

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JP Pump NEMA Premium Efficiency Three-Phase Product code : 14270552
Catalog # : 12518OT3G405JP-W40

Frame	: 404/5JP	Locked rotor time	: 18s (cold) 10s (hot)
Output	: 125 HP	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 138 A	Protection degree	: IP23
L. R. Amperes	: 952 A	Cooling method	: IC01 - ODP
LRC	: 6.9x(Code G)	Mounting	: F-1
No load current	: 47.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1780 rpm	Noise level ²	: 69.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 369 ft.lb	Approx. weight ³	: 1072 lb
Locked rotor torque	: 270 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 25.5 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	94.9	95.0	95.4	95.4	Max. traction	: 2869 lb
Power Factor	0.50	0.75	0.83	0.86	Max. compression	: 3941 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	:	20000 h	20000 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.

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

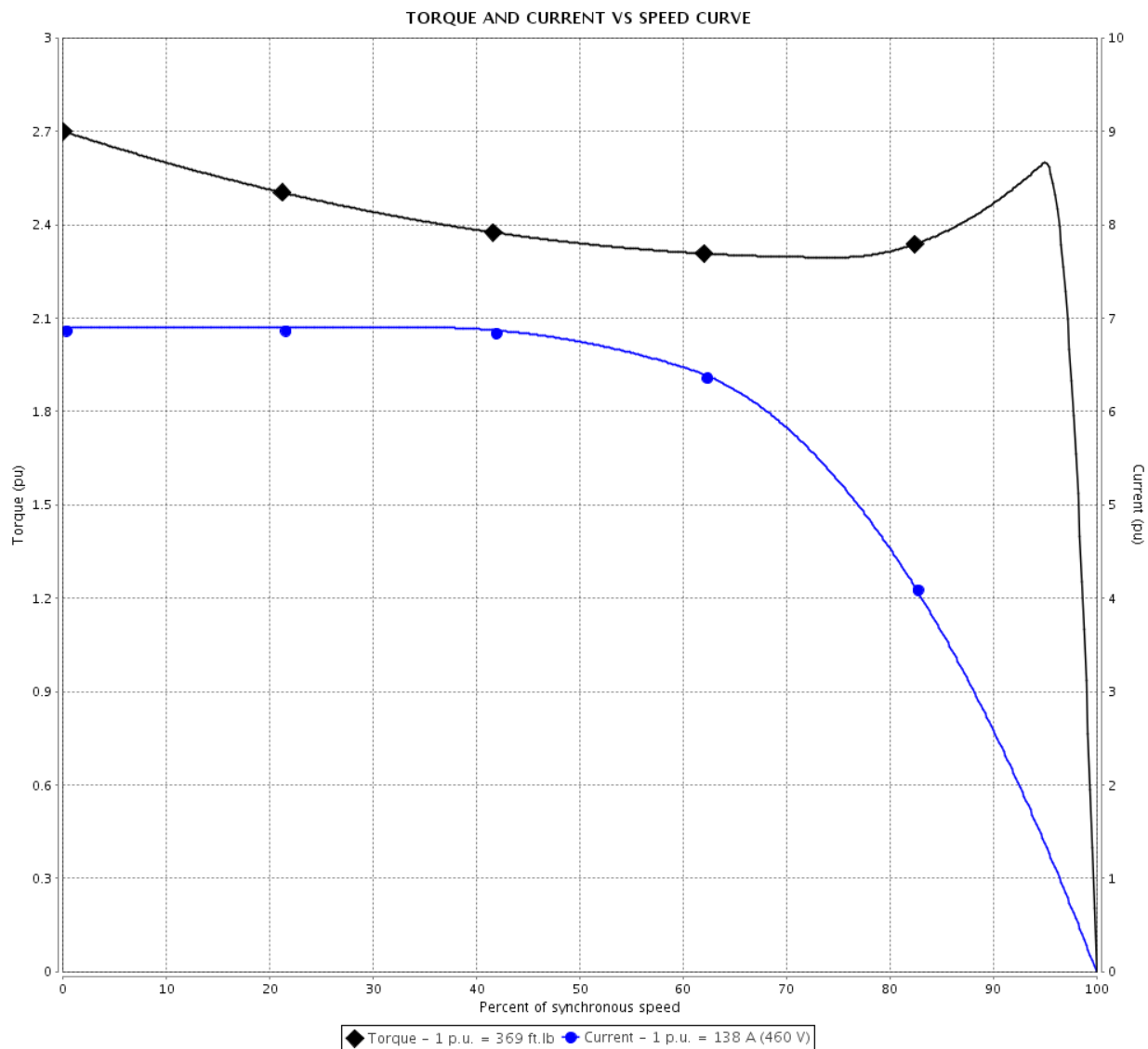


Customer :

