

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: JM Pump NEMA Premium Efficiency Three-Phase			
Product code :	14327872			
Catalog # :	00236OT3V145JM-SG			
Frame : 143/5JM Output : 2 HP (1.5 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 200/400 V Rated current : 5.57/2.78 A L. R. Amperes : 49.5/24.8 A LRC : 8.9x(Code K) No load current : 2.11/1.05 A Rated speed : 3510 rpm Slip : 2.50 % Rated torque : 2.99 ft.lb Locked rotor torque : 220 % Breakdown torque : 330 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1151 sq.ft.lb Design : B	Locked rotor time : 25s (cold) 14s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Cooling method : IC01 - ODP Mounting : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 62.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 36.8 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	83.7    84.0    85.5    85.5			
Power Factor	0.49    0.77    0.86    0.91			
Foundation loads				
Max. traction : 67 lb				
Max. compression : 104 lb				
Bearing type	: <u>Drive end</u> 6206 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. (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



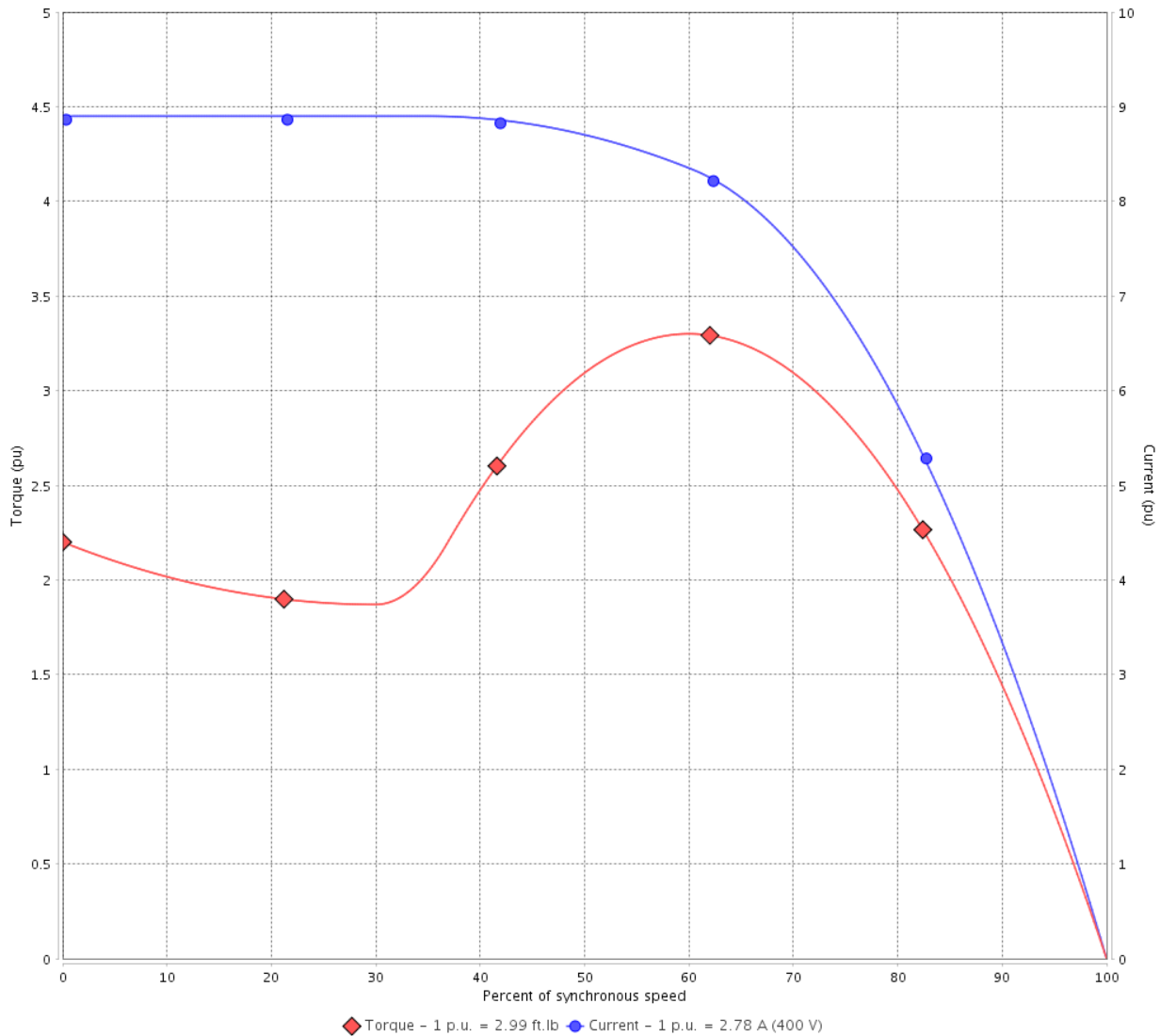
Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 14327872

