

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JP Pump High Efficiency  
Three-Phase

Product code : 14829912

Catalog # : 07536OP3HFP364JPV-W4

Frame : 364/5JP  
Output : 75 HP (55 kW)  
Poles : 2  
Frequency : 60 Hz  
Rated voltage : 575 V  
Rated current : 68.2 A  
L. R. Amperes : 396 A  
LRC : 5.8x(Code F)  
No load current : 20.2 A  
Rated speed : 3550 rpm  
Slip : 1.39 %  
Rated torque : 111 ft.lb  
Locked rotor torque : 160 %  
Breakdown torque : 210 %  
Insulation class : F  
Service factor : 1.15  
Moment of inertia (J) : 5.60 sq.ft.lb  
Design : B

Locked rotor time : 46s (cold) 26s (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)  
Starting method : Direct On Line  
Approx. weight<sup>3</sup> : 674 lb

Output 25% 50% 75% 100%

Efficiency (%) 90.3 91.0 92.4 93.0  
Power Factor 0.55 0.80 0.85 0.87

Foundation loads

Max. traction : 461 lb  
Max. compression : 1135 lb

	Drive end	Non drive end
Bearing type :	6314 C3	6212 Z C3
Sealing :	Without Bearing Seal	Without Bearing Seal
Lubrication interval :	7209 h	12143 h
Lubricant amount :	27 g	13 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		Page Revision 1 / 6		
Checked by				
Date	10/04/2020			

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



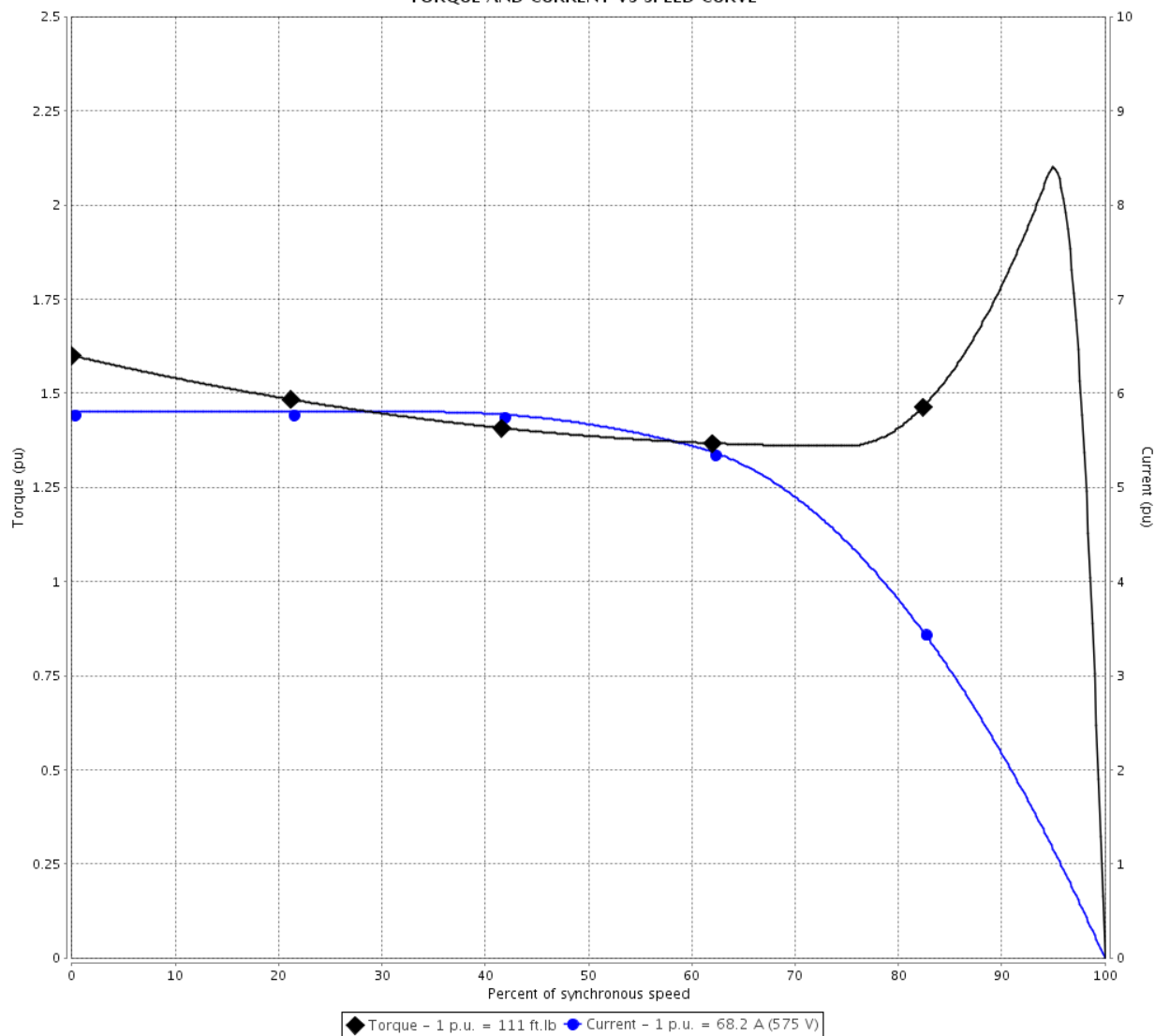
Customer :

