

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	11889668																		
Catalog # :	05018ET3H326JM-W22																		
Frame : 324/6JM Output : 50 HP (37 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 47.4 A L. R. Amperes : 294 A LRC : 6.2x(Code G) No load current : 18.8 A Rated speed : 1775 rpm Slip : 1.39 % Rated torque : 148 ft.lb Locked rotor torque : 229 % Breakdown torque : 270 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 9.16 sq.ft.lb Design : B	Locked rotor time : 27s (cold) 15s (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 <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 66.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 609 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	92.5 93.0 94.1 94.5																		
Power Factor	0.42 0.66 0.77 0.83																		
Foundation loads																			
Max. traction	: 1228 lb																		
Max. compression	: 1837 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>: 20000 h</td> <td>20000 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	: 20000 h	20000 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	12/04/2022		1 / 6																

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



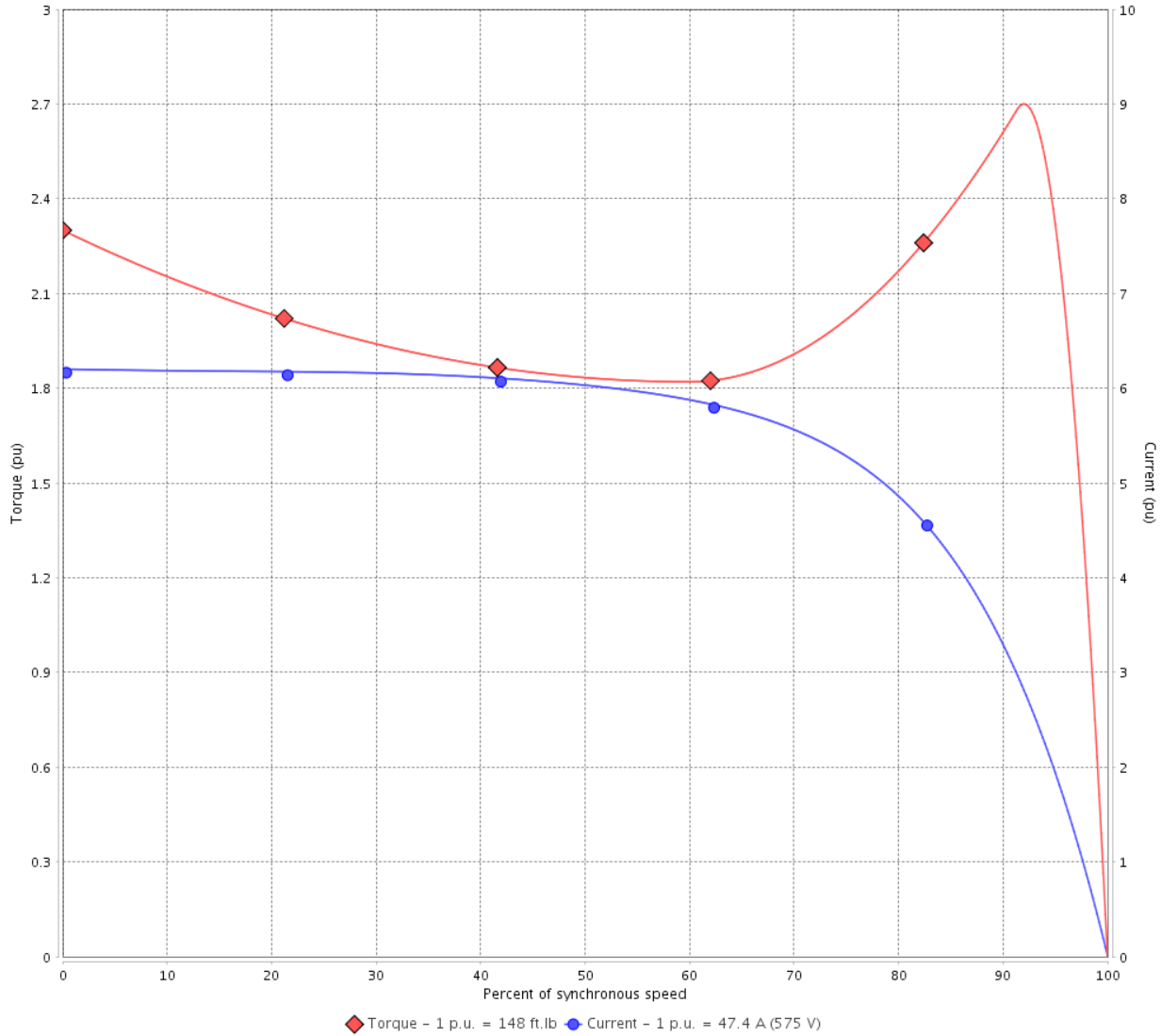
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11889668

