

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	11568624																		
Catalog # :	05036ET3H326TS-W22																		
Frame : 324/6TS Output : 50 HP (37 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 44.9 A L. R. Amperes : 283 A LRC : 6.3x(Code F) No load current : 11.2 A Rated speed : 3560 rpm Slip : 1.11 % Rated torque : 74.0 ft.lb Locked rotor torque : 240 % Breakdown torque : 229 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 5.75 sq.ft.lb Design : B	Locked rotor time : 36s (cold) 20s (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 : 582 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	92.9 93.0 93.0 93.0																		
Power Factor	0.58 0.81 0.87 0.89																		
Foundation loads																			
Max. traction	: 360 lb																		
Max. compression	: 942 lb																		
	<table border="0"> <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>: 6312 C3</td> <td>6212 C3</td> </tr> <tr> <td>Sealing</td> <td>: V'Ring</td> <td>V'Ring</td> </tr> <tr> <td>Lubrication interval</td> <td>: 12000 h</td> <td>15000 h</td> </tr> <tr> <td>Lubricant amount</td> <td>: 21 g</td> <td>13 g</td> </tr> <tr> <td>Lubricant type</td> <td colspan="2">: 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															
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Date	12/04/2022		1 / 6																

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



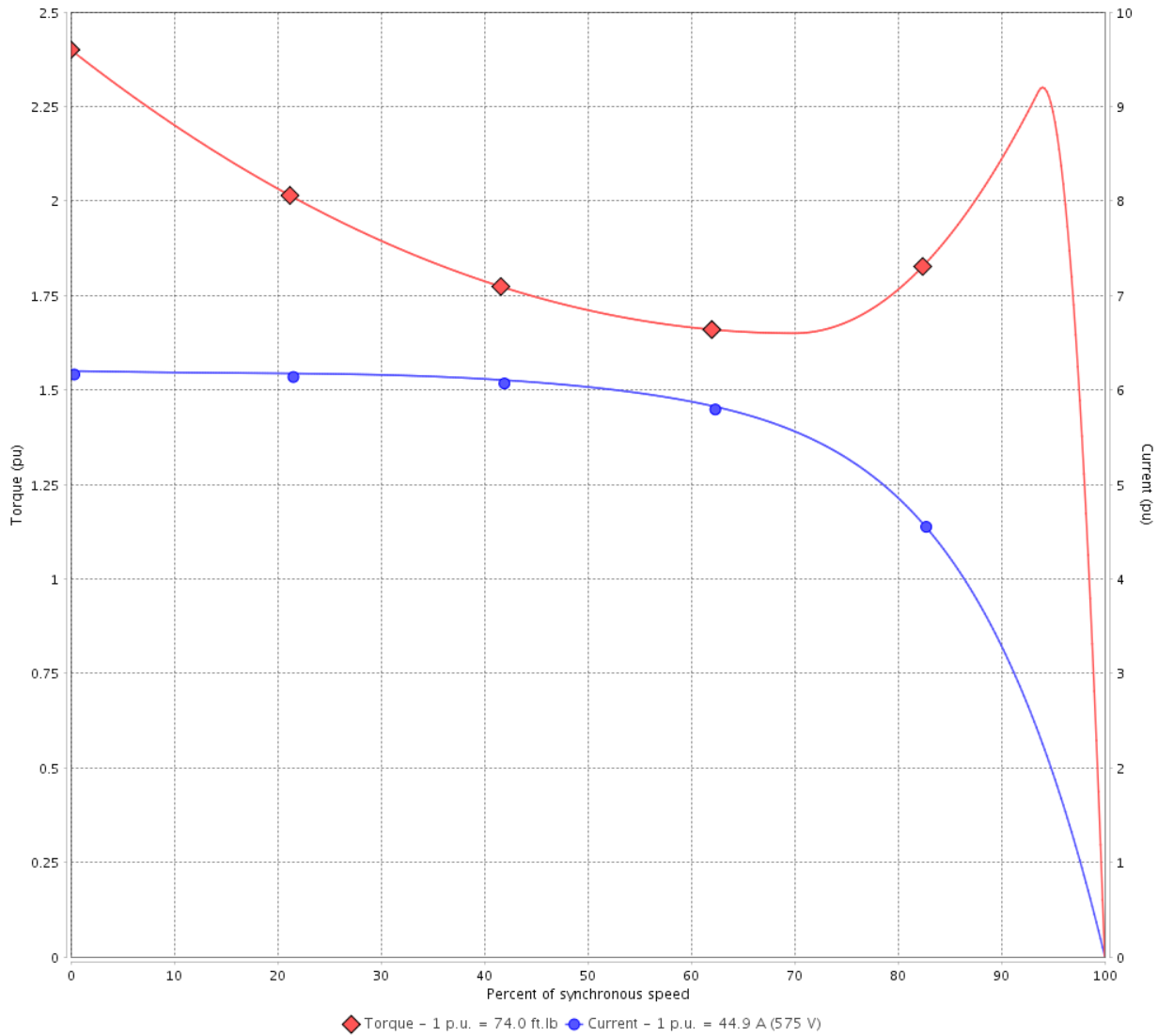
Customer :

