

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: JM Pump NEMA Premium Efficiency Three-Phase																		
Product code :	13312517																		
Catalog # :	00536ET3H184JM-S																		
Frame : 182/4JM Output : 5 HP (3.7 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 4.72 A L. R. Amperes : 36.8 A LRC : 7.8x(Code J) No load current : 1.76 A Rated speed : 3500 rpm Slip : 2.78 % Rated torque : 7.50 ft.lb Locked rotor torque : 220 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.2079 sq.ft.lb Design : B	Locked rotor time : 30s (cold) 17s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 68.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 88.8 lb																		
Output	25%    50%    75%    100%																		
Efficiency (%)	0.000    87.5    88.5    88.5																		
Power Factor	0.00    0.76    0.85    0.89																		
Foundation loads																			
Max. traction : 99 lb																			
Max. compression : 188 lb																			
<table border="0" style="width:100%"> <tr> <td></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">6207 ZZ</td> <td style="text-align:center">6205 ZZ</td> </tr> <tr> <td>Sealing :</td> <td style="text-align:center">V'Ring</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 :	6207 ZZ	6205 ZZ	Sealing :	V'Ring	Without Bearing Seal	Lubrication interval :	-	-	Lubricant amount :	-	-	Lubricant type :	Mobil Polyrex EM	
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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



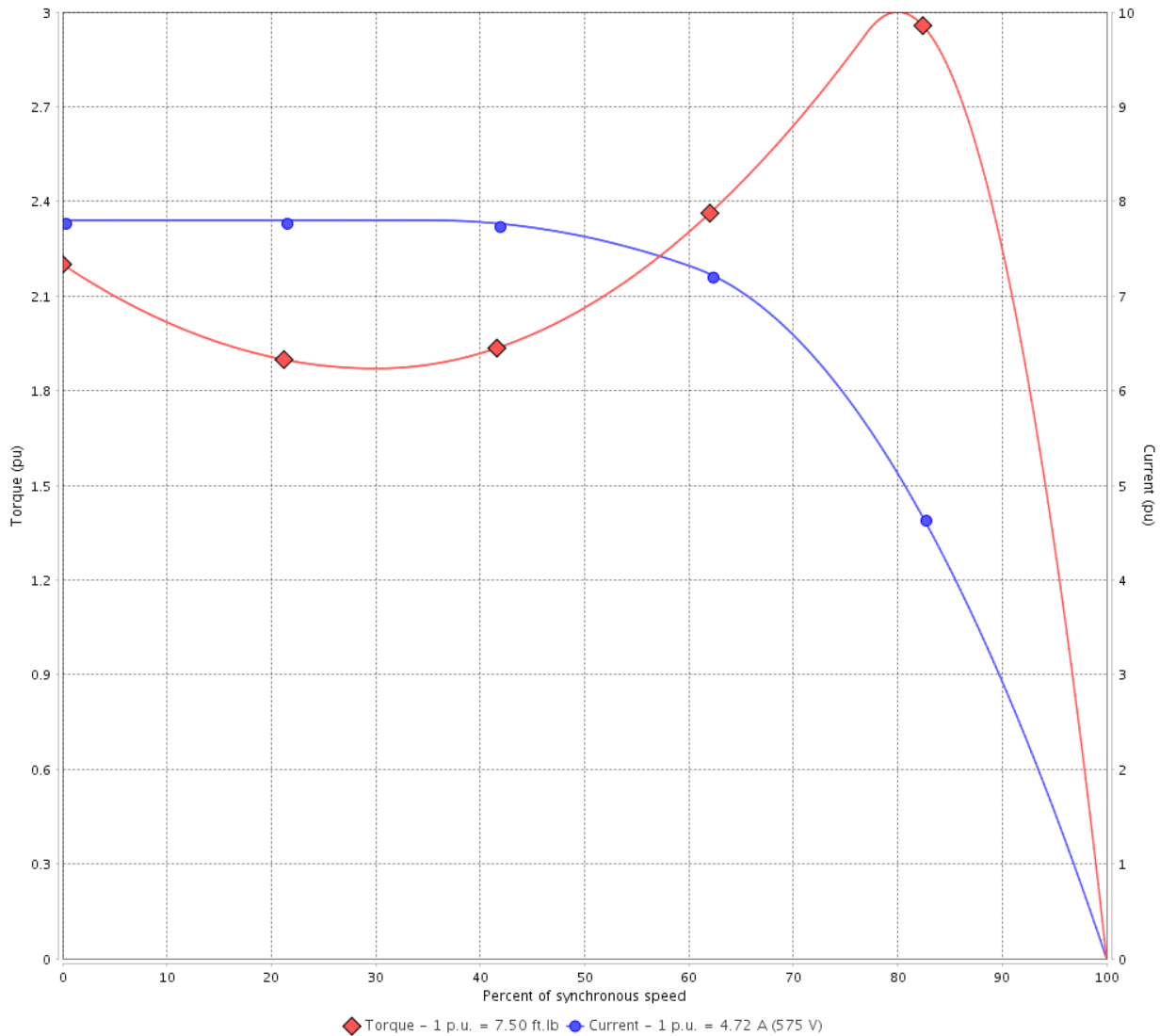
Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13312517

