

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: NEMA Premium Efficiency Three-Phase		Product code : 12037906	
				Catalog # : 20012ST3HIERB449T-W2	
Frame	: 447/9T		Locked rotor time	: 27s (cold) 15s (hot)	
Output	: 200 HP (150 kW)		Temperature rise	: 80 K	
Poles	: 6		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	: 190 A		Protection degree	: IP55	
L. R. Amperes	: 1157 A		Cooling method	: IC411 - TEFC	
LRC	: 6.1x(Code G)		Mounting	: F-1	
No load current	: 68.0 A		Rotation ¹	: Both (CW and CCW)	
Rated speed	: 1185 rpm		Noise level ²	: 70.0 dB(A)	
Slip	: 1.25 %		Starting method	: Direct On Line	
Rated torque	: 886 ft.lb		Approx. weight ³	: 2856 lb	
Locked rotor torque	: 220 %				
Breakdown torque	: 240 %				
Insulation class	: F				
Service factor	: 1.15				
Moment of inertia (J)	: 145 sq.ft.lb				
Design	: B				
Output	25%	50%	75%	100%	
Efficiency (%)	94.5	95.0	95.4	95.8	
Power Factor	0.45	0.68	0.79	0.83	
Foundation loads					
Max. traction : 4242 lb					
Max. compression : 7099 lb					
		<u>Drive end</u>	<u>Non drive end</u>		
Bearing type	:	NU-322 C3	6319 C3		
Sealing	:	Inpro/Seal	Inpro/Seal		
Lubrication interval	:	7000 h	13000 h		
Lubricant amount	:	60 g	45 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



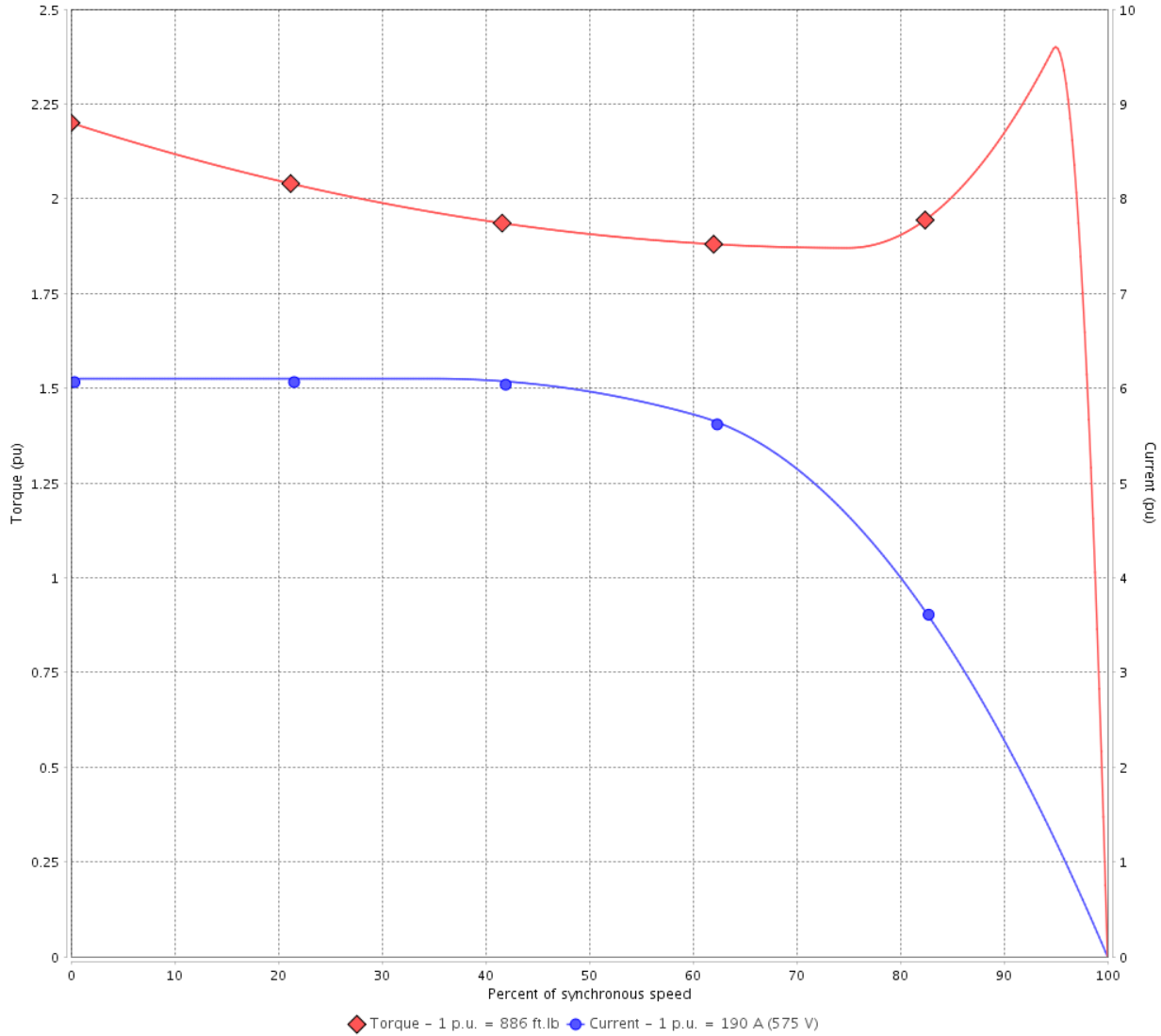
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12037906

