

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JM Pump NEMA Premium Efficiency Three-Phase Product code : 14269584
Catalog # : 07536OT3E364JM-W40

Frame	: 364/5JM	Locked rotor time	: 34s (cold) 19s (hot)
Output	: 75 HP (55 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 170/84.8 A	Protection degree	: IP23
L. R. Amperes	: 1119/560 A	Cooling method	: IC01 - ODP
LRC	: 6.6x(Code G)	Mounting	: F-1
No load current	: 43.0/21.5 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3555 rpm	Noise level ²	: 84.0 dB(A)
Slip	: 1.25 %	Starting method	: Direct On Line
Rated torque	: 111 ft.lb	Approx. weight ³	: 740 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 6.40 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	91.0	91.7	93.0	93.6	Max. traction	: 649 lb
Power Factor	0.56	0.77	0.84	0.87	Max. compression	: 1390 lb

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6212 Z C3
Sealing	:	Without Bearing Seal	Without Bearing Seal
Lubrication interval	:	14418 h	20000 h
Lubricant amount	:	27 g	13 g
Lubricant type	:	Mobil Polyrex EM	

Notes
USABLE @208V 188A SF 1.15 SFA 216A

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

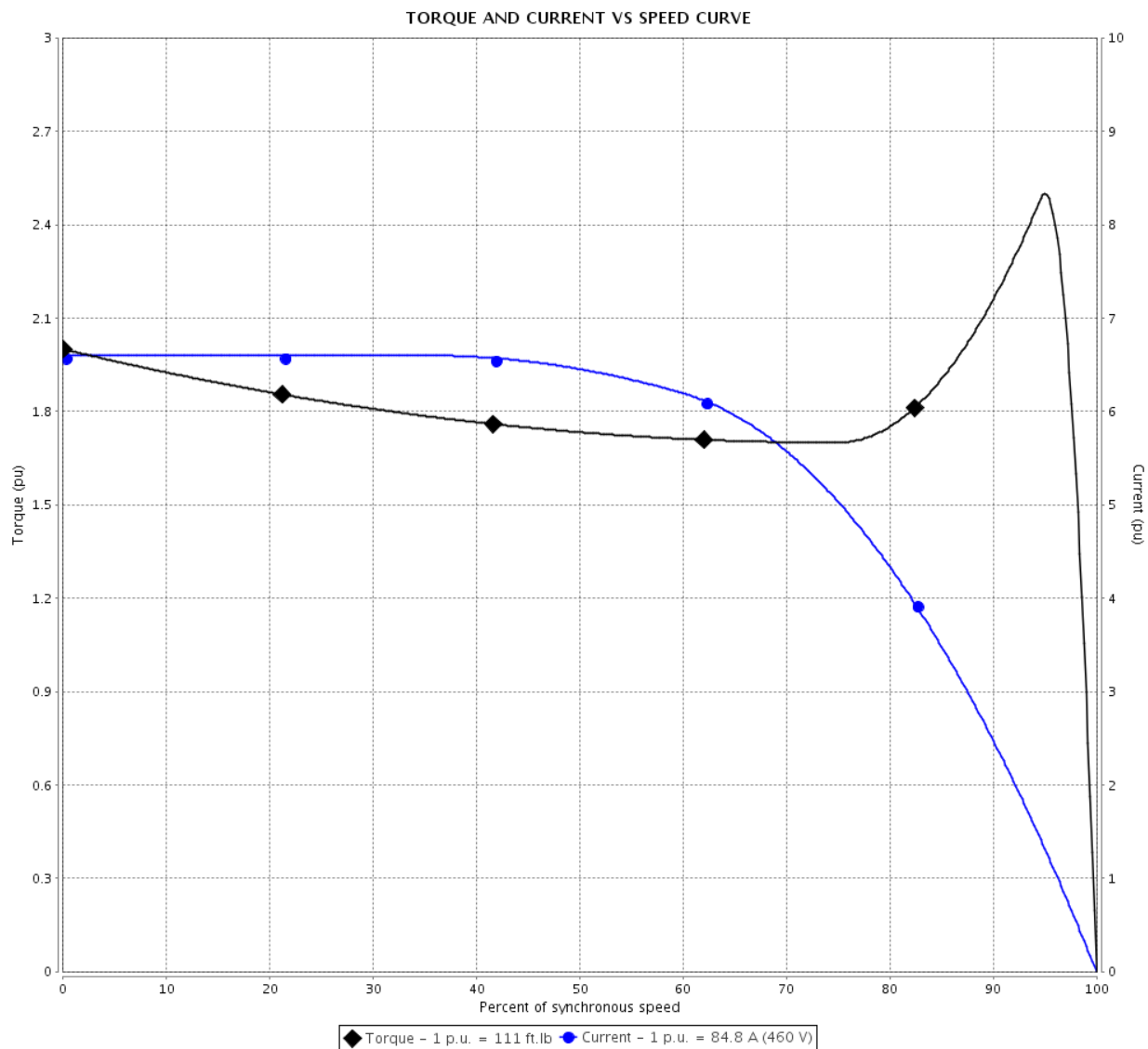


Customer :

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

Product code : 14269584

Catalog # : 07536OT3E364JM-W40



Performance : 230/460 V 60 Hz 2P

Rated current : 170/84.8 A
LRC : 6.6
Rated torque : 111 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 250 %
Rated speed : 3555 rpm

Moment of inertia (J) : 6.40 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by		<div>Page 2 / 6</div> <div>Revision</div>		
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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

