

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer	:					
Product line	: NEMA Premium Efficiency Three-Phase		Product code :	12941852		
			Catalog # :	00318ET3H182JP-W22		
Frame	: 182/4JP		Locked rotor time	: 41s (cold) 23s (hot)		
Output	: 3 HP (2.2 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	: 3.13 A		Protection degree	: IP55		
L. R. Amperes	: 25.3 A		Cooling method	: IC411 - TEFC		
LRC	: 8.1x(Code K)		Mounting	: F-1		
No load current	: 1.60 A		Rotation <sup>1</sup>	: Both (CW and CCW)		
Rated speed	: 1760 rpm		Noise level <sup>2</sup>	: 56.0 dB(A)		
Slip	: 2.22 %		Starting method	: Direct On Line		
Rated torque	: 8.95 ft.lb		Approx. weight <sup>3</sup>	: 94.1 lb		
Locked rotor torque	: 229 %					
Breakdown torque	: 340 %					
Insulation class	: F					
Service factor	: 1.25					
Moment of inertia (J)	: 0.3401 sq.ft.lb					
Design	: B					
Output	25%	50%	75%	100%		
Efficiency (%)	86.4	87.5	88.5	89.5		
Power Factor	0.36	0.61	0.73	0.79		
	Foundation loads					
			Max. traction	: 147 lb		
			Max. compression	: 241 lb		
		<u>Drive end</u>		<u>Non drive end</u>		
Bearing type	:	6307 ZZ		6206 ZZ		
Sealing	:	V'Ring		V'Ring		
Lubrication interval	:	-		-		
Lubricant amount	:	-		-		
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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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



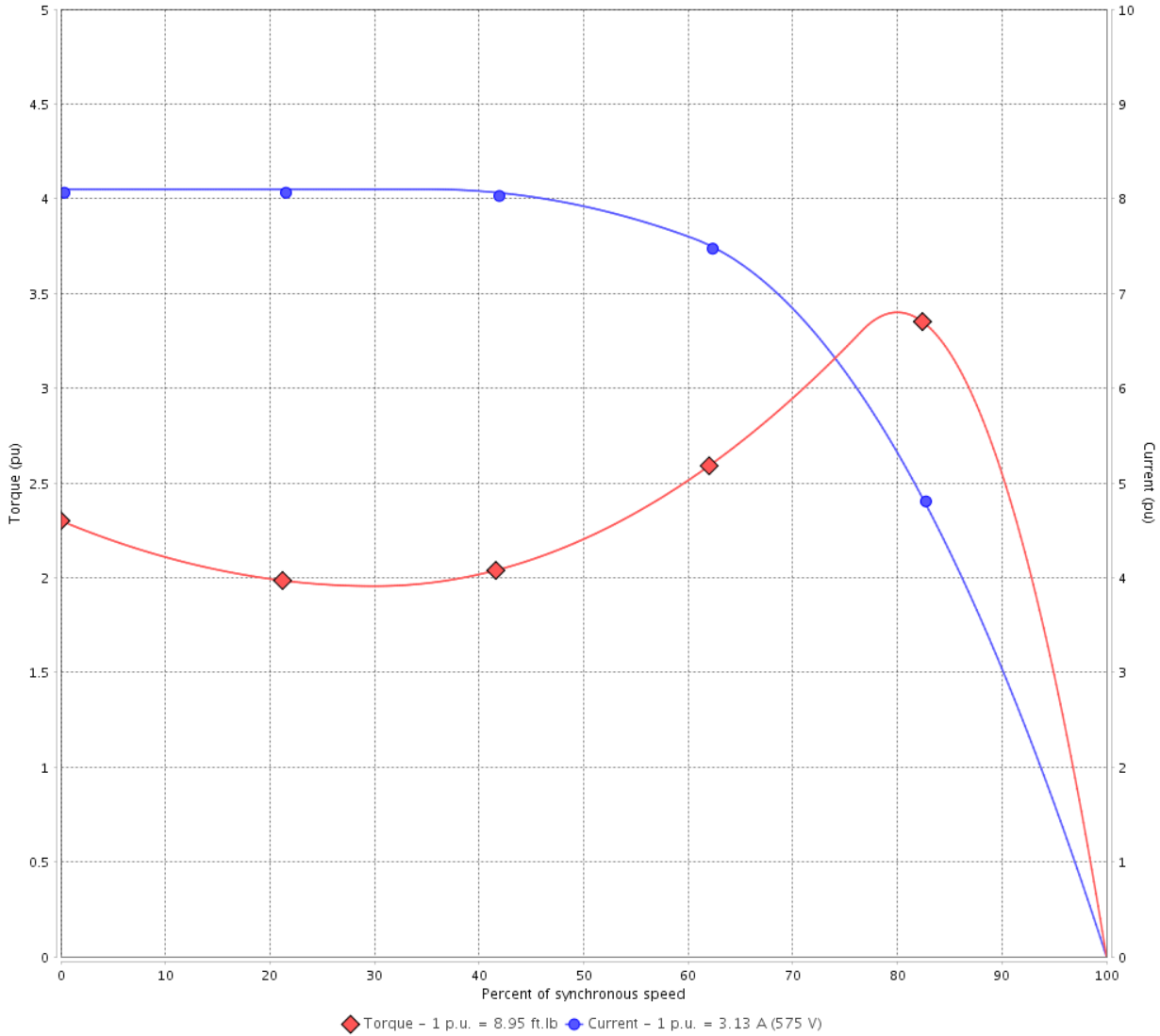
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12941852

