

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line		: NEMA Premium Efficiency Three-Phase		Product code :	14293382	
				Catalog # :	00212XT3H184T	
Frame	: 182/4T		Locked rotor time	: 82s (cold) 46s (hot)		
Output	: 2 HP (1.5 kW)		Temperature rise	: 80 K		
Poles	: 6		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	: 2.50 A		Protection degree	: IP55		
L. R. Amperes	: 18.8 A		Cooling method	: IC411 - TEFC		
LRC	: 7.5x(Code L)		Mounting	: F-1		
No load current	: 1.60 A		Rotation <sup>1</sup>	: Both (CW and CCW)		
Rated speed	: 1165 rpm		Noise level <sup>2</sup>	: 52.0 dB(A)		
Slip	: 2.92 %		Starting method	: Direct On Line		
Rated torque	: 9.02 ft.lb		Approx. weight <sup>3</sup>	: 134 lb		
Locked rotor torque	: 300 %					
Breakdown torque	: 330 %					
Insulation class	: F					
Service factor	: 1.15					
Moment of inertia (J)	: 0.5323 sq.ft.lb					
Design	: B					
Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	82.5	84.5	86.5	88.5	Max. traction : 123 lb	
Power Factor	0.26	0.47	0.58	0.68	Max. compression : 257 lb	
			<u>Drive end</u>		<u>Non drive end</u>	
Bearing type	:	6307 2RS		6206 2RS		
Sealing	:	Oil Seal		Lip Seal		
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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## Three Phase Induction Motor - Squirrel Cage



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

### Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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# TORQUE AND CURRENT VS SPEED CURVE



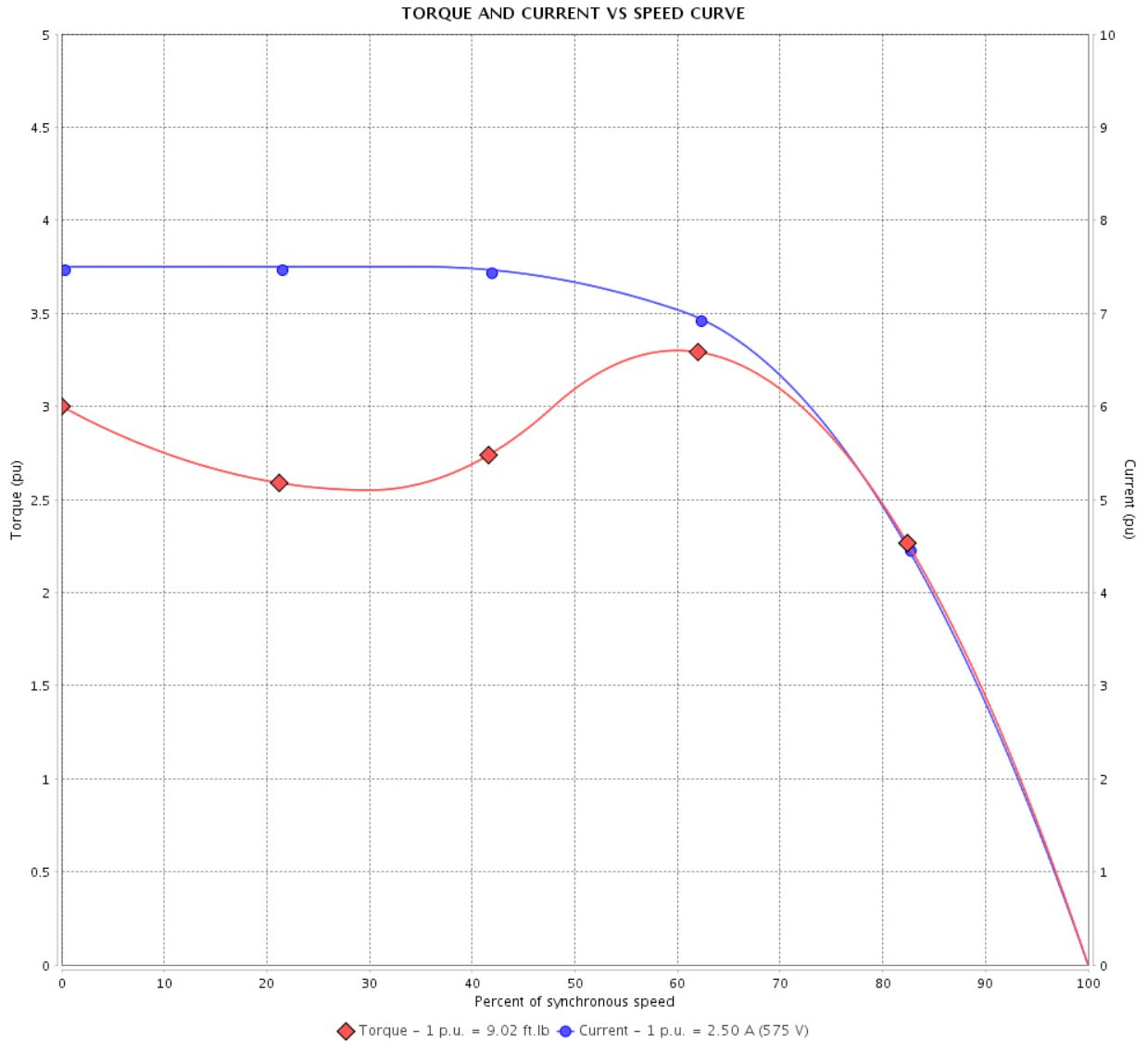
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14293382

