

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	11360896																		
Catalog # :	06036XT3H364TS																		
Frame : 364/5TS Output : 60 HP (45 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 54.9 A L. R. Amperes : 351 A LRC : 6.4x(Code G) No load current : 12.0 A Rated speed : 3550 rpm Slip : 1.39 % Rated torque : 88.8 ft.lb Locked rotor torque : 200 % Breakdown torque : 250 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 9.96 sq.ft.lb Design : B	Locked rotor time : 108s (cold) 60s (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> : 85.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 1022 lb																		
Output	25%    50%    75%    100%																		
Efficiency (%)	91.7    92.4    93.0    93.6																		
Power Factor	0.59    0.79    0.86    0.88																		
Foundation loads																			
Max. traction	: 249 lb																		
Max. compression	: 1271 lb																		
	<table border="0" style="width:100%;"> <tr> <td></td> <td style="text-align: center;"><u>Drive end</u></td> <td style="text-align: center;"><u>Non drive end</u></td> </tr> <tr> <td>Bearing type</td> <td>: 6314 C3</td> <td>6314 C3</td> </tr> <tr> <td>Sealing</td> <td>: Oil Seal</td> <td>Lip Seal</td> </tr> <tr> <td>Lubrication interval</td> <td>: 3604 h</td> <td>3604 h</td> </tr> <tr> <td>Lubricant amount</td> <td>: 27 g</td> <td>27 g</td> </tr> <tr> <td>Lubricant type</td> <td colspan="2">: Mobil Polyrex EM</td> </tr> </table>		<u>Drive end</u>	<u>Non drive end</u>	Bearing type	: 6314 C3	6314 C3	Sealing	: Oil Seal	Lip Seal	Lubrication interval	: 3604 h	3604 h	Lubricant amount	: 27 g	27 g	Lubricant type	: Mobil Polyrex EM	
	<u>Drive end</u>	<u>Non drive end</u>																	
Bearing type	: 6314 C3	6314 C3																	
Sealing	: Oil Seal	Lip Seal																	
Lubrication interval	: 3604 h	3604 h																	
Lubricant amount	: 27 g	27 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.																			
Rev.	Changes Summary	Performed	Checked	Date															
Performed by																			
Checked by			Page	Revision															
Date	13/04/2022		1 / 7																

