

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase Product code : 14270939
Catalog # : 06018OT3H364TS-W40

Frame	: 364/5TS	Locked rotor time	: 34s (cold) 19s (hot)
Output	: 60 HP (45 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.
Rated current	: 55.9 A	Protection degree	: IP23
L. R. Amperes	: 363 A	Cooling method	: IC01 - ODP
LRC	: 6.5x(Code G)	Mounting	: F-1
No load current	: 19.8 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	: 177 ft.lb	Approx. weight ³	: 737 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 15.6 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	94.4	94.5	95.0	95.0	Max. traction	: 1087 lb
Power Factor	0.48	0.73	0.82	0.85	Max. compression	: 1824 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.

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

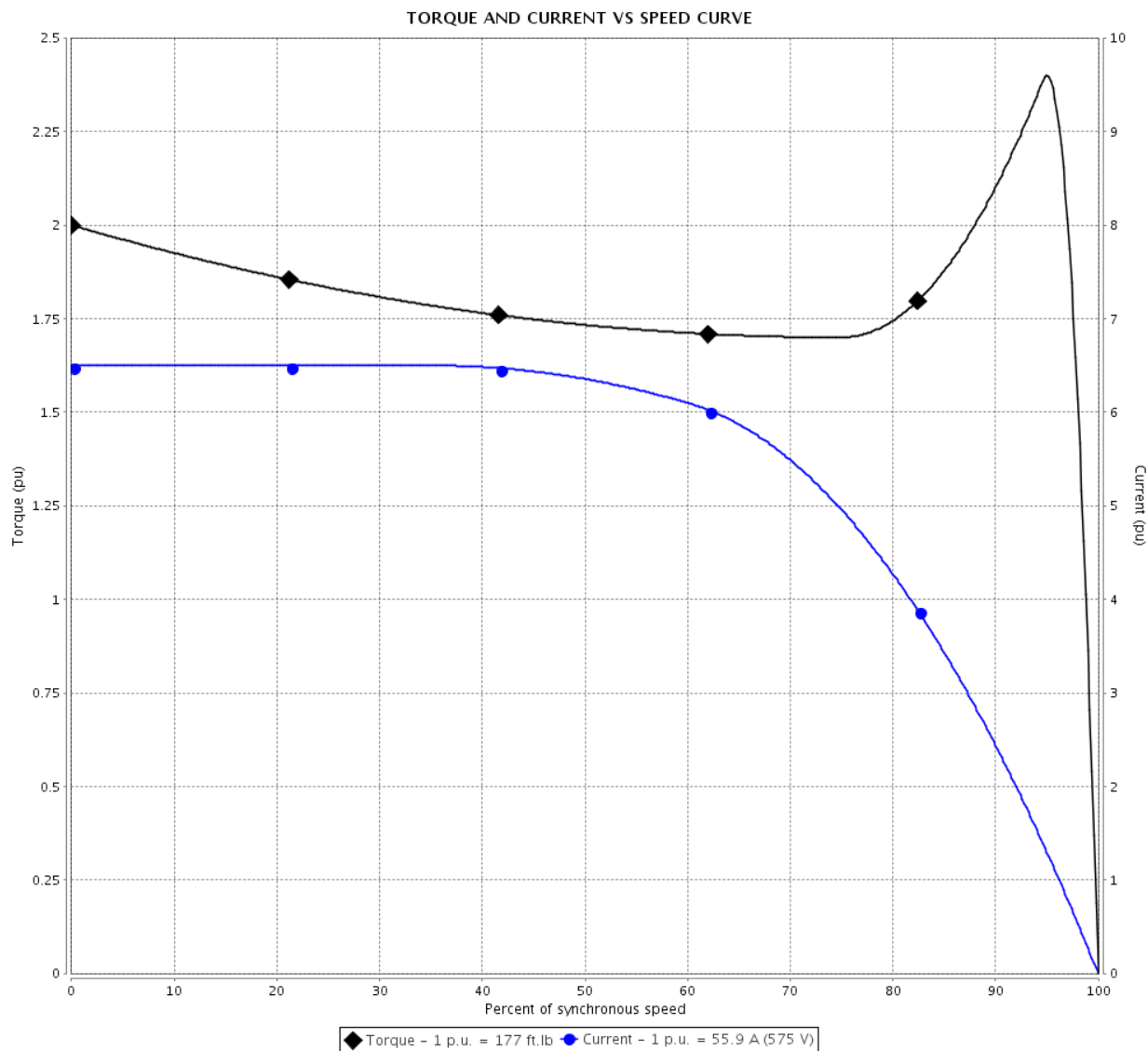


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Three-Phase

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Catalog # : 06018OT3H364TS-W40



