

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JP Pump High Efficiency  
Three-Phase

Product code : 14829568

Catalog # : 06018OP3EFP364JPV-W4

Frame : 364/5JP  
Output : 60 HP (45 kW)  
Poles : 4  
Frequency : 60 Hz  
Rated voltage : 230/460 V  
Rated current : 142/71.0 A  
L. R. Amperes : 866/433 A  
LRC : 6.1x(Code G)  
No load current : 46.0/23.0 A  
Rated speed : 1777 rpm  
Slip : 1.28 %  
Rated torque : 177 ft.lb  
Locked rotor torque : 180 %  
Breakdown torque : 229 %  
Insulation class : F  
Service factor : 1.15  
Moment of inertia (J) : 12.8 sq.ft.lb  
Design : B

Locked rotor time : 39s (cold) 22s (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> : 675 lb

Output	25%	50%	75%	100%
Efficiency (%)	92.9	93.0	93.6	93.6
Power Factor	0.49	0.73	0.82	0.85

Efficiency (%)	92.9	93.0	93.6	93.6
Power Factor	0.49	0.73	0.82	0.85

Foundation loads

Max. traction : 1273 lb  
Max. compression : 1948 lb

	Drive end	Non drive end
Bearing type	6314 C3	6212 Z C3
Sealing	Without Bearing Seal	Without Bearing Seal
Lubrication interval	19579 h	20000 h
Lubricant amount	27 g	13 g
Lubricant type	Mobil Polyrex EM	

### Notes

USABLE @208V 157A SF 1.00 SFA 157A

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 1 / 6 Revision		
Checked by				
Date	10/04/2020			