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Catalog # : 05036ET3H326TS-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 44.9 A	Moment of inertia (J)	: 5.75 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 74.0 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 3560 rpm	Design	: B

Locked rotor time : 36s (cold) 20s (hot)

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Date	12/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

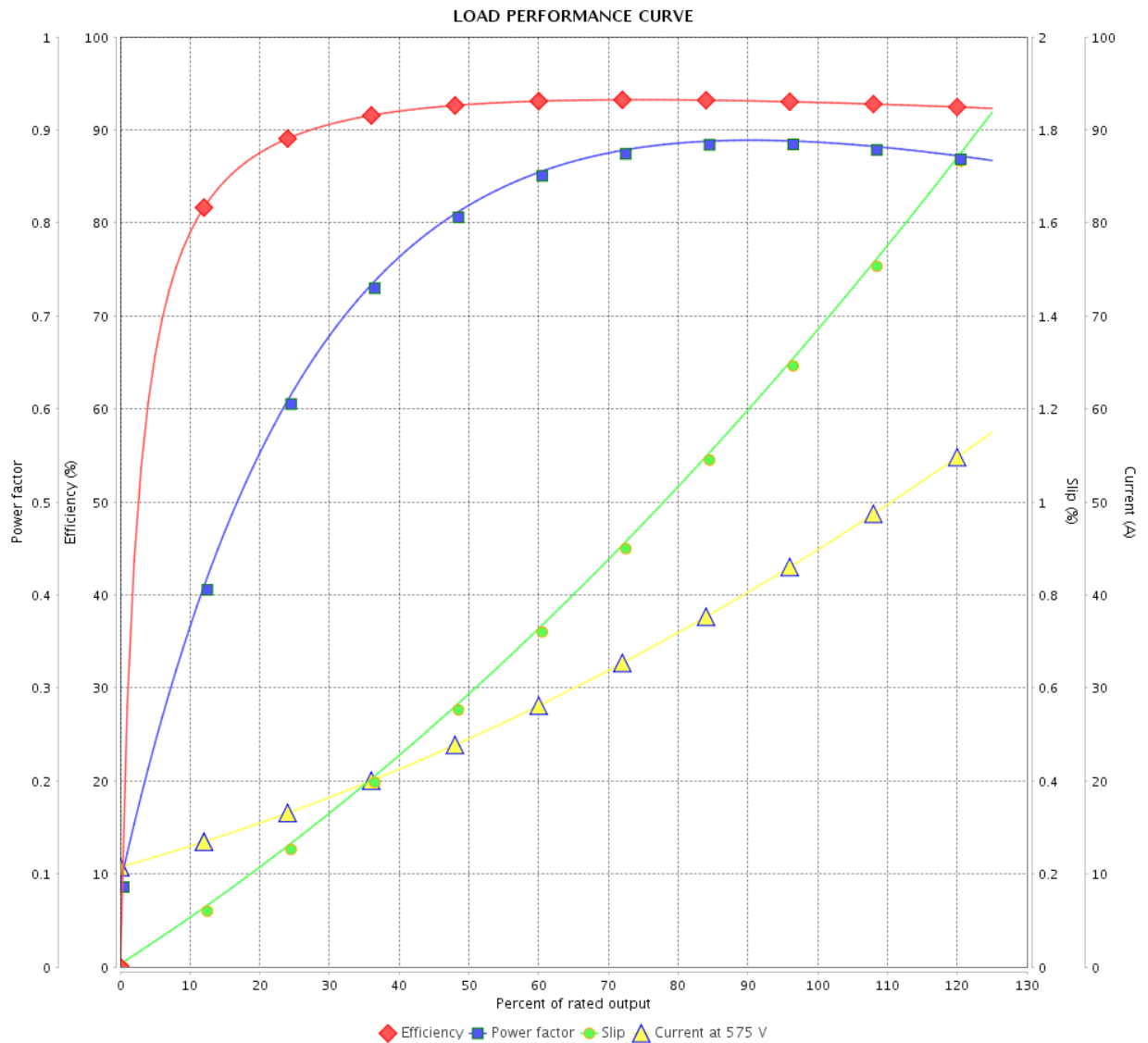


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Performance : 575 V 60 Hz 2P

