

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :	
Product line	: W40 NEMA Premium Efficiency Three-Phase
Product code :	14284843
Catalog # :	10018OT3V404TS-W40
Frame : 404/5TS Output : 100 HP (75 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 200/400 V Rated current : 265/132 A L. R. Amperes : 1799/899 A LRC : 6.8x(Code G) No load current : 91.3/45.7 A Rated speed : 1780 rpm Slip : 1.11 % Rated torque : 295 ft.lb Locked rotor torque : 200 % Breakdown torque : 250 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 21.9 sq.ft.lb Design : B	Locked rotor time : 21s (cold) 12s (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 : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 69.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 940 lb
Output	25%    50%    75%    100%
Efficiency (%)	94.9    95.0    95.4    95.4
Power Factor	0.49    0.75    0.83    0.86
Foundation loads	
Max. traction : 1742 lb	
Max. compression : 2682 lb	
Bearing type	: <u>Drive end</u> 6314 C3 <u>Non drive end</u> 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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12/04/2022	
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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



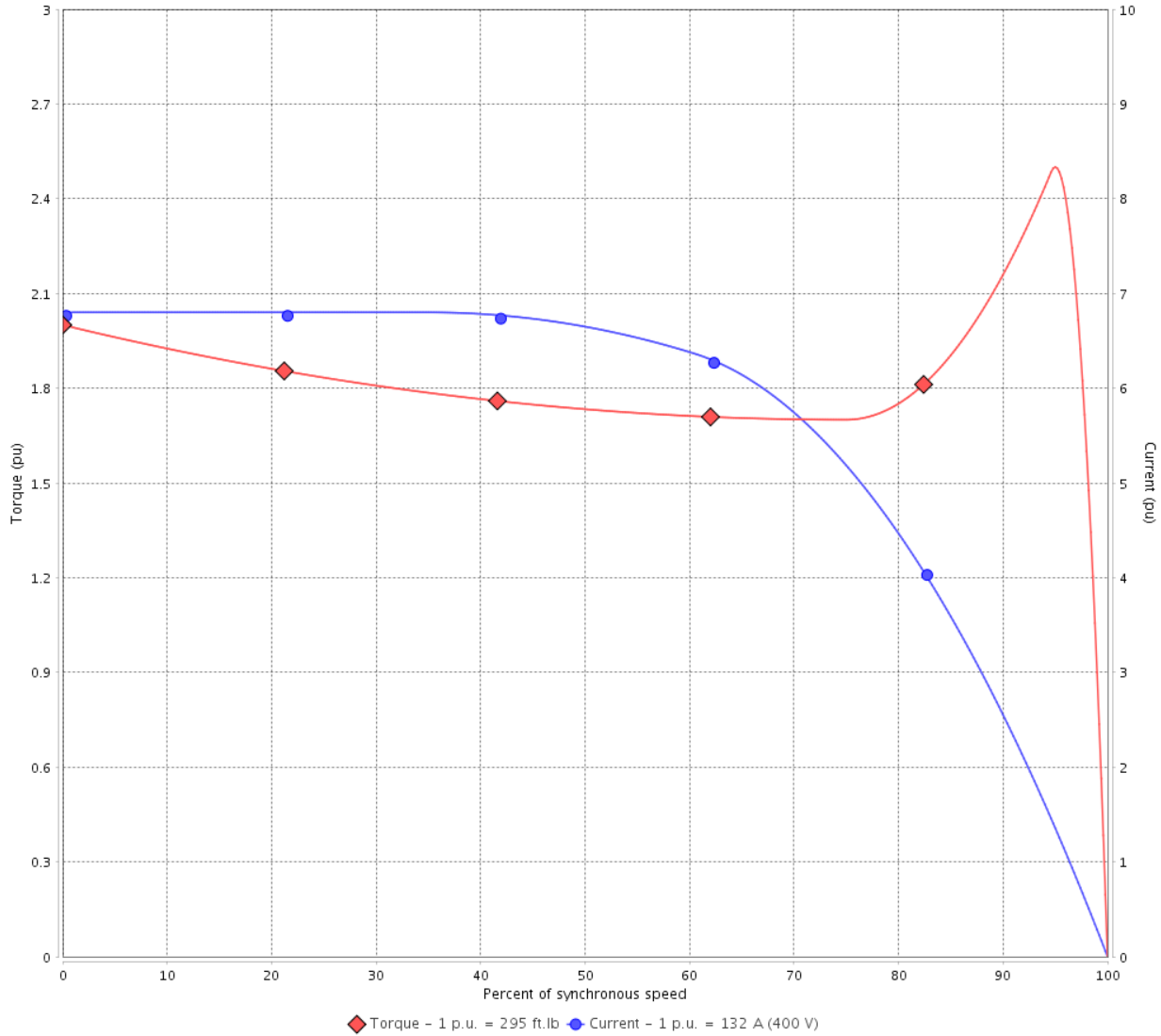
Customer :

