

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: JM Pump NEMA Premium Efficiency Three-Phase			
Product code :	14218460			
Catalog # :	00336ET3H182JM-SG			
Frame : 182/4JM Output : 3 HP (2.2 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 2.94 A L. R. Amperes : 25.8 A LRC : 8.8x(Code K) No load current : 1.29 A Rated speed : 3515 rpm Slip : 2.36 % Rated torque : 4.48 ft.lb Locked rotor torque : 220 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1564 sq.ft.lb Design : B	Locked rotor time : 39s (cold) 22s (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> : 74.0 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	83.6    84.0    86.5    86.5			
Power Factor	0.44    0.71    0.82    0.87			
Foundation loads				
Max. traction : 49 lb				
Max. compression : 123 lb				
Bearing type	: <u>Drive end</u> 6207 ZZ <u>Non drive end</u> 6205 ZZ			
Sealing	: V'Ring    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.				
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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



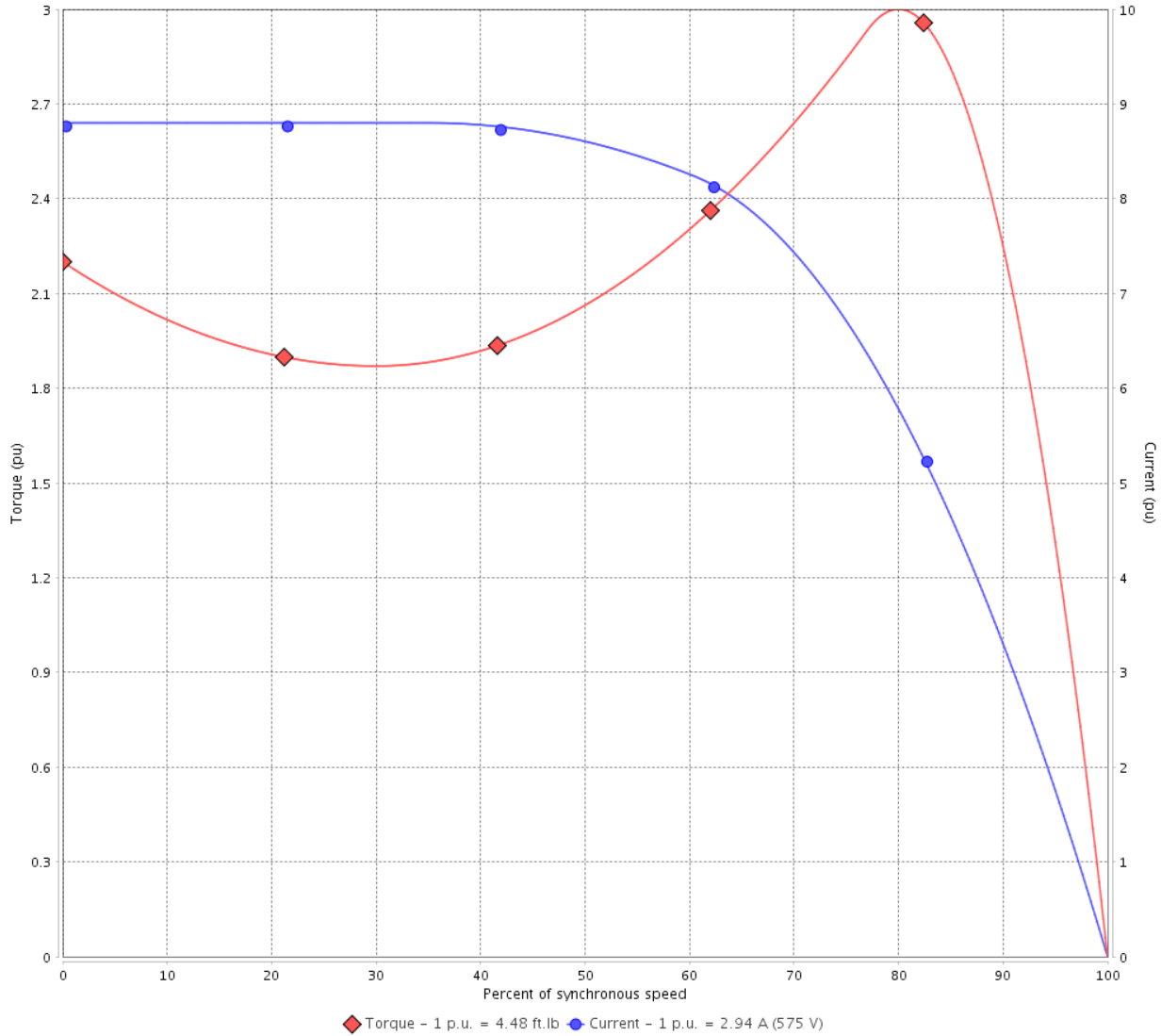
Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 14218460

