

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	14293348			
Catalog # :	00536XT3H184TC			
Frame : 182/4TC Output : 5 HP (3.7 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 4.88 A L. R. Amperes : 36.6 A LRC : 7.5x(Code J) No load current : 1.76 A Rated speed : 3490 rpm Slip : 3.06 % Rated torque : 7.52 ft.lb Locked rotor torque : 250 % Breakdown torque : 380 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1889 sq.ft.lb Design : B	Locked rotor time : 46s (cold) 26s (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> : 69.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 133 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	84.3    85.5    87.5    88.5			
Power Factor	0.47    0.70    0.81    0.86			
Foundation loads				
Max. traction : 116 lb				
Max. compression : 249 lb				
Bearing type	: <u>Drive end</u> 6307 2RS <u>Non drive end</u> 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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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



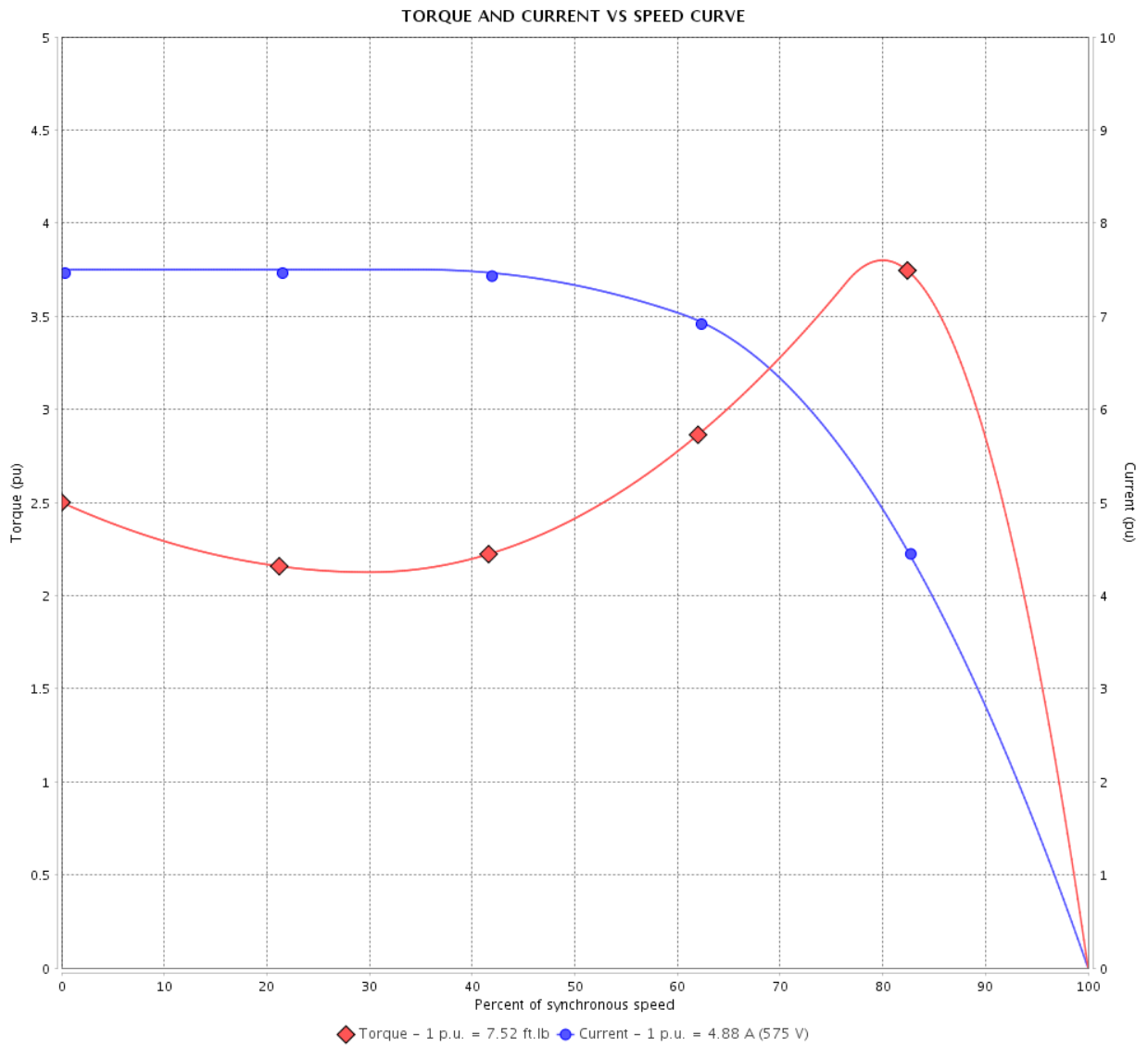
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14293348

