

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line : NEMA Premium Efficiency Three-Phase	Product code : 13890650																		
	Catalog # : 35018ST3HIE449T-W22																		
Frame : L447/9T	Locked rotor time : 81s (cold) 45s (hot)																		
Output : 350 HP (260 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 : 315 A	Protection degree : IP55																		
L. R. Amperes : 2175 A	Cooling method : IC411 - TEFC																		
LRC : 6.9x(Code G)	Mounting : F-1																		
No load current : 92.0 A	Rotation <sup>1</sup> : Both (CW and CCW)																		
Rated speed : 1787 rpm	Noise level <sup>2</sup> : 77.0 dB(A)																		
Slip : 0.72 %	Starting method : Direct On Line																		
Rated torque : 1030 ft.lb	Approx. weight <sup>3</sup> : 3192 lb																		
Locked rotor torque : 260 %																			
Breakdown torque : 229 %																			
Insulation class : F																			
Service factor : 1.15																			
Moment of inertia (J) : 131 sq.ft.lb																			
Design : B																			
Output 25% 50% 75% 100%	Foundation loads																		
Efficiency (%) 95.7 95.8 96.2 96.2	Max. traction : 4710 lb																		
Power Factor 0.52 0.76 0.83 0.86	Max. compression : 7903 lb																		
	<table border="1"><thead><tr><th></th><th>Drive end</th><th>Non drive end</th></tr></thead><tbody><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>6000 h</td><td>8000 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">Mobil Polyrex EM</td></tr></tbody></table>		Drive end	Non drive end	Bearing type :	6322 C3	6319 C3	Sealing :	Inpro/Seal	Inpro/Seal	Lubrication interval :	6000 h	8000 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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Checked by			Page	Revision															
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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



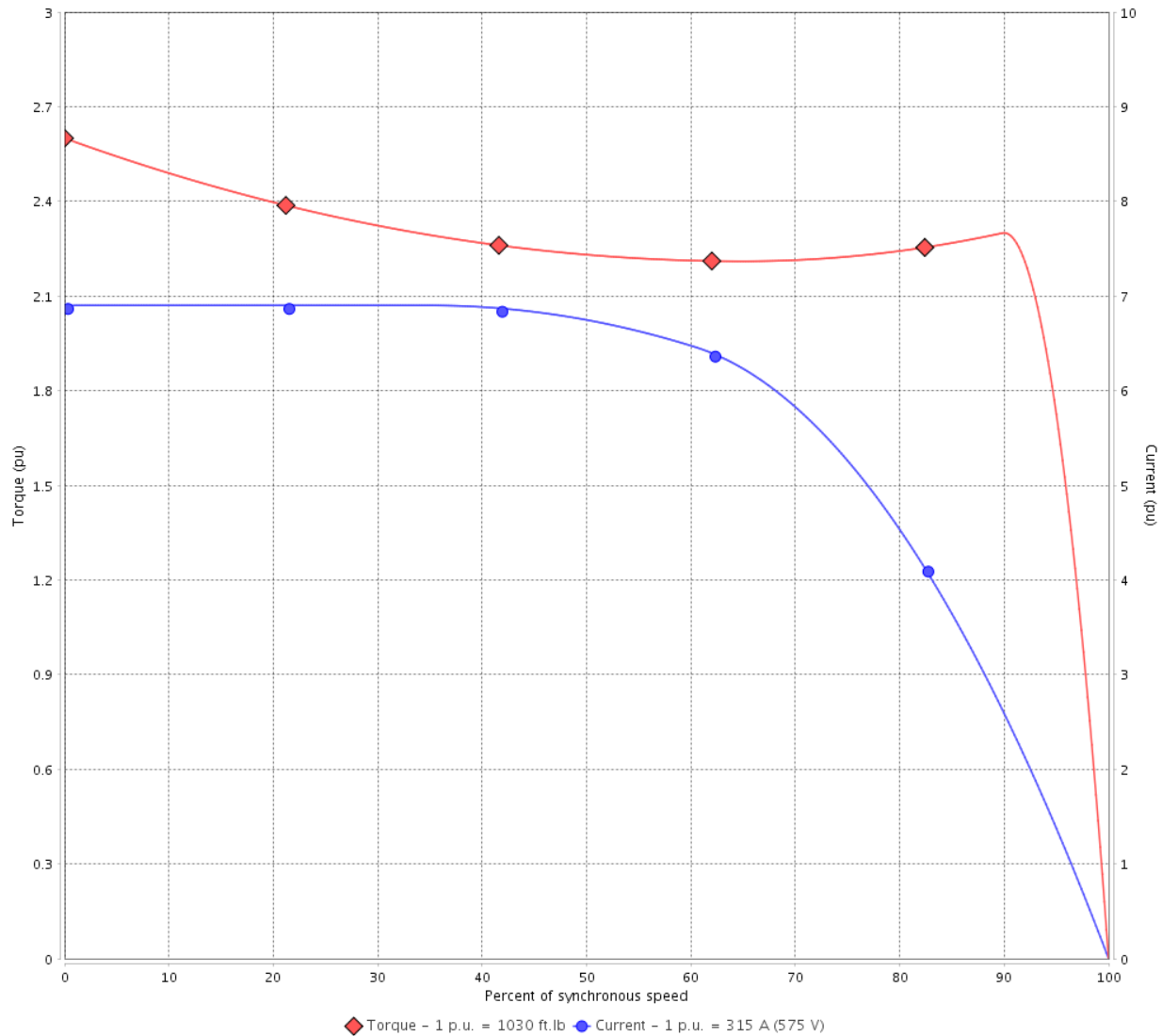
Customer :