Catalog # : 00336ET3H182JM-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 2.94 A	Moment of inertia (J)	: 0.1564 sq.ft.lb
LRC	: 8.8	Duty cycle	: Cont.(S1)
Rated torque	: 4.48 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3515 rpm	Design	: B

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

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

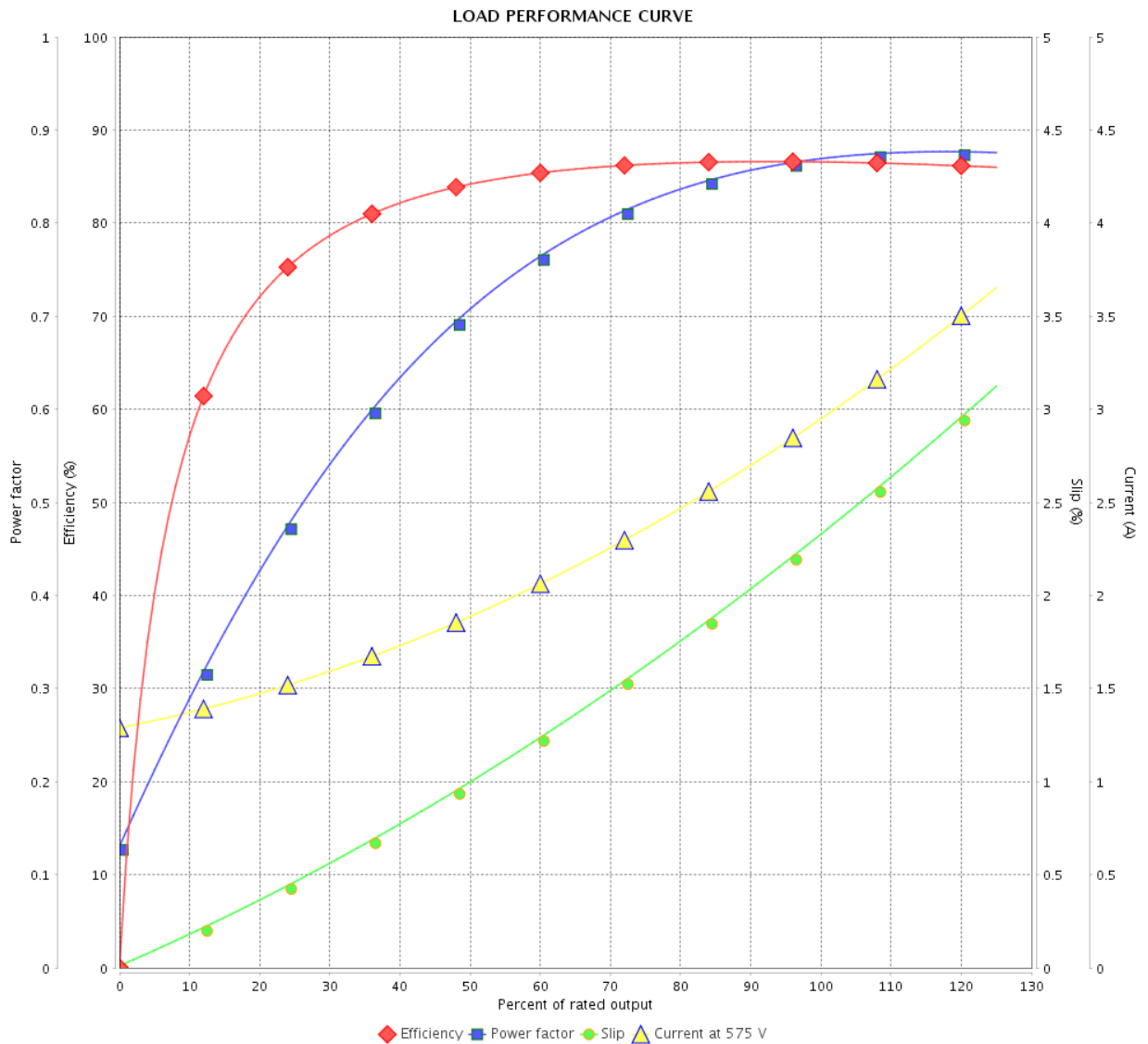


Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14218460

Catalog # : 00336ET3H182JM-SG



Performance : 575 V 60 Hz 2P

Rated current : 2.94 A  
 LRC : 8.8  
 Rated torque : 4.48 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 300 %  
 Rated speed : 3515 rpm

