

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	11360969		
		Catalog # :	06018XT3H364T		
Frame	: 364/5T	Locked rotor time	: 36s (cold) 20s (hot)		
Output	: 60 HP (45 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	: 54.6 A	Protection degree	: IP55		
L. R. Amperes	: 382 A	Cooling method	: IC411 - TEFC		
LRC	: 7.0x(Code H)	Mounting	: F-1		
No load current	: 17.6 A	Rotation <sup>1</sup>	: Both (CW and CCW)		
Rated speed	: 1780 rpm	Noise level <sup>2</sup>	: 75.0 dB(A)		
Slip	: 1.11 %	Starting method	: Direct On Line		
Rated torque	: 177 ft.lb	Approx. weight <sup>3</sup>	: 1006 lb		
Locked rotor torque	: 250 %				
Breakdown torque	: 250 %				
Insulation class	: F				
Service factor	: 1.15				
Moment of inertia (J)	: 20.8 sq.ft.lb				
Design	: B				
Output	50%	75%	100%		
Efficiency (%)	94.1	94.5	95.0		
Power Factor	0.72	0.82	0.87		
Foundation loads					
Max. traction			: 1013 lb		
Max. compression			: 2019 lb		
		<u>Drive end</u>	<u>Non drive end</u>		
Bearing type	:	6314 C3	6314 C3		
Sealing	:	Oil Seal	Lip Seal		
Lubrication interval	:	9789 h	9789 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.			
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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



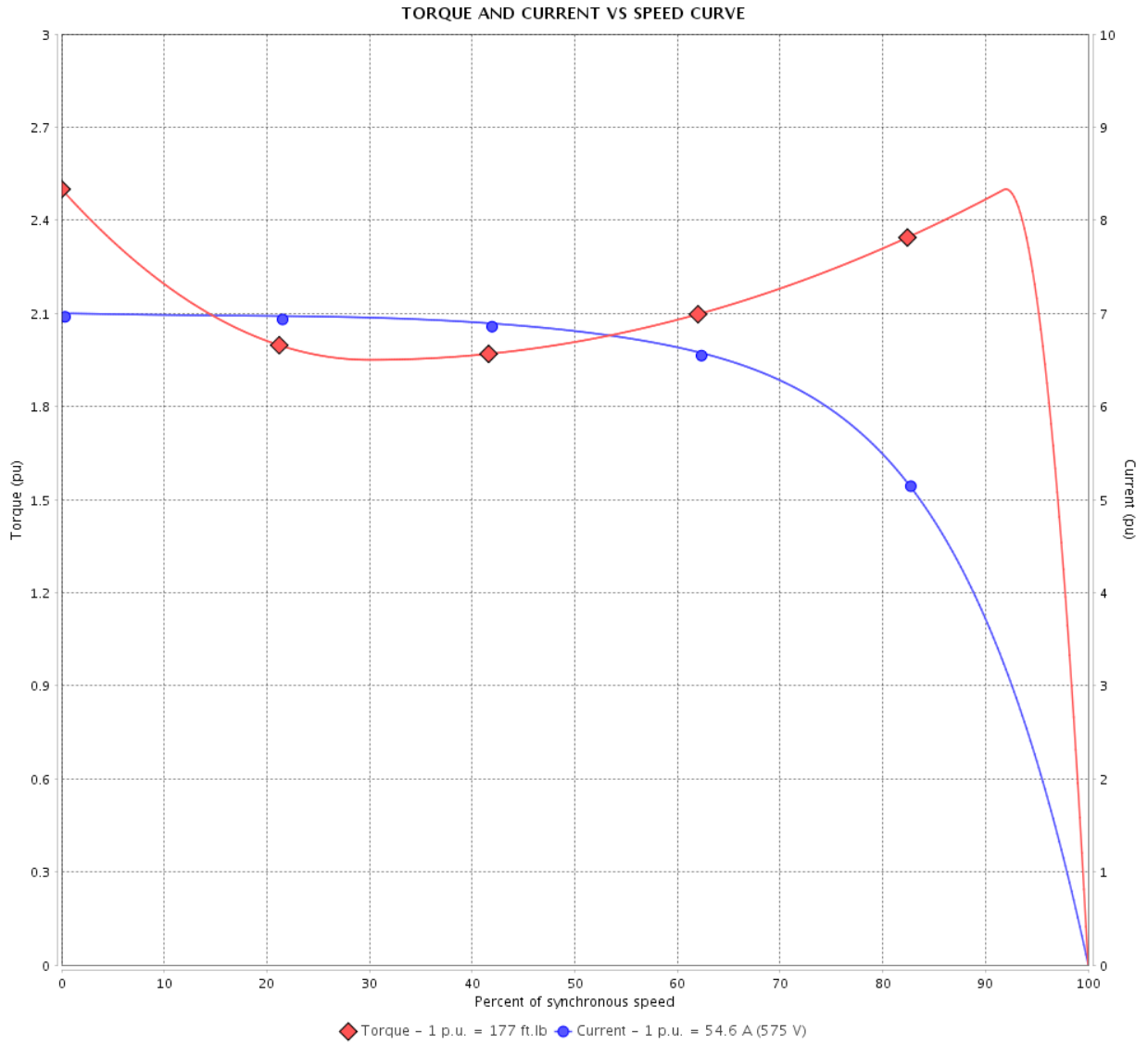
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11360969

