

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line		: NEMA Premium Efficiency Three-Phase		Product code : 12712281			
			Catalog # :	04036ET3H324JM-W22			
Frame	:	324/6JM		Locked rotor time	:	39s (cold) 22s (hot)	
Output	:	40 HP (30 kW)		Temperature rise	:	80 K	
Poles	:	2		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	:	36.6 A		Protection degree	:	IP55	
L. R. Amperes	:	231 A		Cooling method	:	IC411 - TEFC	
LRC	:	6.3x(Code G)		Mounting	:	F-1	
No load current	:	8.80 A		Rotation ¹	:	Both (CW and CCW)	
Rated speed	:	3555 rpm		Noise level ²	:	76.0 dB(A)	
Slip	:	1.25 %		Starting method	:	Direct On Line	
Rated torque	:	59.1 ft.lb		Approx. weight ³	:	553 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					
Output	50%	75%	100%	Foundation loads			
Efficiency (%)	91.7	92.4	92.4	Max. traction		: 267 lb	
Power Factor	0.82	0.87	0.89	Max. compression		: 820 lb	
		<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					
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							
Checked by					Page	Revision	
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



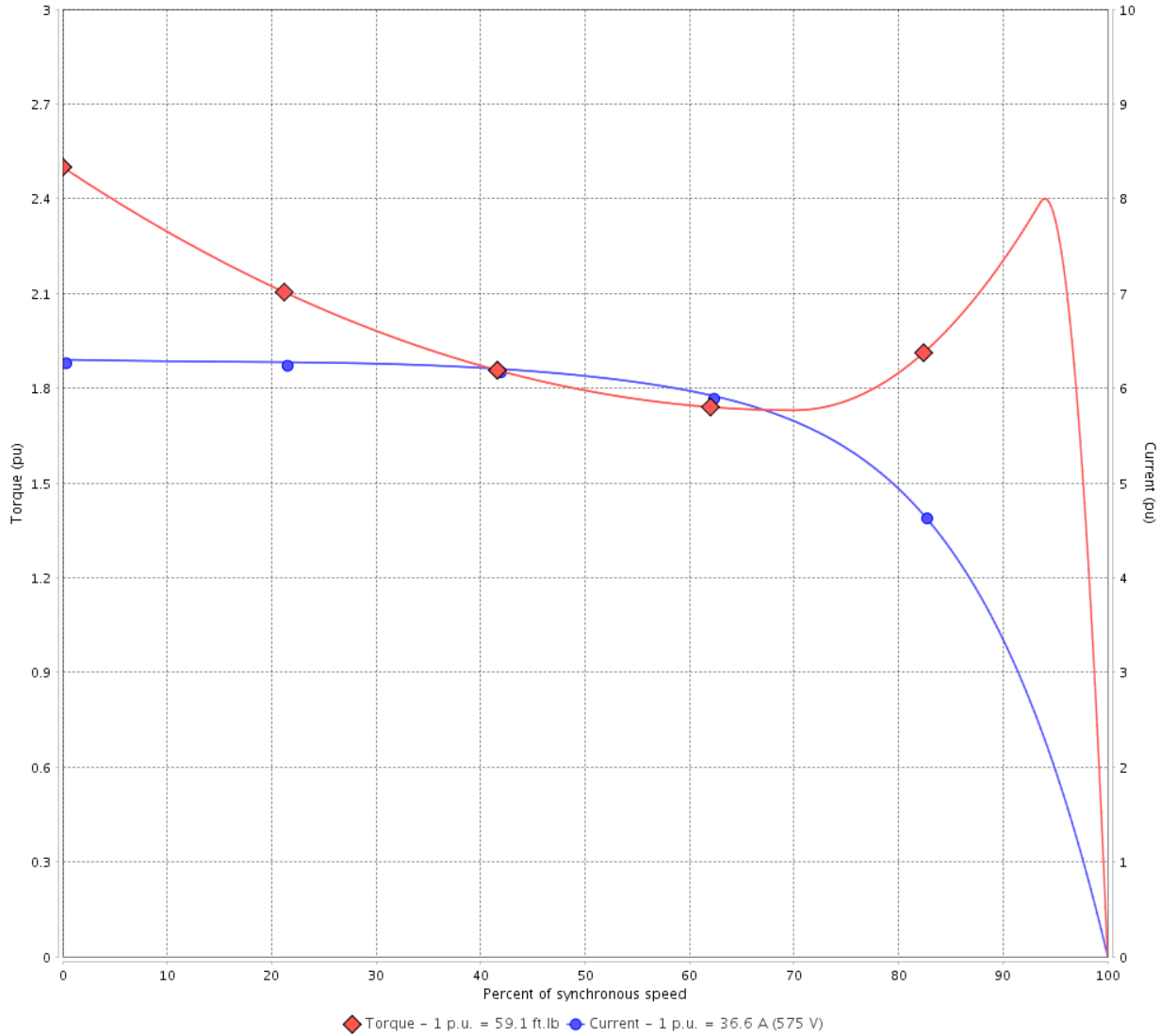
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12712281

