

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line : JP Pump NEMA Premium Efficiency Three-Phase	Product code : 13500644																		
	Catalog # : 00156OT3V143JP-S																		
Frame : 143/5JP Output : 1.5 HP (1.1 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 200/400 V Rated current : 4.25/2.13 A L. R. Amperes : 36.6/18.3 A LRC : 8.6x(Code K) No load current : 1.86/0.930 A Rated speed : 3510 rpm Slip : 2.50 % Rated torque : 2.24 ft.lb Locked rotor torque : 210 % Breakdown torque : 330 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.0835 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. 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> : 29.3 lb																		
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Output</td> <td>25%</td> <td>50%</td> <td>75%</td> <td>100%</td> </tr> <tr> <td>Efficiency (%)</td> <td>81.1</td> <td>81.5</td> <td>84.0</td> <td>84.0</td> </tr> <tr> <td>Power Factor</td> <td>0.45</td> <td>0.73</td> <td>0.83</td> <td>0.89</td> </tr> </table>	Output	25%	50%	75%	100%	Efficiency (%)	81.1	81.5	84.0	84.0	Power Factor	0.45	0.73	0.83	0.89	Foundation loads Max. traction : 49 lb Max. compression : 79 lb			
Output	25%	50%	75%	100%															
Efficiency (%)	81.1	81.5	84.0	84.0															
Power Factor	0.45	0.73	0.83	0.89															
<table 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;">6206 ZZ</td> <td style="text-align:center;">6203 ZZ</td> </tr> <tr> <td>Sealing :</td> <td style="text-align:center;">Without Bearing Seal</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 :	6206 ZZ	6203 ZZ	Sealing :	Without Bearing Seal	Without Bearing Seal	Lubrication interval :	-	-	Lubricant amount :	-	-	Lubricant type :	Mobil Polyrex EM	
	<u>Drive end</u>	<u>Non drive end</u>																	
Bearing type :	6206 ZZ	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	14/04/2022		1 / 6																