Catalog # : 00236OT3V145JM-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 2P

Rated current	: 5.57/2.78 A	Moment of inertia (J)	: 0.1151 sq.ft.lb
LRC	: 8.9	Duty cycle	: Cont.(S1)
Rated torque	: 2.99 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 3510 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	13/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

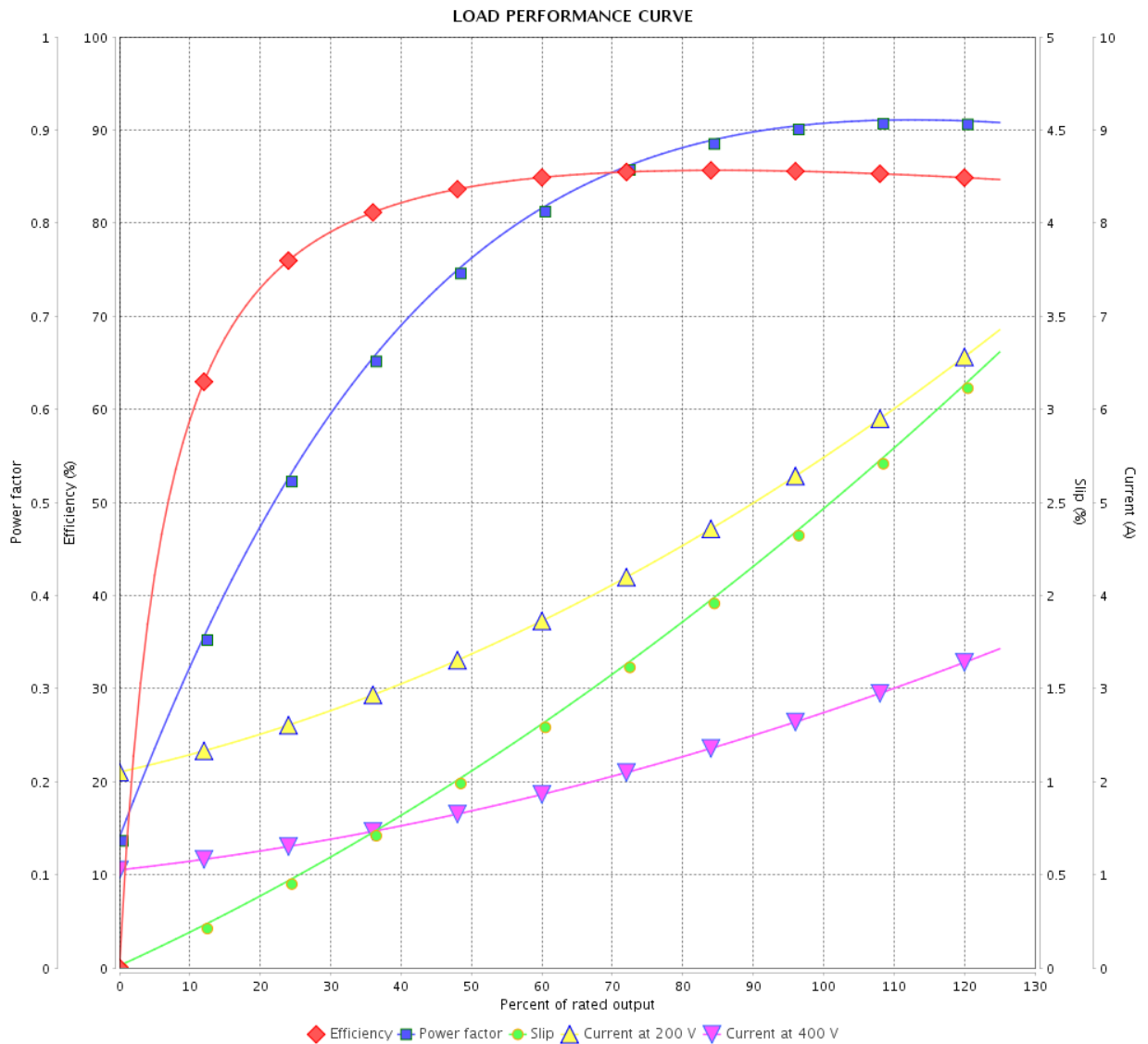


Customer : \_\_\_\_\_

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 1432782

Catalog # : 00236OT3V145JM-SG



Performance : 200/400 V 60 Hz 2P

Rated current : 5.57/2.78 A  
 LRC : 8.9  
 Rated torque : 2.99 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 330 %  