Catalog # : 00318ET3H182JP-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 3.13 A	Moment of inertia (J)	: 0.3401 sq.ft.lb
LRC	: 8.1	Duty cycle	: Cont.(S1)
Rated torque	: 8.95 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Locked rotor time : 41s (cold) 23s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

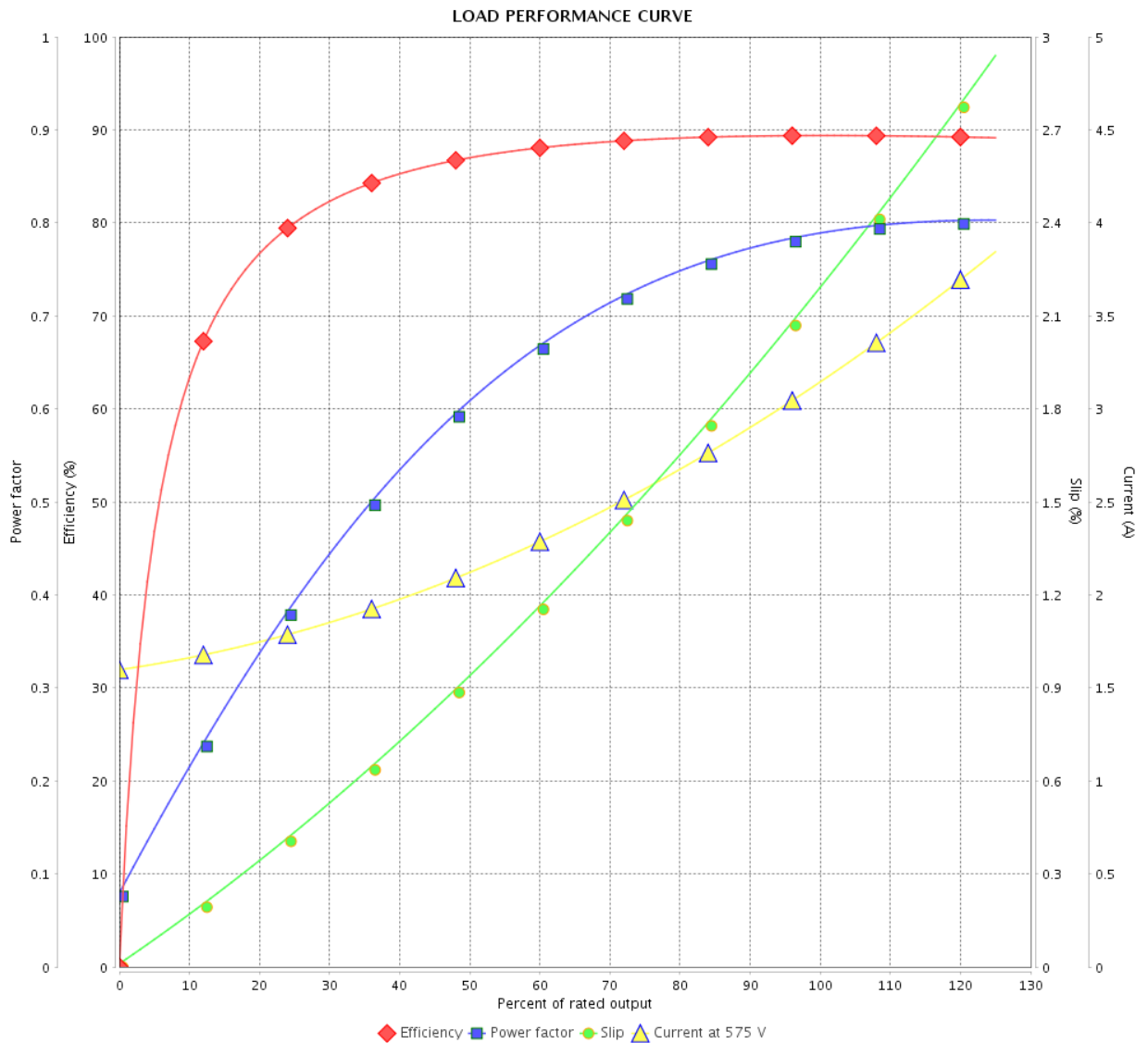


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12941852

Catalog # : 00318ET3H182JP-W22



Performance : 575 V 60 Hz 4P

Rated current : 3.13 A  
 LRC : 8.1  
