

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: W40 NEMA Premium Efficiency Three-Phase	Product code :	14497311	
		Catalog # :	05018OT3H326TC-W40	
Frame	: 324/6TC	Locked rotor time	: 19s (cold) 11s (hot)	
Output	: 50 HP (37 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	: 46.8 A	Protection degree	: IP23	
L. R. Amperes	: 295 A	Cooling method	: IC01 - ODP	
LRC	: 6.3x(Code G)	Mounting	: F-1	
No load current	: 18.6 A	Rotation ¹	: Both (CW and CCW)	
Rated speed	: 1775 rpm	Noise level ²	: 66.0 dB(A)	
Slip	: 1.39 %	Starting method	: Direct On Line	
Rated torque	: 148 ft.lb	Approx. weight ³	: 525 lb	
Locked rotor torque	: 240 %			
Breakdown torque	: 240 %			
Insulation class	: F			
Service factor	: 1.25			
Moment of inertia (J)	: 7.08 sq.ft.lb			
Design	: B			
Output	25% 50% 75% 100%	Foundation loads		
Efficiency (%)	94.0 94.1 94.5 94.5	Max. traction		
Power Factor	0.44 0.70 0.80 0.84	Max. compression		
		<u>Drive end</u>	<u>Non drive end</u>	
Bearing type	:	6312 Z C3	6211 Z C3	
Sealing	:	Without Bearing Seal	Without Bearing Seal	
Lubrication interval	:	20000 h	20000 h	
Lubricant amount	:	21 g	11 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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Performed by				
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Date	12/04/2022		1 / 6	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