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

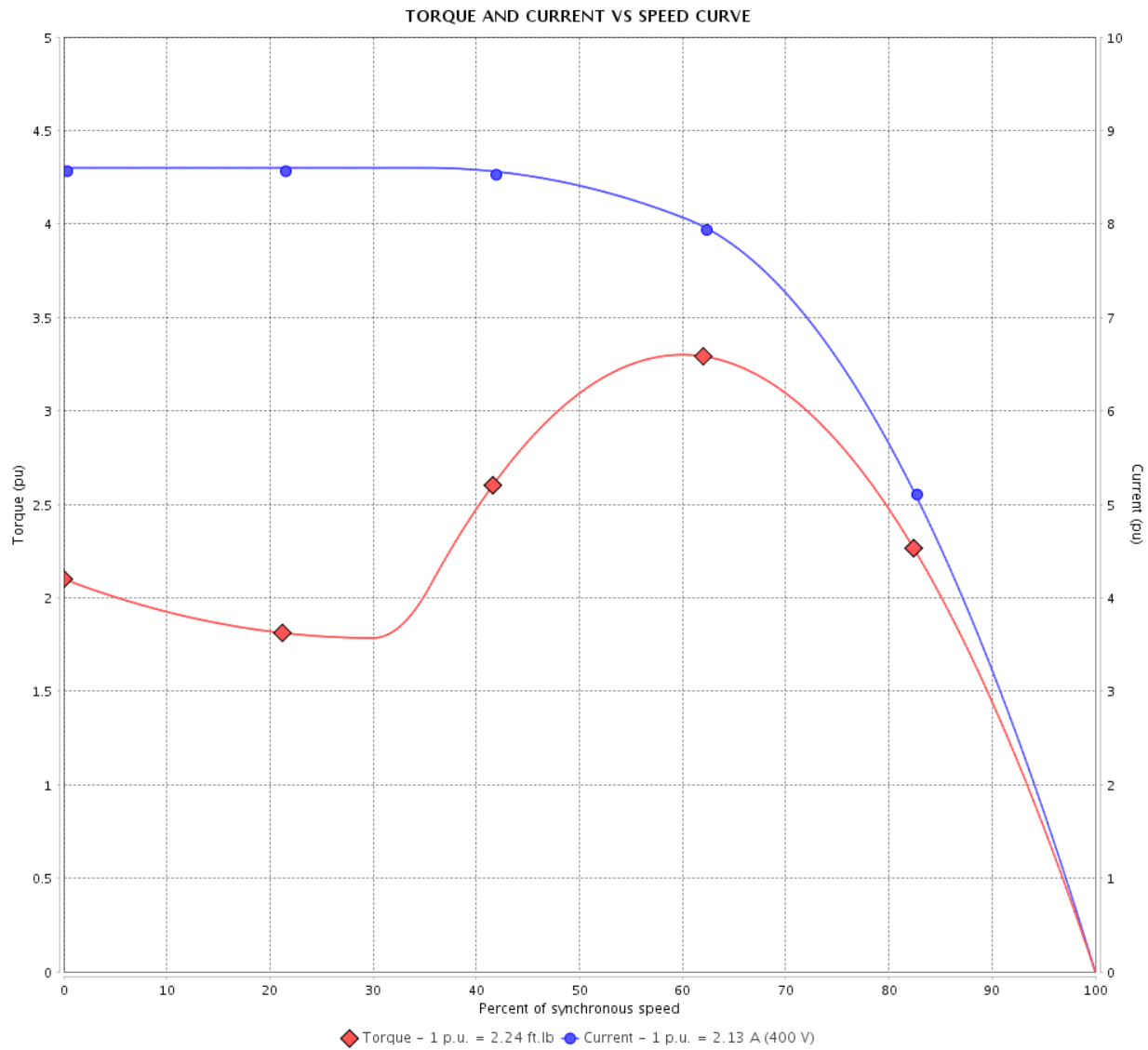


Customer :

Product line : JP Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13500644

Catalog # : 00156OT3V143JP-S



Performance : 200/400 V 60 Hz 2P

Rated current	: 4.25/2.13 A	Moment of inertia (J)	: 0.0835 sq.ft.lb
LRC	: 8.6	Duty cycle	: Cont.(S1)
Rated torque	: 2.24 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 3510 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	14/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