Catalog # : 00536XT3H184TC



Performance : 575 V 60 Hz 2P

Rated current	: 4.88 A	Moment of inertia (J)	: 0.1889 sq.ft.lb
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 7.52 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.15
Breakdown torque	: 380 %	Temperature rise	: 80 K
Rated speed	: 3490 rpm	Design	: B

Locked rotor time : 46s (cold) 26s (hot)

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



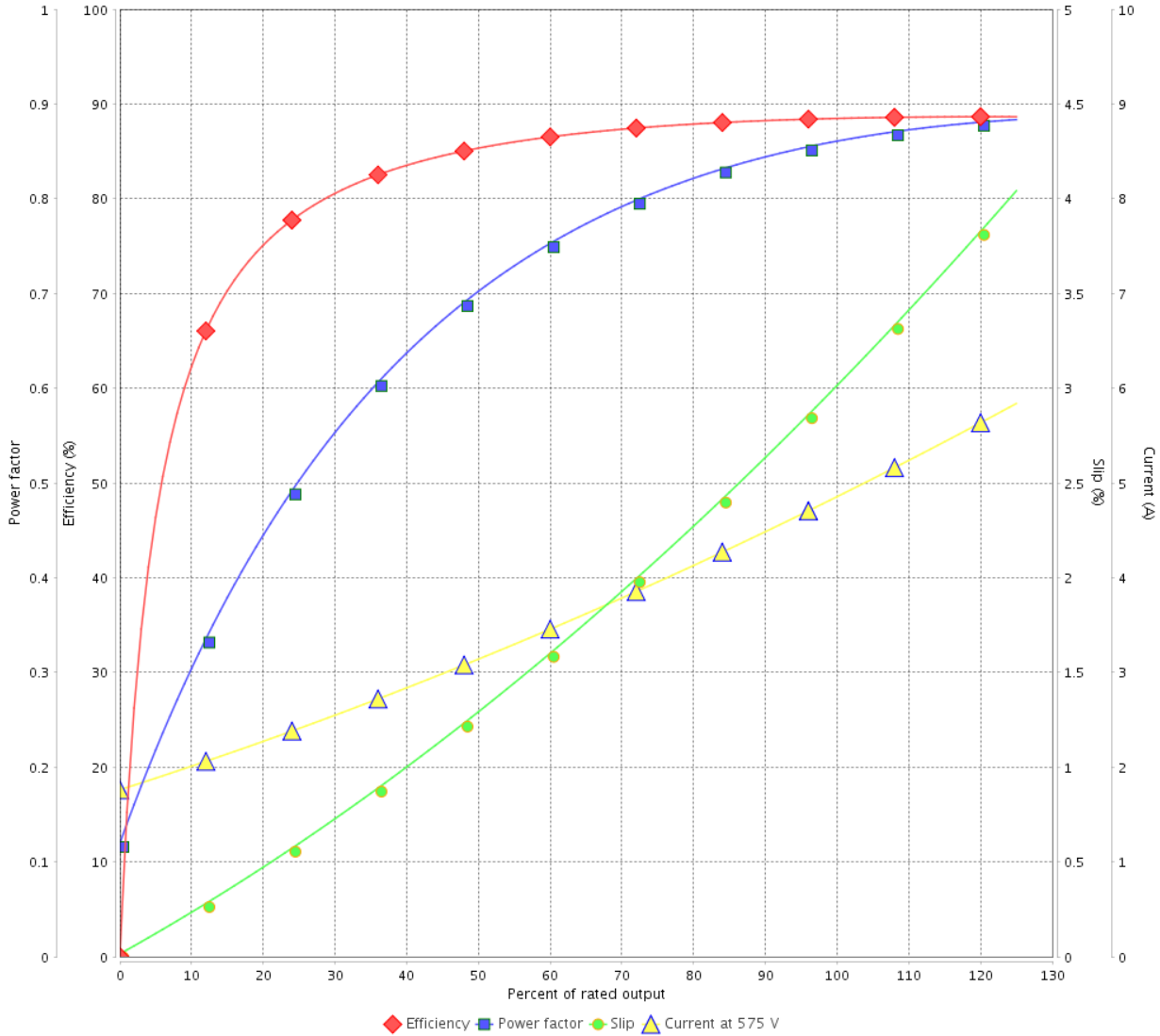
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14293348