Catalog # : 00536ET3H184JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 4.72 A	Moment of inertia (J)	: 0.2079 sq.ft.lb
LRC	: 7.8	Duty cycle	: Cont.(S1)
Rated torque	: 7.50 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3500 rpm	Design	: B

Locked rotor time : 30s (cold) 17s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

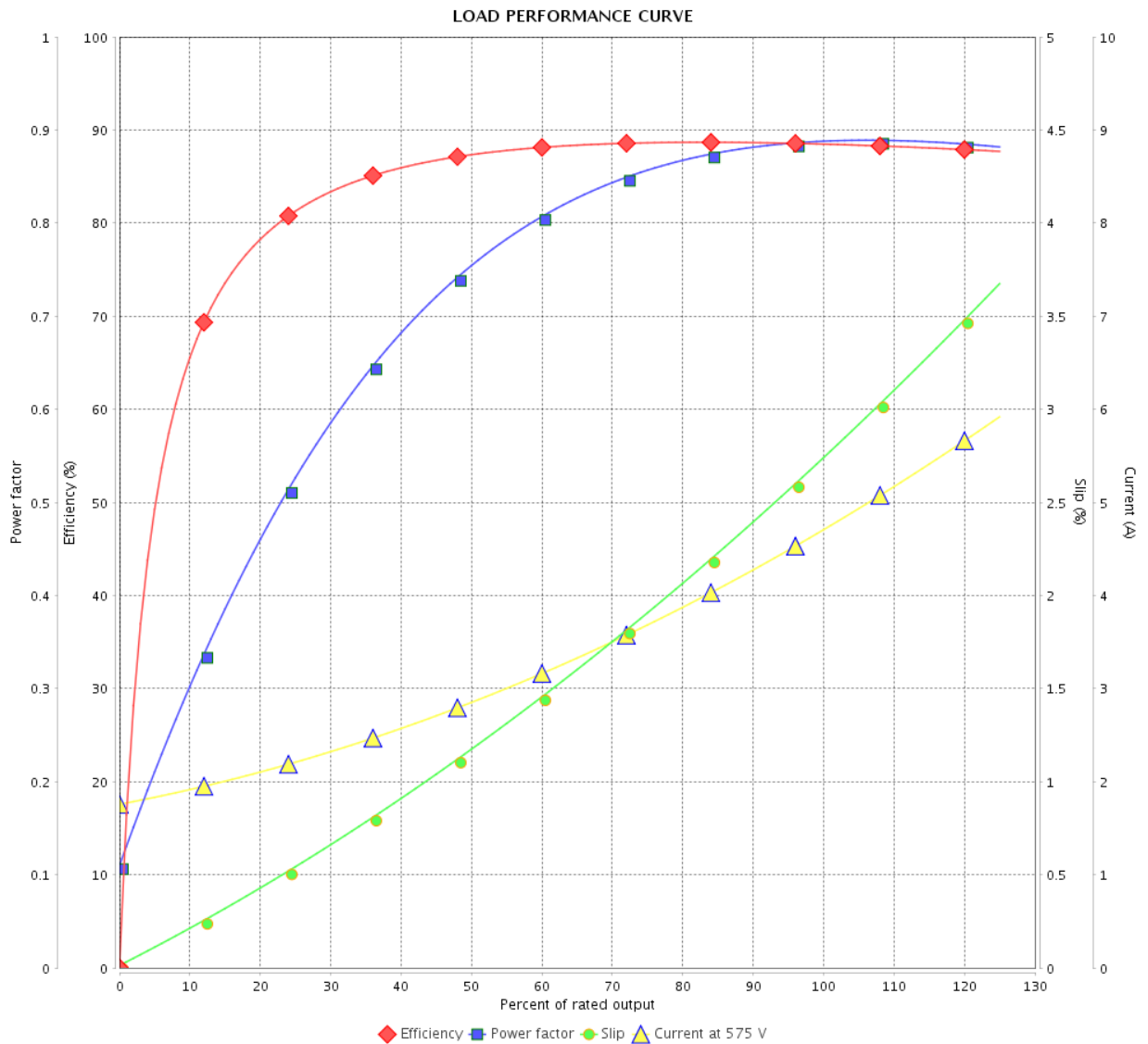


Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13312517

Catalog # : 00536ET3H184JM-S



Performance : 575 V 60 Hz 2P

Rated current : 4.72 A  
 LRC : 7.8  
 Rated torque : 7.50 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 300 %  
