

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	14383370																		
Catalog # :	12536ET3H444TS-W22G																		
Frame : 444/5TS Output : 125 HP Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 107 A L. R. Amperes : 708 A LRC : 6.6x(Code G) No load current : 27.2 A Rated speed : 3570 rpm Slip : 0.83 % Rated torque : 184 ft.lb Locked rotor torque : 200 % Breakdown torque : 250 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 33.5 sq.ft.lb Design : B	Locked rotor time : 52s (cold) 29s (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> : 81.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 1599 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	93.0 93.6 94.5 95.0																		
Power Factor	0.59 0.82 0.87 0.89																		
Foundation loads																			
Max. traction	: 425 lb																		
Max. compression	: 2025 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>: 6314 C3</td> <td>6314 C3</td> </tr> <tr> <td>Sealing</td> <td>: WSeal</td> <td>WSeal</td> </tr> <tr> <td>Lubrication interval</td> <td>: 4000 h</td> <td>4000 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	: WSeal	WSeal	Lubrication interval	: 4000 h	4000 h	Lubricant amount	: 27 g	27 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



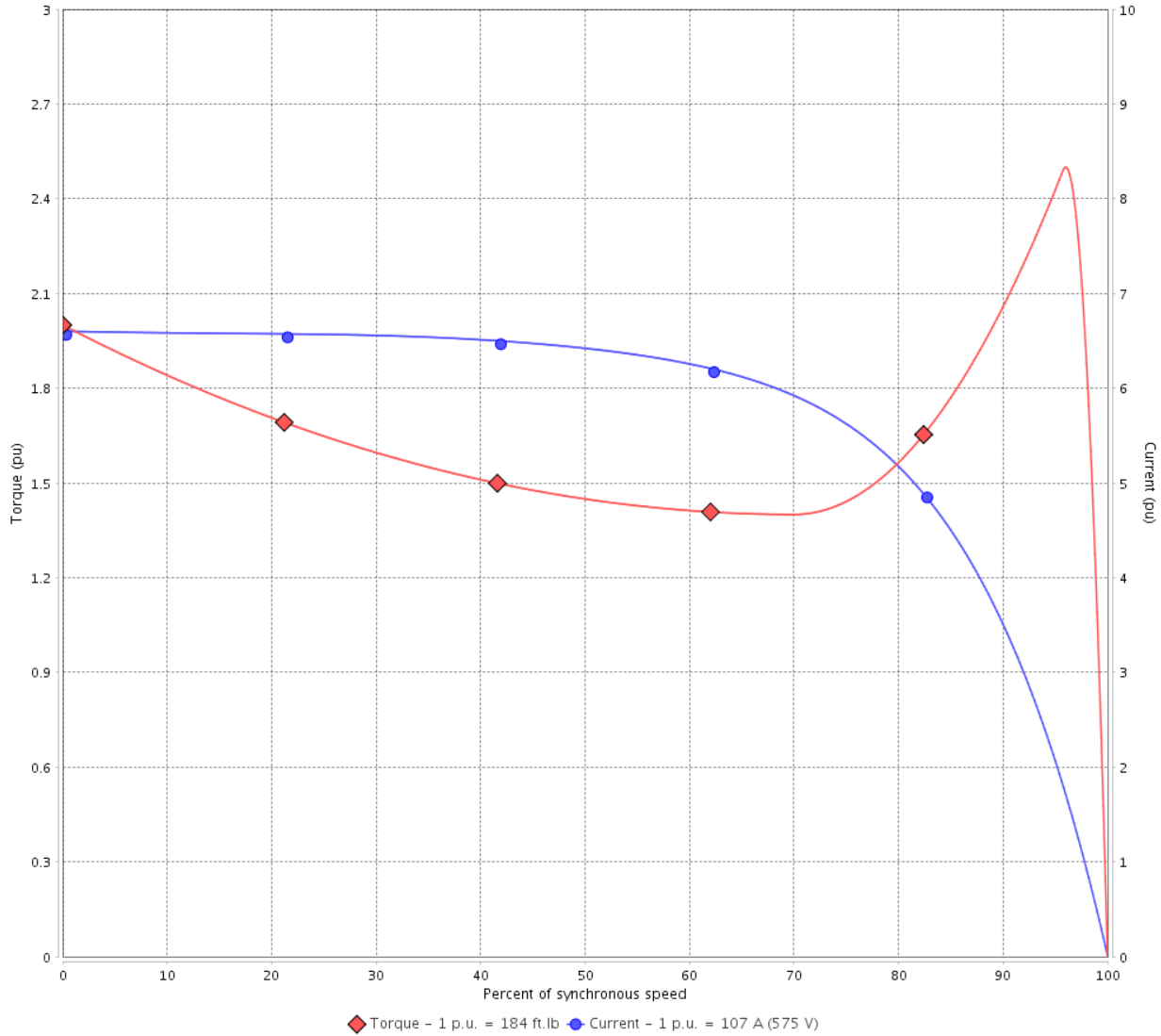
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 107 A	Moment of inertia (J)	: 33.5 sq.ft.lb
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 184 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 3570 rpm	Design	: B