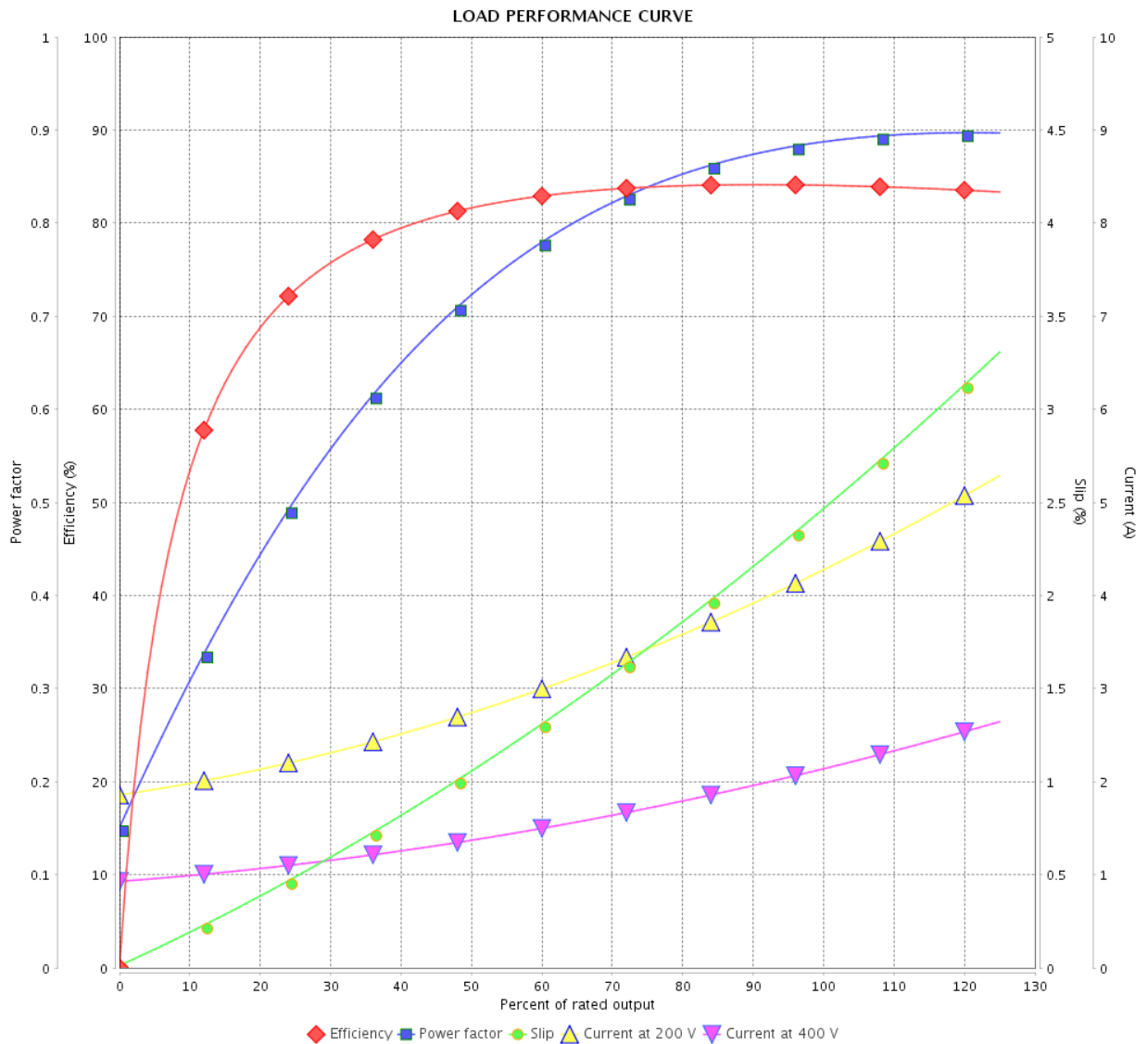


Customer :

Product line : JP Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13500644

Catalog # : 00156OT3V143JP-S



Performance : 200/400 V 60 Hz 2P

Rated current : 4.25/2.13 A  
 LRC : 8.6  
 Rated torque : 2.24 ft.lb  
 Locked rotor torque : 210 %  
 Breakdown torque : 330 %  
 Rated speed : 3510 rpm

Moment of inertia (J) : 0.0835 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 : JP Pump NEMA Premium  
Efficiency Three-Phase

Product code : 13500644

Catalog # : 00156OT3V143JP-S

Performance : 200/400 V 60 Hz 2P

Rated current : 4.25/2.13 A  
LRC : 8.6  
Rated torque : 2.24 ft.lb  
Locked rotor torque : 210 %  
Breakdown torque : 330 %  
Rated speed : 3510 rpm

Moment of inertia (J) : 0.0835 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

