

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase      Product code : 14272884  
 Catalog # : 12518OT3H405T-W40

Frame : 404/5T Output : 125 HP Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 110 A L. R. Amperes : 762 A LRC : 6.9x(Code G) No load current : 37.6 A Rated speed : 1780 rpm Slip : 1.11 % Rated torque : 369 ft.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	Locked rotor time : 18s (cold) 10s (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> : 1025 lb
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Output	25%	50%	75%	100%	Foundation loads
Efficiency (%)	94.9	95.0	95.4	95.4	Max. traction : 2363 lb
Power Factor	0.50	0.75	0.83	0.86	Max. compression : 3388 lb

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type :	6316 C3	6212 Z C3
Sealing :	Without Bearing Seal	Without Bearing Seal
Lubrication interval :	20000 h	20000 h
Lubricant amount :	34 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



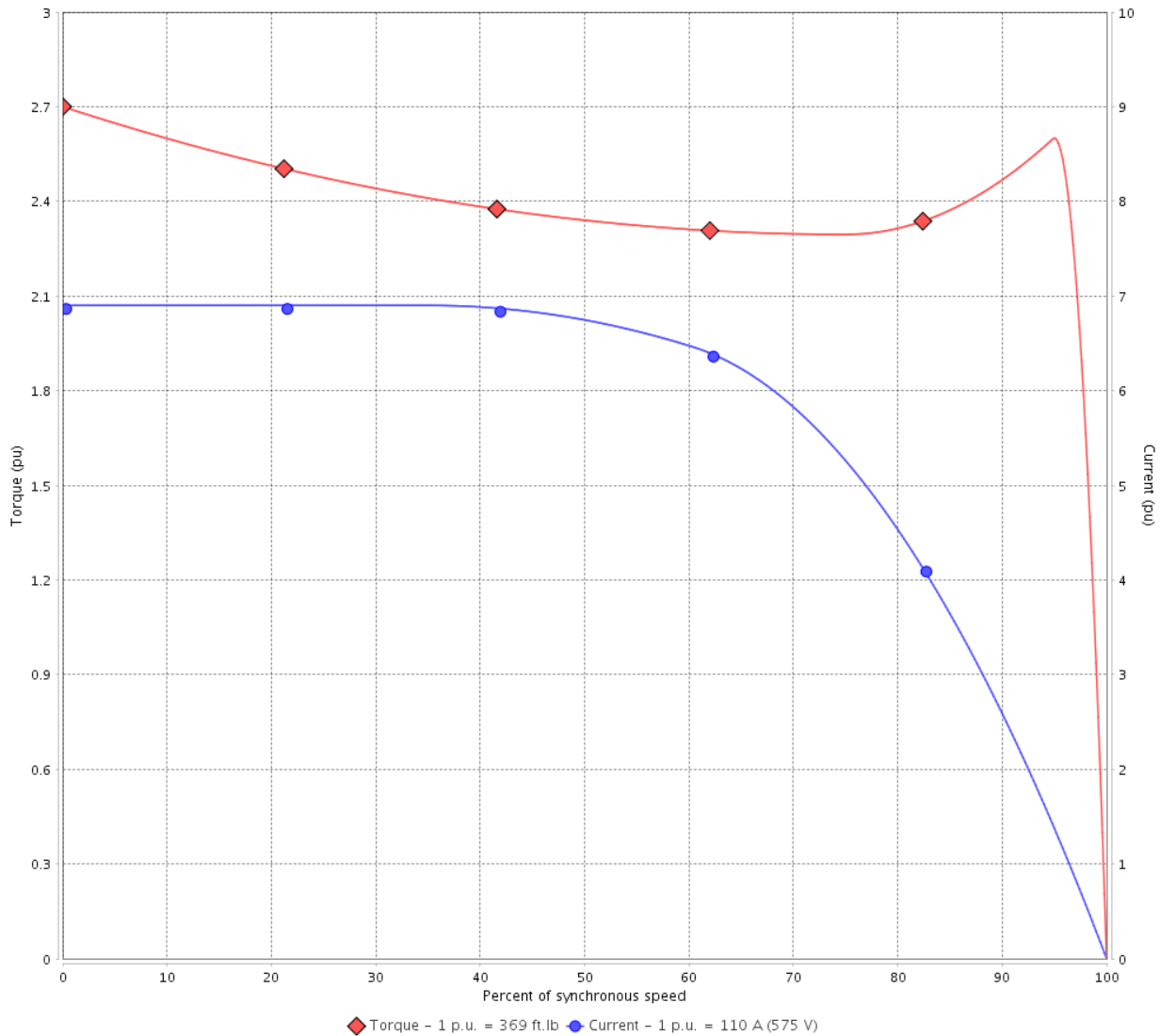
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Three-Phase