Catalog # : 20012ST3HIERB449T-W2

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 6P

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LRC	: 6.1	Duty cycle	: Cont.(S1)
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Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1185 rpm	Design	: B

Locked rotor time : 27s (cold) 15s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

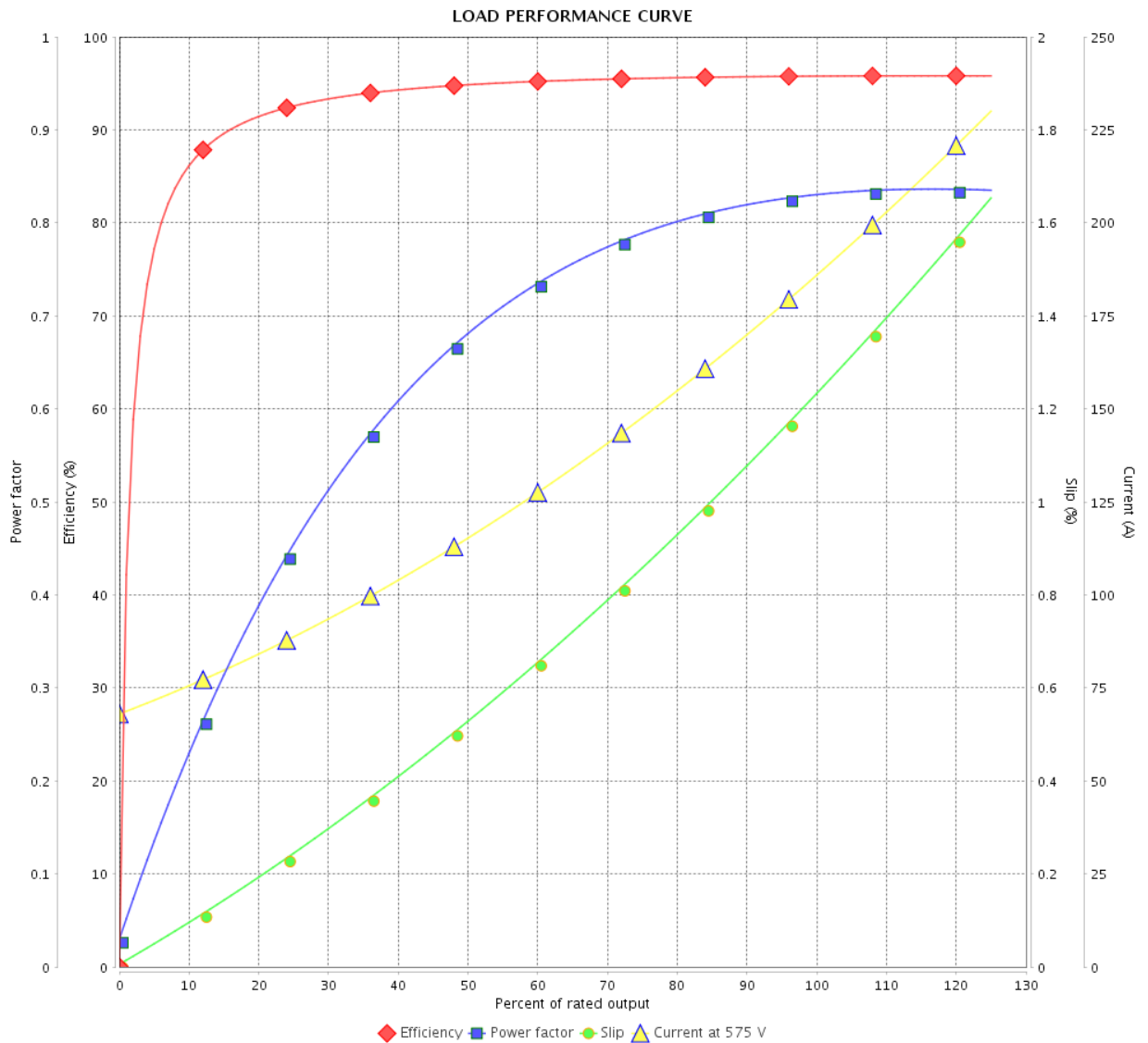