Catalog # : 06018XT3H364T



Performance : 575 V 60 Hz 4P

Rated current	: 54.6 A	Moment of inertia (J)	: 20.8 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 177 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

Locked rotor time : 36s (cold) 20s (hot)

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



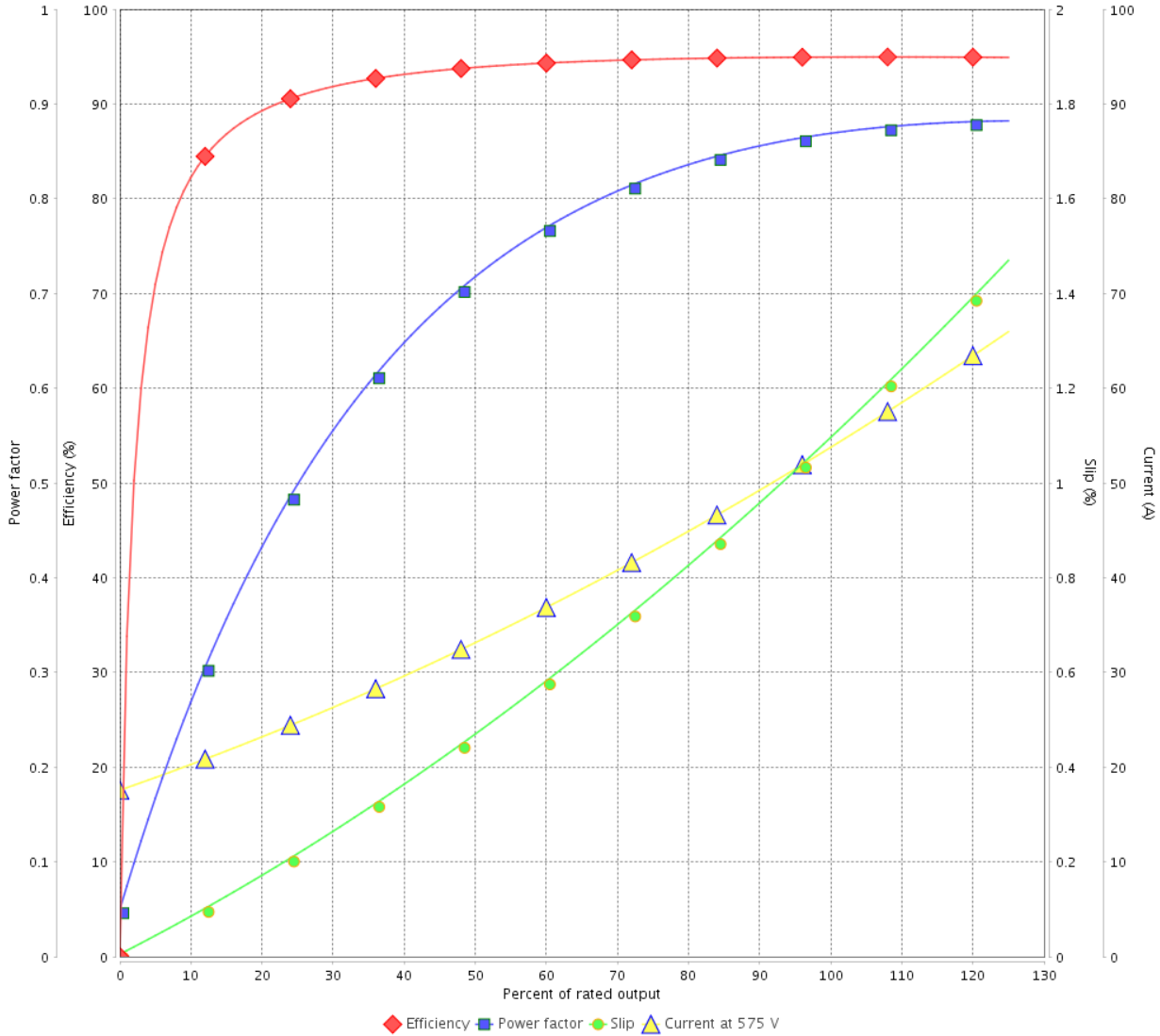
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11360969