# DATA SHEET

## 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				
Date	13/04/2022		Page 2 / 7	Revision

# TORQUE AND CURRENT VS SPEED CURVE



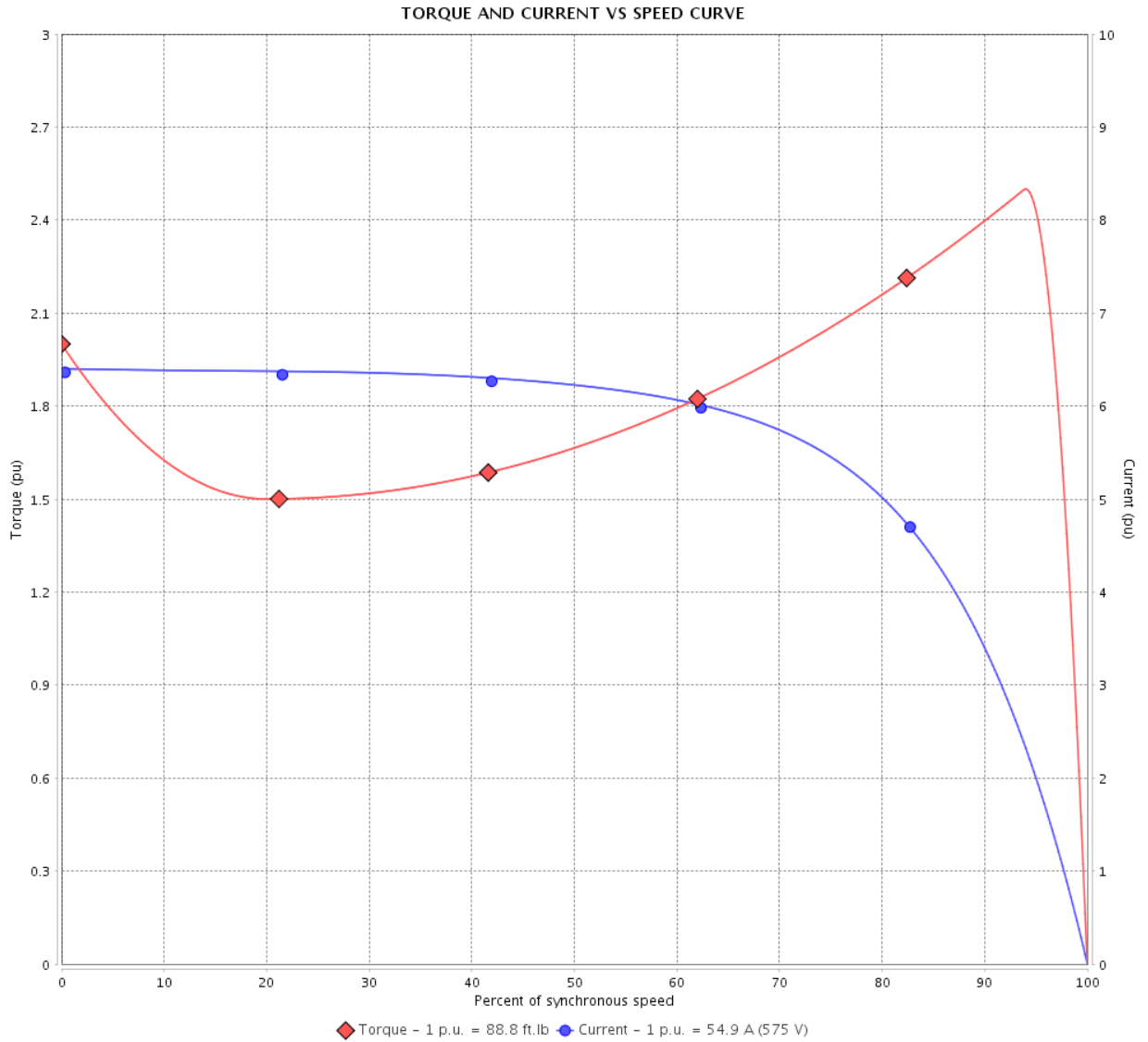
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11360896

Catalog # : 06036XT3H364TS



Performance : 575 V 60 Hz 2P

Rated current	: 54.9 A	Moment of inertia (J)	: 9.96 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 88.8 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 3550 rpm	Design	: B

Locked rotor time : 108s (cold) 60s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 7	Revision
Checked by				
Date	13/04/2022			

# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



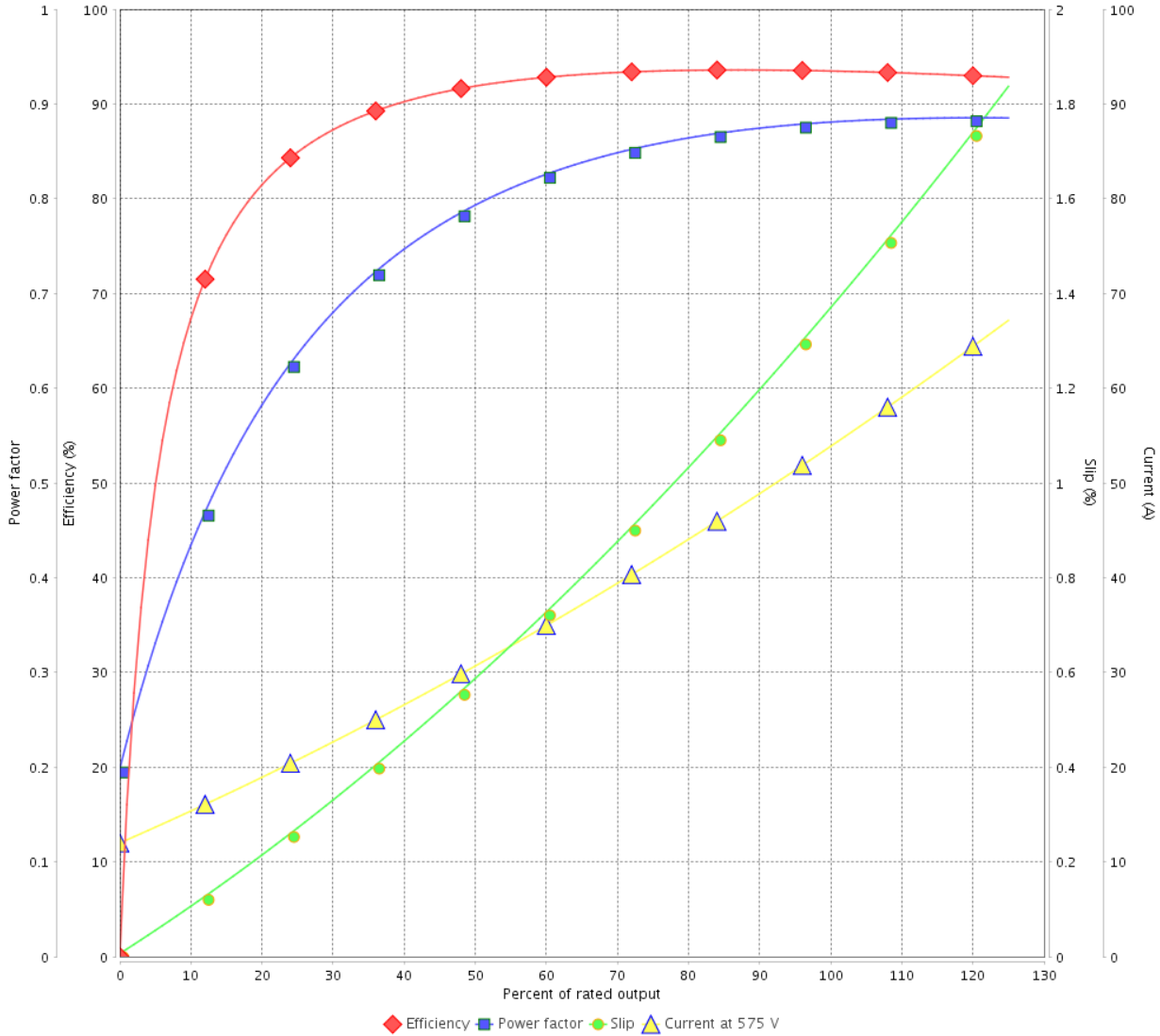
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11360896

Catalog # : 06036XT3H364TS

LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 2P

Rated current : 54.9 A  
 LRC : 6.4  
 Rated torque : 88.8 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 250 %  
 Rated speed : 3550 rpm

Moment of inertia (J) : 9.96 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	13/04/2022			

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11360896

Catalog # : 06036XT3H364TS

Performance : 575 V 60 Hz 2P

Rated current : 54.9 A  
LRC : 6.4  
Rated torque : 88.8 ft.lb  
Locked rotor torque : 200 %  
Breakdown torque : 250 %  
Rated speed : 3550 rpm

Moment of inertia (J) : 9.96 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

