

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	13551474																		
Catalog # :	01009ST3HIE284T-W22																		
Frame : 284/6T Output : 10 HP (7.5 kW) Poles : 8 Frequency : 60 Hz Rated voltage : 575 V Rated current : 10.7 A L. R. Amperes : 60.0 A LRC : 5.6x(Code G) No load current : 5.20 A Rated speed : 880 rpm Slip : 2.22 % Rated torque : 59.7 ft.lb Locked rotor torque : 200 % Breakdown torque : 240 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 7.20 sq.ft.lb Design : B	Locked rotor time : 57s (cold) 32s (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> : 54.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 364 lb																		
Output	25%    50%    75%    100%																		
Efficiency (%)	89.3    89.5    90.2    90.2																		
Power Factor	0.36    0.61    0.72    0.78																		
Foundation loads																			
Max. traction : 442 lb																			
Max. compression : 806 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 style="text-align: center;">6311 C3</td> <td style="text-align: center;">6211 C3</td> </tr> <tr> <td>Sealing :</td> <td style="text-align: center;">Inpro/Seal</td> <td style="text-align: center;">Inpro/Seal</td> </tr> <tr> <td>Lubrication interval :</td> <td style="text-align: center;">20000 h</td> <td style="text-align: center;">20000 h</td> </tr> <tr> <td>Lubricant amount :</td> <td style="text-align: center;">18 g</td> <td style="text-align: center;">11 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 :	6311 C3	6211 C3	Sealing :	Inpro/Seal	Inpro/Seal	Lubrication interval :	20000 h	20000 h	Lubricant amount :	18 g	11 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



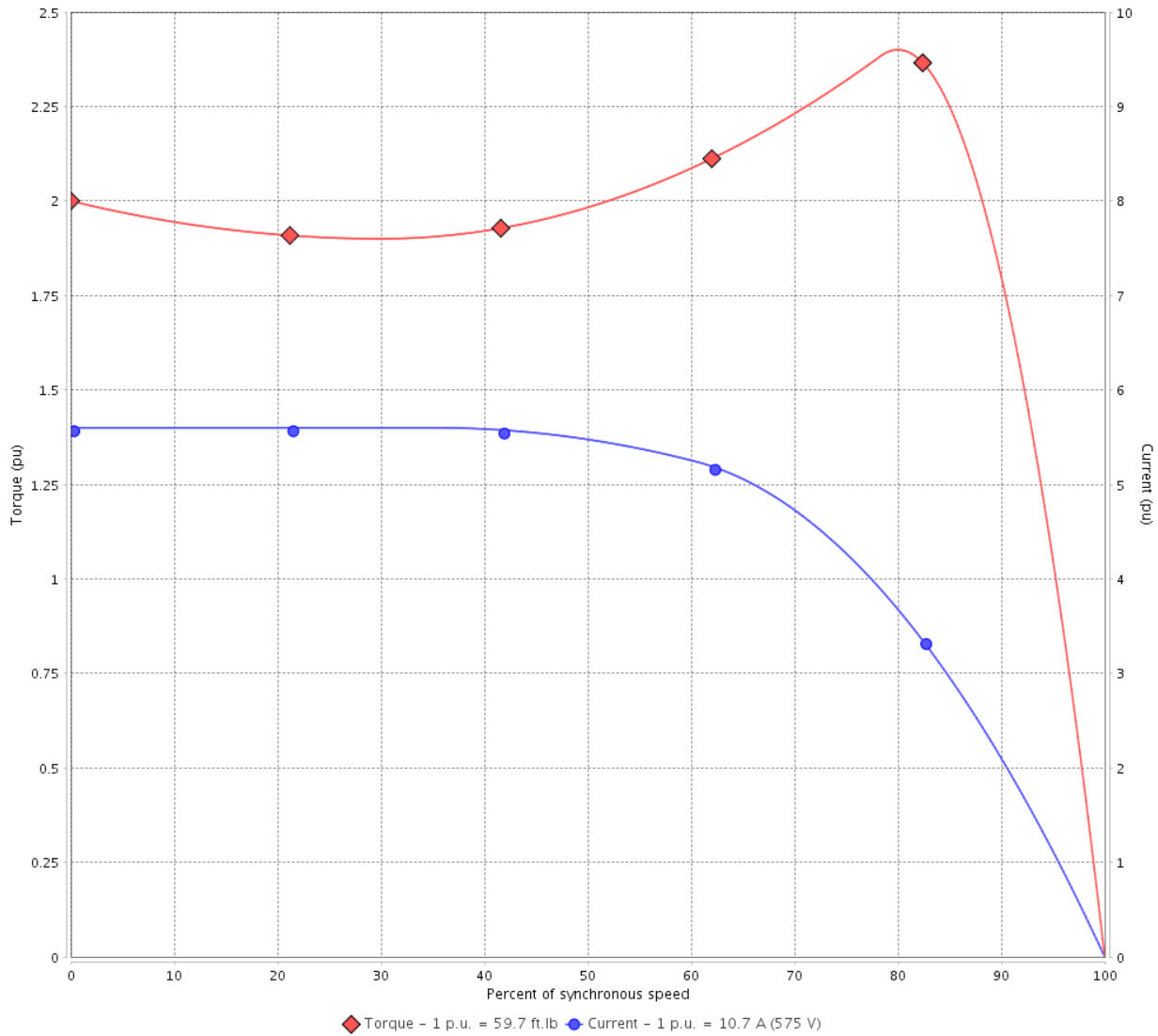
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13551474