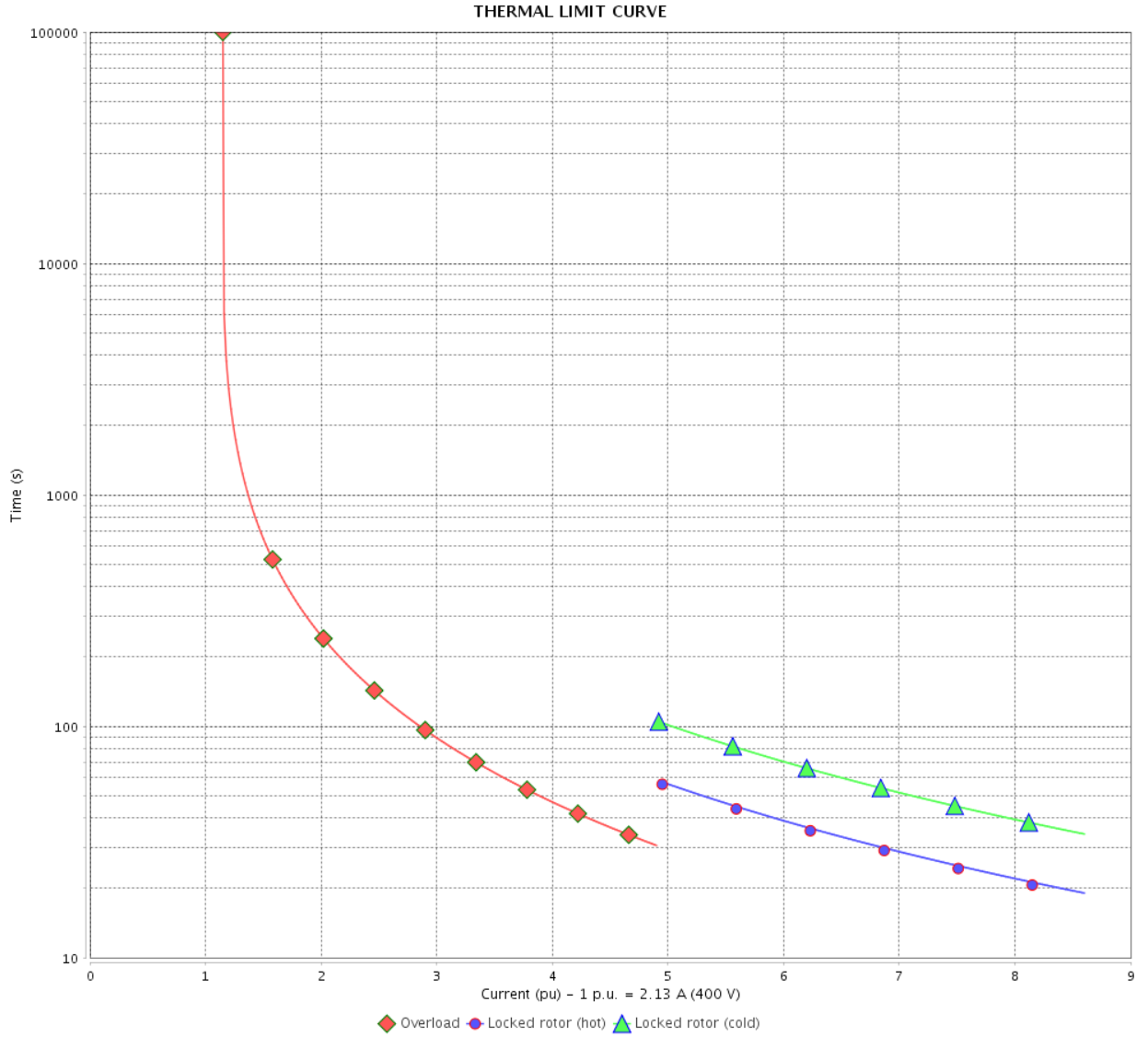
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		4 / 6	