Product line : NEMA Premium Efficiency Three-Phase

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TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 315 A	Moment of inertia (J)	: 131 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 1030 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1787 rpm	Design	: B

Locked rotor time : 81s (cold) 45s (hot)

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Date	13/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

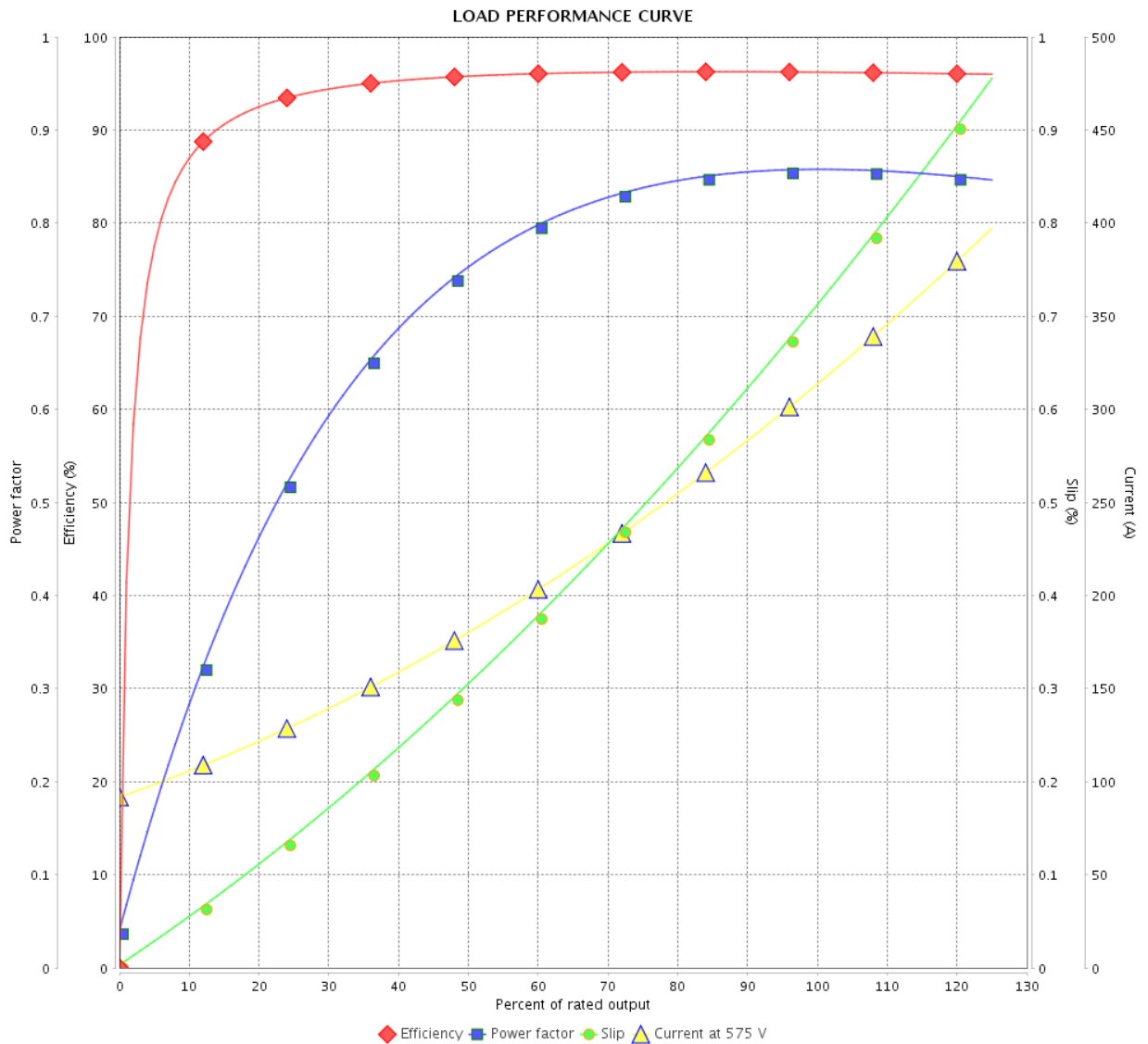


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Performance : 575 V 60 Hz 4P