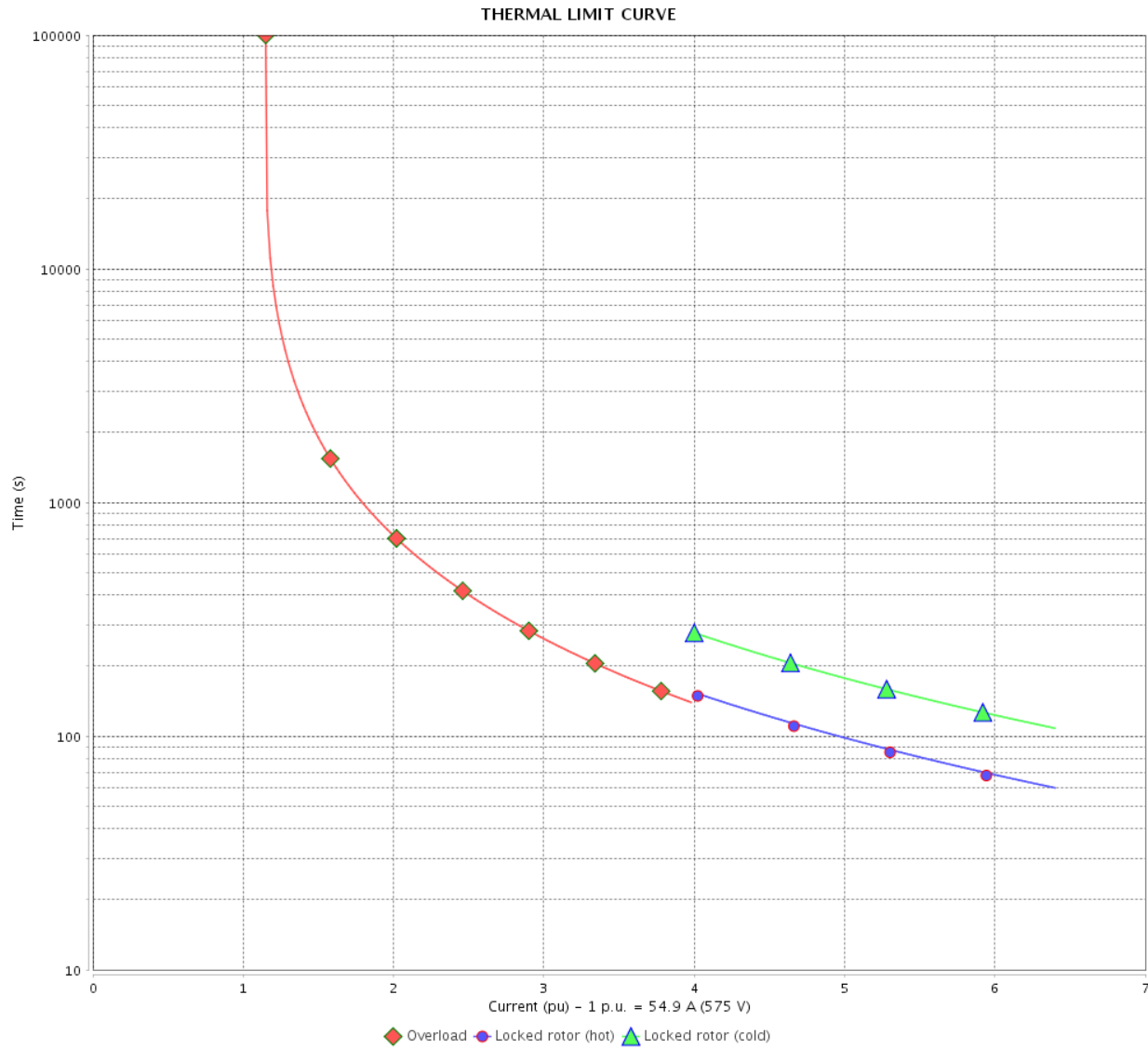
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		5 / 7	