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Performance : 575 V 60 Hz 6P

Rated current : 190 A
 LRC : 6.1
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 Breakdown torque : 240 %
 Rated speed : 1185 rpm

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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

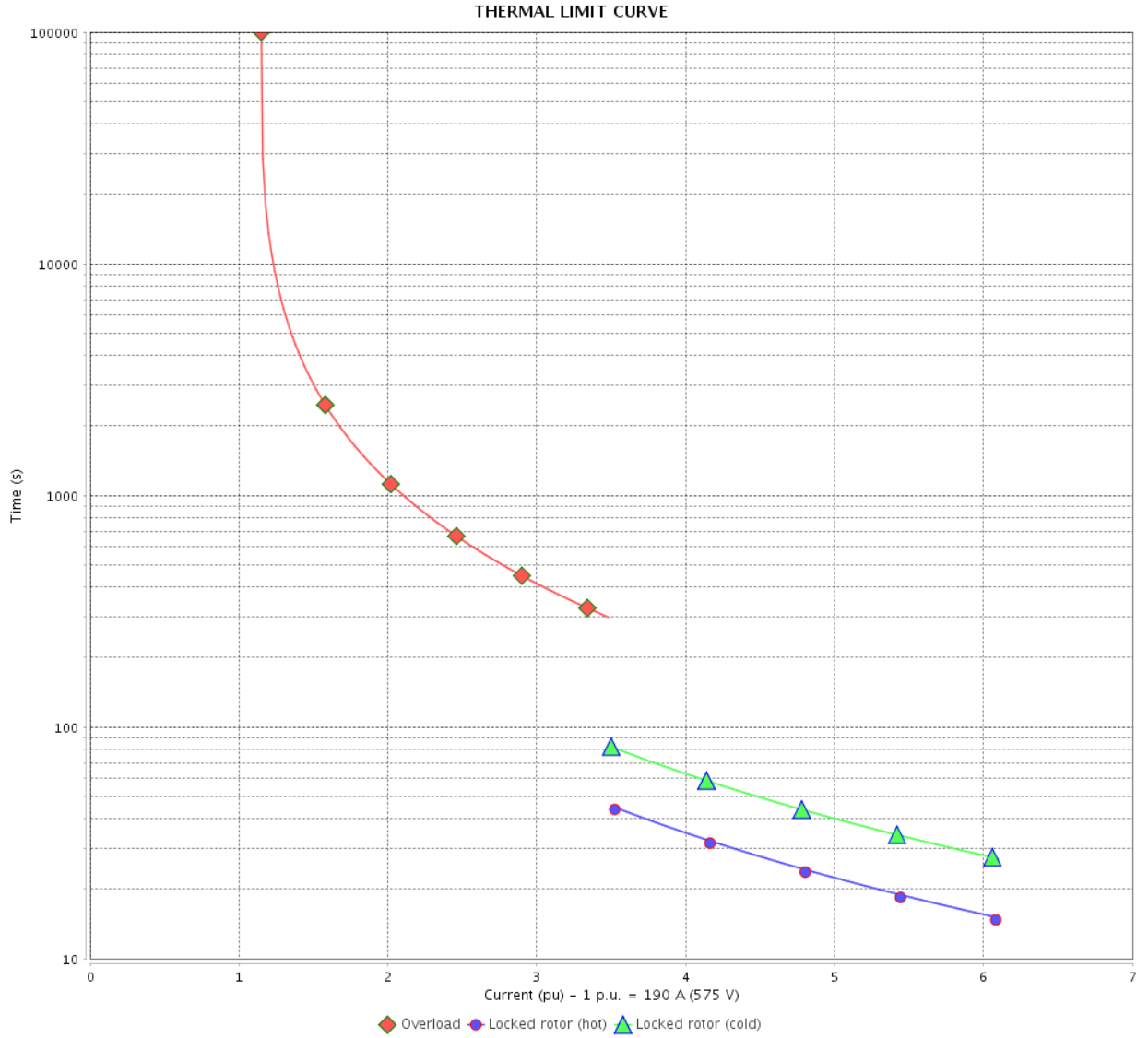
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

