

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line		: NEMA Premium Efficiency Three-Phase		Product code : 11684307		
			Catalog # :	06036ST3HIE364TS-W22		
Frame	: 364/5TS			Locked rotor time	: 25s (cold) 14s (hot)	
Output	: 60 HP (45 kW)			Temperature rise	: 80 K	
Poles	: 2			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	: 53.6 A			Protection degree	: IP55	
L. R. Amperes	: 343 A			Cooling method	: IC411 - TEFC	
LRC	: 6.4x(Code G)			Mounting	: F-1	
No load current	: 12.0 A			Rotation <sup>1</sup>	: Both (CW and CCW)	
Rated speed	: 3550 rpm			Noise level <sup>2</sup>	: 79.0 dB(A)	
Slip	: 1.39 %			Starting method	: Direct On Line	
Rated torque	: 88.8 ft.lb			Approx. weight <sup>3</sup>	: 862 lb	
Locked rotor torque	: 190 %					
Breakdown torque	: 250 %					
Insulation class	: F					
Service factor	: 1.25					
Moment of inertia (J)	: 10.6 sq.ft.lb					
Design	: B					
Output	50%	75%	100%	Foundation loads		
Efficiency (%)	91.7	93.0	93.6	Max. traction	: 328 lb	
Power Factor	0.81	0.88	0.90	Max. compression	: 1190 lb	
		<u>Drive end</u>		<u>Non drive end</u>		
Bearing type	:	6314 C3		6314 C3		
Sealing	:	Inpro/Seal		Inpro/Seal		
Lubrication interval	:	4000 h		4000 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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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



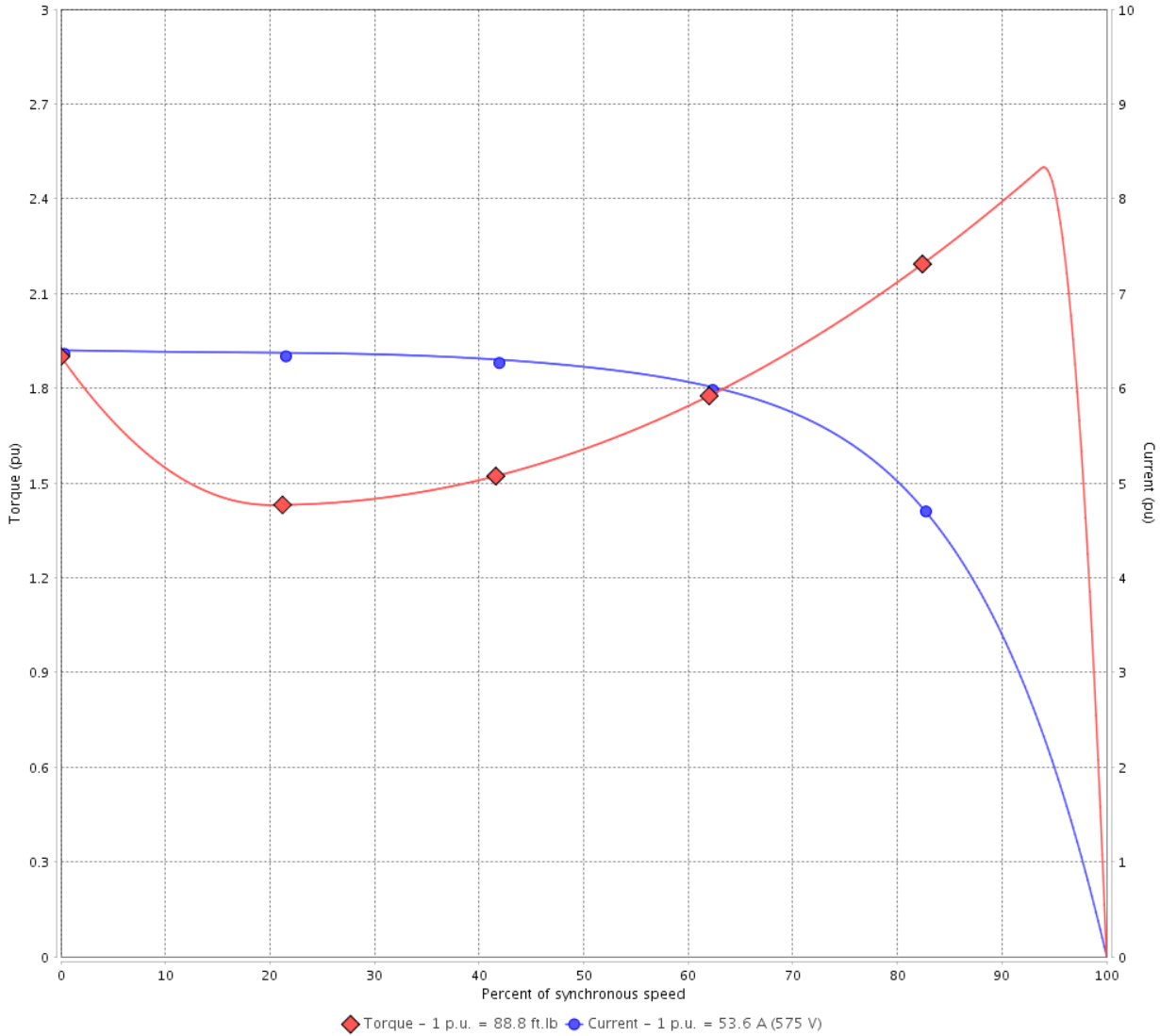
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11684307