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

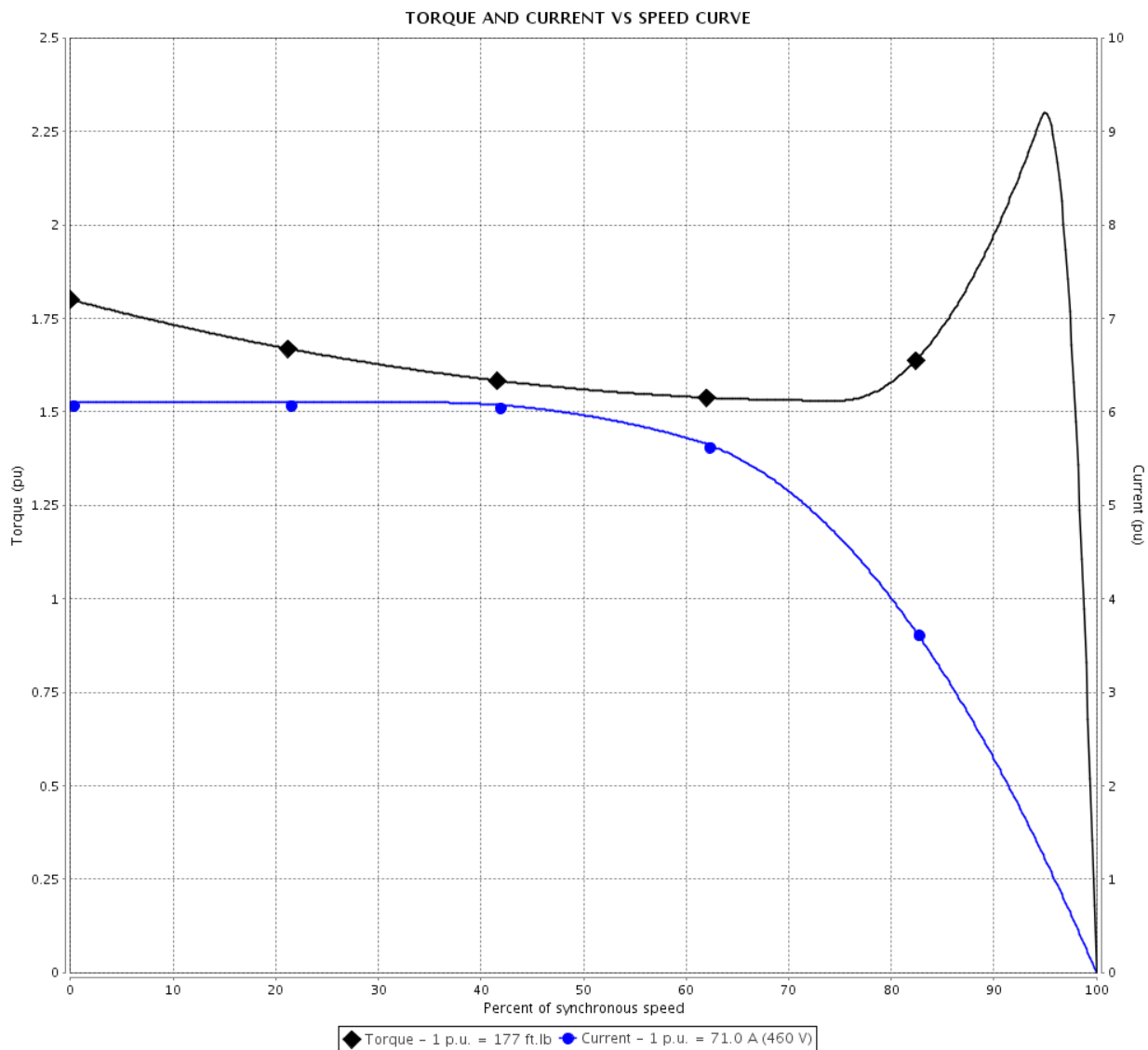


Customer :

Product line : W40 JP Pump High Efficiency  
Three-Phase

Product code : 14829568

Catalog # : 06018OP3EFP364JPV-W4



Performance : 230/460 V 60 Hz 4P

Rated current : 142/71.0 A  
LRC : 6.1  
Rated torque : 177 ft.lb  
Locked rotor torque : 180 %  
Breakdown torque : 229 %  
Rated speed : 1777 rpm

Moment of inertia (J) : 12.8 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Locked rotor time : 39s (cold) 22s (hot)

