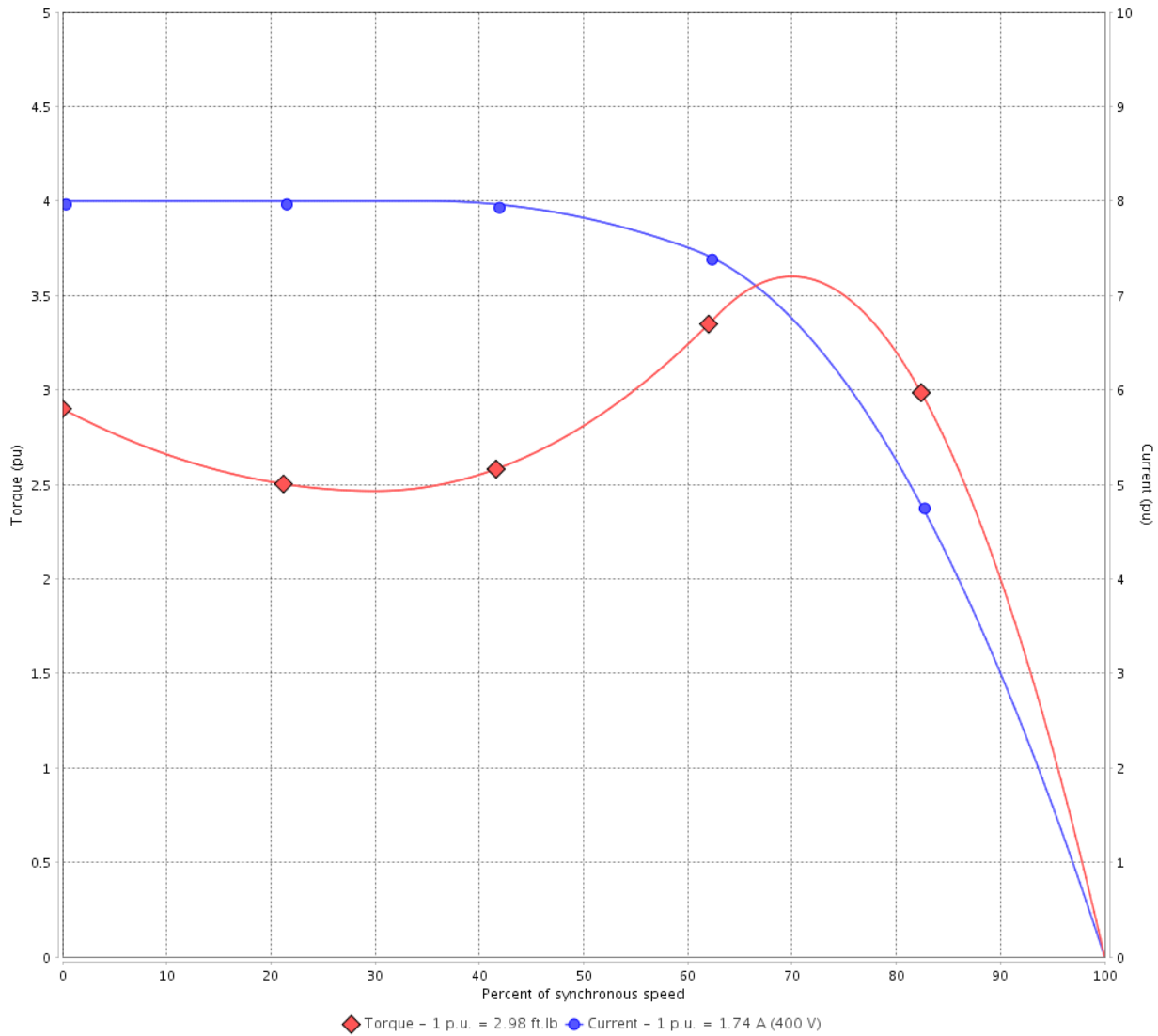
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12792416

Catalog # : 001180T3V143T-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 4P

|                     |               |                       |                   |
|---------------------|---------------|-----------------------|-------------------|
| Rated current       | : 3.47/1.74 A | Moment of inertia (J) | : 0.1101 sq.ft.lb |
| LRC                 | : 8.0         | Duty cycle            | : Cont.(S1)       |
| Rated torque        | : 2.98 ft.lb  | Insulation class      | : F               |
| Locked rotor torque | : 290 %       | Service factor        | : 1.15            |
| Breakdown torque    | : 360 %       | Temperature rise      | : 80 K            |
| Rated speed         | : 1760 rpm    | Design                | : B               |