Catalog # : 01009ST3HIE284T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 8P

Rated current	: 10.7 A	Moment of inertia (J)	: 7.20 sq.ft.lb
LRC	: 5.6	Duty cycle	: Cont.(S1)
Rated torque	: 59.7 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 880 rpm	Design	: B

Locked rotor time : 57s (cold) 32s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

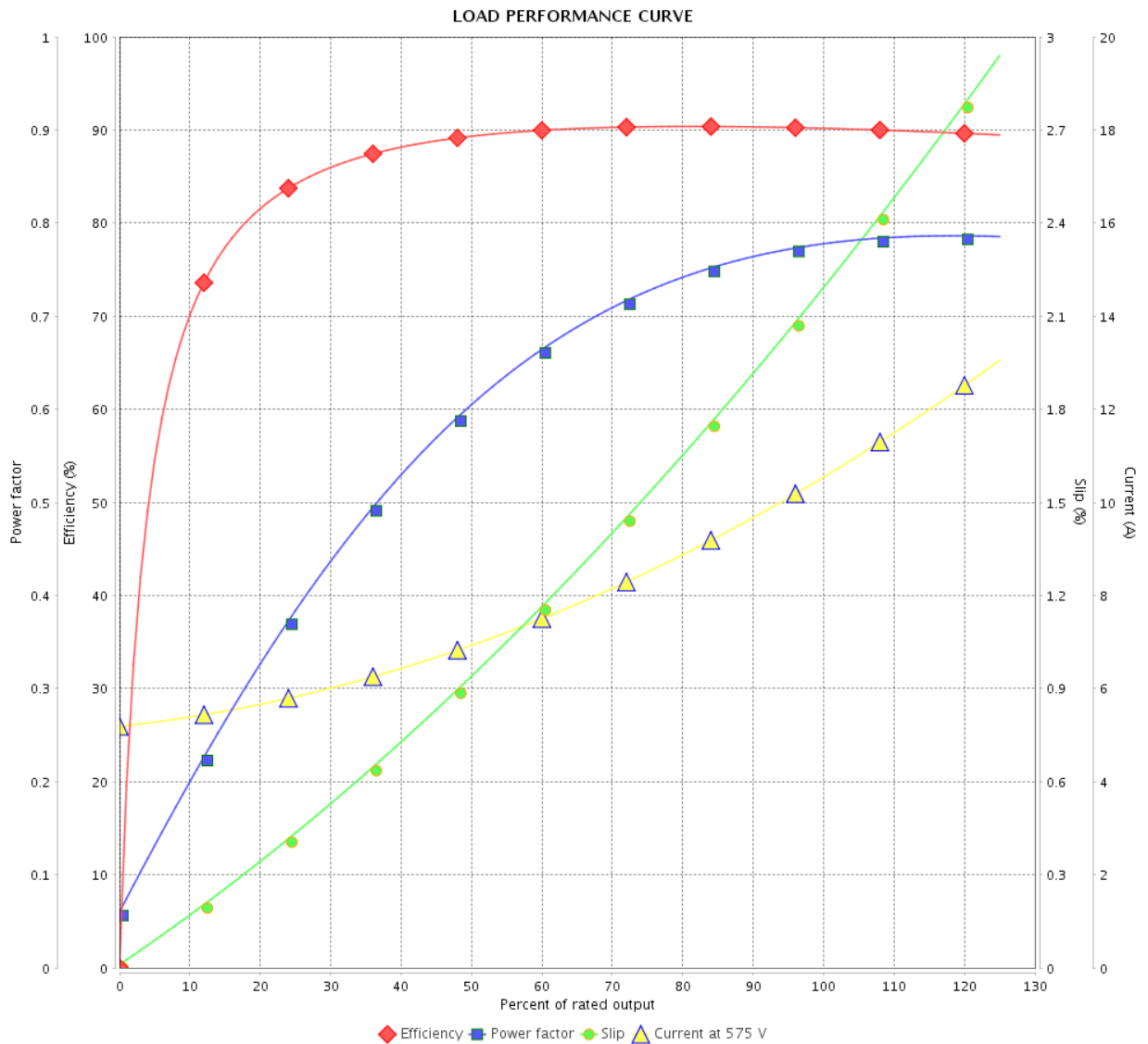


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13551474

Catalog # : 01009ST3HIE284T-W22



Performance : 575 V 60 Hz 8P

Rated current : 10.7 A  
 LRC : 5.6  
 Rated torque : 59.7 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 880 rpm

Moment of inertia (J) : 7.20 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 code : 13551474  
 Catalog # : 01009ST3HIE284T-W22

Performance : 575 V 60 Hz 8P

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Locked rotor torque : 200 %	Service factor : 1.25
Breakdown torque : 240 %	Temperature rise : 80 K
Rated speed : 880 rpm	Design : B

