

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	12448183																		
Catalog # :	04036ET3H324TS-W22																		
Frame : 324/6TS Output : 40 HP (30 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 37.0 A L. R. Amperes : 233 A LRC : 6.3x(Code G) No load current : 10.4 A Rated speed : 3560 rpm Slip : 1.11 % Rated torque : 59.1 ft.lb Locked rotor torque : 250 % Breakdown torque : 240 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 4.90 sq.ft.lb Design : B	Locked rotor time : 39s (cold) 22s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 76.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 537 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	91.6 91.7 92.4 92.4																		
Power Factor	0.55 0.80 0.86 0.88																		
Foundation loads																			
Max. traction : 275 lb																			
Max. compression : 812 lb																			
	<table border="0" style="width:100%;"> <tr> <td></td> <td style="text-align: center;"><u>Drive end</u></td> <td style="text-align: center;"><u>Non drive end</u></td> </tr> <tr> <td>Bearing type :</td> <td style="text-align: center;">6312 C3</td> <td style="text-align: center;">6212 C3</td> </tr> <tr> <td>Sealing :</td> <td style="text-align: center;">V'Ring</td> <td style="text-align: center;">V'Ring</td> </tr> <tr> <td>Lubrication interval :</td> <td style="text-align: center;">12000 h</td> <td style="text-align: center;">15000 h</td> </tr> <tr> <td>Lubricant amount :</td> <td style="text-align: center;">21 g</td> <td style="text-align: center;">13 g</td> </tr> <tr> <td>Lubricant type :</td> <td colspan="2" style="text-align: center;">Mobil Polyrex EM</td> </tr> </table>		<u>Drive end</u>	<u>Non drive end</u>	Bearing type :	6312 C3	6212 C3	Sealing :	V'Ring	V'Ring	Lubrication interval :	12000 h	15000 h	Lubricant amount :	21 g	13 g	Lubricant type :	Mobil Polyrex EM	
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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																			
Checked by			Page	Revision															
Date	13/04/2022		1 / 6																

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



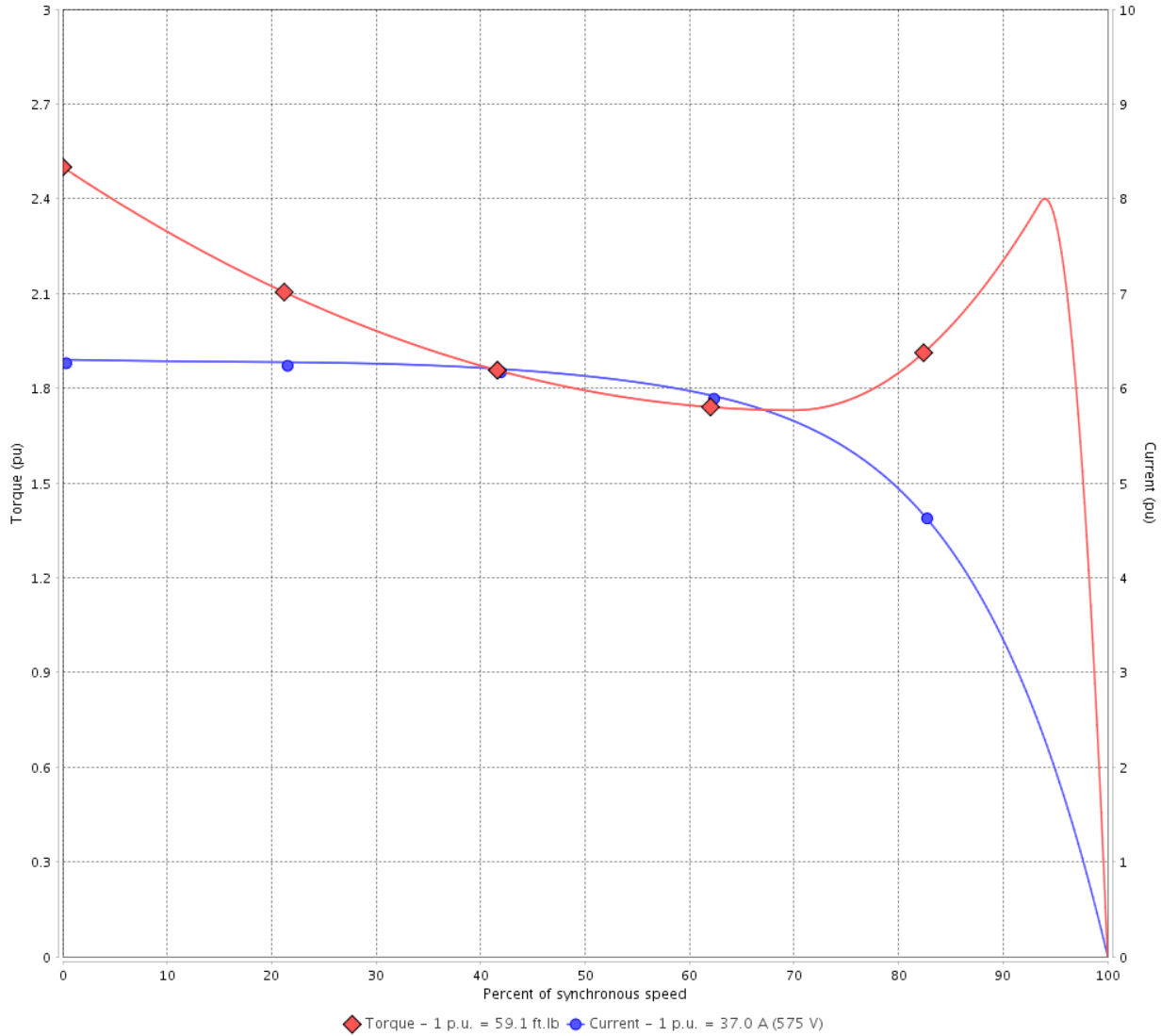
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Performance : 575 V 60 Hz 2P

