

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JP Pump High Efficiency  
Three-Phase

Product code : 14829574

Catalog # : 07536OP3EFP364JPV-W4

Frame : 364/5JP  
Output : 75 HP (55 kW)  
Poles : 2  
Frequency : 60 Hz  
Rated voltage : 230/460 V  
Rated current : 171/85.3 A  
L. R. Amperes : 989/495 A  
LRC : 5.8x(Code F)  
No load current : 50.4/25.2 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%
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Efficiency (%)	90.3	91.0	92.4	93.0
Power Factor	0.55	0.80	0.85	0.87

Foundation loads

Max. traction : 579 lb  
Max. compression : 1253 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

USABLE @208V 186A SF 1.00 SFA 186A

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		<div>Page</div> <div>Revision</div>		
Checked by				
Date	10/04/2020			
		1 / 6		

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

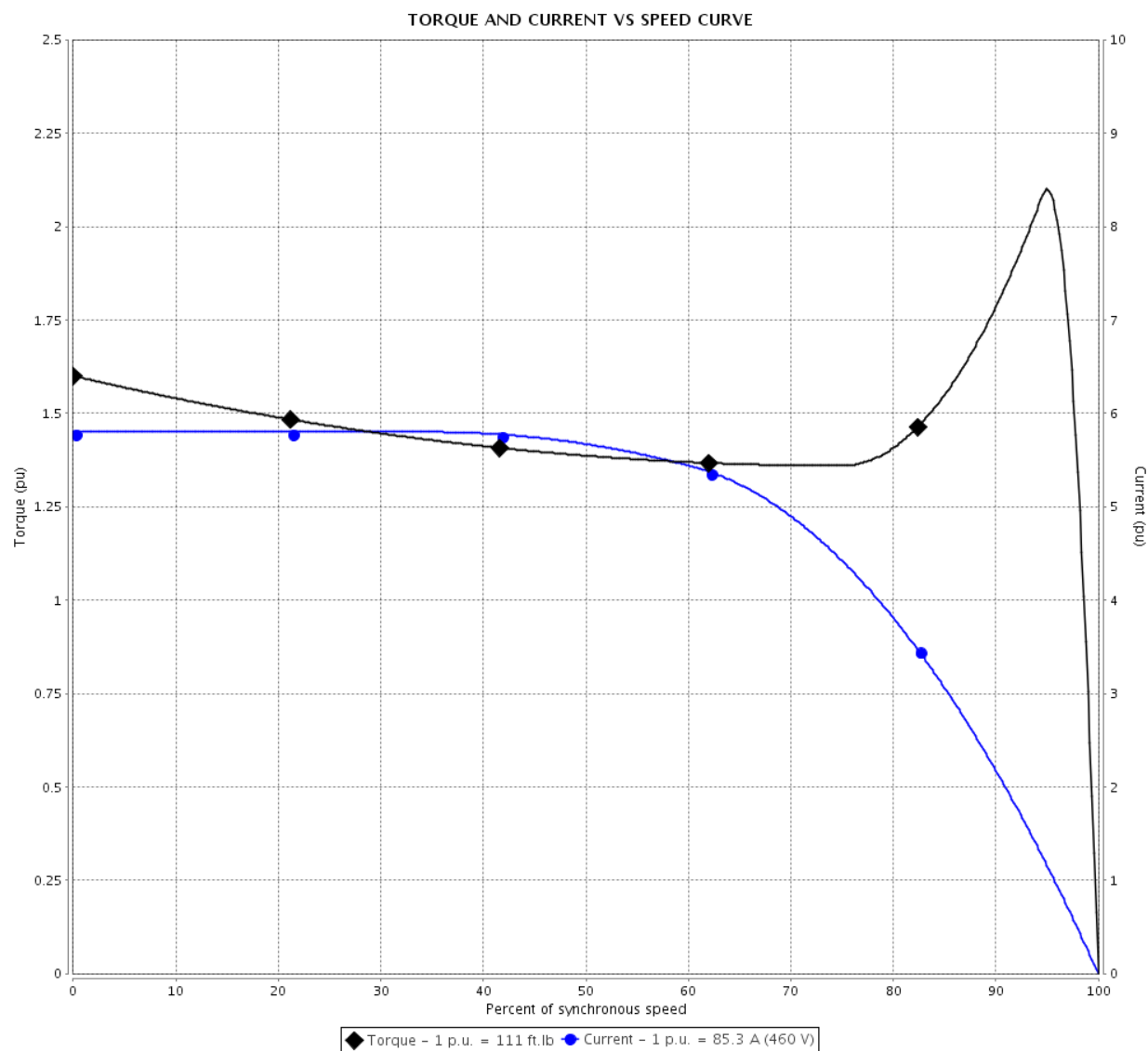


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Duty cycle : Cont.(S1)  
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Design : B