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.2079 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

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Efficiency Three-Phase

Product code : 13312517

Catalog # : 00536ET3H184JM-S

Performance : 575 V 60 Hz 2P

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LRC : 7.8  
Rated torque : 7.50 ft.lb  
Locked rotor torque : 220 %  
Breakdown torque : 300 %  
Rated speed : 3500 rpm

Moment of inertia (J) : 0.2079 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

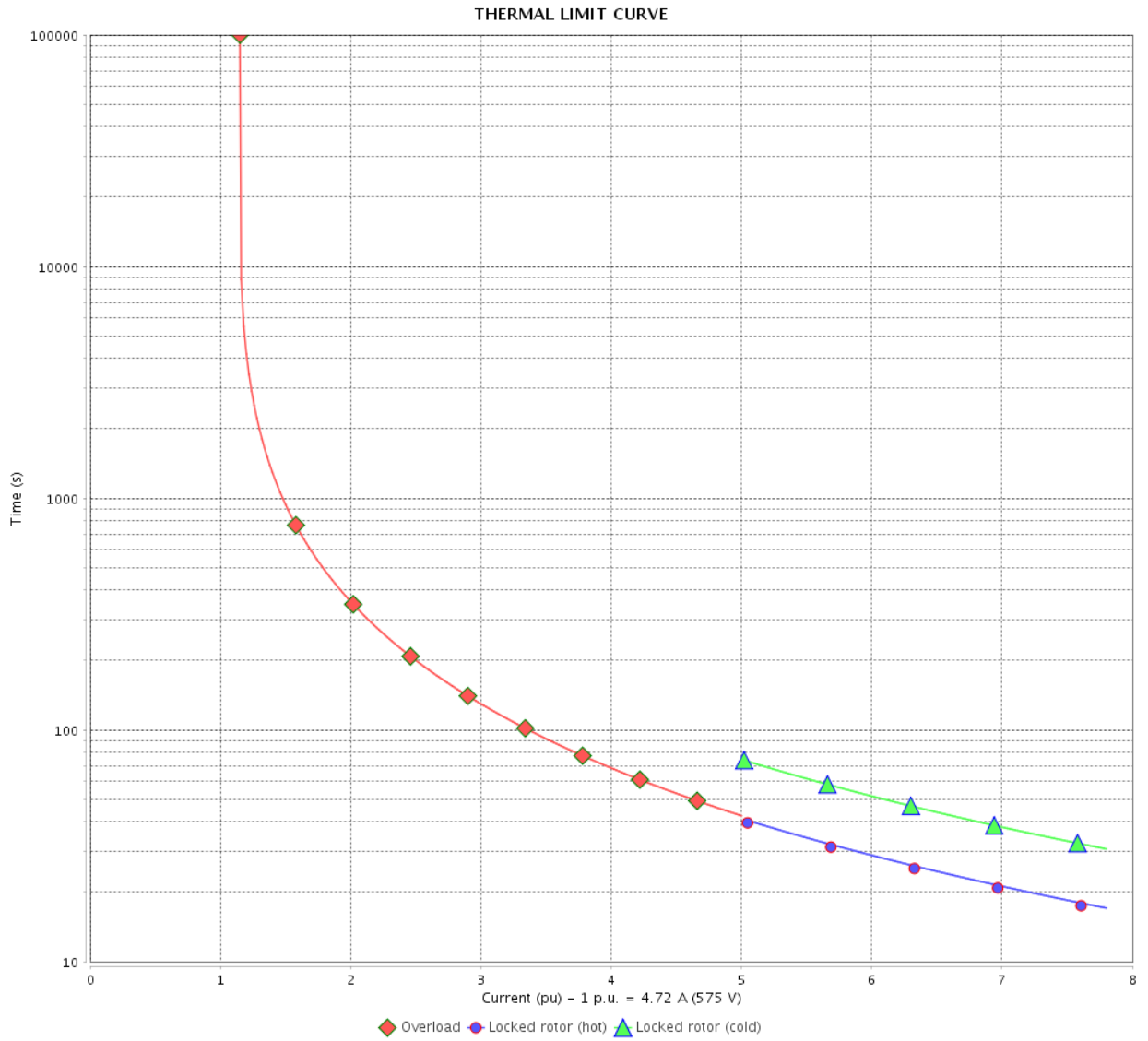
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