Performance : 575 V 60 Hz 4P

Rated current	: 55.9 A	Moment of inertia (J)	: 15.6 sq.ft.lb
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Rated torque	: 177 ft.lb	Insulation class	: F
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Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

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

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Checked by				
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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

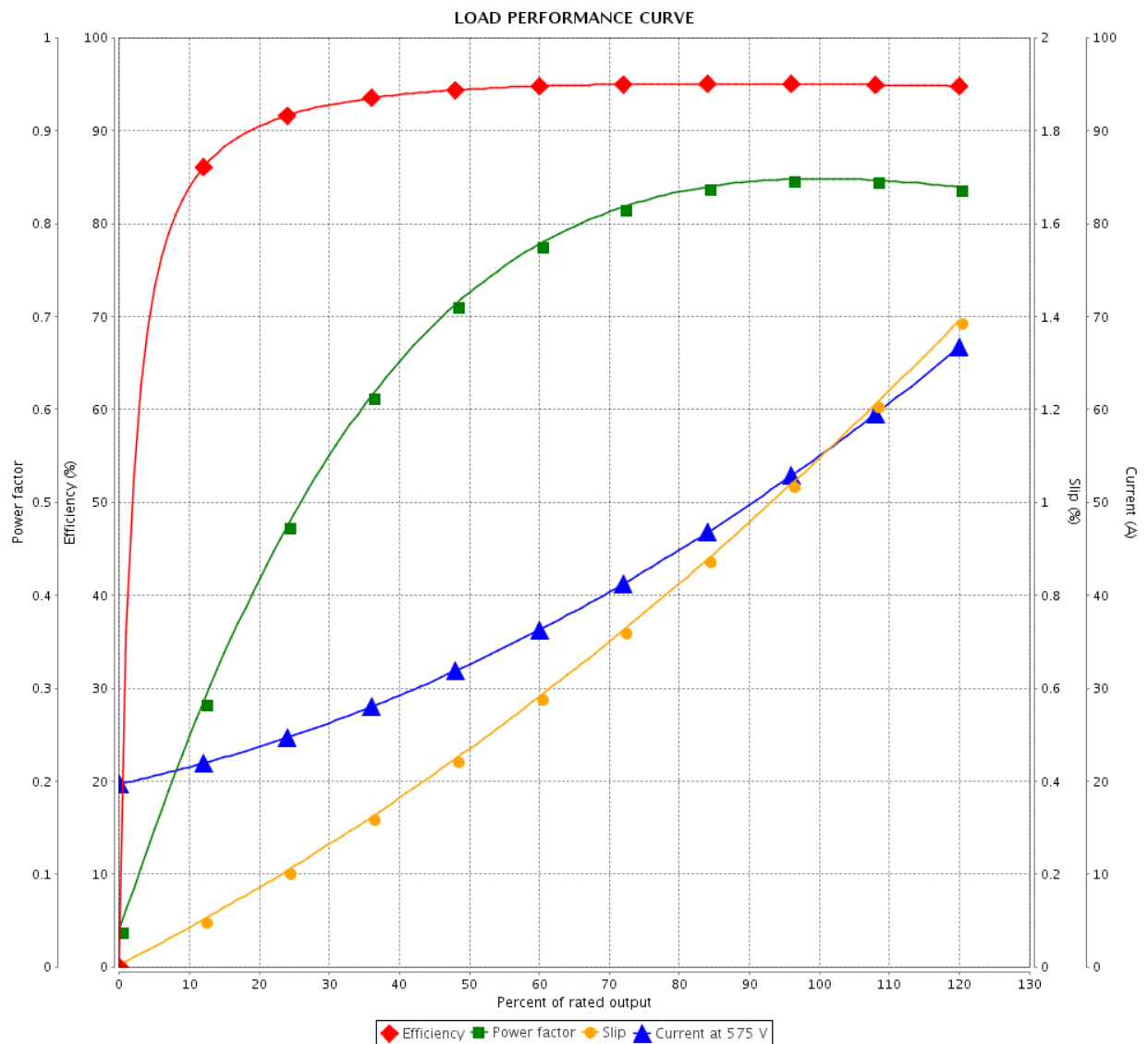


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THERMAL LIMIT CURVE

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Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

Heating constant

Cooling constant

Rev.