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

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

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

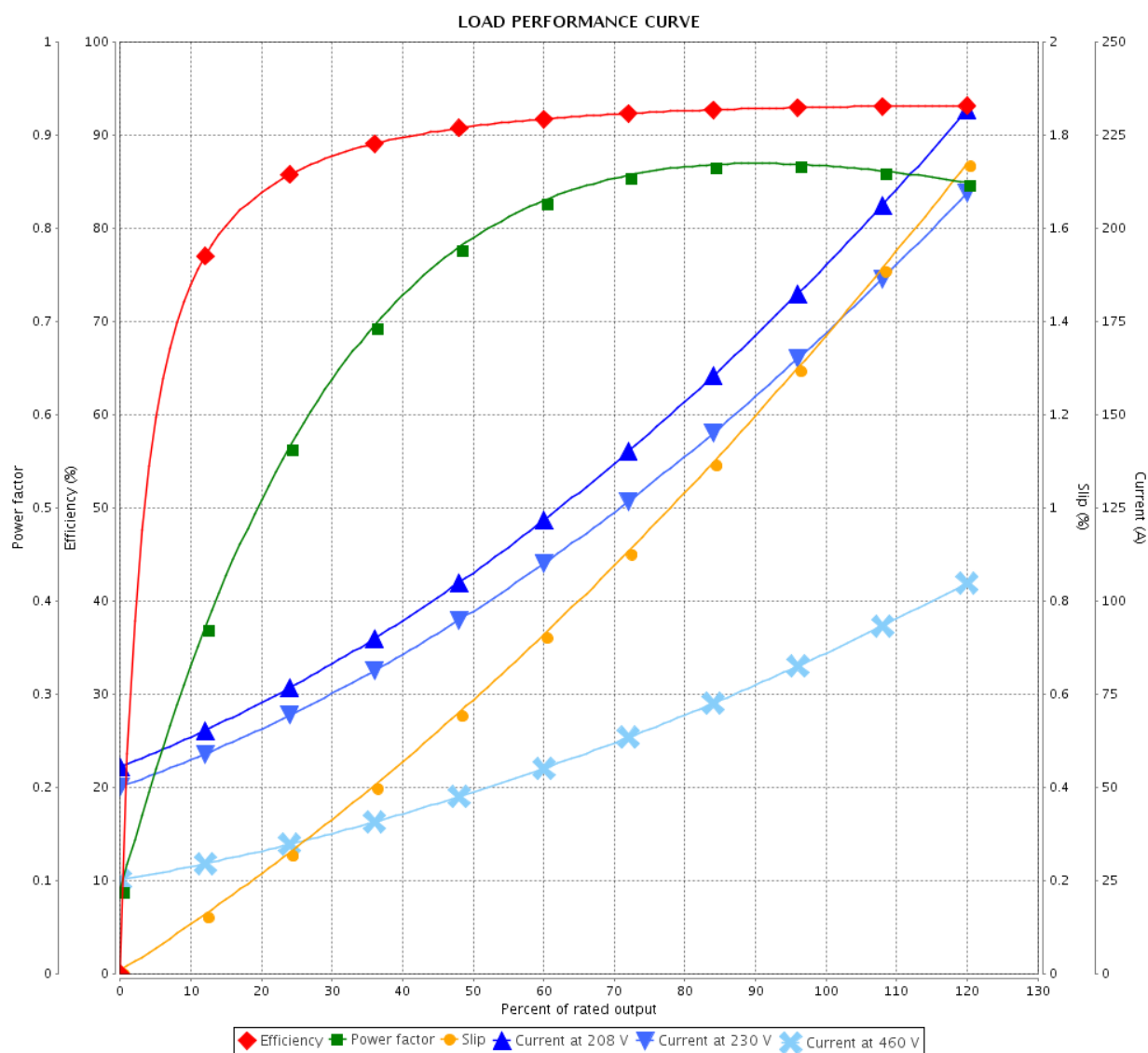


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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 6		