Rated current	: 37.0 A	Moment of inertia (J)	: 4.90 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 59.1 ft.lb	Insulation class	: F
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Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 3560 rpm	Design	: B

Locked rotor time : 39s (cold) 22s (hot)

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Date	13/04/2022			

LOAD PERFORMANCE CURVE

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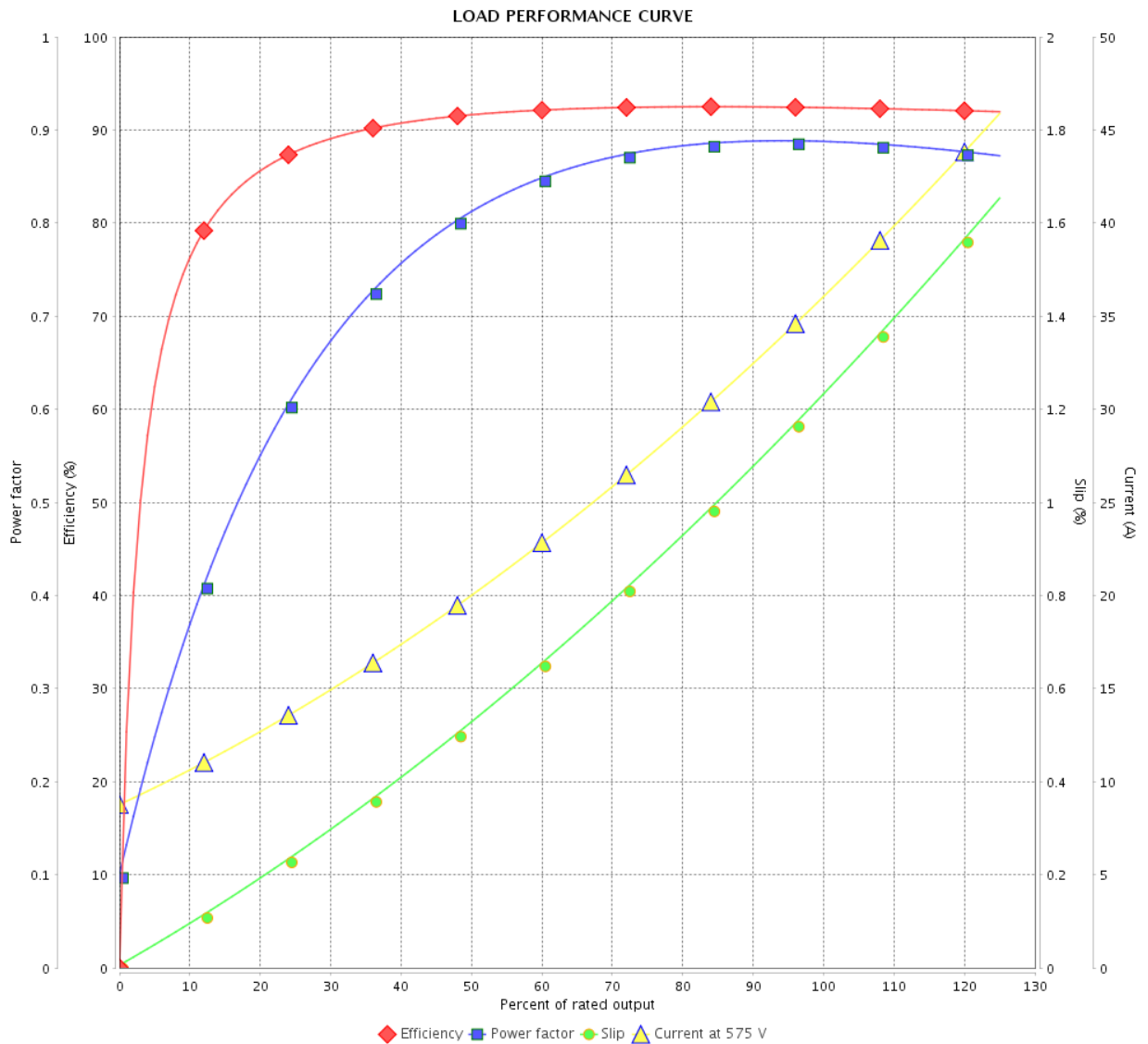


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 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