Product line : W40 JP Pump High Efficiency  
Three-Phase

Product code : 14829912

Catalog # : 07536OP3HFP364JPV-W4

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 68.2 A	Moment of inertia (J)	: 5.60 sq.ft.lb
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 111 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.15
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 3550 rpm	Design	: B

Locked rotor time : 46s (cold) 26s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 2 / 6 Revision		
Checked by				
Date	10/04/2020			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

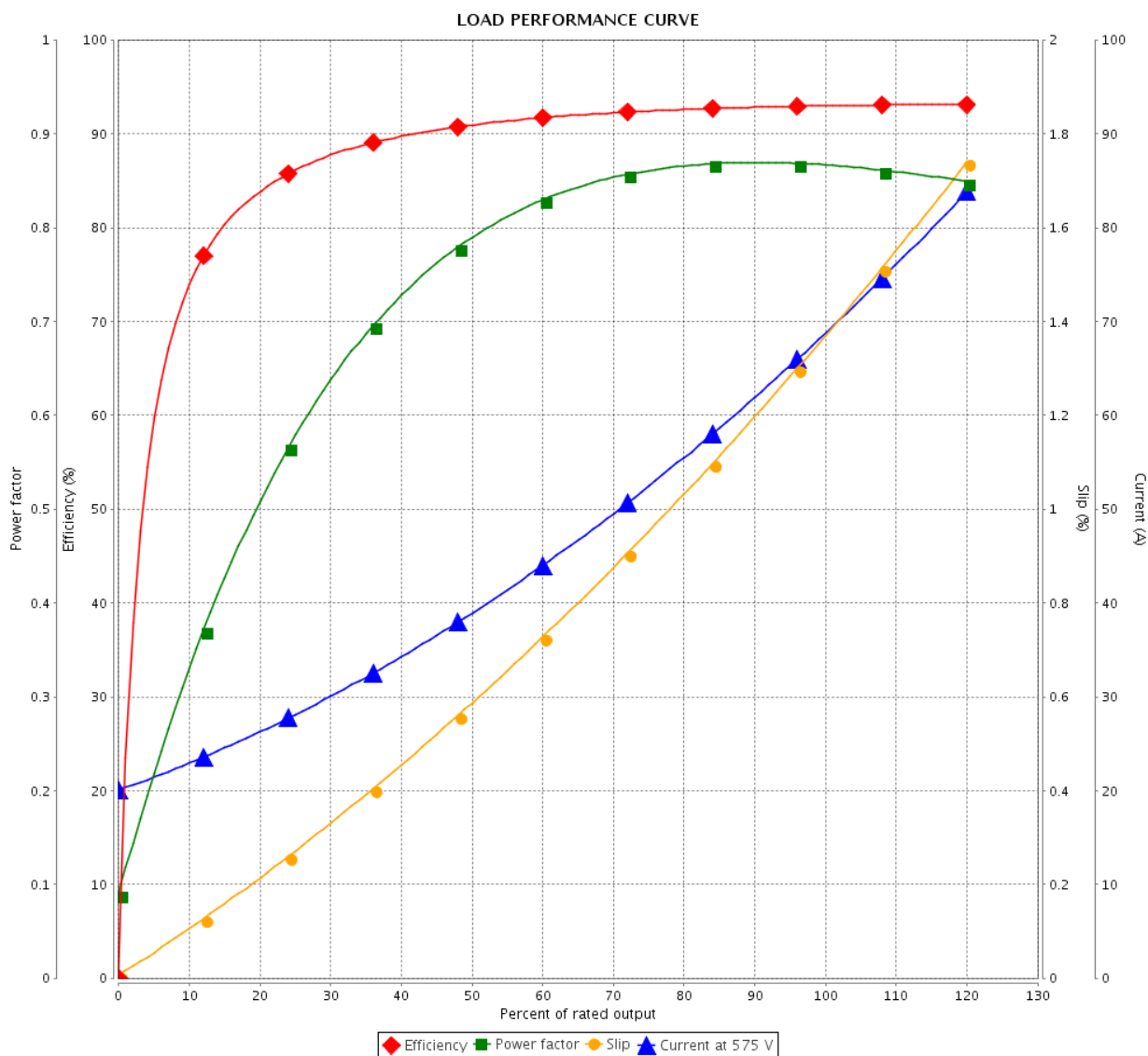


Customer :

Product line : W40 JP Pump High Efficiency  
Three-Phase

Product code : 14829912

Catalog # : 07536OP3HFP364JPV-W4



Performance : 575 V 60 Hz 2P

Rated current : 68.2 A  
LRC : 5.8  
Rated torque : 111 ft.lb  
Locked rotor torque : 160 %  
Breakdown torque : 210 %  
Rated speed : 3550 rpm

Moment of inertia (J) : 5.60 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 3 / 6		
Checked by				
Date	10/04/2020			
		Revision		

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer

:

Product line

: W40 JP Pump High Efficiency  
Three-Phase

Product code :

14829912

Catalog # :

07536OP3HFP364JPV-  
W4

Performance : 575 V 60 Hz 2P

Rated current

: 68.2 A

LRC

: 5.8

Rated torque

: 111 ft.lb

Locked rotor torque

: 160 %

Breakdown torque

: 210 %

Rated speed

: 3550 rpm

Moment of inertia (J)