Catalog # : 04036ET3H324JM-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 36.6 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
Locked rotor torque	: 250 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 3555 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

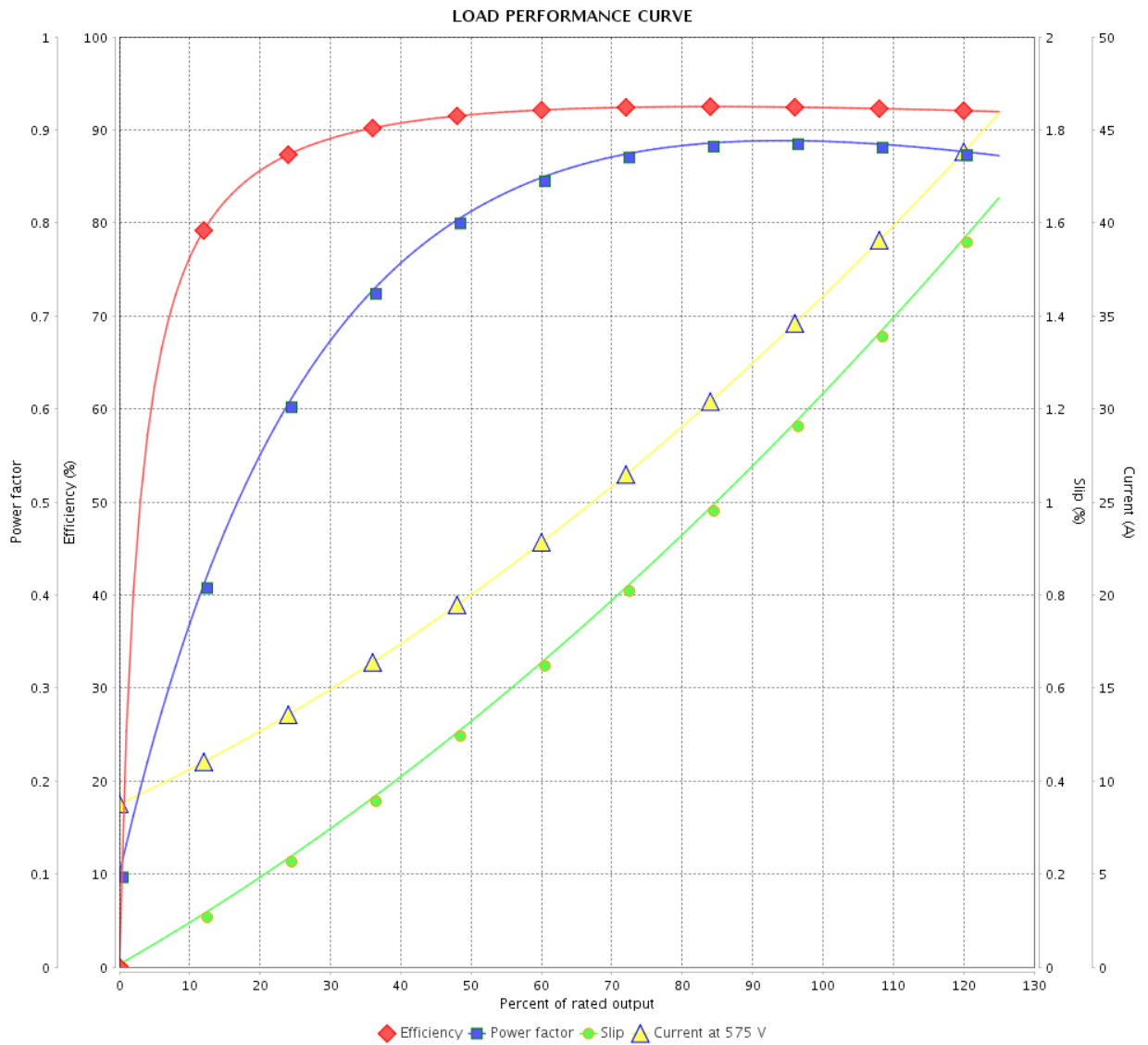


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Product line : NEMA Premium Efficiency Three-Phase

