

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer	:		
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	14371273
		Catalog # :	00318XT3H182T
Frame	: 182/4T	Locked rotor time	: 50s (cold) 28s (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	: 25.0 A	Cooling method	: IC411 - TEFC
LRC	: 8.0x(Code K)	Mounting	: F-1
No load current	: 1.68 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>	: 121 lb
Locked rotor torque	: 250 %		
Breakdown torque	: 320 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.2781 sq.ft.lb		
Design	: B		
Output	50%	75%	100%
Efficiency (%)	87.5	88.5	89.5
Power Factor	0.59	0.71	0.79
	Foundation loads		
	Max. traction : 122 lb		
	Max. compression : 243 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.	
Rev.	Changes Summary		Date
Performed by		Performed	Checked
Checked by			
Date	14/04/2022	Page	Revision
		1 / 7	

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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

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		2 / 7	

# TORQUE AND CURRENT VS SPEED CURVE



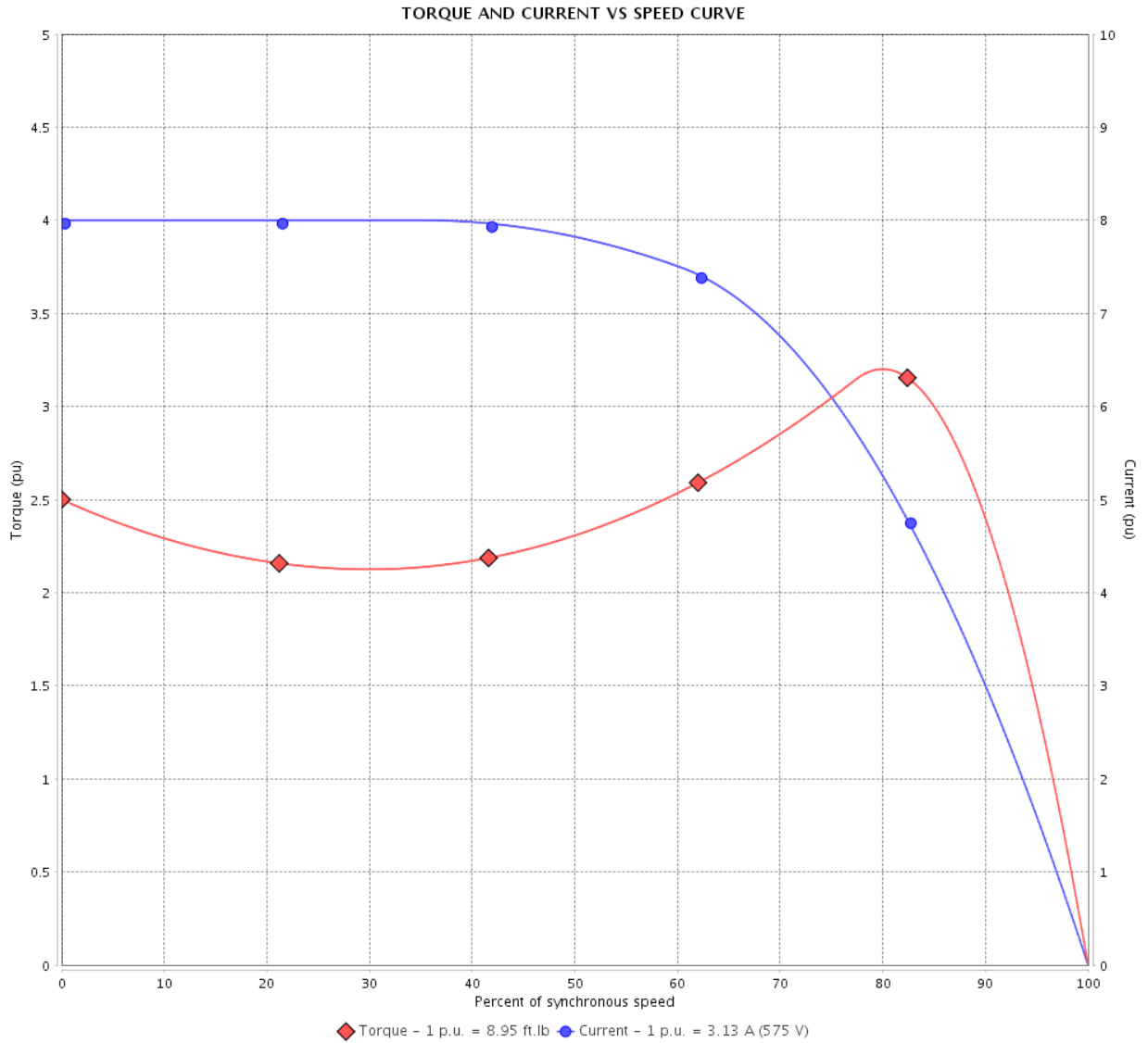
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14371273