Catalog # : 00536XT3H184TC

LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 2P

Rated current : 4.88 A  
 LRC : 7.5  
 Rated torque : 7.52 ft.lb  
 Locked rotor torque : 250 %  
 Breakdown torque : 380 %  
 Rated speed : 3490 rpm

Moment of inertia (J) : 0.1889 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

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 Product code : 14293348  
 Catalog # : 00536XT3H184TC

Performance : 575 V 60 Hz 2P

Rated current : 4.88 A	Moment of inertia (J) : 0.1889 sq.ft.lb
LRC : 7.5	Duty cycle : Cont.(S1)
Rated torque : 7.52 ft.lb	Insulation class : F
Locked rotor torque : 250 %	Service factor : 1.15
Breakdown torque : 380 %	Temperature rise : 80 K
Rated speed : 3490 rpm	Design : B

Heating constant

Cooling constant

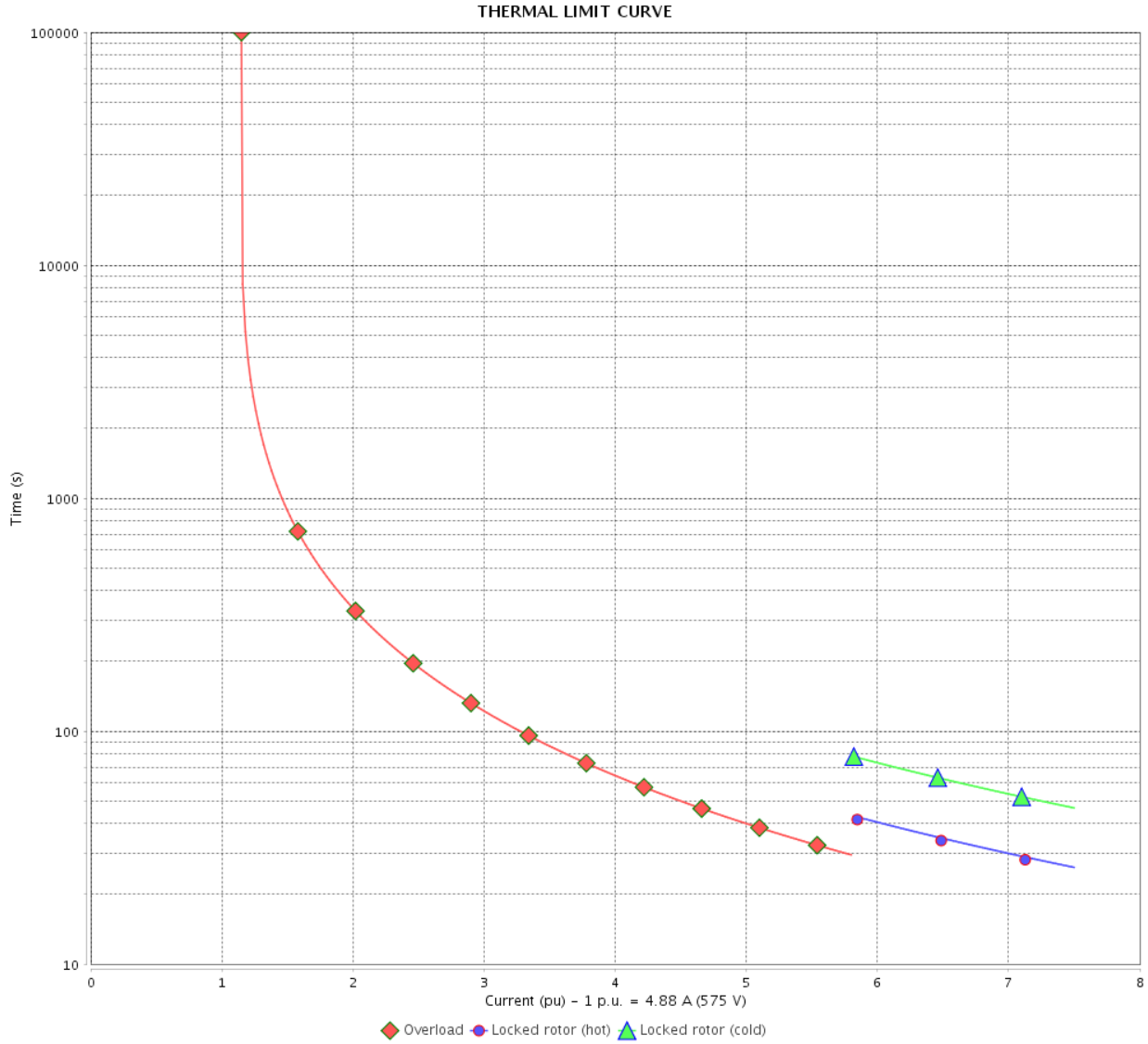
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