Checked by				
Date	10/04/2020			
		Revision		

# THERMAL LIMIT CURVE

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Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

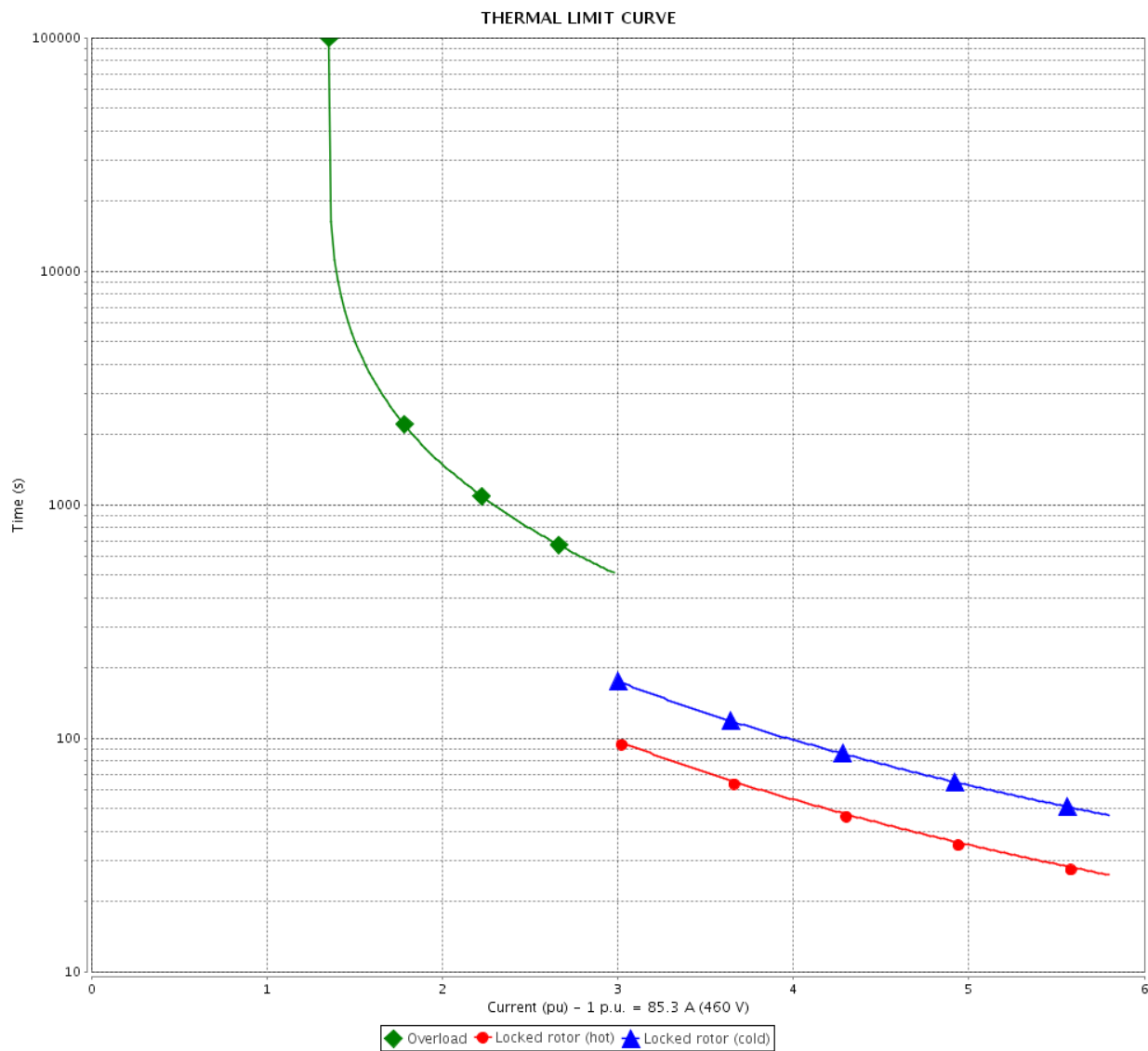
Rev.	Changes Summary		Performed	Checked	Date
Performed by			Page		Revision
Checked by					
Date	10/04/2020				