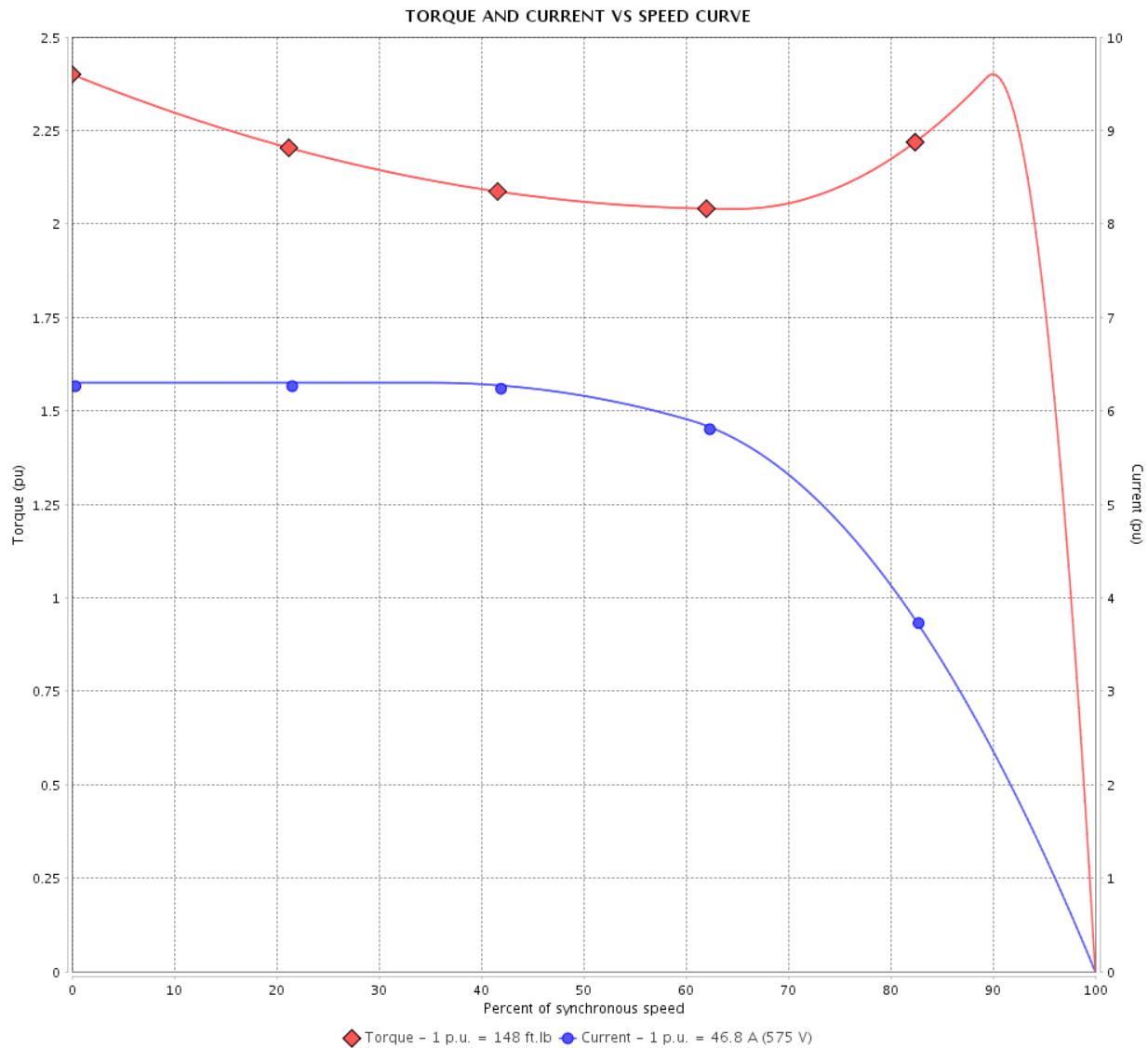


Customer : _____

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14497311

Catalog # : 05018OT3H326TC-W40



Performance : 575 V 60 Hz 4P

Rated current	: 46.8 A	Moment of inertia (J)	: 7.08 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 148 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

Locked rotor time : 19s (cold) 11s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