Catalog # : 05018ET3H326JM-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 47.4 A	Moment of inertia (J)	: 9.16 sq.ft.lb
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 148 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

Locked rotor time : 27s (cold) 15s (hot)

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Performed by			Page 2 / 6	Revision
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Date	12/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

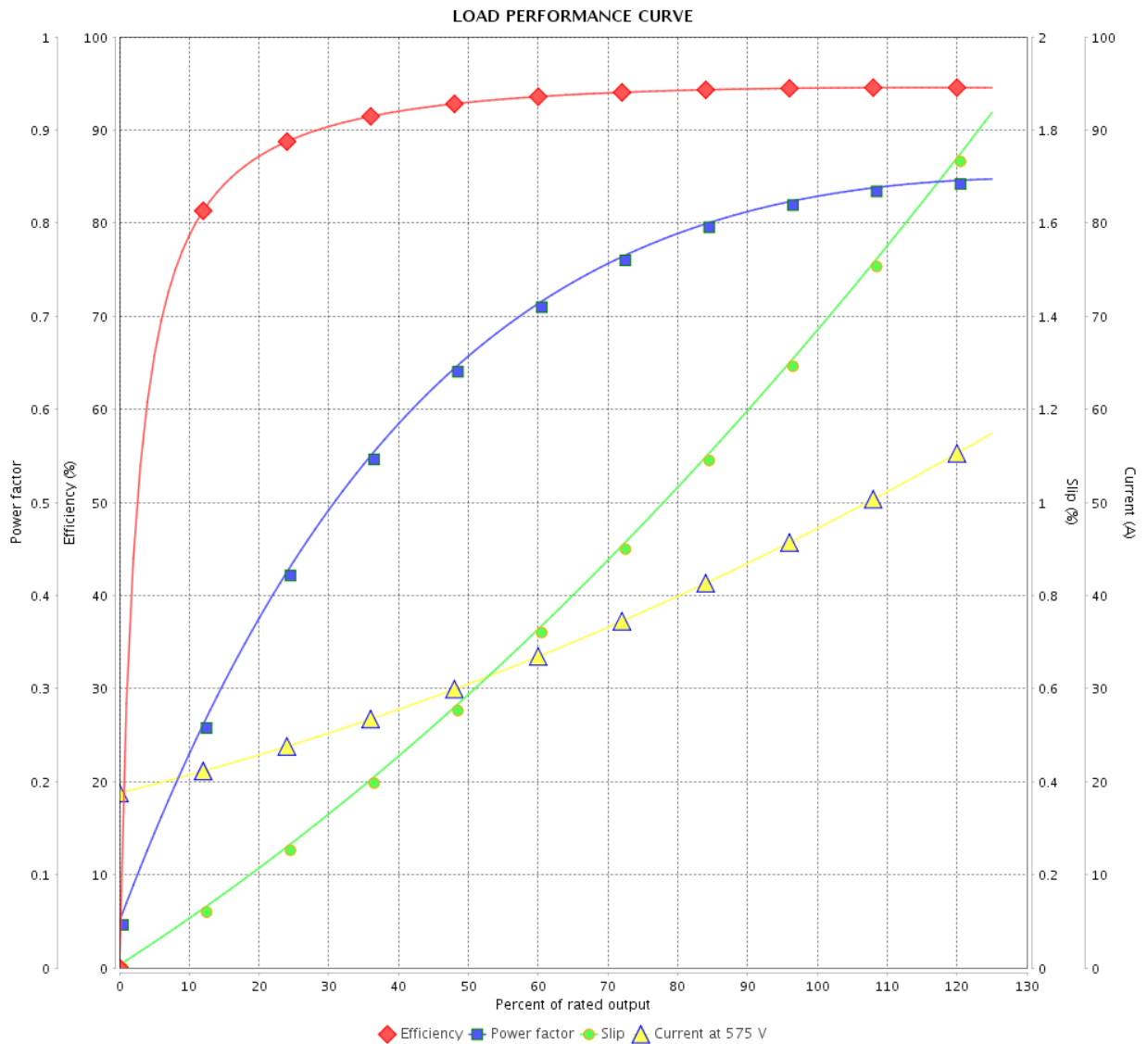