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Three-Phase

Product code : 14284843

Catalog # : 10018OT3V404TS-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 4P

Rated current : 265/132 A  
LRC : 6.8  
Rated torque : 295 ft.lb  
Locked rotor torque : 200 %  
Breakdown torque : 250 %  
Rated speed : 1780 rpm

Moment of inertia (J) : 21.9 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

Locked rotor time : 21s (cold) 12s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

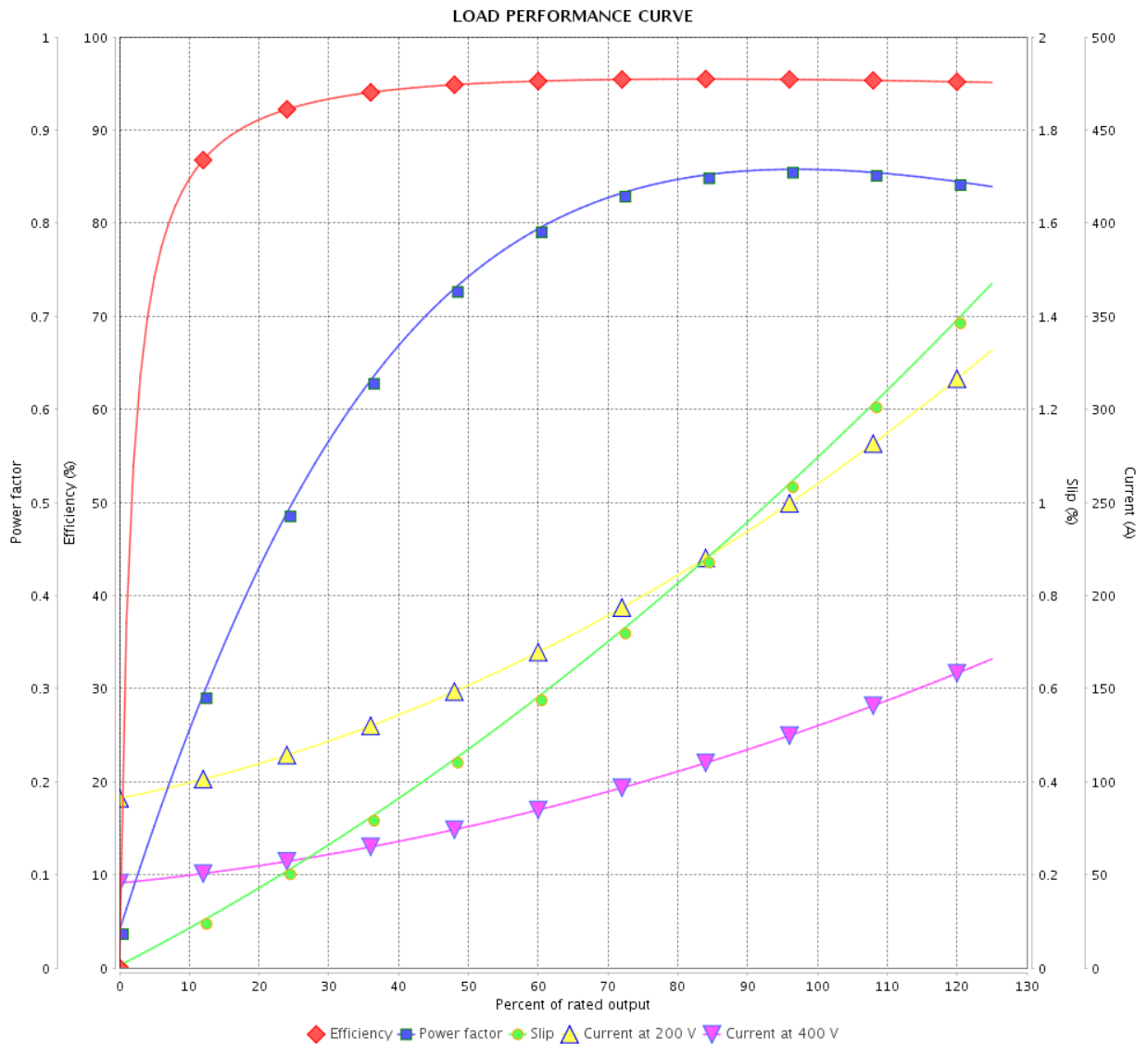


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Catalog # : 10018OT3V404TS-W40



