

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer					
Product line		: JM Pump NEMA Premium Efficiency Three-Phase		Product code : 14327892	
				Catalog # : 00536OT3H182JM-SG	
Frame	:	182/4JM		Locked rotor time	: 21s (cold) 12s (hot)
Output	:	5 HP (3.7 kW)		Temperature rise	: 80 K
Poles	:	2		Duty cycle	: Cont.(S1)
Frequency	:	60 Hz		Ambient temperature	: -20°C to +40°C
Rated voltage	:	575 V		Altitude	: 1000 m.a.s.l.
Rated current	:	4.88 A		Cooling method	: IC01 - ODP
L. R. Amperes	:	37.1 A		Mounting	: F-1
LRC	:	7.6x(Code J)		Rotation <sup>1</sup>	: Both (CW and CCW)
No load current	:	2.06 A		Noise level <sup>2</sup>	: 65.0 dB(A)
Rated speed	:	3510 rpm		Starting method	: Direct On Line
Slip	:	2.50 %		Approx. weight <sup>3</sup>	: 58.7 lb
Rated torque	:	7.48 ft.lb			
Locked rotor torque	:	190 %			
Breakdown torque	:	300 %			
Insulation class	:	F			
Service factor	:	1.15			
Moment of inertia (J)	:	0.1386 sq.ft.lb			
Design	:	B			
Output	25%	50%	75%	100%	Foundation loads
Efficiency (%)	85.2	85.5	86.5	86.5	Max. traction : 114 lb
Power Factor	0.45	0.73	0.83	0.88	Max. compression : 172 lb
		<u>Drive end</u>		<u>Non drive end</u>	
Bearing type	:	6207 ZZ		6205 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. (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



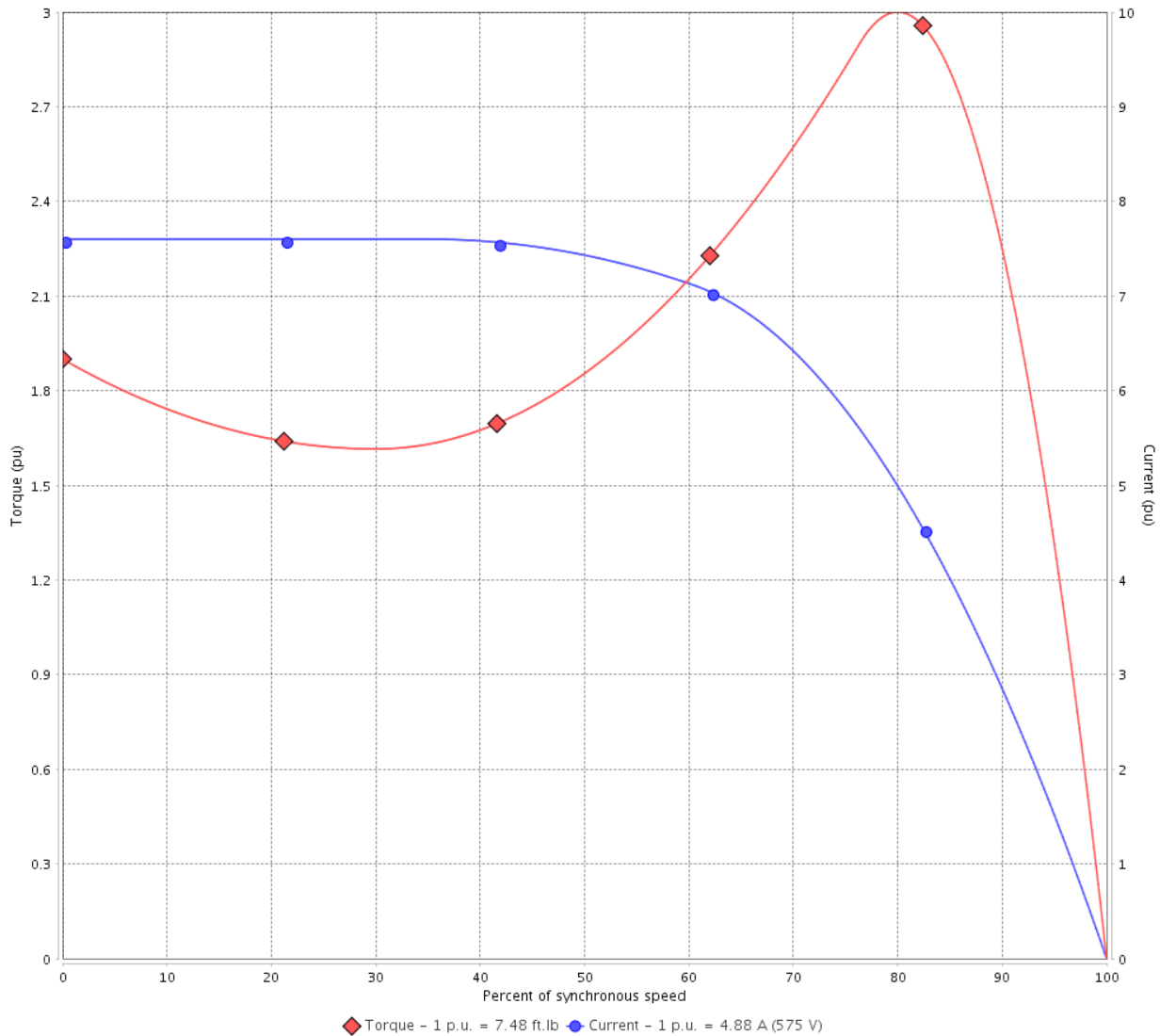
Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 14327892