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11889668

Catalog # : 05018ET3H326JM-W22



Performance : 575 V 60 Hz 4P

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

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Date		12/04/2022		

# THERMAL LIMIT CURVE

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Heating constant

Cooling constant

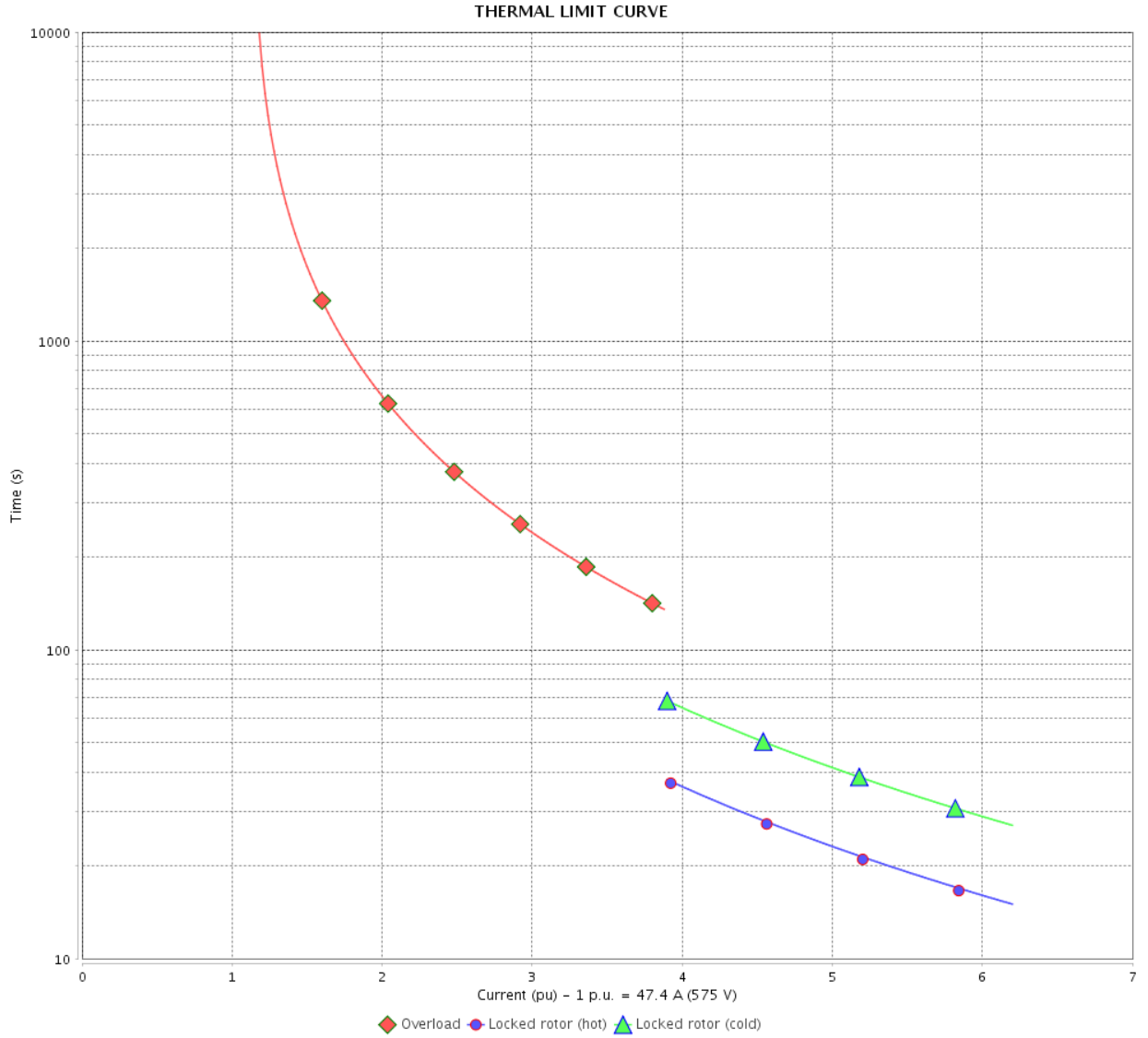
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
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Date		12/04/2022		