Changes Summary

Performed

Checked

Date

Performed by

Checked by

Date

10/04/2020

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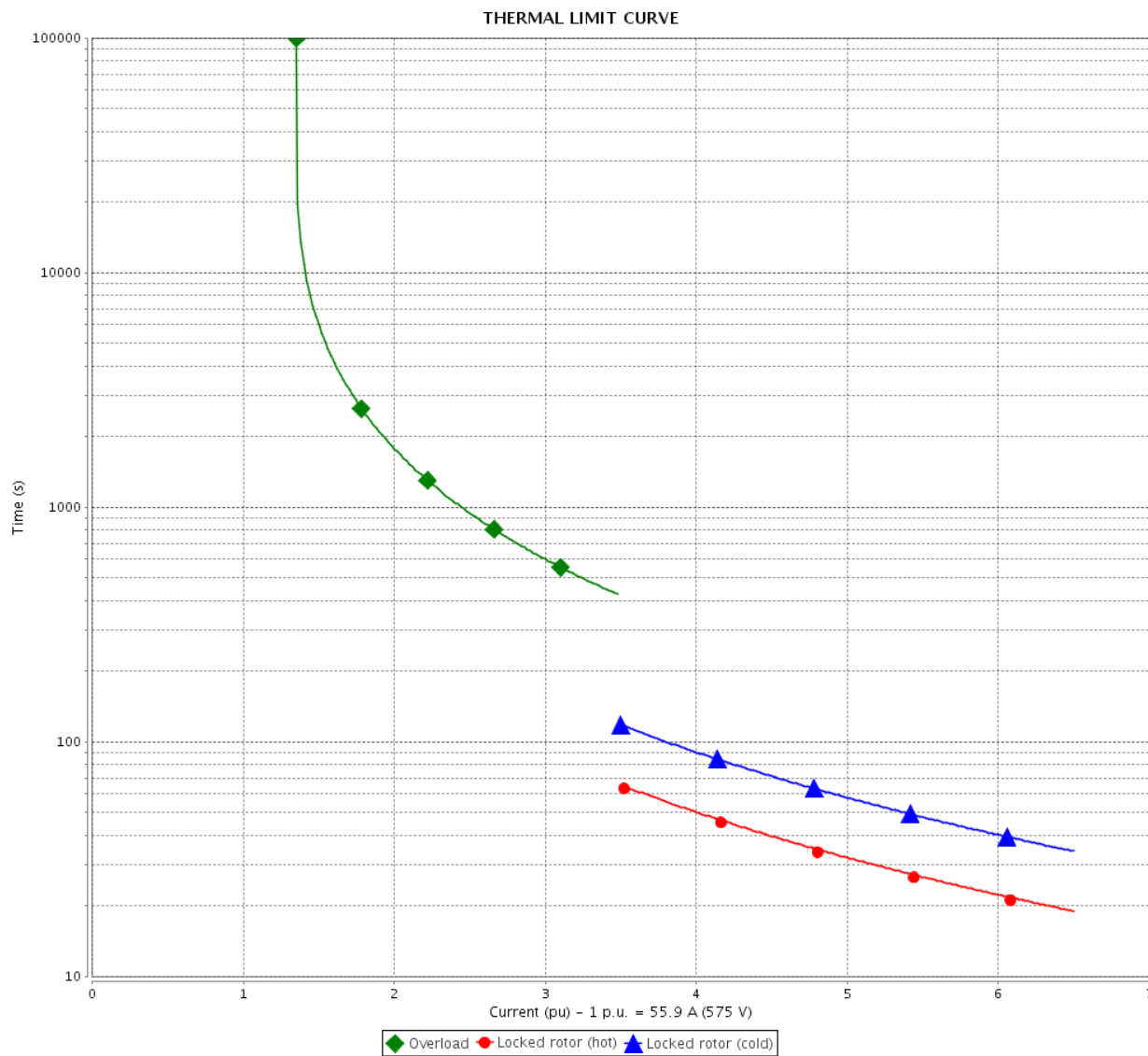
Revision

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date	10/04/2020				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