Catalog # : 06018XT3H364T

LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 4P

Rated current : 54.6 A  
 LRC : 7.0  
 Rated torque : 177 ft.lb  
 Locked rotor torque : 250 %  
 Breakdown torque : 250 %  
 Rated speed : 1780 rpm

Moment of inertia (J) : 20.8 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 : 11360969  
 Catalog # : 06018XT3H364T

Performance : 575 V 60 Hz 4P

Rated current : 54.6 A	Moment of inertia (J) : 20.8 sq.ft.lb
LRC : 7.0	Duty cycle : Cont.(S1)
Rated torque : 177 ft.lb	Insulation class : F
Locked rotor torque : 250 %	Service factor : 1.15
Breakdown torque : 250 %	Temperature rise : 80 K
Rated speed : 1780 rpm	Design : B

Heating constant

Cooling constant

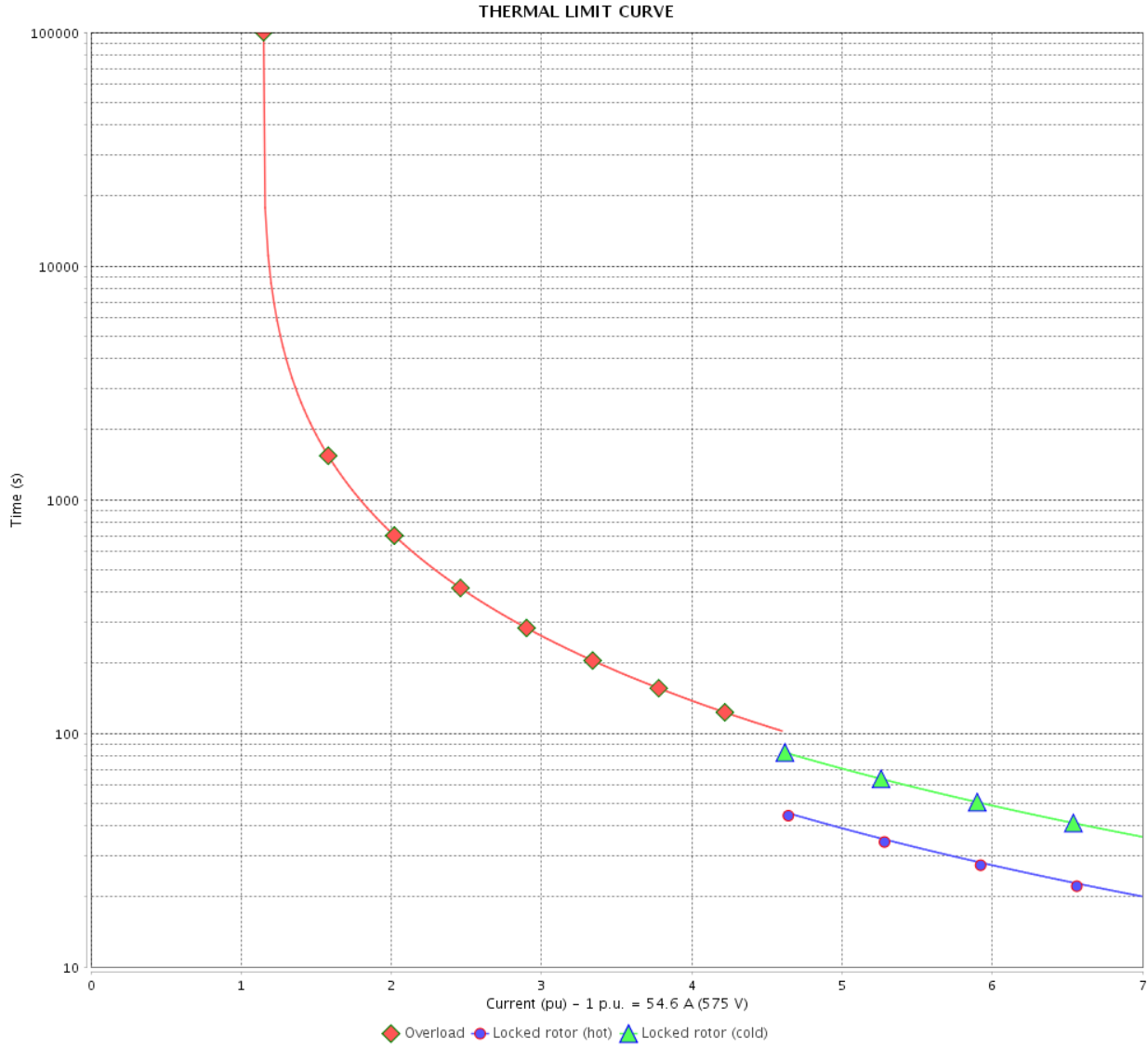
Rev.	Changes Summary	Performed	Checked	Date
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Date	12/04/2022			