Locked rotor time : 39s (cold) 22s (hot)

| Rev.         | Changes Summary | Performed | Checked       | Date     |
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| Checked by   |                 |           |               |          |
| Date         | 14/04/2022      |           |               |          |

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

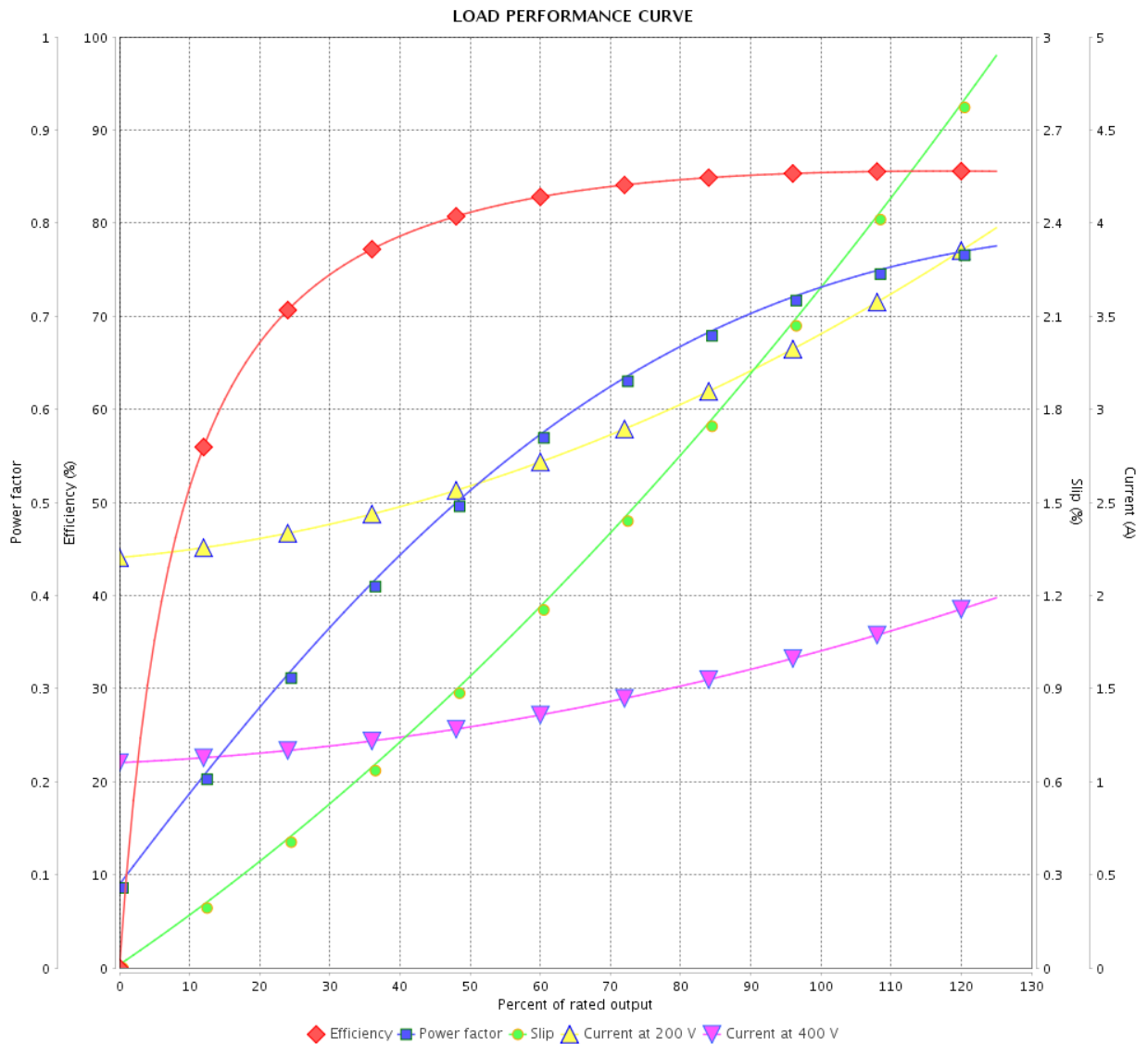


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12792416

Catalog # : 00118OT3V143T-SG



Performance : 200/400 V 60 Hz 4P

Rated current : 3.47/1.74 A  
 LRC : 8.0  
 Rated torque : 2.98 ft.lb  
 Locked rotor torque : 290 %  
 Breakdown torque : 360 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.1101 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

| Rev.         | Changes Summary | Performed  | Checked | Date     |
|--------------|-----------------|------------|---------|----------|
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| Date         |                 | 14/04/2022 |         |          |