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Performance : 575 V 60 Hz 2P

Rated current : 36.6 A
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 Rated torque : 59.1 ft.lb
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Moment of inertia (J) : 4.90 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 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

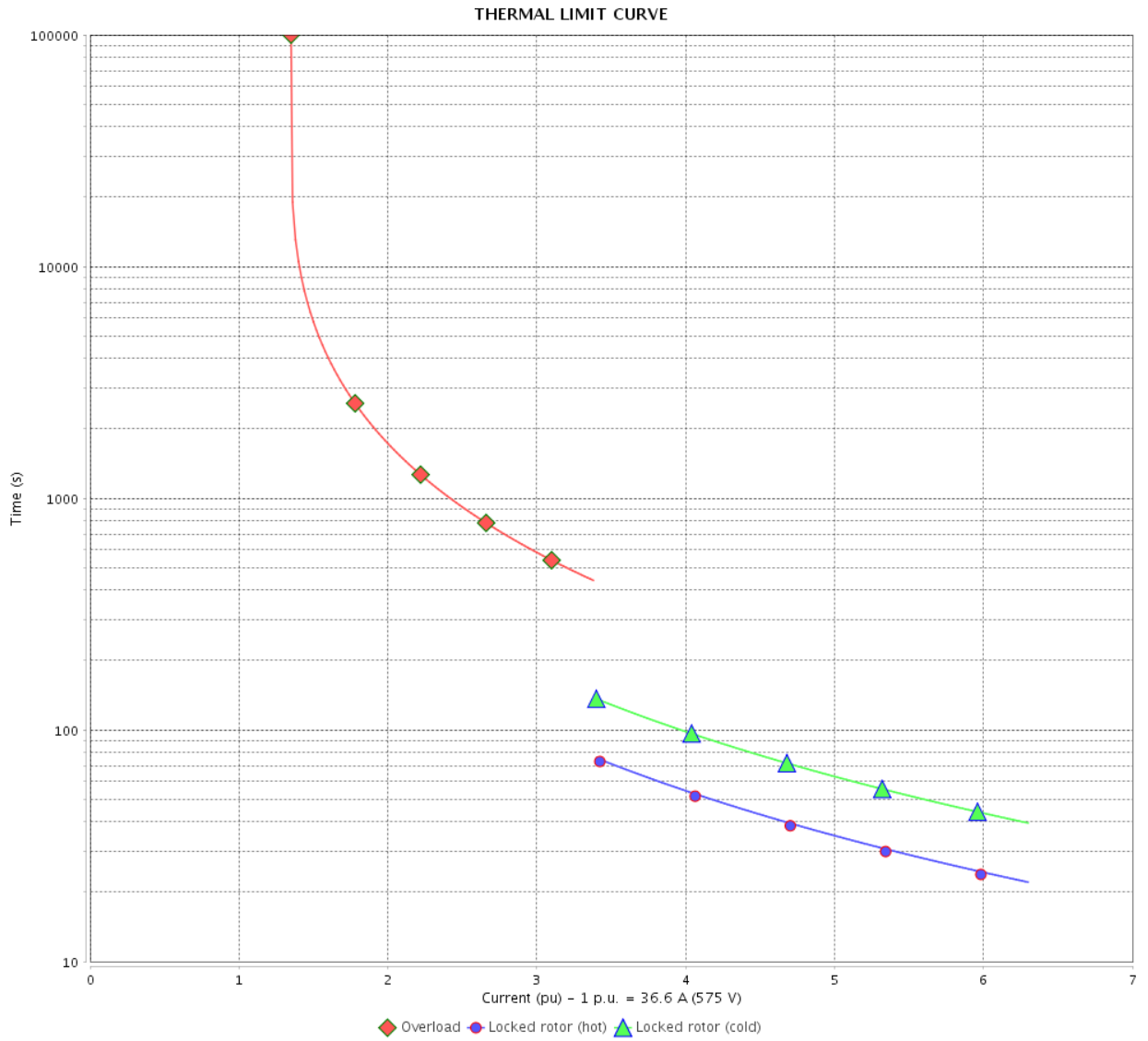
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



