

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	11434693																		
Catalog # :	20012ST3HIE449T-W22																		
Frame : 447/9T Output : 200 HP (150 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 575 V Rated current : 190 A L. R. Amperes : 1157 A LRC : 6.1x(Code G) No load current : 68.0 A Rated speed : 1185 rpm Slip : 1.25 % Rated torque : 886 ft.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	Locked rotor time : 27s (cold) 15s (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 ¹ : Both (CW and CCW) Noise level ² : 70.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 2840 lb																		
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	: 4251 lb																		
Max. compression	: 7090 lb																		
	<table border="0"> <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>: 6322 C3</td> <td>6319 C3</td> </tr> <tr> <td>Sealing</td> <td>: Inpro/Seal</td> <td>Inpro/Seal</td> </tr> <tr> <td>Lubrication interval</td> <td>: 11000 h</td> <td>13000 h</td> </tr> <tr> <td>Lubricant amount</td> <td>: 60 g</td> <td>45 g</td> </tr> <tr> <td>Lubricant type</td> <td colspan="2" style="text-align: center;">Mobil Polyrex EM</td> </tr> </table>		<u>Drive end</u>	<u>Non drive end</u>	Bearing type	: 6322 C3	6319 C3	Sealing	: Inpro/Seal	Inpro/Seal	Lubrication interval	: 11000 h	13000 h	Lubricant amount	: 60 g	45 g	Lubricant type	Mobil Polyrex EM	
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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															
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



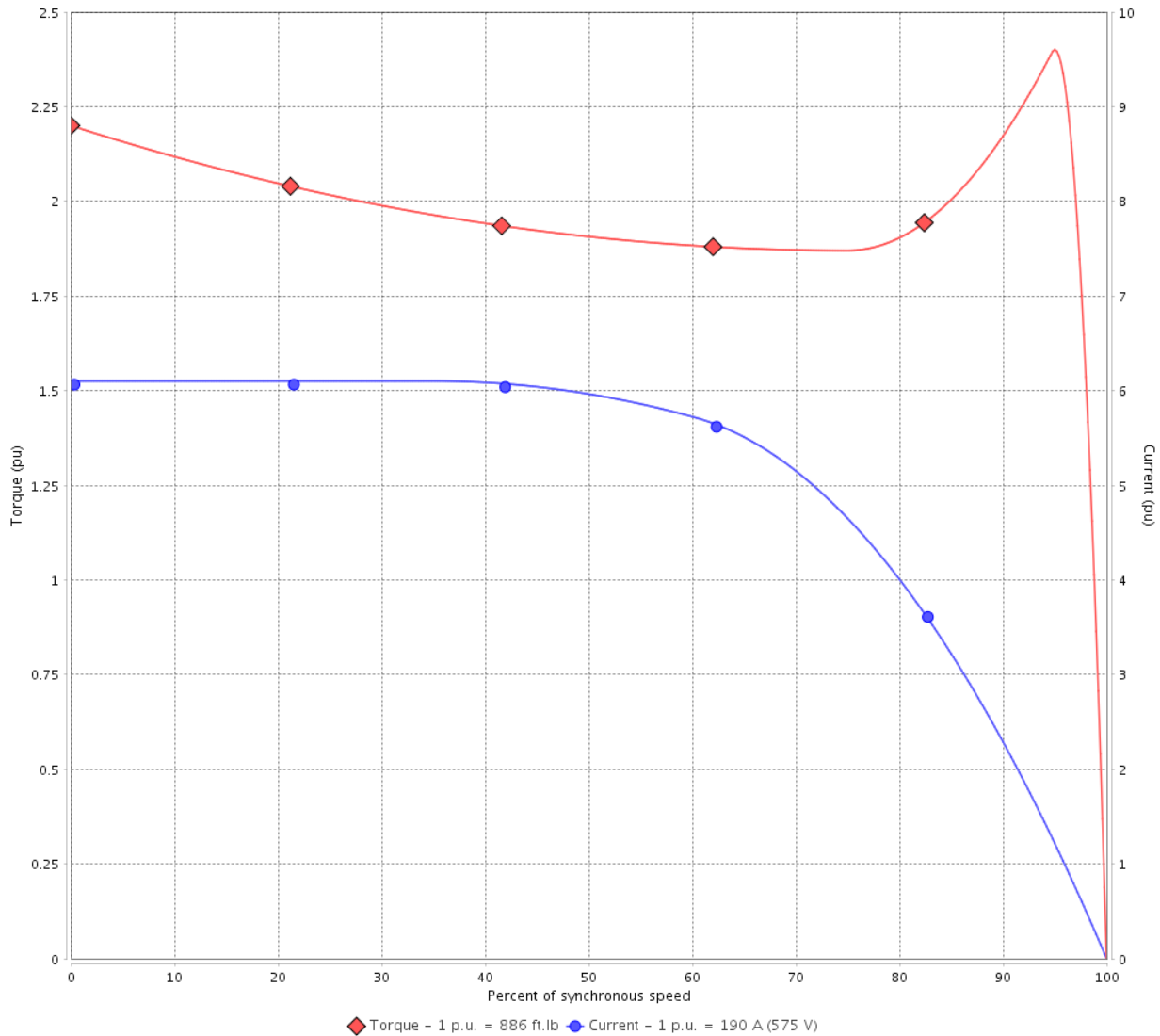
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 6P