# 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

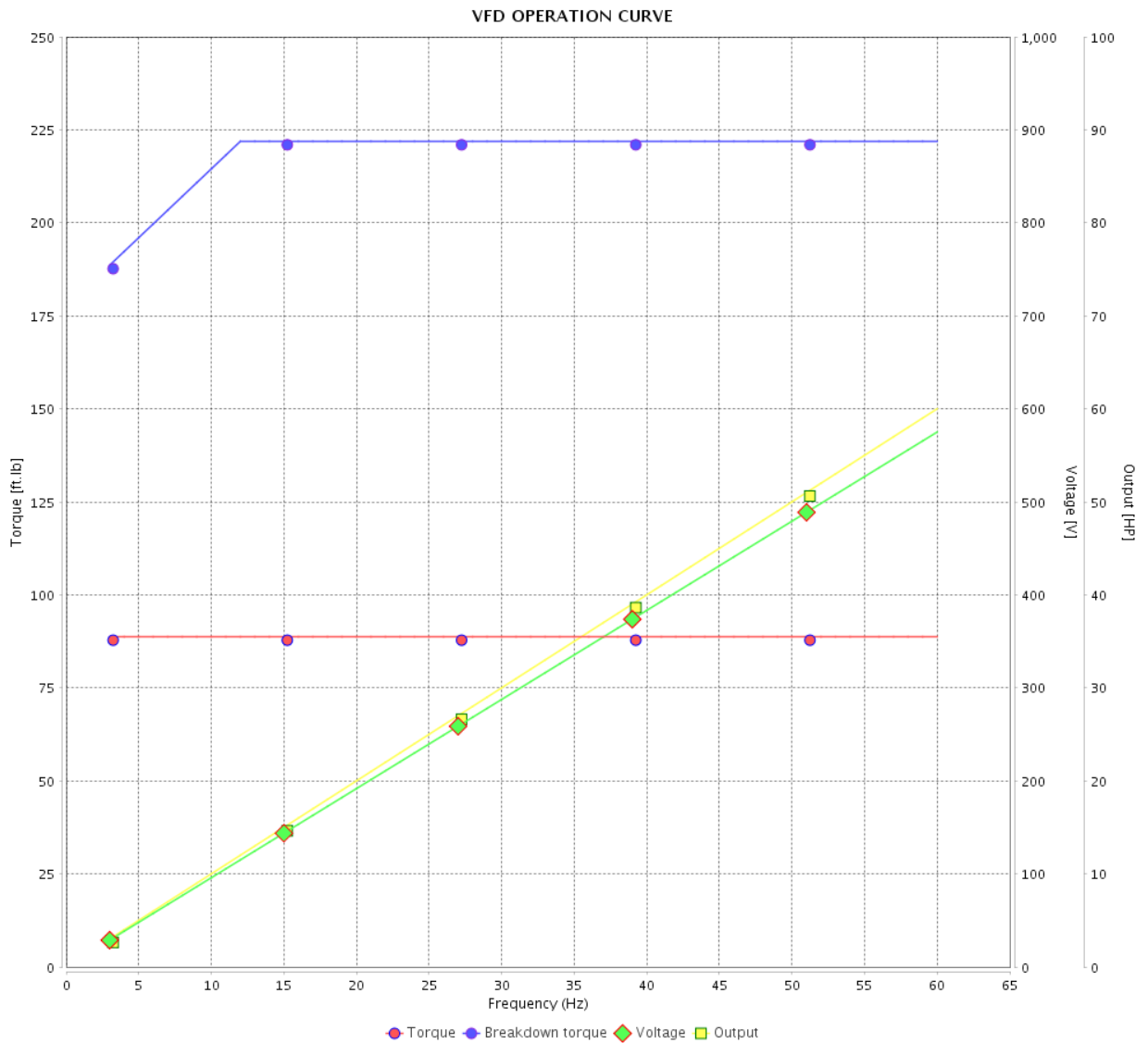


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11360896

Catalog # : 06036XT3H364TS

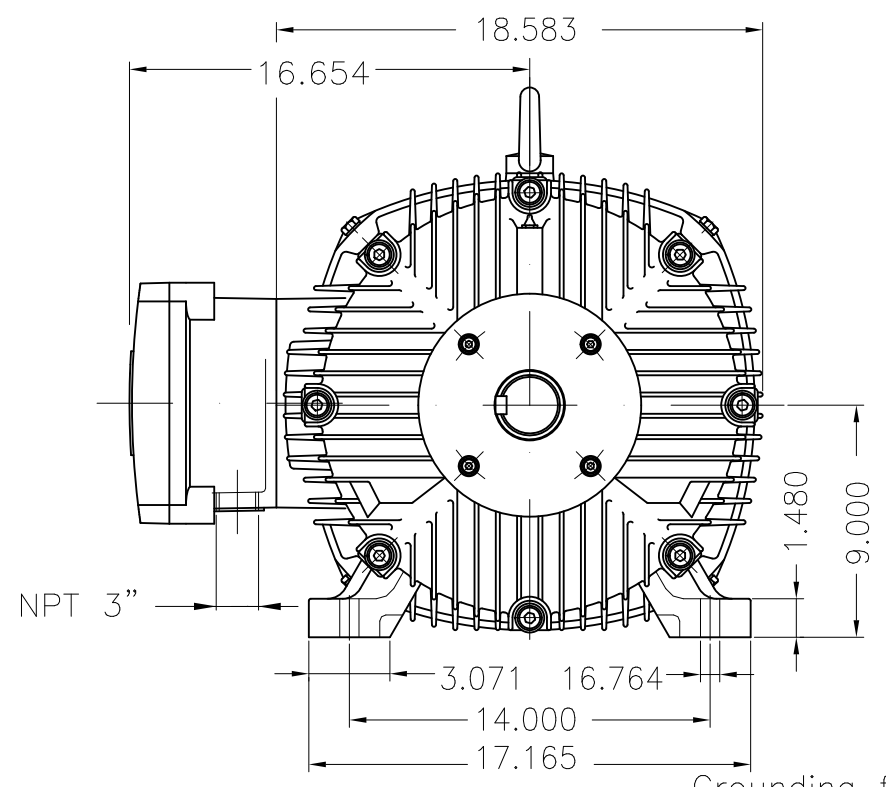