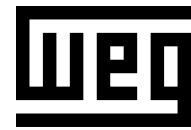
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# THERMAL LIMIT CURVE



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 Product code : 14284843  
 Catalog # : 10018OT3V404TS-W40

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Locked rotor torque : 200 %	Service factor : 1.25
Breakdown torque : 250 %	Temperature rise : 80 K
Rated speed : 1780 rpm	Design : B

Heating constant

Cooling constant

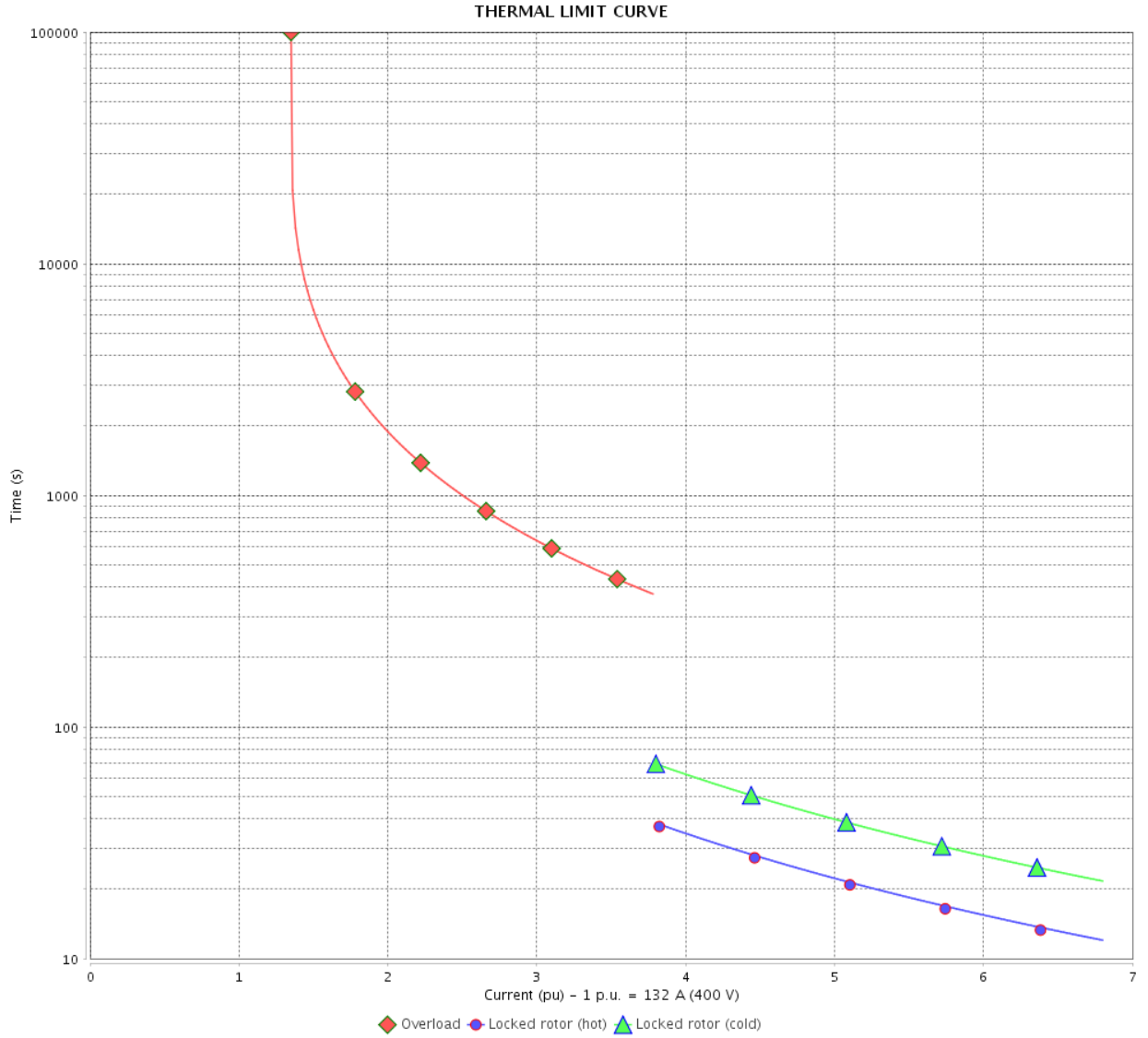
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