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

Product code : 14270552

Catalog # : 12518OT3G405JP-W40



Performance : 460 V 60 Hz 4P

Rated current	: 138 A	Moment of inertia (J)	: 25.5 sq.ft.lb
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Rated torque	: 369 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

Locked rotor time : 18s (cold) 10s (hot)

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Checked by				
Date	10/04/2020			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

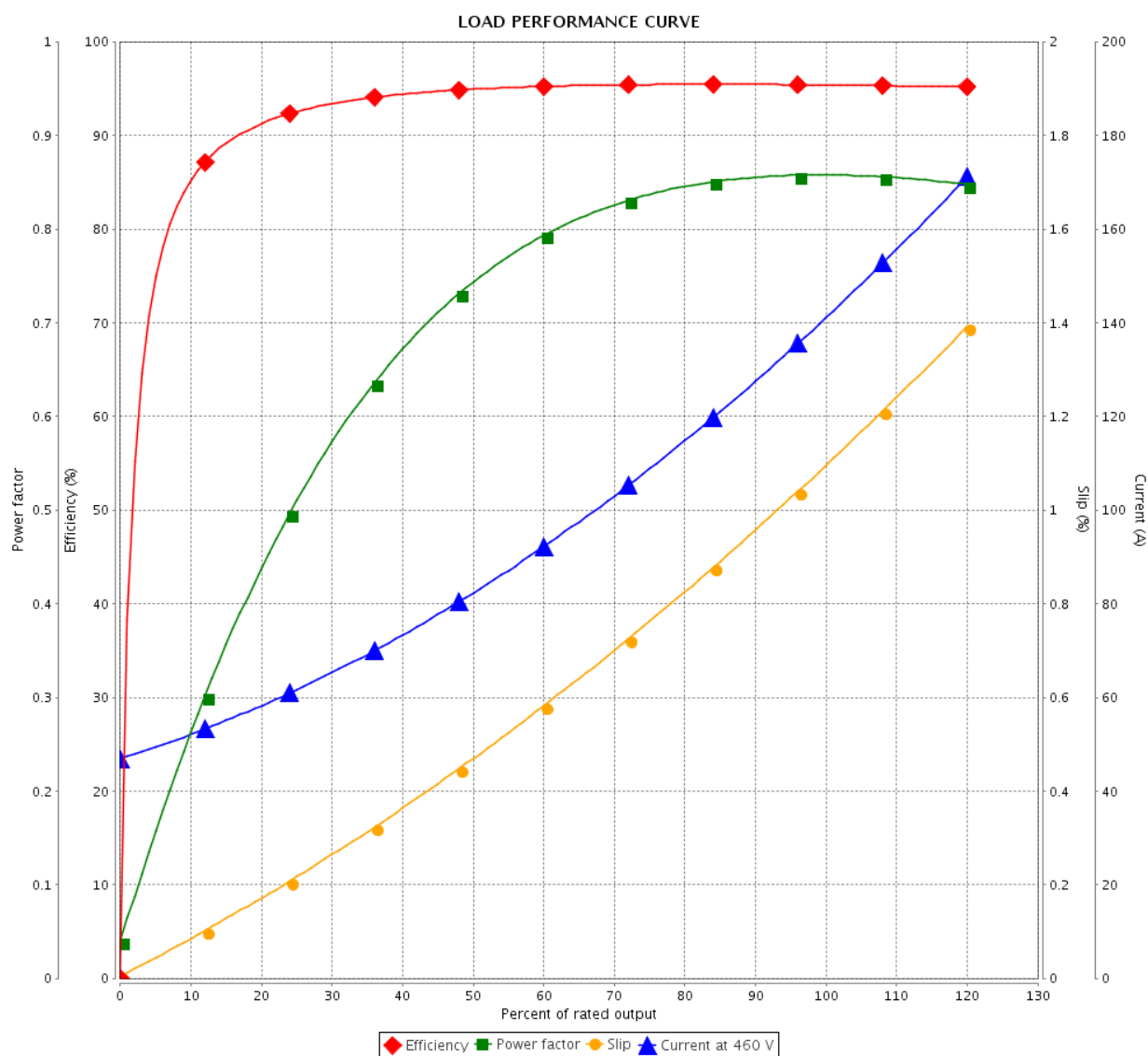


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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

Rev.