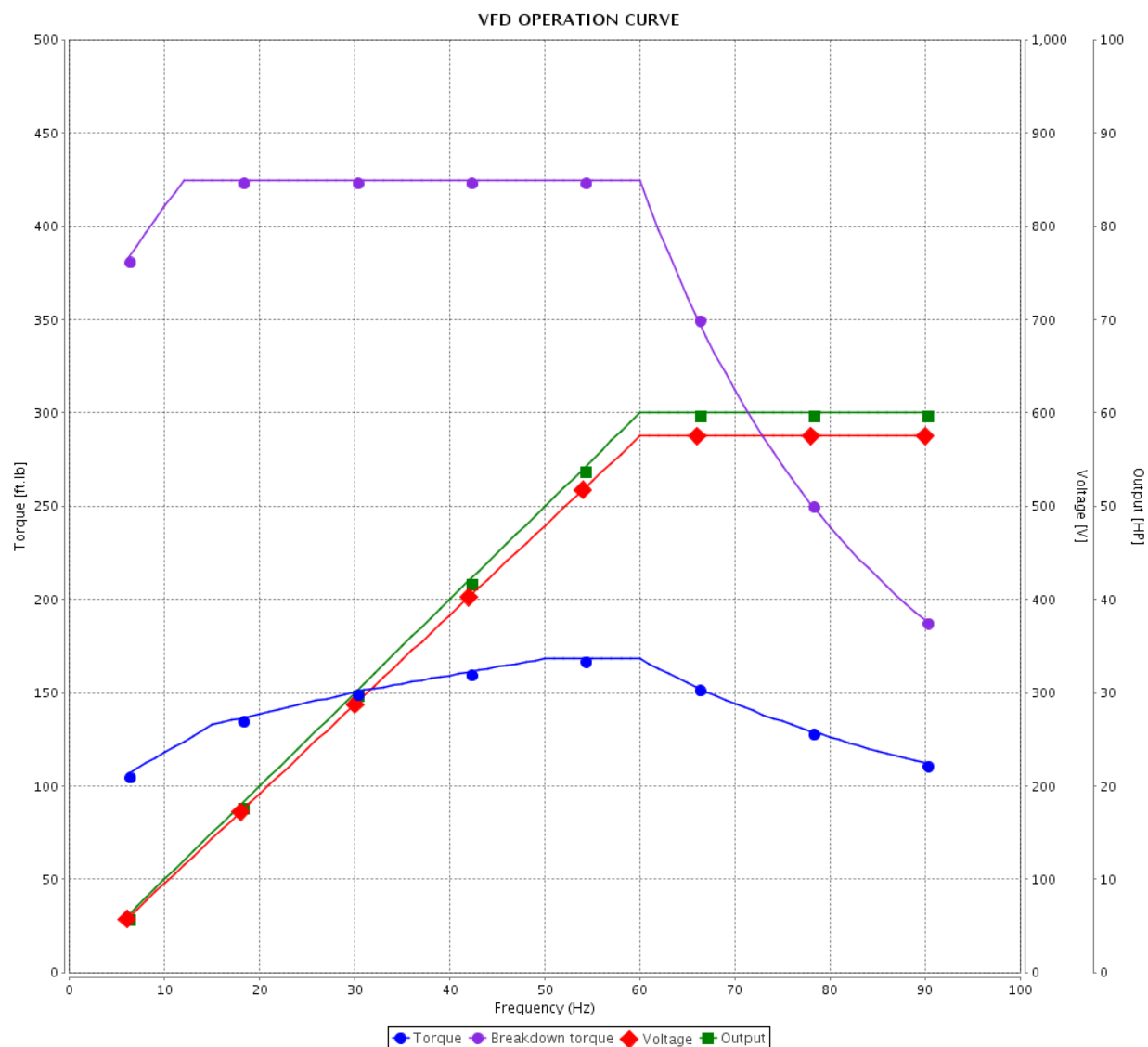


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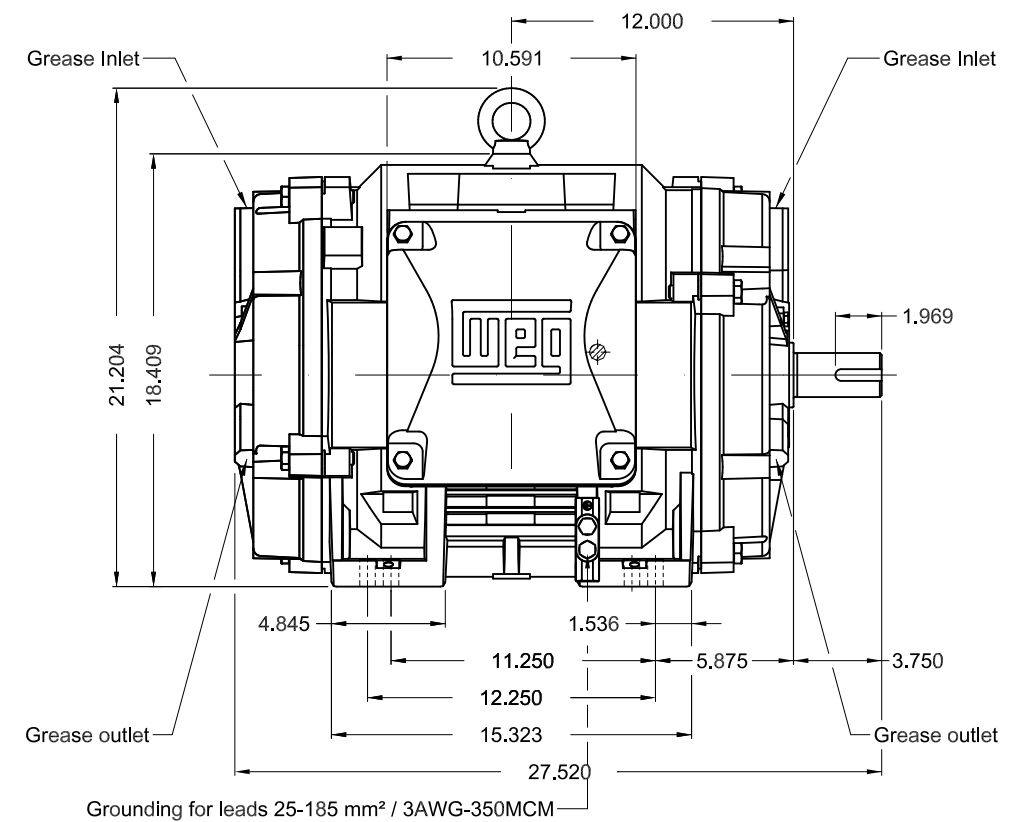
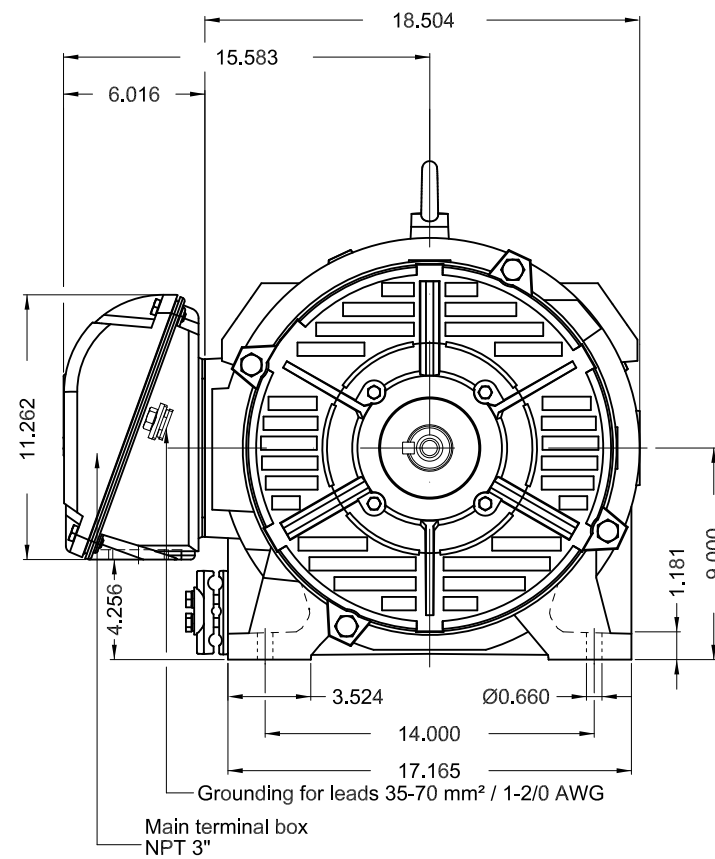


Performance : 575 V 60 Hz 4P

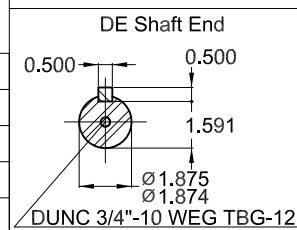
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Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
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TS shaft end
Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B3R(D)



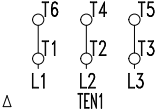

60 HP 04 Poles 60Hz										A	
								1:8			
ECM		LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED		PIRWBUSER		THREE PHASE W40 MOTOR NEMA PREMIUM EFF FRAME 364/5TS IP23 ODP				PREVIEW WDD			
CHECKED											
RELEASED											
REL DT.			WMO	Jaragua do Sul			Product Engineering		SHEET	1 / 1	



W40 NEMA
Premium®



Severe Duty

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