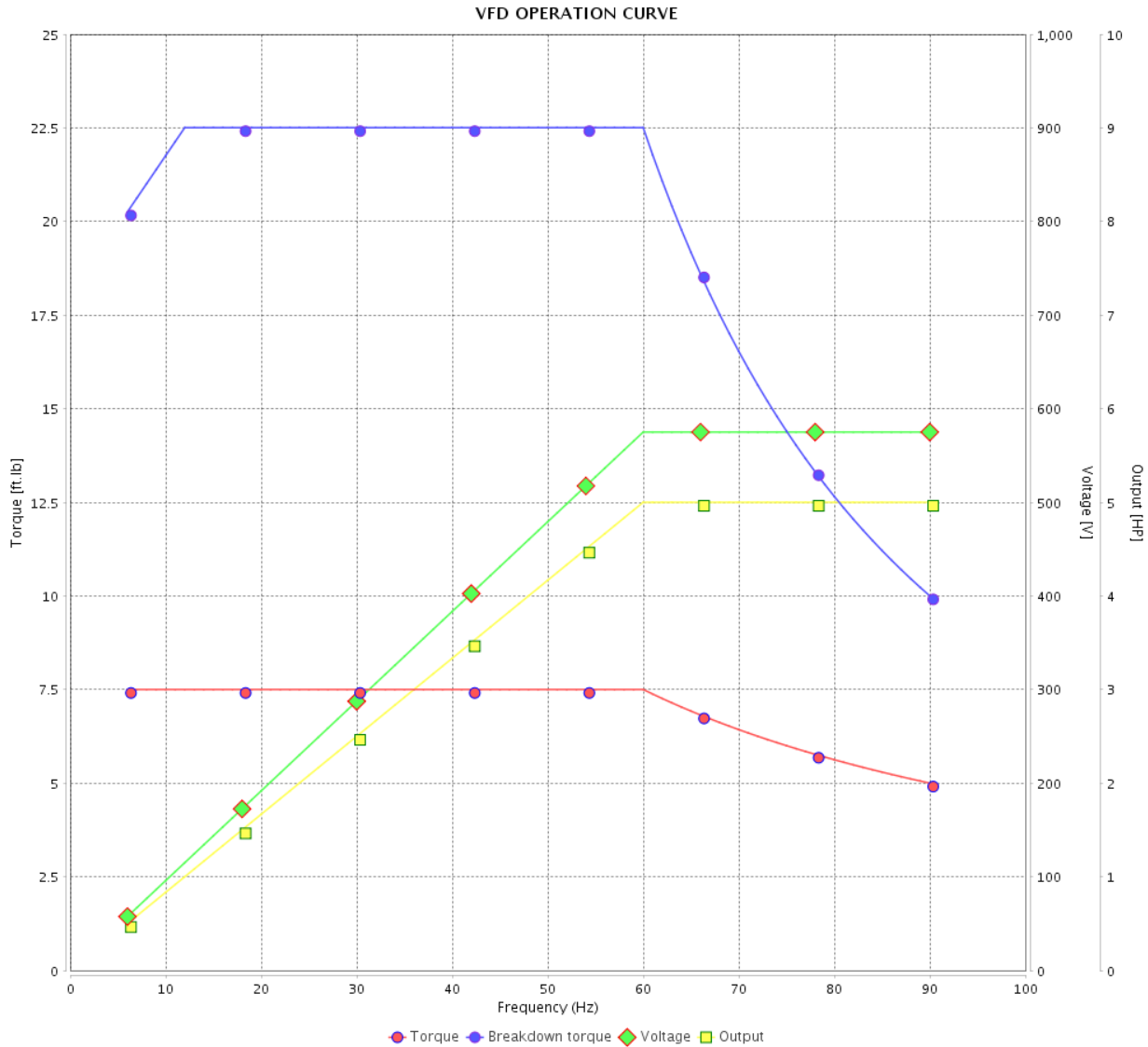


Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 13312517

Catalog # : 00536ET3H184JM-S



Performance : 575 V 60 Hz 2P

Rated current : 4.72 A  
 LRC : 7.8  
 Rated torque : 7.50 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 300 %  
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.2079 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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1 2 3 4 5 6