Catalog # : 00212XT3H184T



Performance : 575 V 60 Hz 6P

Rated current	: 2.50 A	Moment of inertia (J)	: 0.5323 sq.ft.lb
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 9.02 ft.lb	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.15
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 1165 rpm	Design	: B

Locked rotor time : 82s (cold) 46s (hot)

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



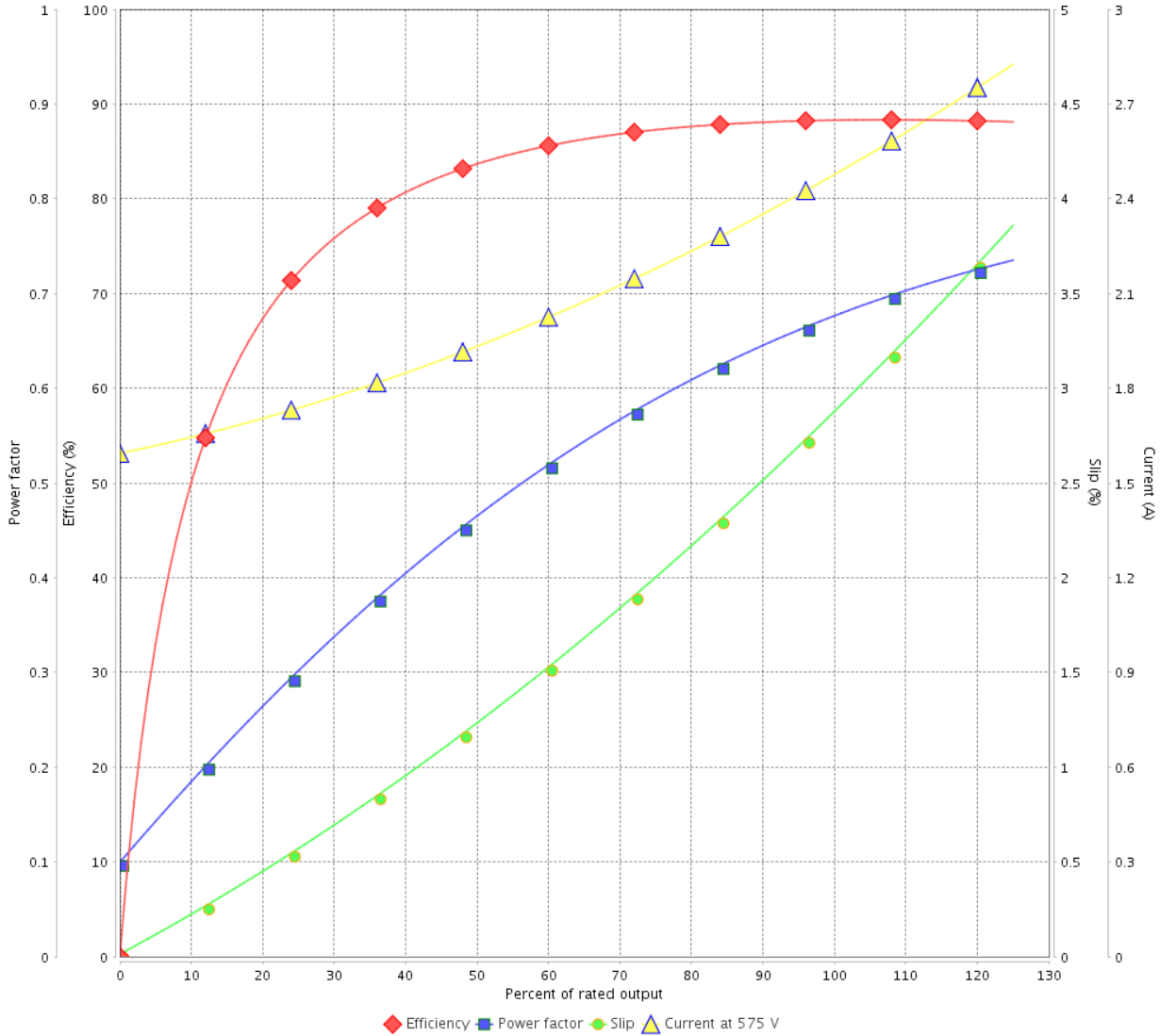
Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14293382