Heating constant

Cooling constant

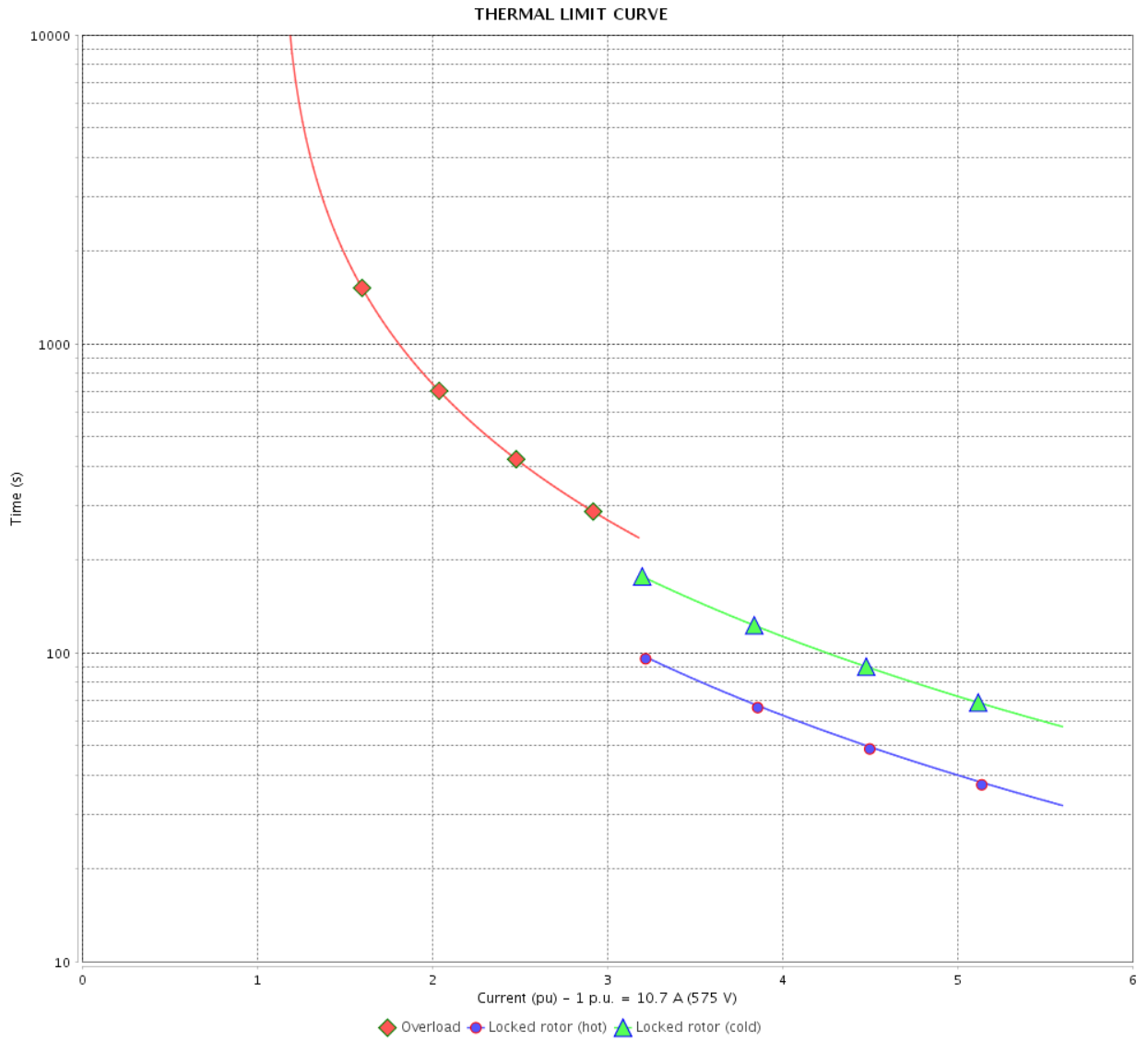
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
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Date	01/06/2022			