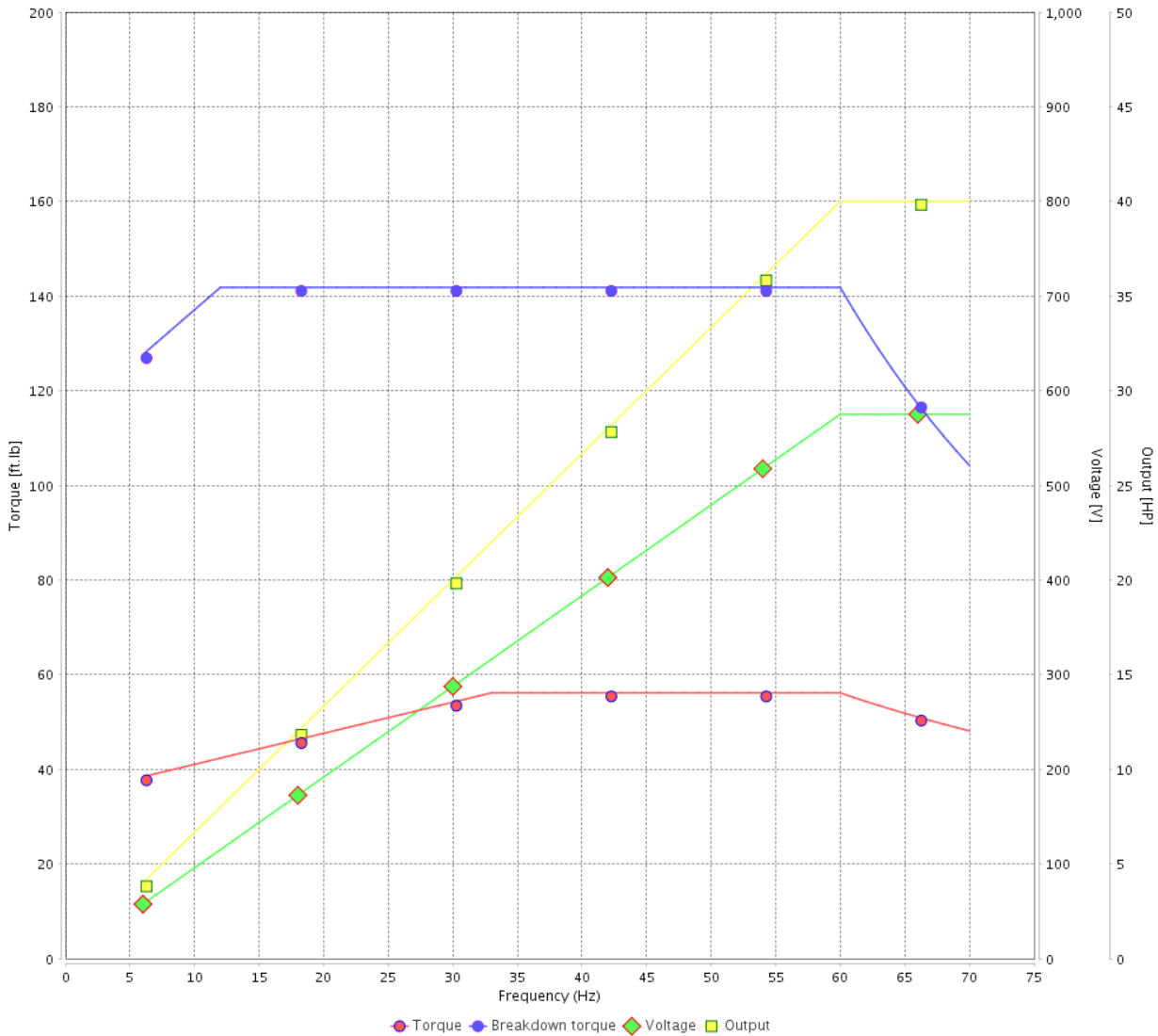
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VFD OPERATION CURVE