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 Service factor : 1.25
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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

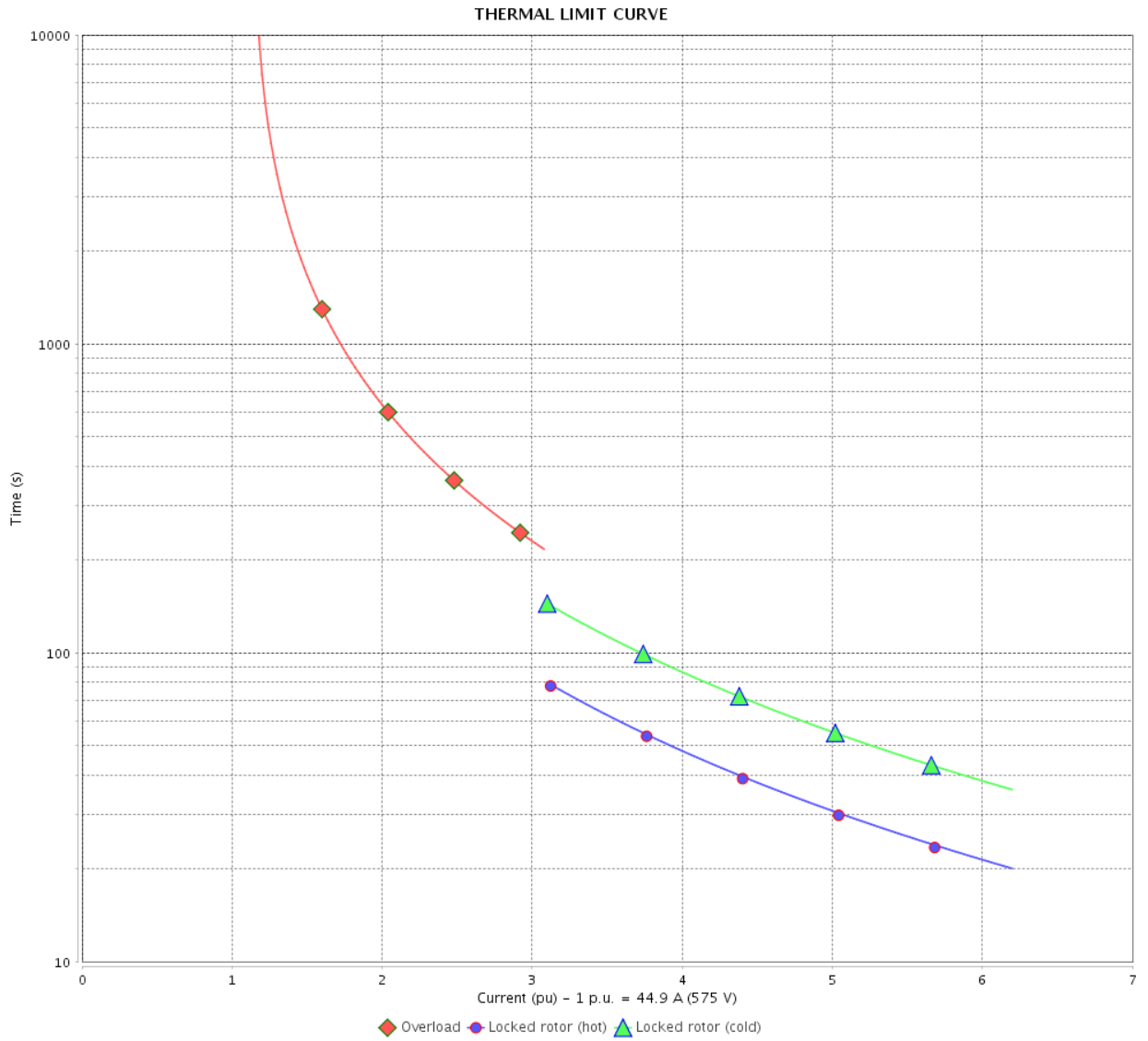
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Performed by				
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