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 Design : B

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# THERMAL LIMIT CURVE

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Heating constant

Cooling constant

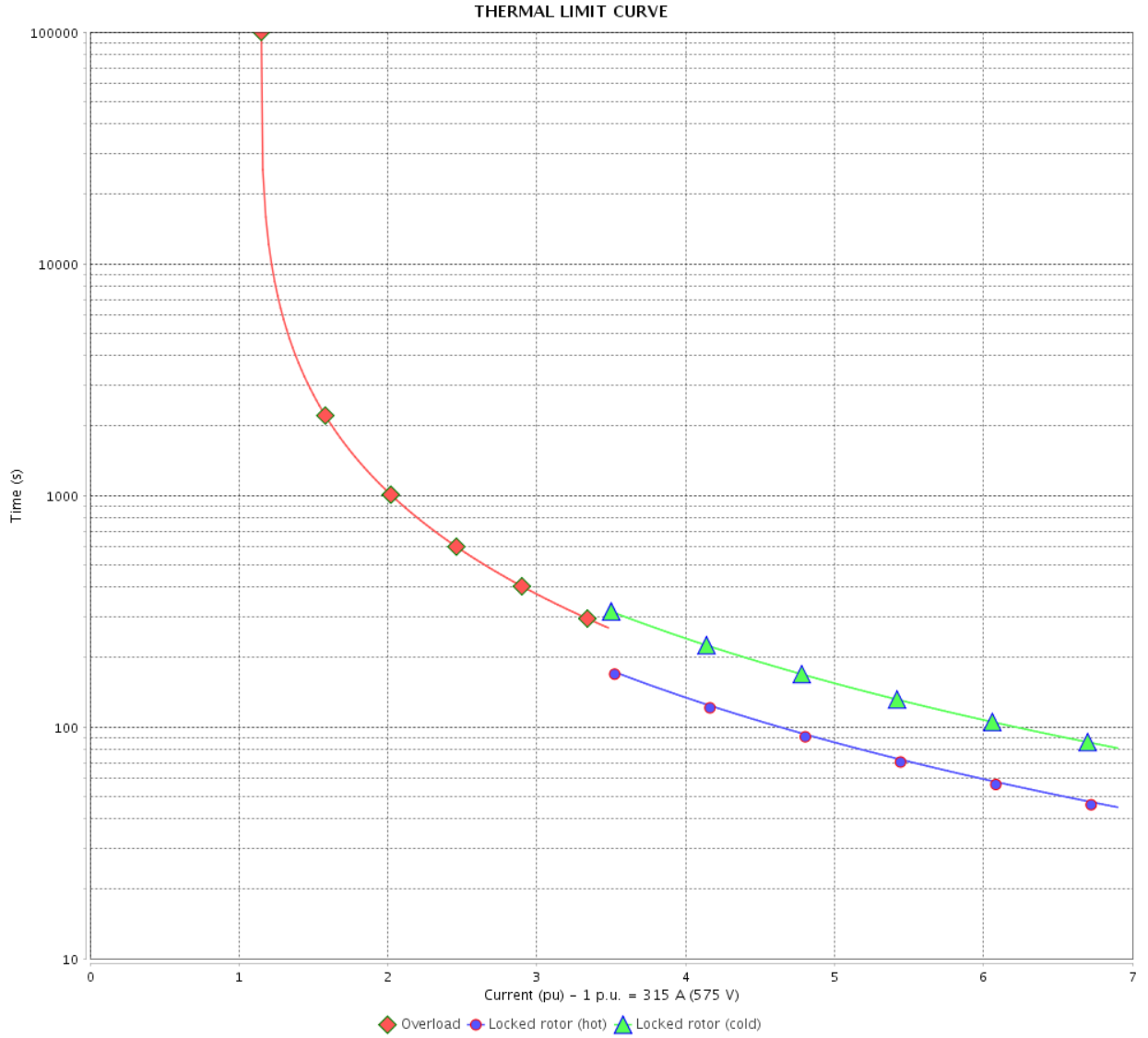
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