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

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

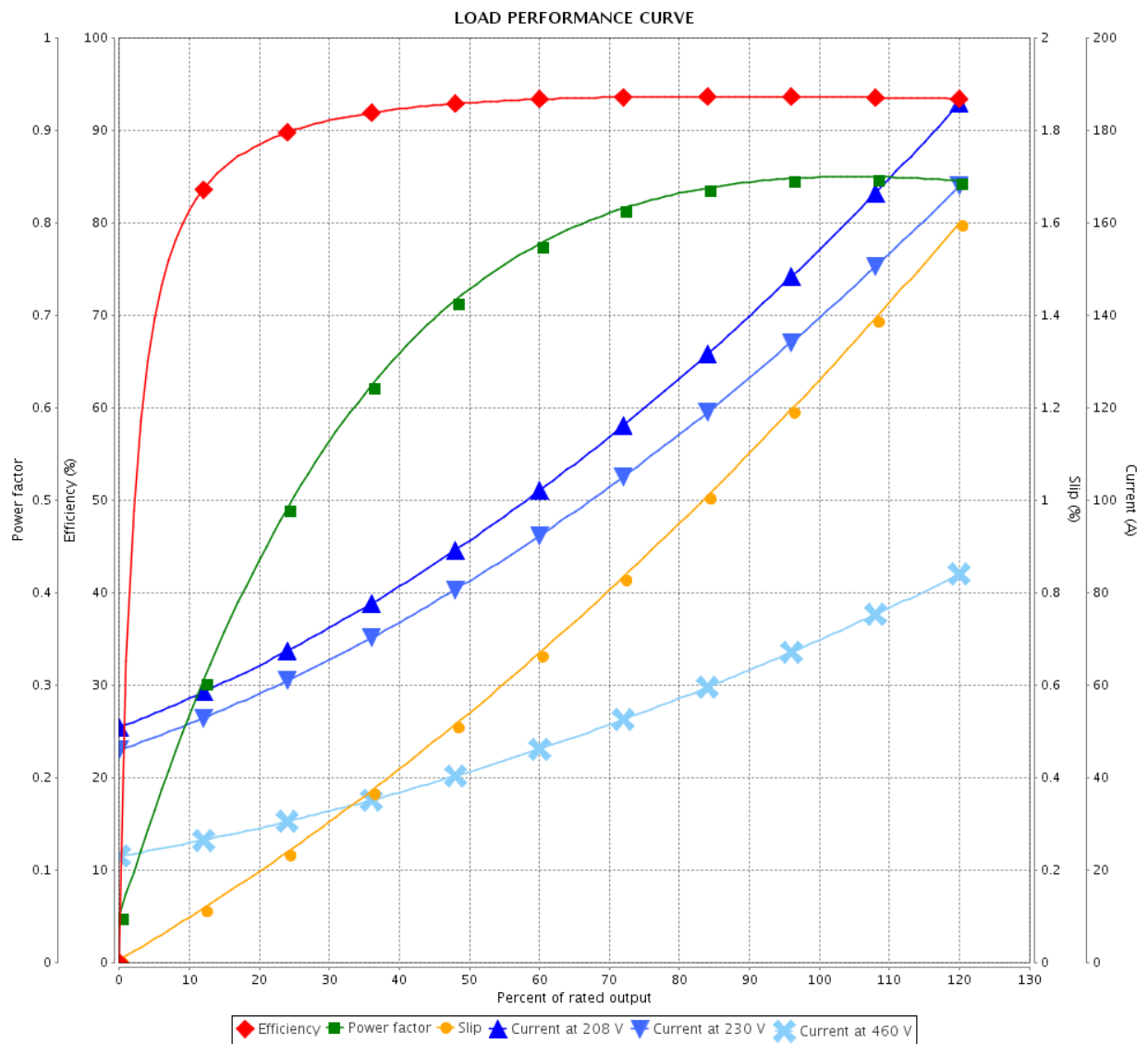


Customer :

Product line : W40 JP Pump High Efficiency  
Three-Phase

Product code : 14829568

Catalog # : 06018OP3EFP364JPV-W4



Performance : 230/460 V 60 Hz 4P

Rated current : 142/71.0 A  
LRC : 6.1  
Rated torque : 177 ft.lb  
Locked rotor torque : 180 %  
Breakdown torque : 229 %  
Rated speed : 1777 rpm

Moment of inertia (J) : 12.8 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 / 6Revision		
Checked by				
Date	10/04/2020			

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JP Pump High Efficiency  
Three-Phase

Product code : 14829568

Catalog # : 06018OP3EFP364JPV-W4

Performance : 230/460 V 60 Hz 4P

Rated current : 142/71.0 A  
LRC : 6.1  
Rated torque : 177 ft.lb  
Locked rotor torque : 180 %  
Breakdown torque : 229 %  
Rated speed : 1777 rpm

Moment of inertia (J) : 12.8 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