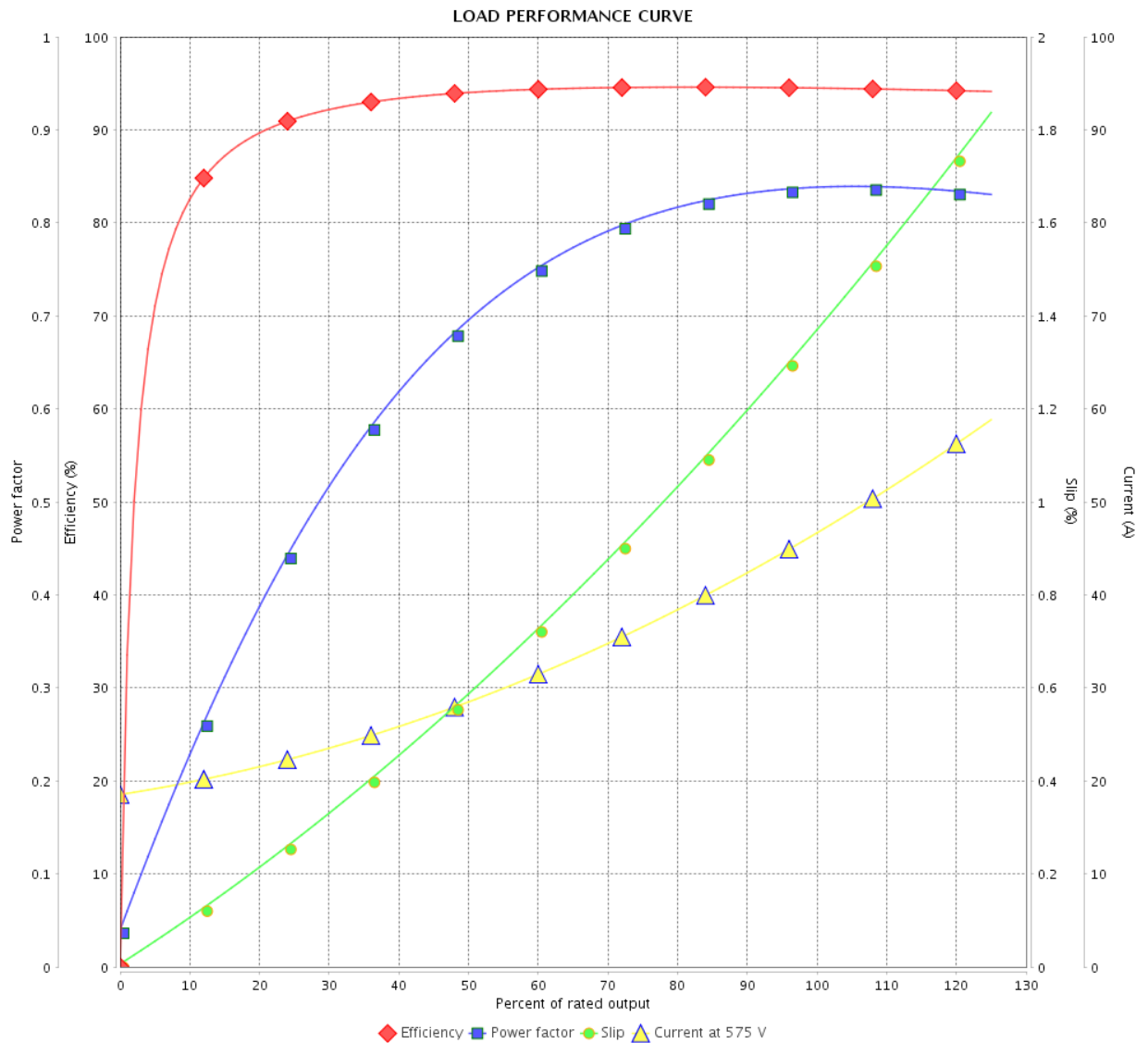


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Three-Phase

Product code : 14497311

Catalog # : 05018OT3H326TC-W40



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 Service factor : 1.25
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THERMAL LIMIT CURVE



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Locked rotor torque : 240 %	Service factor : 1.25
Breakdown torque : 240 %	Temperature rise : 80 K
Rated speed : 1775 rpm	Design : B