Catalog # : 00212XT3H184T

LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 6P

Rated current : 2.50 A  
 LRC : 7.5  
 Rated torque : 9.02 ft.lb  
 Locked rotor torque : 300 %  
 Breakdown torque : 330 %  
 Rated speed : 1165 rpm

Moment of inertia (J) : 0.5323 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 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 : 14293382  
 Catalog # : 00212XT3H184T

Performance : 575 V 60 Hz 6P

Rated current : 2.50 A	Moment of inertia (J) : 0.5323 sq.ft.lb
LRC : 7.5	Duty cycle : Cont.(S1)
Rated torque : 9.02 ft.lb	Insulation class : F
Locked rotor torque : 300 %	Service factor : 1.15
Breakdown torque : 330 %	Temperature rise : 80 K
Rated speed : 1165 rpm	Design : B

Heating constant

Cooling constant

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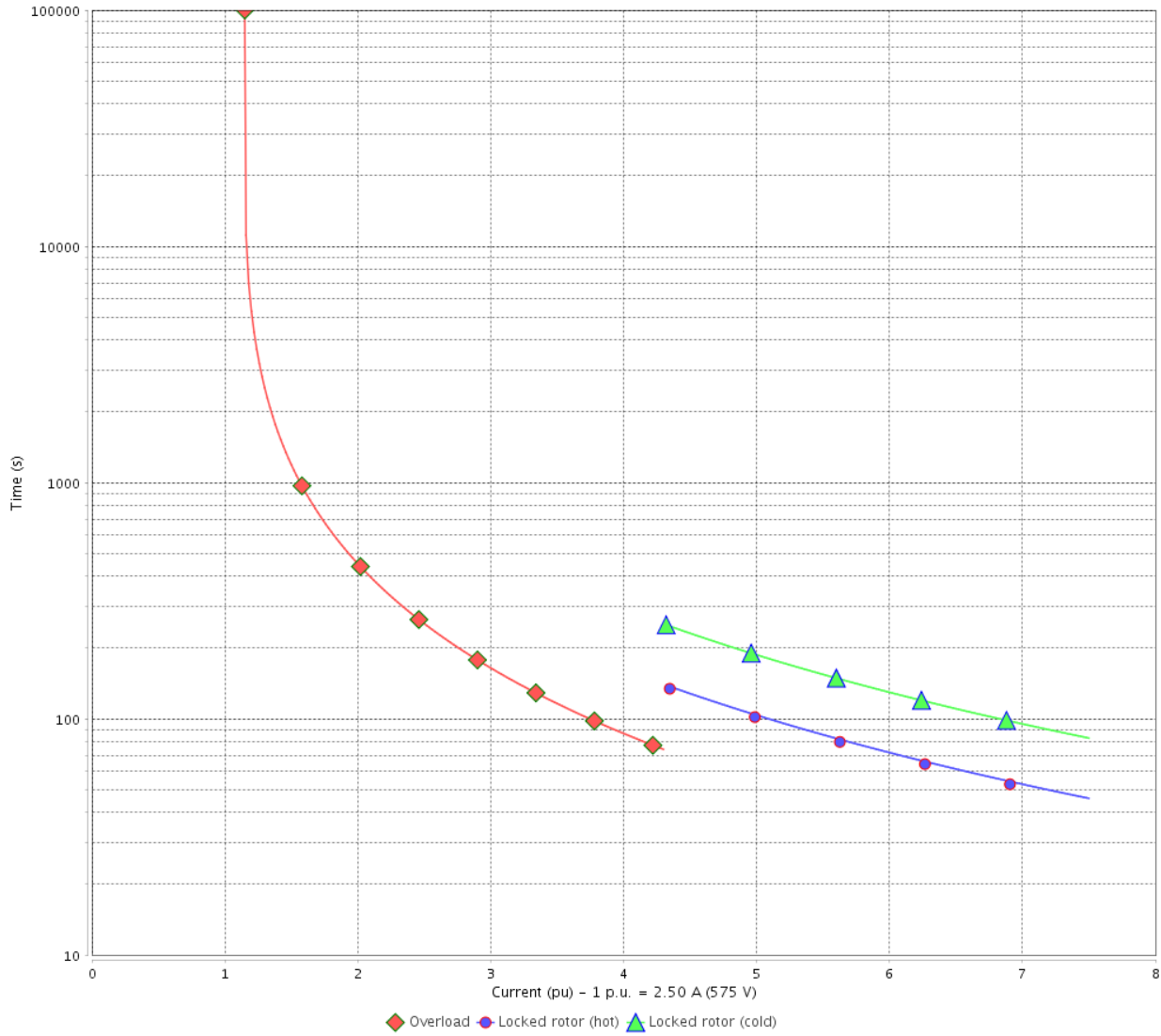
# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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