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



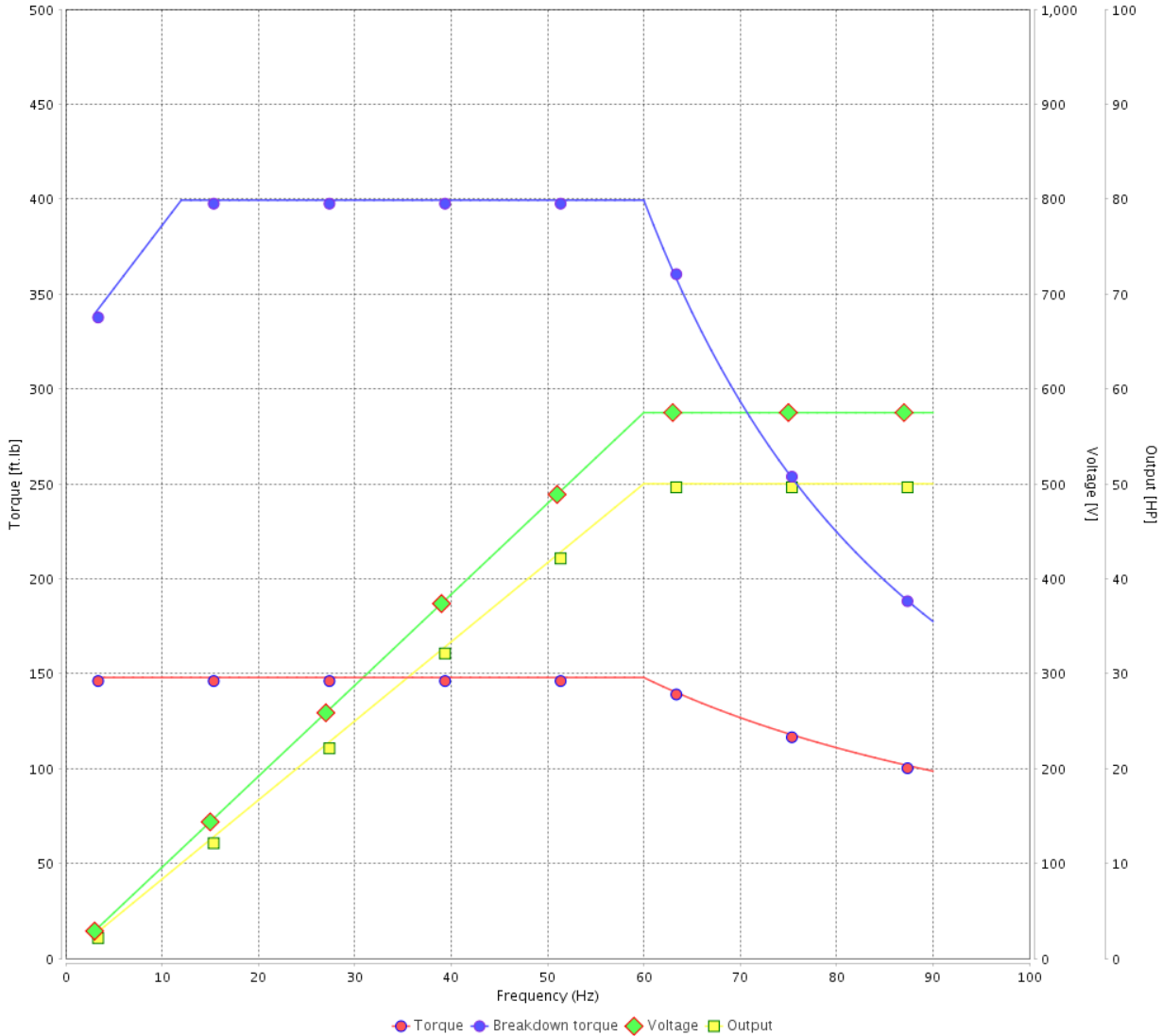
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 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