Heating constant

Cooling constant

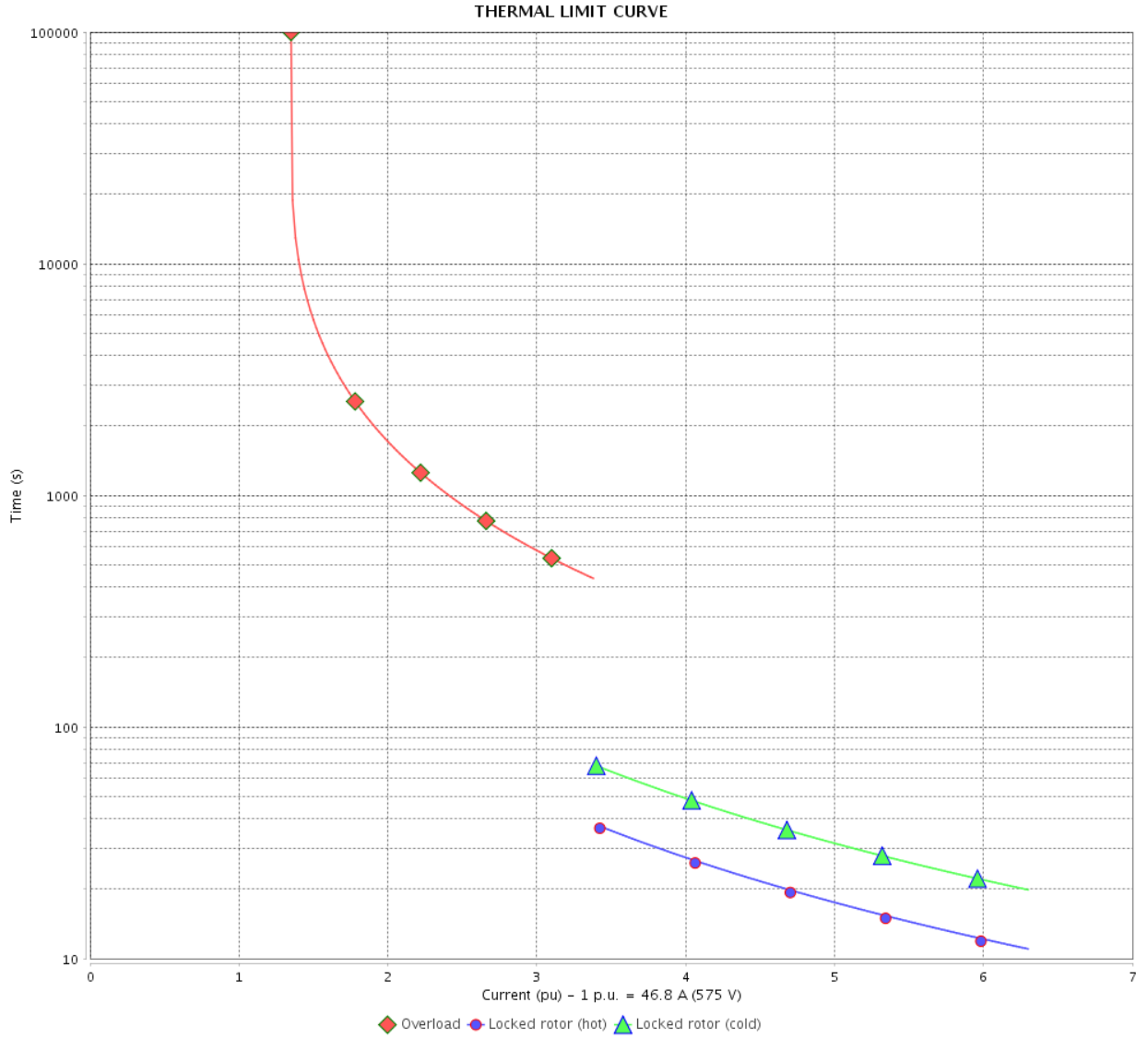
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



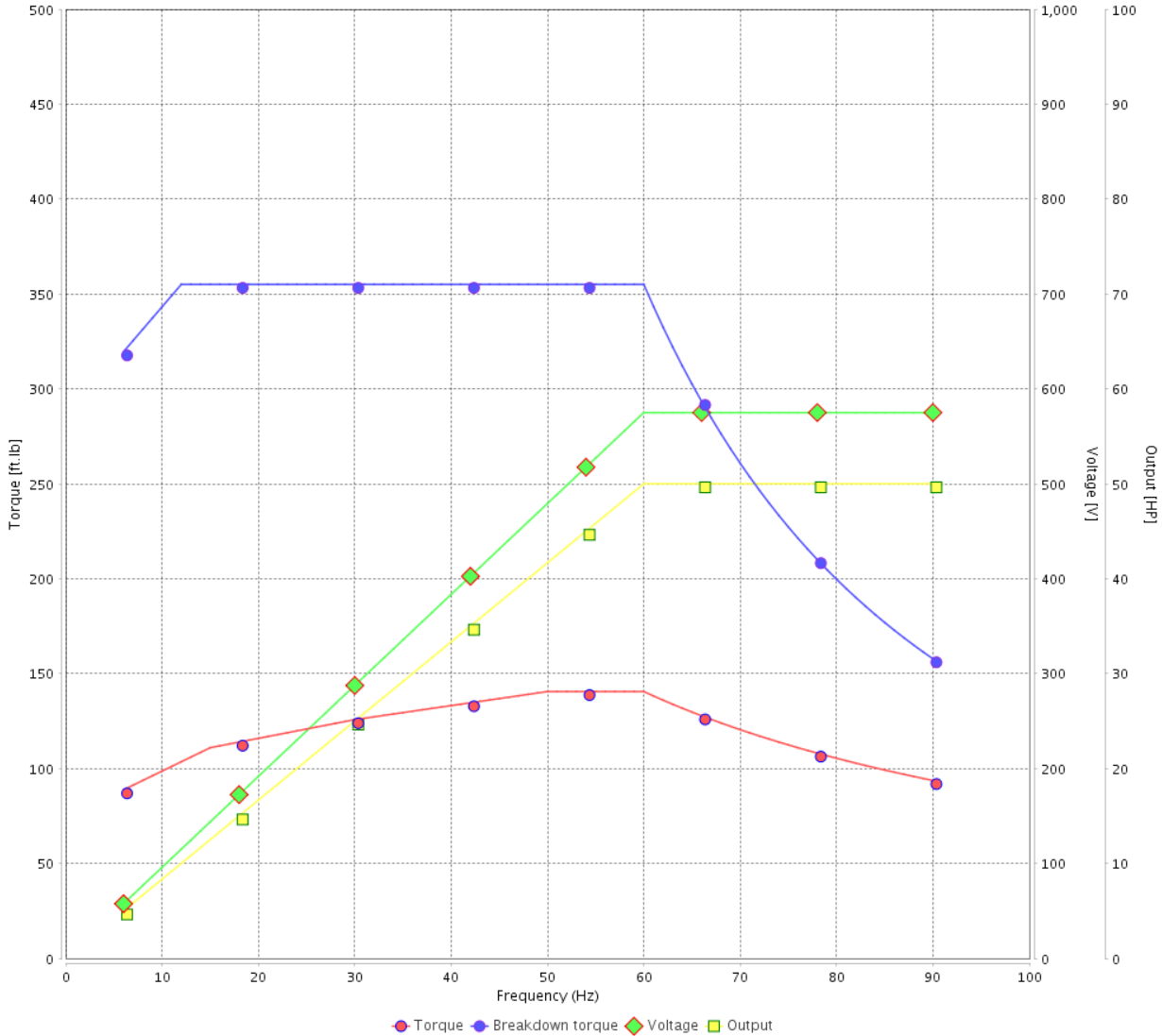
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VFD OPERATION CURVE