Changes Summary

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Checked

Date

Performed by

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Date

10/04/2020

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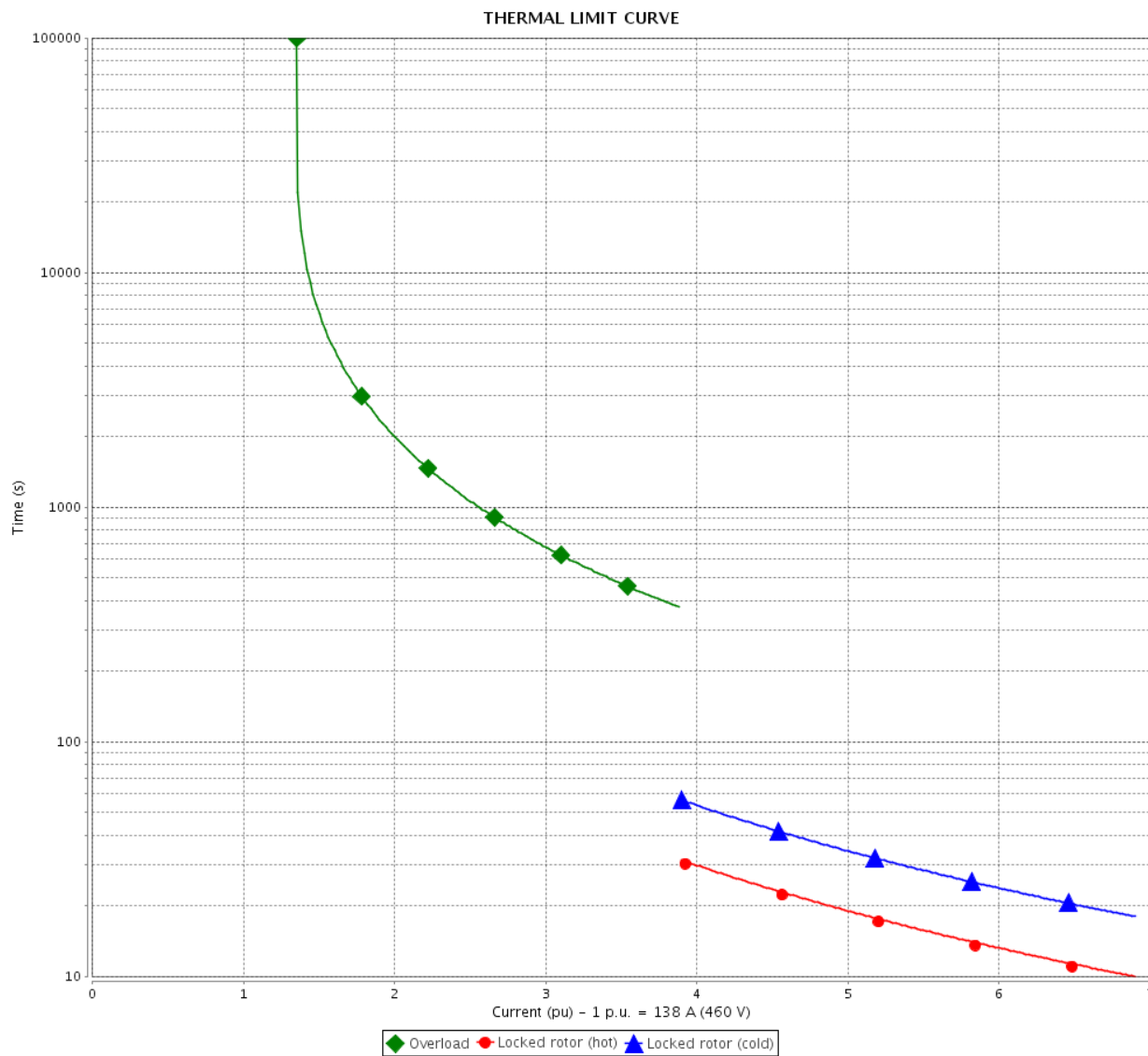
Revision

