

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase Product code : 14272478
 Catalog # : 10018OT3H404T-W40

Frame	: 404/5T	Locked rotor time	: 21s (cold) 12s (hot)
Output	: 100 HP (75 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	: 92.0 A	Protection degree	: IP23
L. R. Amperes	: 626 A	Cooling method	: IC01 - ODP
LRC	: 6.8x(Code G)	Mounting	: F-1
No load current	: 31.8 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	: 295 ft.lb	Approx. weight ³	: 950 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		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	94.9	95.0	95.4	95.4	Max. traction	: 1737 lb
Power Factor	0.49	0.75	0.83	0.86	Max. compression	: 2687 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



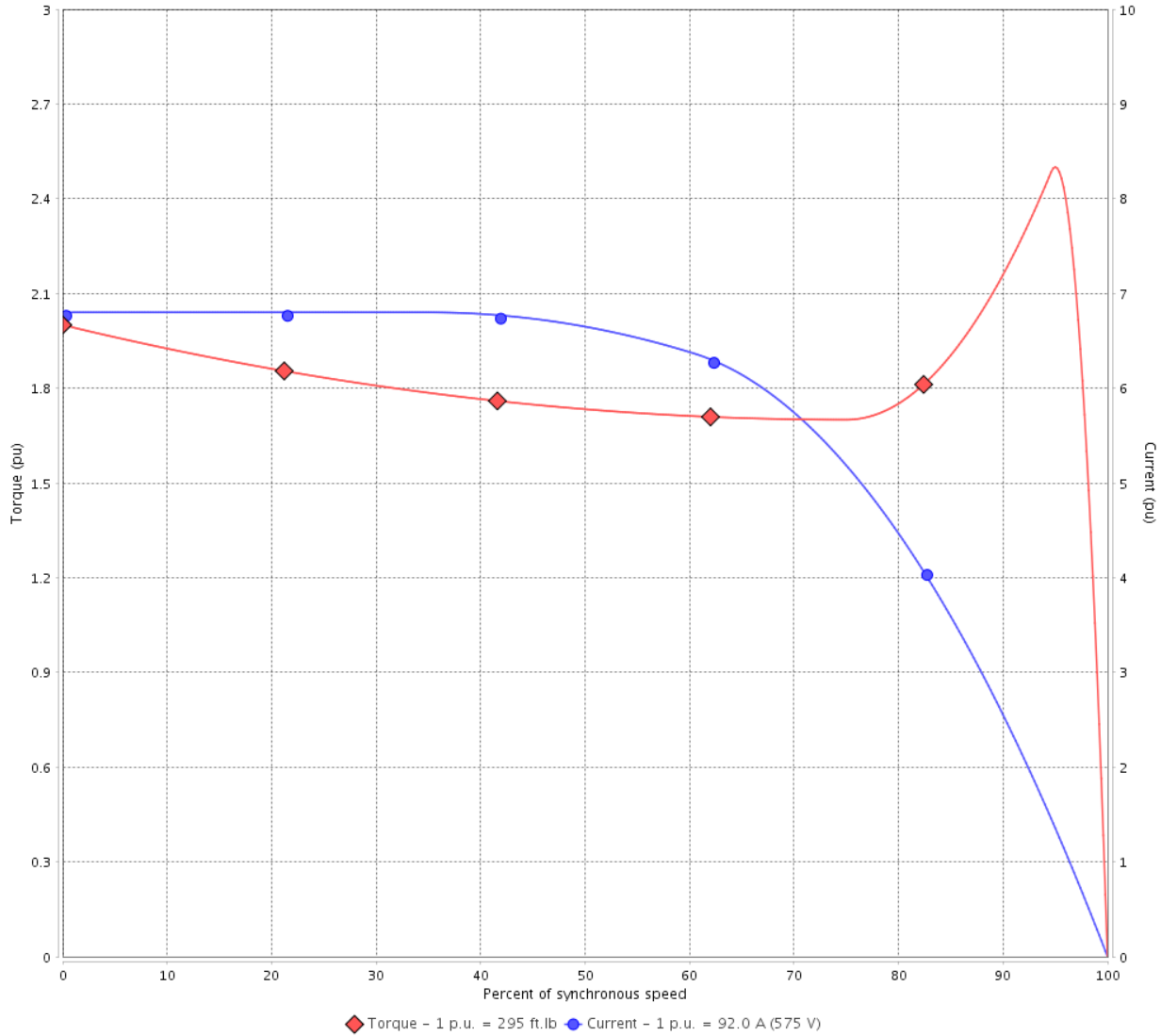
Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14272478