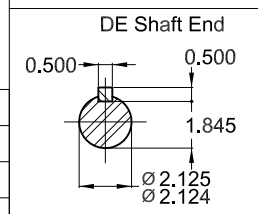
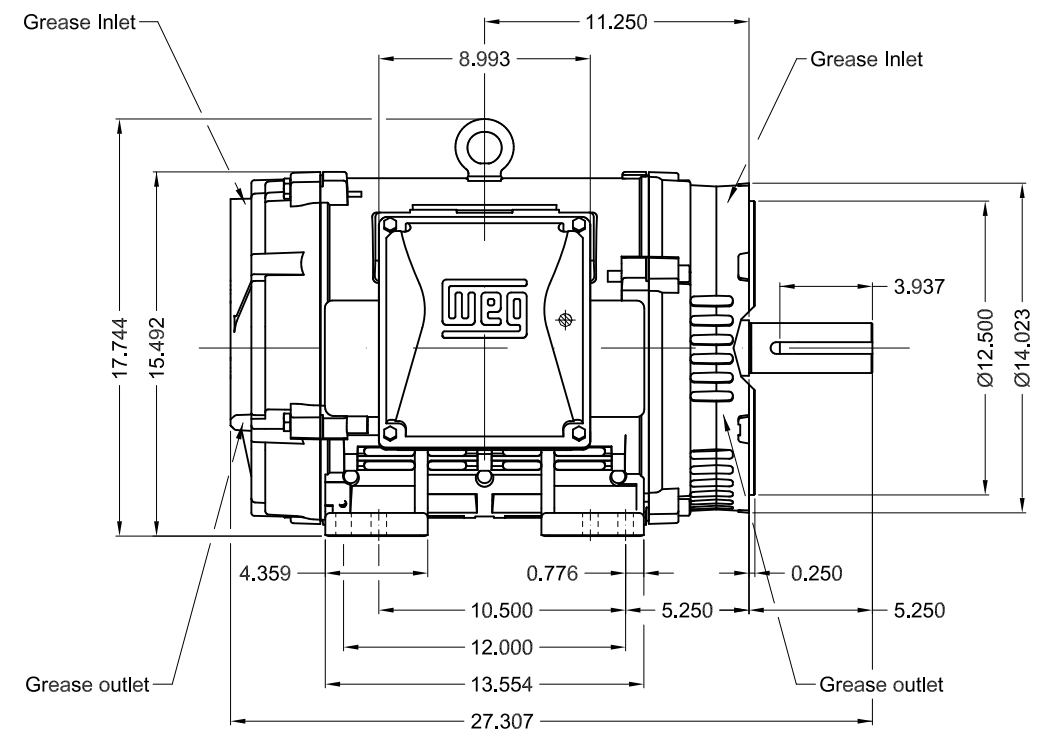
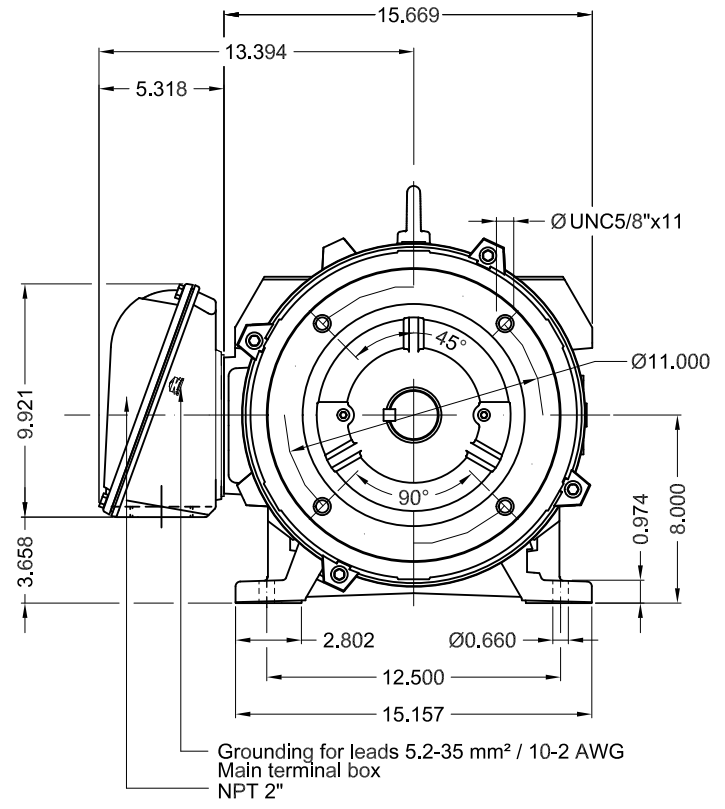