Catalog # : 005360T3H182JM-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 4.88 A	Moment of inertia (J)	: 0.1386 sq.ft.lb
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 7.48 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3510 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

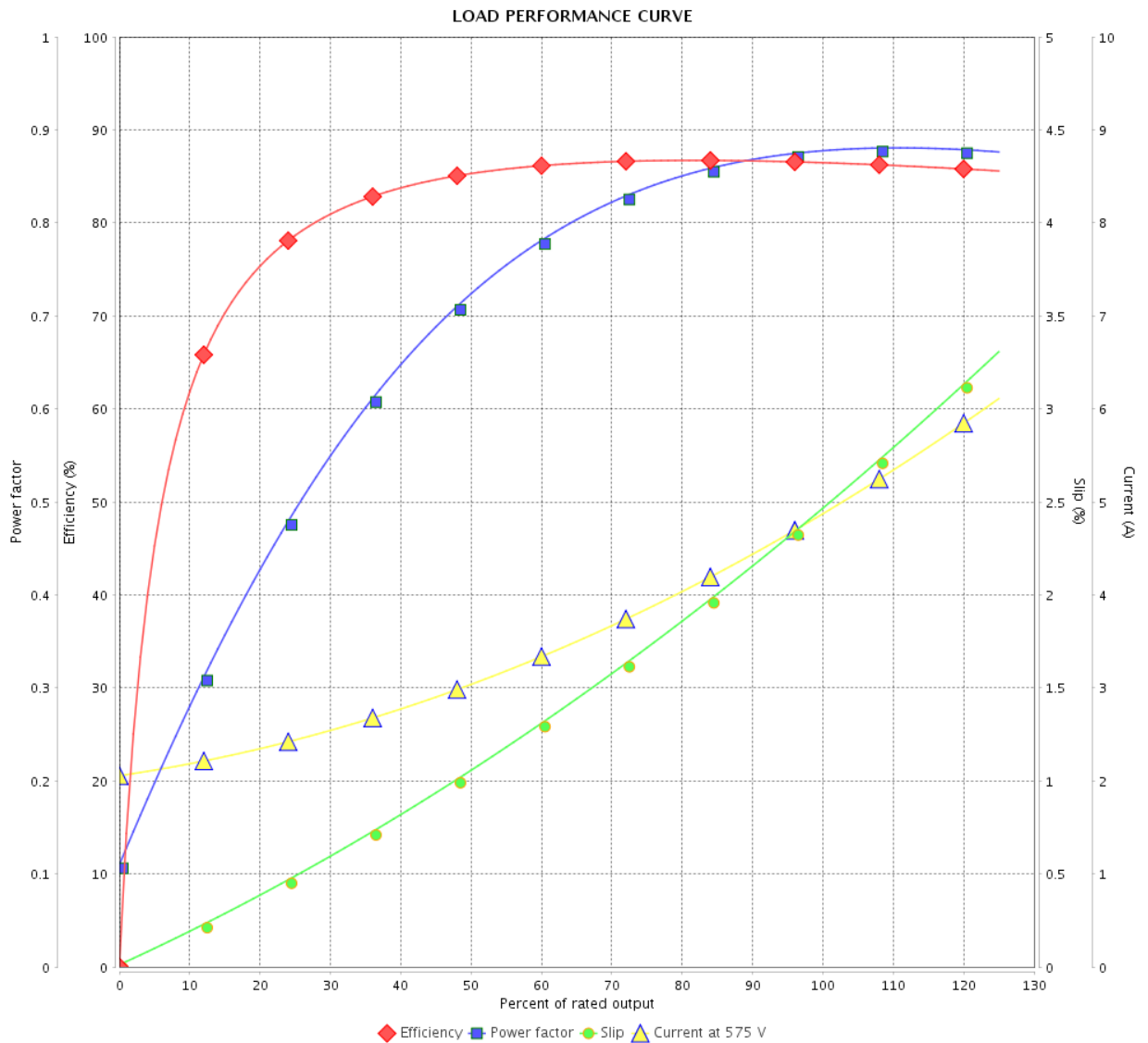


Customer : \_\_\_\_\_

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 14327892

Catalog # : 00536OT3H182JM-SG



Performance : 575 V 60 Hz 2P

Rated current : 4.88 A  
 LRC : 7.6  
 Rated torque : 7.48 ft.lb  
 Locked rotor torque : 190 %  
 Breakdown torque : 300 %  
 Rated speed : 3510 rpm

Moment of inertia (J) : 0.1386 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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Efficiency Three-Phase

Product code : 14327892

Catalog # : 00536OT3H182JM-SG

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LRC : 7.6  
Rated torque : 7.48 ft.lb  
Locked rotor torque : 190 %  
Breakdown torque : 300 %  
Rated speed : 3510 rpm

Moment of inertia (J) : 0.1386 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