Product code : 14272884

Catalog # : 12518OT3H405T-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 110 A	Moment of inertia (J)	: 25.5 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
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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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

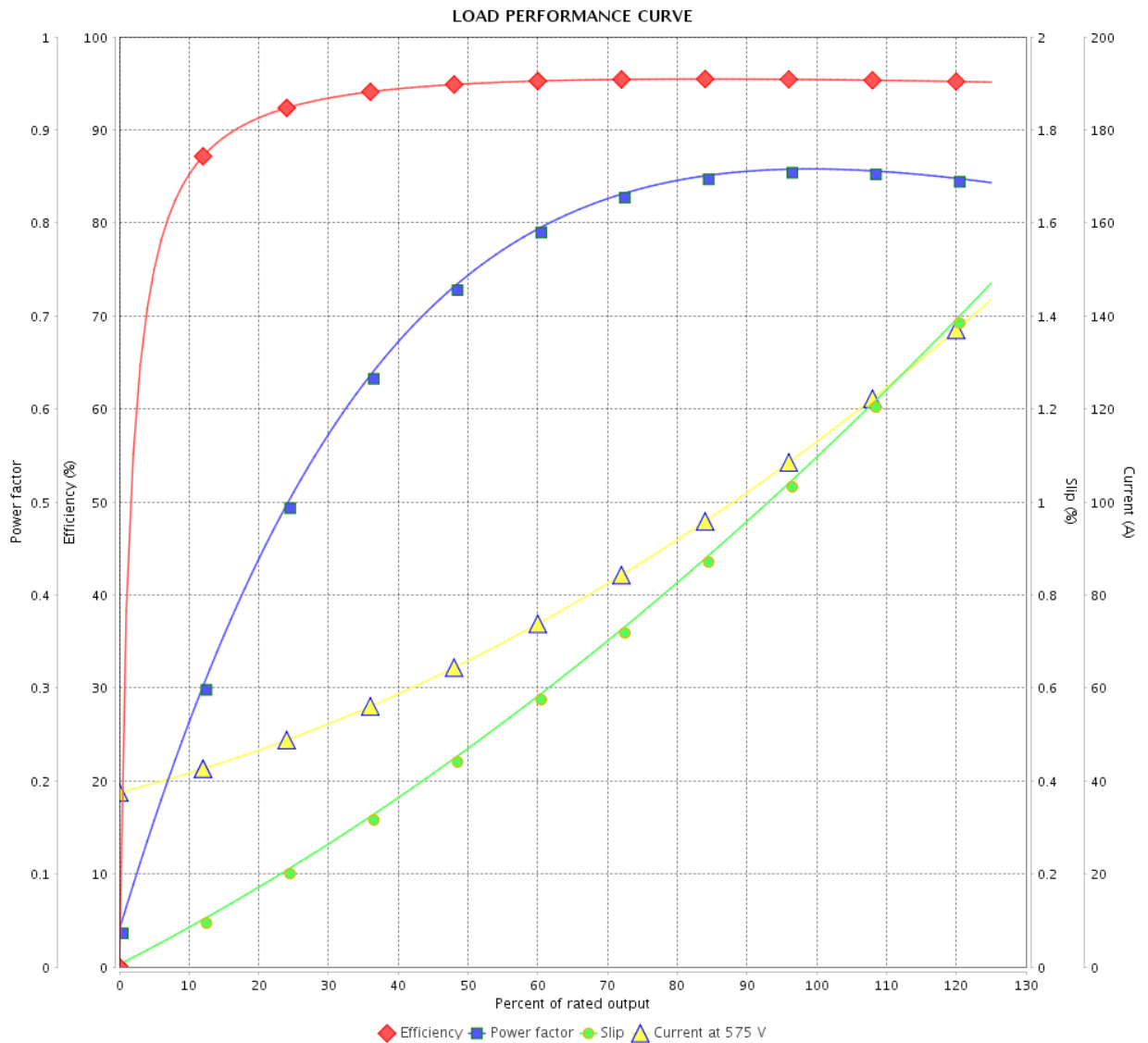


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 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