 Rated torque : 8.95 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 340 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.3401 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

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12941852  
Catalog # : 00318ET3H182JP-W22

Performance : 575 V 60 Hz 4P

Rated current	: 3.13 A	Moment of inertia (J)	: 0.3401 sq.ft.lb
LRC	: 8.1	Duty cycle	: Cont.(S1)
Rated torque	: 8.95 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Heating constant

Cooling constant

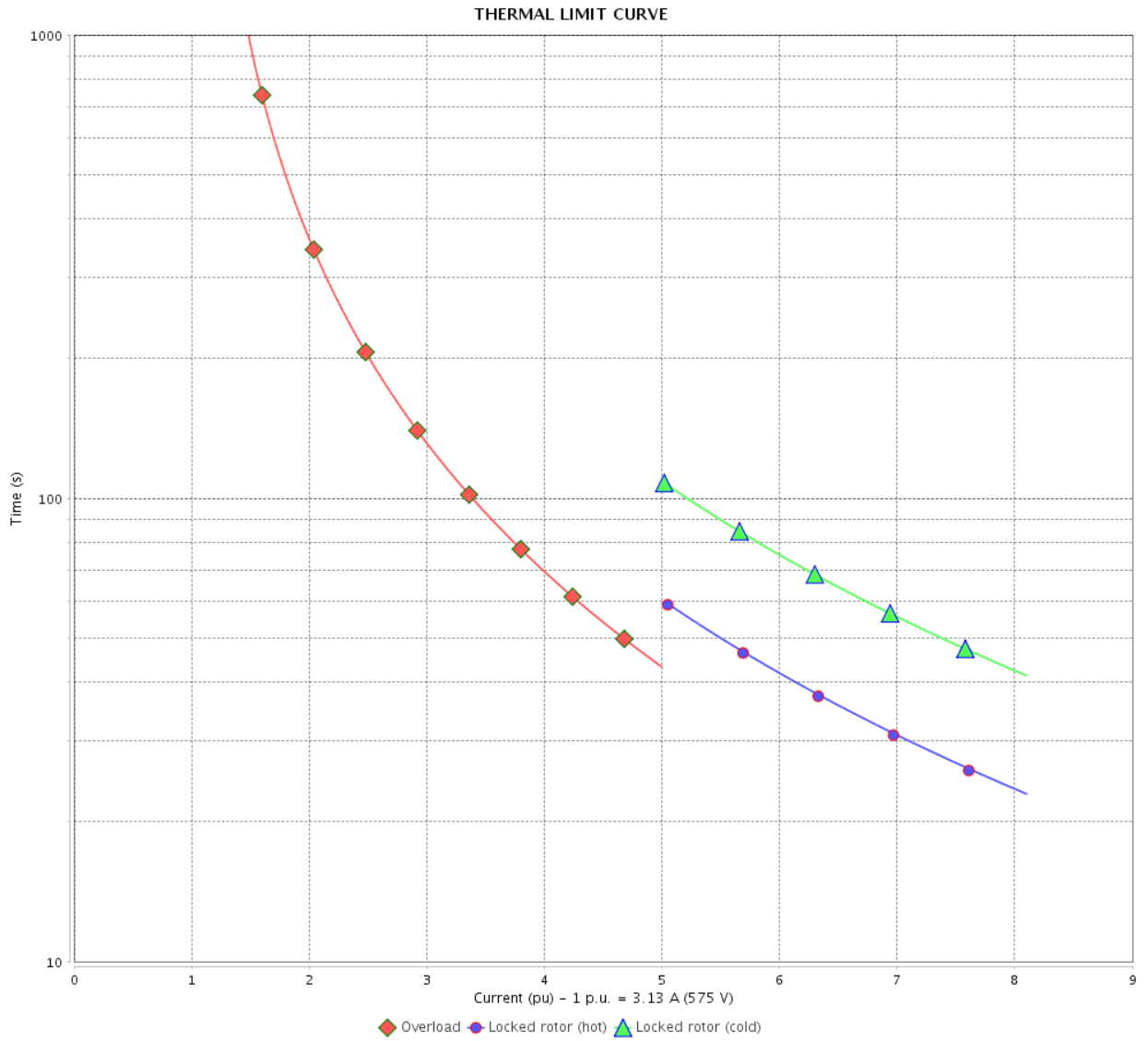
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