Locked rotor time : 52s (cold) 29s (hot)

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Date	13/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

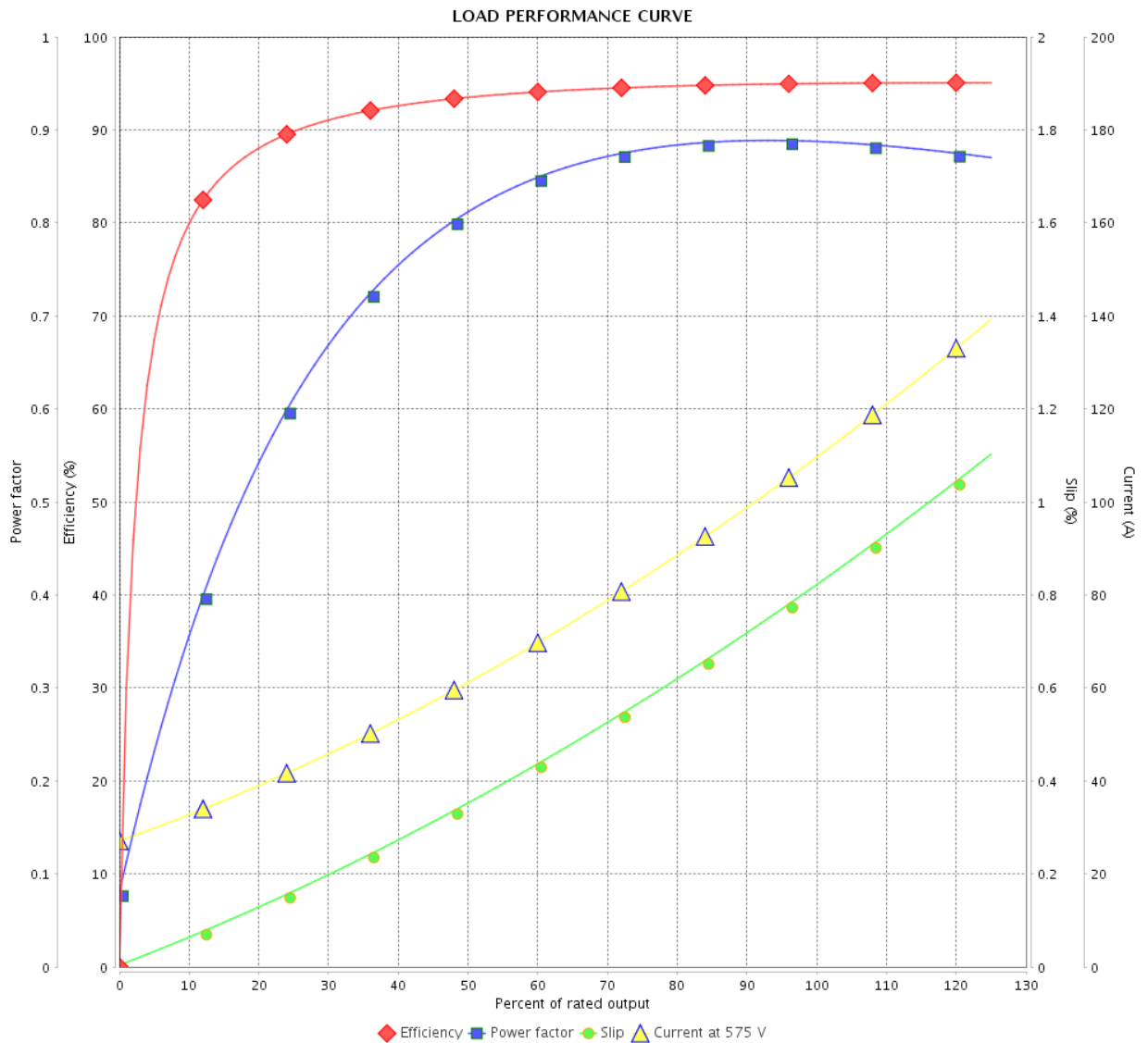


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# THERMAL LIMIT CURVE