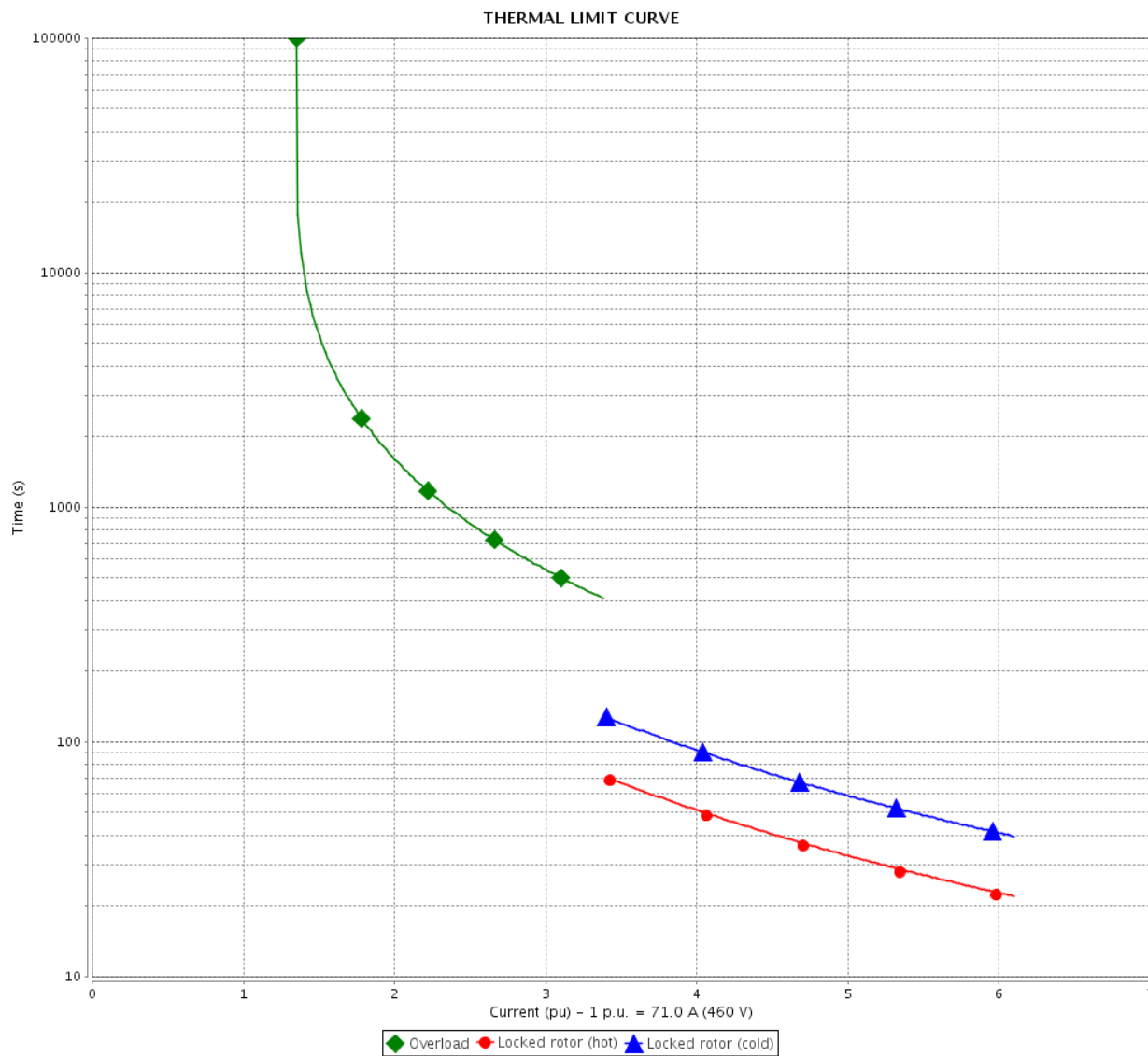
Revision

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by					
Date	10/04/2020				
				Page 5 / 6	Revision