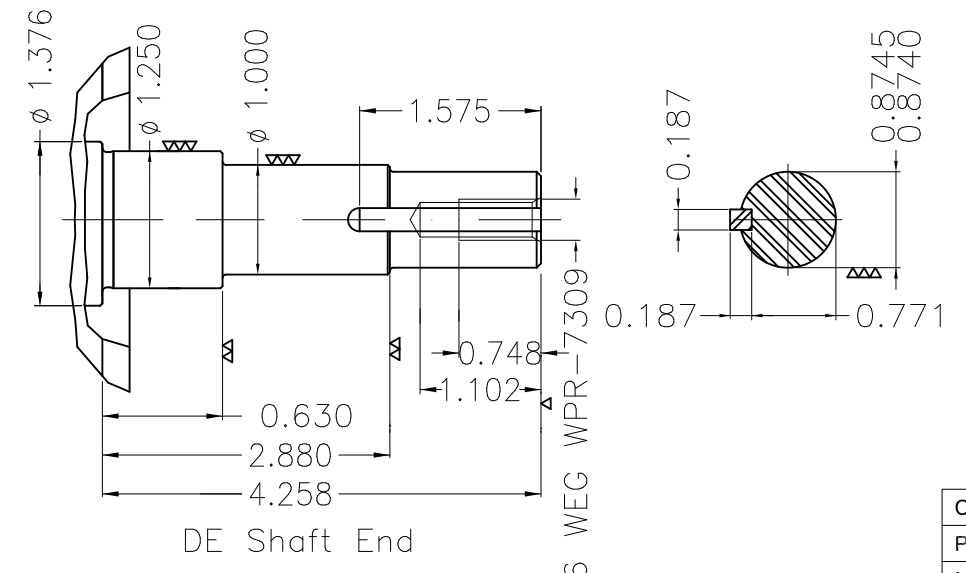
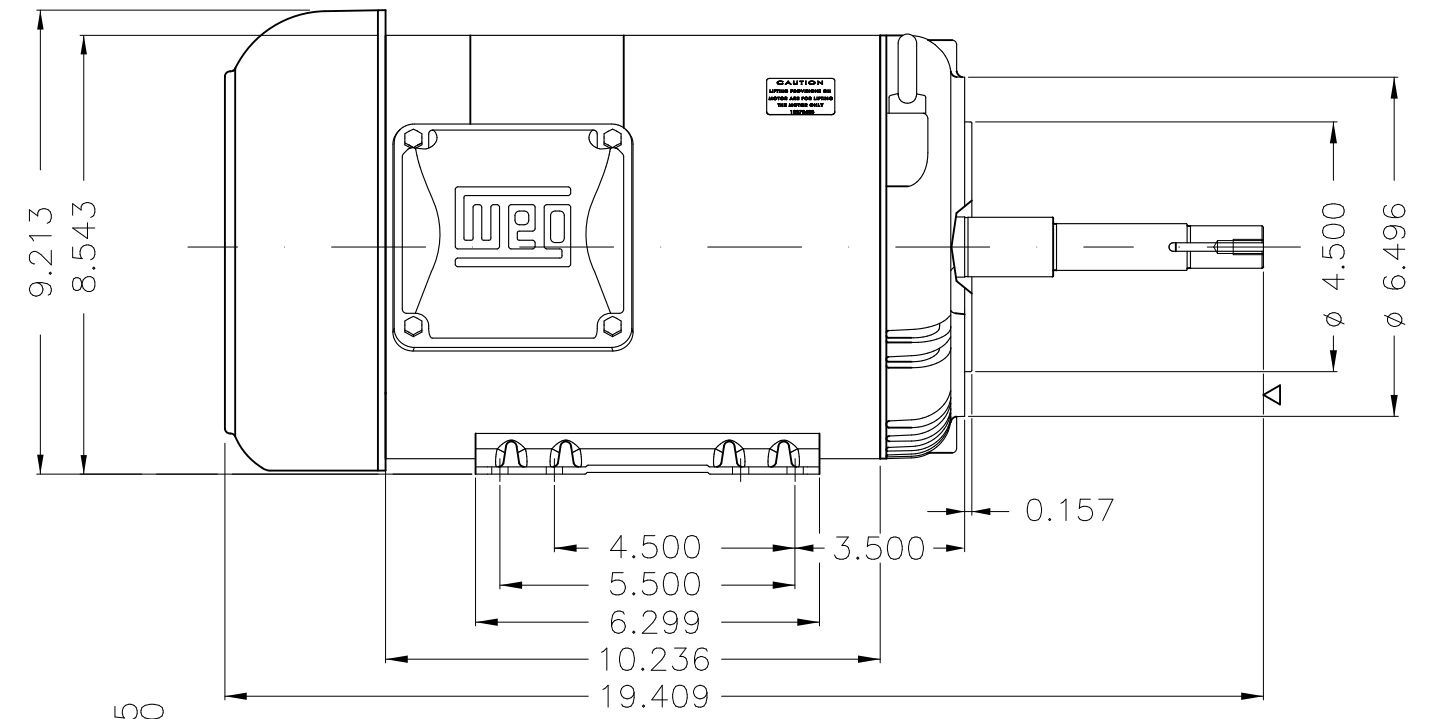