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12792416  
Catalog # : 00118OT3V143T-SG

Performance : 200/400 V 60 Hz 4P

|                     |               |                       |                   |
|---------------------|---------------|-----------------------|-------------------|
| Rated current       | : 3.47/1.74 A | Moment of inertia (J) | : 0.1101 sq.ft.lb |
| LRC                 | : 8.0         | Duty cycle            | : Cont.(S1)       |
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| Locked rotor torque | : 290 %       | Service factor        | : 1.15            |
| Breakdown torque    | : 360 %       | Temperature rise      | : 80 K            |
| Rated speed         | : 1760 rpm    | Design                | : B               |

Heating constant

Cooling constant

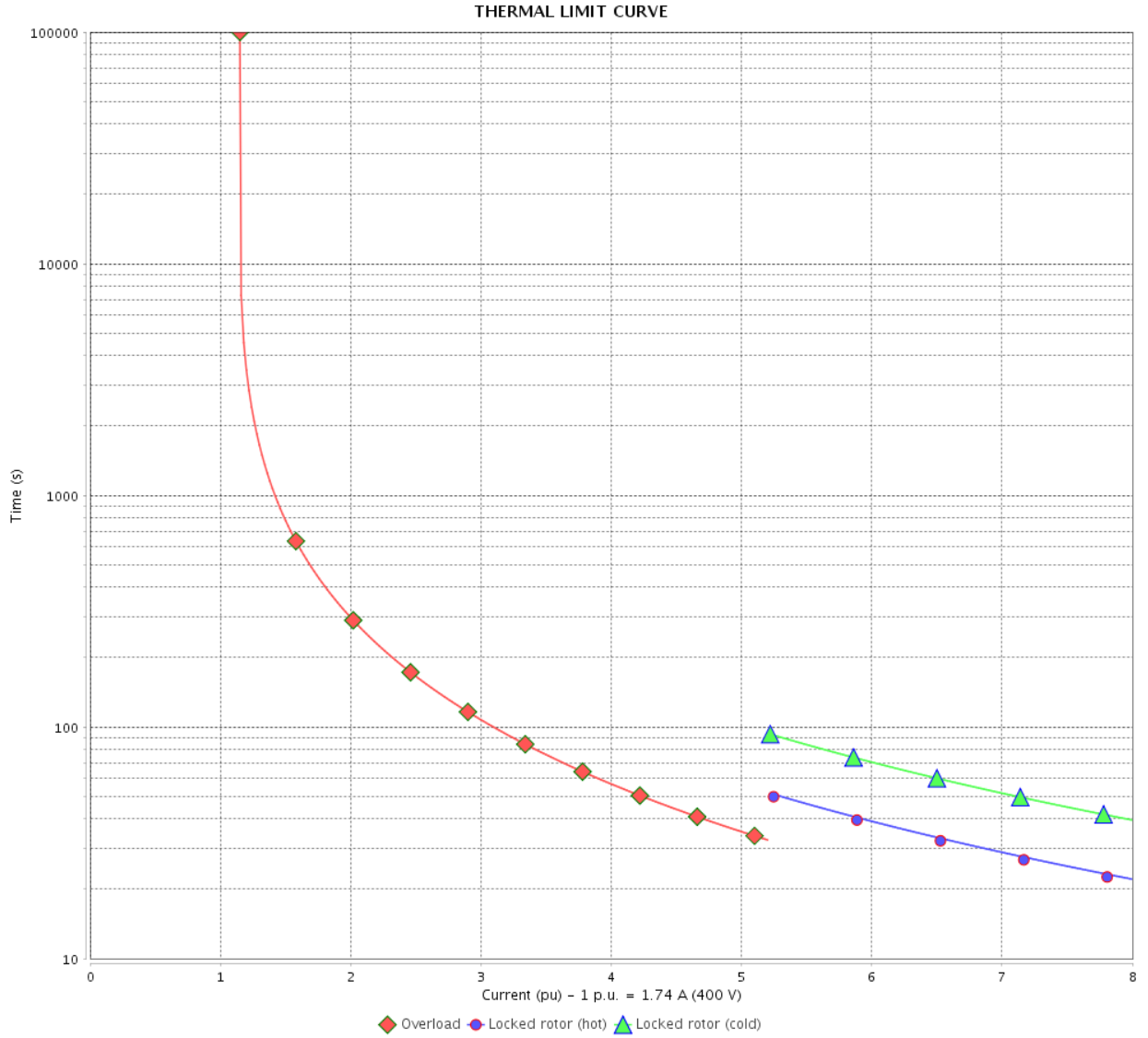
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| Checked by   |                 |           | Page    | Revision |
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



