

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: W40 JP Pump NEMA Premium Efficiency Three-Phase			
Product code :	14836785			
Catalog # :	04018OT3V324JPV-W40			
Frame : 324/6JP Output : 40 HP (30 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 200/400 V Rated current : 109/54.7 A L. R. Amperes : 679/339 A LRC : 6.2x(Code G) No load current : 42.5/21.3 A Rated speed : 1775 rpm Slip : 1.39 % Rated torque : 118 ft.lb Locked rotor torque : 200 % Breakdown torque : 240 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 5.69 sq.ft.lb Design : B	Locked rotor time : 23s (cold) 13s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP23 Cooling method : IC01 - ODP Mounting : W-6 Rotation <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 66.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 465 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	93.5    93.6    94.1    94.1			
Power Factor	0.44    0.70    0.80    0.84			
Foundation loads				
Max. traction				
Max. compression				
Bearing type	: <u>Drive end</u> 6312 Z C3 <u>Non drive end</u> 6211 Z C3			
Sealing	: Without Bearing Seal      Without Bearing Seal			
Lubrication interval	: 20000 h      20000 h			
Lubricant amount	: 21 g      11 g			
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	12/04/2022		1 / 6	

# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



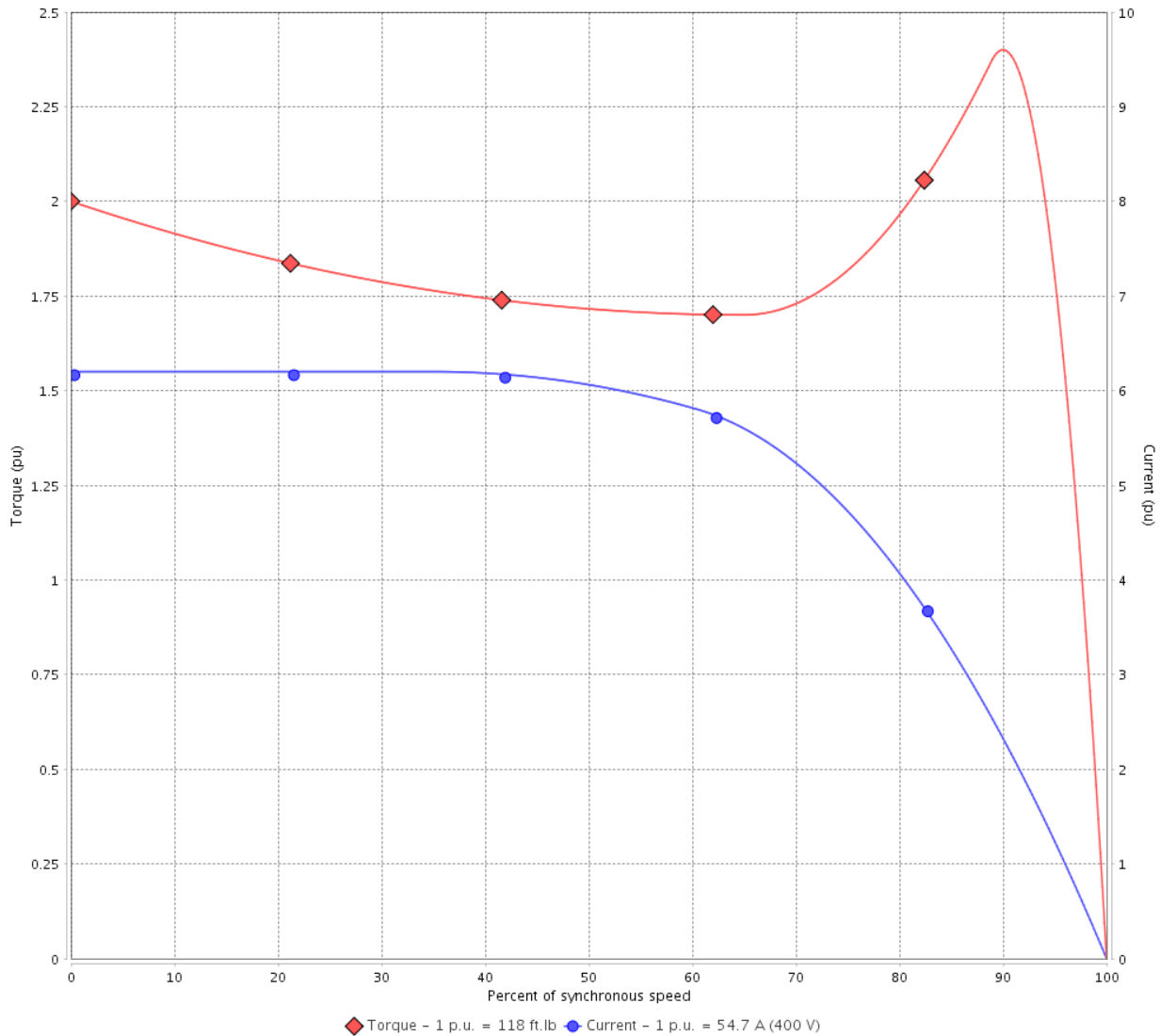
Customer :