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



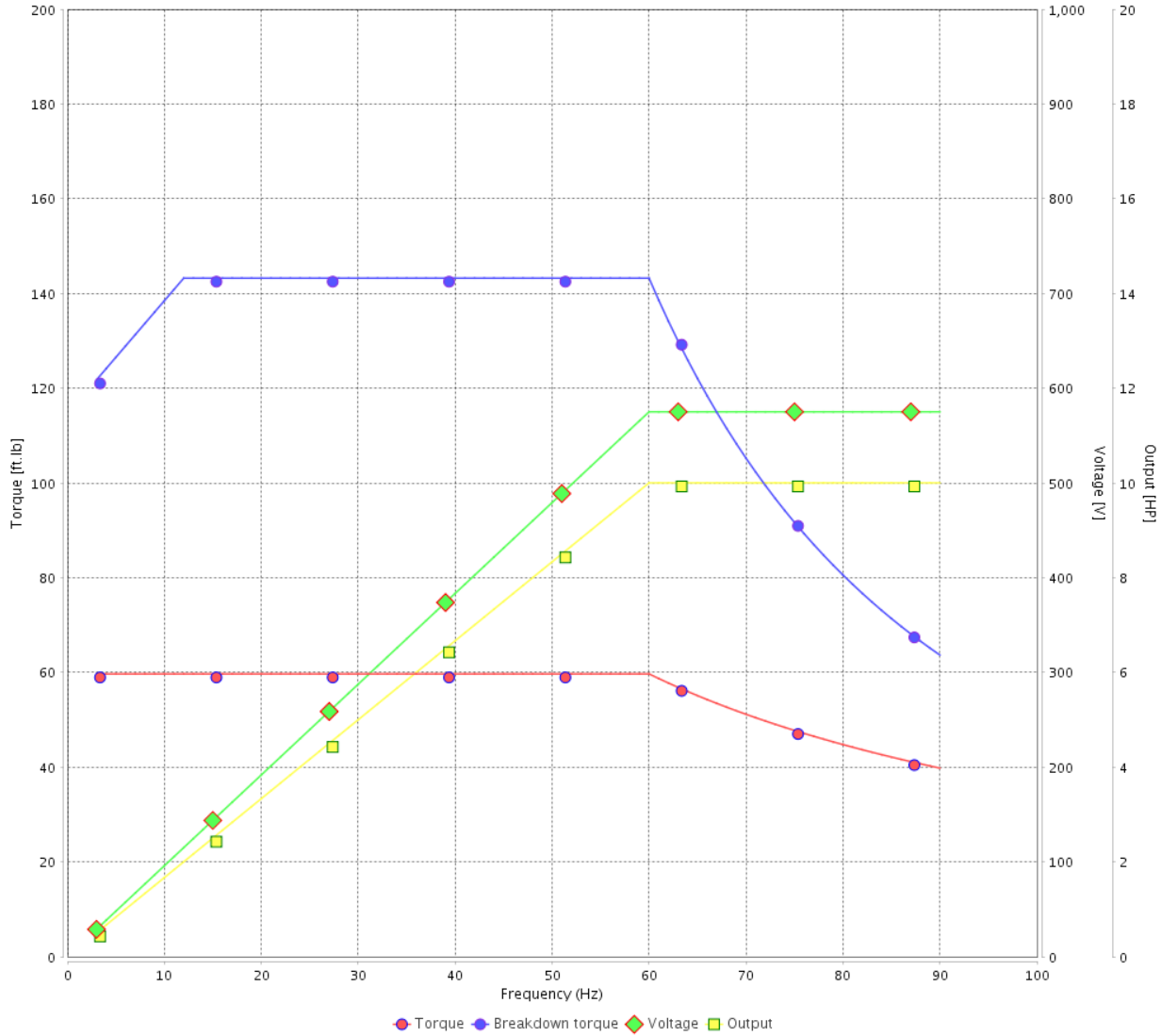
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VFD OPERATION CURVE