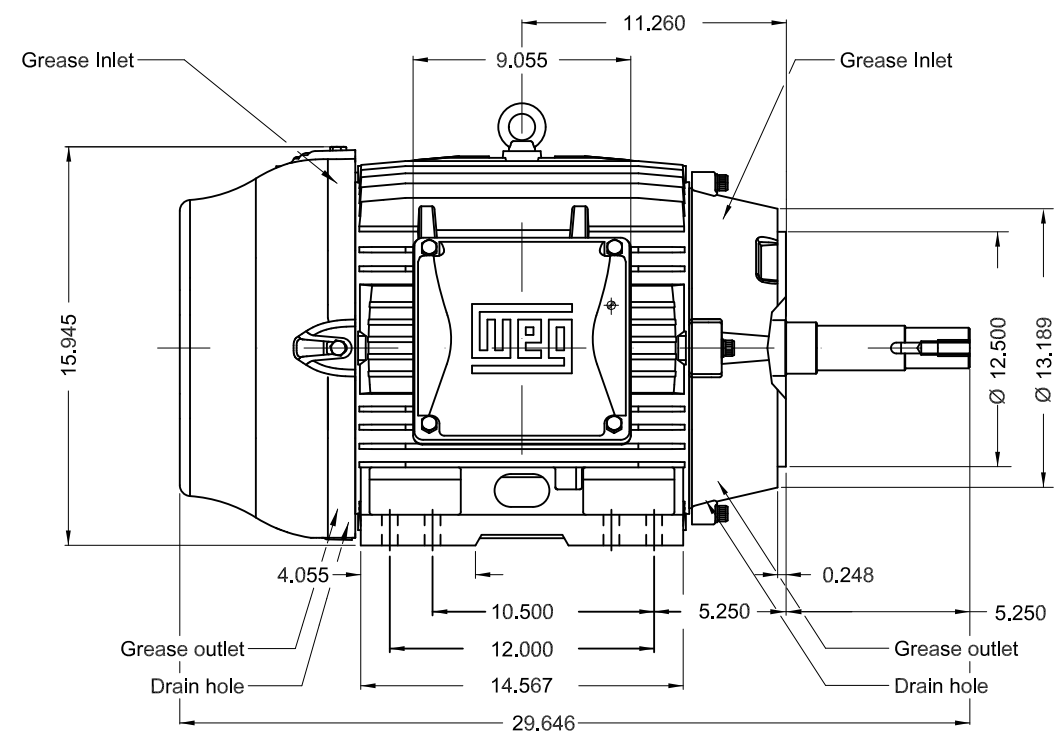
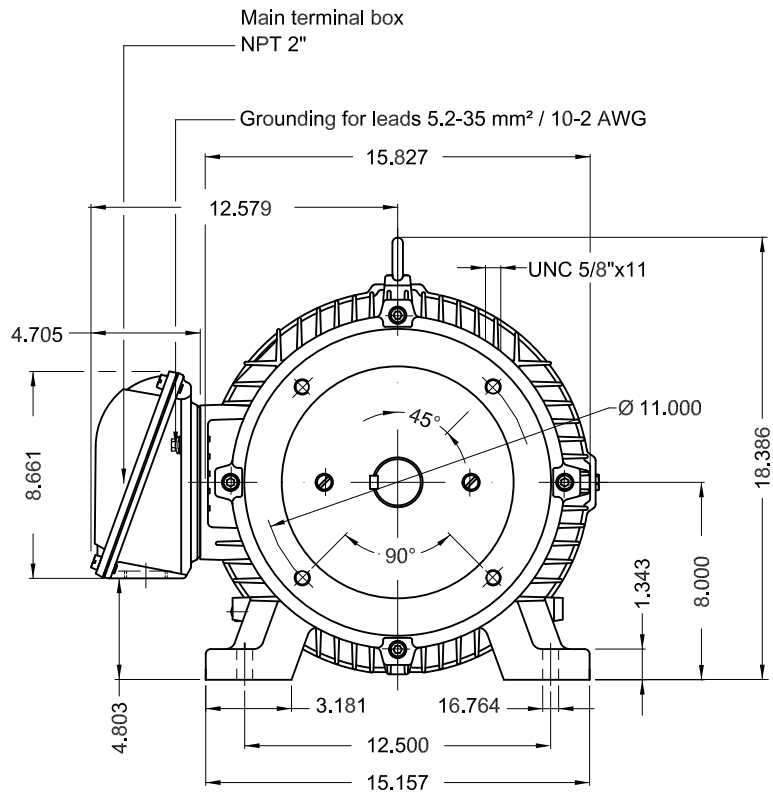
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1 2 3 4 5 6