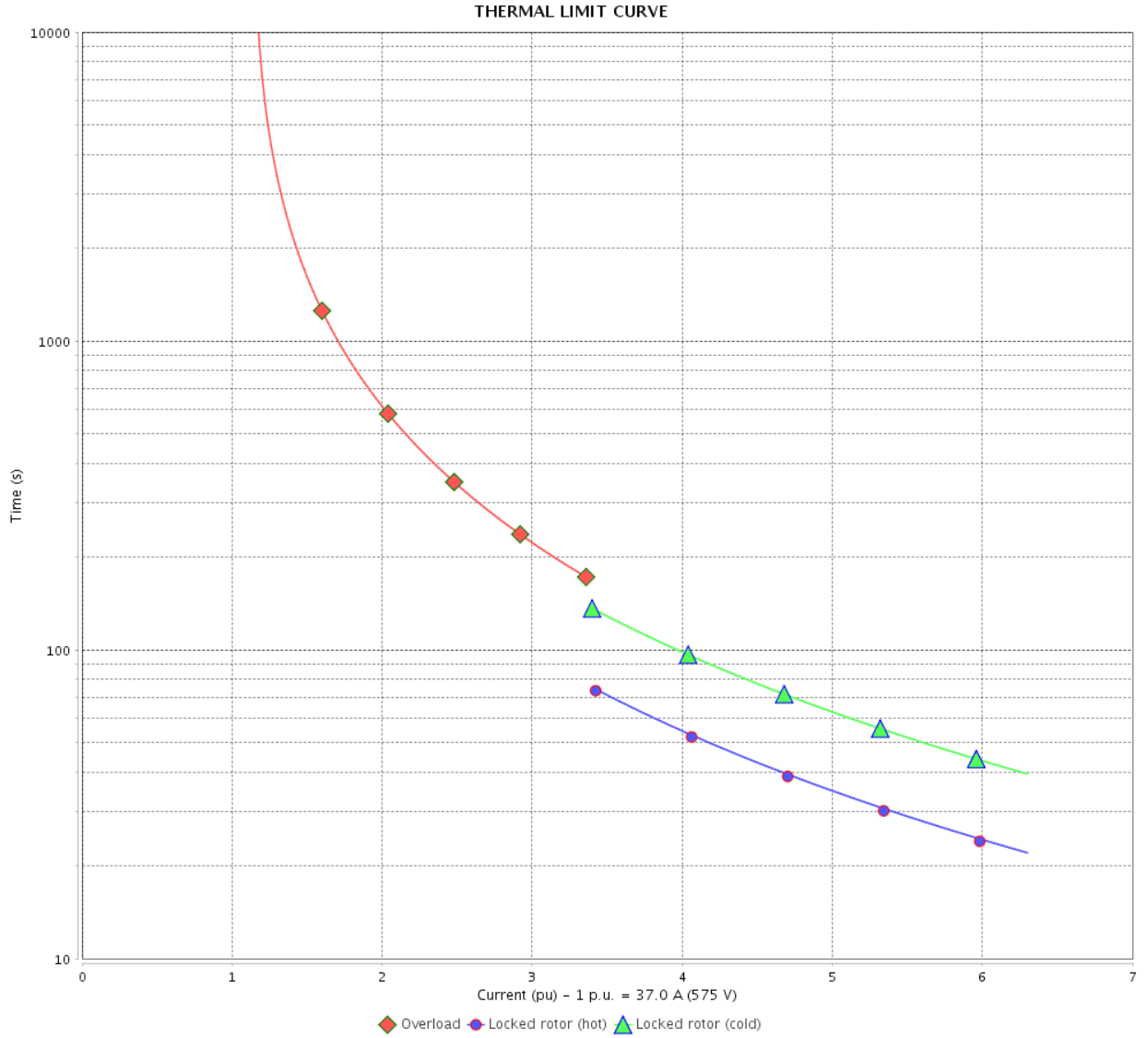
Rev.	Changes Summary	Performed	Checked	Date
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