Performance : 575 V 60 Hz 2P

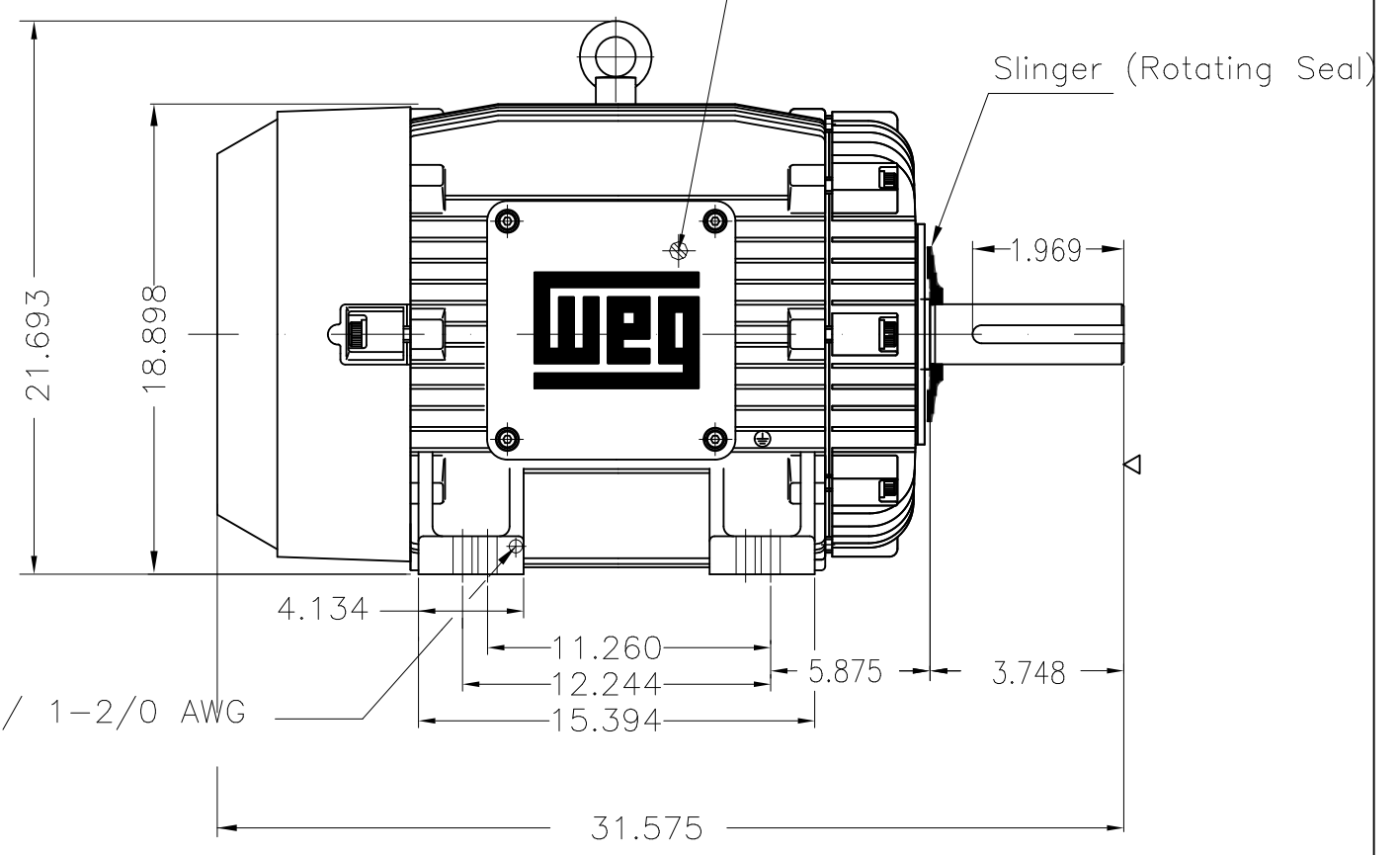
Rated current : 54.9 A  
 LRC : 6.4  
 Rated torque : 88.8 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 250 %  
 Rated speed : 3550 rpm

