

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JP Pump High Efficiency
Three-Phase

Product code : 14827994

Catalog # : 10036OP3HFP365JPV-W4

Frame : 364/5JP
Output : 100 HP (75 kW)
Poles : 2
Frequency : 60 Hz
Rated voltage : 575 V
Rated current : 92.0 A
L. R. Amperes : 524 A
LRC : 5.7x(Code F)
No load current : 20.8 A
Rated speed : 3550 rpm
Slip : 1.39 %
Rated torque : 148 ft.lb
Locked rotor torque : 170 %
Breakdown torque : 229 %
Insulation class : F
Service factor : 1.15
Moment of inertia (J) : 6.80 sq.ft.lb
Design : B

Locked rotor time : 27s (cold) 15s (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
Rotation¹ : Both (CW and CCW)
Starting method : Direct On Line
Approx. weight³ : 741 lb

Output 25% 50% 75% 100%

Efficiency (%) 92.2 92.4 93.0 93.0
Power Factor 0.58 0.80 0.85 0.88

Foundation loads

Max. traction : 795 lb
Max. compression : 1536 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

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
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Date	10/04/2020			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



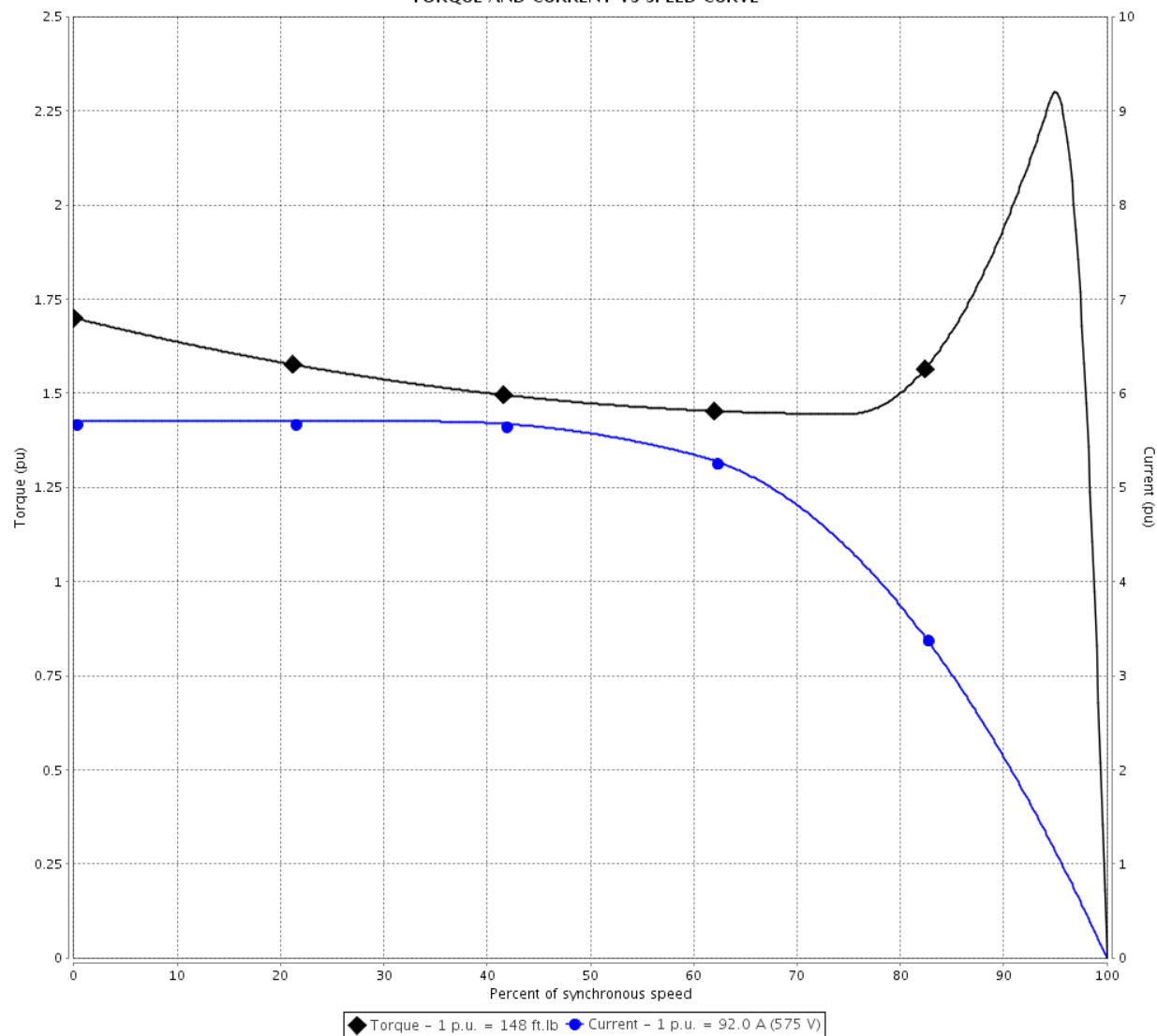
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 92.0 A	Moment of inertia (J)	: 6.80 sq.ft.lb
LRC	: 5.7	Duty cycle	: Cont.(S1)
Rated torque	: 148 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 3550 rpm	Design	: B