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Heating constant

Cooling constant

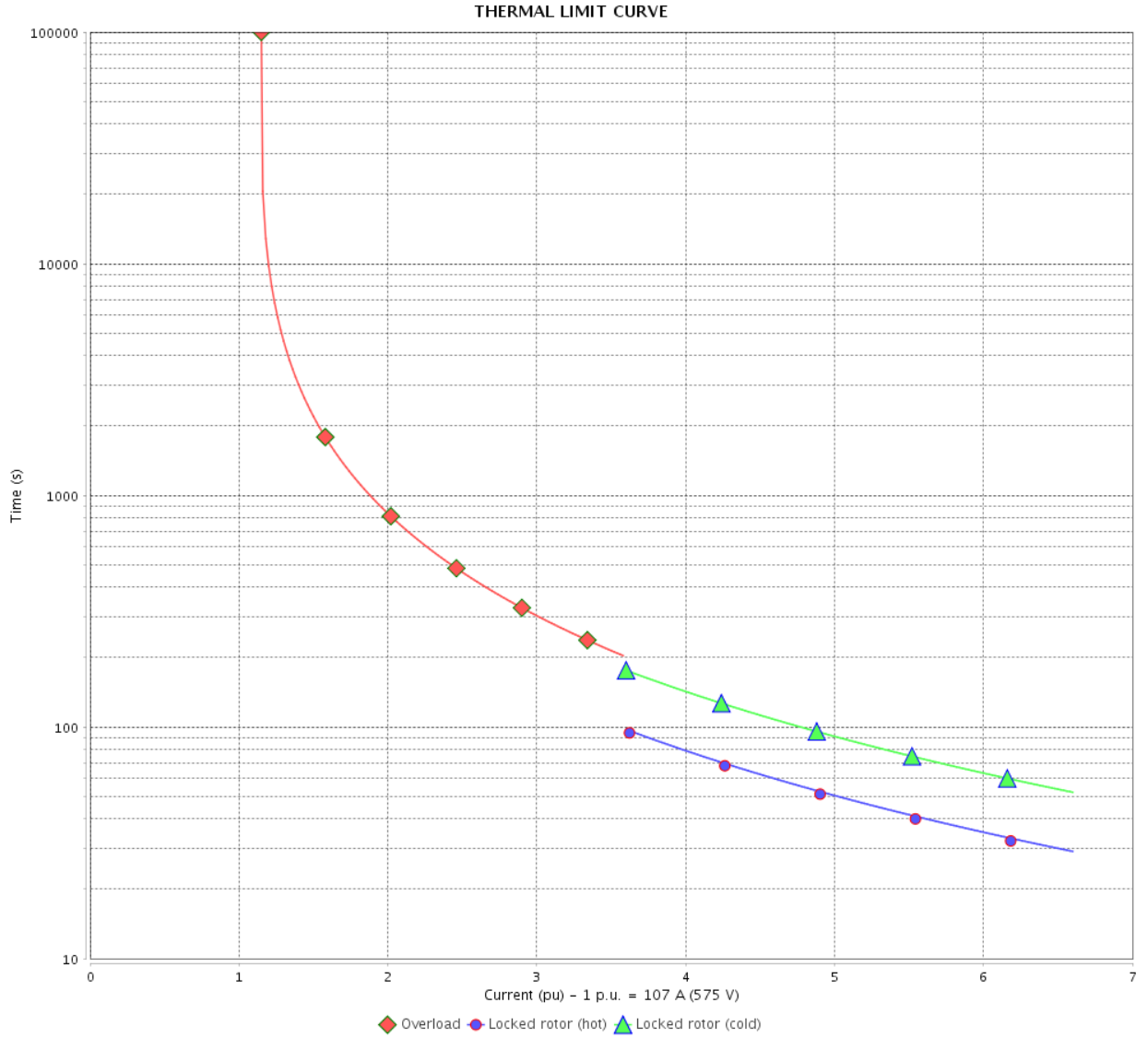
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Rev.	Changes Summary	Performed	Checked	Date
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# VFD OPERATION CURVE