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

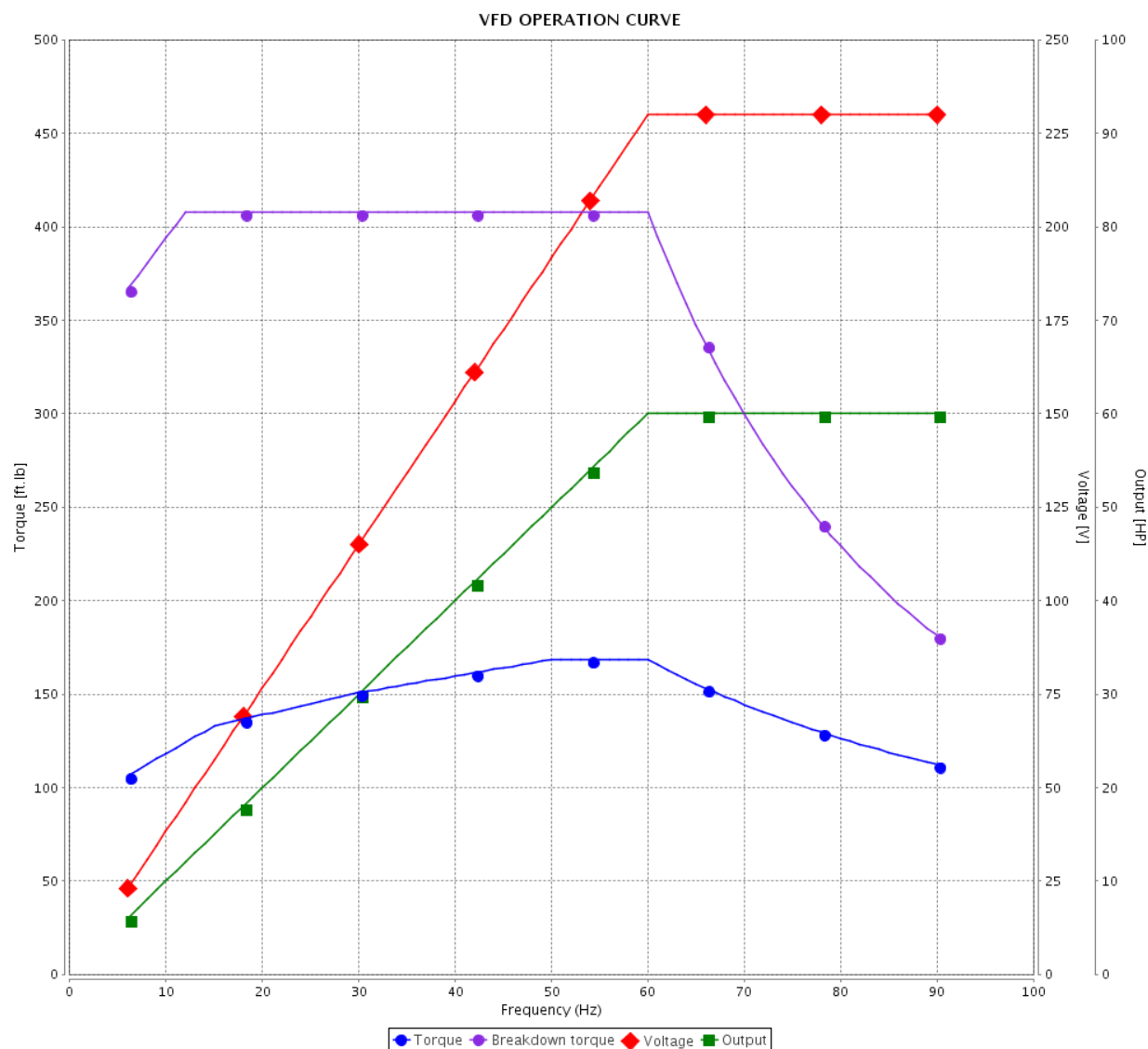


Customer :