| Rev.         | Changes Summary | Performed  | Checked | Date     |
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| Date         |                 | 14/04/2022 |         |          |

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



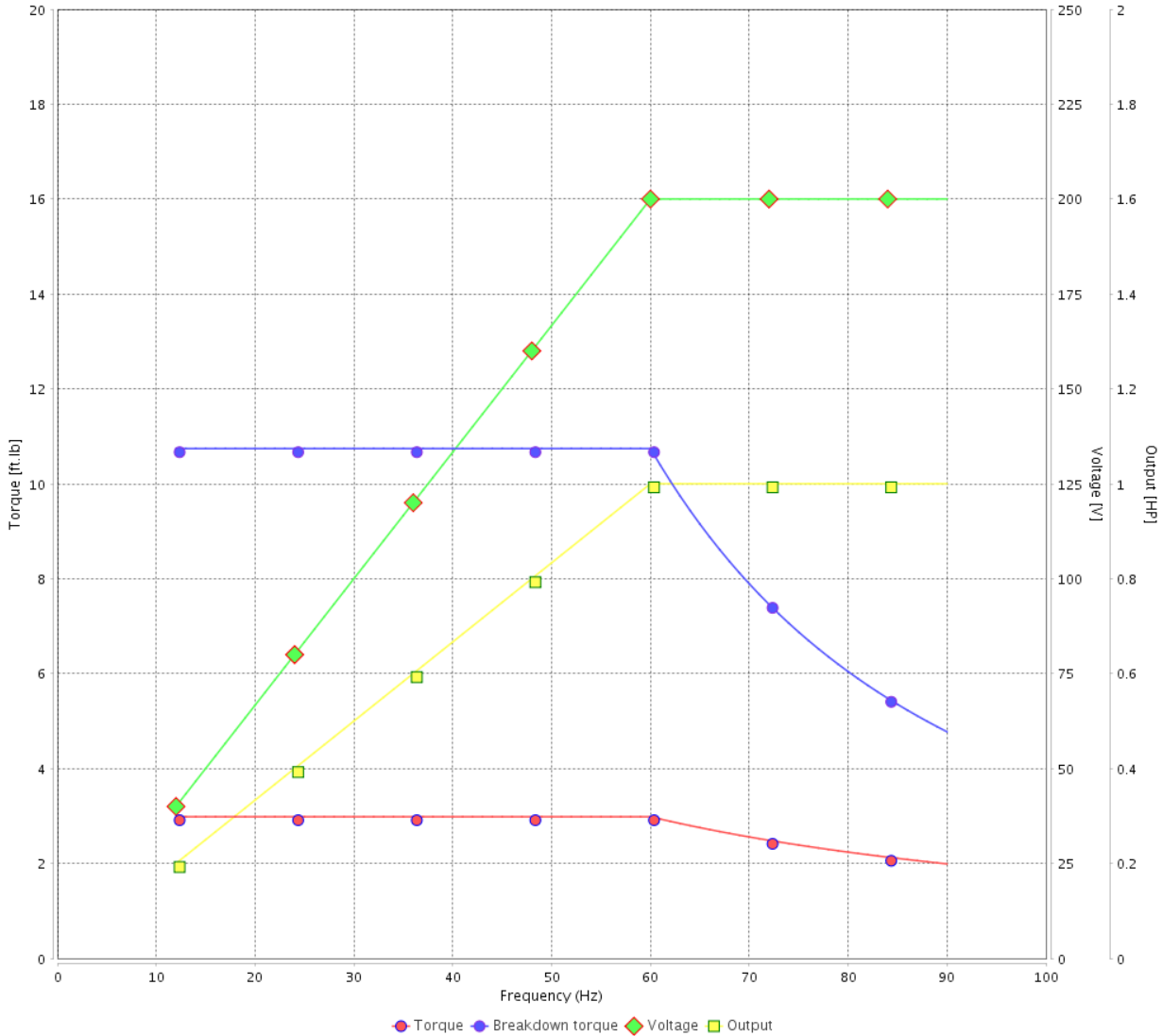
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12792416