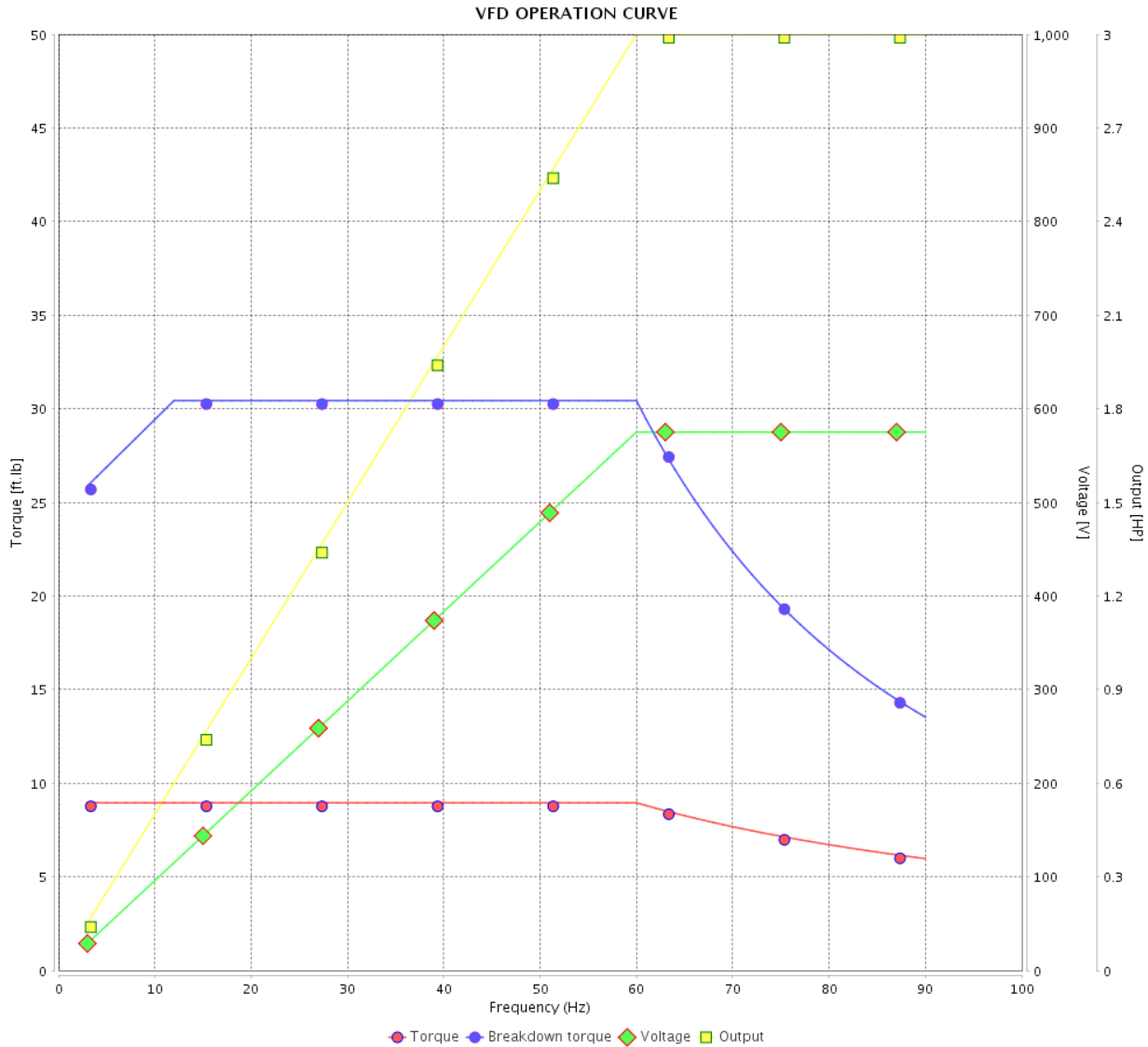


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12941852

Catalog # : 00318ET3H182JP-W22



Performance : 575 V 60 Hz 4P

Rated current : 3.13 A  
 LRC : 8.1  
 Rated torque : 8.95 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 340 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.3401 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