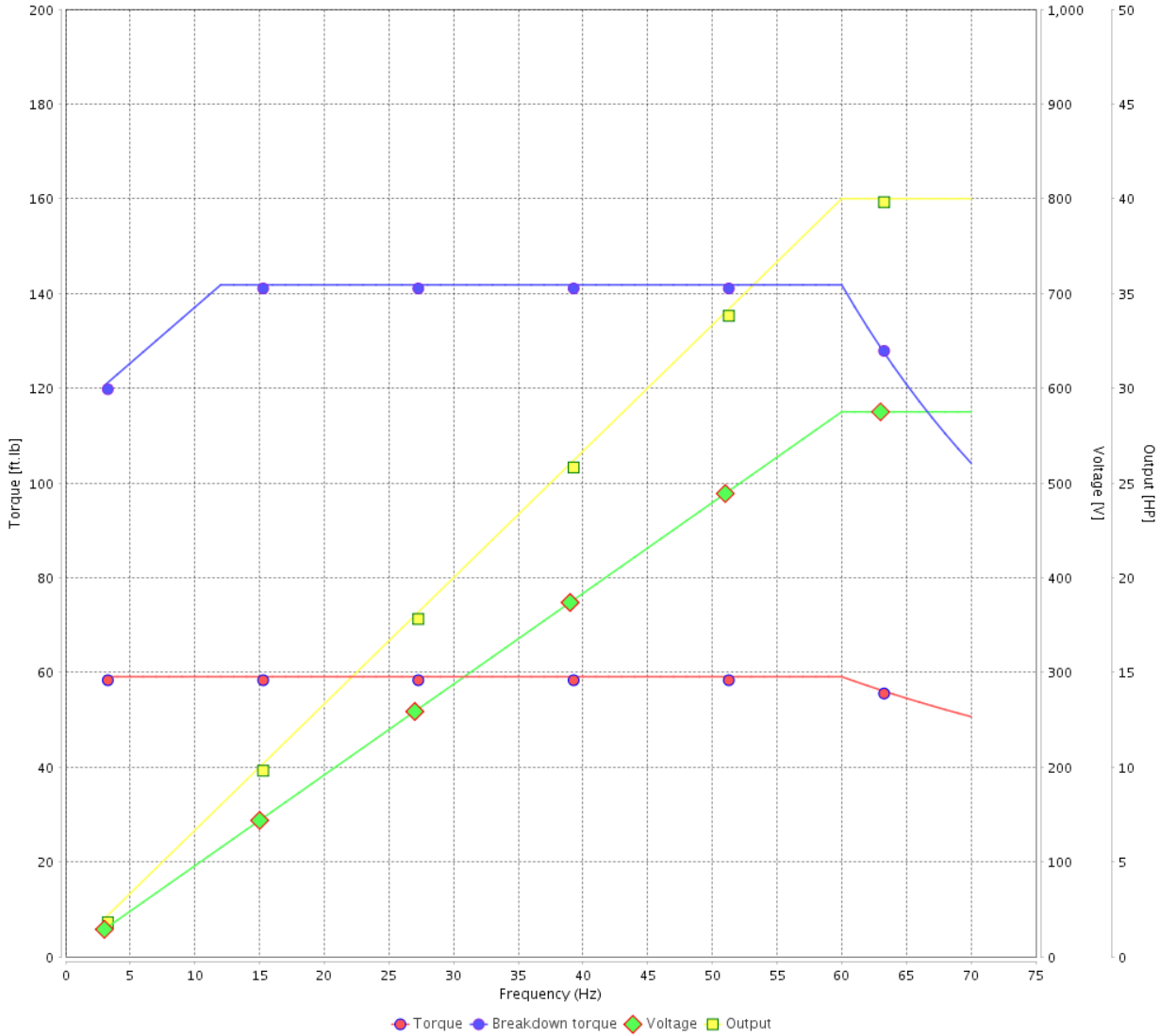
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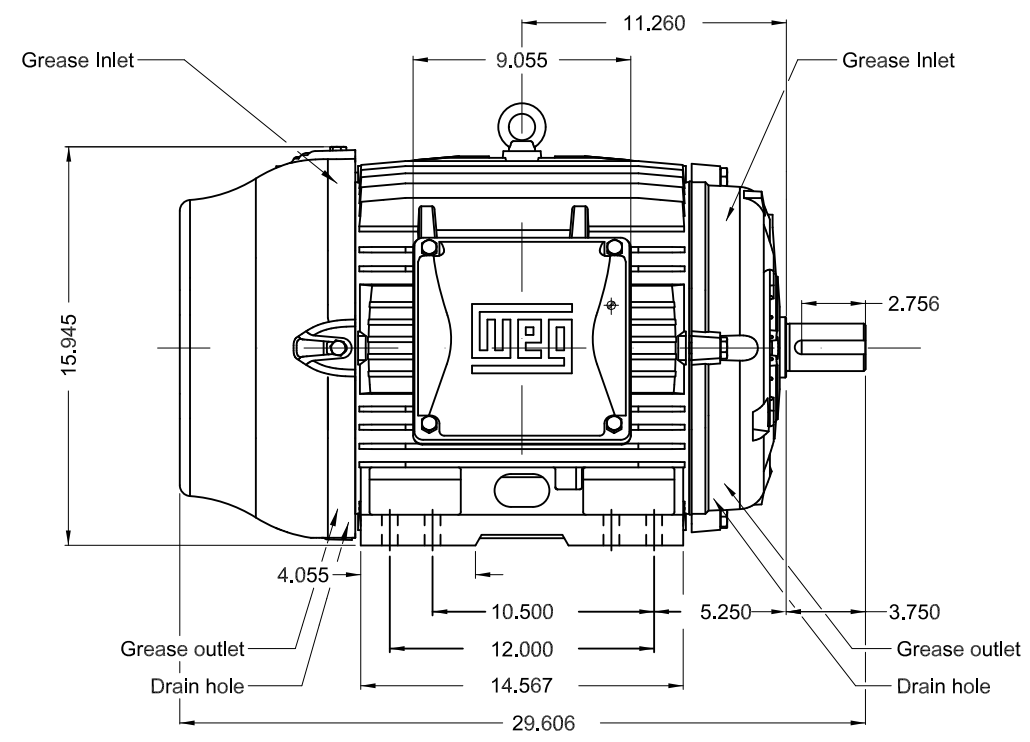