Catalog # : 10018OT3H404T-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 92.0 A	Moment of inertia (J)	: 21.9 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 295 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

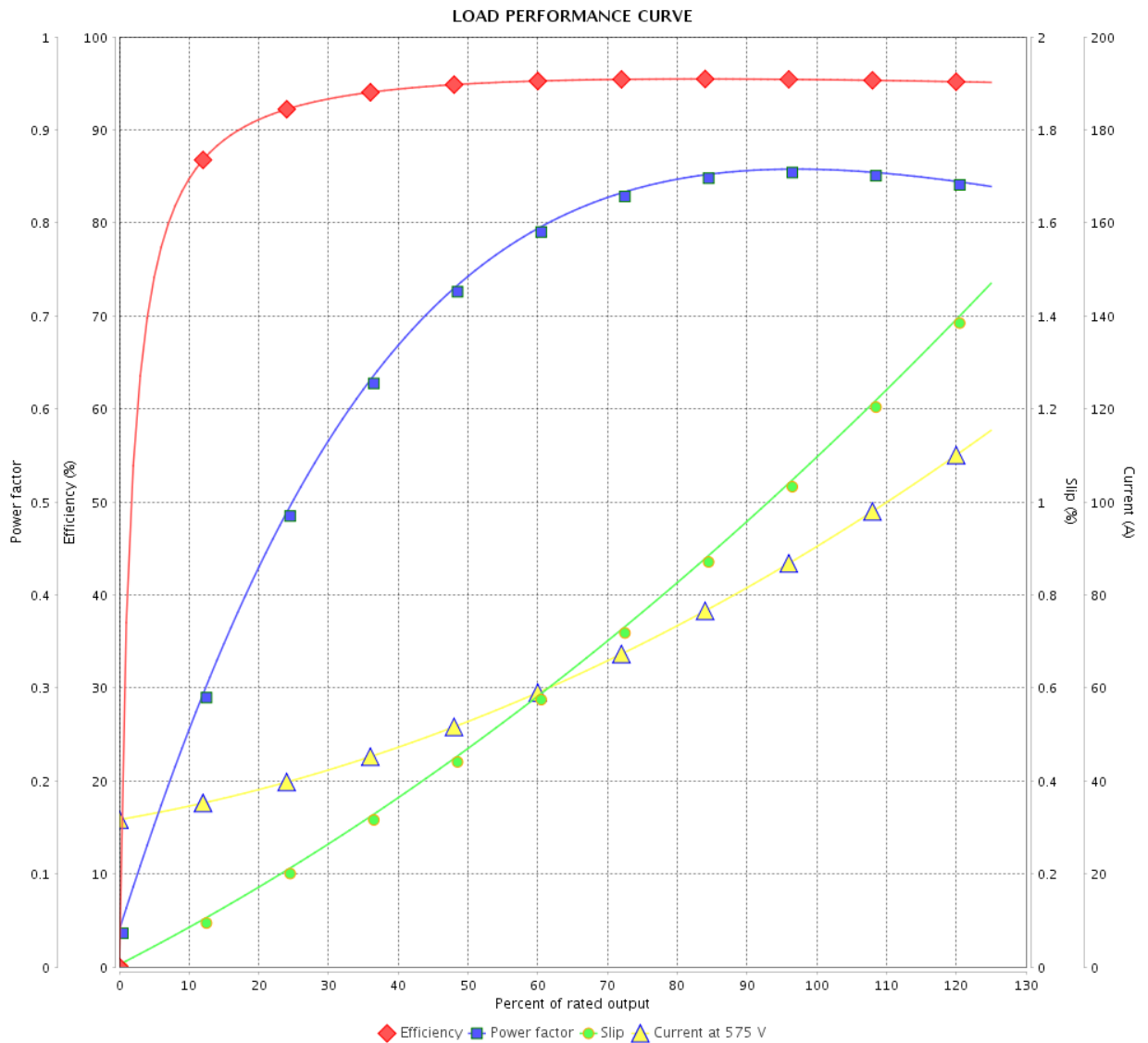


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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