Catalog # : 06036ST3HIE364TS-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 53.6 A	Moment of inertia (J)	: 10.6 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 88.8 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 3550 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

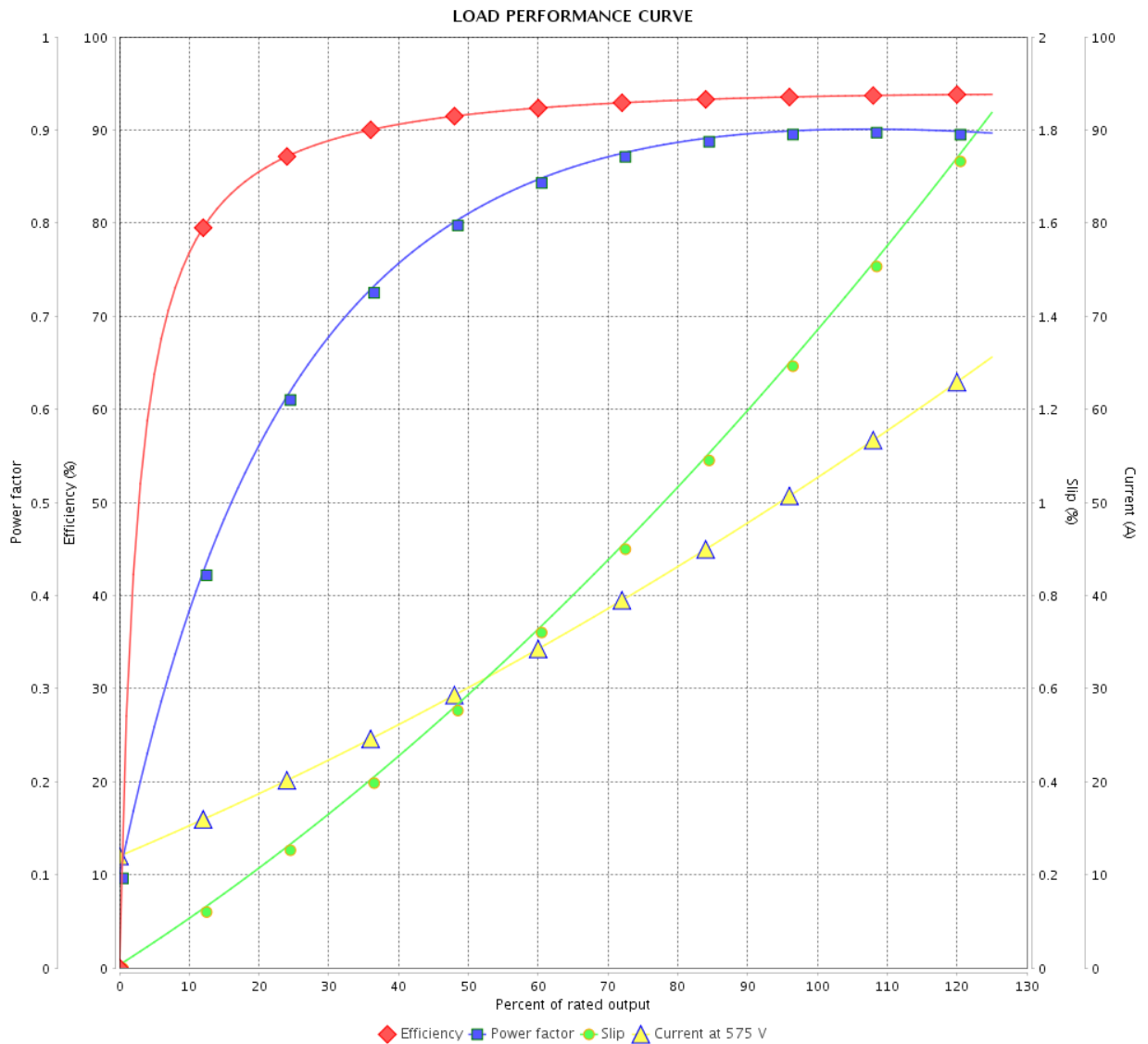


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11684307

Catalog # : 06036ST3HIE364TS-W22



Performance : 575 V 60 Hz 2P

Rated current : 53.6 A  
 LRC : 6.4  
 Rated torque : 88.8 ft.lb  
 Locked rotor torque : 190 %  
 Breakdown torque : 250 %  
 Rated speed : 3550 rpm

Moment of inertia (J) : 10.6 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

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Product line : NEMA Premium Efficiency Three-Phase  
Product code : 11684307  
Catalog # : 06036ST3HIE364TS-W22

Performance : 575 V 60 Hz 2P

Rated current	: 53.6 A	Moment of inertia (J)	: 10.6 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 88.8 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 3550 rpm	Design	: B