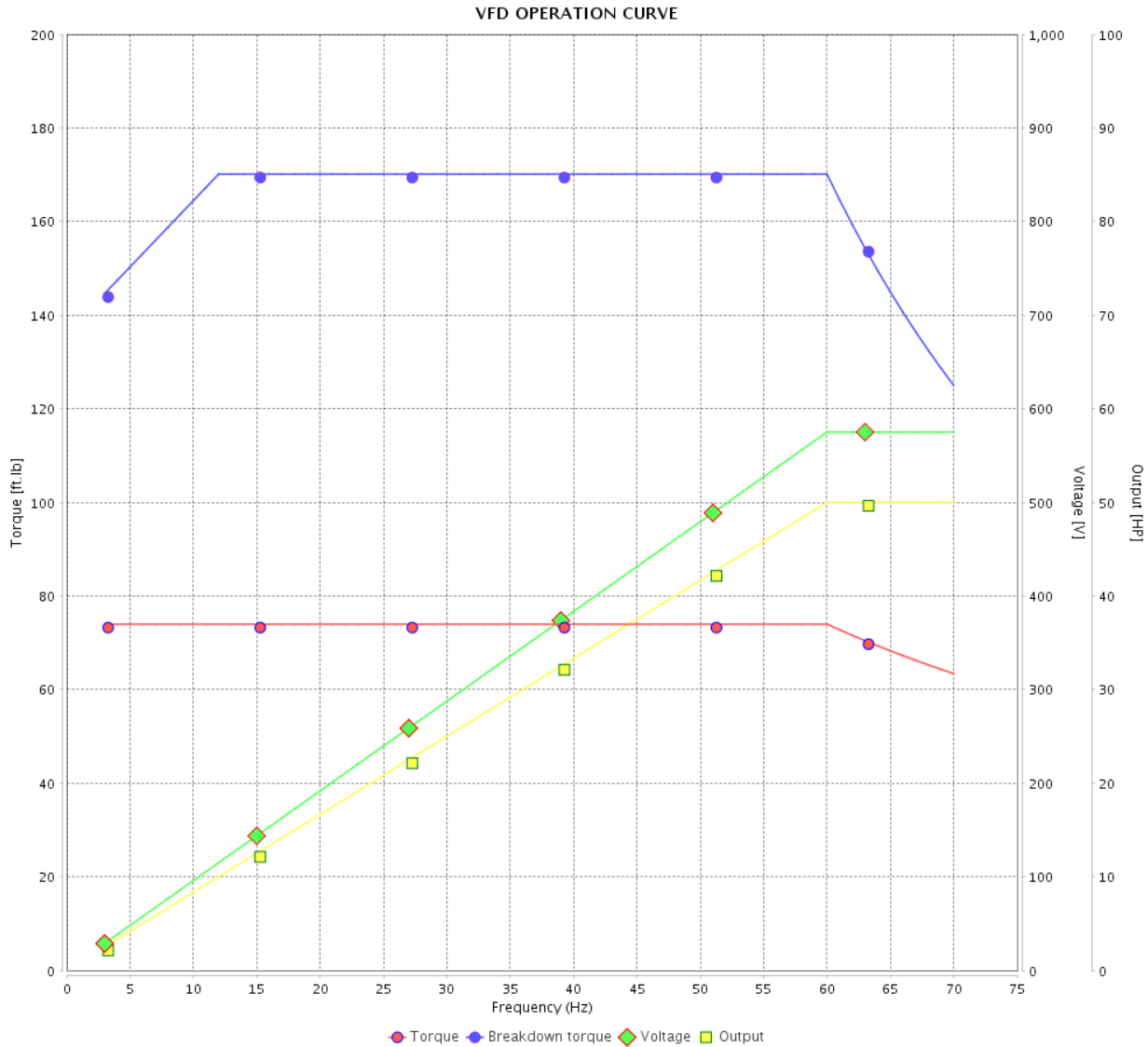


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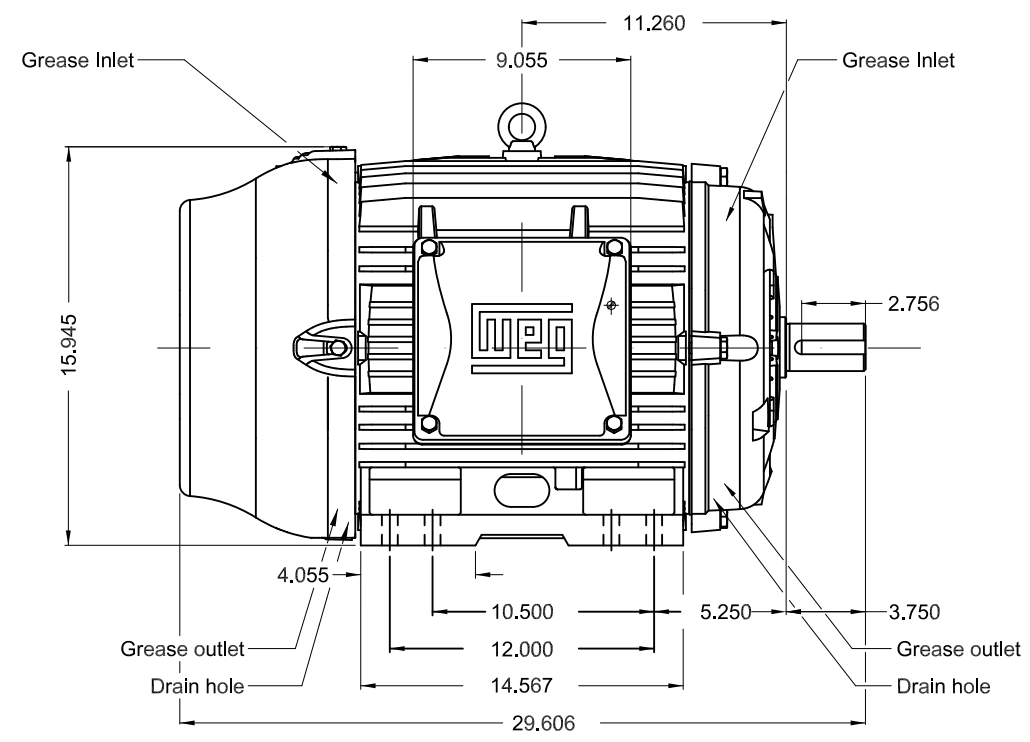
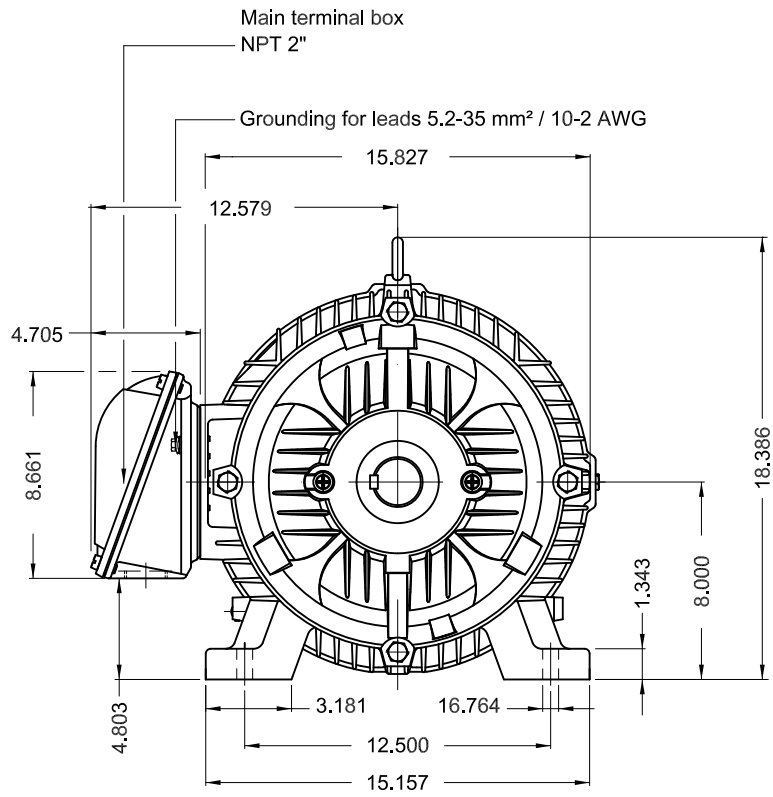
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1 2 3 4 5 6

A

B

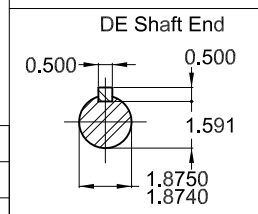
C



D

E

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



50 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





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

VJP PART # HT050502NPW22

Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. 324/6TS 1000m.a.s.l. IP55 TEFC 570lb

V 575

A 44.9

HP 50

kW 37

SF 1.25

SFA 56.1

RPM 3560

PF 0.89

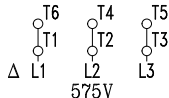
AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 93.0%

DUTY CONT.

DES B Code G

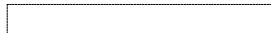


→ 6312-C3 (21g)

→ 6212-C3 (13g)



MOBIL POLYREX EM (12000h)



MADE IN BRAZIL
11568624