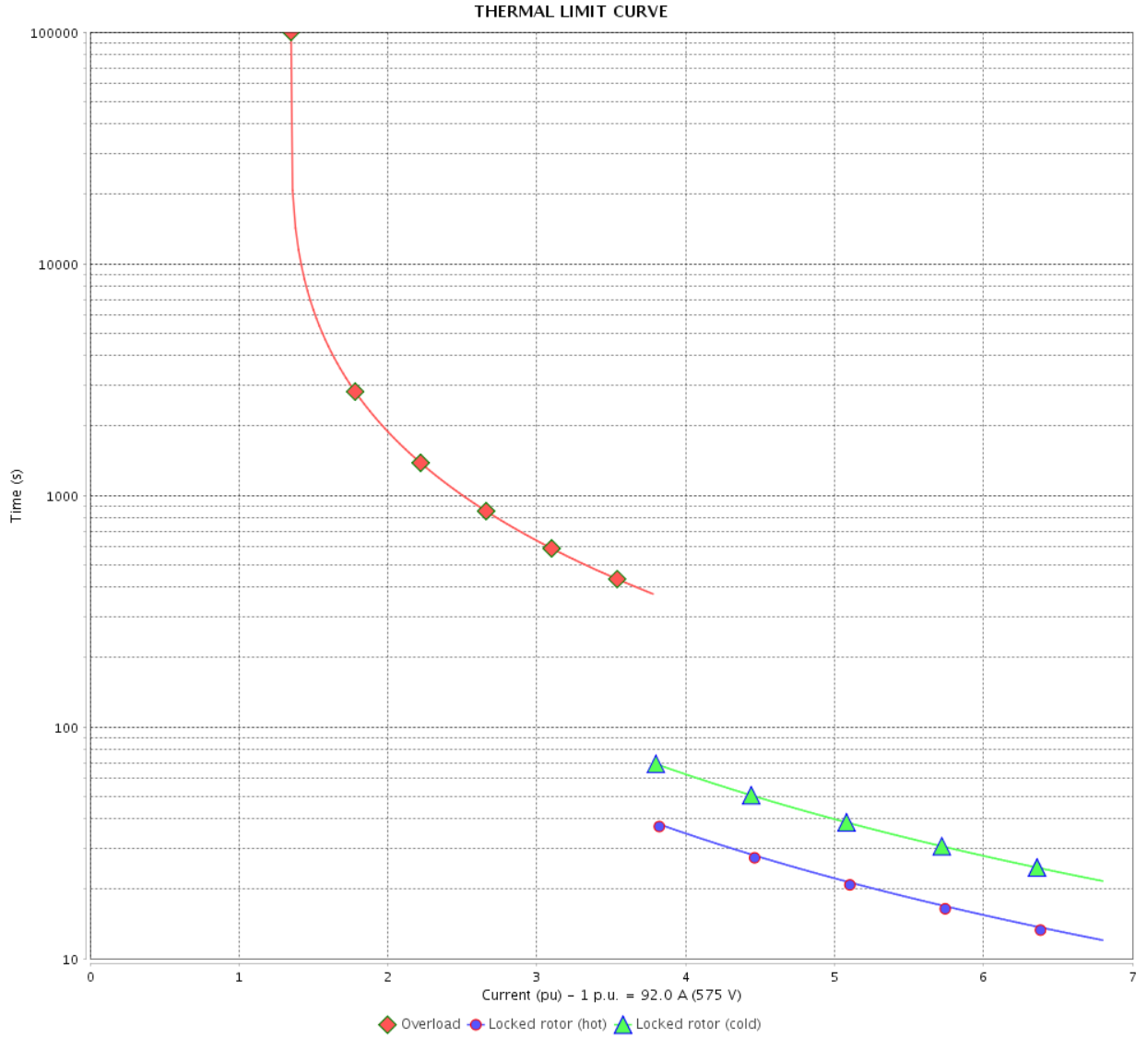
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