 Rated speed : 3510 rpm

Moment of inertia (J) : 0.1151 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
Performed by			Page	Revision
Checked by				
Date				
			3 / 6	

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 14327872

Catalog # : 00236OT3V145JM-SG

Performance : 200/400 V 60 Hz 2P

Rated current : 5.57/2.78 A  
LRC : 8.9  
Rated torque : 2.99 ft.lb  
Locked rotor torque : 220 %  
Breakdown torque : 330 %  
Rated speed : 3510 rpm

Moment of inertia (J) : 0.1151 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

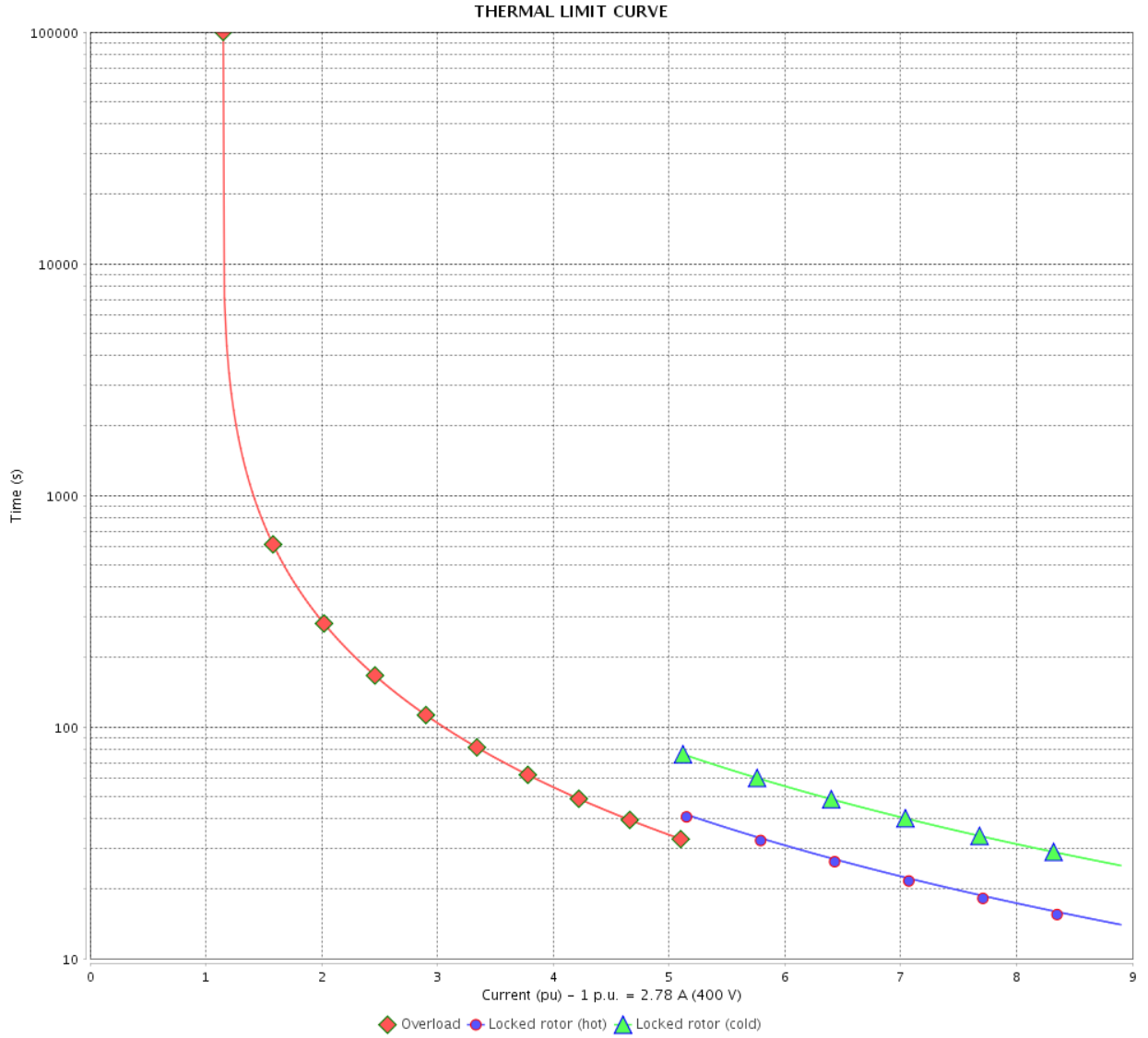
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		4 / 6	