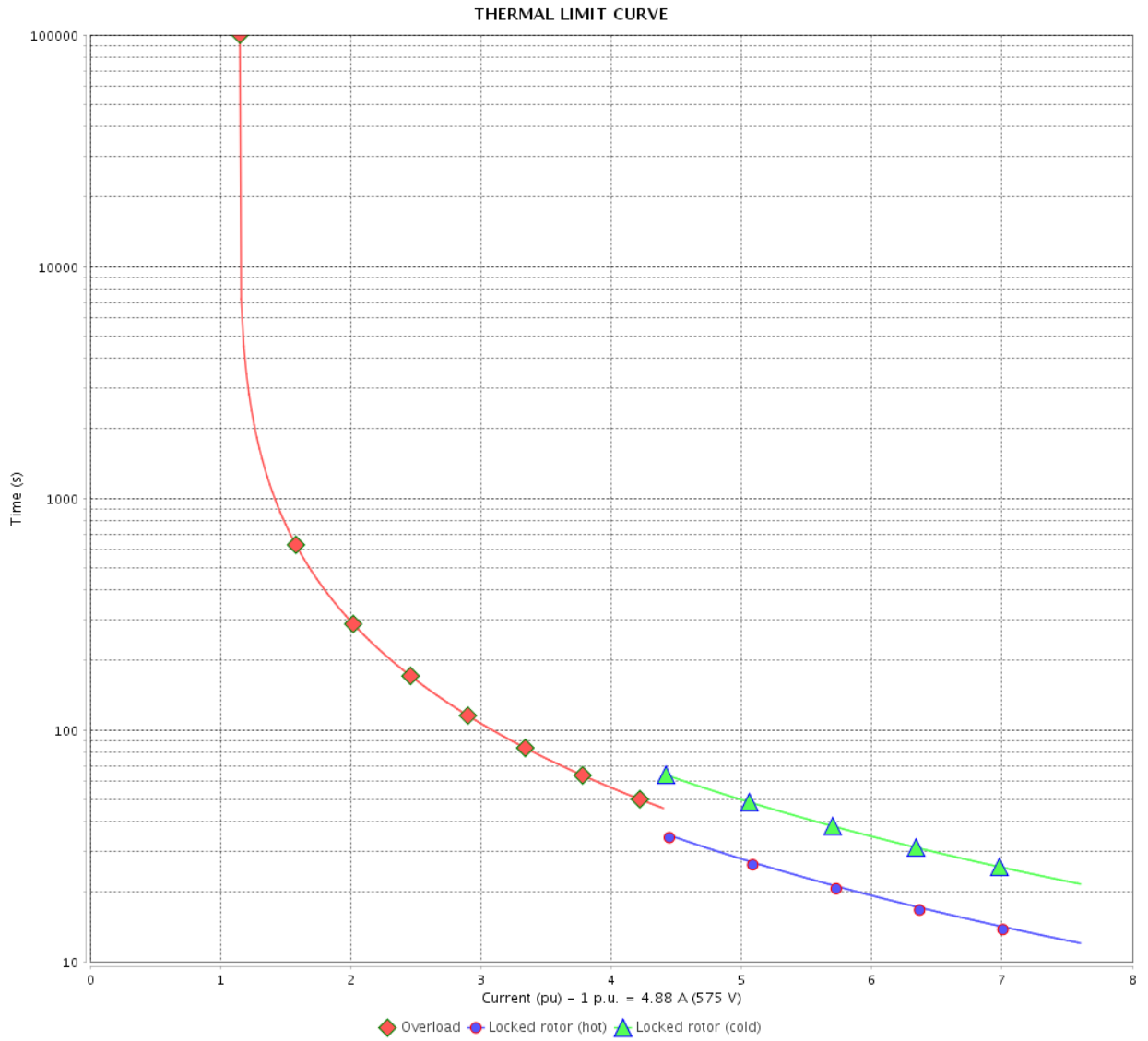
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