Locked rotor time : 27s (cold) 15s (hot)

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Date	10/04/2020			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

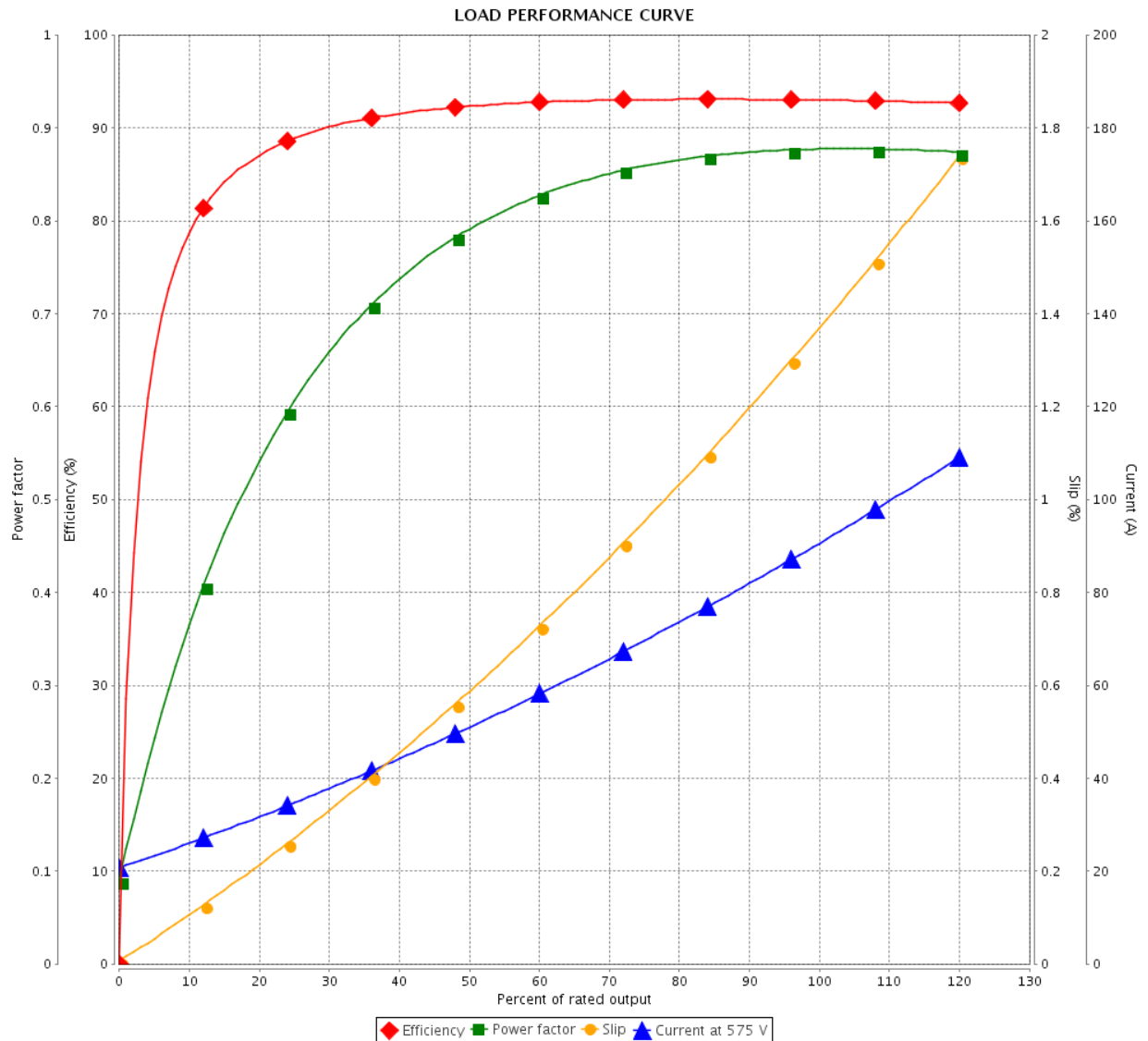


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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

Rev.