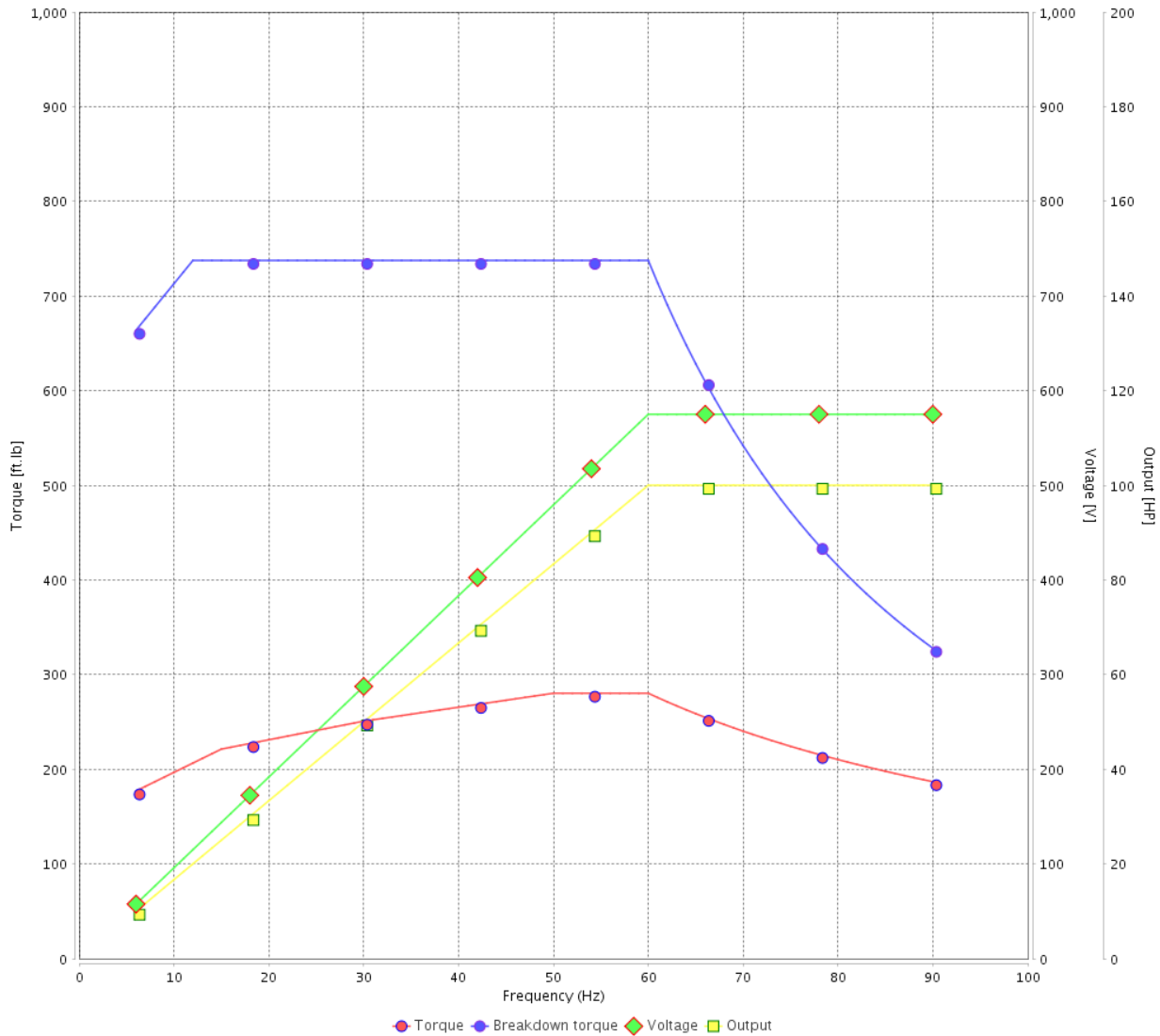
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VFD OPERATION CURVE