: 5.60 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

Date

10/04/2020

Page

4 / 6

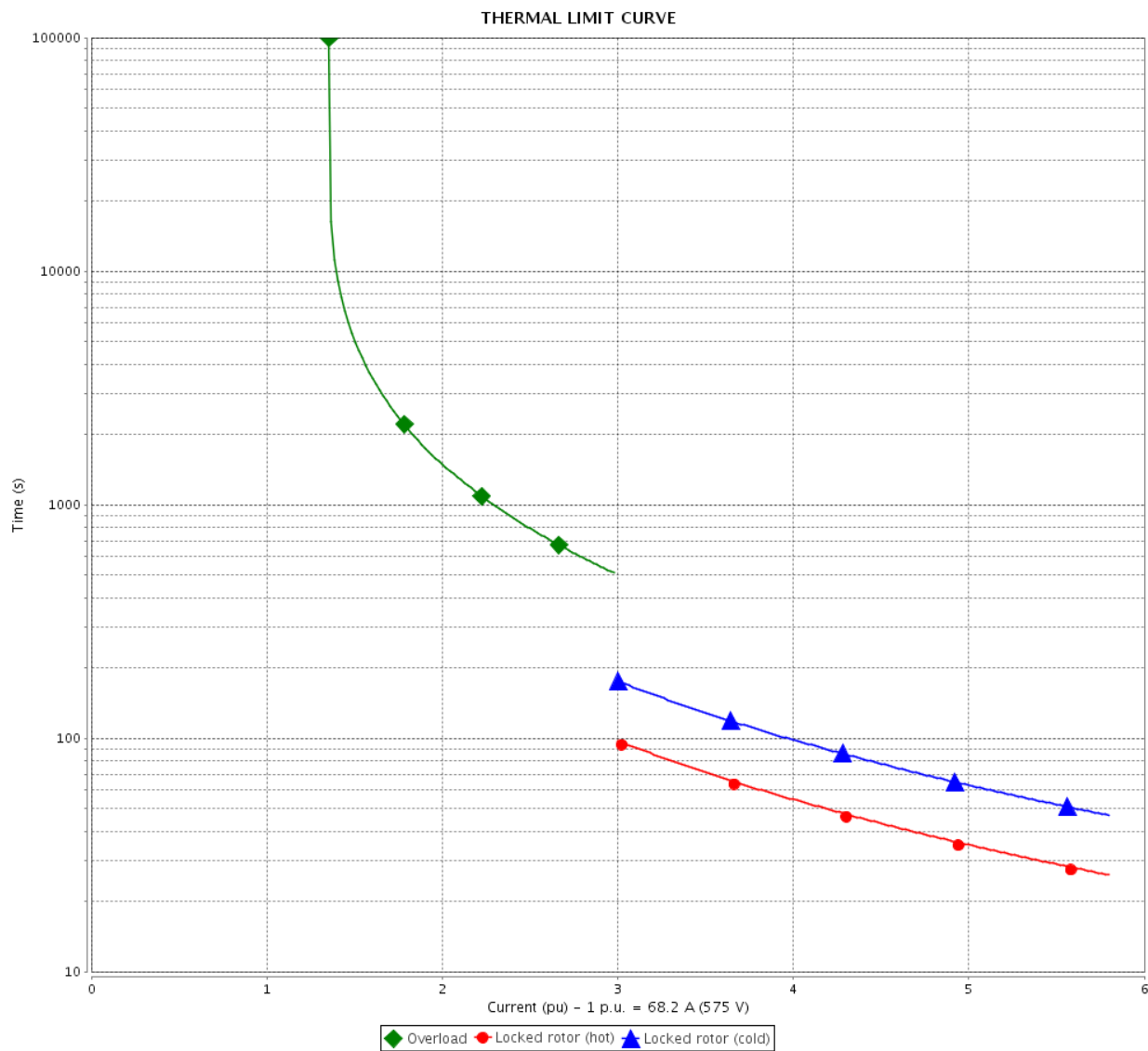
Revision

# 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	10/04/2020				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