Rev.	Changes Summary	Performed	Checked	Date
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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



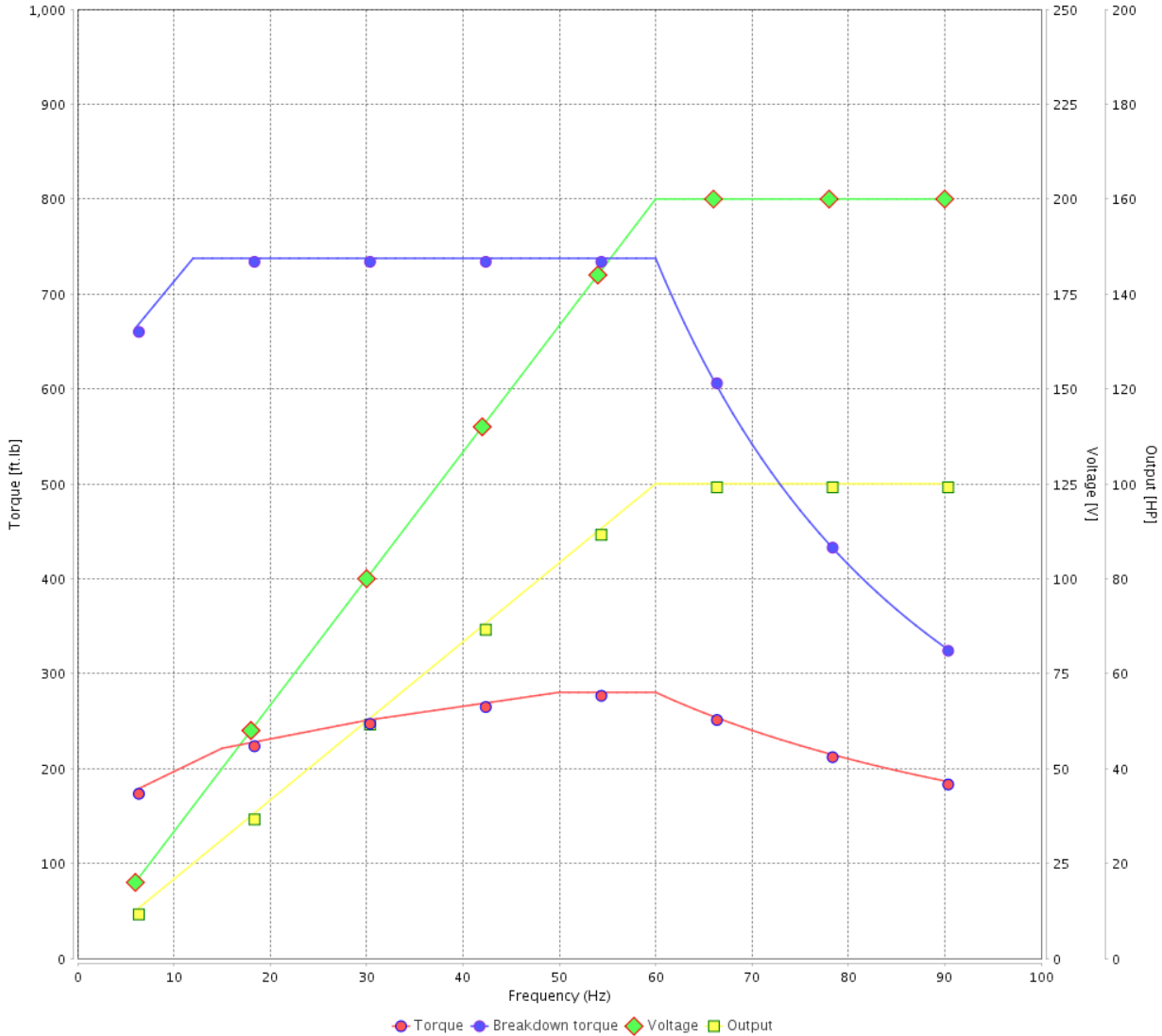
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VFD OPERATION CURVE

