

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JP Pump NEMA Premium Efficiency Three-Phase Product code : 14490306
Catalog # : 05036OT3V324JP-W40

Frame	: 324JP	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 50 HP (37 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 200/400 V	Altitude	: 1000 m.a.s.l.
Rated current	: 135/67.5 A	Protection degree	: IP23
L. R. Amperes	: 851/425 A	Cooling method	: IC01 - ODP
LRC	: 6.3x(Code G)	Mounting	: F-1
No load current	: 42.5/21.3 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3560 rpm	Noise level ²	: 75.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 73.8 ft.lb	Approx. weight ³	: 528 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 220 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 3.02 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads
Efficiency (%)	91.5	91.7	93.0	93.0	Max. traction
Power Factor	0.50	0.73	0.82	0.85	Max. compression

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6312 Z C3	6211 Z C3
Sealing	:	Without Bearing Seal	Without Bearing Seal
Lubrication interval	:	19658 h	20000 h
Lubricant amount	:	21 g	11 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

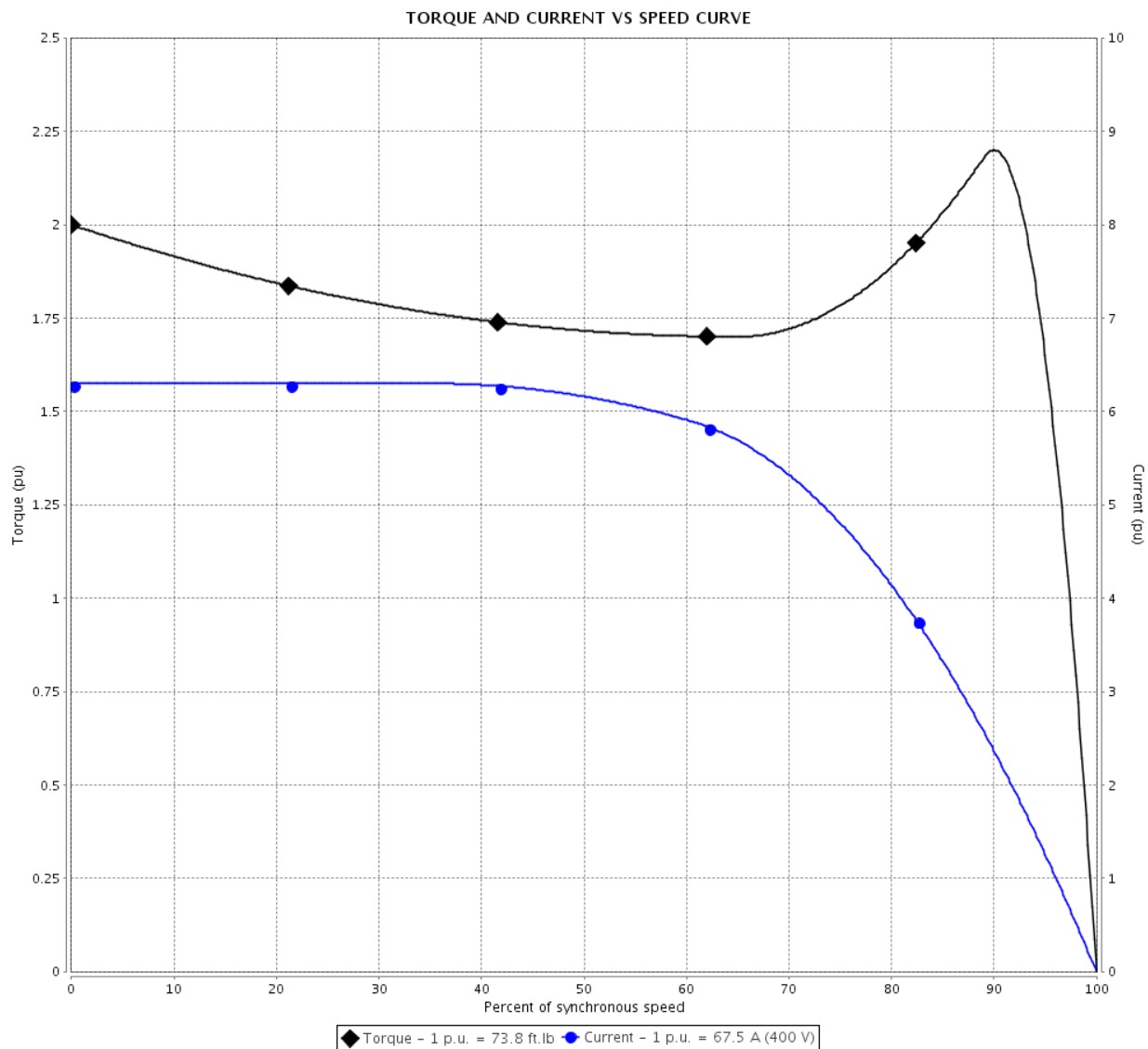


Customer :