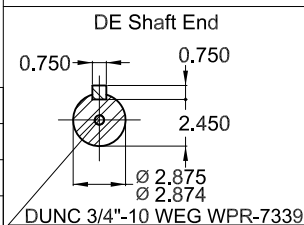
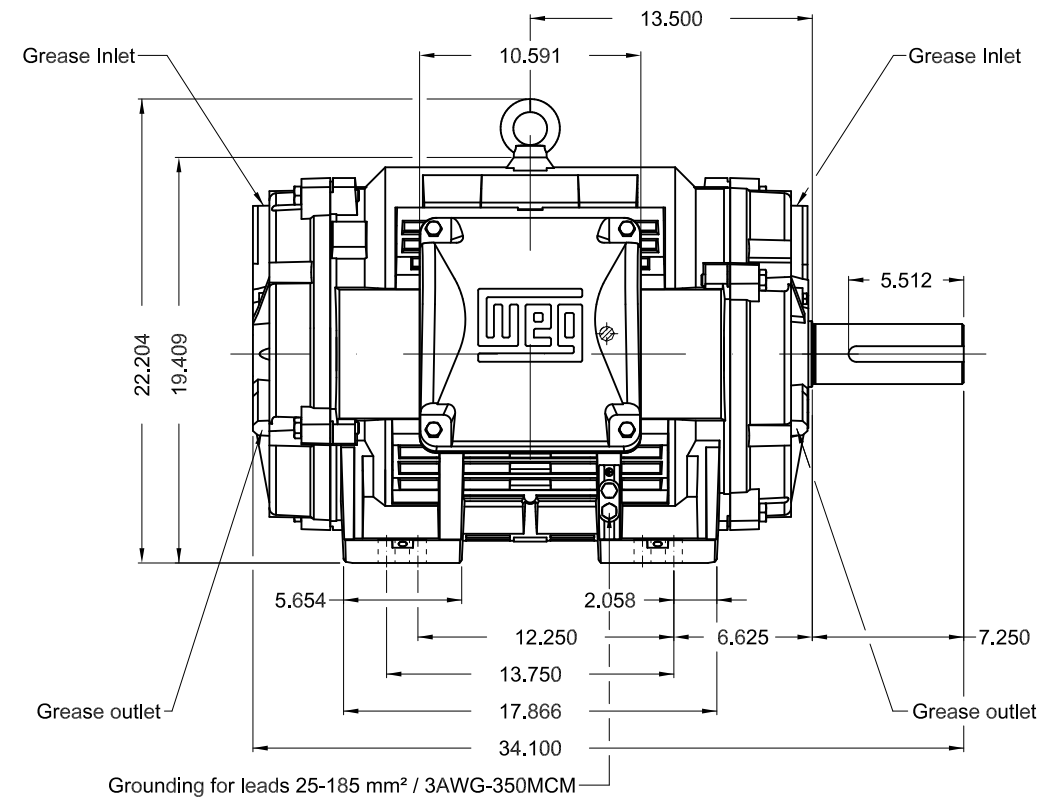
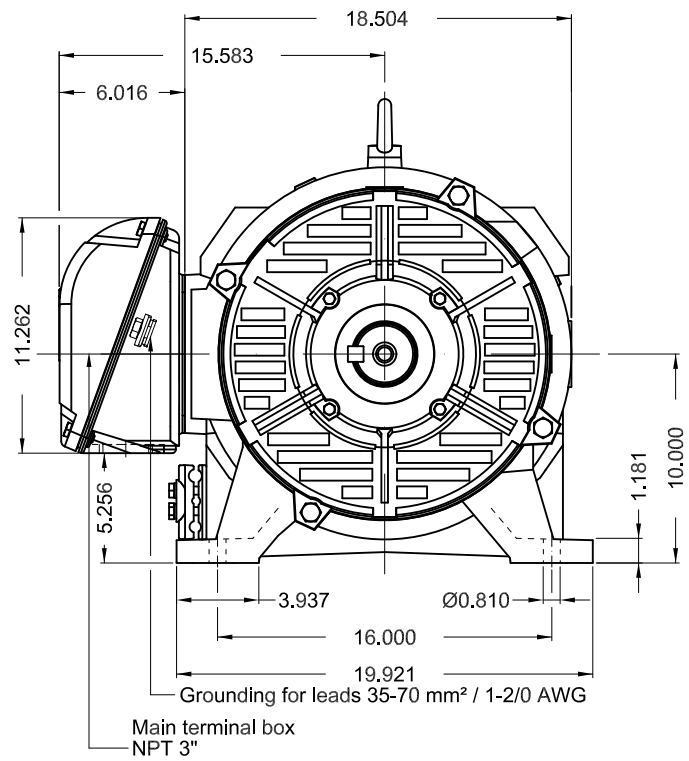


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Rated current : 92.0 A
LRC : 6.8
Rated torque : 295 ft.lb
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Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B3R(D)

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

PREVIEW
WDD



MODEL 100180T3H404T-W40
MADE IN BRAZIL
14272478

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

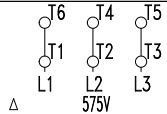
UL US **3PT9 LISTED**


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) 100(75)	Hz 60
V 575	A 92.0	IP23	
NEMA NOM EFF	95.4 %	RPM 1780	
ENCL ODP	DUTY CONT.	INS. CL. F Δ T 80 K	
PF 0.86	DES B	CODE G	AMB. 40°C
SF 1.25	SFA 115	ALT 1000 m.a.s.l.	



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

950 Lbs