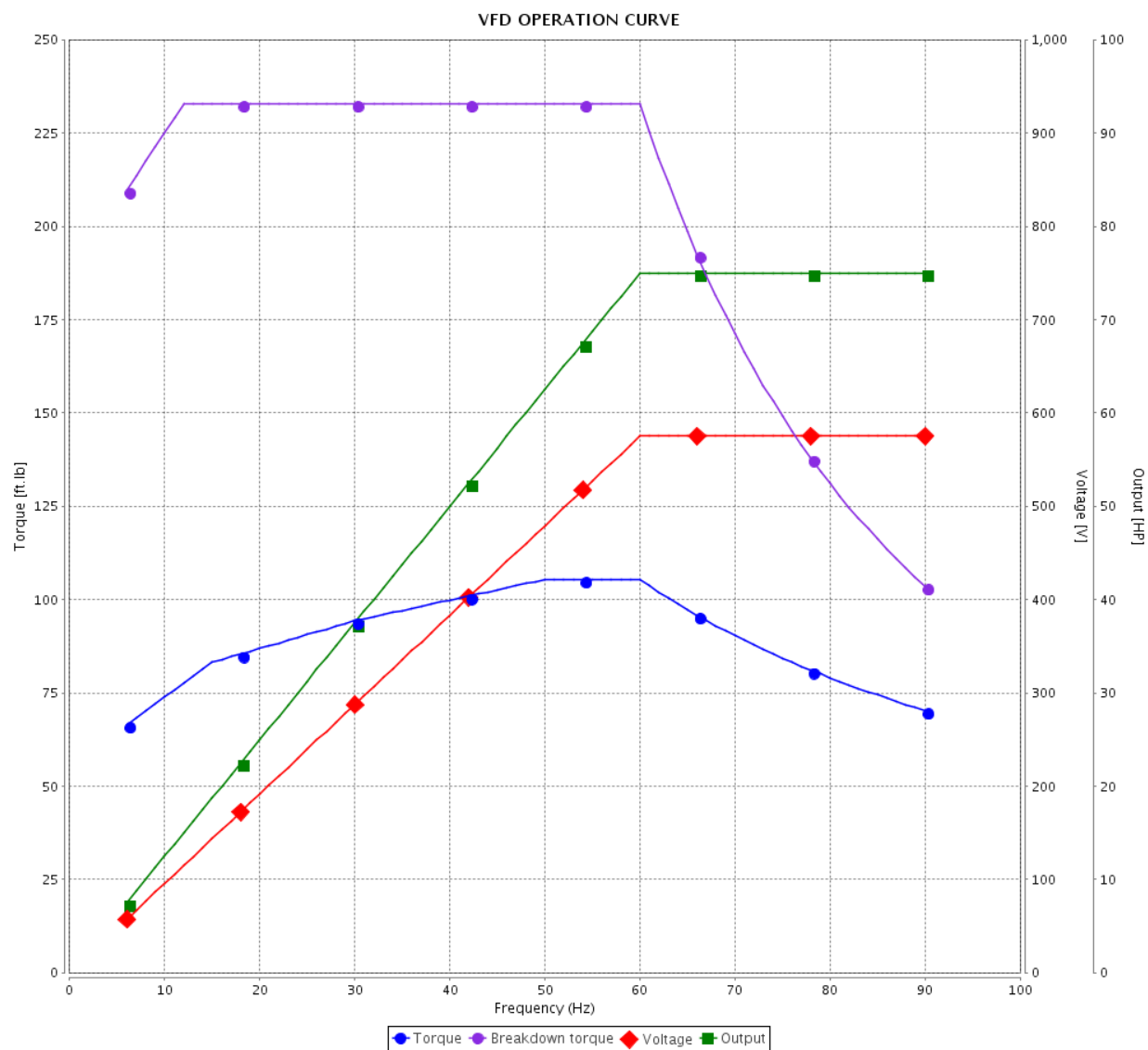


Customer :