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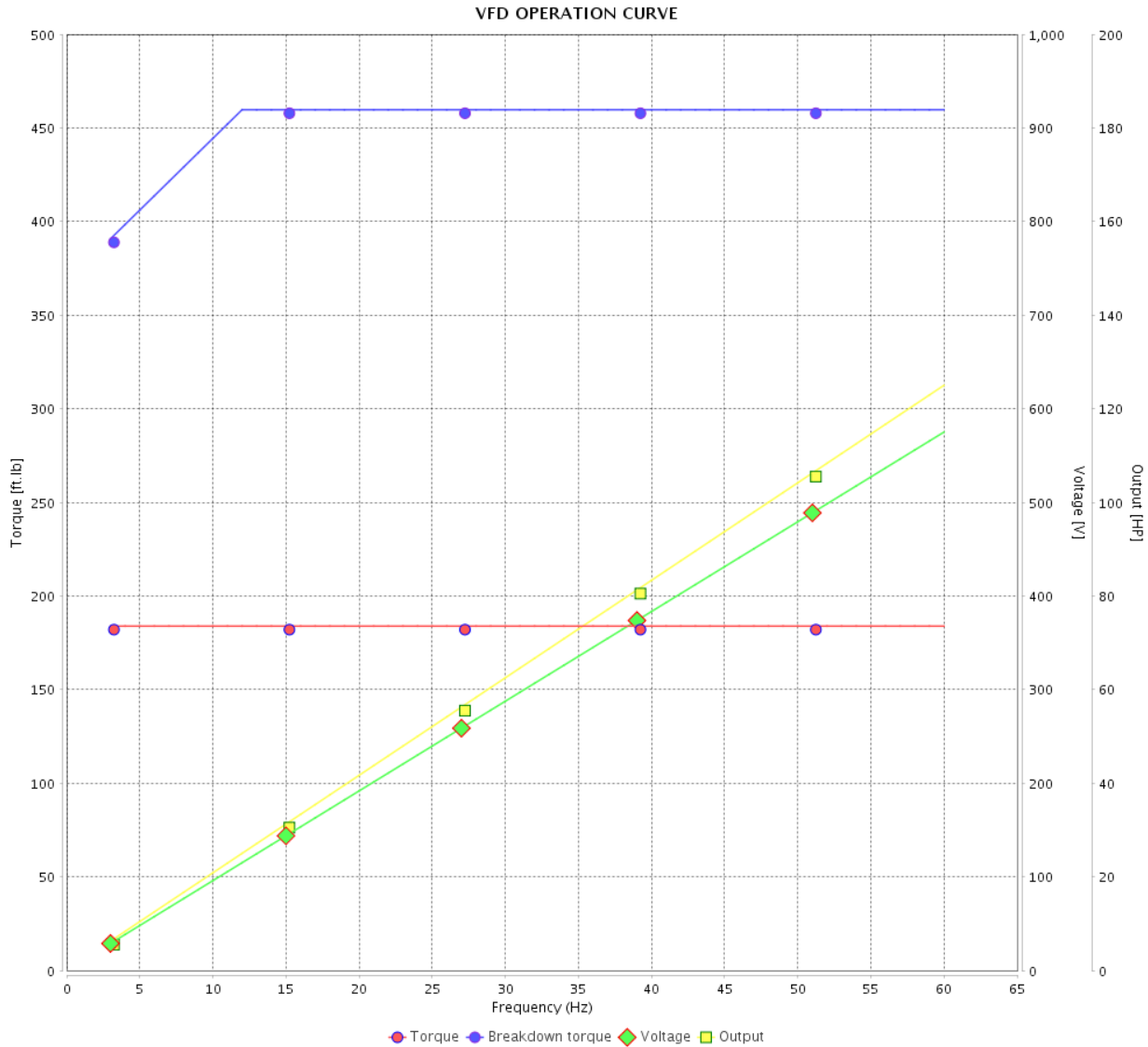