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date				
			Page	Revision
			5 / 6	

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

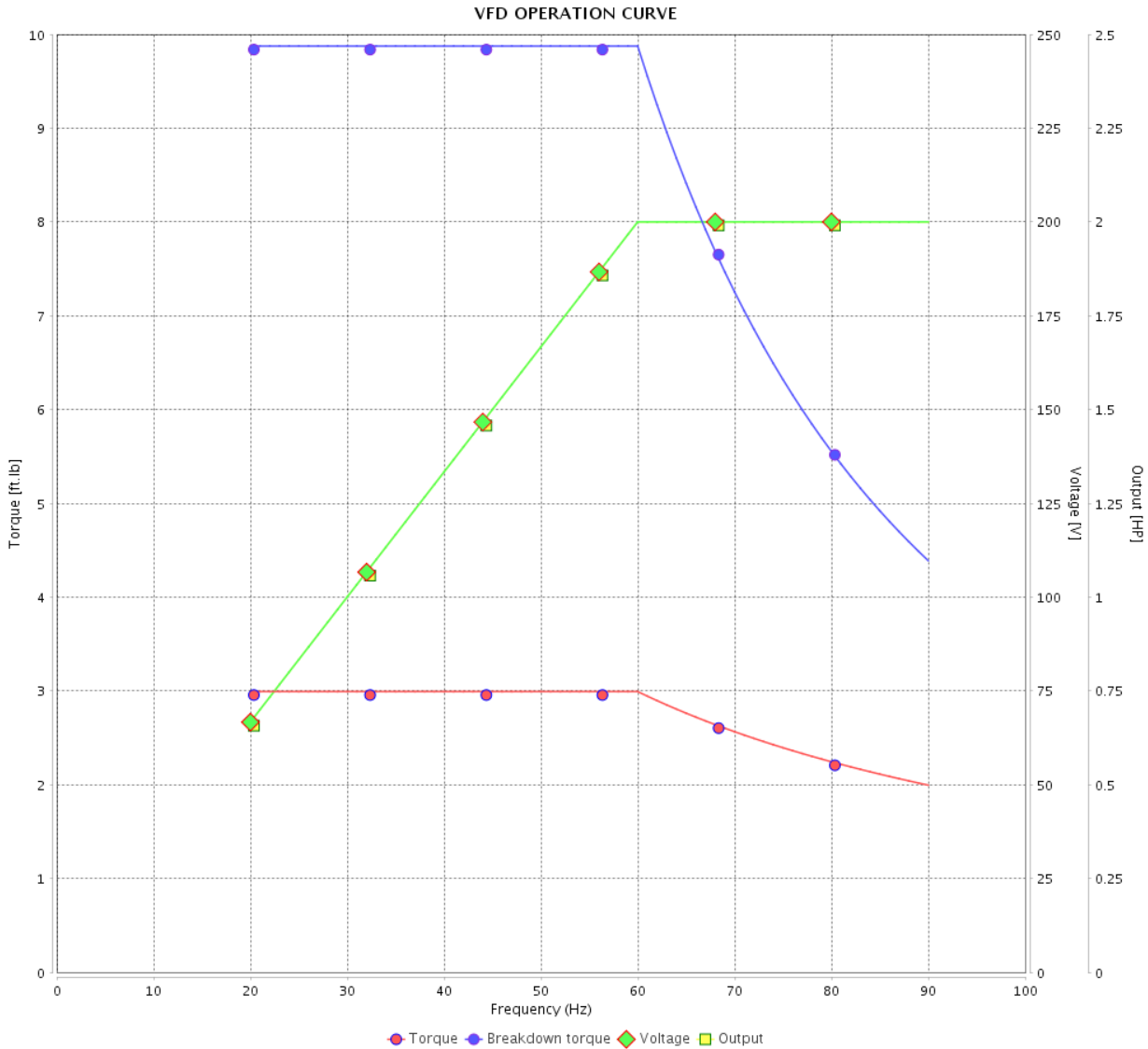


Customer : \_\_\_\_\_

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14327872

Catalog # : 00236OT3V145JM-SG



Performance : 200/400 V 60 Hz 2P

Rated current : 5.57/2.78 A  
 LRC : 8.9  
 Rated torque : 2.99 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 330 %  
 Rated speed : 3510 rpm

Moment of inertia (J) : 0.1151 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
Performed by			Page 6 / 6	Revision
Checked by				
Date	13/04/2022			