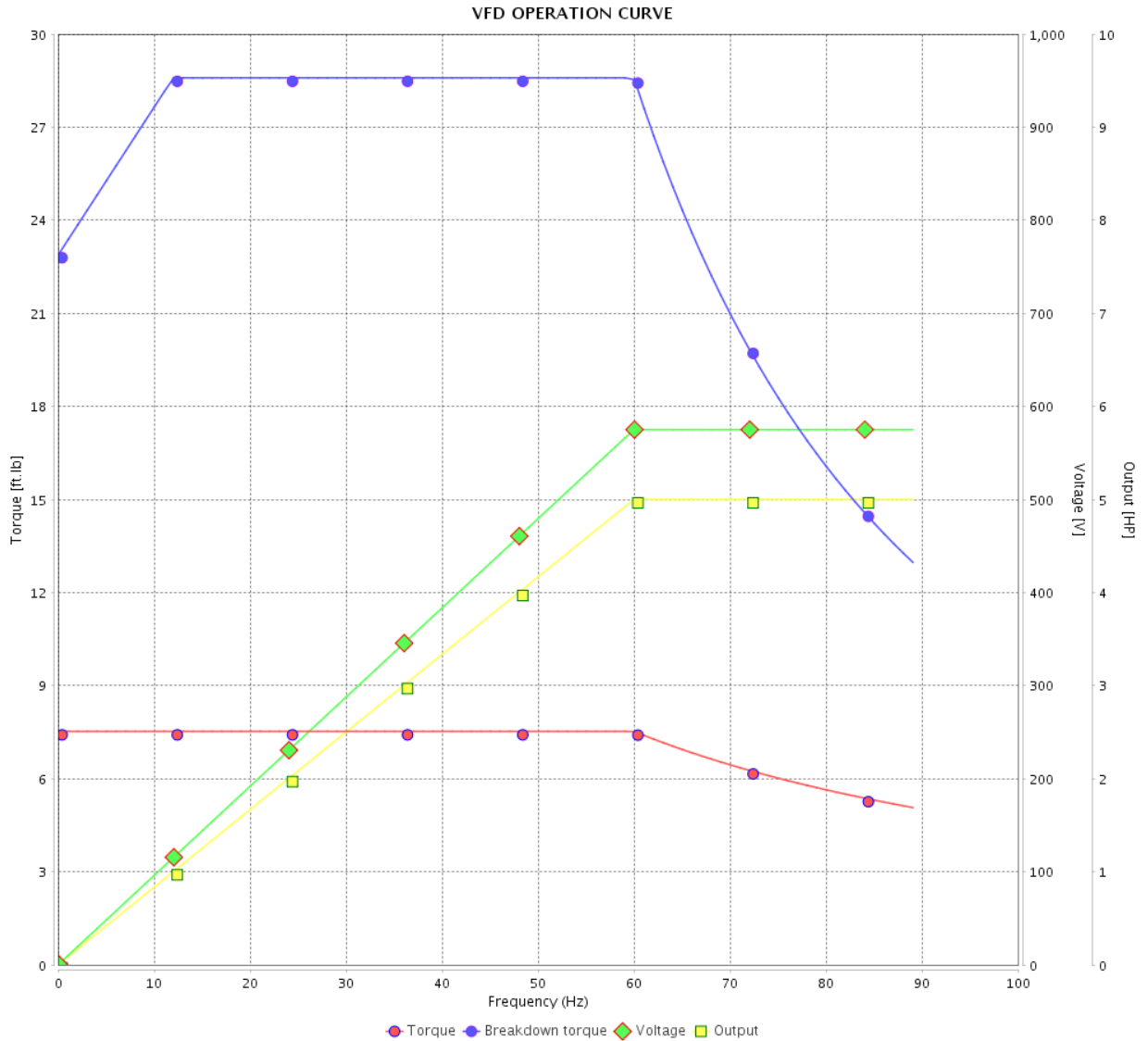


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14293348

Catalog # : 00536XT3H184TC