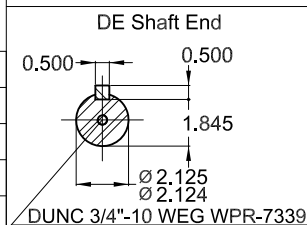
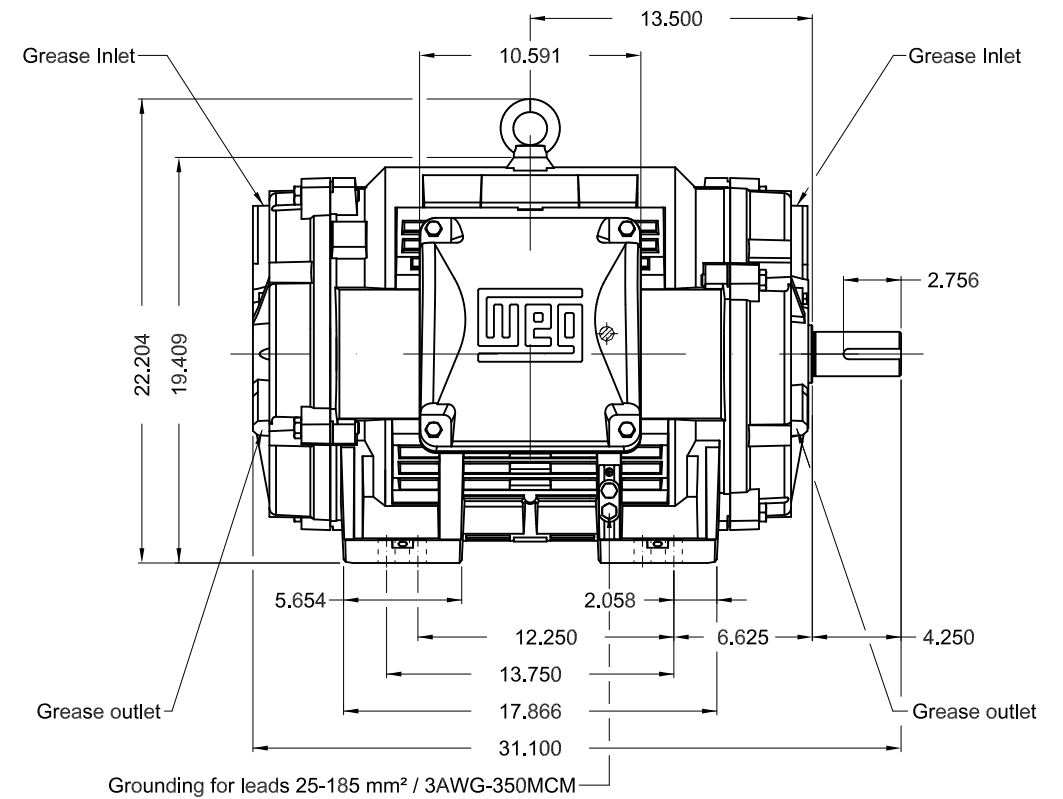
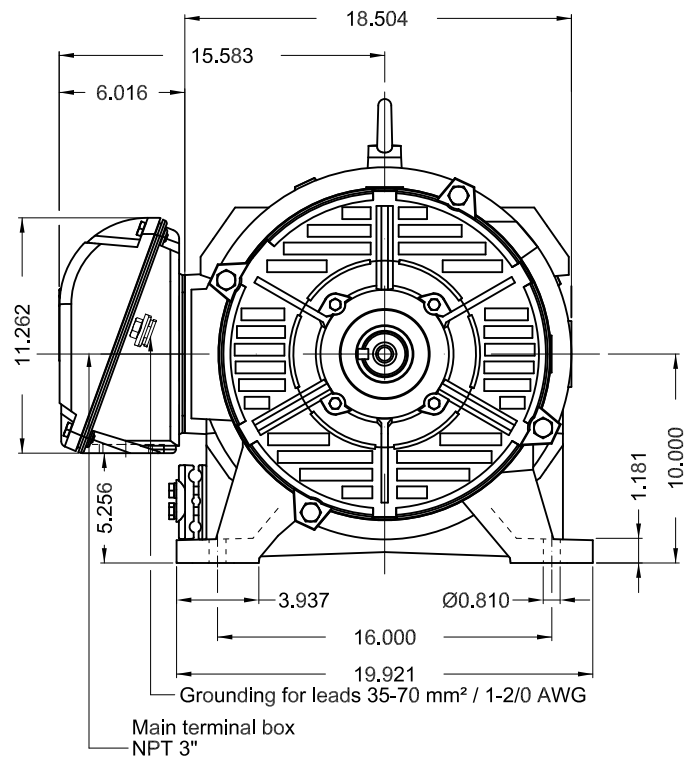


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TS shaft end  
Color RAL 5009  
Painting plan 203A  
Mounting NEMA F-1  
Mounting B3R(D)

100 HP 04 Poles 60 Hz

A

1:9

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 PREM. EFF.					
CHECKED		FRAME 404/5TS IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW  
WDD



MODEL 100180T3V404TS-W40  
MADE IN BRAZIL  
14284843

**WEG** **W40 NEMA**  
**CC029A Premium**  
Inverter Duty Motor

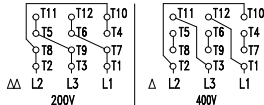


MOD.T01#FOXON



For use on PWM, VT 1000:1, CT 2:1, 1.0SF

PH 3	FR 404/5TS	HP(kW) 100.0(75.0)	Hz 60
V 200/400	A 265/132	IP23	
NEMA NOM EFF	95.4 %	RPM 1780	
ENCL ODP	DUTY CONT.	INS. CL. F $\Delta$ T 80 K	
PF 0.86	DES B	CODE G	AMB. 40°C
SF 1.25	SFA 331/165	ALT 1000 m.a.s.l.	



→ 6314-C3(27g)  
→ 6212-Z-C3(13g)

MOBIL POLYREX EM  
20000 h

939 Lbs