# 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



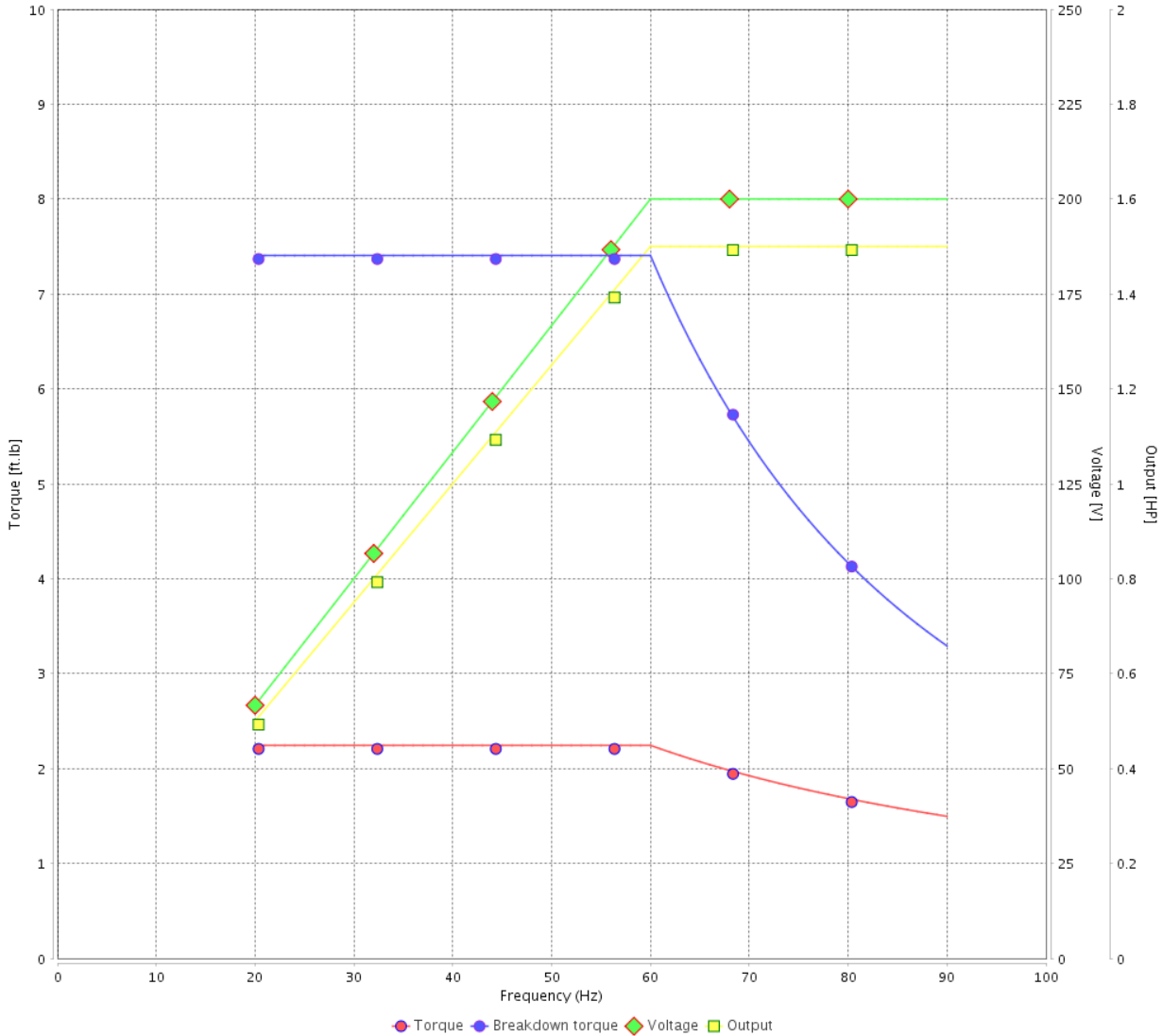
Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 13500644

Catalog # : 00156OT3V143JP-S

VFD OPERATION CURVE



Performance : 200/400 V 60 Hz 2P

Rated current : 4.25/2.13 A  
 LRC : 8.6  
 Rated torque : 2.24 ft.lb  
 Locked rotor torque : 210 %  
 Breakdown torque : 330 %  
 Rated speed : 3510 rpm

Moment of inertia (J) : 0.0835 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	14/04/2022			