THERMAL LIMIT CURVE



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# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

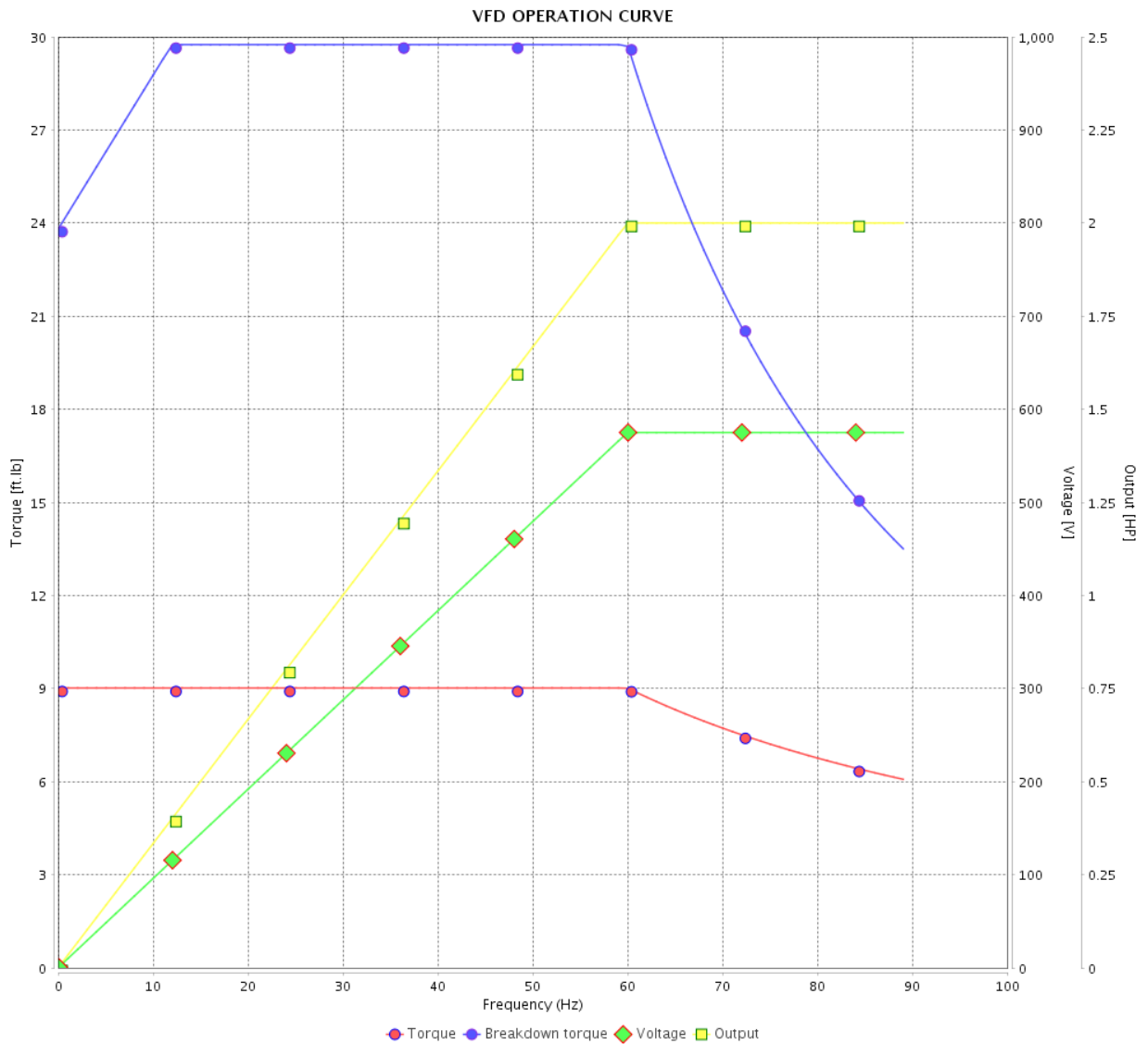