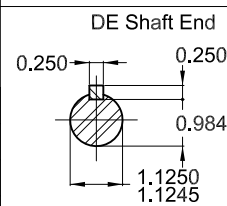
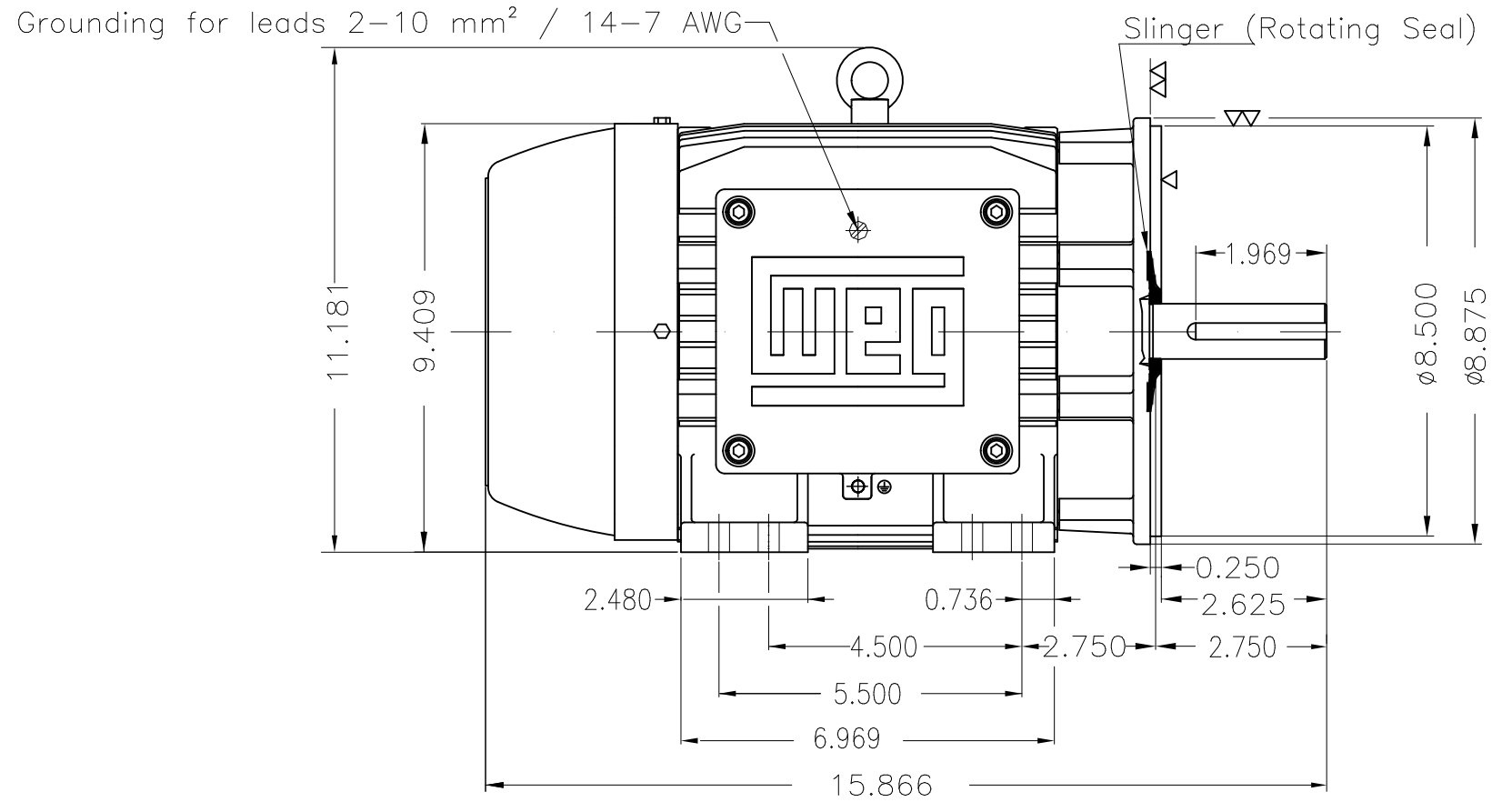
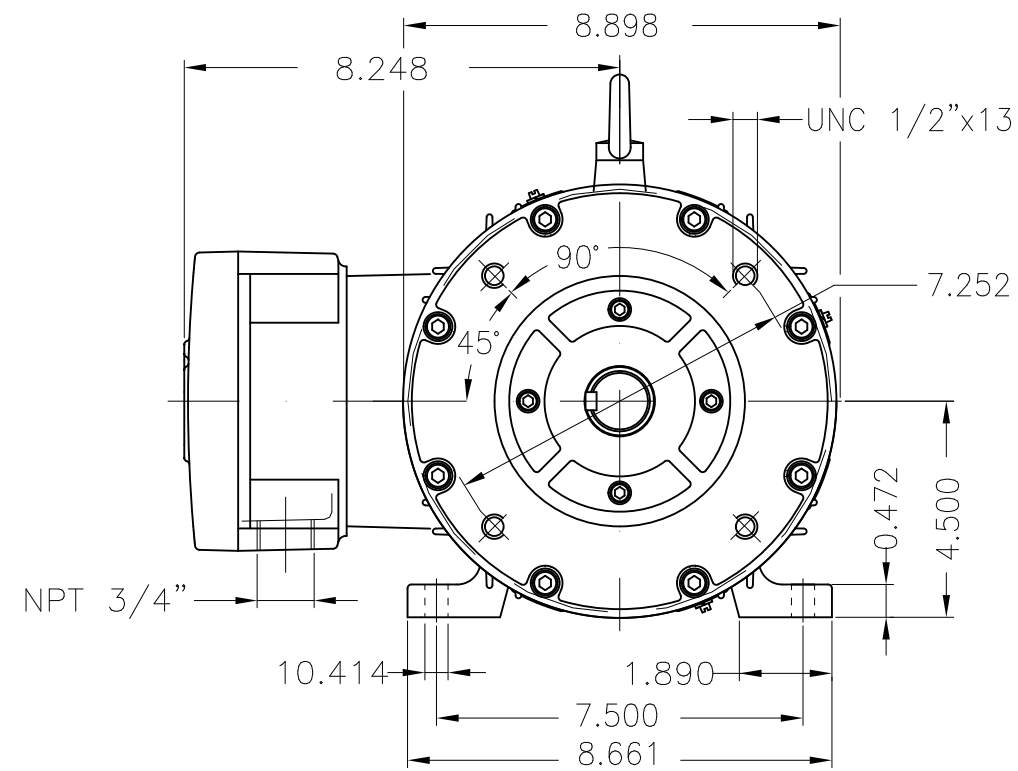