Heating constant

Cooling constant

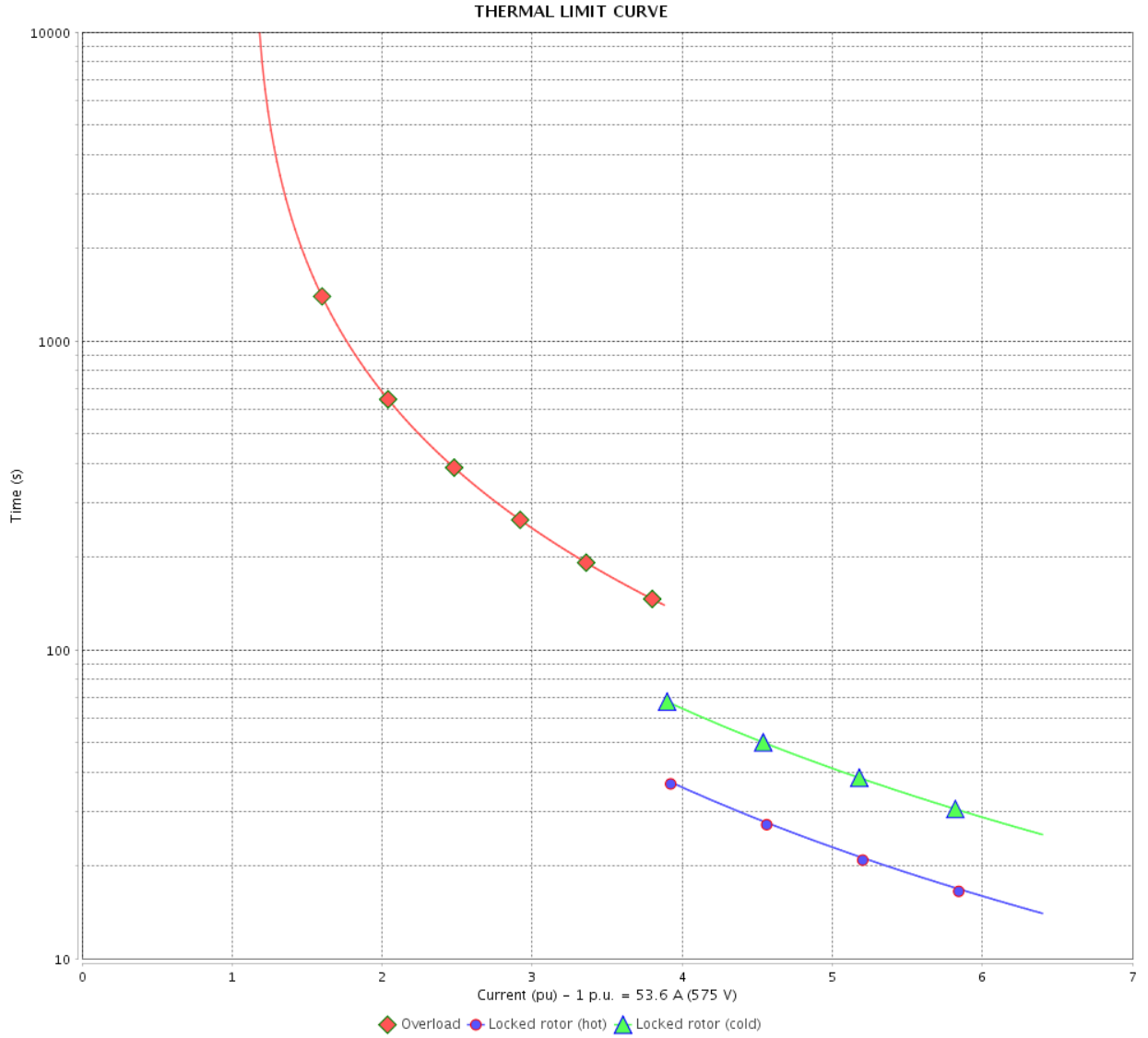
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