Catalog # : 001180T3V143T-SG

VFD OPERATION CURVE



Performance : 200/400 V 60 Hz 4P

Rated current : 3.47/1.74 A  
 LRC : 8.0  
 Rated torque : 2.98 ft.lb  
 Locked rotor torque : 290 %  
 Breakdown torque : 360 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.1101 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

| Rev.         | Changes Summary | Performed | Checked       | Date     |
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| Checked by   |                 |           |               |          |
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1 2 3 4 5 6

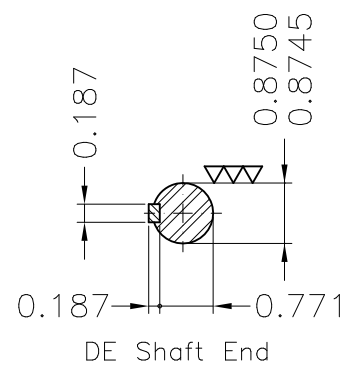
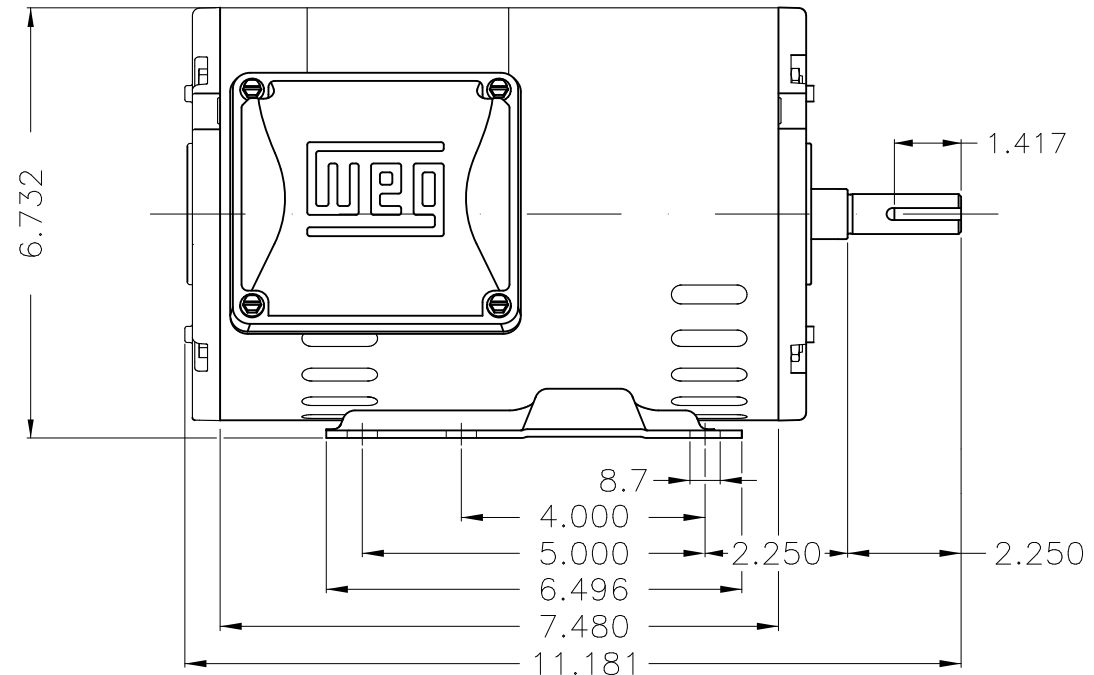
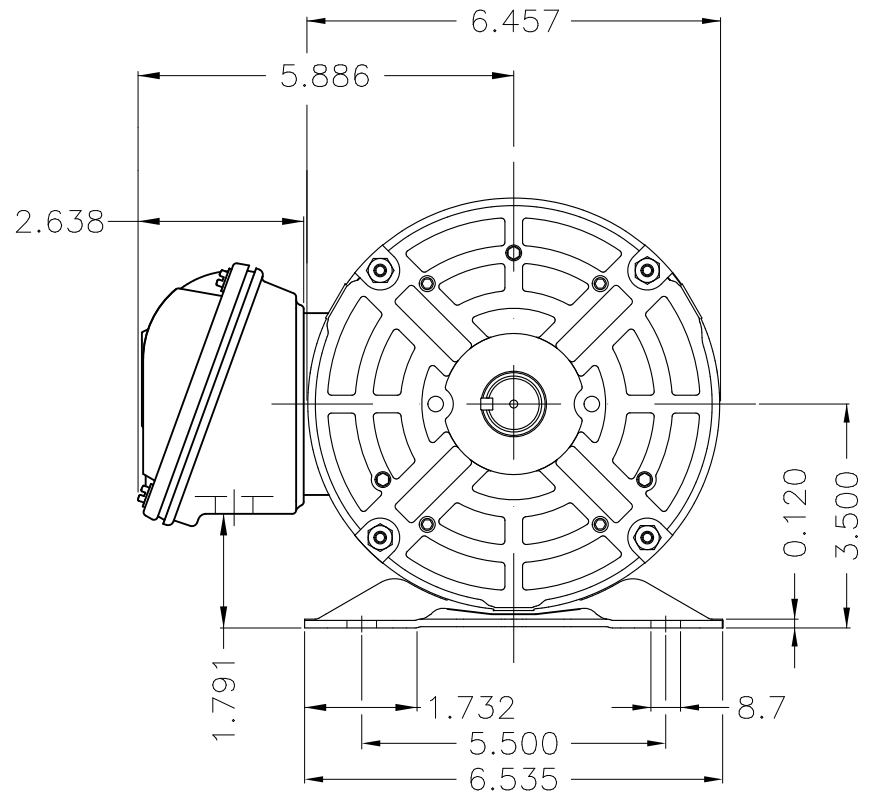
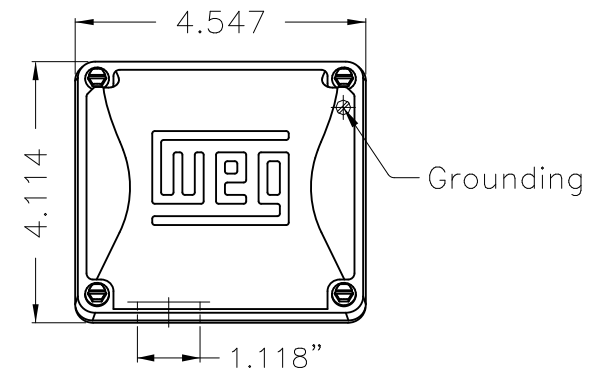
A