Performance : 575 V 60 Hz 2P

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

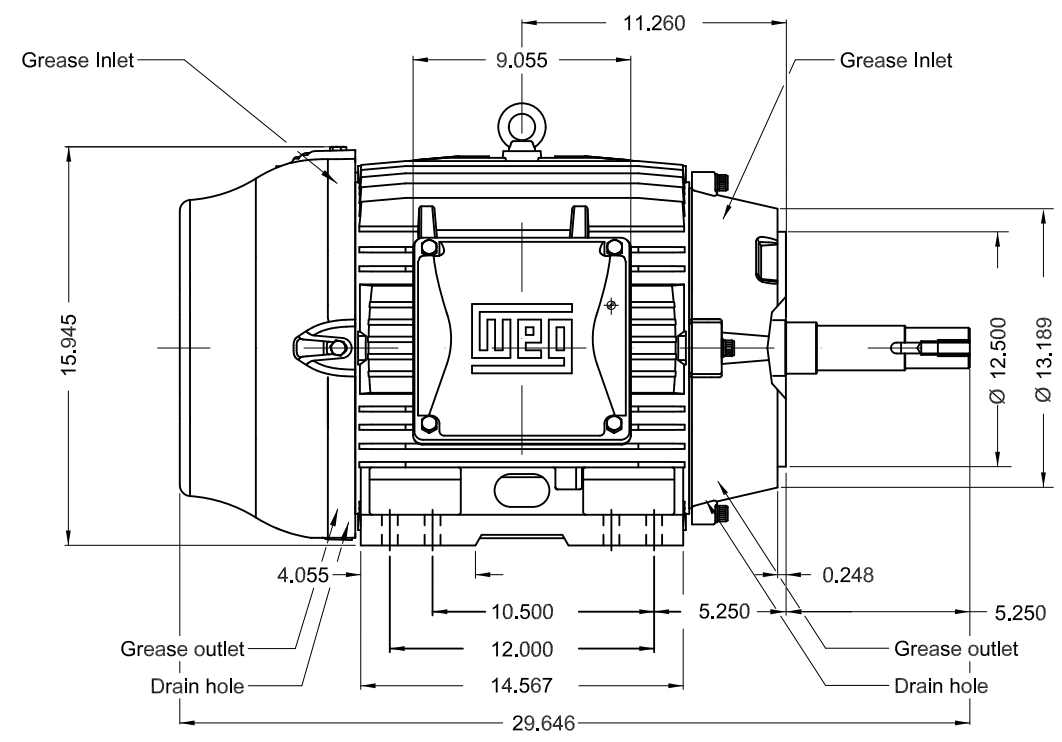
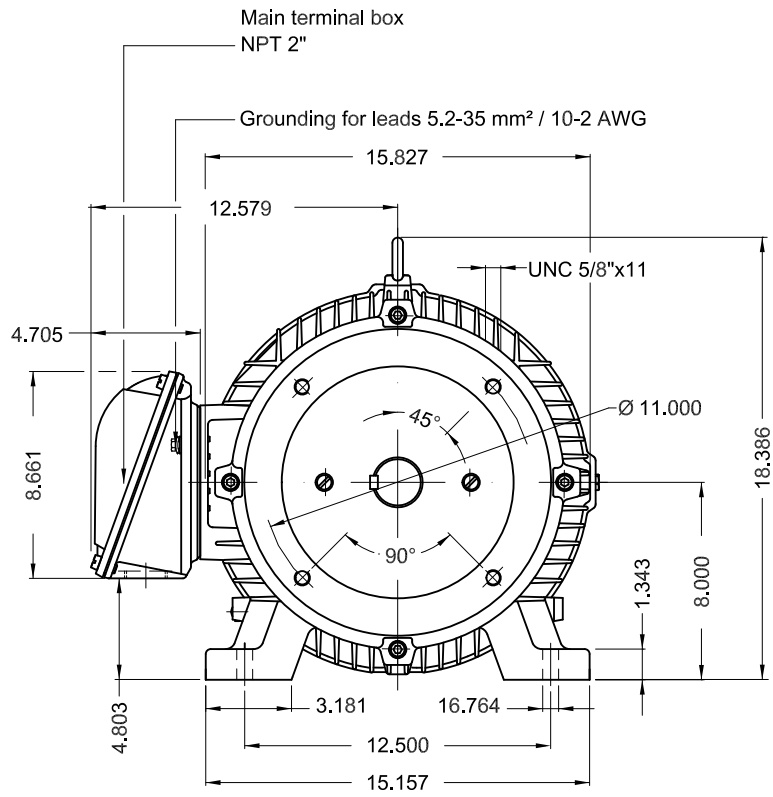
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1 2 3 4 5 6