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LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 886 ft.lb	Insulation class	: F
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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Date	14/04/2022			

LOAD PERFORMANCE CURVE

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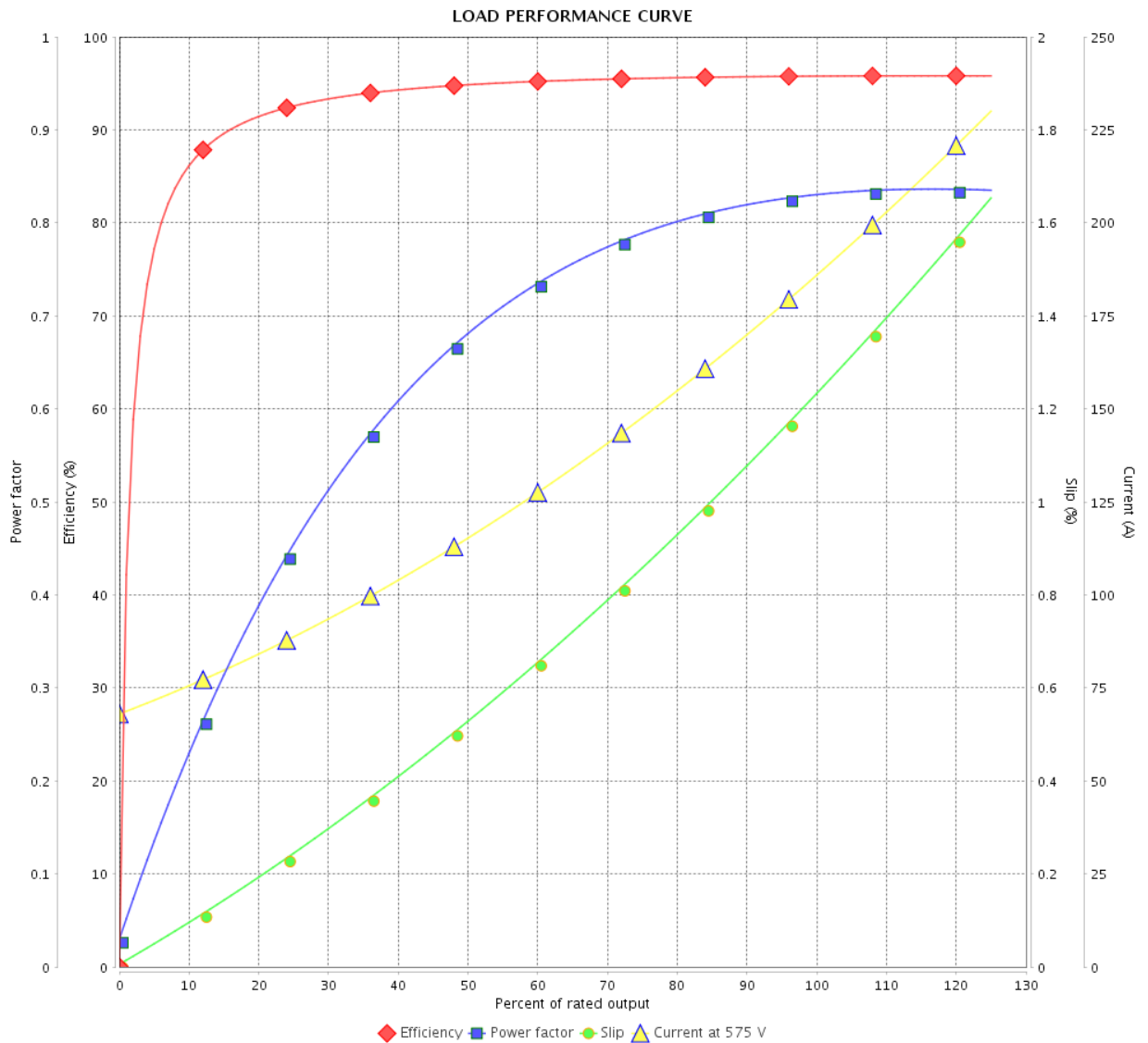