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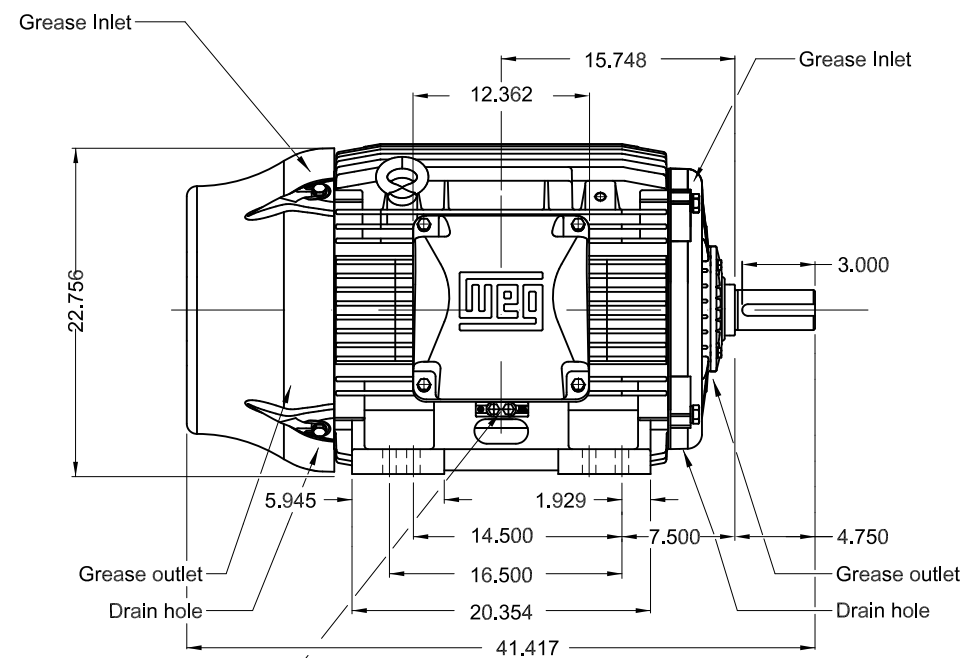
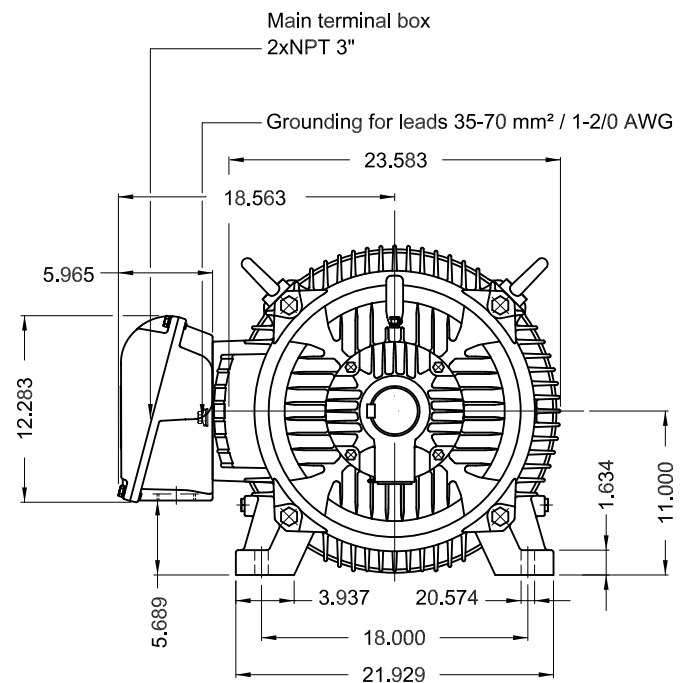
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1 2 3 4 5 6

A

B

C

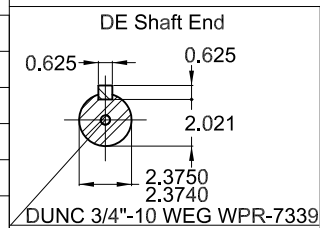


Grounding for leads 25-185 mm² / 3AWG-350MCM

D

E

- Without vertical jackscrews
- Internal AEGIS ground ring on the DE
- Color RAL 5009
- Painting plan 203A
- Mounting NEMA F-1
- Mounting B3R(D)



125 HP 02 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR W22 PREM. EFF.					
CHECKED		FRAME 444/5TS IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW  
WDD



Dimensions in inches

XME A3