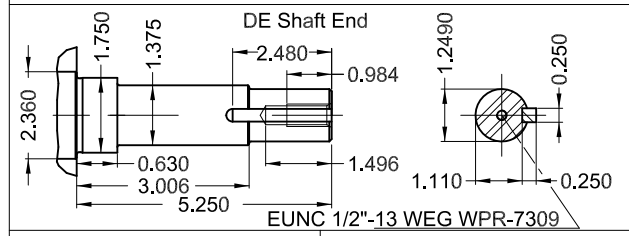
A

B

C



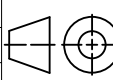

D



E

Color RAL 5009
 Painting plan 203A
 Mounting NEMA F-1
 Mounting B34R(D)

40 HP 02 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	PREVIEW WDD					
CHECKED								
RELEASED								
REL DT.								
		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		



*Inverter Duty Motor
Severe Duty*



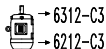
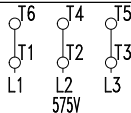
FOR SAFE AREA
MOD.TE1BFOXON



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

JM040502NPW22
MADE IN BRAZIL
12712281

PH 3	FR 324/6JM	HP(kW) 40(30)		Hz 60
V 575		A 37.0		IP55
NEMA NOM EFF		92.4	%	RPM 3560
ENCL TEFC	DUTY CONT.		INS. CL. F Δ T 80 K	
PF 0.88		DES B	CODE G	AMB. 40°C
SF 1.25	SFA 46.3		ALT 1000 m.a.s.l.	



→ 6312-C3
→ 6212-C3

MOBIL POLYREX EM
21 g 12000 h

553 Lbs