Product line : W40 JP Pump High Efficiency  
Three-Phase

Product code : 14829568

Catalog # : 06018OP3EFP364JPV-W4

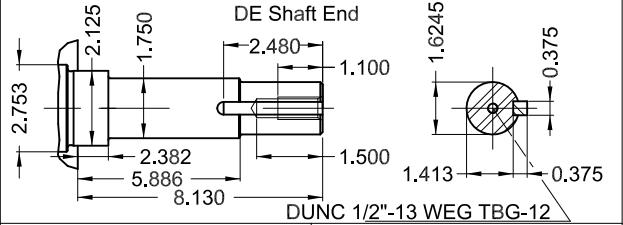
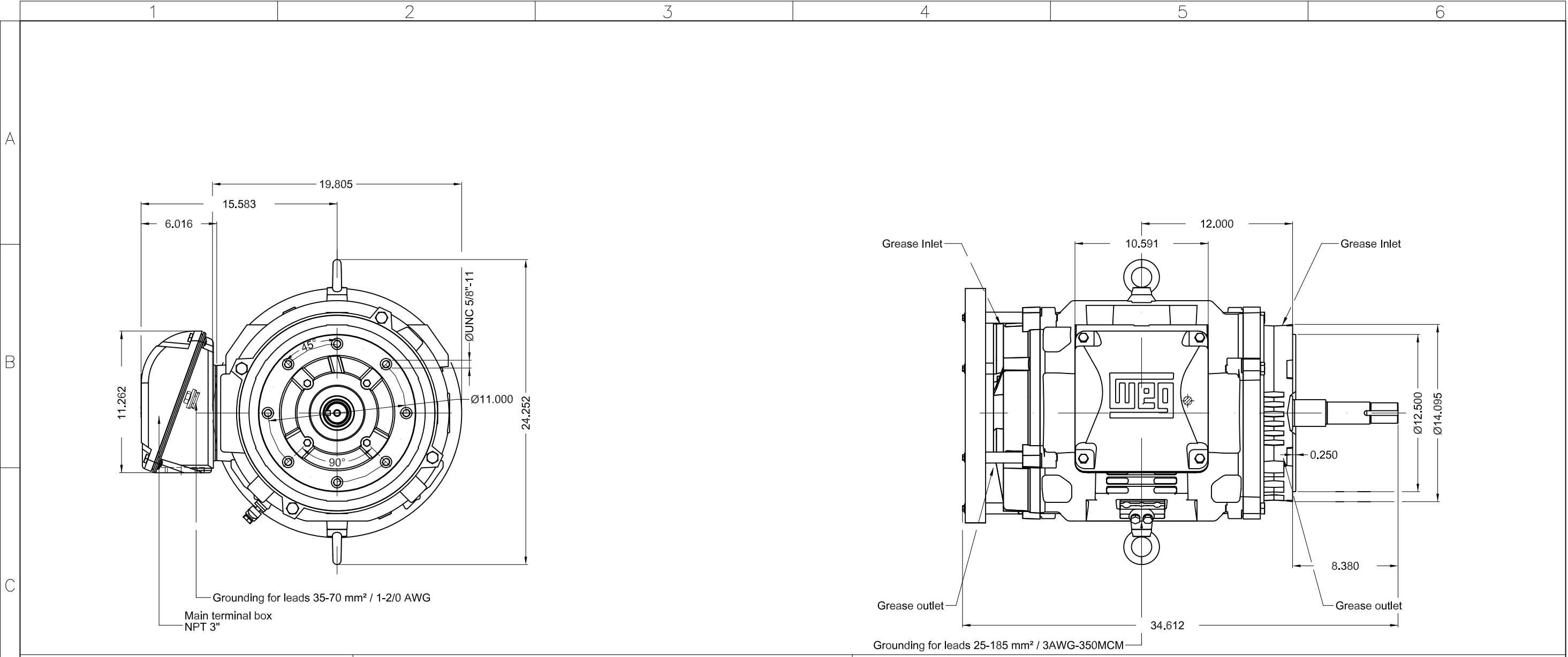


Performance : 230/460 V 60 Hz 4P

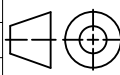

Rated current : 142/71.0 A  
LRC : 6.1  
Rated torque : 177 ft.lb  
Locked rotor torque : 180 %  
Breakdown torque : 229 %  
Rated speed : 1777 rpm

Moment of inertia (J) : 12.8 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				6 / 6	
Date					



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

60 HP 04 Poles 60Hz										A		
								1:8				
ECM		LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER	
EXECUTED		PIRWBUSER		THREE PHASE W40 MOTOR HIGH EFF					PREVIEW			
CHECKED				FRAME 364/5JP IP23 ODP								
RELEASED												
REL DT.			WMO	Jaragua do Sul			Product Engineering		SHEET	1 / 1		

MODEL 060180P3EFP364JPV-W4

MADE IN BRAZIL

14829568


**W40**  
**CC029A**

Inverter Duty Motor

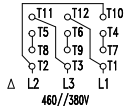
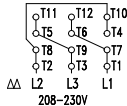


MOD.T01#FOX0H



For 60Hz use on PWM, VT 1000:1, CT 2:1, 1.0SF

PH 3	FR 364/5JP	HP(kW) 60.0(45.0)	Hz 60
V 230/460	A 142/71.0	RPM 1777	DES B
NEMA NOM EFF	93.6 %	INS. CL. F $\Delta$ T 80 K	IP23
ENCL ODP	DUTY	CONT.	AMB. 40°C
CODE G	PF 0.85	SF 1.15	SFA 163/81.6
USABLE @208V	157 A	SF 1.00	
60HP 45kW 50Hz 380V	85.8A 1470RPM	SF1.00 EFF 91.6%	


 → 6314-C3(27g)  
 → 6212-Z-C3(13g)

 MOBIL POLYREX EM  
 19579 h

ALT 1000 m.a.s.l. 675 Lbs