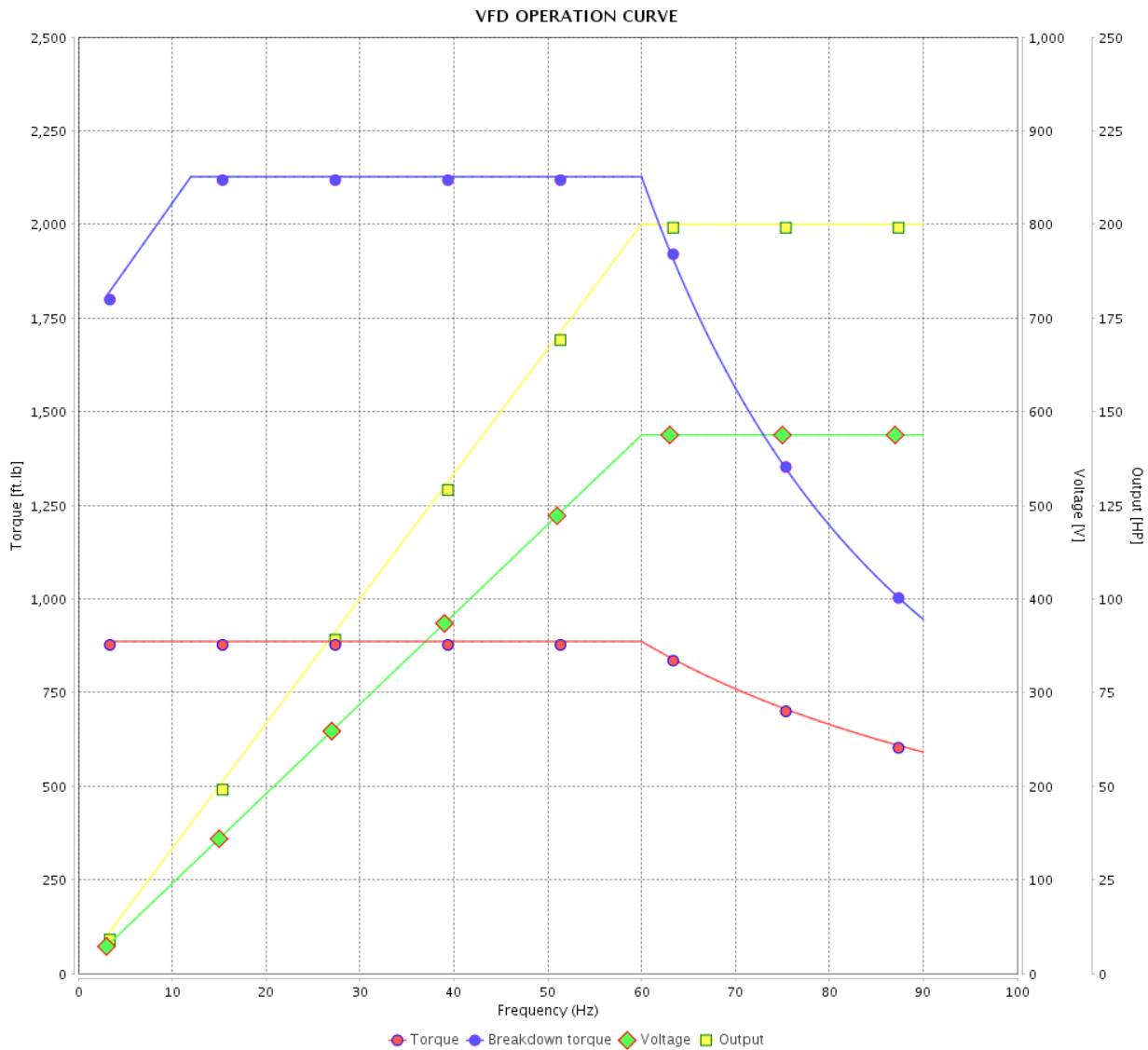


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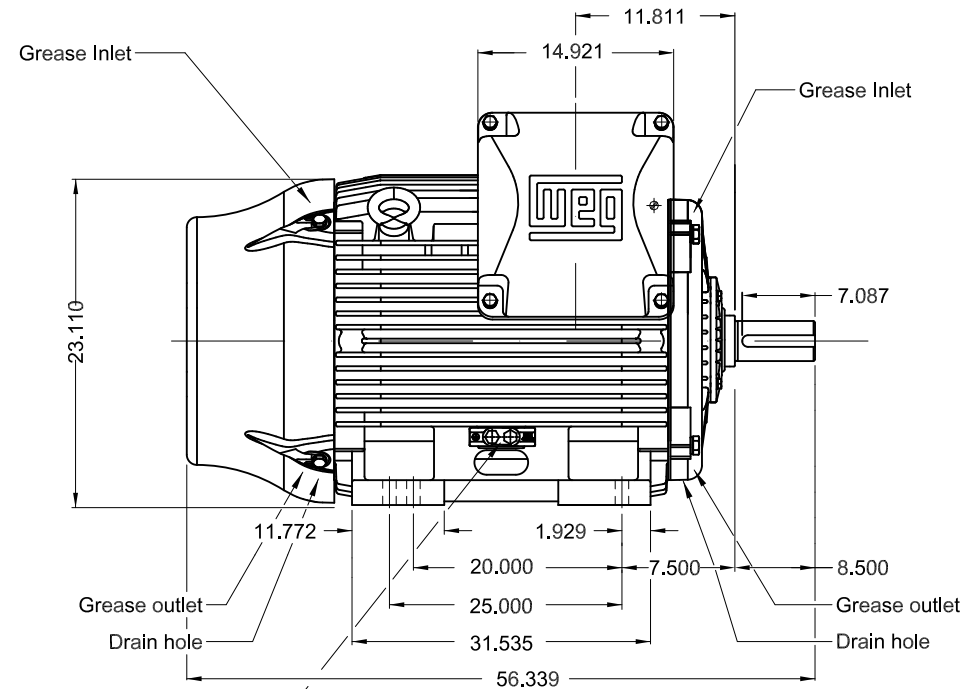
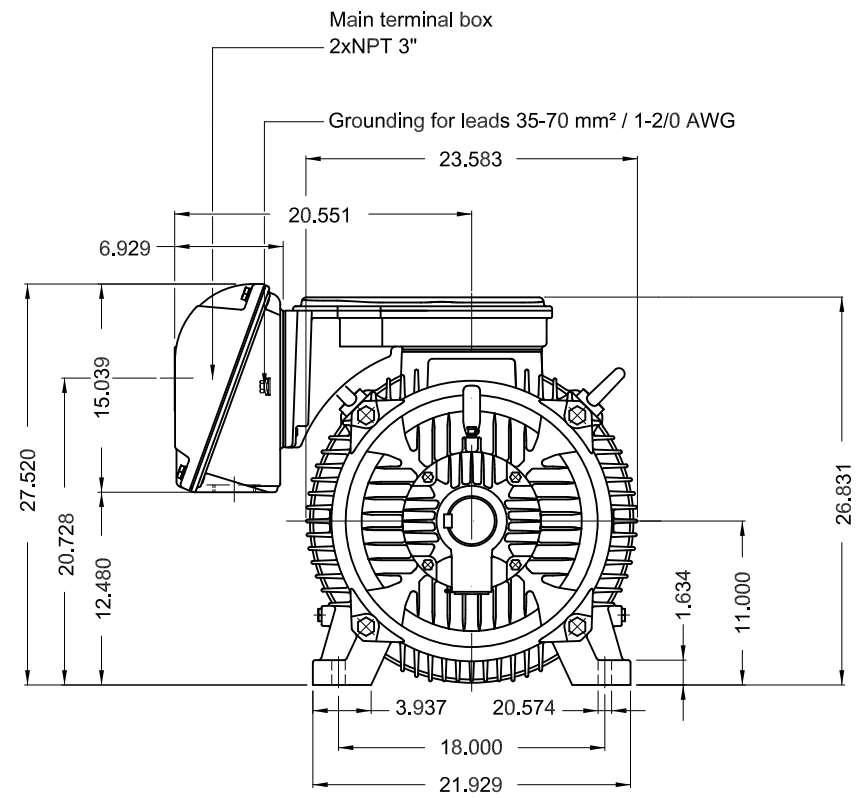
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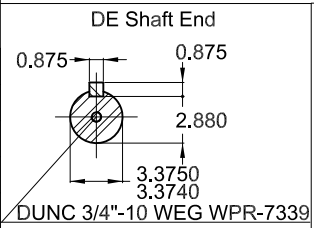
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Grounding for leads 25-185 mm² / 3AWG-350MCM

- DE roller bearing
- Shaft locking device
- Color RAL 5009
- Painting plan 202E
- Mounting B3R(D)



200 HP 06 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR IEEE 841 W22 PREM. EFF. FRAME 447/9T IP55 TEFC					
CHECKED							
RELEASED							
REL DT.							
	WMO	Jaragua do Sul	Product Engineering	SHEET 1 / 1			

PREVIEW
WDD



MADE IN BRAZIL
12037906



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 - T3C
For use on PWM: Gr. A, B, C, D and F,
VT 1000:1, CT 20:1, 1.00SF - T3

MODEL 20012ST3HIERB449T-W2

Inverter Duty Motor
Severe Duty

IEEE
841-2009

PH3 60Hz Fr. 447/9T 1000m.a.s.l. IP55 TEFC 2856lb

V 575

A 190

HP 200

kW 150

SF 1.15

SFA 218

RPM 1185

PF 0.83

AMB 40°C

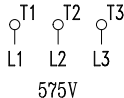
INS cl. F DT80K

NEMA NOM EFF 95.8%

DUTY CONT.

DESB Code G

GUARANT. EFF 95.0%



→ NU-322-C3 (60g) 7000h
110RU03X30
→ 6319-C3 (45g) 7000h
95BC03X30

MOBIL POLYREX EM