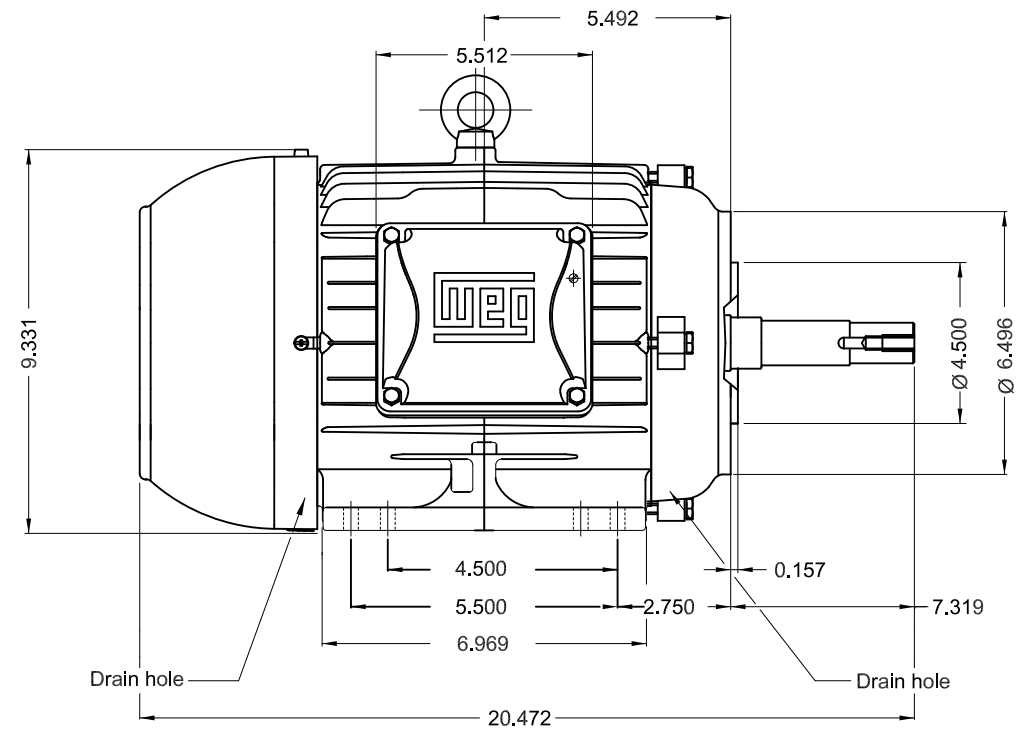
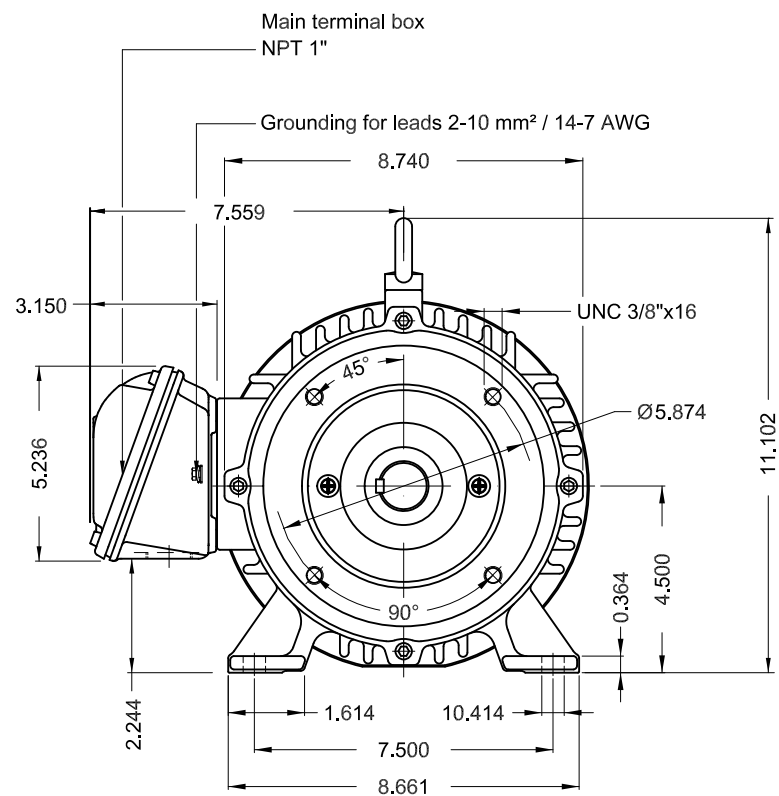
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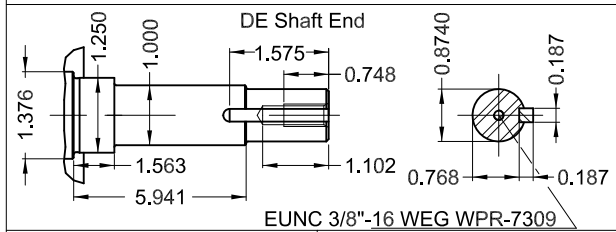
A

B

C



D




E

Color RAL 5009  
 Painting plan 207A  
 Mounting NEMA F-1  
 Mounting B34R(D)

3 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 182/4JP IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO		Jaragua do Sul	Product Engineering	SHEET	1 / 1	

PREVIEW  
 WDD



Dimensions in inches

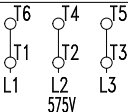
XME A3

**W22**  
CC029A**NEMA Premium**® Inverter Duty Motor  
Severe Duty

12941852

MADE IN BRAZIL JP003504NPW22

PH 3	FR 182/4JP	HP(kw) 3.0(2.2)	Hz 60	SF 1.25	PF 0.79
V 575	A 3.13	RPM 1760	INS. CL.F $\Delta$ T 80 K		
NEMA NOM EFF 89.5 %				DES B DUTY CONT.	
ENCL TEFC			IP55	SFA 3.91	ALT 1000 m.a.s.l.
					CODE K



MOBIL POLYREX EM

95 Lbs

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 - T5

For use on PWM, Gr. A, B, C, D, F and G  
 VT1000:1, CT20:1, 1.0SF, T4A



FOR SAFE AREA  
 MOD.TE1BFOXON