Product line : W40 JP Pump High Efficiency  
Three-Phase

Product code : 14829912

Catalog # : 07536OP3HFP364JPV-W4

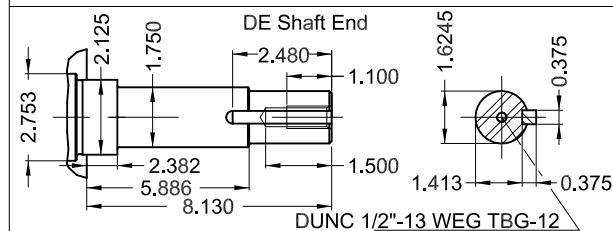
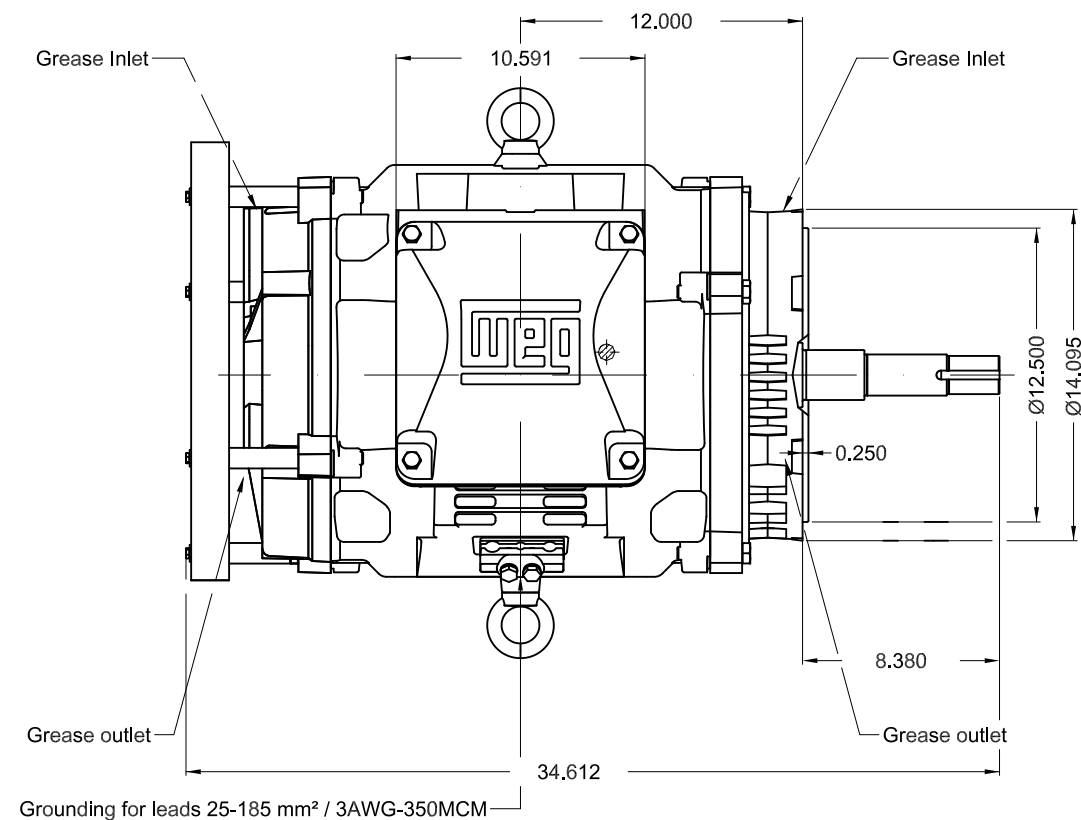
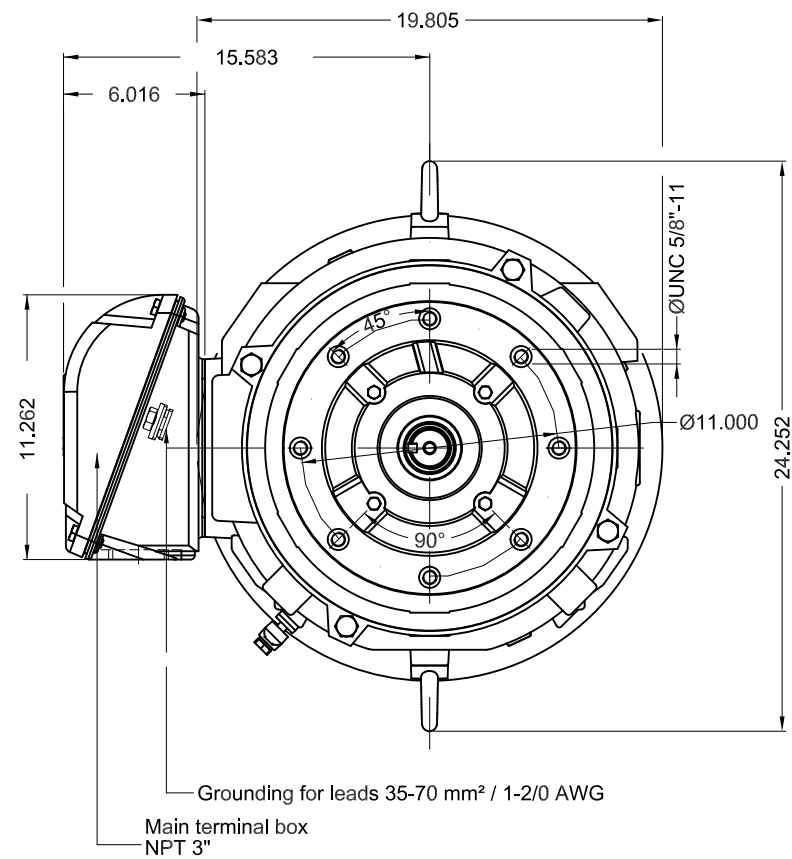


Performance : 575 V 60 Hz 2P

Rated current : 68.2 A  
LRC : 5.8  
Rated torque : 111 ft.lb  
Locked rotor torque : 160 %  
Breakdown torque : 210 %  
Rated speed : 3550 rpm

Moment of inertia (J) : 5.60 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

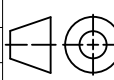

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 6 / 6		
Checked by				
Date	10/04/2020			
		Revision		



75 HP 02 Poles 60Hz A

1:8

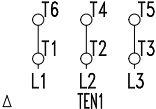

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
-----	-----	--------------------------	----------	---------	----------	------	-----

EXECUTED	PIRWBUSER	 THREE PHASE W40 MOTOR HIGH EFF FRAME 364/5JP IP23 ODP	PREVIEW		
CHECKED			WDD		
RELEASED			SHEET 1 / 1		
REL DT.		WMO Jaragua do Sul	Product Engineering		

Color RAL 3002  
Painting plan 203A  
Mounting NEMA W-6  
Mounting V18



*Severe Duty*

PH	FR	HP(kW)		Hz	
V —		A —			
NEMA NOM EFF		—	%	RPM	
ENCL ODP	DUTY		INS. CL.	$\Delta T$ K	
PF		DES —	CODE	AMB.	 KLUBERSYNTH BHP 72-102
SF	SFA		ALT 1000 m.a.s.l.		
					Lbs