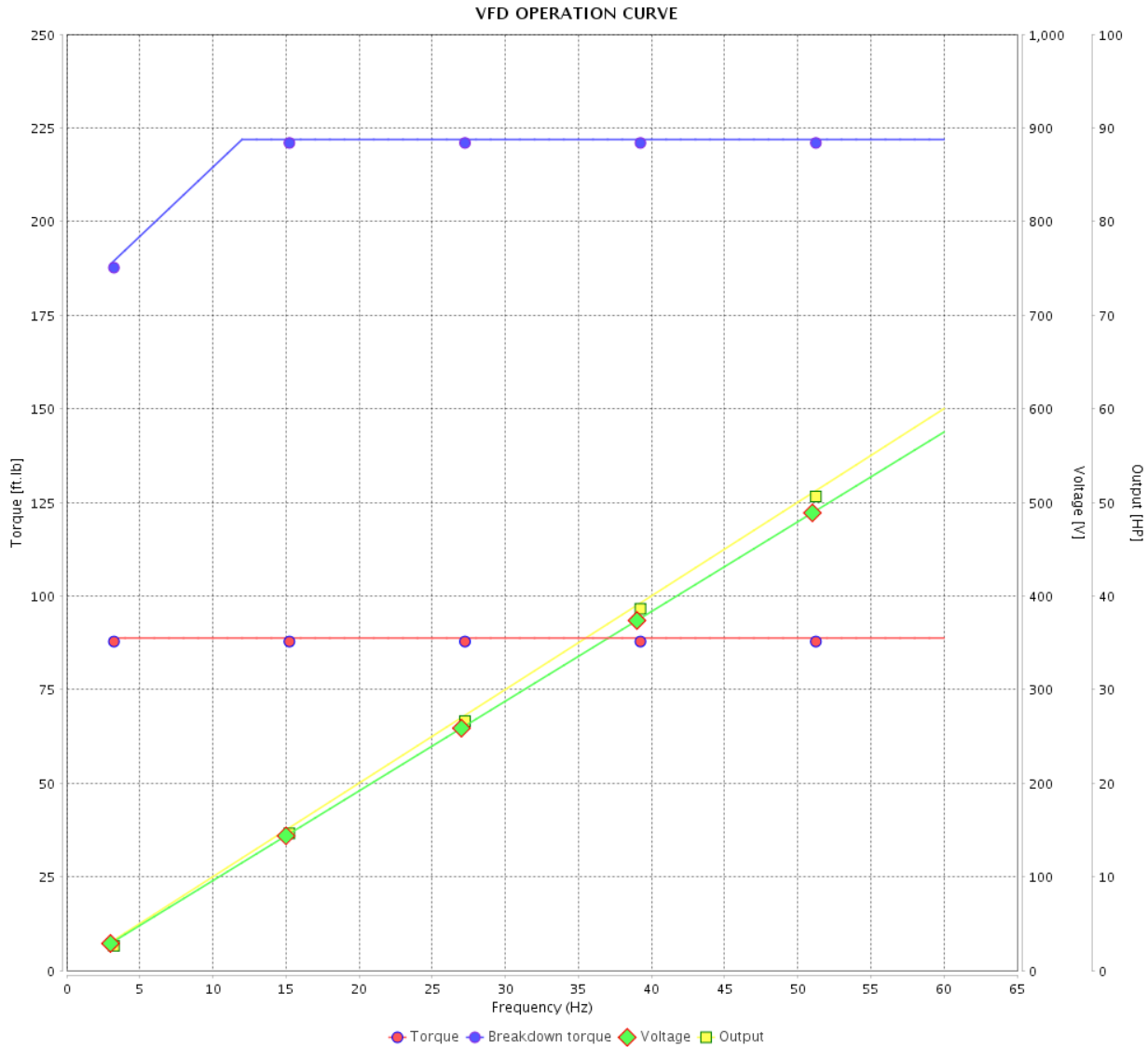


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11684307

Catalog # : 06036ST3HIE364TS-W22



Performance : 575 V 60 Hz 2P

Rated current	: 53.6 A	Moment of inertia (J)	: 10.6 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 88.8 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 3550 rpm	Design	: B