Product line : W40 JP Pump NEMA Premium  
Efficiency Three-Phase

Product code : 14836785

Catalog # : 04018OT3V324JPV-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 4P

Rated current	: 109/54.7 A	Moment of inertia (J)	: 5.69 sq.ft.lb
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 118 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

Locked rotor time : 23s (cold) 13s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	12/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

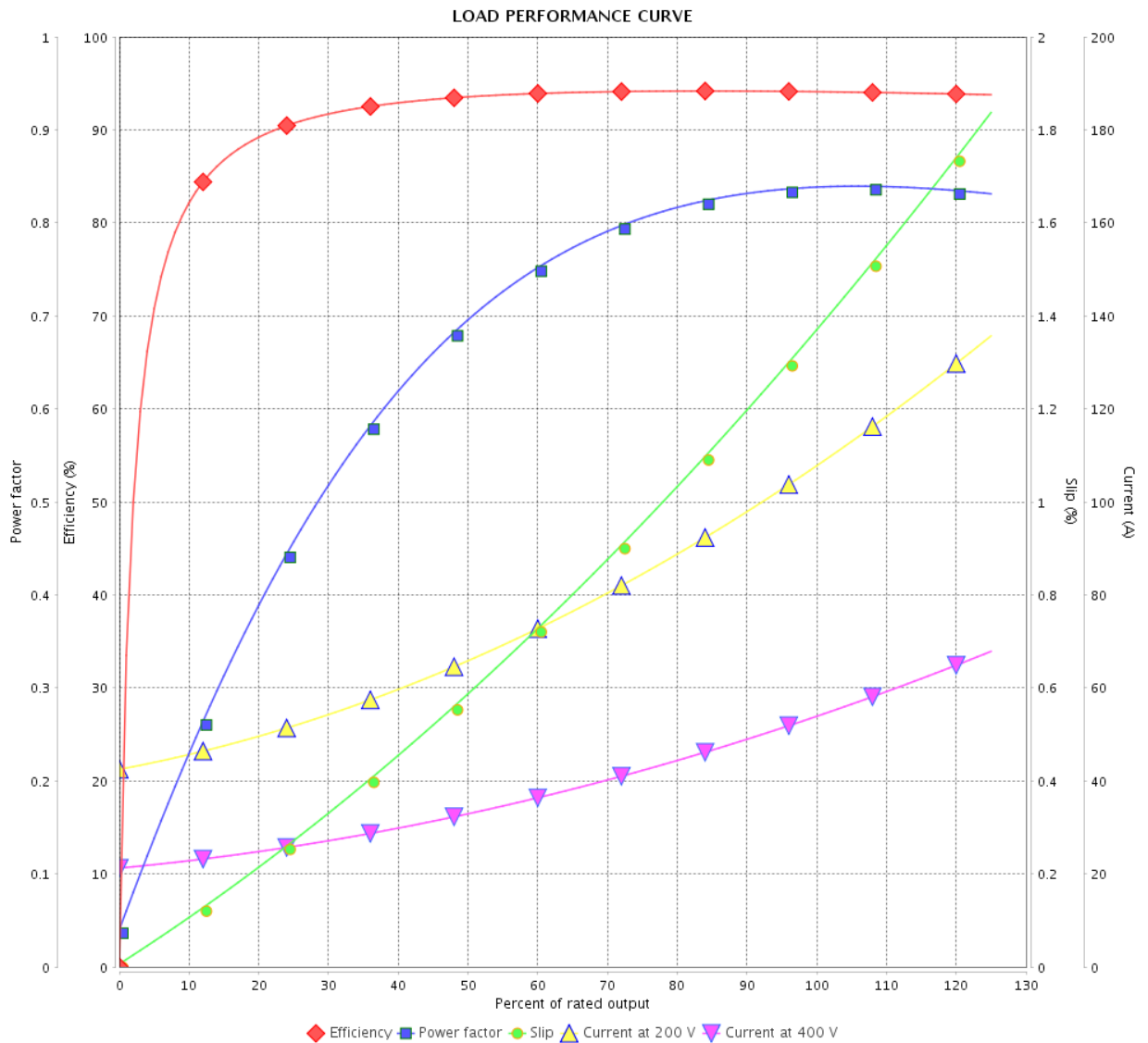


Customer :

Product line : W40 JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14836785

Catalog # : 04018OT3V324JPV-W40



Performance : 200/400 V 60 Hz 4P

Rated current : 109/54.7 A  
 LRC : 6.2  
 Rated torque : 118 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 1775 rpm

Moment of inertia (J) : 5.69 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		3 / 6		
Date		12/04/2022		

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 JP Pump NEMA Premium  
Efficiency Three-Phase

Product code : 14836785

Catalog # : 04018OT3V324JPV-W40

Performance : 200/400 V 60 Hz 4P

Rated current : 109/54.7 A  
LRC : 6.2  
Rated torque : 118 ft.lb  
Locked rotor torque : 200 %  
Breakdown torque : 240 %  
Rated speed : 1775 rpm

Moment of inertia (J) : 5.69 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