Catalog # : 00318XT3H182T



Performance : 575 V 60 Hz 4P

Rated current	: 3.13 A	Moment of inertia (J)	: 0.2781 sq.ft.lb
LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 8.95 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.15
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Locked rotor time : 50s (cold) 28s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 7	Revision
Checked by				
Date	14/04/2022			

# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



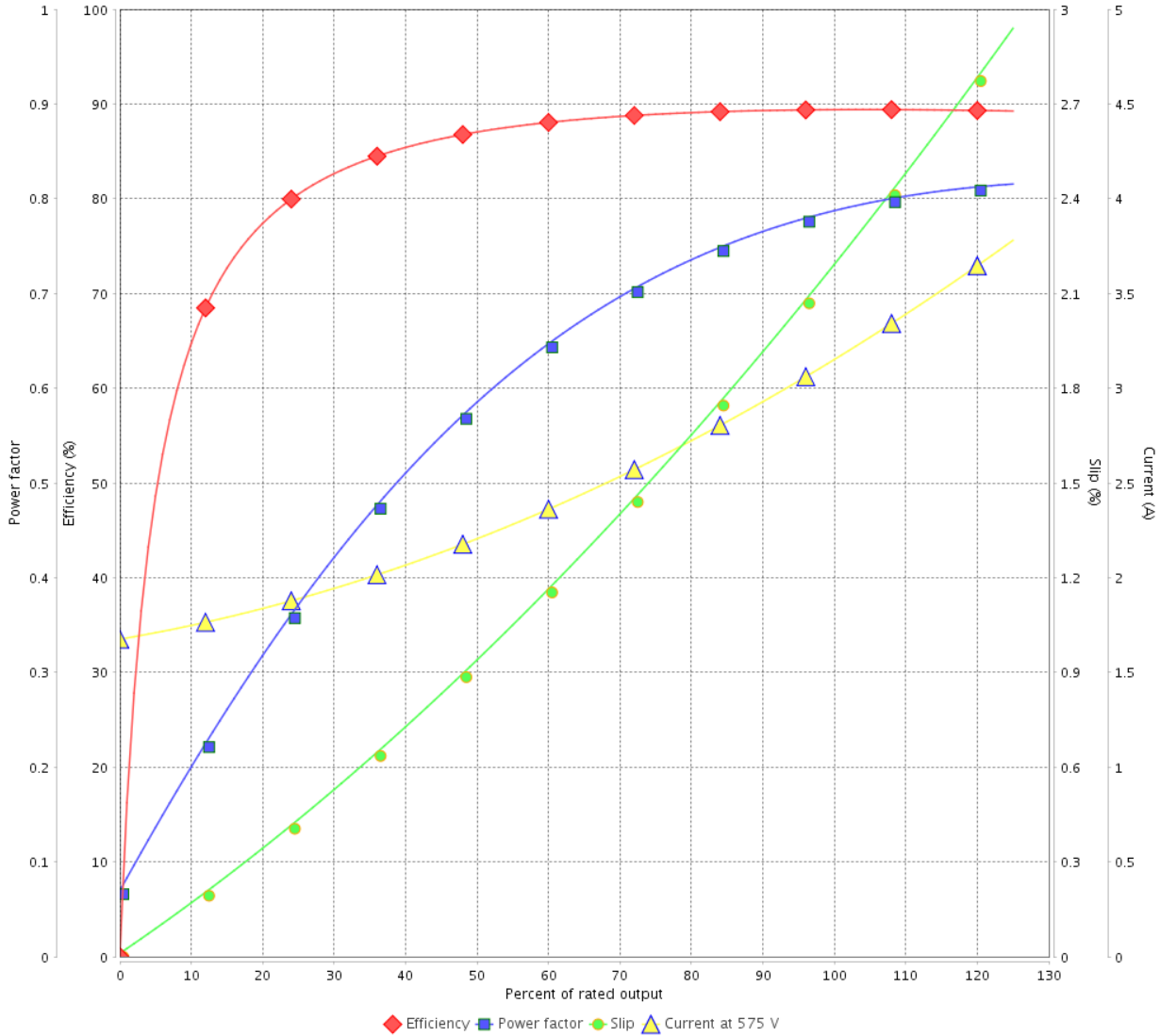
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14371273