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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

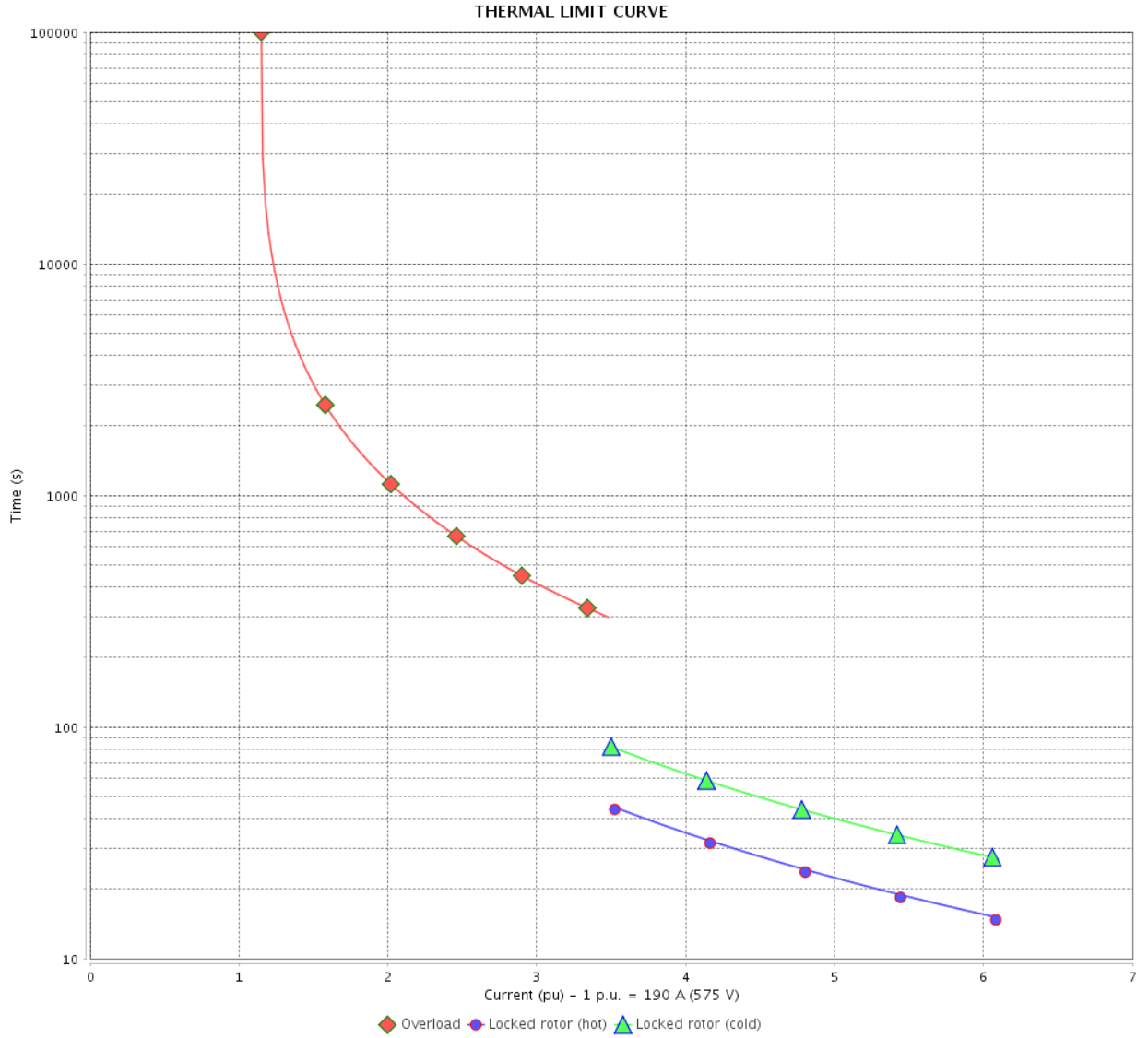
Rev.	Changes Summary	Performed	Checked	Date
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