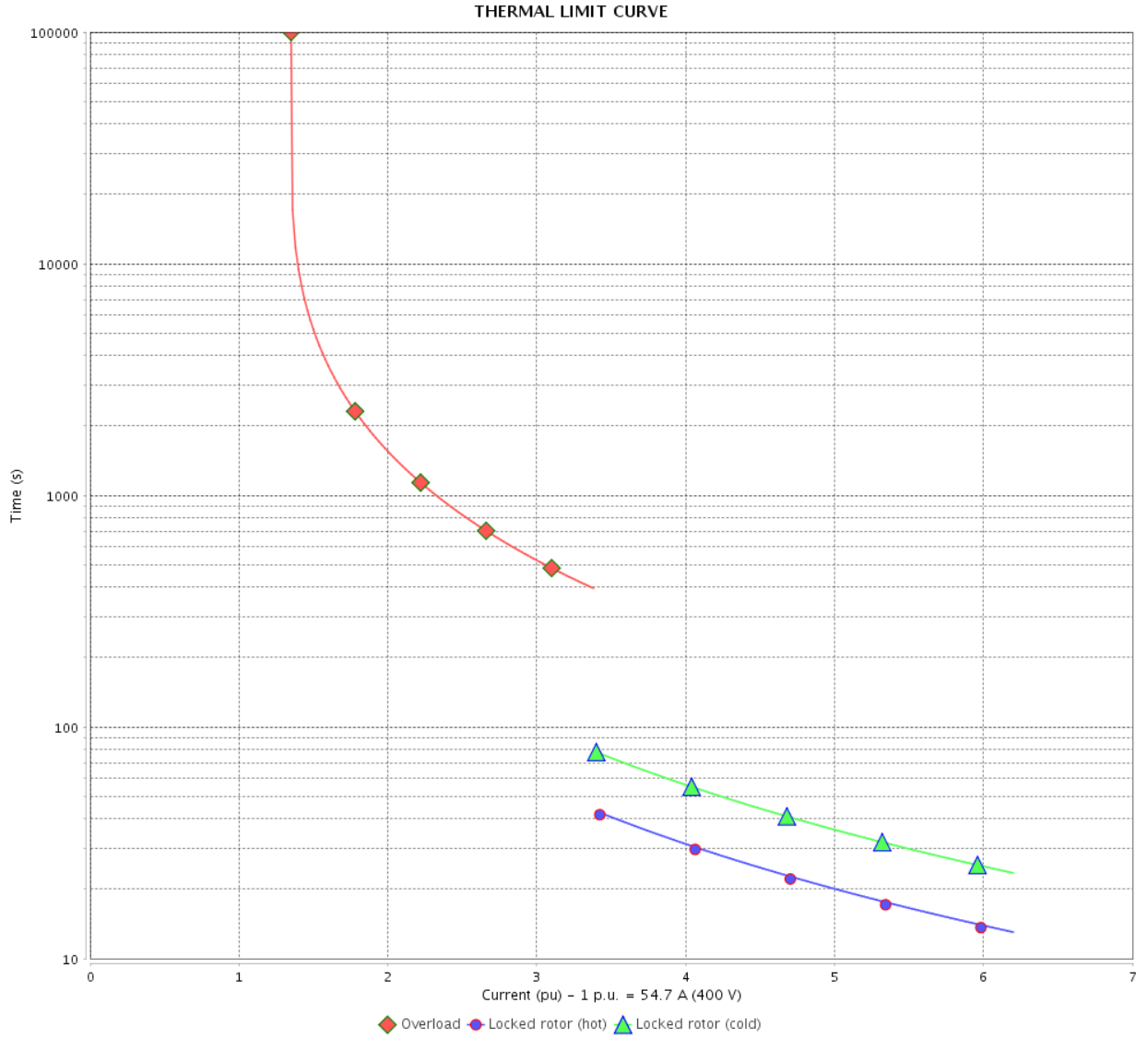
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	12/04/2022		4 / 6	