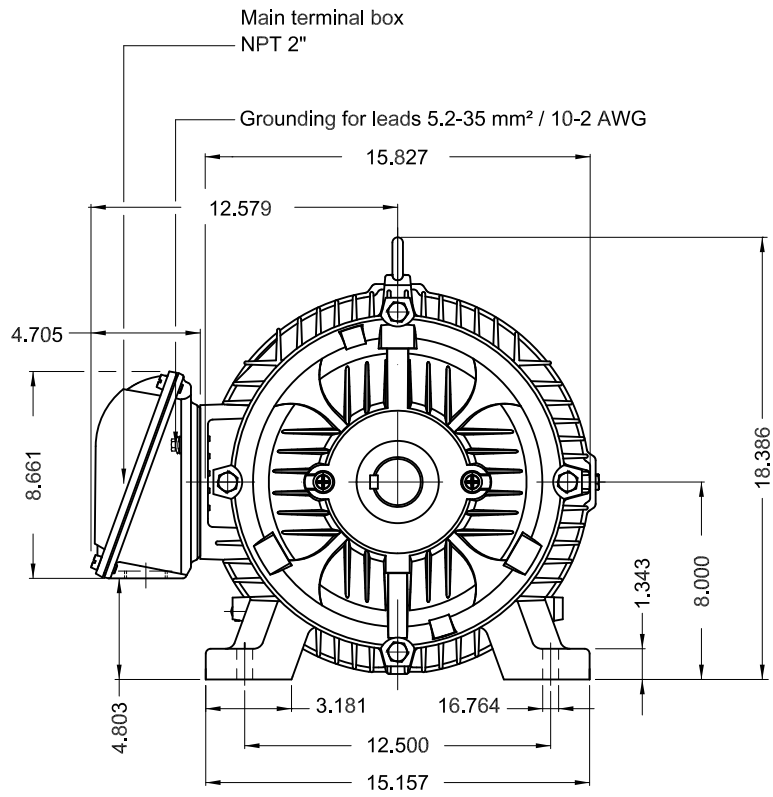
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1 2 3 4 5 6