1 2 3 4 5 6

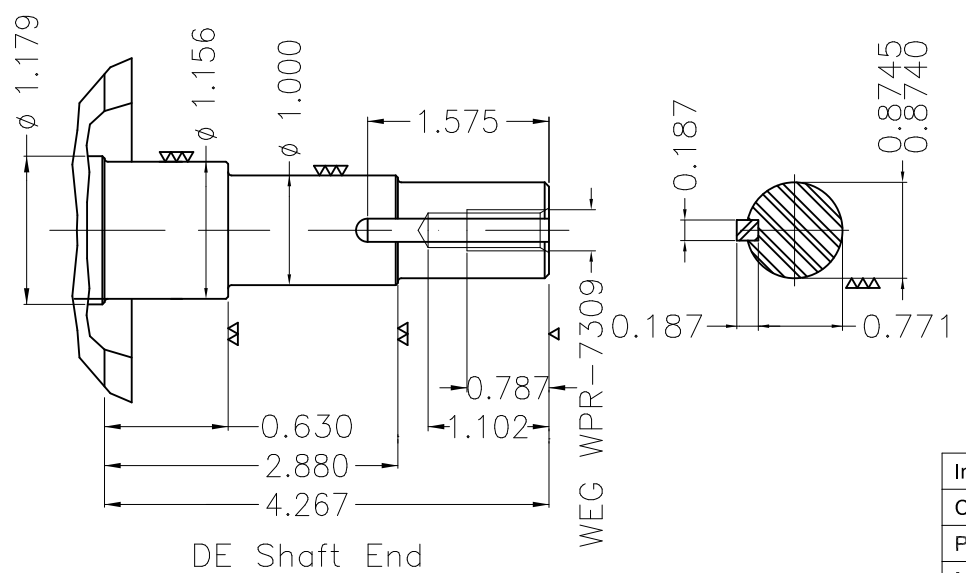
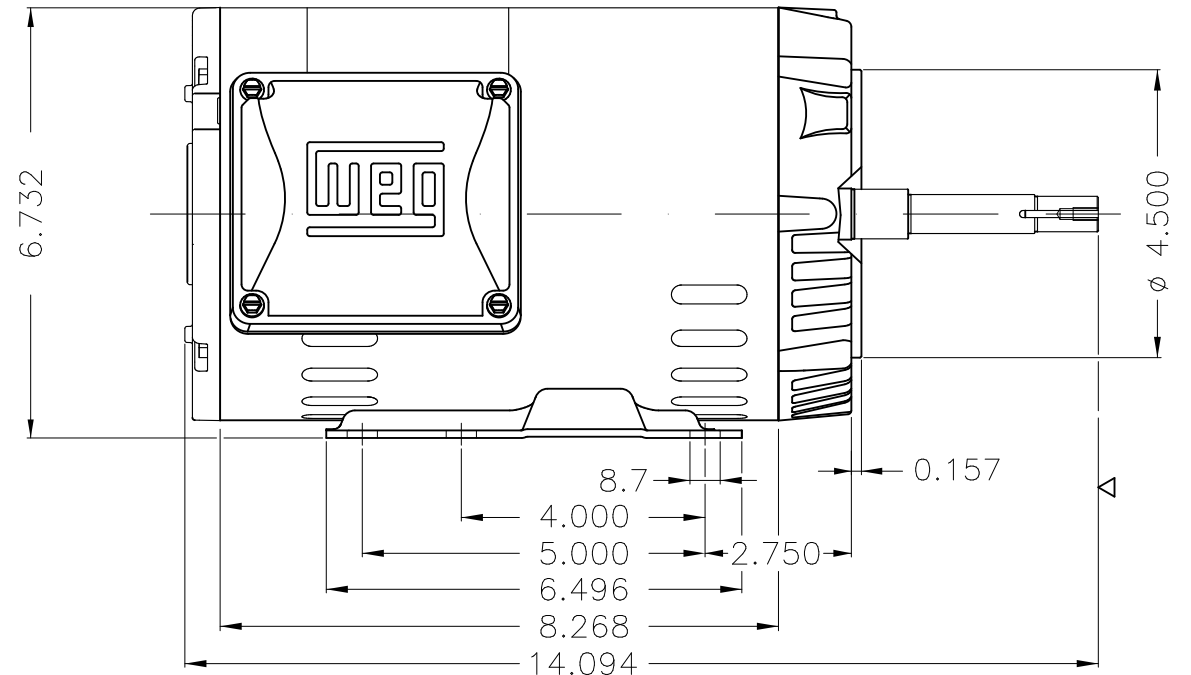
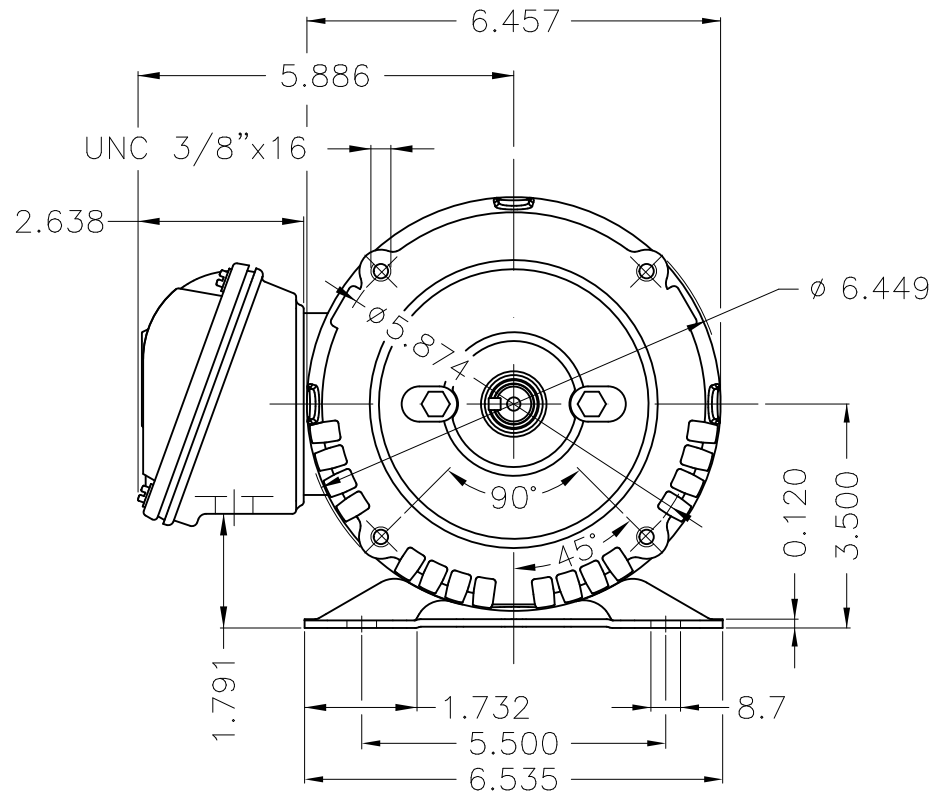
A

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	PIRWUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSE 1/2 HP					
CHECKED		FRAME 143/5JM IP21 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

2 HP 02 Poles 60 Hz