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

Product code : 14490306

Catalog # : 05036OT3V324JP-W40



Performance : 200/400 V 60 Hz 2P

Rated current : 135/67.5 A
LRC : 6.3
Rated torque : 73.8 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 220 %
Rated speed : 3560 rpm

Moment of inertia (J) : 3.02 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Locked rotor time : 25s (cold) 14s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

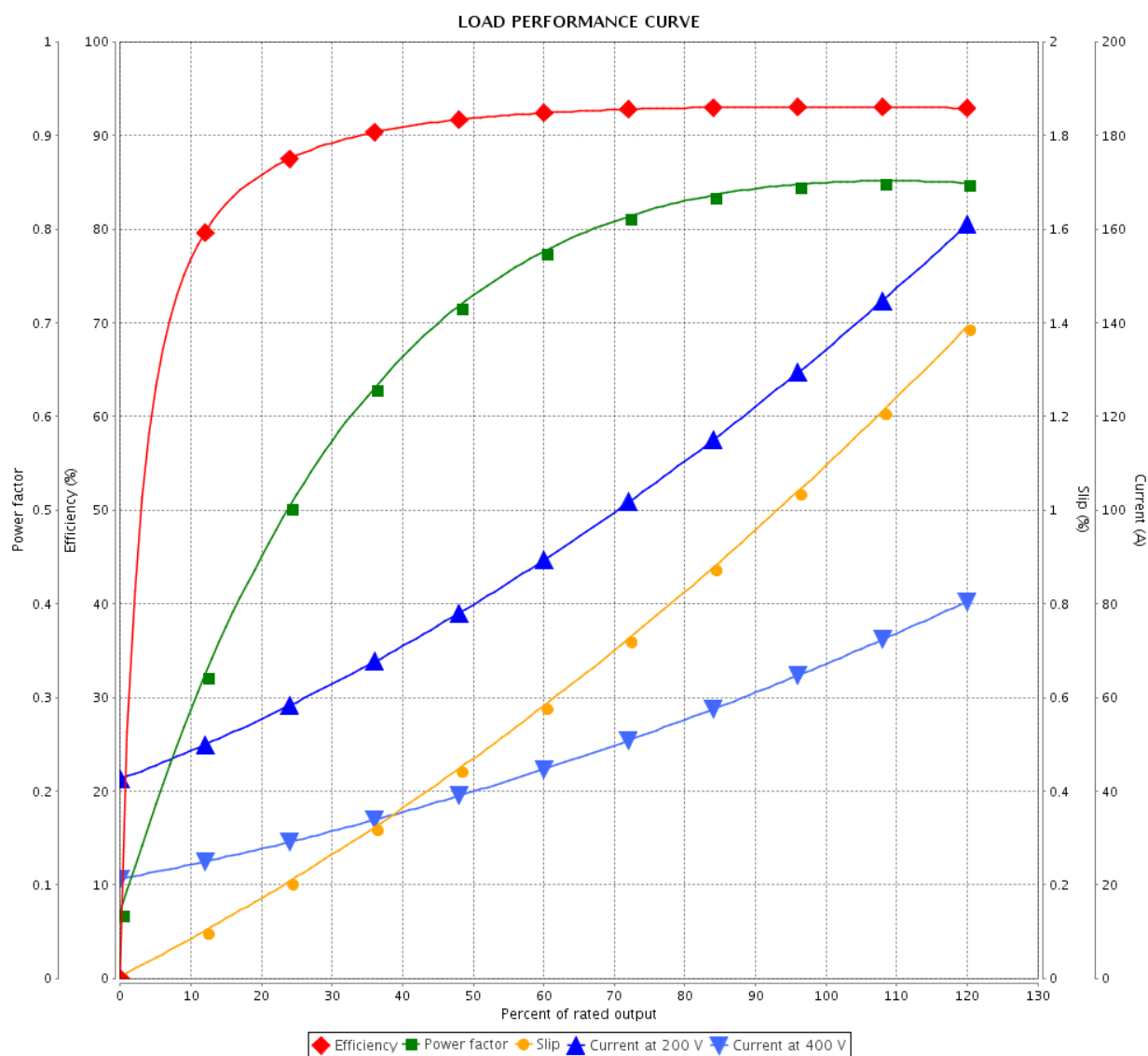


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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Design : B

Heating constant

Cooling constant

Rev.