1 2 3 4 5 6

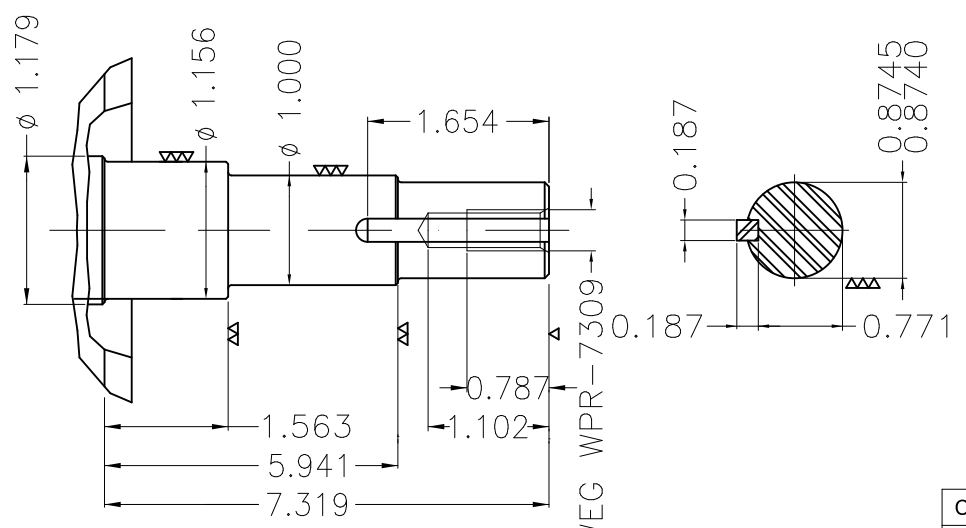
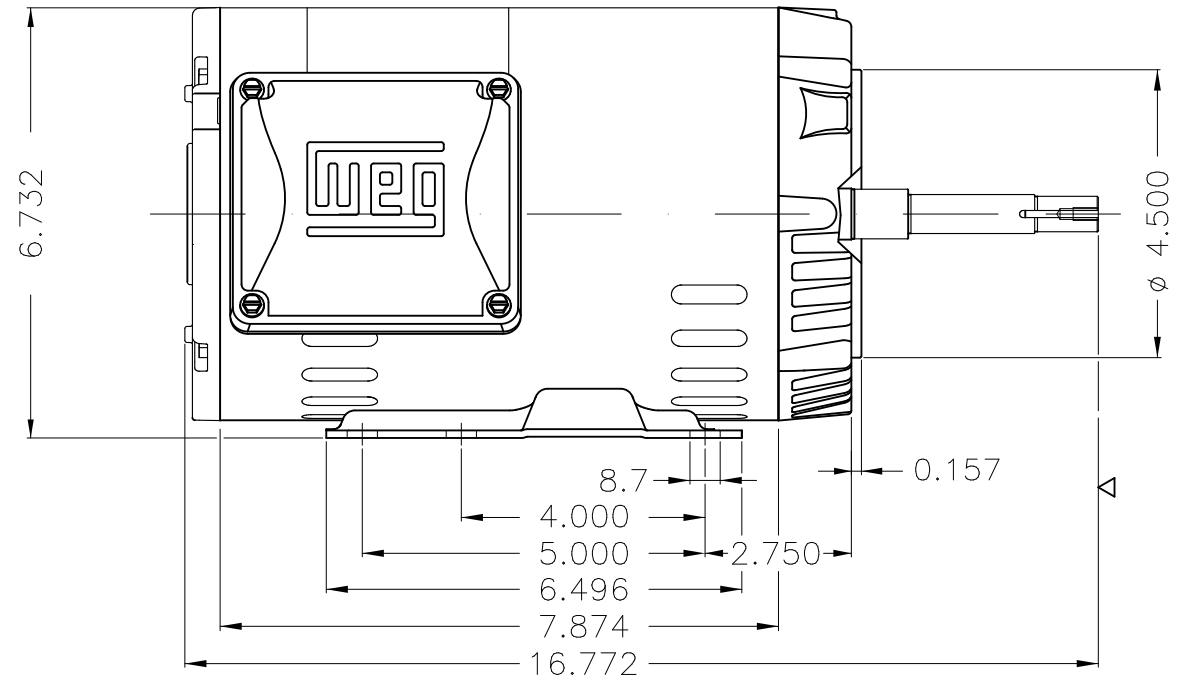
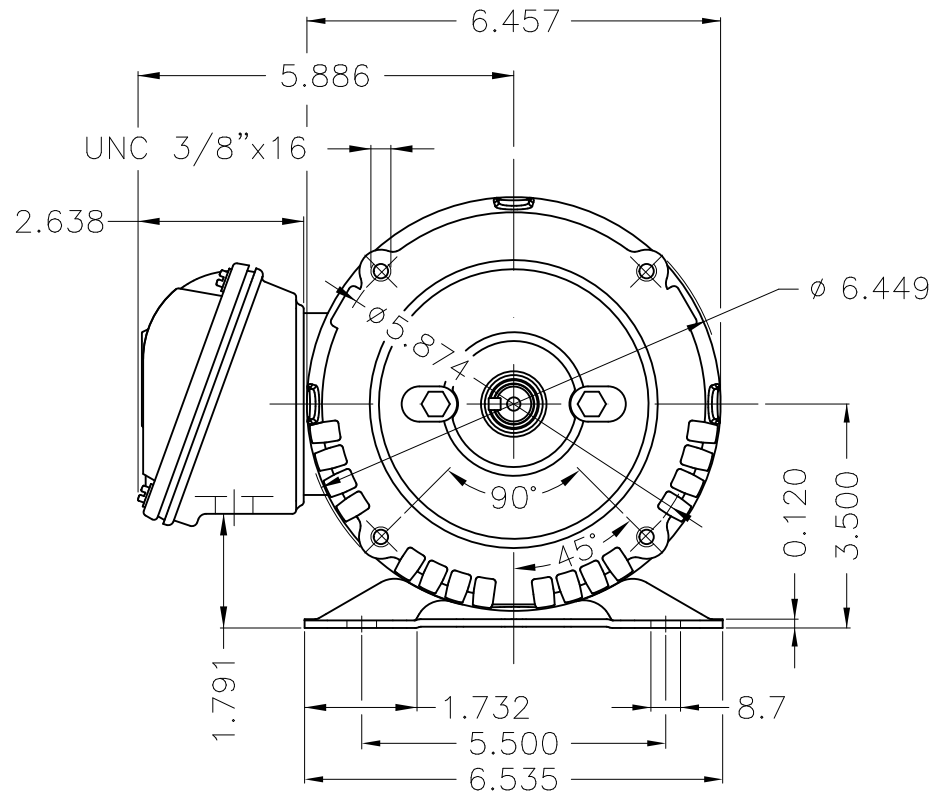
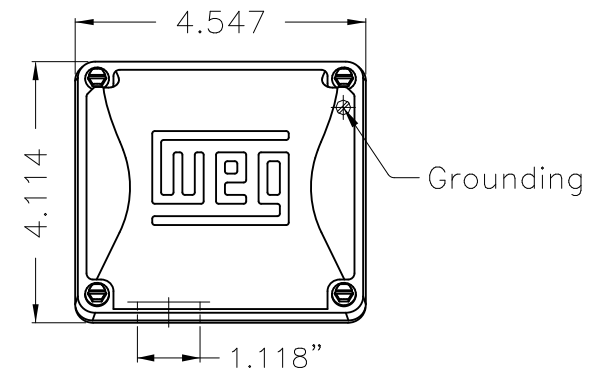
A

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 JP 3/4 DE PREL ETX							
CHECKED		FRAME 143/5JP IP21 ODP							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

PREVIEW

WDD



1.5 HP 02 Poles 60 Hz