A

B

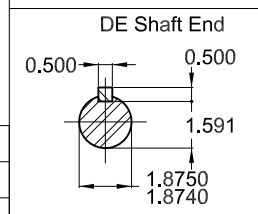
C



D

E

Color RAL 5009
 Painting plan 203A
 Mounting B3R(D)



40 HP 02 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF. FRAME 324/6TS IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO		Jaragua do Sul	Product Engineering	SHEET	1 / 1	

PREVIEW
 WDD



Dimensions in inches XME A3



NEMA
Premium
W22



FOR SAFE AREA
Mod.TE1BFOXON
CC029A



Class I, Div 2, Gr A, B, C and D - T3
Class I, Zone 2, IIC - T3
Class II, Div 2, Gr F and G - T4
For use on PWM: Gr. A, B, C, D and F,
VT 1000:1, CT 20:1, 1.00SF - T3A

HT040502NPW22

Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. 324/6TS 1000m.a.s.l. IP55 TEFC 549lb

V 575

A 37.0

HP 40

kW 30

SF 1.25

SFA 46.3

RPM 3560

PF 0.88

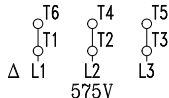
AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 92.4%

DUTY CONT.

DES B Code G



→ 6312-C3 (21g)

→ 6212-C3 (13g)



MOBIL POLYREX EM (12000h)



MADE IN BRAZIL
12448183