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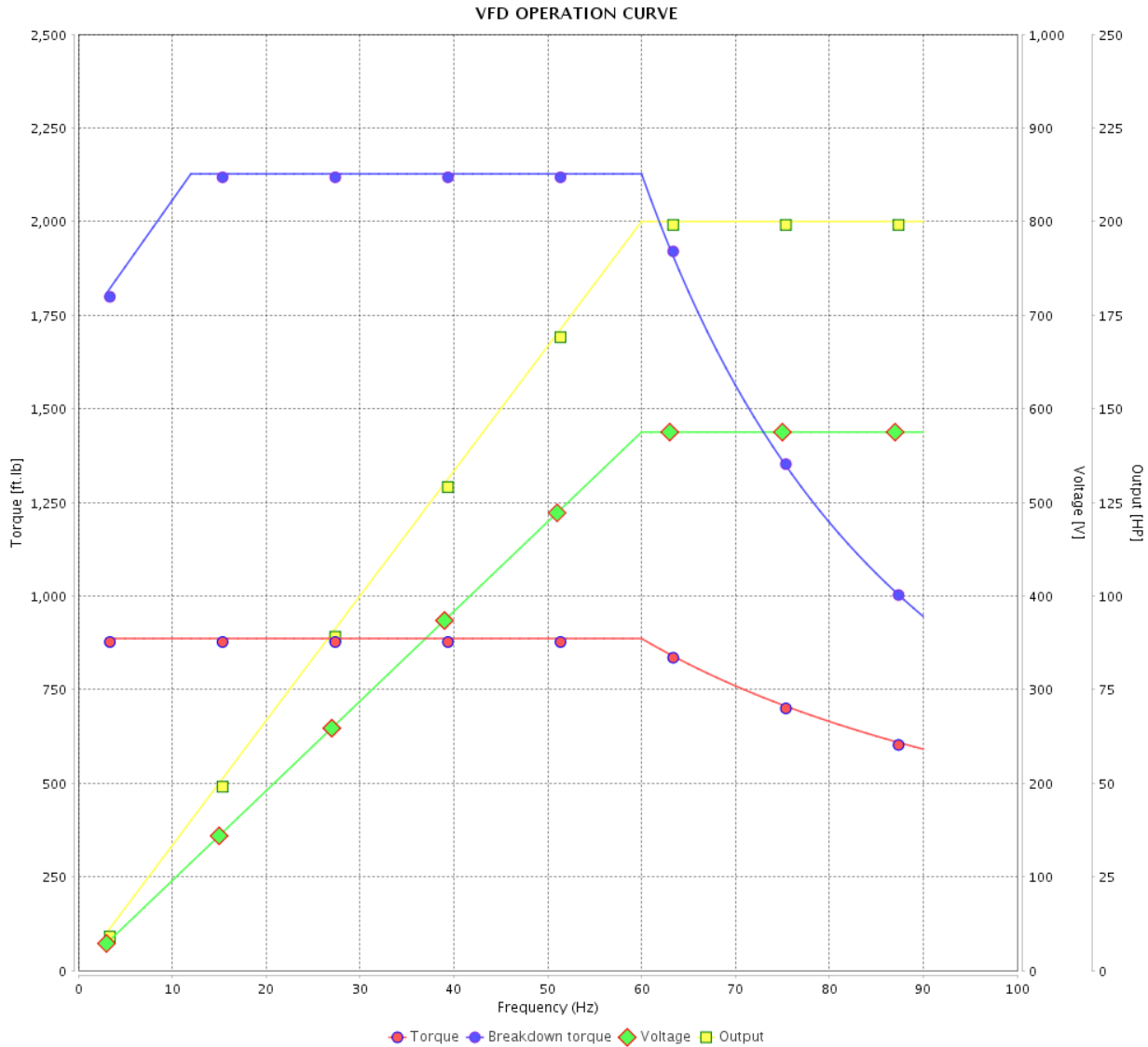