Changes Summary

Performed

Checked

Date

Performed by

Checked by

Date

10/04/2020

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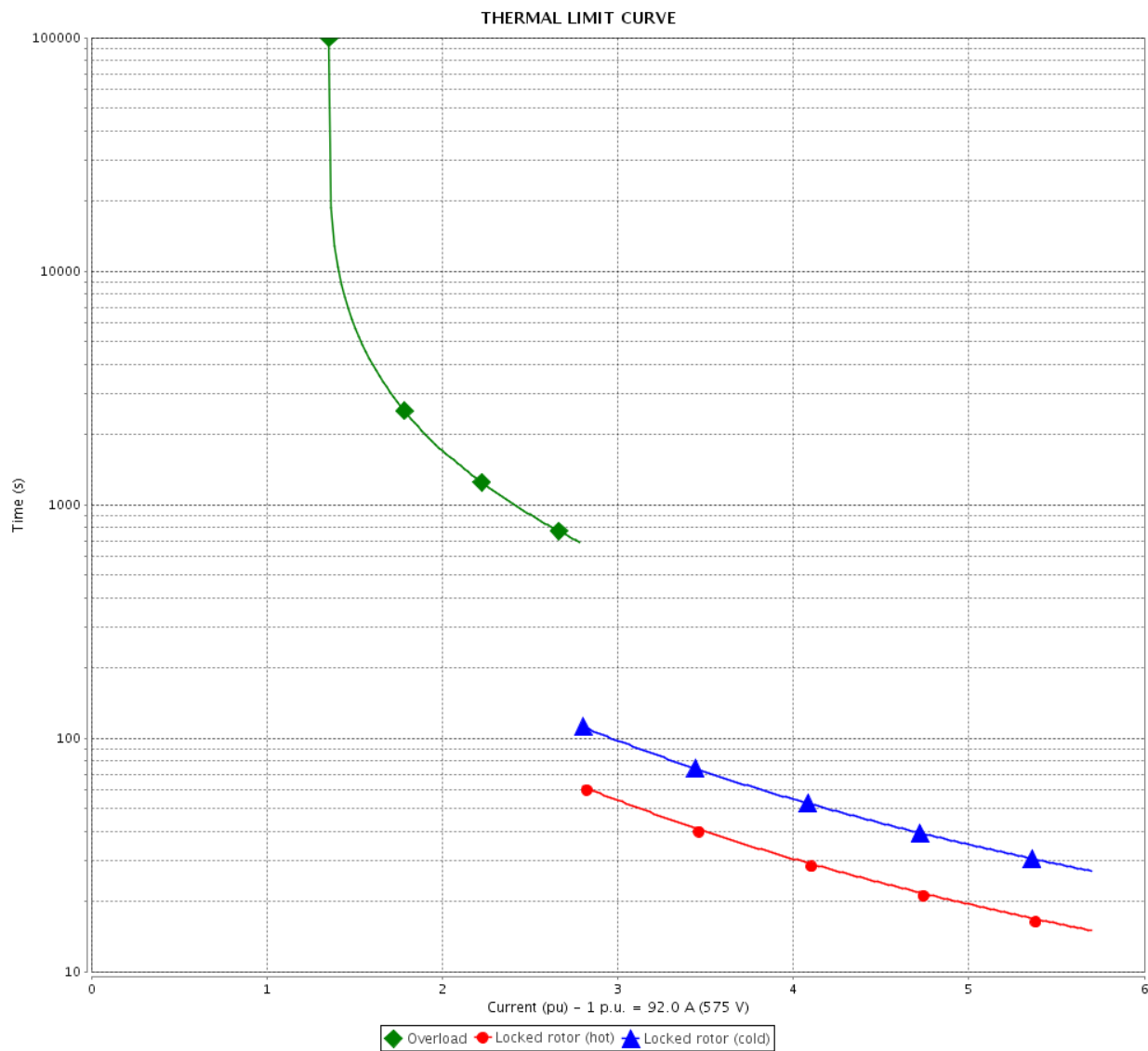
Revision