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Checked

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Performed by

Checked by

Date

10/04/2020

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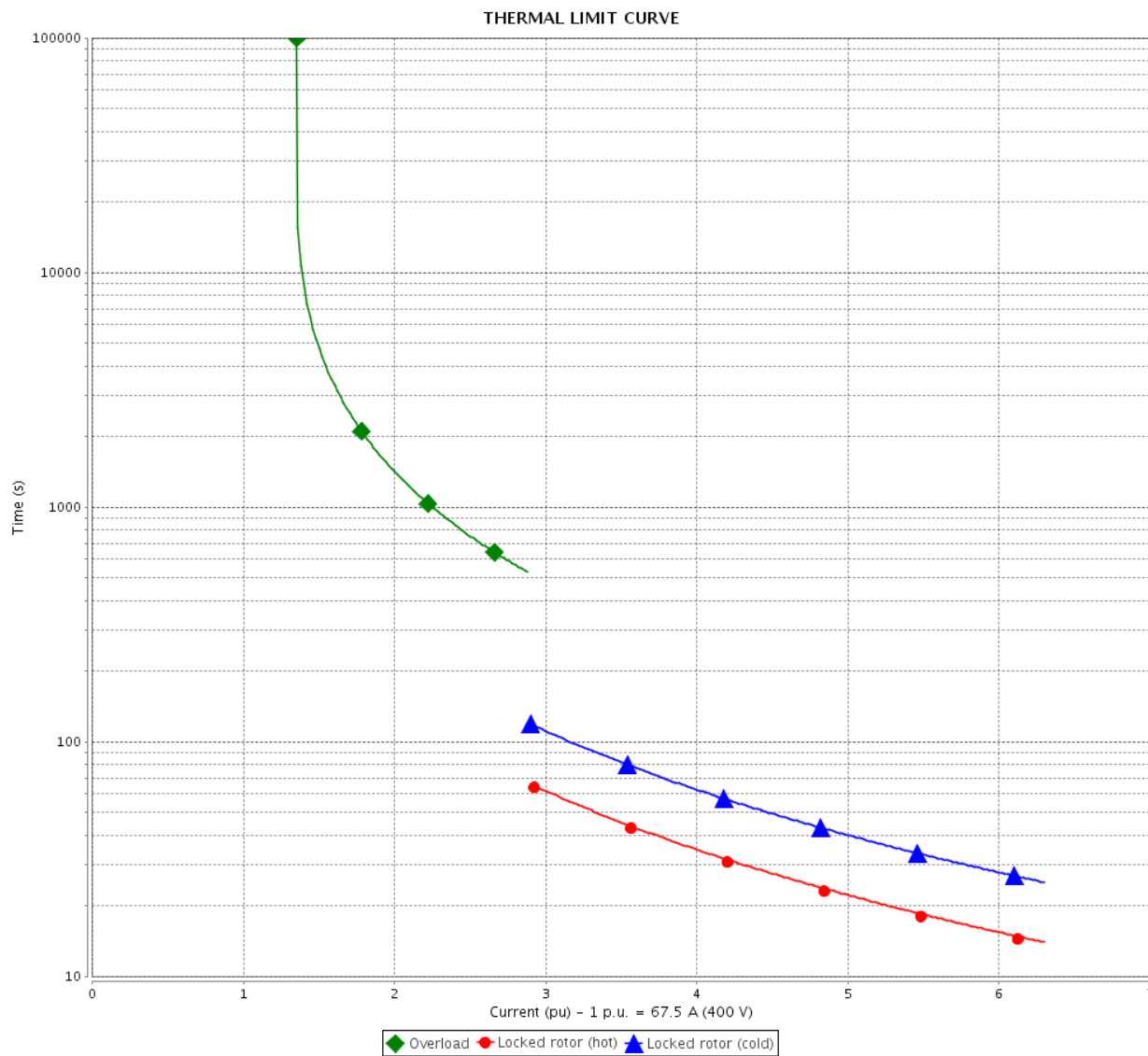
Revision