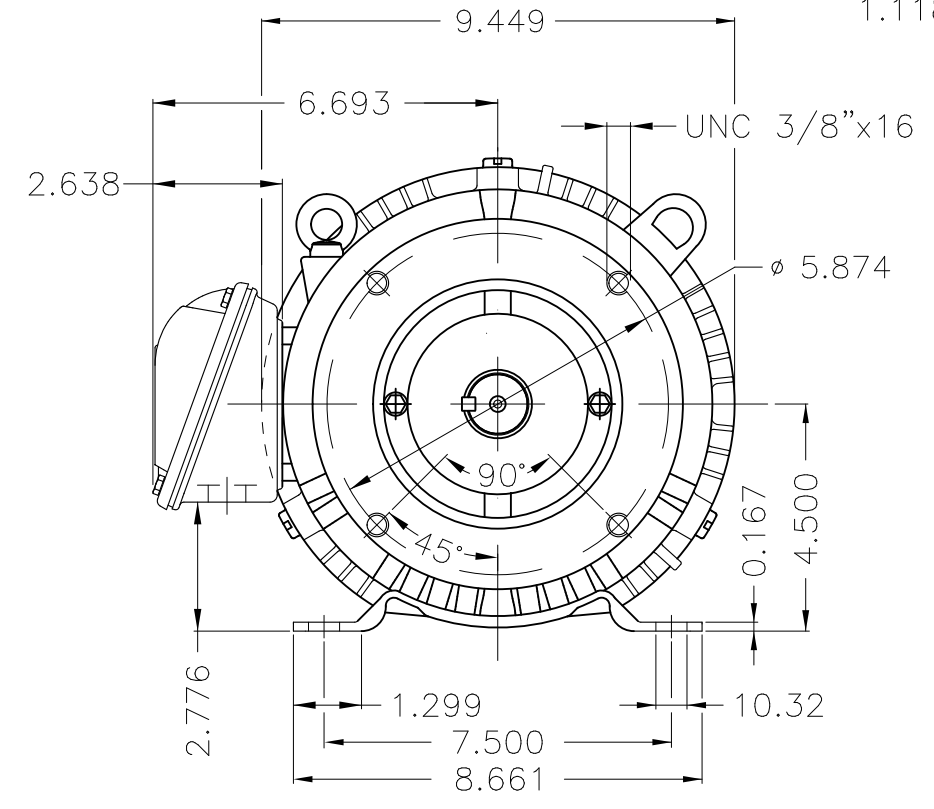
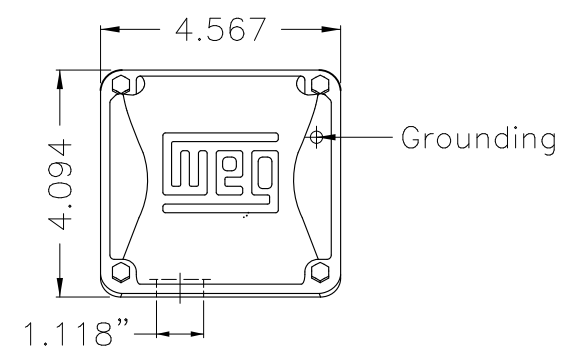
A

