

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line : JM Pump NEMA Premium Efficiency Three-Phase			Product code : 14807103			
			Catalog # : 00118ET3H143JM-S			
Frame : 143/5JM Output : 1 HP (0.75 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 1.18 A L. R. Amperes : 10.1 A LRC : 8.6x(Code M) No load current : 0.712 A Rated speed : 1765 rpm Slip : 1.94 % Rated torque : 2.98 ft.lb Locked rotor torque : 280 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1232 sq.ft.lb Design : B			Locked rotor time : 34s (cold) 19s (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> : 52.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 40.6 lb			
Output      25%      50%      75%      100%			Foundation loads			
Efficiency (%)    81.0    82.5    84.0    85.5 Power Factor    0.30    0.52    0.66    0.75			Max. traction : 57 lb Max. compression : 98 lb			
		<u>Drive end</u>		<u>Non drive end</u>		
Bearing type :		6206 ZZ		6203 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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Performed by					Page      Revision 1 / 6	
Checked by						
Date		14/04/2022				

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



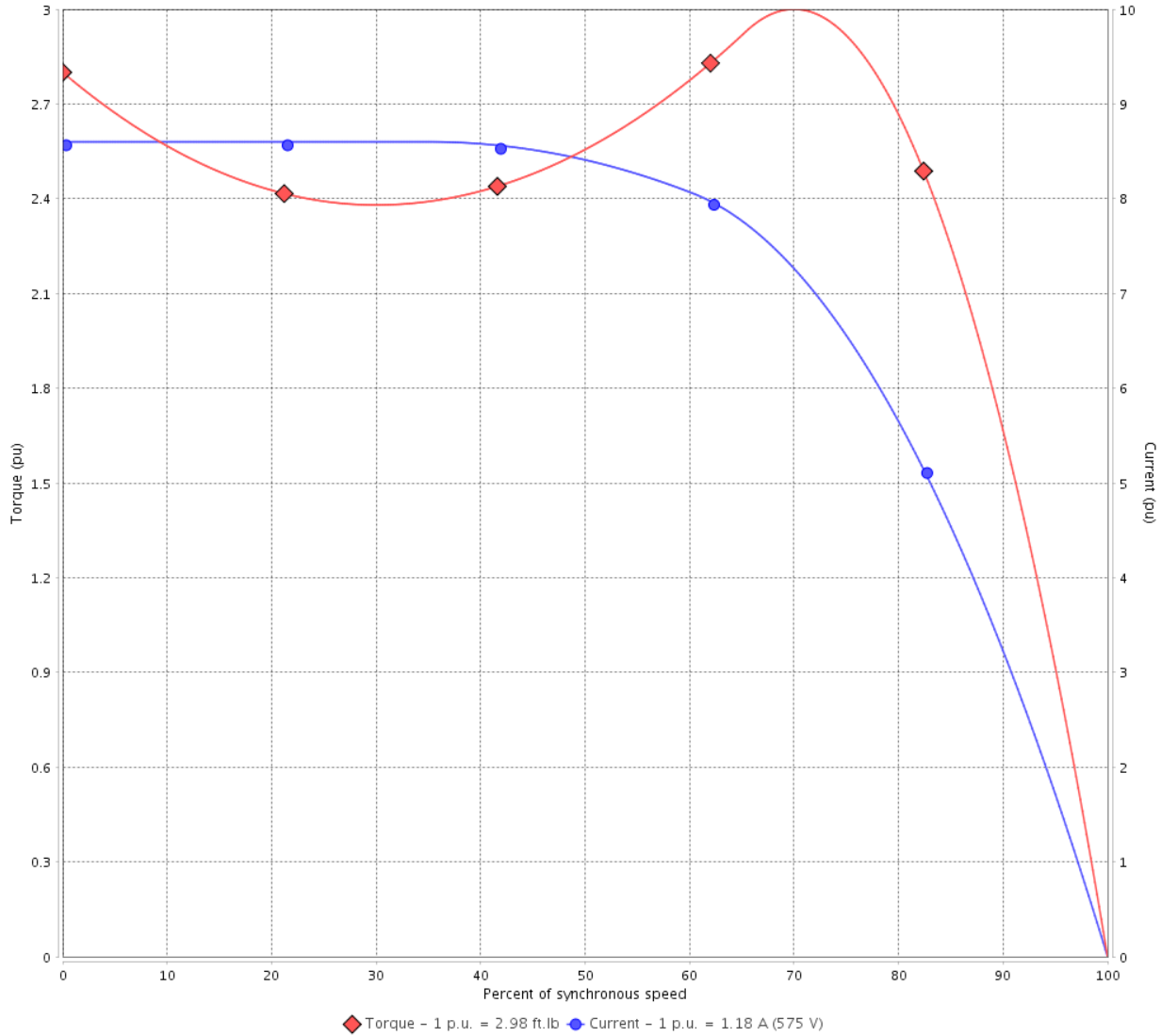
Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14807103