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

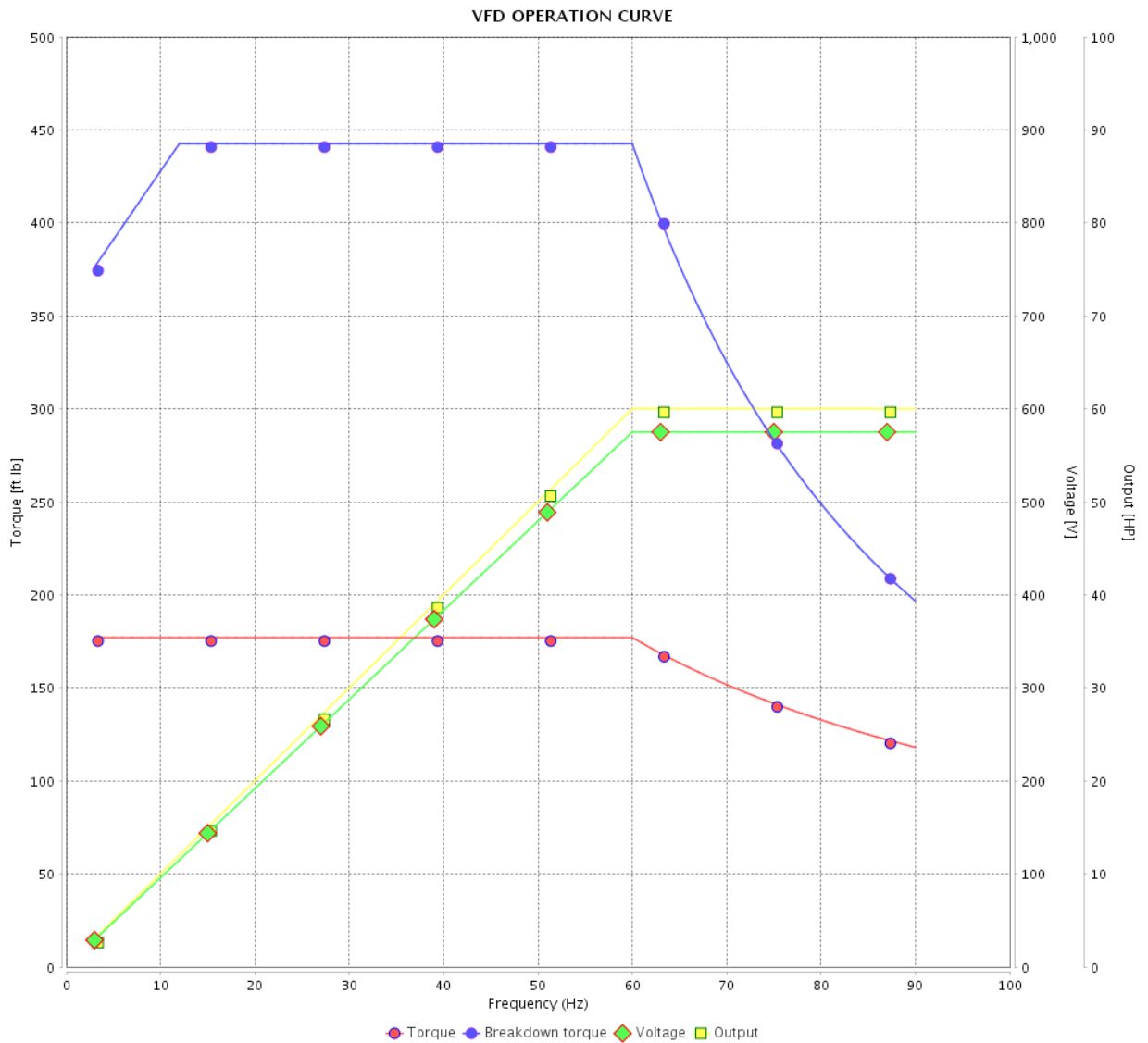


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11360969

Catalog # : 06018XT3H364T

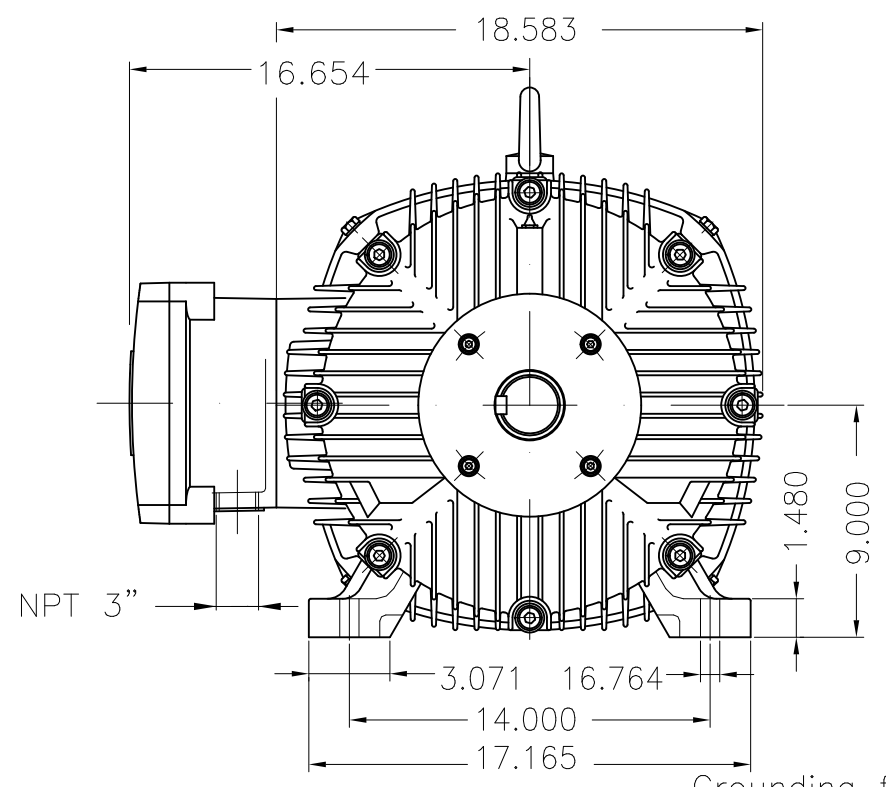


Performance : 575 V 60 Hz 4P

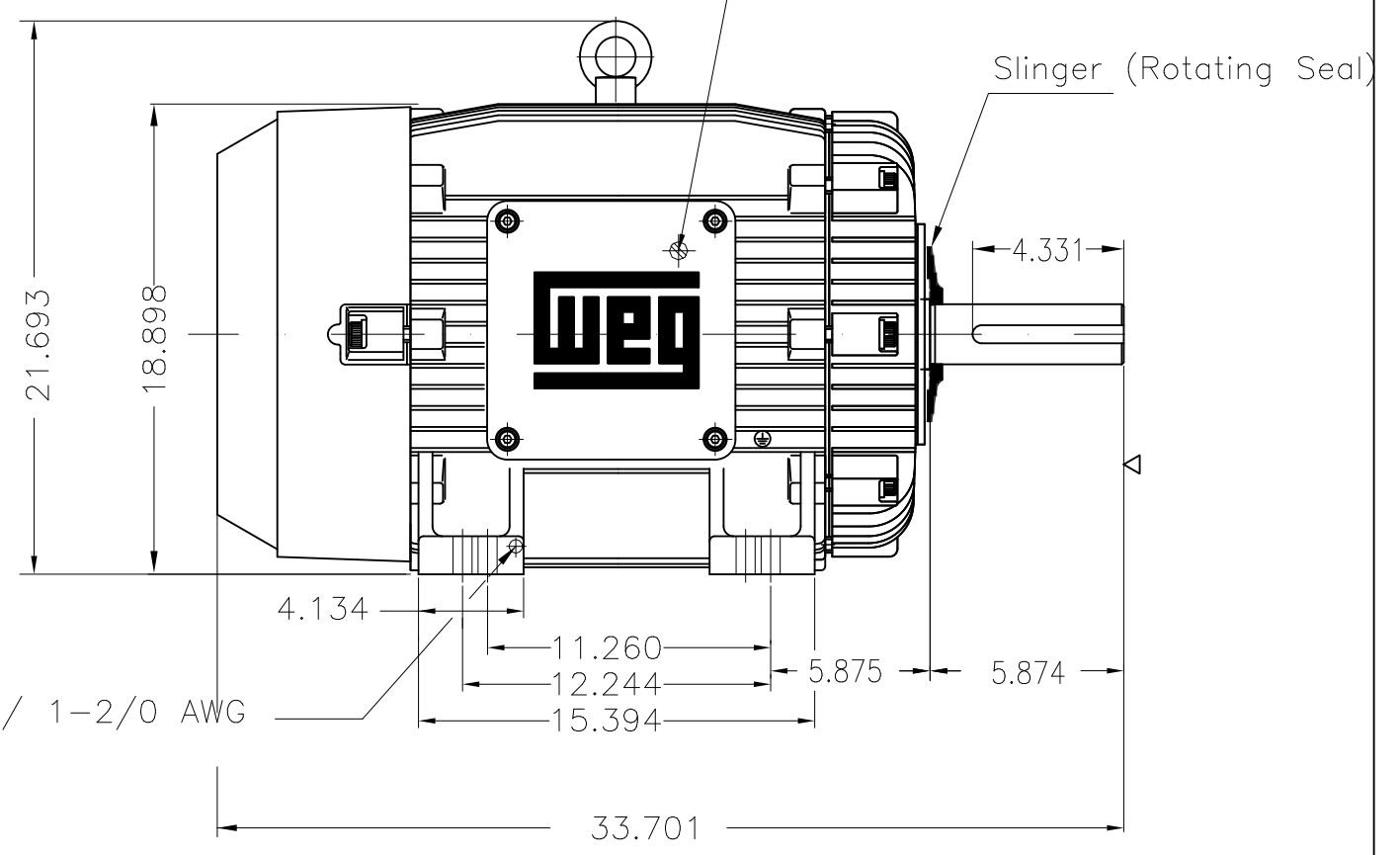
Rated current : 54.6 A  
 LRC : 7.0  
 Rated torque : 177 ft.lb  
 Locked rotor torque : 250 %  
 Breakdown torque : 250 %  
 Rated speed : 1780 rpm

Moment of inertia (J) : 20.8 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
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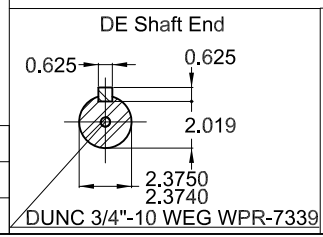
Grounding for leads 25–50 mm<sup>2</sup> / 3–1 AWG



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

60 HP 04 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 364/5T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

**PREVIEW**  
 WDD







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

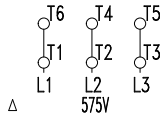
*Inverter Duty Motor  
 Severe Duty*



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.

HX060504NPW21X  
 MADE IN BRAZIL  
 11360969

PH 3	FR 364/5T	HP(kW) 60(45)	Hz 60
V 575	A 54.6	RPM 1780	
NEMA NOM. EFF. 95.0%		INS CL F $\Delta$ T 80 K	IP55
PF 0.87	DUTY CONT.		CODE H
ENCL. TEFC	SF 1.15	SFA 62.8	
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) 9789 h  
 ALT 1000 m.a.s.l | 1005 Lbs