Catalog # : 00318XT3H182T

LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 4P

Rated current : 3.13 A  
 LRC : 8.0  
 Rated torque : 8.95 ft.lb  
 Locked rotor torque : 250 %  
 Breakdown torque : 320 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.2781 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 7	Revision
Checked by				
Date	14/04/2022			

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
 Product code : 14371273  
 Catalog # : 00318XT3H182T

Performance : 575 V 60 Hz 4P

Rated current : 3.13 A	Moment of inertia (J) : 0.2781 sq.ft.lb
LRC : 8.0	Duty cycle : Cont.(S1)
Rated torque : 8.95 ft.lb	Insulation class : F
Locked rotor torque : 250 %	Service factor : 1.15
Breakdown torque : 320 %	Temperature rise : 80 K
Rated speed : 1760 rpm	Design : B

Heating constant  
 Cooling constant

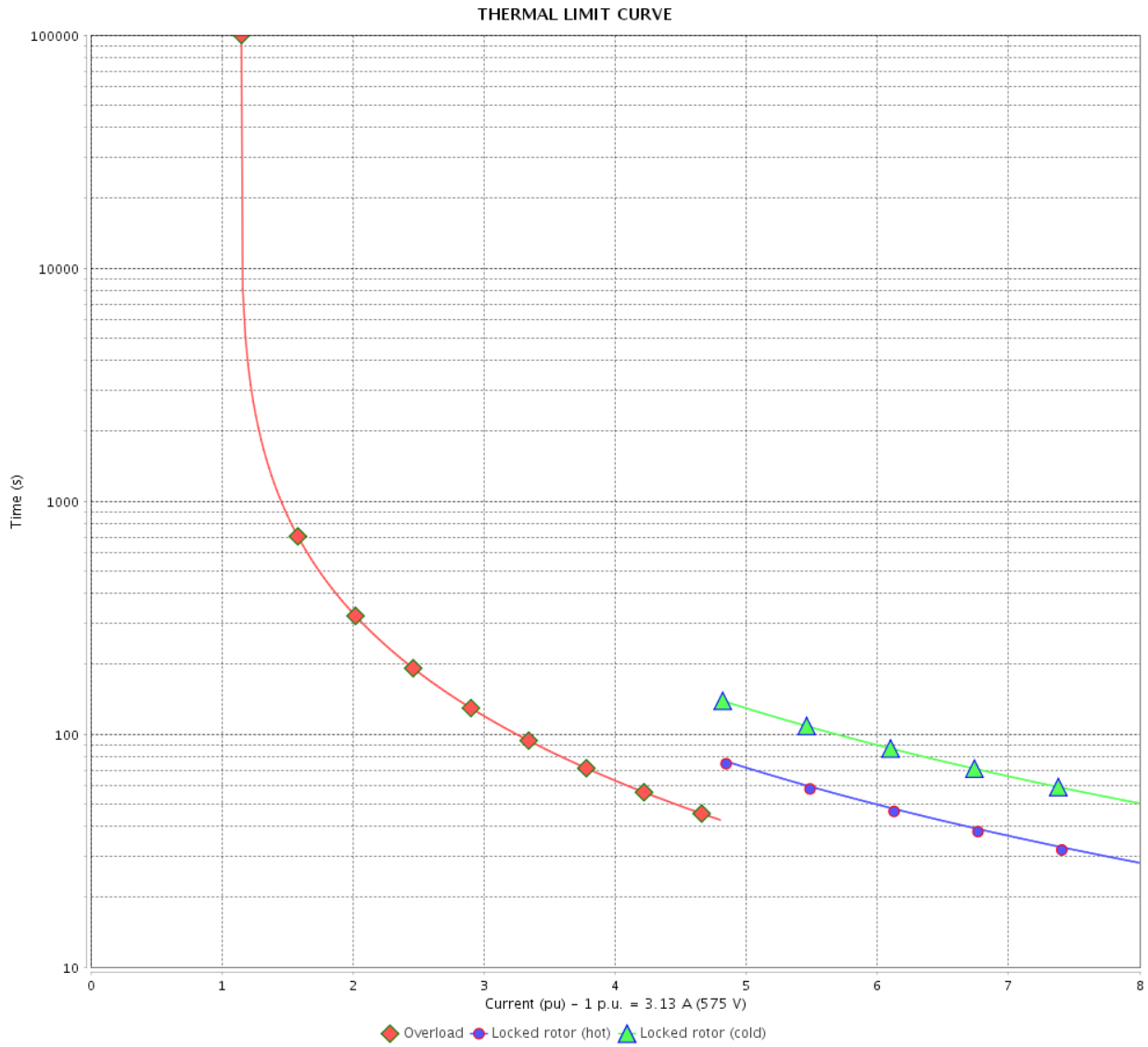
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 5 / 7	Revision
Checked by				
Date	14/04/2022			