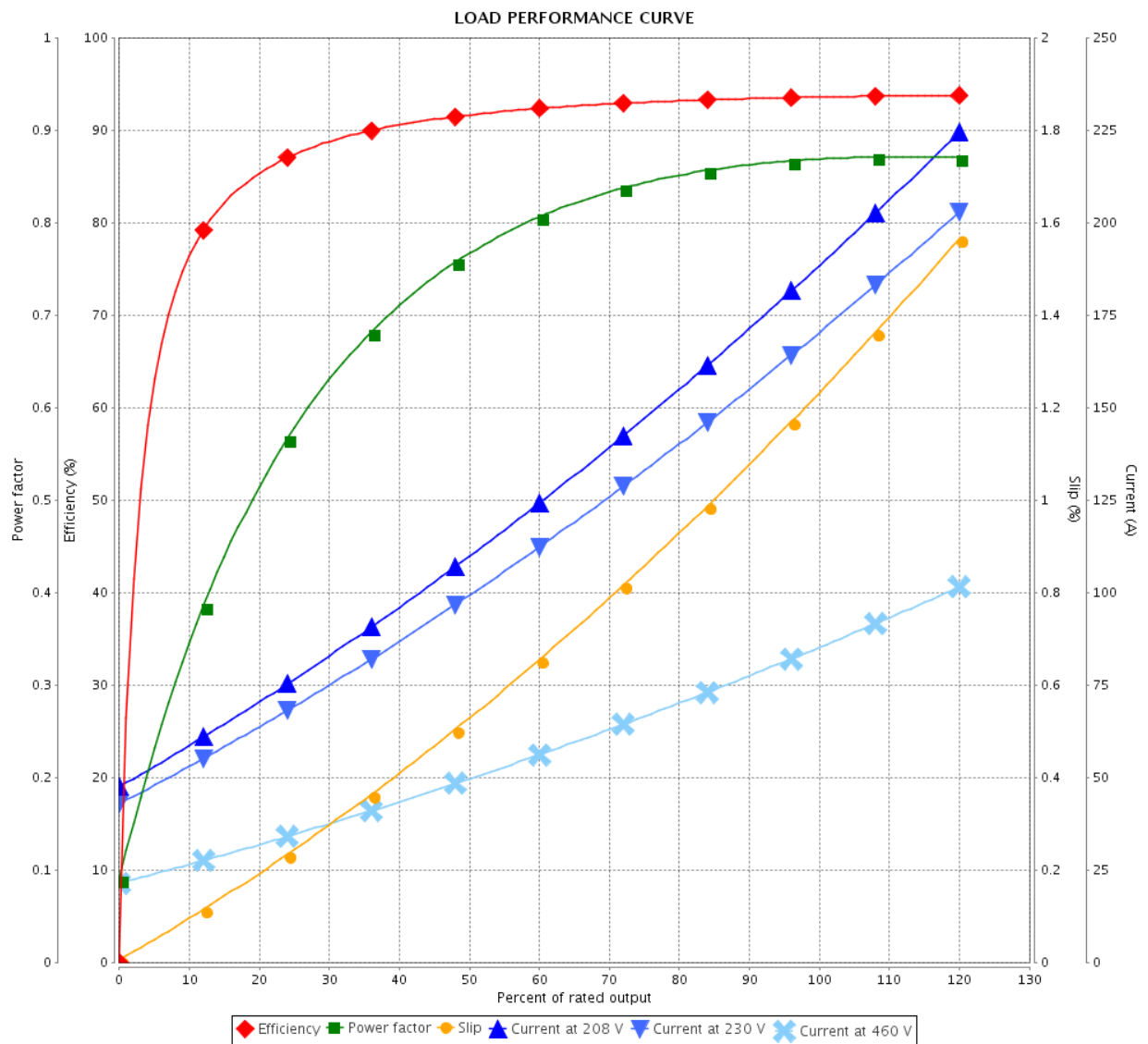


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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 6		
Checked by				
Date	10/04/2020			
		Revision		

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Rated torque : 111 ft.lb

Locked rotor torque : 200 %

Breakdown torque : 250 %

Rated speed : 3555 rpm

Moment of inertia (J) : 6.40 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