Performance : 575 V 60 Hz 2P

Rated current : 4.88 A  
 LRC : 7.5  
 Rated torque : 7.52 ft.lb  
 Locked rotor torque : 250 %  
 Breakdown torque : 380 %  
 Rated speed : 3490 rpm

Moment of inertia (J) : 0.1889 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 B34R(D)

5 HP 02 Poles 60 Hz

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

PREVIEW  
 WDD



SHEET 1 / 1

Dimensions in inches

XME A3



MADE IN BRAZIL

**W21X NEMA**  
**Premium**

14293348



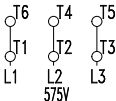
LISTED

CC029A

*Inverter Duty Motor*  
*Severe Duty*

MODEL 00536XT3H184TC

PH 3	FR 182/4TC		
HP(kW) 5.0(3.7)		HZ 60	IP55
V 575		A 4.88	
RPM 3490		NEMA NOM EFF 88.5%	
PF 0.86		SFA 5.61	DES B
INS CL F $\Delta$ T 80 K		SF 1.15	ENCL TEFC
DUTY CONT.		CODE J	ALT 1000 m.a.s.l.
AMB 40°C			
AMB 55°C SF1.0			



→ 6307-2RS MOBIL POLYREX EM  
→ 6206-2RS

132 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.