Moment of inertia (J) : 0.1564 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

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LRC : 8.8  
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Locked rotor torque : 220 %  
Breakdown torque : 300 %  
Rated speed : 3515 rpm

Moment of inertia (J) : 0.1564 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

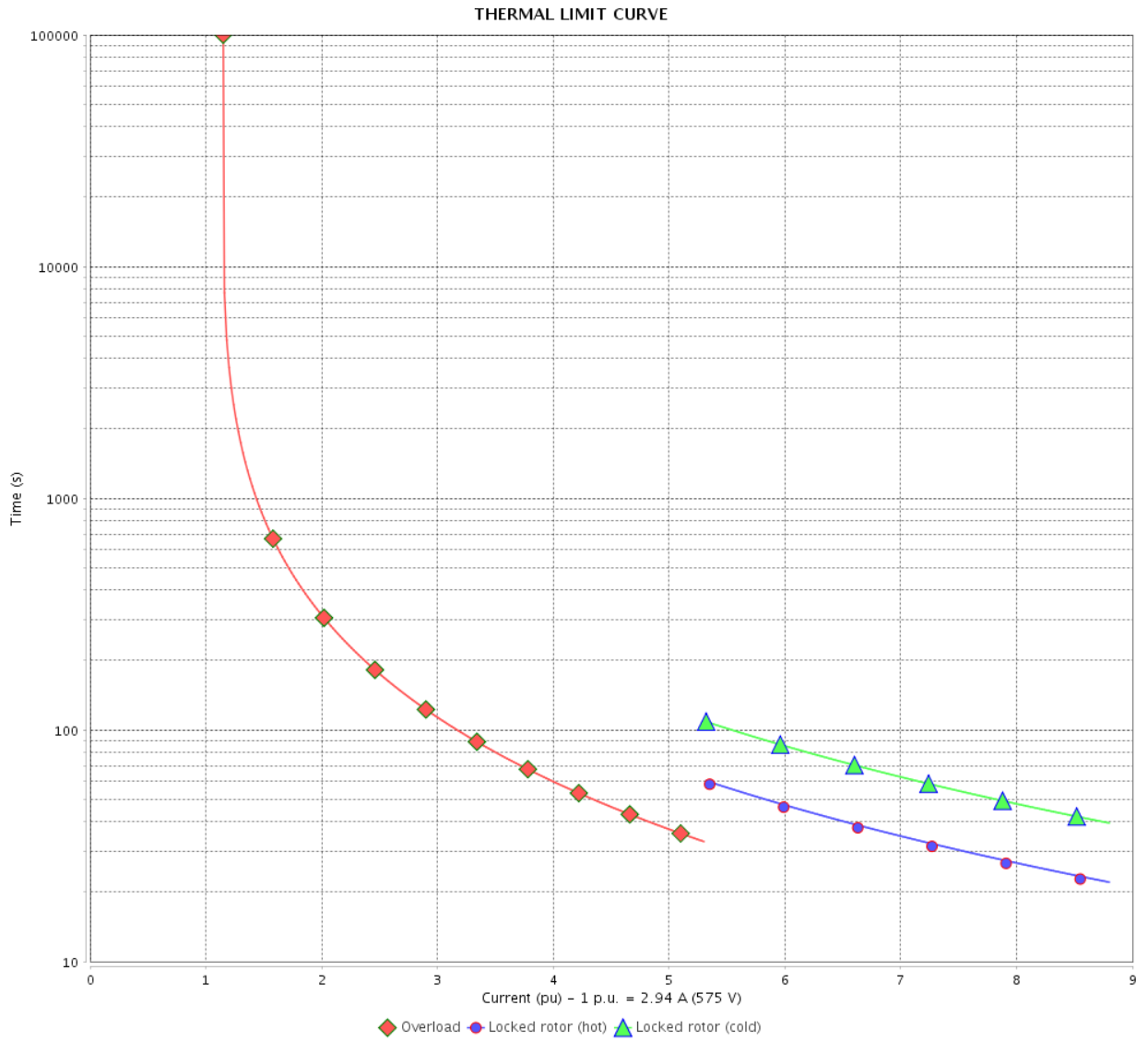
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