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

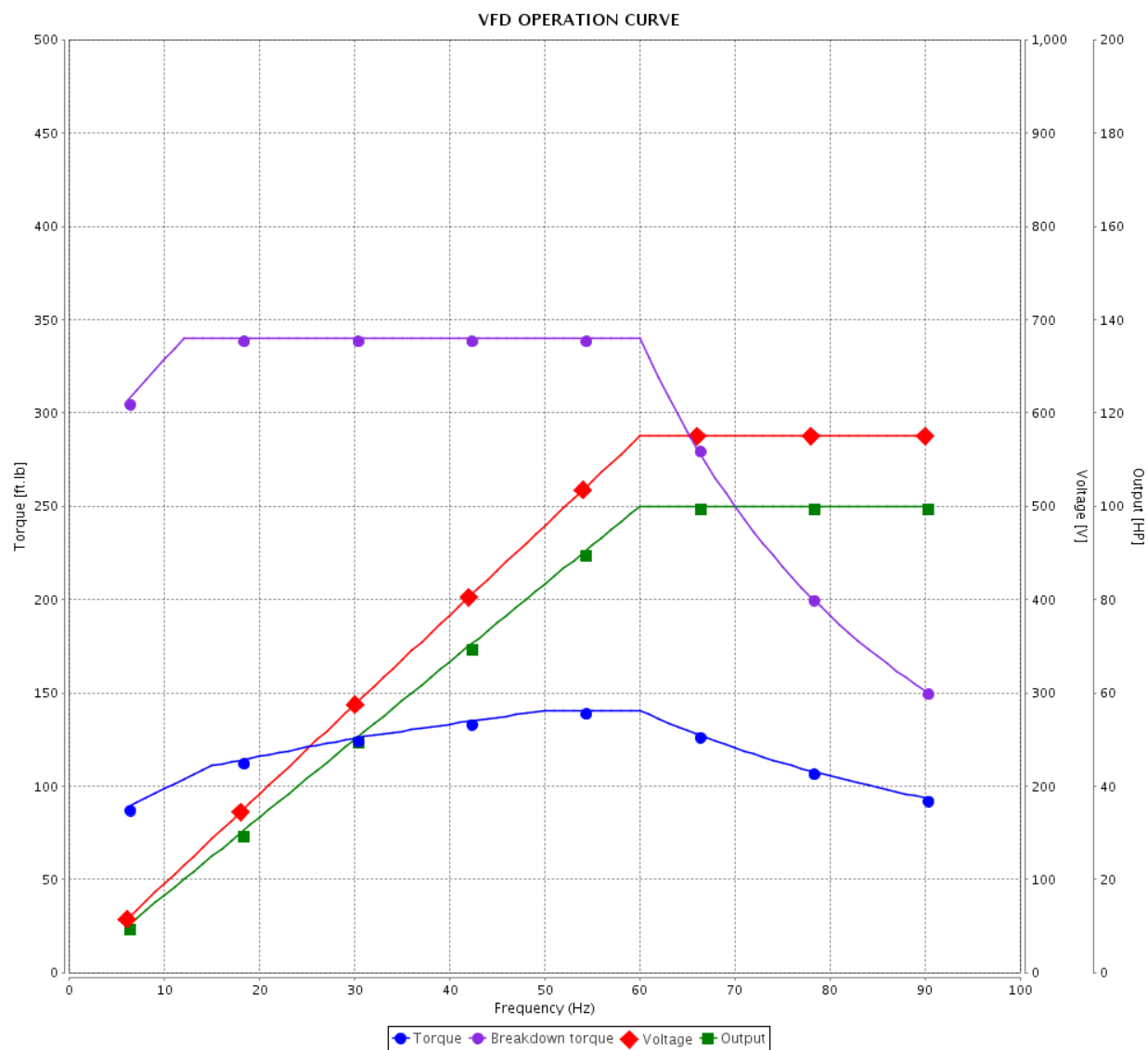


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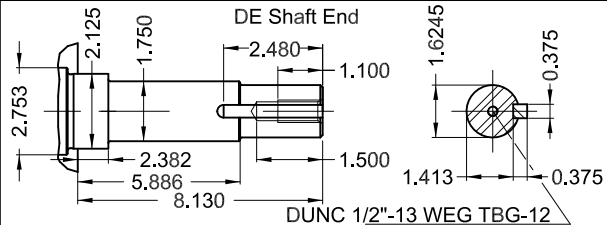
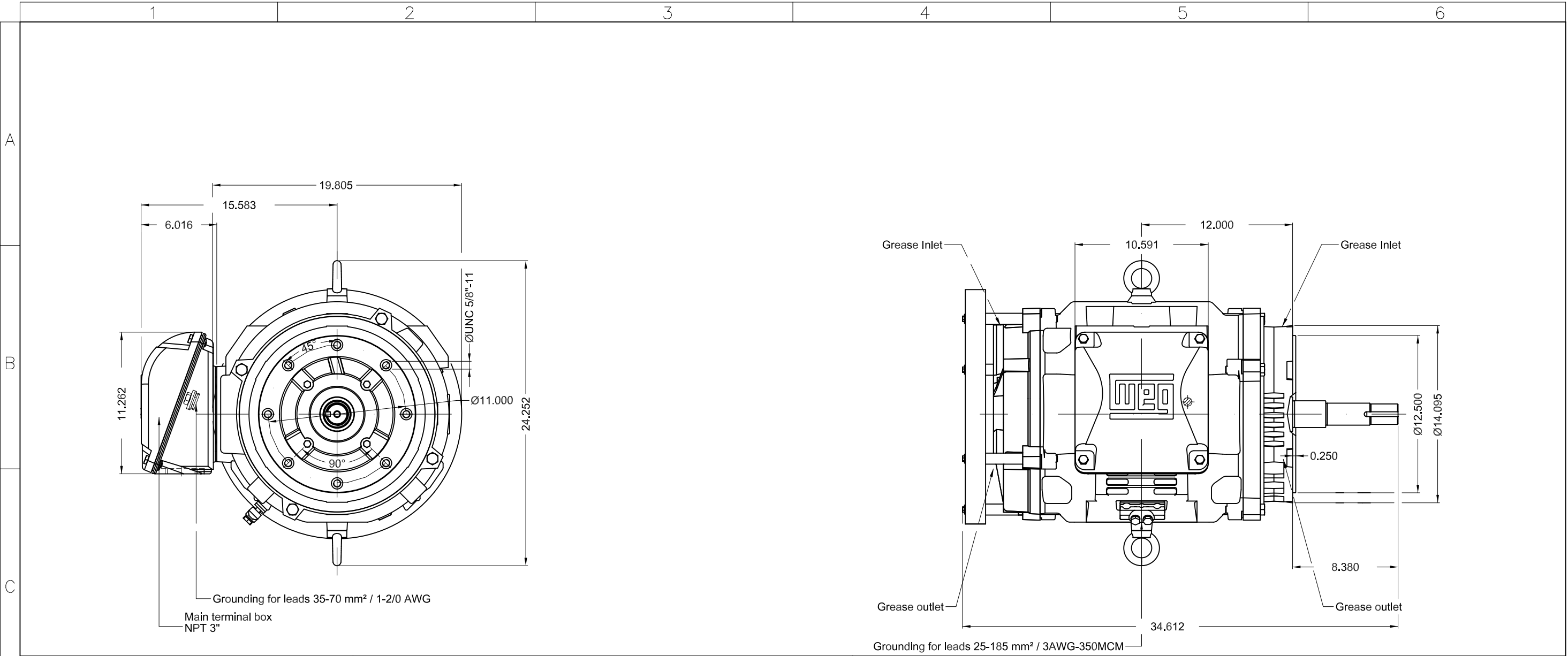


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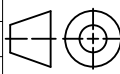

Moment of inertia (J) : 6.80 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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100 HP 02 Poles 60Hz A

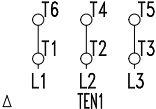

1:8

ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER		THREE PHASE W40 MOTOR HIGH EFF FRAME 364/5JP IP23 ODP			PREVIEW			
CHECKED						WDD			
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 —			
NEMA NOM EFF		—	%	RPM	
ENCL ODP	DUTY		INS. CL.	ΔT K	
PF		DES —	CODE	AMB.	 KLUBERSYNTH BHP 72-102
SF	SFA		ALT 1000 m.a.s.l.		
					Lbs