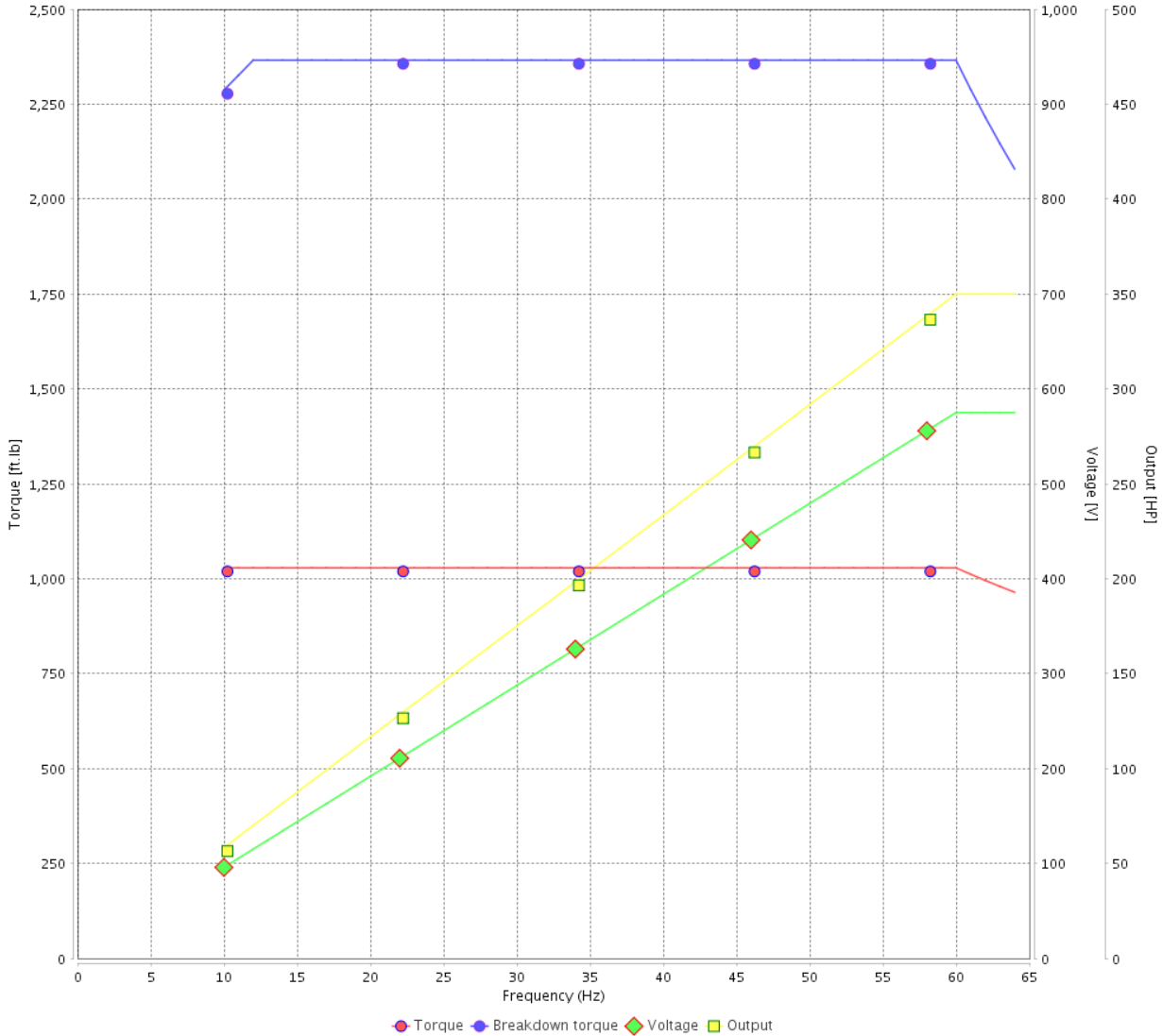
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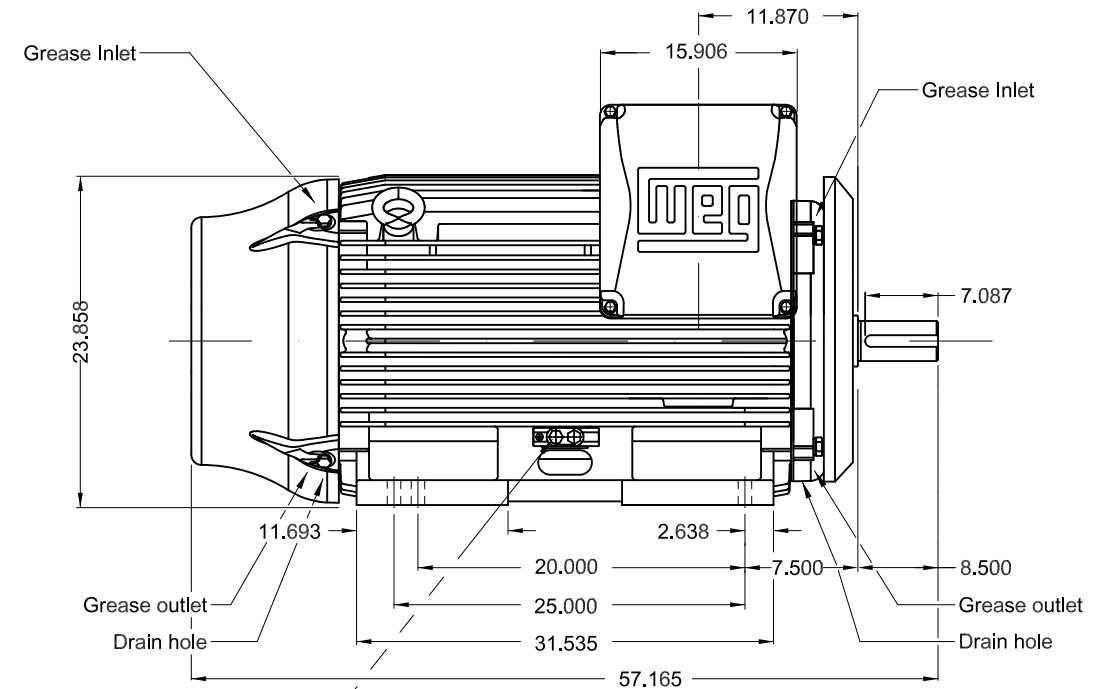
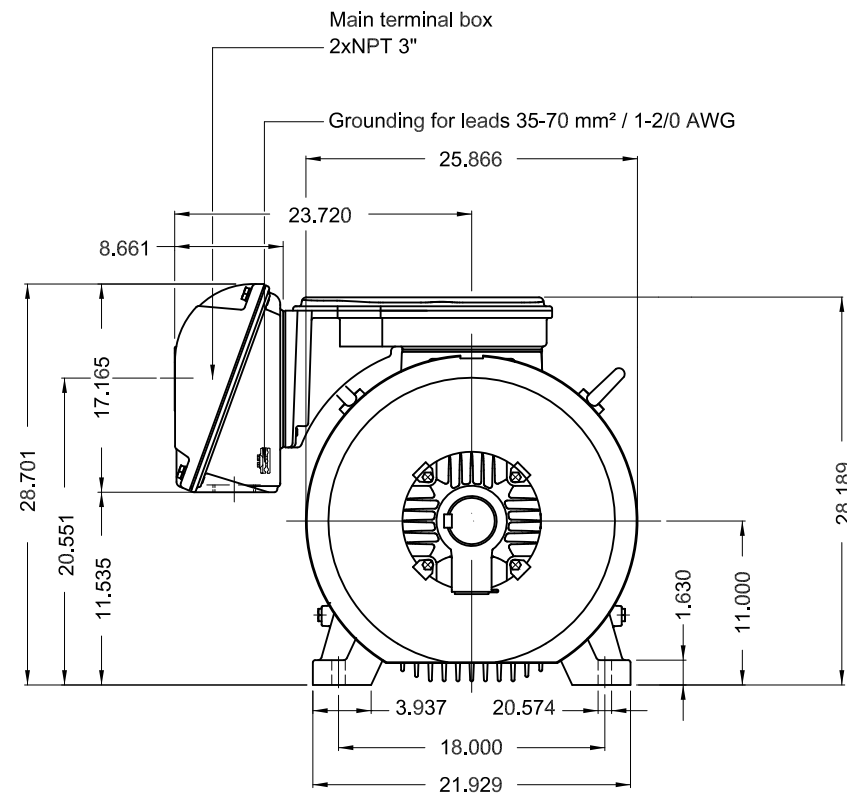
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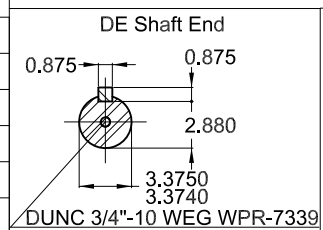


Grounding for leads 25-185 mm<sup>2</sup> / 3AWG-350MCM

350 HP 04 Poles 60 Hz

Dimensions in inches

- NDE endshield with electrically insulated bearing hub
- Drive-End Air Deflector
- 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. FRAME L447/9T IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO		Jaragua do Sul	Product Engineering	SHEET	1 / 1	

**PREVIEW**  
WDD