Date

10/04/2020

Page

4 / 6

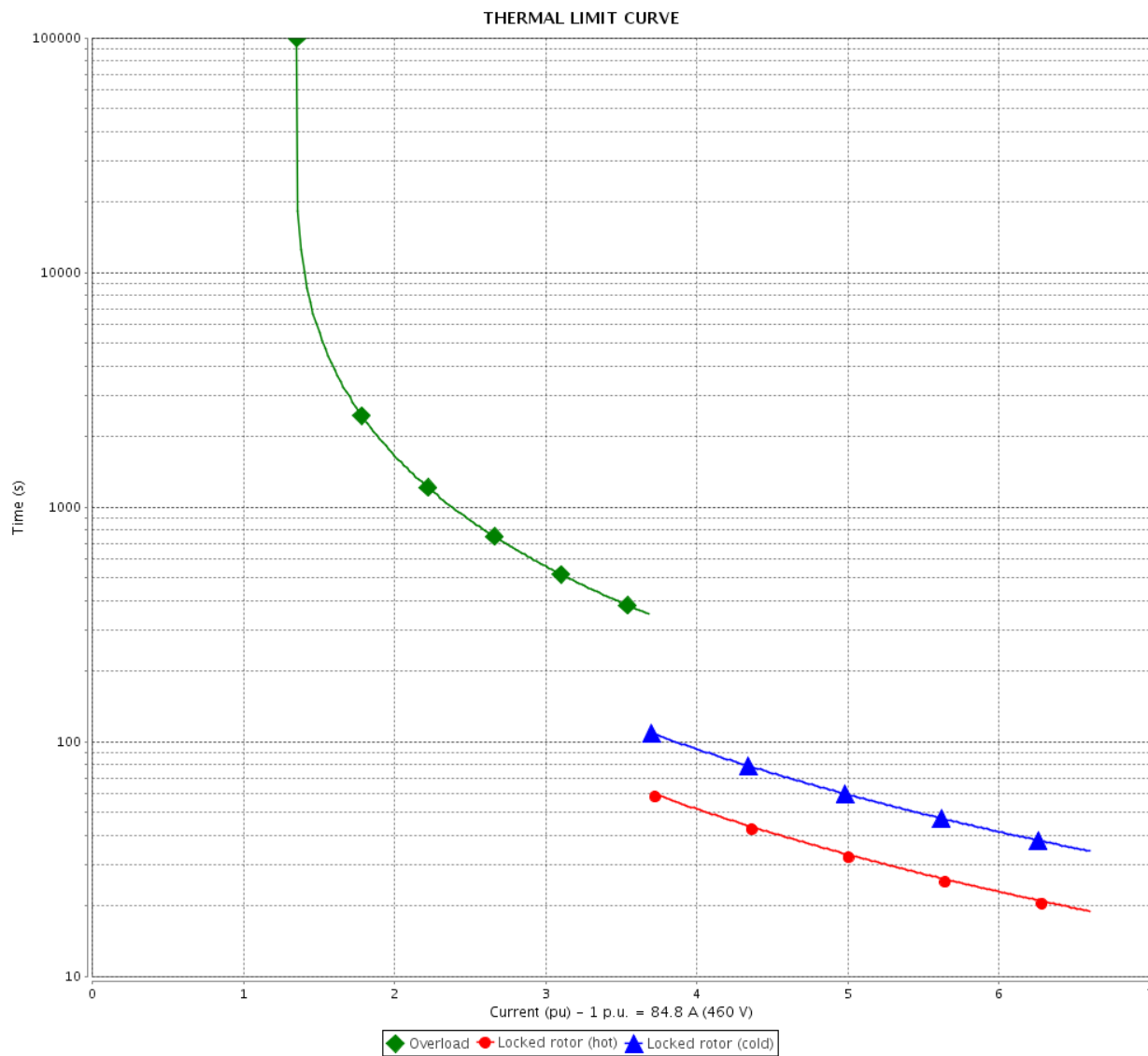
Revision

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

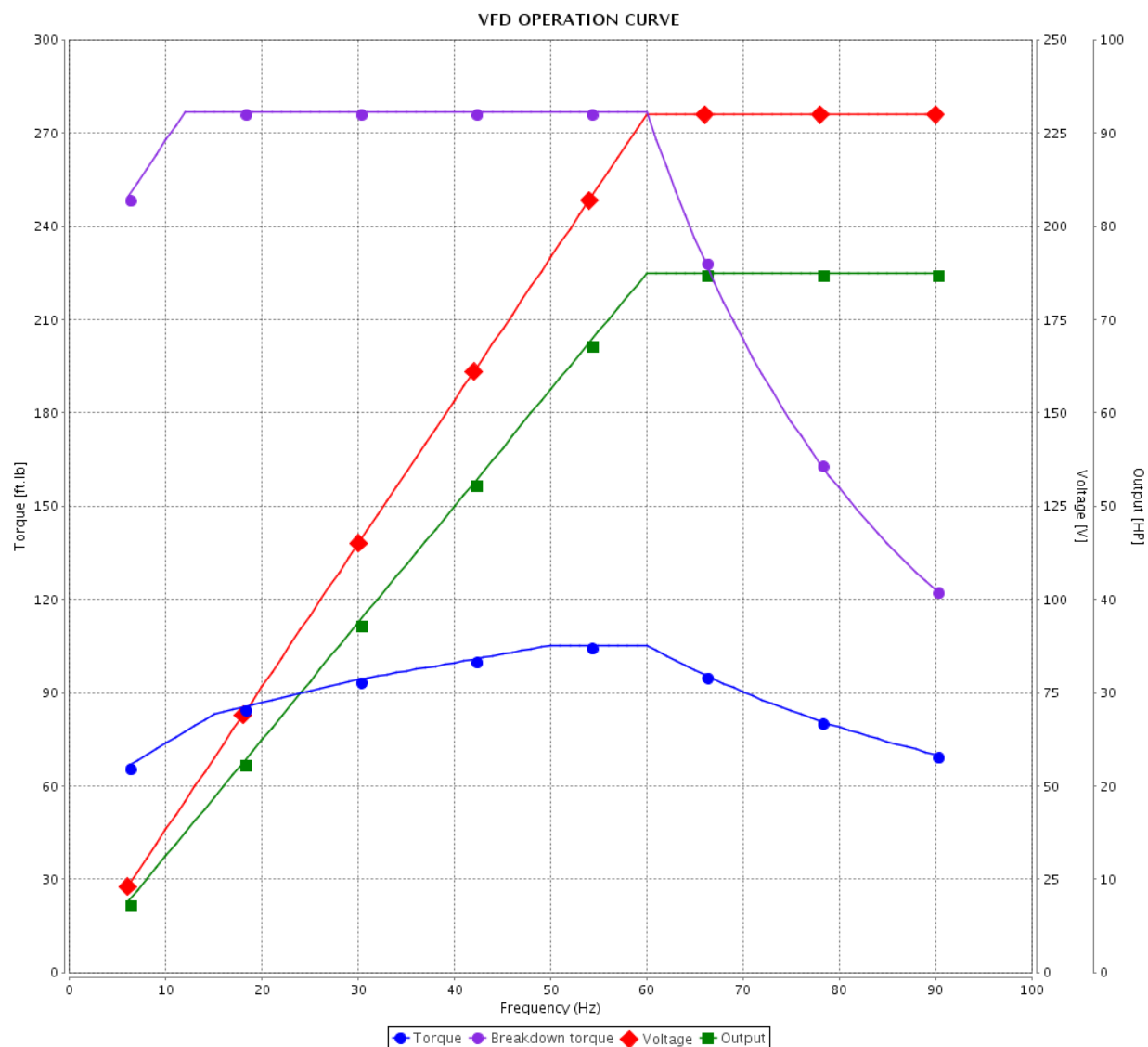


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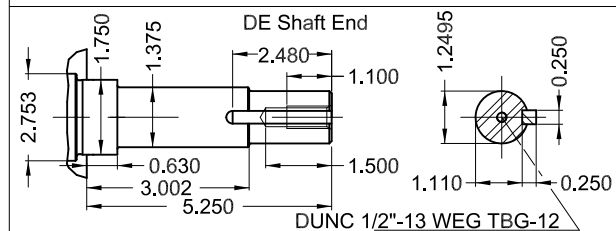