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

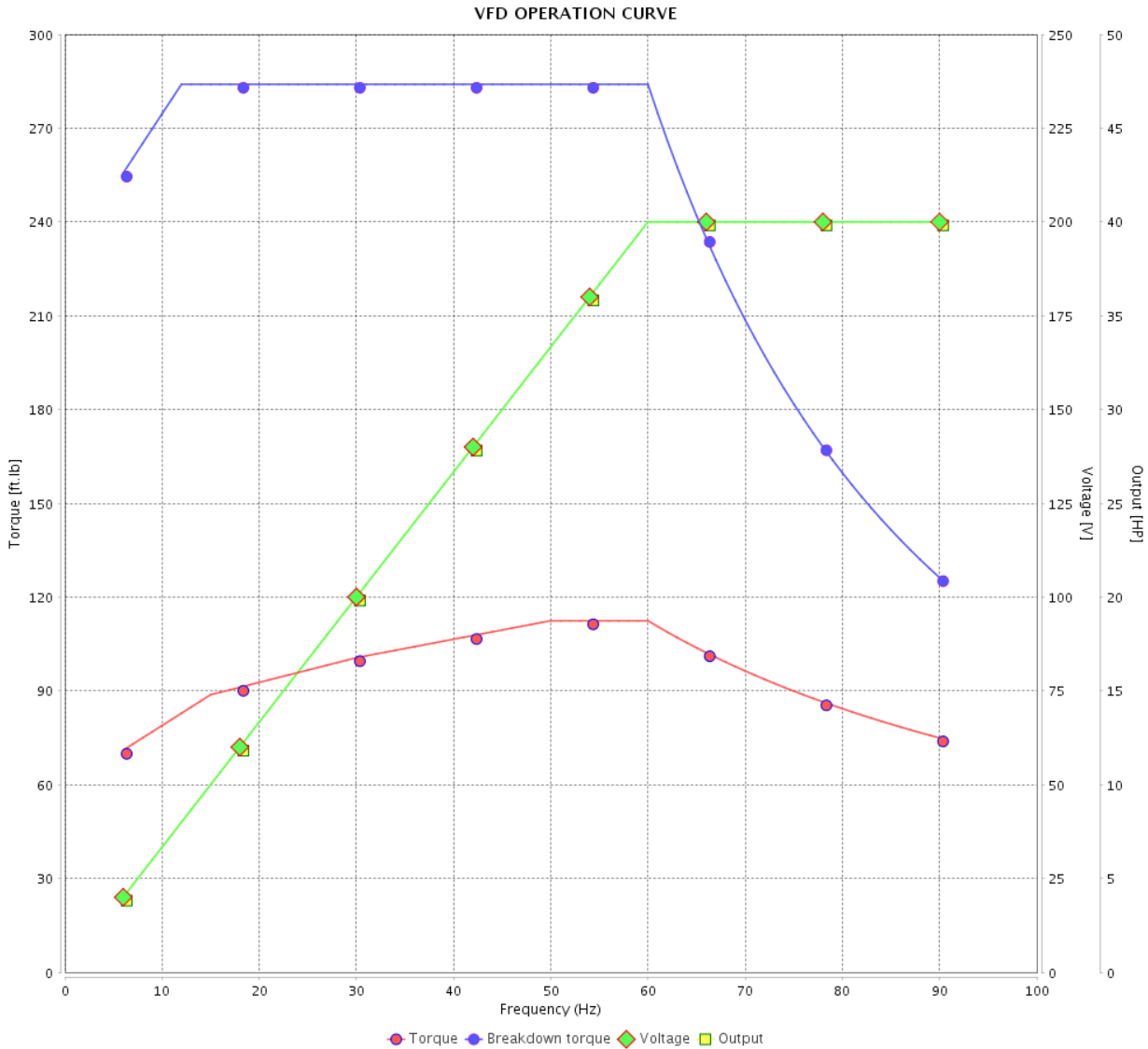


Customer :

Product line : W40 JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14836785