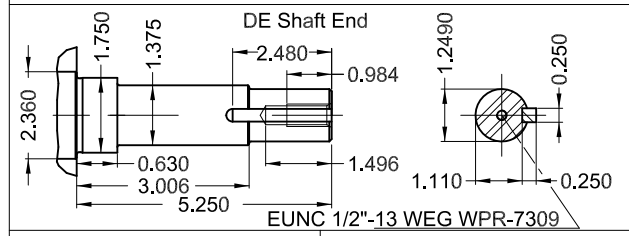
A

B

C



D



E

Color RAL 5009  
 Painting plan 203A  
 Mounting B34R(D)

50 HP 04 Poles 60 Hz A

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

**PREVIEW**  
 WDD



VJP PART # JM050504NPW22  
MADE IN BRAZIL  
11889668



*Inverter Duty Motor  
Severe Duty*

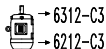
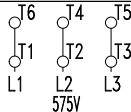


FOR SAFE AREA  
MOD.TE1BFOXON



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, 1.0SF, T3A

PH 3	FR 324/6JM	HP(kW) 50(37)		Hz 60
V 575		A 47.4		IP55
NEMA NOM EFF		94.5	%	RPM 1775
ENCL TEFC	DUTY CONT.		INS. CL. F $\Delta T$ 80 K	
PF 0.83		DES B	CODE G	AMB. 40°C
SF 1.25	SFA 59.3		ALT 1000 m.a.s.l.	



→ 6312-C3  
→ 6212-C3

MOBIL POLYREX EM  
21 g 20000 h

608 Lbs