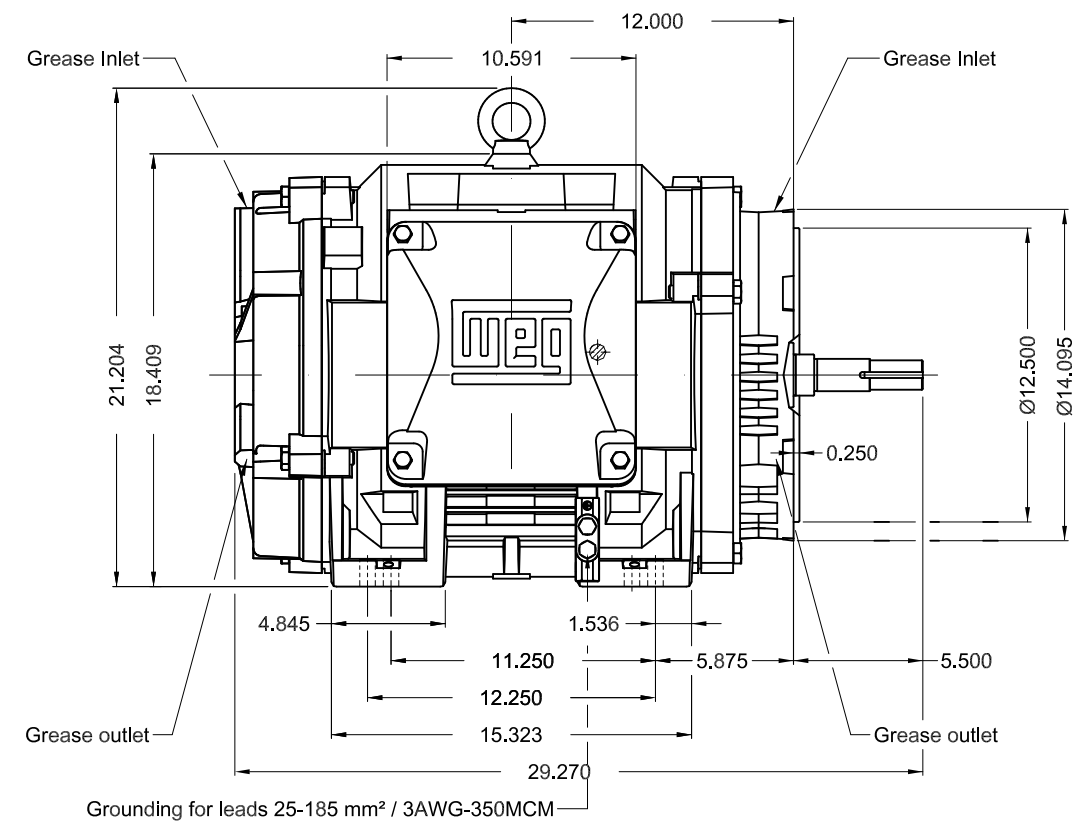
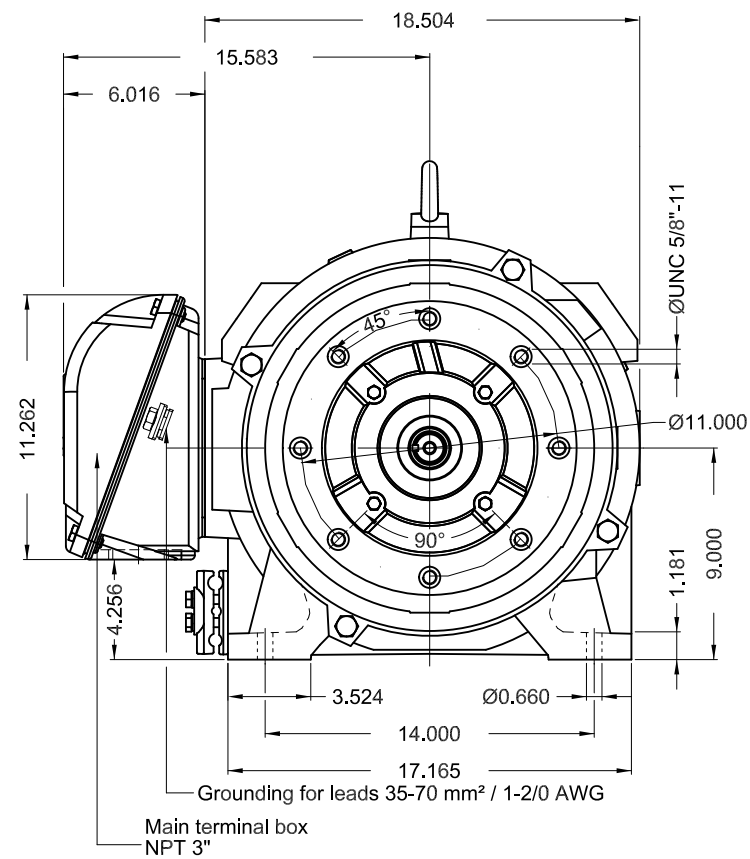




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Rev.	Changes Summary	Performed	Checked	Date
Performed by				Page 6 / 6
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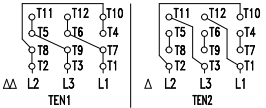

75 HP 02 Poles 60Hz										A	
								1:8			
ECM		LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER		THREE PHASE W40 MOTOR NEMA PREMIUM EFF FRAME 364/5JM IP23 ODP					PREVIEW WDD			
CHECKED											
RELEASED											
REL DT.		WMO	Jaragua do Sul		Product Engineering		SHEET	1	/	1	



W40 NEMA
Premium®



Severe Duty

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