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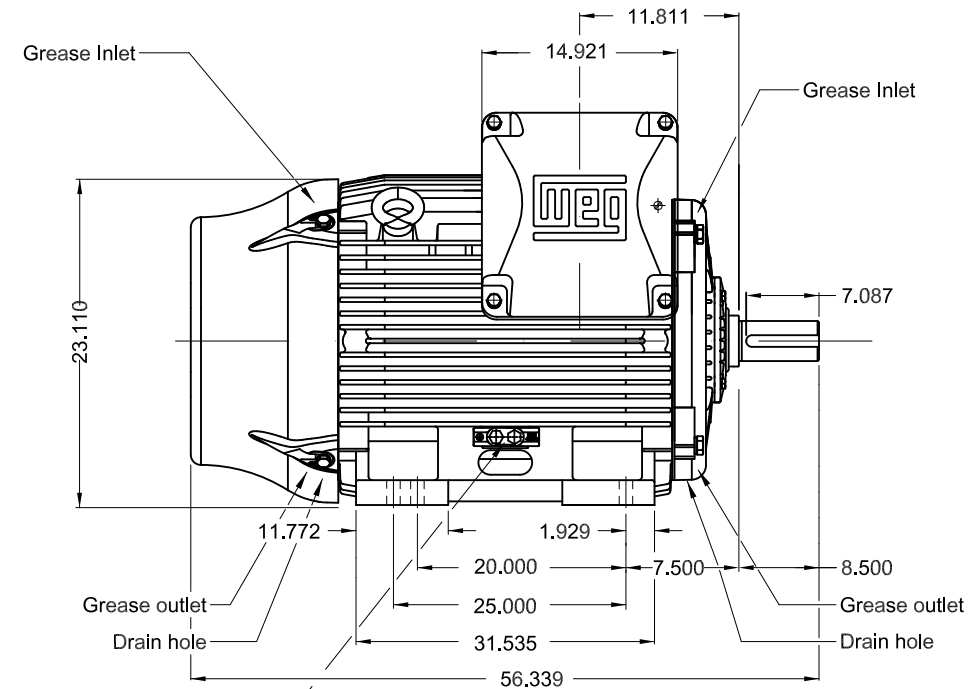
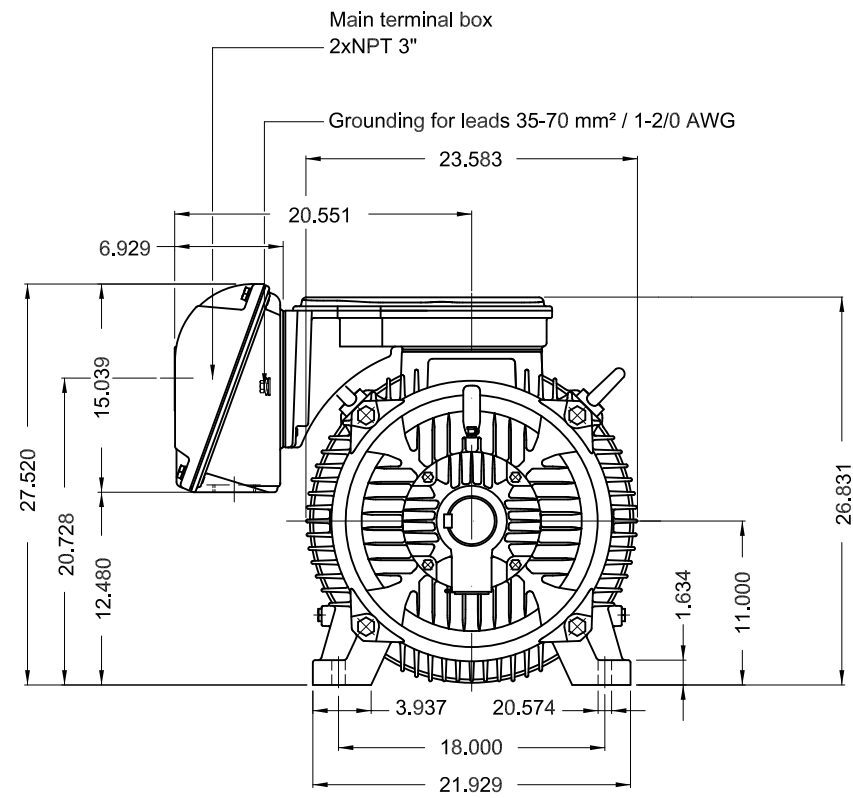
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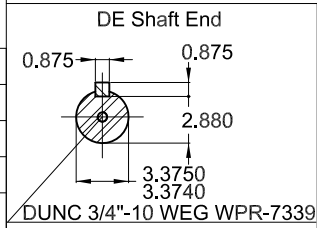


Grounding for leads 25-185 mm² / 3AWG-350MCM

200 HP 06 Poles 60 Hz

A

Without vertical jackscrews
 Color RAL 5009
 Painting plan 202E
 Mounting NEMA F-1
 Mounting B3R(D)



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

PREVIEW
 WDD



SHEET 1 / 1

Dimensions in inches

XME A3

MADE IN BRAZIL
11434693



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 20012ST3HIE449T-W22

Inverter Duty Motor
Severe Duty



PH3 60Hz Fr. 447/9T 1000m.a.s.l. IP55 TEFC 2840lb

V 575

A 190

HP 200

kW 150

SF 1.15

SFA 218

RPM 1185

PF 0.83

AMB 40°C

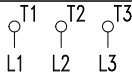
INS cl. F DT80K

NEMA NOM EFF 95.8%

DUTY CONT.

DES B Code G

GUARANT. EFF 95.0%



575V



→ 6322-C3 (60g) 110BC03X30

→ 6319-C3 (45g) 95BC03X30



MOBIL POLYREX EM (11000h)