B

C

D

E



EUNC 3/8"-16 WEG WPR-7309

DE Shaft End

Color Munsell N 1 matte black  
 Painting plan 207N  
 Mounting F-1/B34R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JM TYPE PSEF 500					
CHECKED		FRAME 182/4JM IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

5 HP 02 Poles 60 Hz





**NEMA**  
**Premium**



MADE IN MEXICO

**MAT: 13312517 CC029A**

**W01.TE0IC0X0N**

**MODEL 00536ET3H184JM-S**

**06APR2022 S/N:**

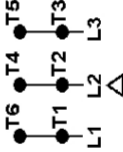
**For 60Hz: Class I, Zone 2, IIC  
Class I, Div.2, Gr. A,B,C,D - T3  
Div 2 Inverter Duty (SF1.00)**

**CT 2:1/VT 1000:1**

<b>PH 3</b>	<b>Hz 60</b>	<b>HP 5.0</b>
<b>FR 182/4JM</b>		<b>KW 3.7</b>
<b>DUTY CONT.</b>		<b>V 575</b>
<b>ALT 1000 m.a.s.l.</b>		<b>A 4.72</b>
<b>INS CL F AT 80K</b>	<b>IP55</b>	<b>SFA 5.43</b>
<b>AMB 52°C</b>	<b>DES B</b>	<b>SF 1.15</b>
<b>ENCL TEFC</b>	<b>CODE J</b>	<b>PF 0.89</b>
		<b>RPM 3500</b>
		<b>NEMA NOM. EFF 88.5%</b>

**For safe area-inverter duty motor For use on VPWM 1000:1 VT, 10:1 CT**

**DE 6207-ZZ ODE 6205-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.**