Catalog # : 00118ET3H143JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 1.18 A	Moment of inertia (J)	: 0.1232 sq.ft.lb
LRC	: 8.6	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

Locked rotor time : 34s (cold) 19s (hot)

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Date	14/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

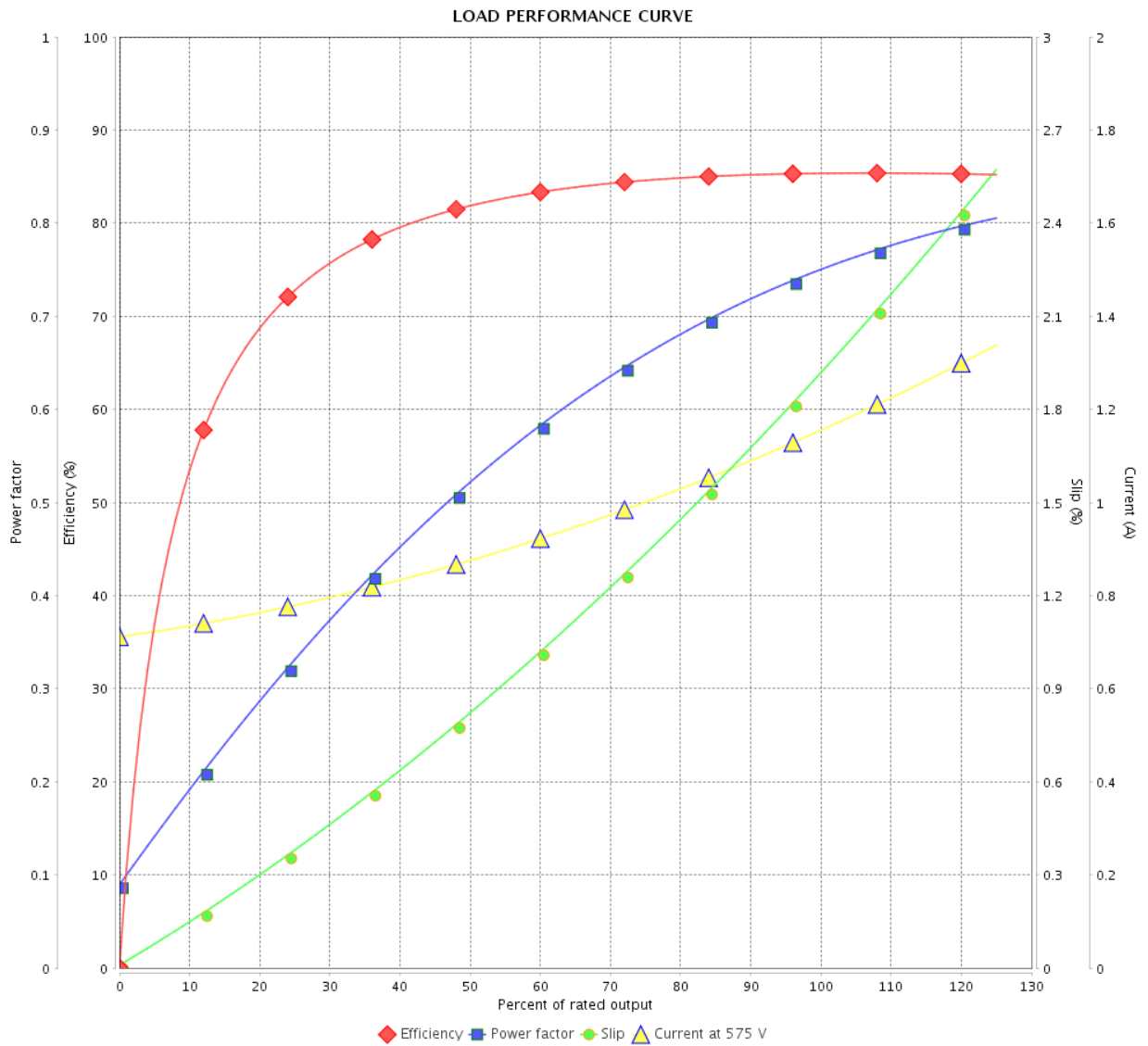


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Product code : 14807103

Catalog # : 00118ET3H143JM-S



Performance : 575 V 60 Hz 4P

Rated current : 1.18 A  
 LRC : 8.6  
 Rated torque : 2.98 ft.lb  
