

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	13473782																		
Catalog # :	25018ET3H447TS-W22																		
Frame : 445/7TS Output : 250 HP (185 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 225 A L. R. Amperes : 1461 A LRC : 6.5x(Code G) No load current : 72.0 A Rated speed : 1780 rpm Slip : 1.11 % Rated torque : 738 ft.lb Locked rotor torque : 229 % Breakdown torque : 240 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 89.6 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 : 73.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 2513 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	95.7 95.8 96.2 96.2																		
Power Factor	0.50 0.75 0.83 0.86																		
Foundation loads																			
Max. traction	: 3462 lb																		
Max. compression	: 5975 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;">6314 C3</td> <td style="text-align: center;">6314 C3</td> </tr> <tr> <td>Sealing :</td> <td style="text-align: center;">WSeal</td> <td style="text-align: center;">WSeal</td> </tr> <tr> <td>Lubrication interval :</td> <td style="text-align: center;">12000 h</td> <td style="text-align: center;">12000 h</td> </tr> <tr> <td>Lubricant amount :</td> <td style="text-align: center;">27 g</td> <td style="text-align: center;">27 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 :	6314 C3	6314 C3	Sealing :	WSeal	WSeal	Lubrication interval :	12000 h	12000 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															
Performed by																			
Checked by			Page	Revision															
Date	13/04/2022		1 / 6																

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



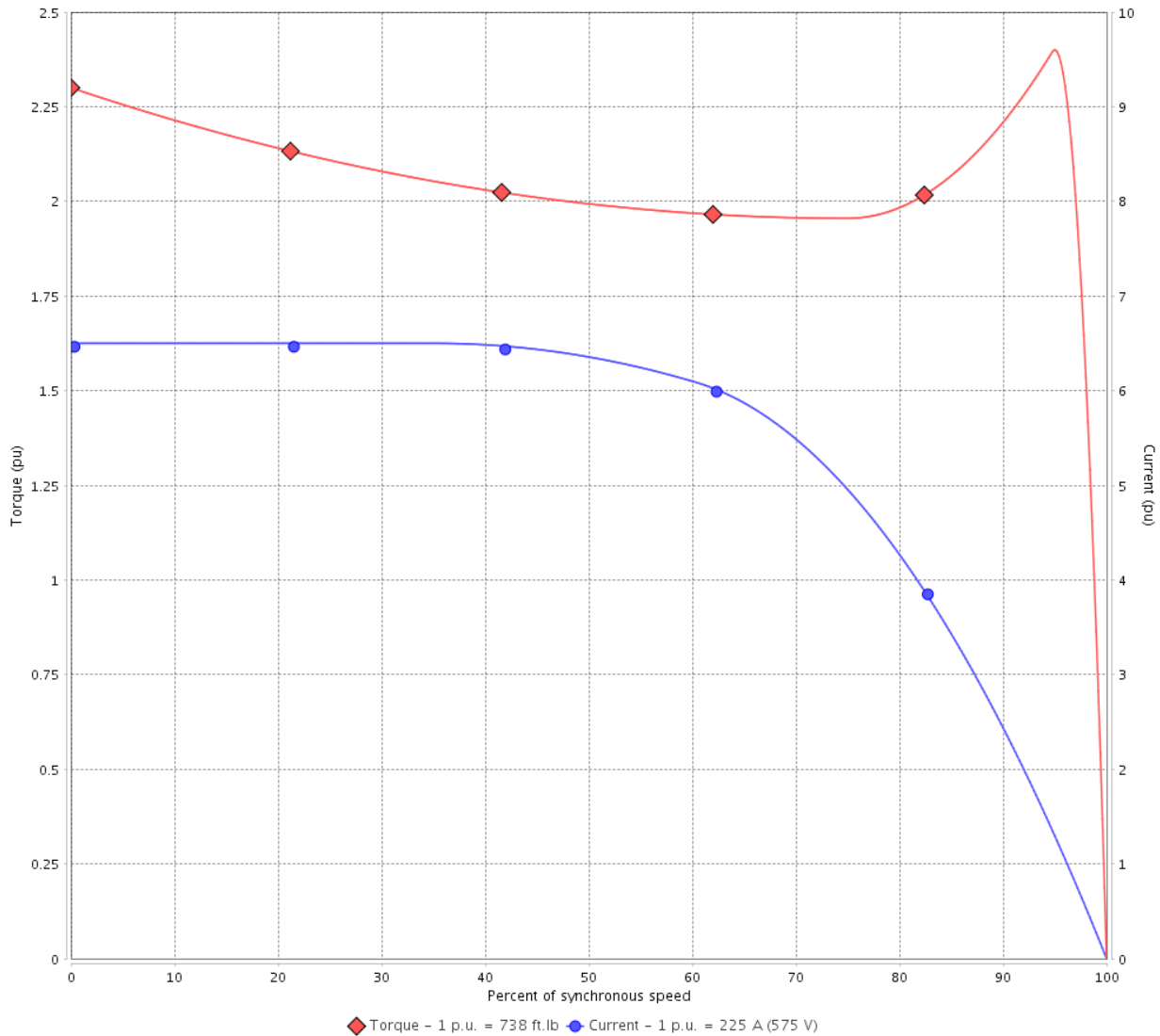
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13473782