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

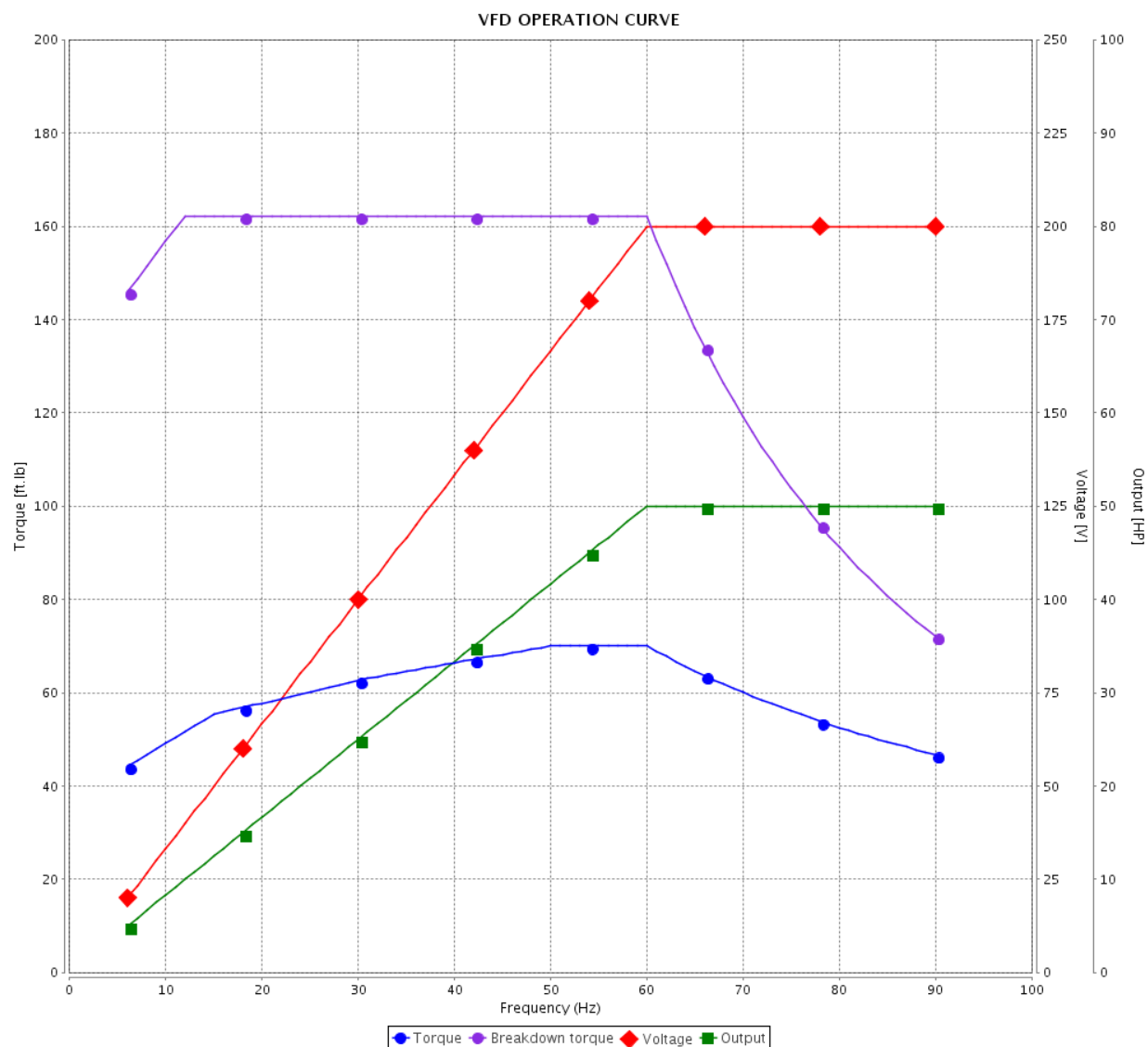


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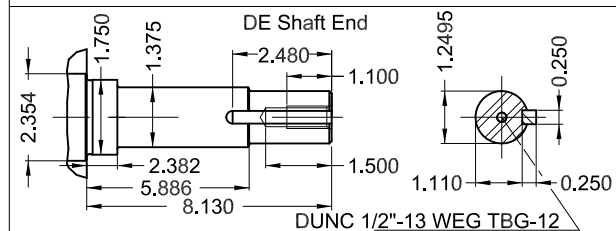
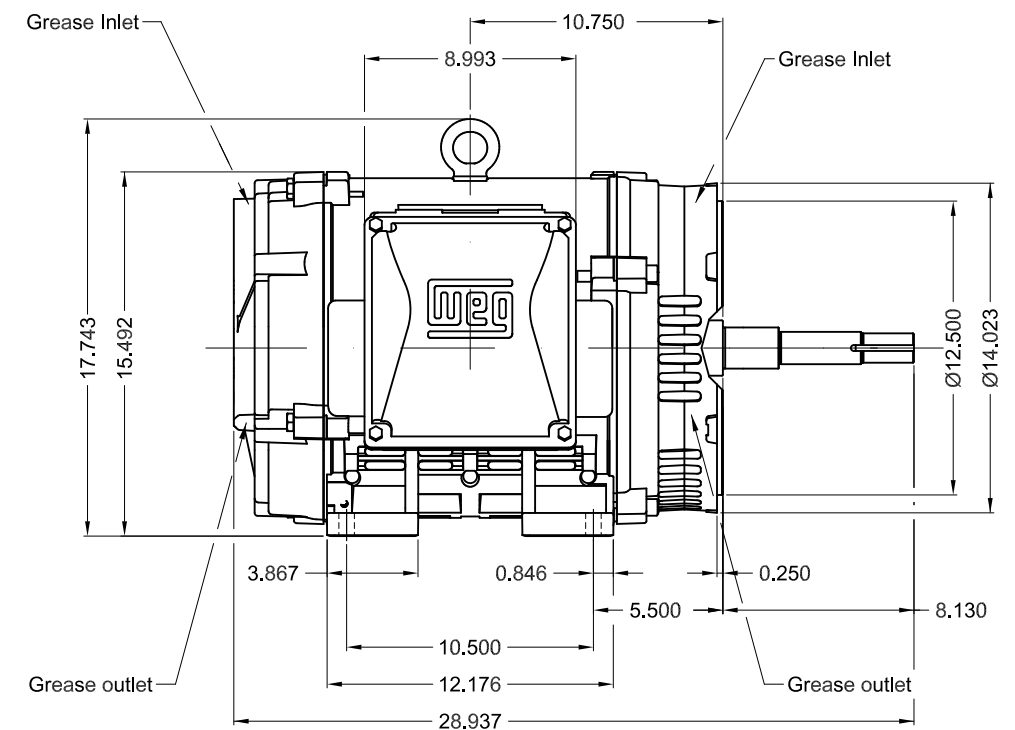
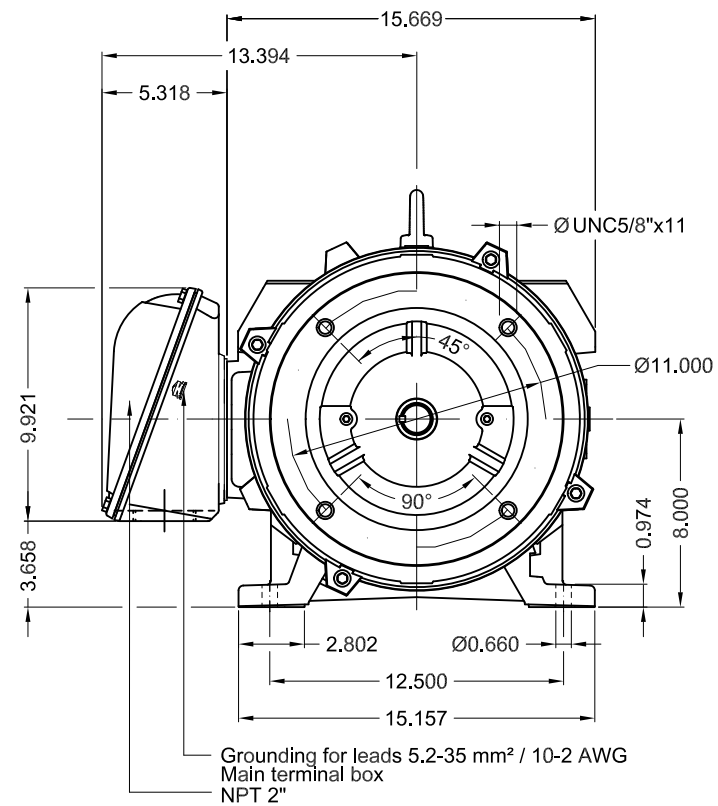




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50 HP 02 Poles 60Hz										A		
											1:8	
ECM		LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER			THREE PHASE W40 MOTOR NEMA PREMIUM EFF FRAME 324JP IP23 ODP					PREVIEW WDD			
CHECKED												
RELEASED												
REL DT.			WMO	Jaragua do Sul			Product Engineering		SHEET	1 / 1		