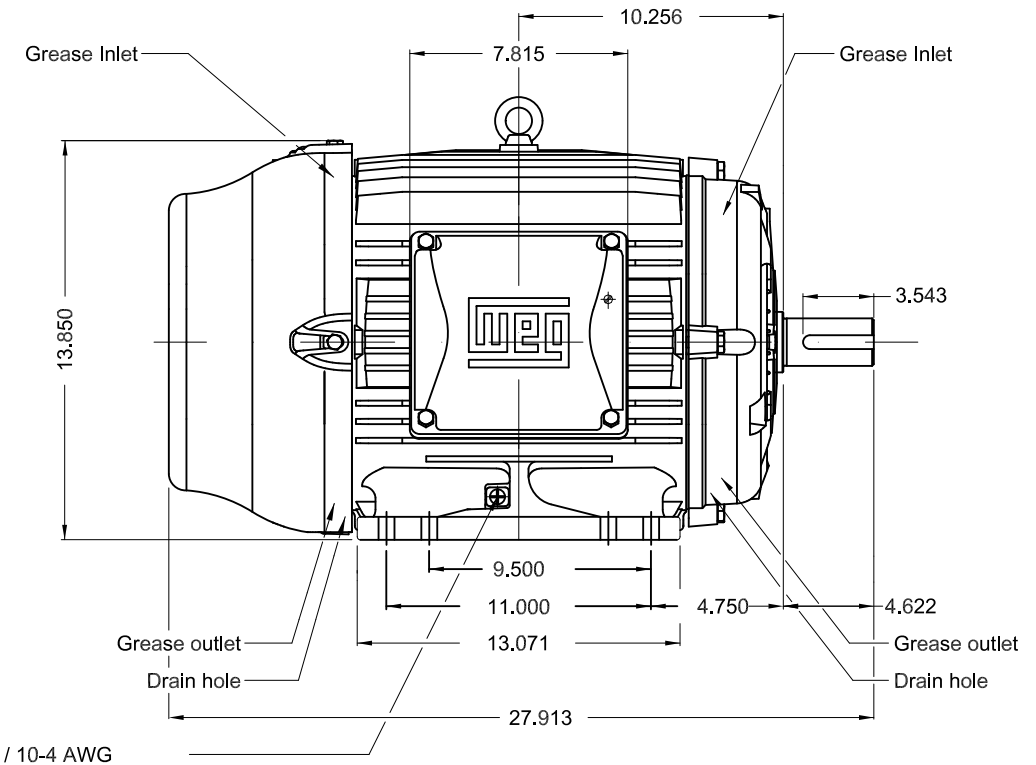
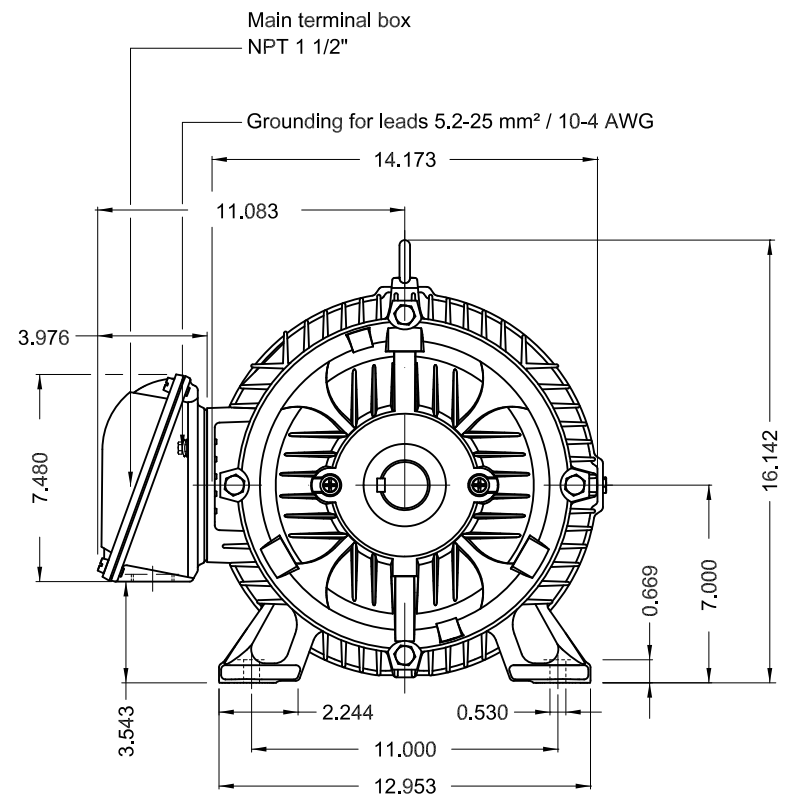


Performance : 575 V 60 Hz 8P

Rated current : 10.7 A  
 LRC : 5.6  
 Rated torque : 59.7 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 240 %  
 Rated speed : 880 rpm

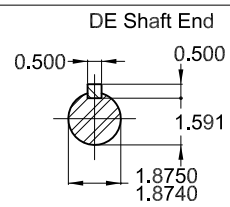
Moment of inertia (J) : 7.20 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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Grounding for leads 5.2-25 mm<sup>2</sup> / 10-4 AWG

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



10 HP 08 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR IEEE 841 W22 PREM. EFF. FRAME 284/6T IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO		Jaragua do Sul	Product Engineering			

**PREVIEW**  
WDD



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