Moment of inertia (J) : 9.96 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	Revision
Checked by				
Date	13/04/2022			



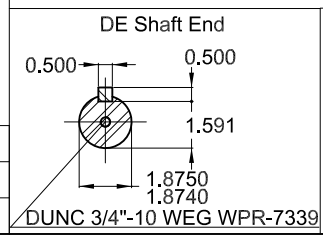
Grounding for leads 25-50 mm<sup>2</sup> / 3-1 AWG



Grounding for leads 35-70 mm<sup>2</sup> / 1-2/0 AWG

60 HP 02 Poles 60 Hz A

Color RAL 5009  
 Painting plan 202P  
 Mounting B3R(D)

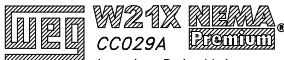


ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR EXPLOSION PROOF PREM. EFF.					
CHECKED		FRAME 364/5TS IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW  
 WDD







**W21X NEMA**  
**CC029A Premium**

*Inverter Duty Motor  
 Severe Duty*



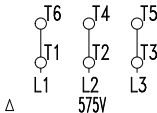
TEMP CODE T3C  
 CSA/UL: Class I - Div. 1 - Groups C and D  
 CSA: Class II - Div. 1 - Groups F and G  
 CSA: Class I - Zone 1 - IIB

**EXPLOSION PROOF MOTOR**

FOR USE ON VPWM VFD 1000:1VT, 2:1CT, 1.0SF, T3C, AMB 40°C.

VJP PART # HX060502NP  
 MADE IN BRAZIL  
 11360896

PH 3	FR 364/5TS	HP(kW) 60(45)	Hz 60
V 575	A 54.9	RPM 3550	
NEMA NOM. EFF. 93.6%		INS CL F $\Delta$ T 80 K	IP55
PF 0.88	DUTY CONT.	CODE G	
ENCL. TEFC	SF 1.15	SFA 63.1	
AMB 40°C	DES B		
AMB 55°C SF1.0	-bearings lub interval reduced by a factor of 50%		



→ 6314-C3(27g) MOBIL POLYREX EM  
 → 6314-C3(27g) 3604 h  
 ALT 1000 m.a.s.l | 1023 Lbs