 Locked rotor torque : 280 %  
 Breakdown torque : 300 %  
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.1232 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



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Efficiency Three-Phase

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Breakdown torque : 300 %  
Rated speed : 1765 rpm

Moment of inertia (J) : 0.1232 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

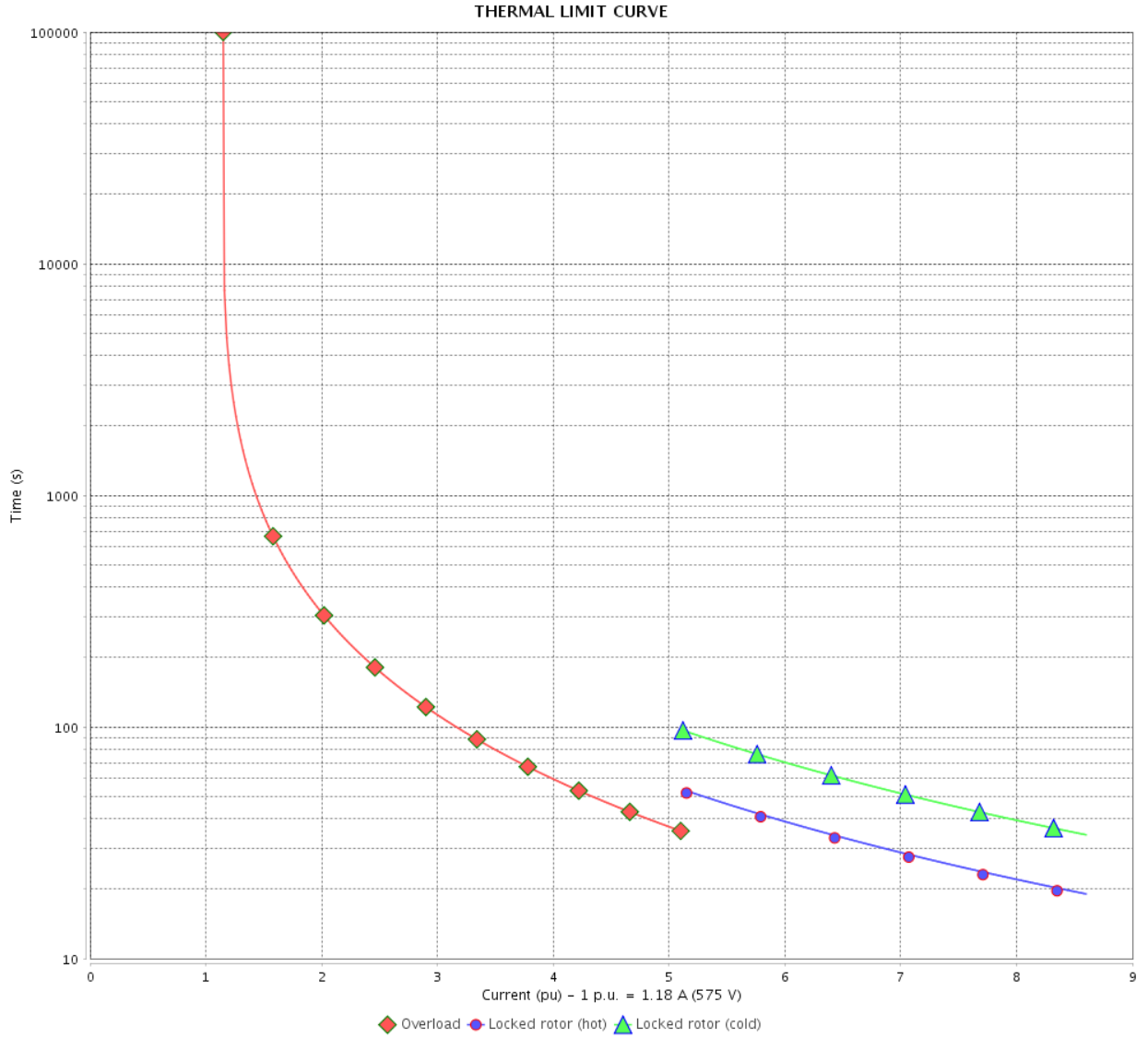
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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