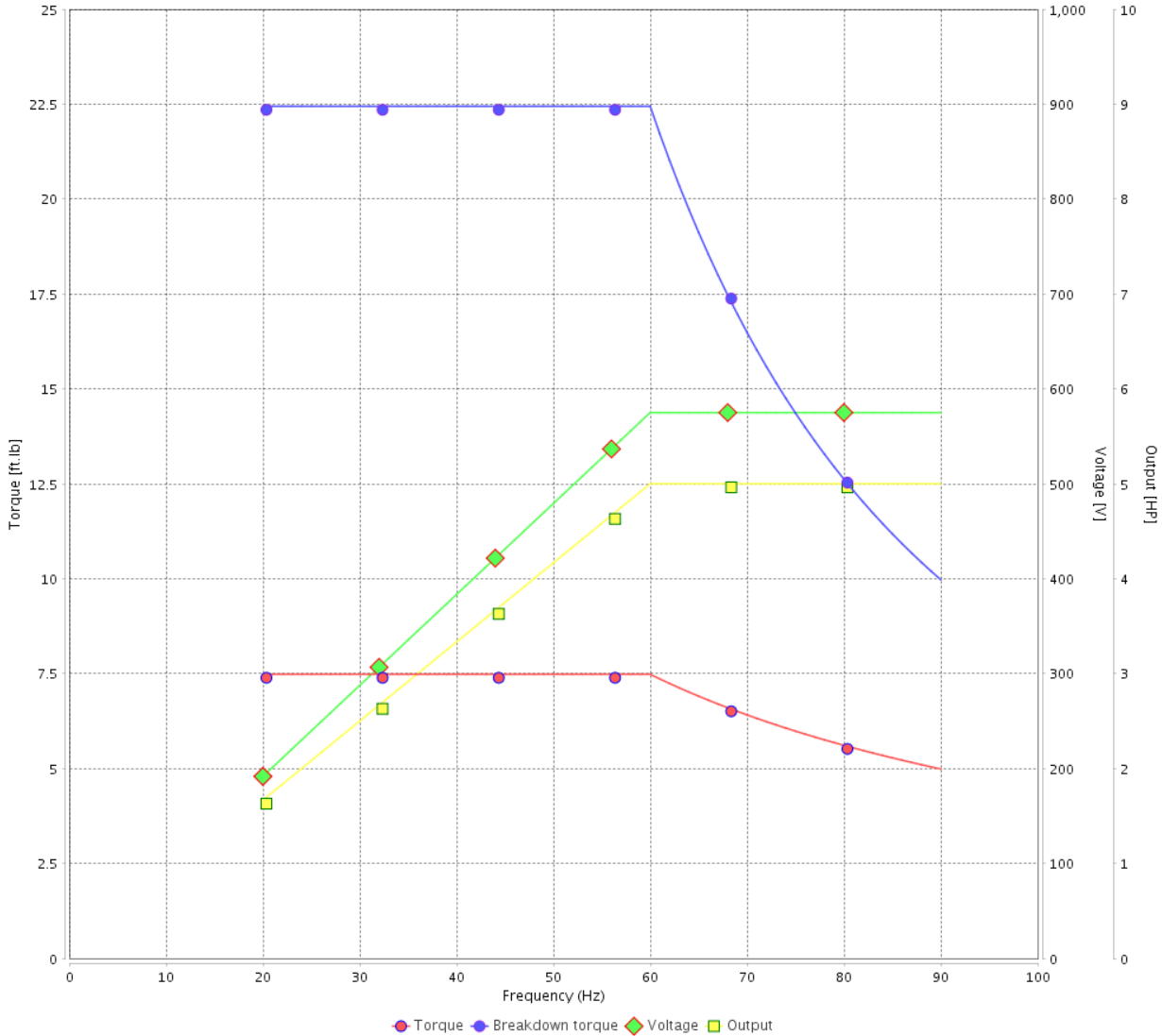
Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14327892

Catalog # : 00536OT3H182JM-SG

VFD OPERATION CURVE



Performance : 575 V 60 Hz 2P

Rated current : 4.88 A  
 LRC : 7.6  
 Rated torque : 7.48 ft.lb  
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 Breakdown torque : 300 %  
 Rated speed : 3510 rpm