Catalog # : 04018OT3V324JPV-W40

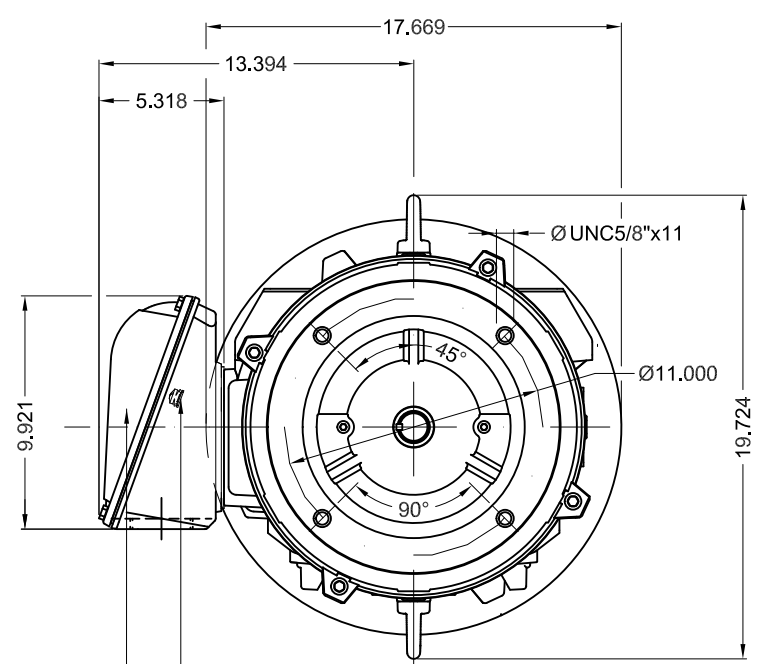


Performance : 200/400 V 60 Hz 4P

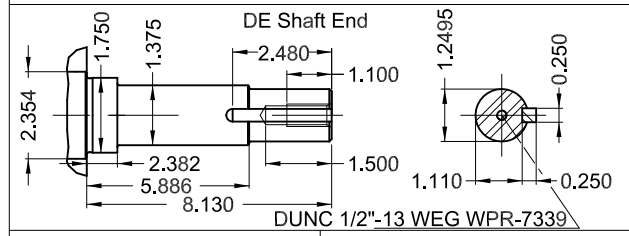
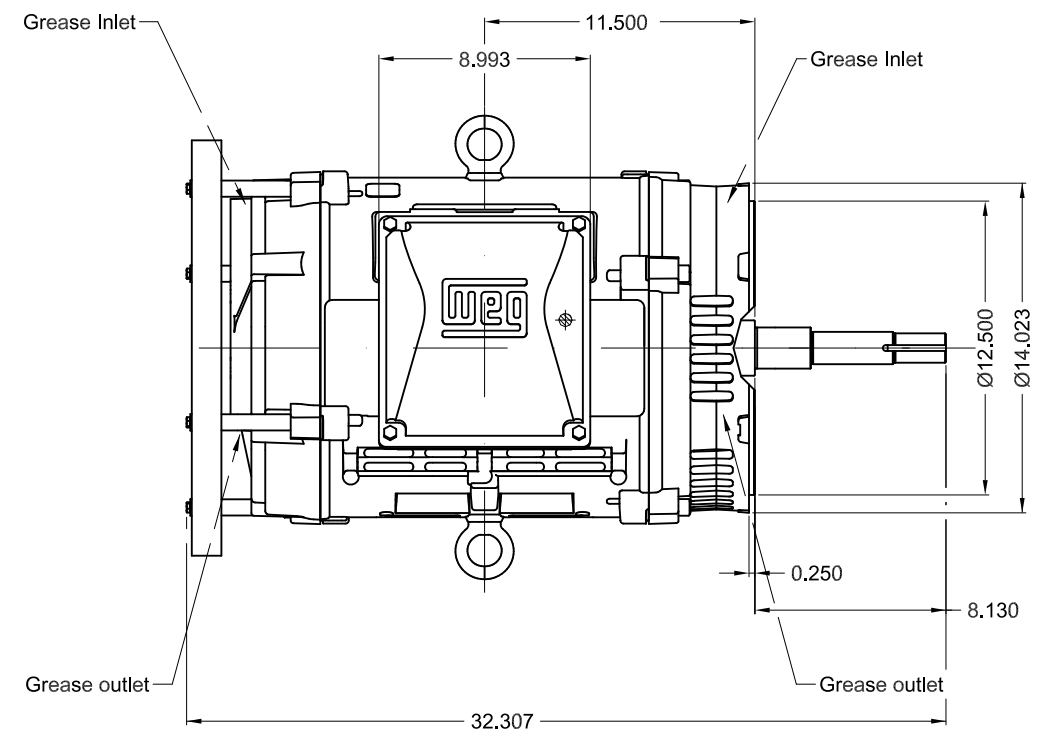
Rated current : 109/54.7 A  
 LRC : 6.2  
 Rated torque : 118 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 1775 rpm

Moment of inertia (J) : 5.69 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	12/04/2022			



Grounding for leads 5.2-35 mm<sup>2</sup> / 10-2 AWG  
Main terminal box  
NPT 2"



40 HP 04 Poles 60 Hz A

1:8

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 CLOSE COUPLED PUMP JP TYPE PREM. FT. FRAME 324/6JP IP23 ODP					
CHECKED							
RELEASED							
REL DT.			WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1	

Color RAL 5009  
Painting plan 203A  
Mounting NEMA W-6  
Mounting V18

**PREVIEW**  
WDD