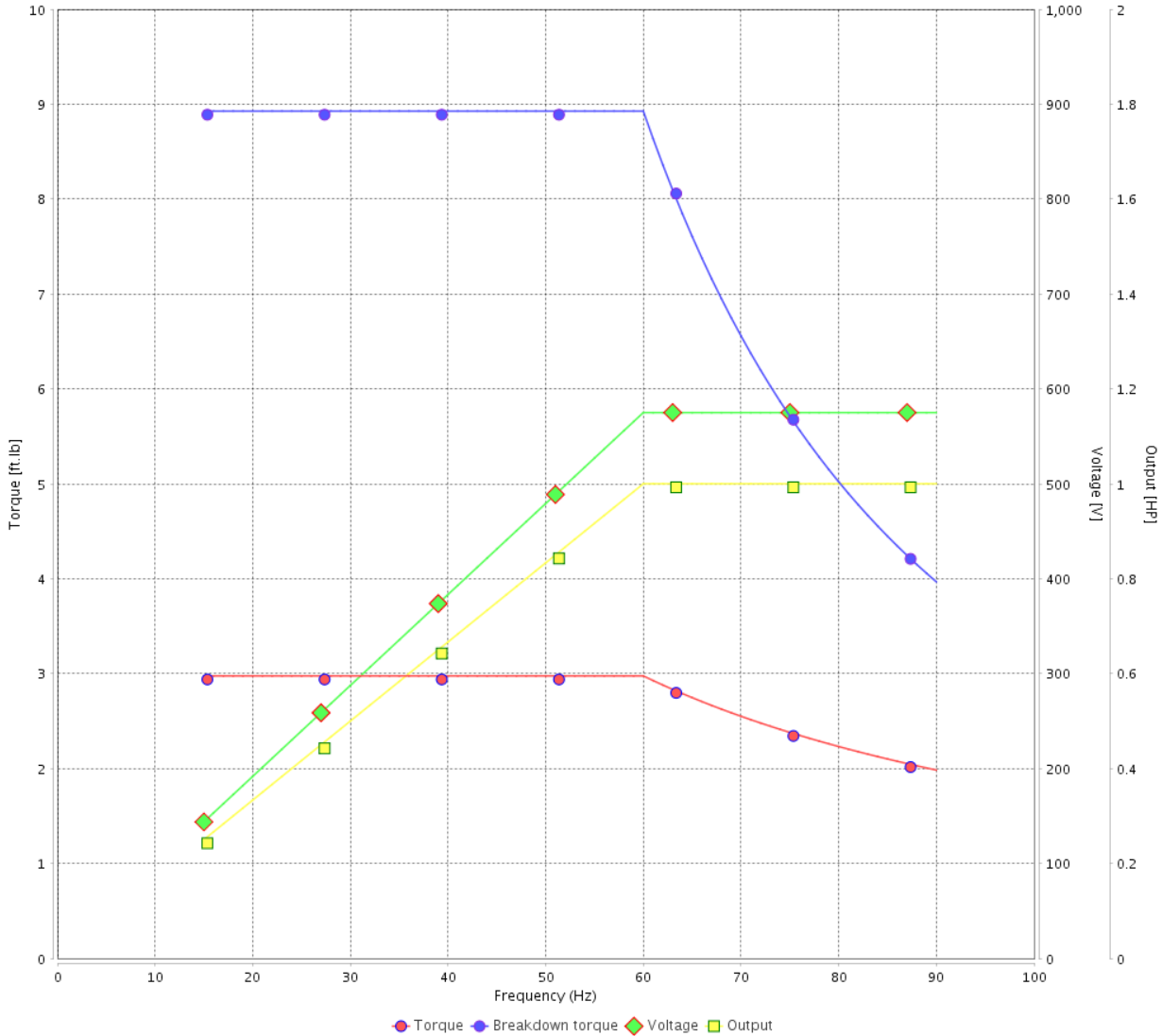
Customer : \_\_\_\_\_

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 14807103

Catalog # : 00118ET3H143JM-S

VFD OPERATION CURVE



Performance : 575 V 60 Hz 4P

Rated current : 1.18 A  
LRC : 8.6  
Rated torque : 2.98 ft.lb  
Locked rotor torque : 280 %  
Breakdown torque : 300 %  
Rated speed : 1765 rpm

Moment of inertia (J) : 0.1232 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