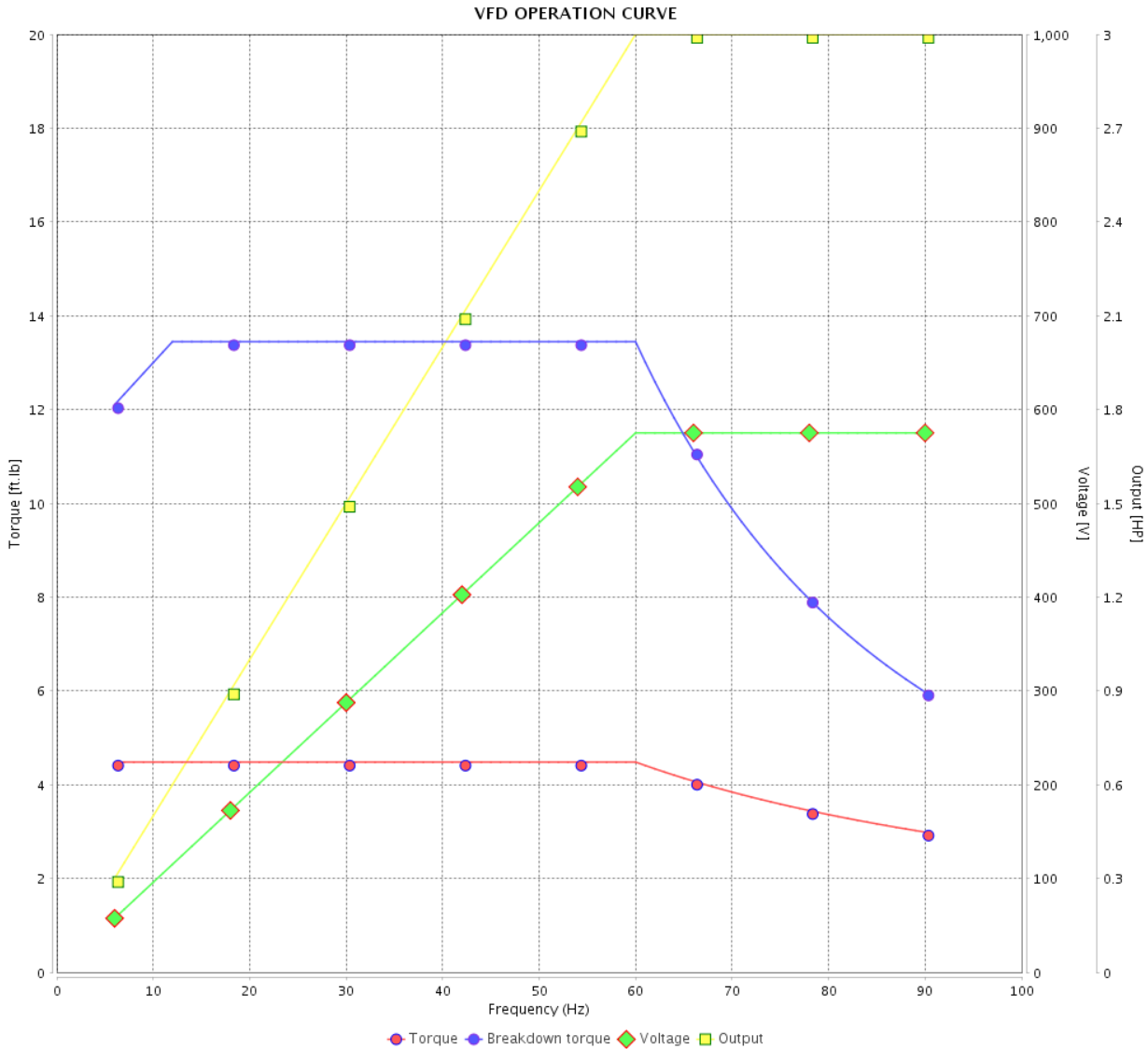


Customer : \_\_\_\_\_

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14218460

Catalog # : 00336ET3H182JM-SG



Performance : 575 V 60 Hz 2P

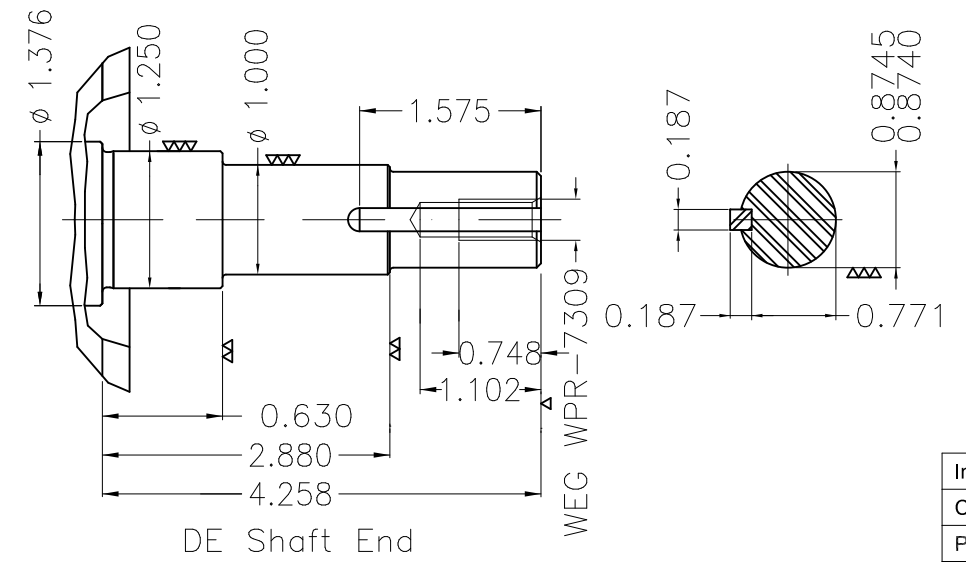
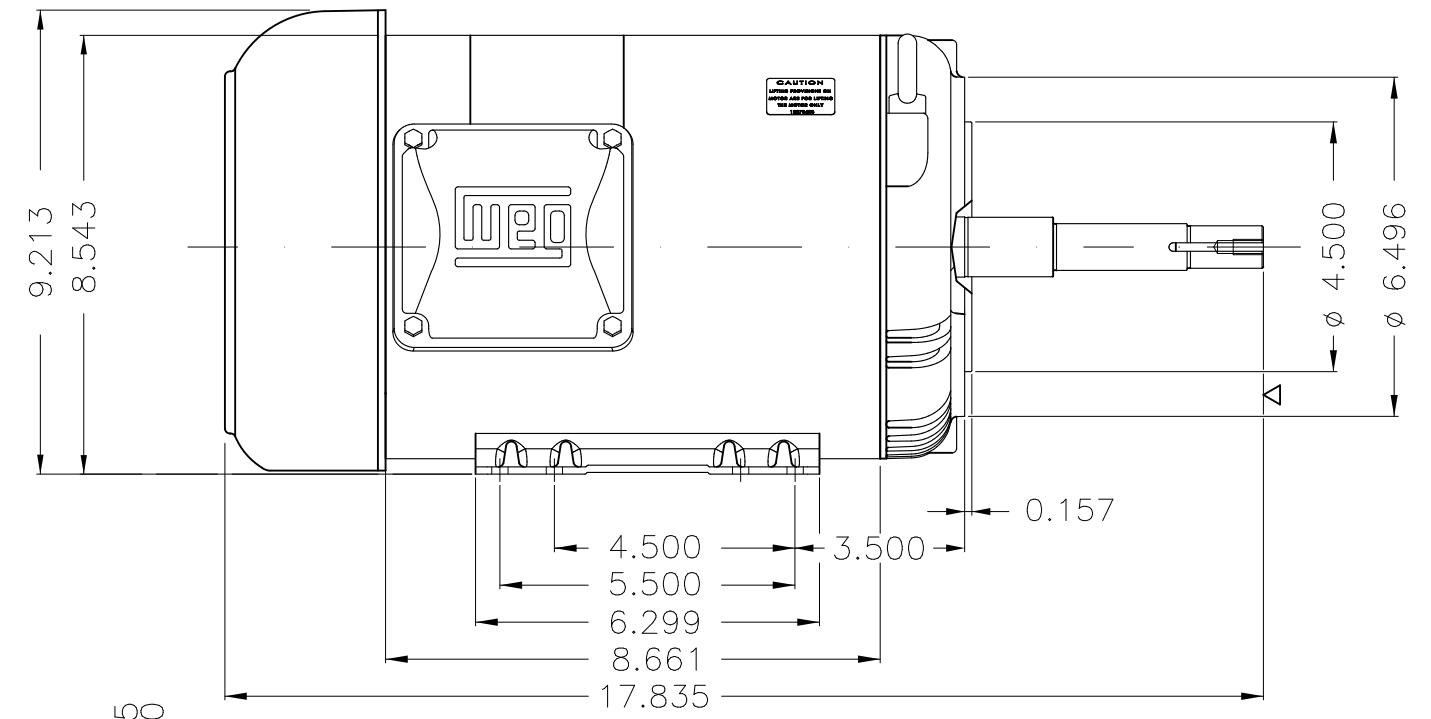
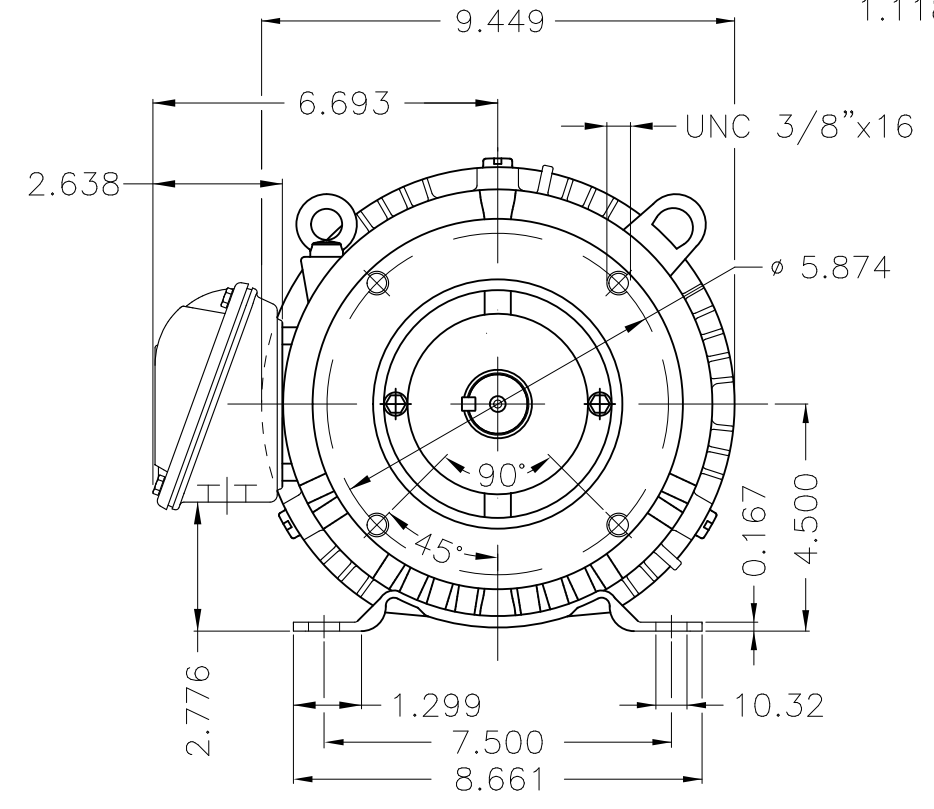
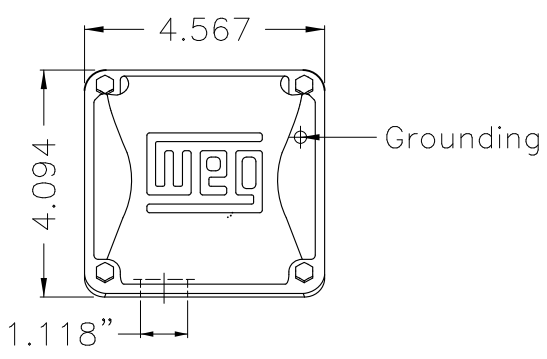
Rated current : 2.94 A  
 LRC : 8.8  
 Rated torque : 4.48 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 300 %  
 Rated speed : 3515 rpm

Moment of inertia (J) : 0.1564 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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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

Internal AEGIS ground ring on the DE  
 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	PIRWBUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JM TYPE PSEF 187					
CHECKED		FRAME 182/4JM IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

3 HP 02 Poles 60 Hz

Dimensions in inches XME A3



**NEMA**  
**Premium**

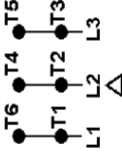
MADE IN MEXICO

**MAT: 14218460 CC029A**  
**W01.TE0IC0X0N**  
**JM003502NPW01GR**  
**12OCT2021 S/N:**

PH 3	Hz 60	HP 3.0
FR 182/4JM		KW 2.2
DUTY CONT.		V 575
ALT 1000 m.a.s.l		A 2.94
INS CL F AT 80K	IP55	SFA 3.38
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE K	PF 0.87
		RPM 3515
		NEMA NOM. EFF 86.5%

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.