# 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

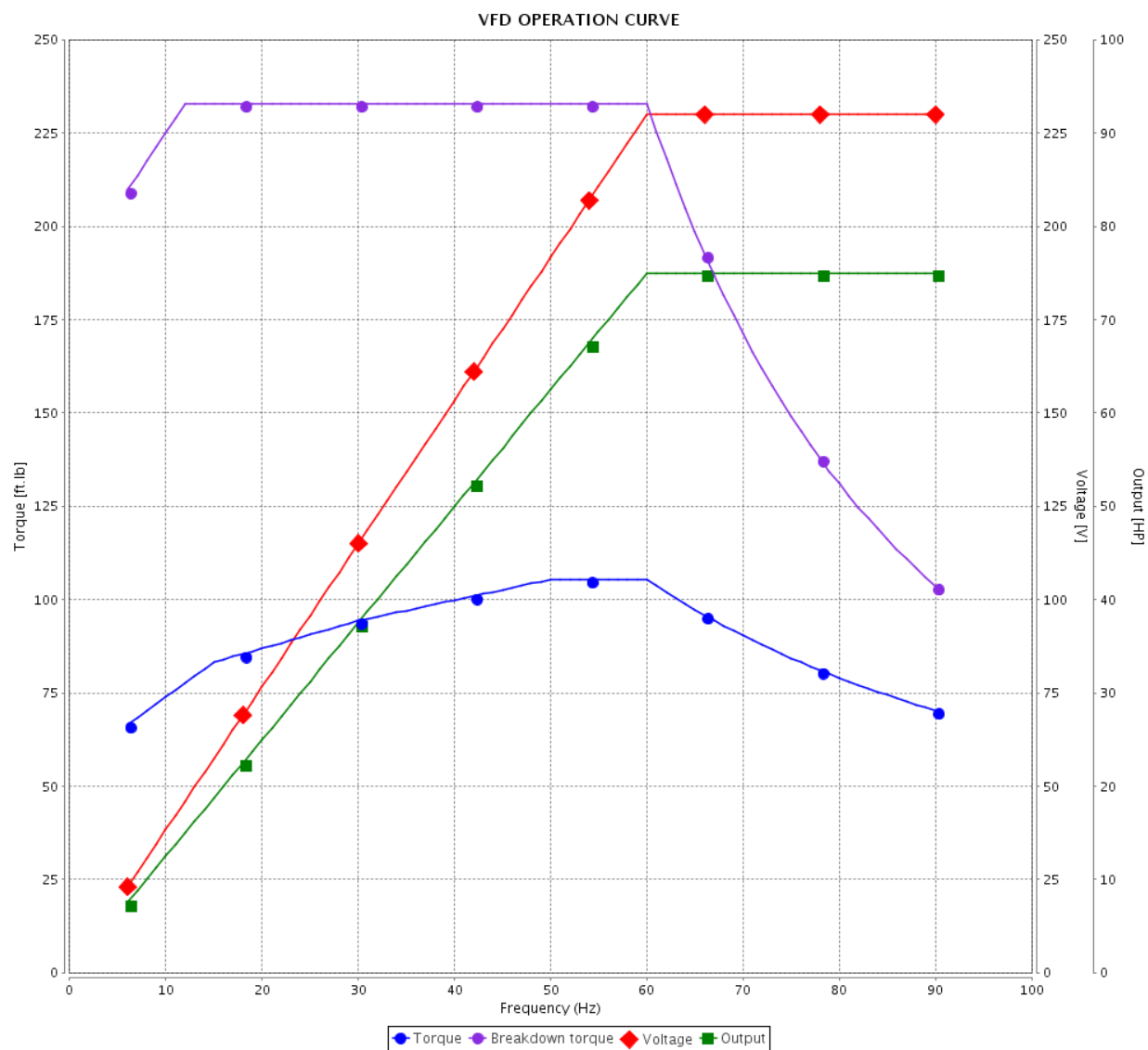


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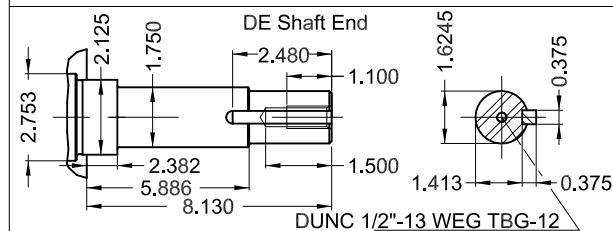
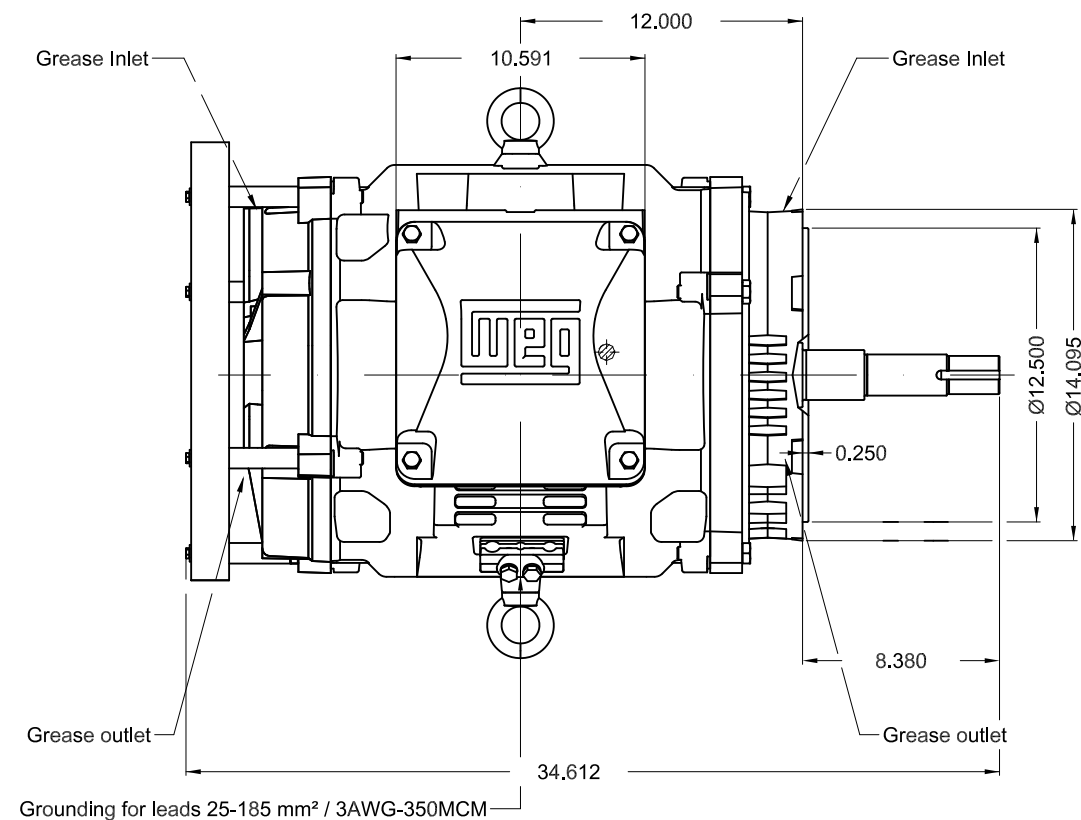
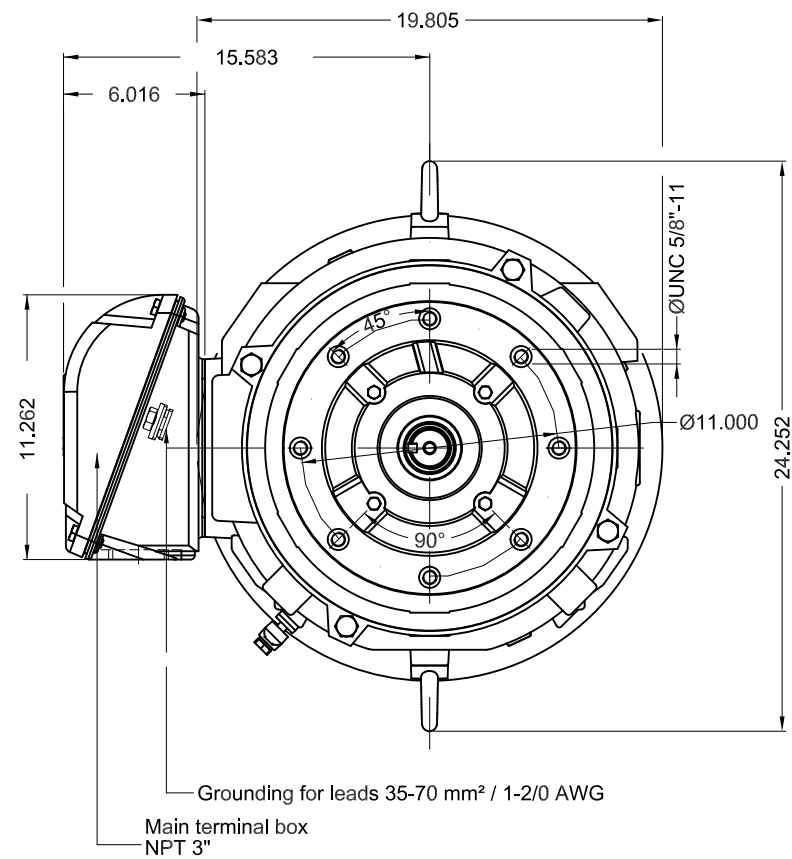


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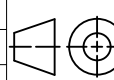

Moment of inertia (J) : 5.60 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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



75 HP 02 Poles 60Hz A

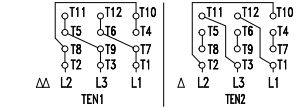

1:8

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

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



*Severe Duty*

PH	FR		HP(kW)		Hz			
V	—	A	—	RPM	DES	—		
NEMA NOM EFF		—	%	INS. CL.	$\Delta T$	K		
ENCL ODP		DUTY		AMB.				
CODE	PF	SF	SFA					
USABLE @208V								
ALT 1000 m.a.s.l.							Lbs	