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Heating constant

Cooling constant

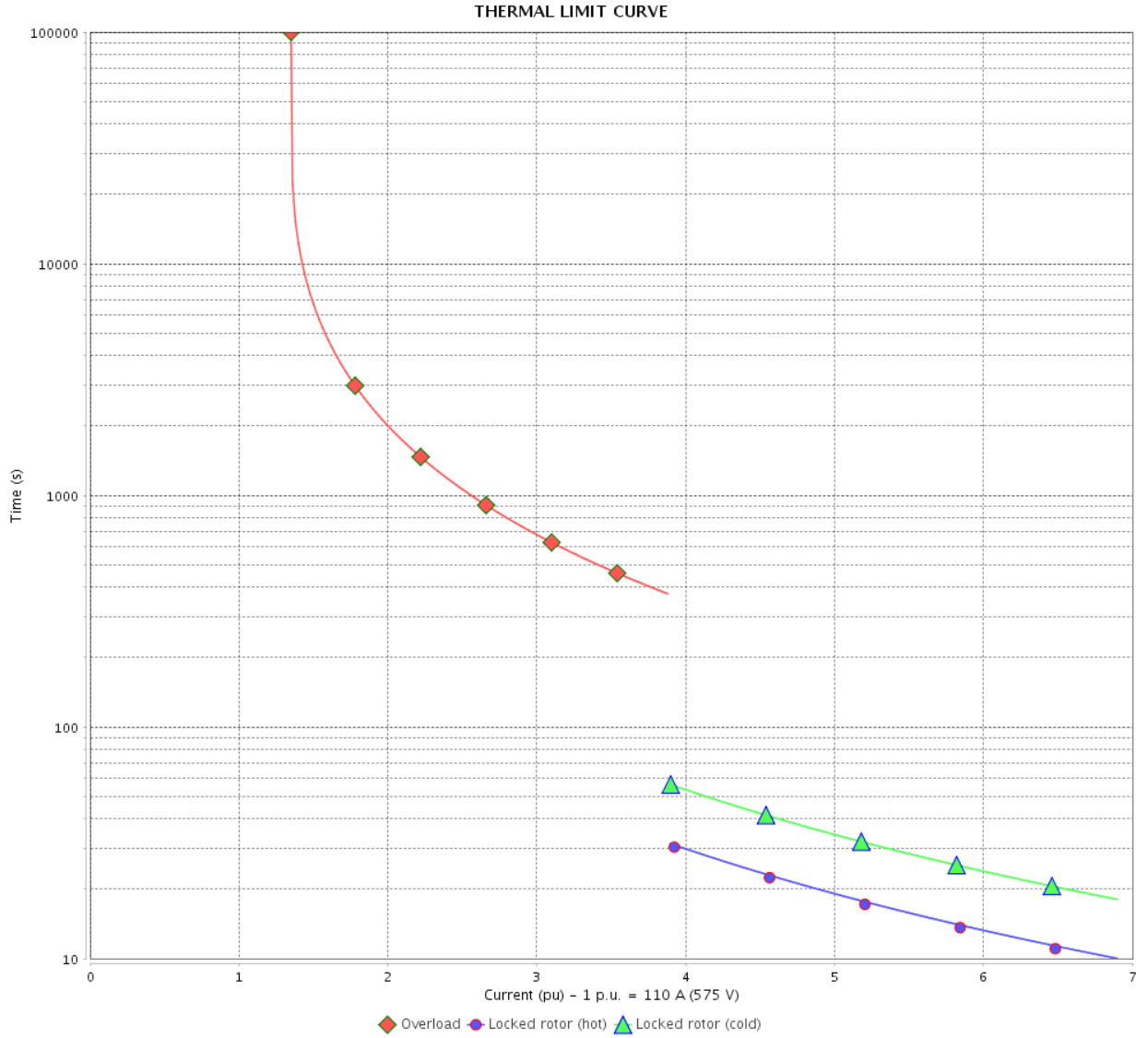
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