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 6 / 7		Revision
Checked by				
Date				

# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

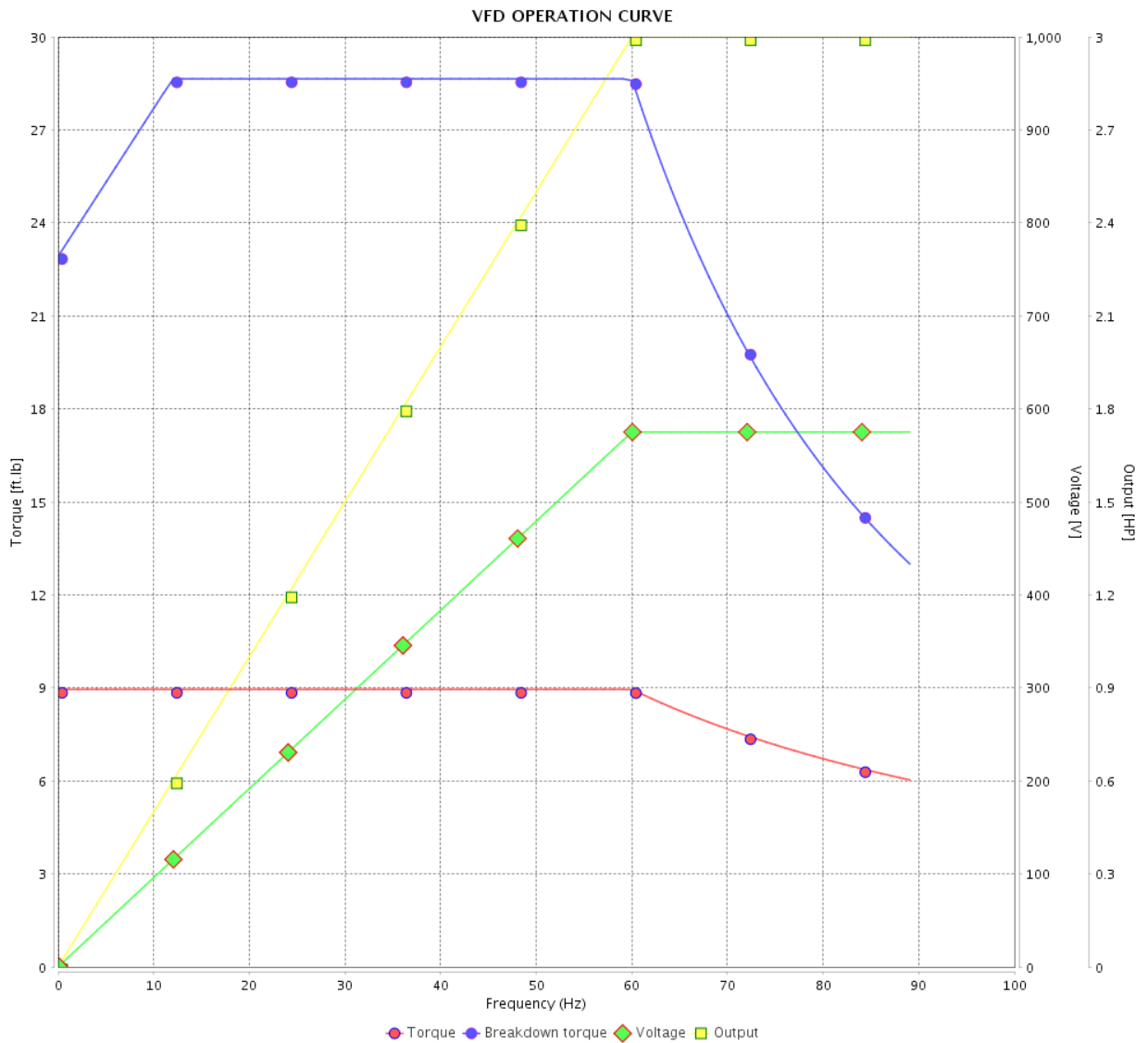


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14371273

Catalog # : 00318XT3H182T

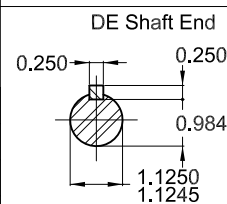
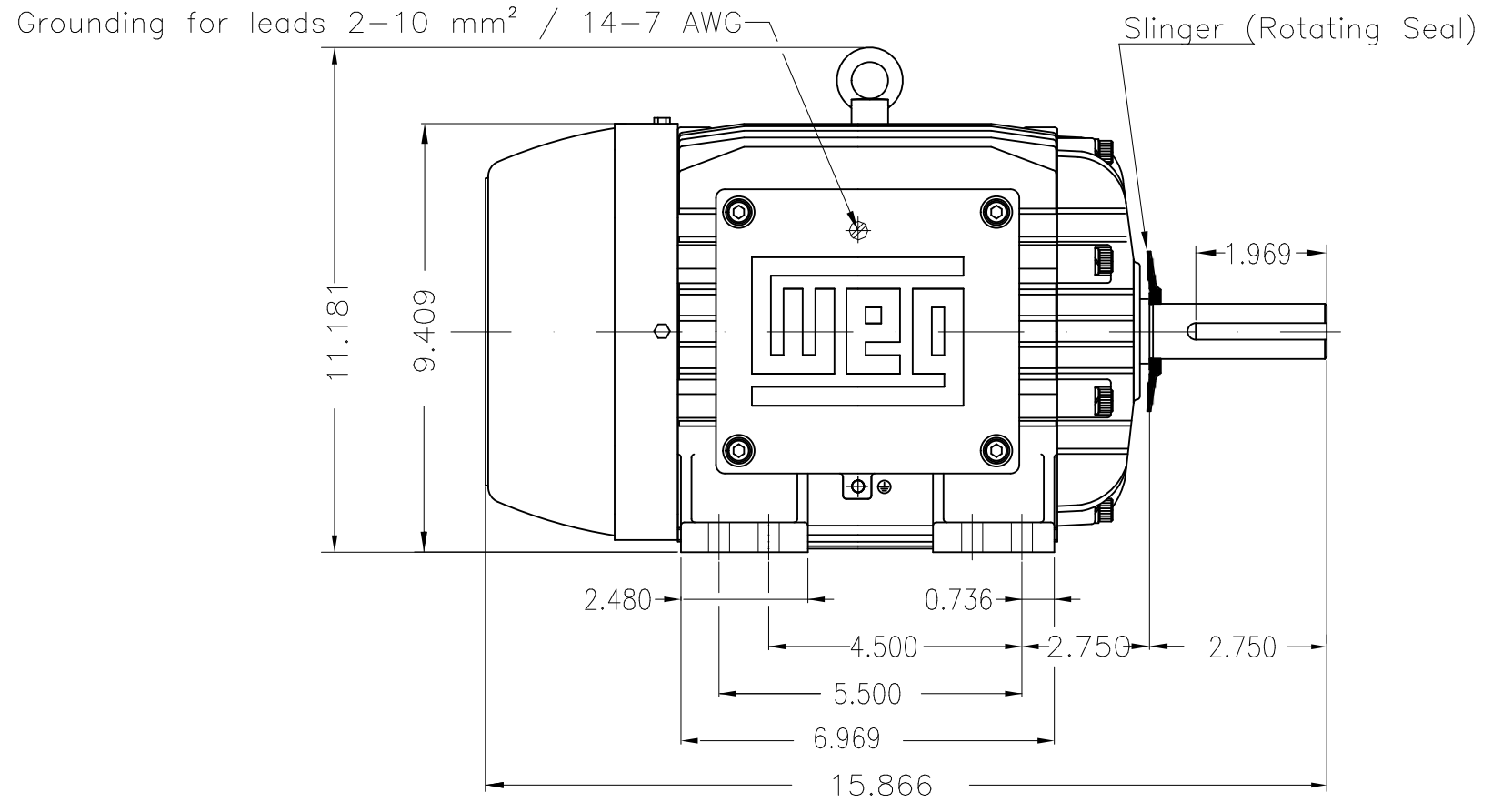
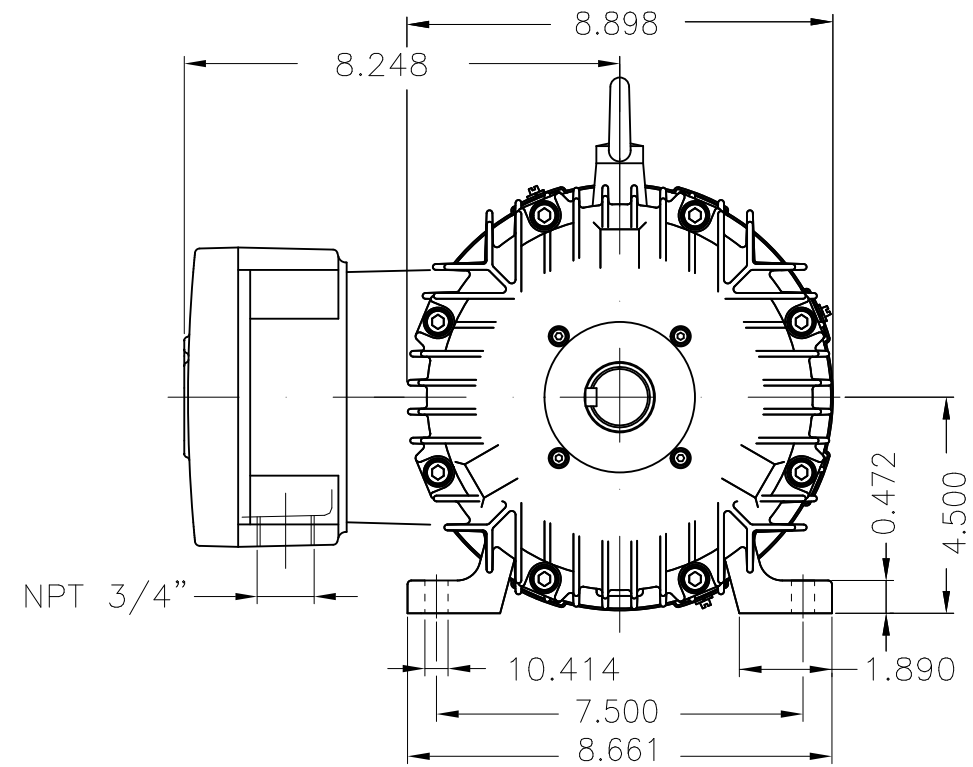


Performance : 575 V 60 Hz 4P

Rated current : 3.13 A  
 LRC : 8.0  
 Rated torque : 8.95 ft.lb  
 Locked rotor torque : 250 %  
 Breakdown torque : 320 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.2781 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by				Page 7 / 7
Checked by				
Date	14/04/2022			



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

3 HP 04 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**

14371273

CC029A

*Inverter Duty Motor*  
*Severe Duty*


LISTED

MODEL 00318XT3H182T

PH 3 | FR 182/4T

HP(kW) 3.0(2.2)

HZ 60

IP55

V 575

A 3.13

RPM 1760

NEMA NOM EFF 89.5%

PF 0.79

SFA 3.60

DES B

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

ENCL TEFC

DUTY CONT.

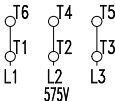
CODE K

ALT 1000

m.a.s.l.

AMB 40°C

AMB 55°C SF1.0



→ 6307-2RS MOBIL POLYREX EM

→ 6206-2RS

121 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.