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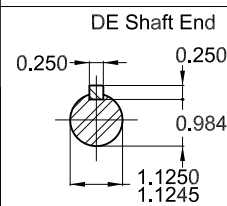
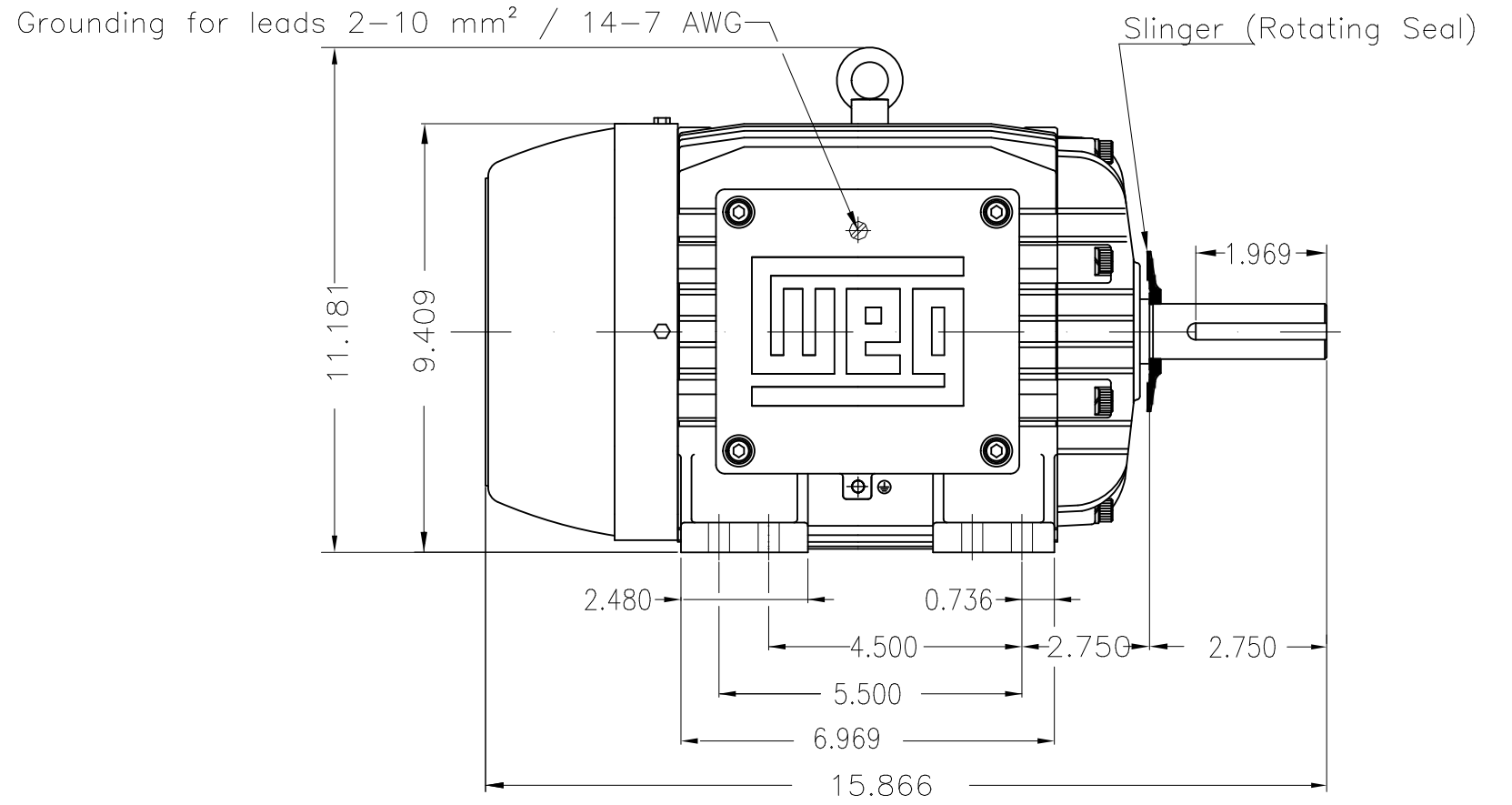
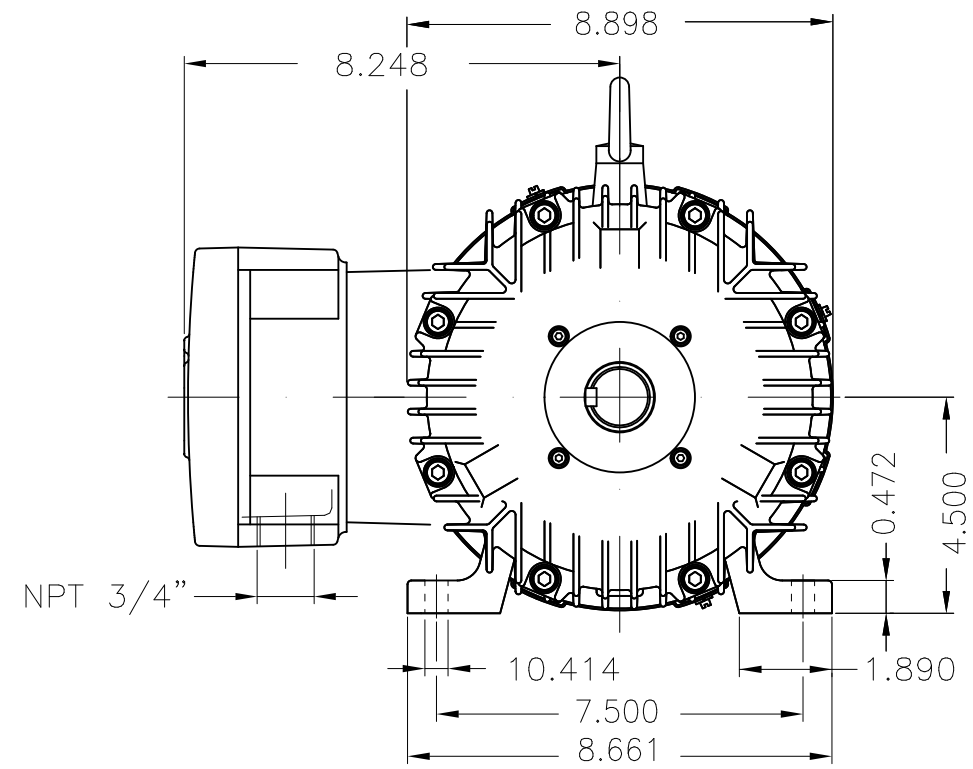