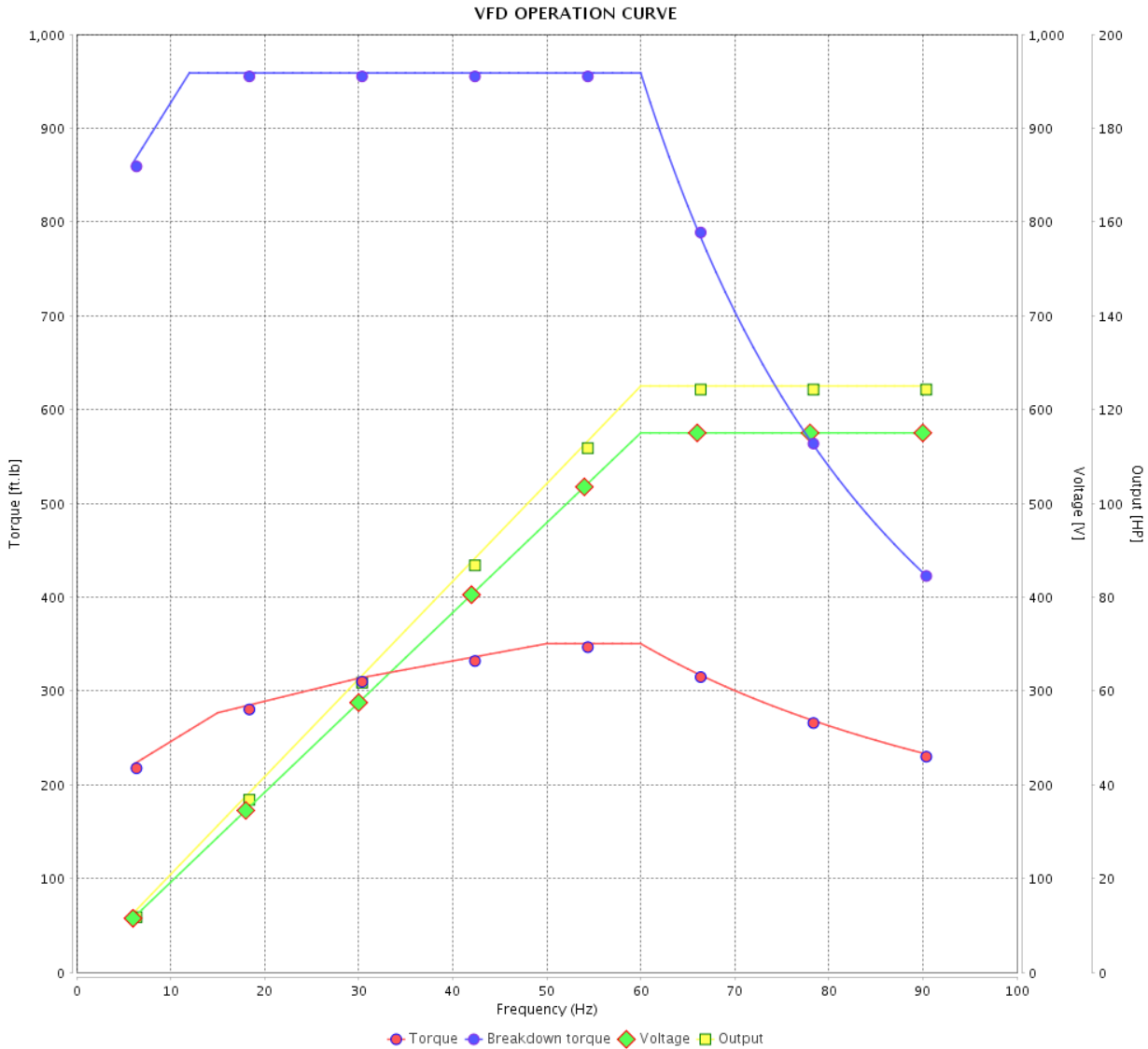


Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14272884

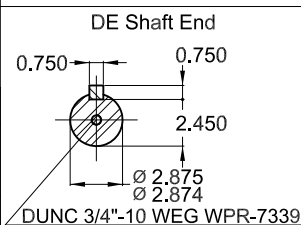
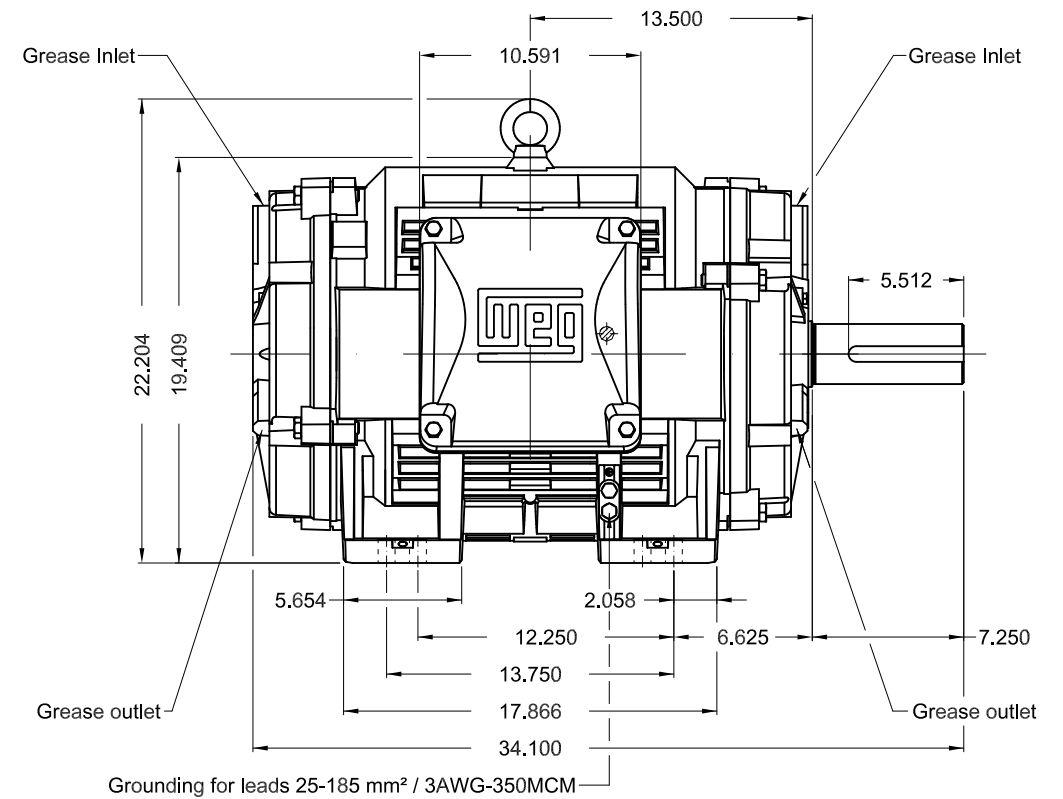
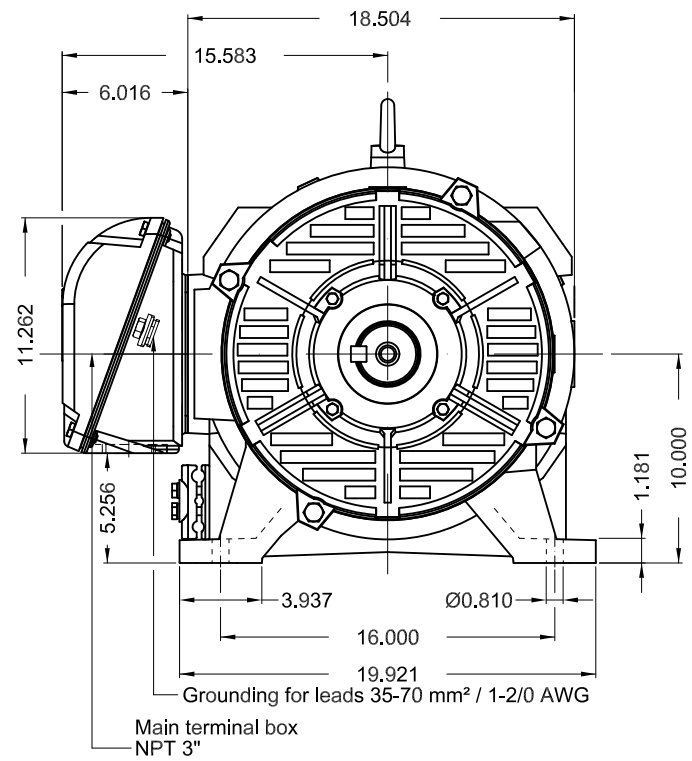
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Color RAL 5009  
Painting plan 203A  
Mounting NEMA F-1  
Mounting B3R(D)

125 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 404/5T IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW  
WDD



MODEL 125180T3H405T-W40  
MADE IN BRAZIL  
14272884

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

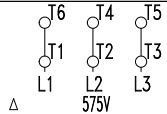
**UL** US **3PT9 LISTED**


MOD.T01#FOXON

**SP**®  
C US  
Energy Verified

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

PH 3	FR 404/5T	HP(kW) 125(90)		Hz 60
V 575		A 110		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 138		ALT 1000 m.a.s.l.	



 → 6316-C3(34g)      MOBIL POLYREX EM  
→ 6212-Z-C3(13g)      20000 h

1025 Lbs