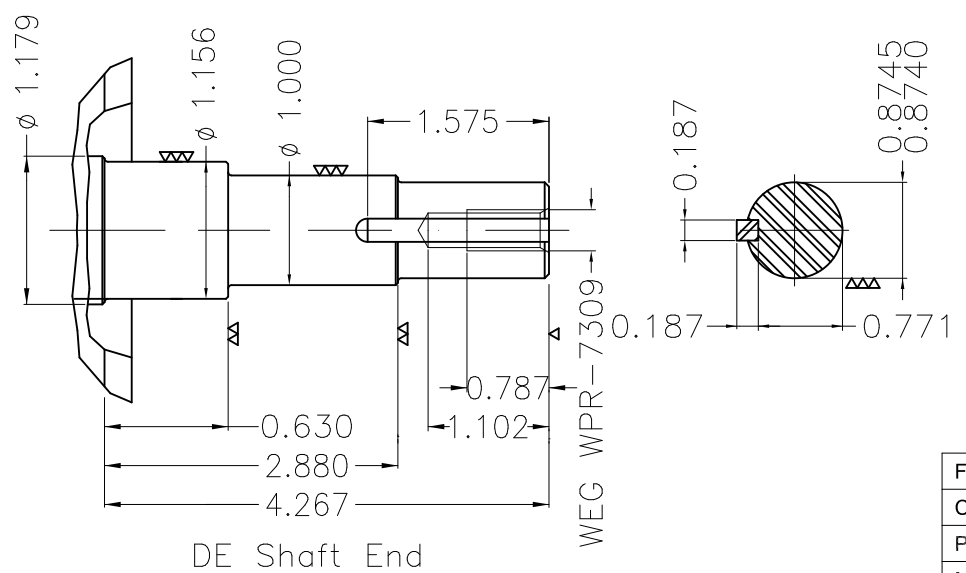
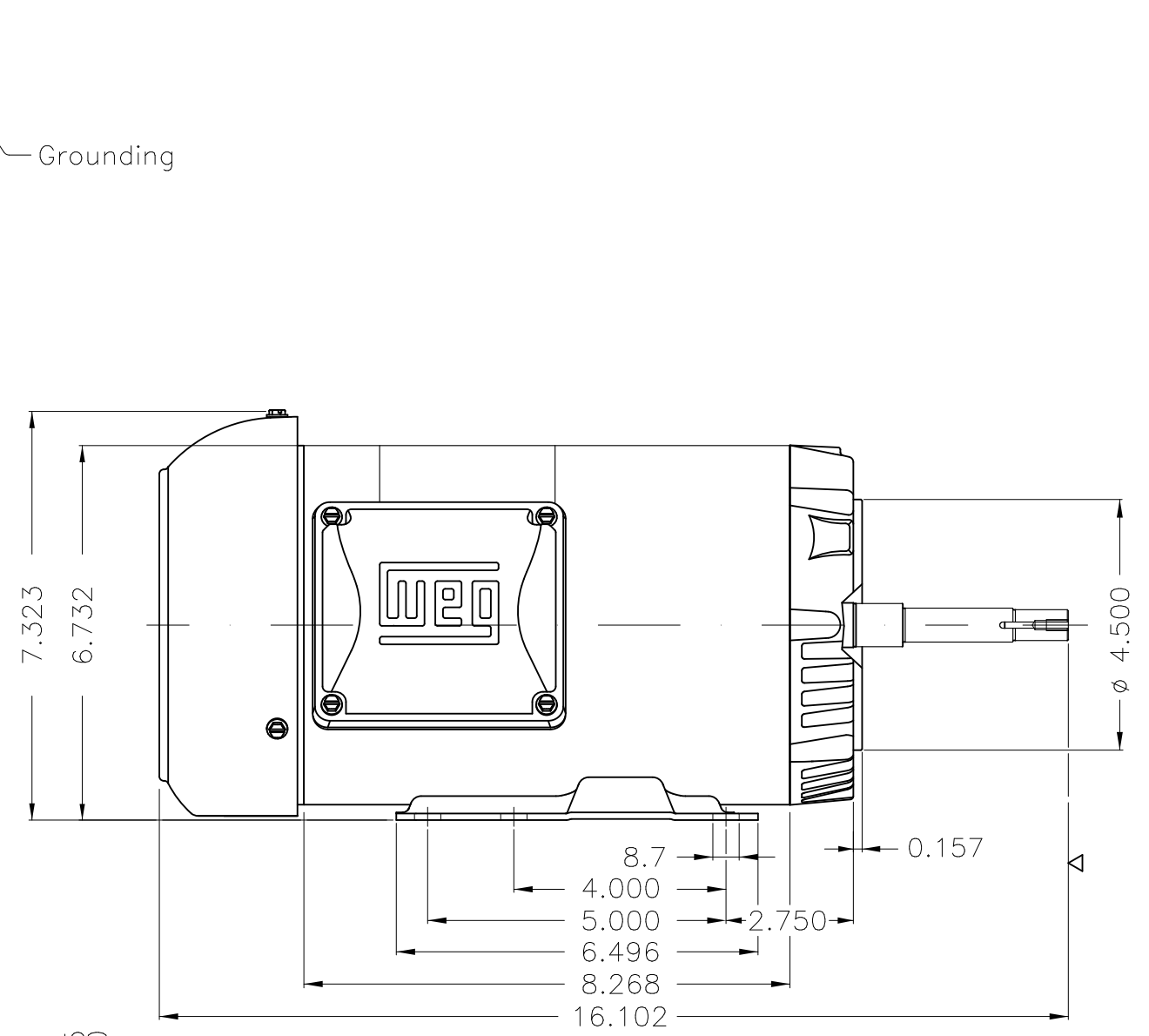
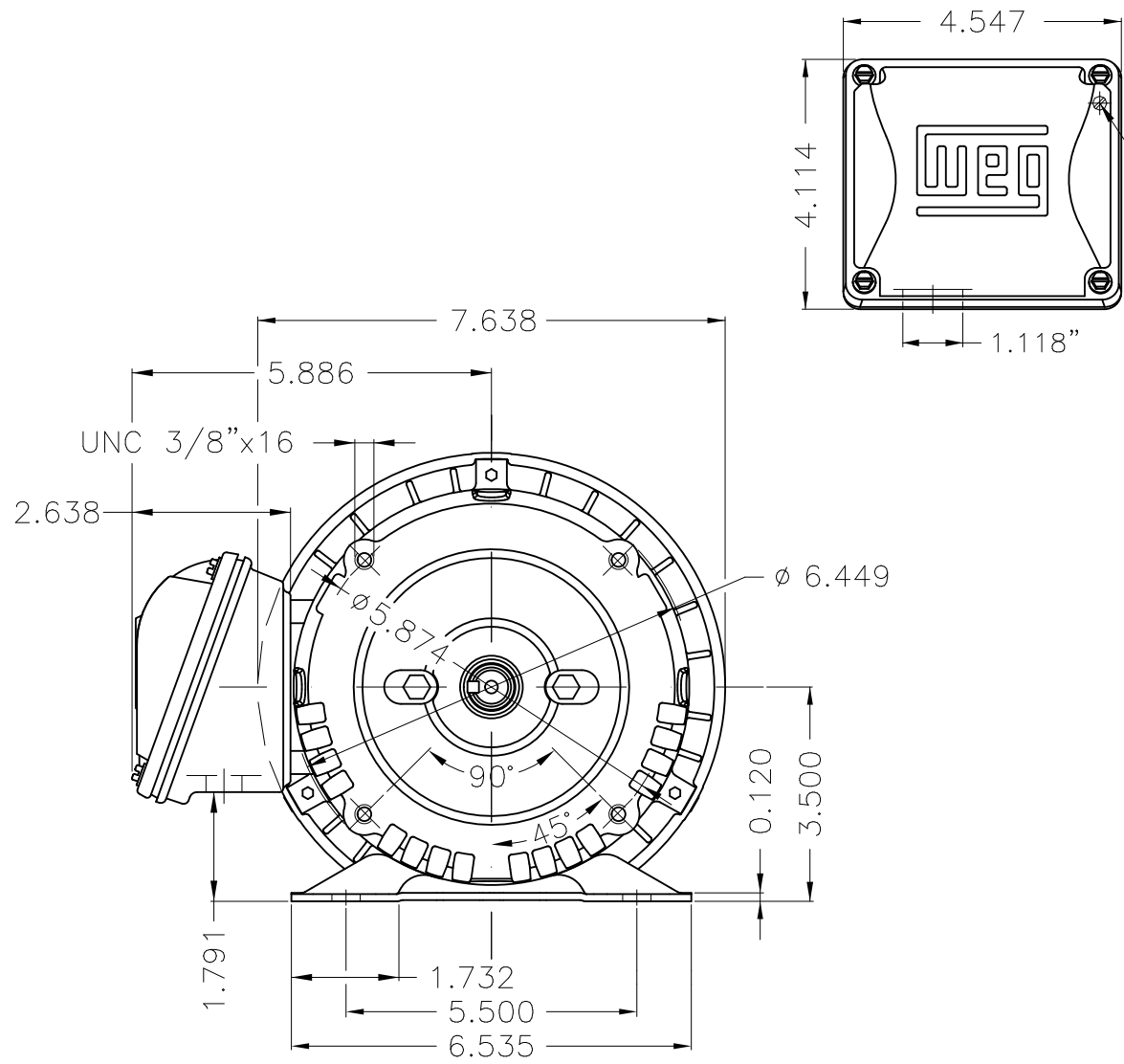
A

B

C

D

E



EUNC 3/8"-16 WEG WPR-7309

DE Shaft End

Fan cover - steel plate						
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	PIRBUSER		THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSE 143						
CHECKED			FRAME 143/5JM IP55 TEFC						
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			

1 HP 04 Poles 60 Hz



**NEMA**  
**Premium**



MADE IN MEXICO



**MAT: 14807103 CC029A**  
**W01.TE0IC0X0N**  
**JM000504NPW01MFC**  
**28SEP2021 B/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**

PH 3	Hz 60	HP 1.0
FR 143/5JM		KW 0.75
DUTY CONT.		V 575
ALT 1000 m.a.s.l.		A 1.18
INS CL F AT 80K	IP55	SFA 1.36
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE M	PF 0.75
		RPM 1765
		NEMA
		NOM. EFF 85.5%

**For safe area-Inverter duty motor For use on VPWM 1000:1 VT, 4:1 CT**

**DE 6206-ZZ ODE 6203-ZZ MOBIL POLYREX EM**

T1 T2 T3  
  
 L1 L2 L3  


T1-BLU  
T2-WHT  
T3-ORG



**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.