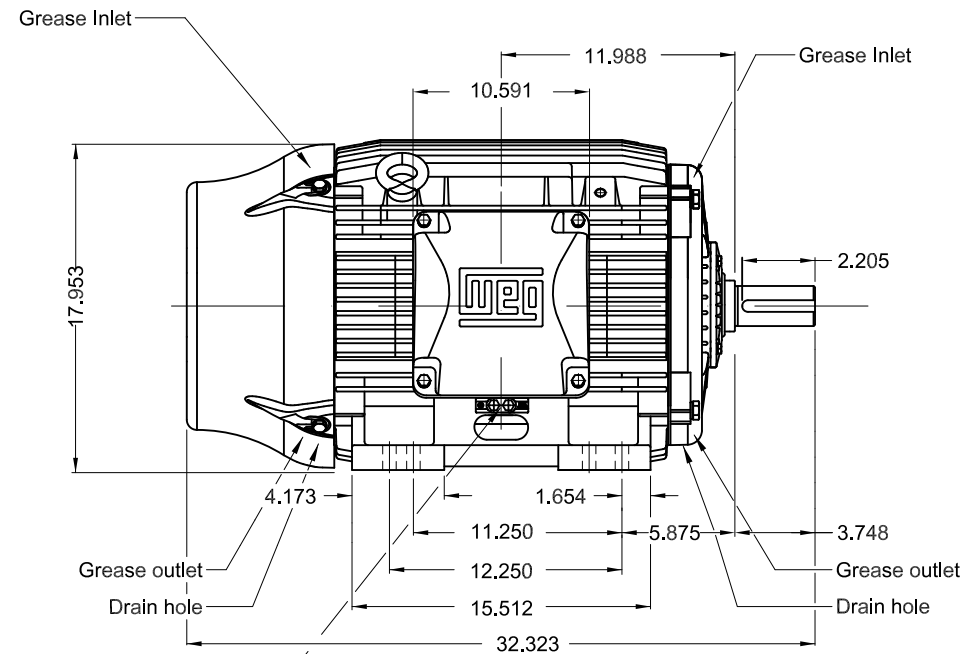
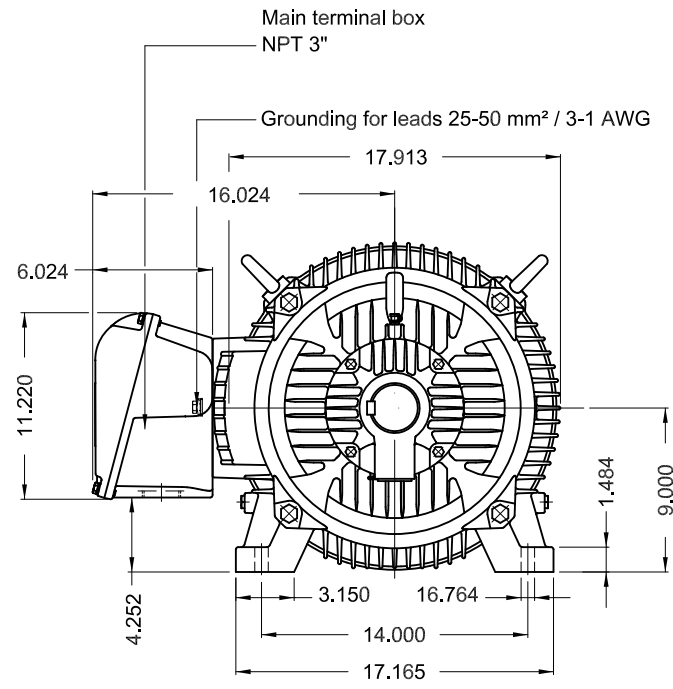
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1 2 3 4 5 6

A

B

C

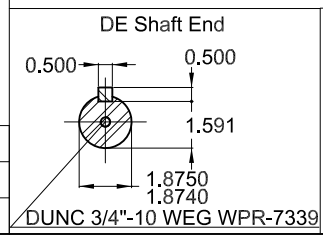


Grounding for leads 25-185 mm² / 3AWG-350MCM

D

E

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



60 HP 02 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR IEEE 841 W22 PREM. EFF. FRAME 364/5TS IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

**PREVIEW**  
**WDD**





**NEMA**  
Premium  
W22



FOR SAFE AREA  
Mod.TE1BFOXON  
CC029A



Class I, Div 2, Gr A, B, C and D - T3  
Class I, Zone 2, IIC - T3  
Class II, Div 2, Gr F and G - T4  
For use on PWM: Gr. A, B, C, D and F,  
VT 1000:1, CT 20:1, 1.00SF - T3A

MODEL 06036ST3HIE364TS-W22



Inverter Duty Motor  
Severe Duty

MADE IN BRAZIL  
11684307

PH3 60Hz Fr. 364/5TS 1000m.a.s.l. IP55 TEFC 861lb

V 575

A 53.6

HP 60

kW 45

SF 1.25

SFA 67.0

RPM 3550

PF 0.90

AMB 40°C

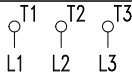
INS cl. F DT80K

NEMA NOM EFF 93.6%

DUTY CONT.

DES B Code G

GUARANT. EFF 92.4%



575V



→ 6314-C3 (27g) 70BC03X30

→ 6314-C3 (27g) 70BC03X30



MOBIL POLYREX EM (4000h)