B

C

D

E



Bearing cap  
 Internal AEGIS ground ring on the DE  
 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.<br>FRAME 143/5T IP21 ODP |                     |         |          |      |     |
| CHECKED  |           |  |                     |         |          |      |     |
| RELEASED |           |  |                     |         |          |      |     |
| REL DT.  | WMO       | Jaragua do Sul   | Product Engineering | SHEET   | 1 / 1    |      |     |

1 HP 04 Poles 60 Hz

A

PREVIEW  
WDD



Dimensions in inches XME A3

**WEG**  
**NEMA**  
**Premium**3PT9  
C US LISTED

Energy Verified

MADE IN MEXICO

MAT: 12792416 CC029A

W01.T00IC0X0N

MODEL 001180T3V143T-SG  
30NOV2018

PH 3 FR 143/5T |HP(kW) 1.0(0.75) |Hz 60

V 200/400 |RPM 1760

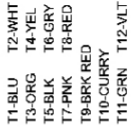
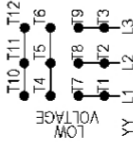
A 3.47/1.74 |DUTY CONT.

SFA 3.99/2.00 |CODE L |DES B

SF 1.15 |INS CL F ΔT 80K AMB 40°C |ENCL ODP

ALT 1000 m.a.s.l. |NEMA NOM.EFF. 85.5% |PF 0.73

ALTERNATE RATING:



INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

Inverter duty For use on VPWM 1000:1 VT, 5:1 CT

DE: 6205-ZZ |ODE: 6203-ZZ |MOBIL POLYREX EM

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.