Performance : 575 V 60 Hz 6P

Rated current : 2.50 A  
 LRC : 7.5  
 Rated torque : 9.02 ft.lb  
 Locked rotor torque : 300 %  
 Breakdown torque : 330 %  
 Rated speed : 1165 rpm

Moment of inertia (J) : 0.5323 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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Color RAL 5009  
 Painting plan 202P  
 Mounting NEMA F-1  
 Mounting B3R(D)

2 HP 06 Poles 60 Hz

Dimensions in inches

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR EXPLOSION PROOF PREM. EFF.					
CHECKED		FRAME 182/4T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

**PREVIEW**  
 WDD



SHEET 1 / 1



MADE IN BRAZIL

**W21X NEMA**  
**Premium**

14293382



LISTED

CC029A

*Inverter Duty Motor*  
*Severe Duty*

MODEL 00212XT3H184T

PH 3 | FR 182/4T

HP(kW) 2.0(1.5)

HZ 60

IP55

V 575

A 2.50

RPM 1165

NEMA NOM EFF 88.5%

PF 0.68

SFA 2.88

DES B

INS CL F  $\Delta$ T 80 K | SF 1.15

ENCL TEFC

DUTY CONT.

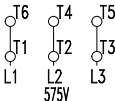
CODE L

ALT 1000

m.a.s.l.

AMB 40°C

AMB 55°C SF1.0



→ 6307-2RS MOBIL POLYREX EM

→ 6206-2RS

134 Lbs

TEMP CODE T3C  
CSA/UL: Class I - Div. 1 - Groups C and D  
CSA: Class II - Div. 1 - Groups F and G  
CSA: Class I - Zone 1 - IIB

EXPLOSION PROOF MOTOR

FOR USE ON VPWM VFD 1000:1VT, 20:1CT, 1.0SF, T3C, AMB 40°C.