Moment of inertia (J) : 0.1386 sq.ft.lb  
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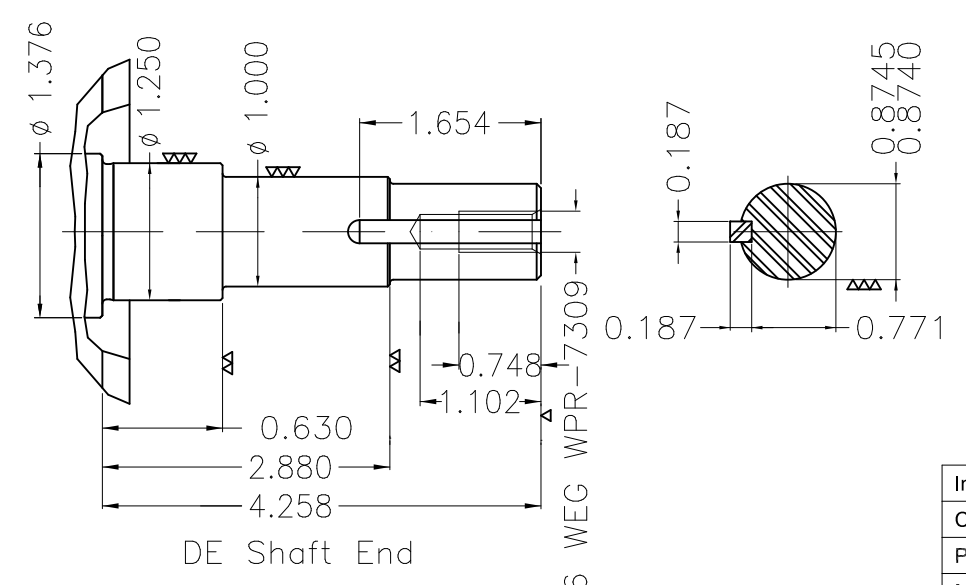
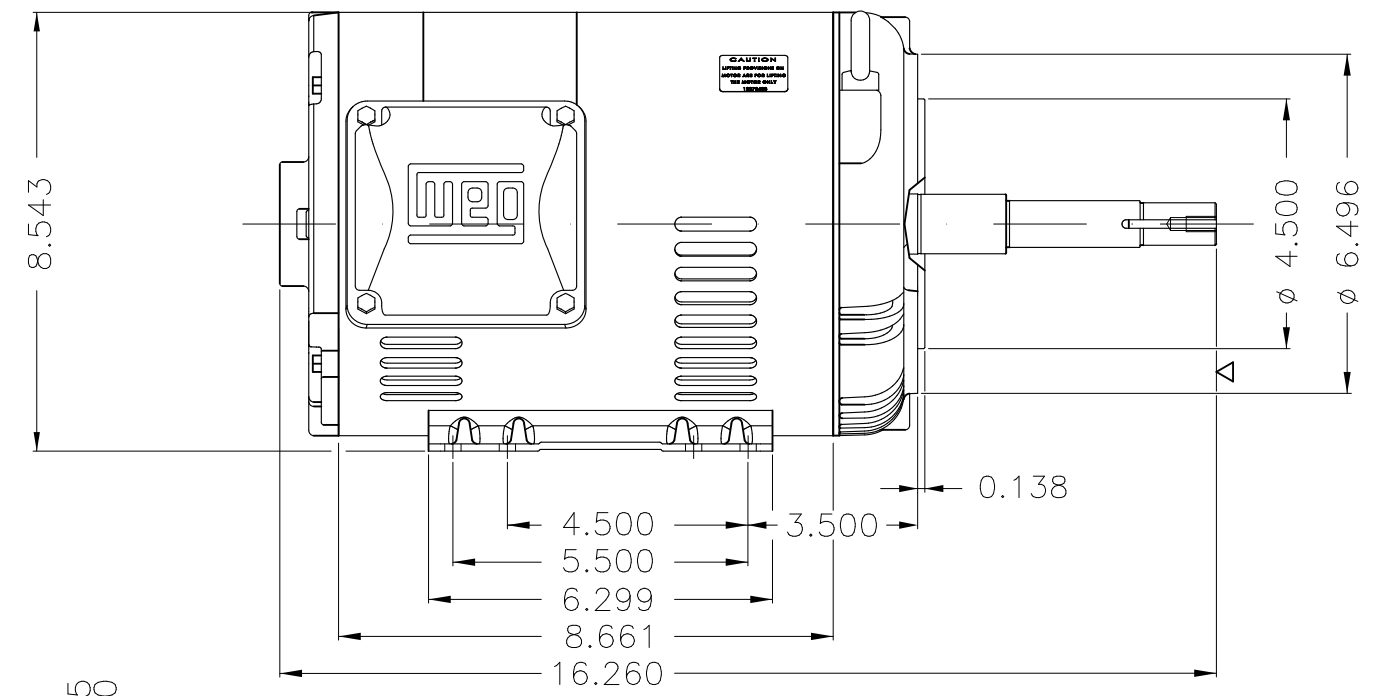
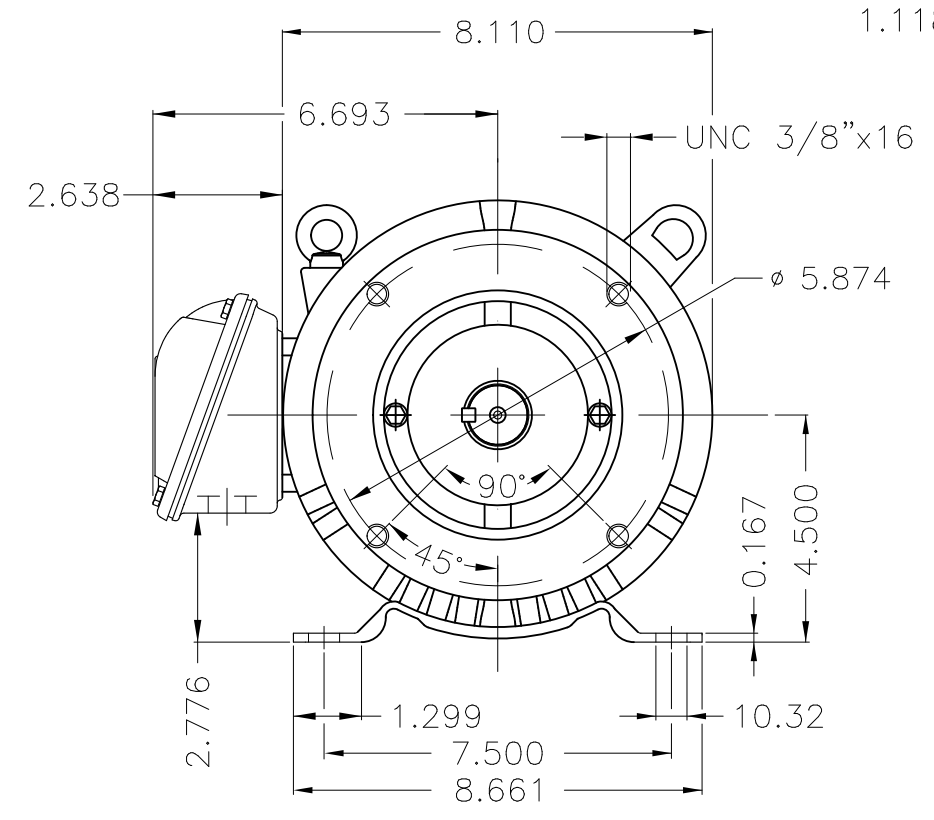
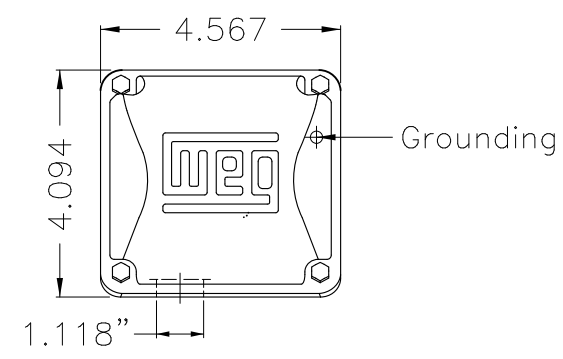
A

B

C

D

E



EUNC 3/8"-16 WEG WPR-7309

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 117					
CHECKED		FRAME 182/4JM IP21 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

5 HP 02 Poles 60 Hz