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

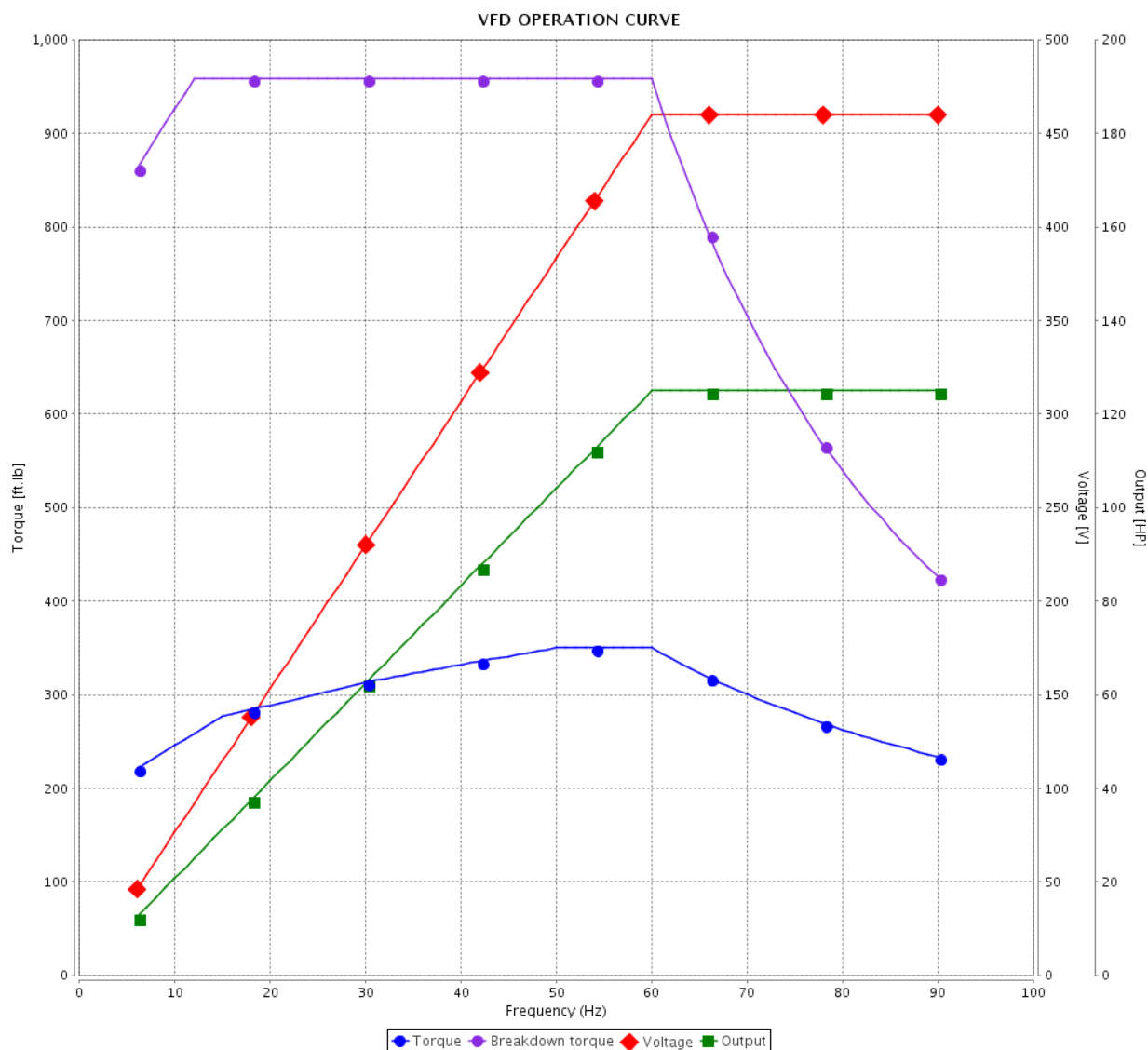


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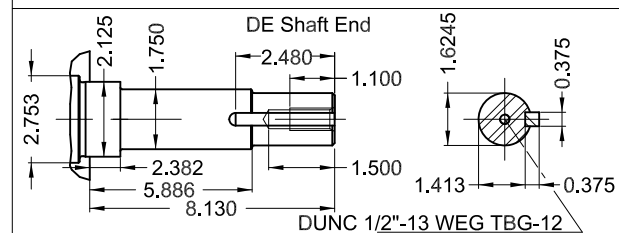
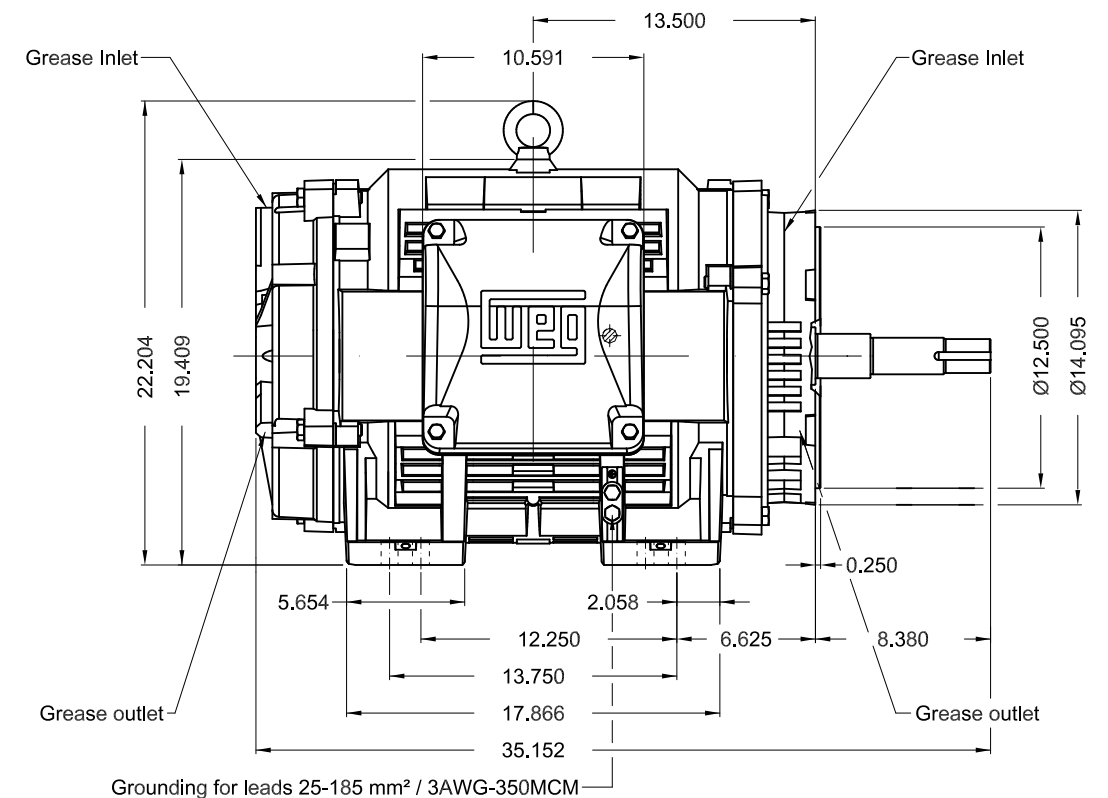
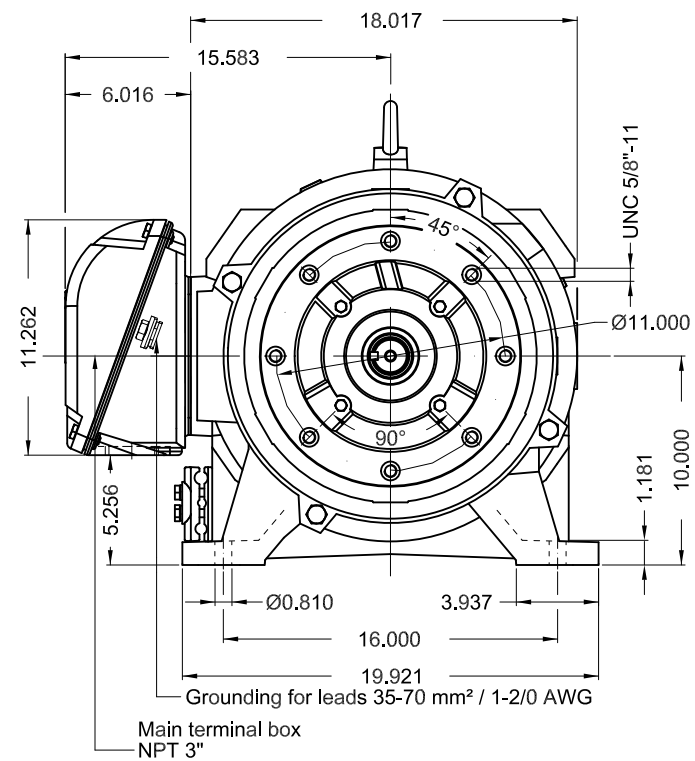




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125 HP 04 Poles 60Hz										A	
								1:9			
ECM		LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER		THREE PHASE W40 MOTOR NEMA PREMIUM EFF FRAME 404/5JP IP23 ODP					PREVIEW WDD			
CHECKED											
RELEASED											
REL DT.			WMO	Jaragua do Sul		Product Engineering		SHEET	1	/	1