Performance : 575 V 60 Hz 4P

Rated current : 46.8 A
LRC : 6.3
Rated torque : 148 ft.lb
Locked rotor torque : 240 %
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Rated speed : 1775 rpm

Moment of inertia (J) : 7.08 sq.ft.lb
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Color RAL 5009
 Painting plan 203A
 Mounting NEMA F-1
 Mounting B34R(D)

50 HP 04 Poles 60 Hz A

1:8

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 PREM. EFF.					
CHECKED		FRAME 324/6TC IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
WDD



MODEL 050180T3H326TC-W40
MADE IN BRAZIL
14497311

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

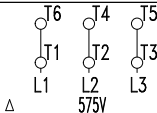


IEC 60034-1
MOD.T01#FOXON



For use on PWM, VT 1000:1, CT 3:1, 1.0SF

PH 3	FR 324/6TC	HP(kW) 50(37)		Hz 60
V 575		A 46.8		IP23
NEMA NOM EFF		94.5	%	RPM 1775
ENCL ODP	DUTY CONT.		INS. CL. F Δ T 80 K	
PF 0.84		DES B	CODE G	AMB. 40°C
SF 1.25		SFA 58.5		ALT 1000 m.a.s.l.



→ 6312-Z-C3
→ 6211-Z-C3

MOBIL POLYREX EM
21 g 20000 h

525 Lbs