Catalog # : 25018ET3H447TS-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 225 A	Moment of inertia (J)	: 89.6 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 738 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

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

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Performed by			Page 2 / 6	Revision
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Date	13/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

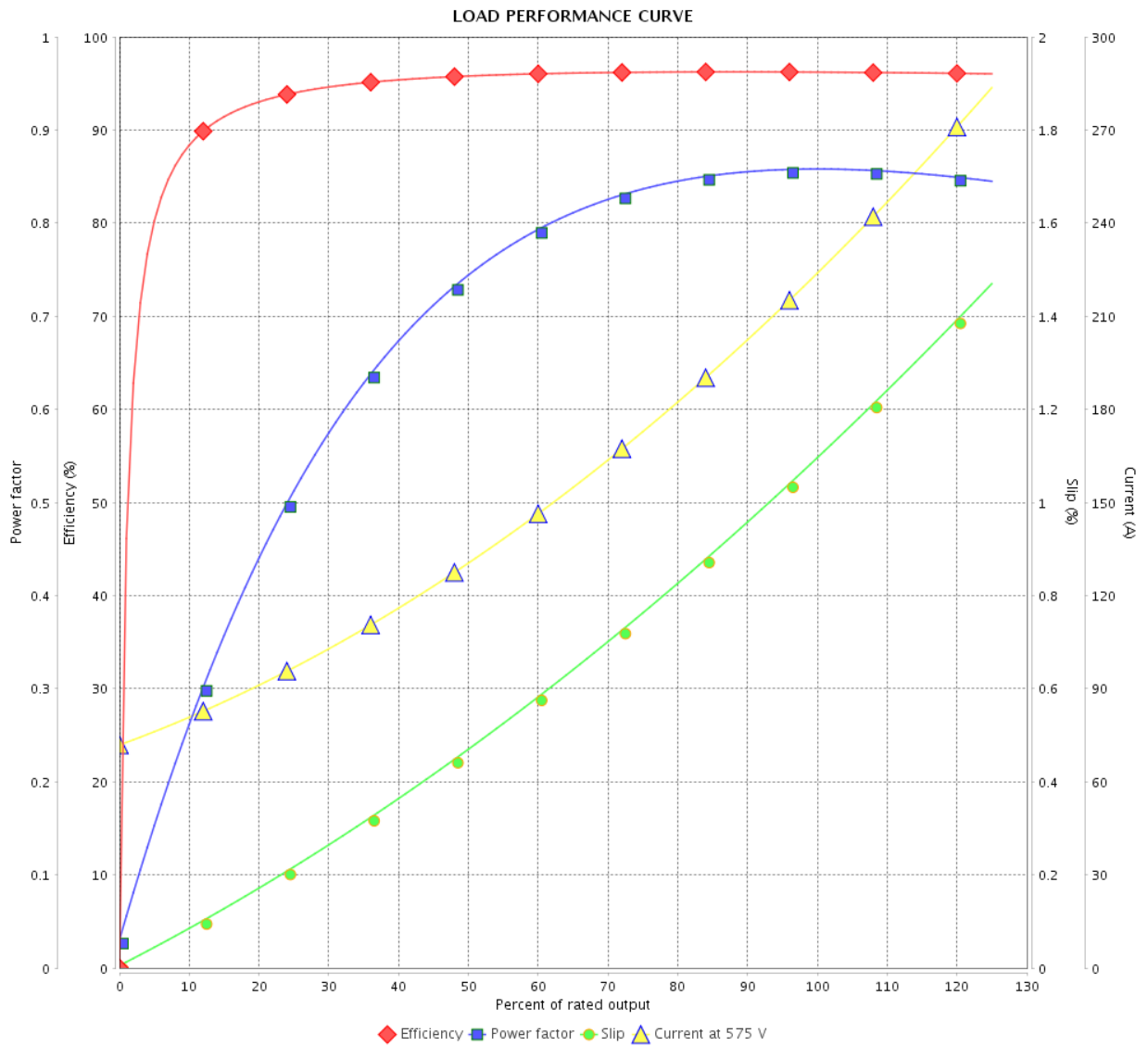


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Product code : 13473782

Catalog # : 25018ET3H447TS-W22



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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

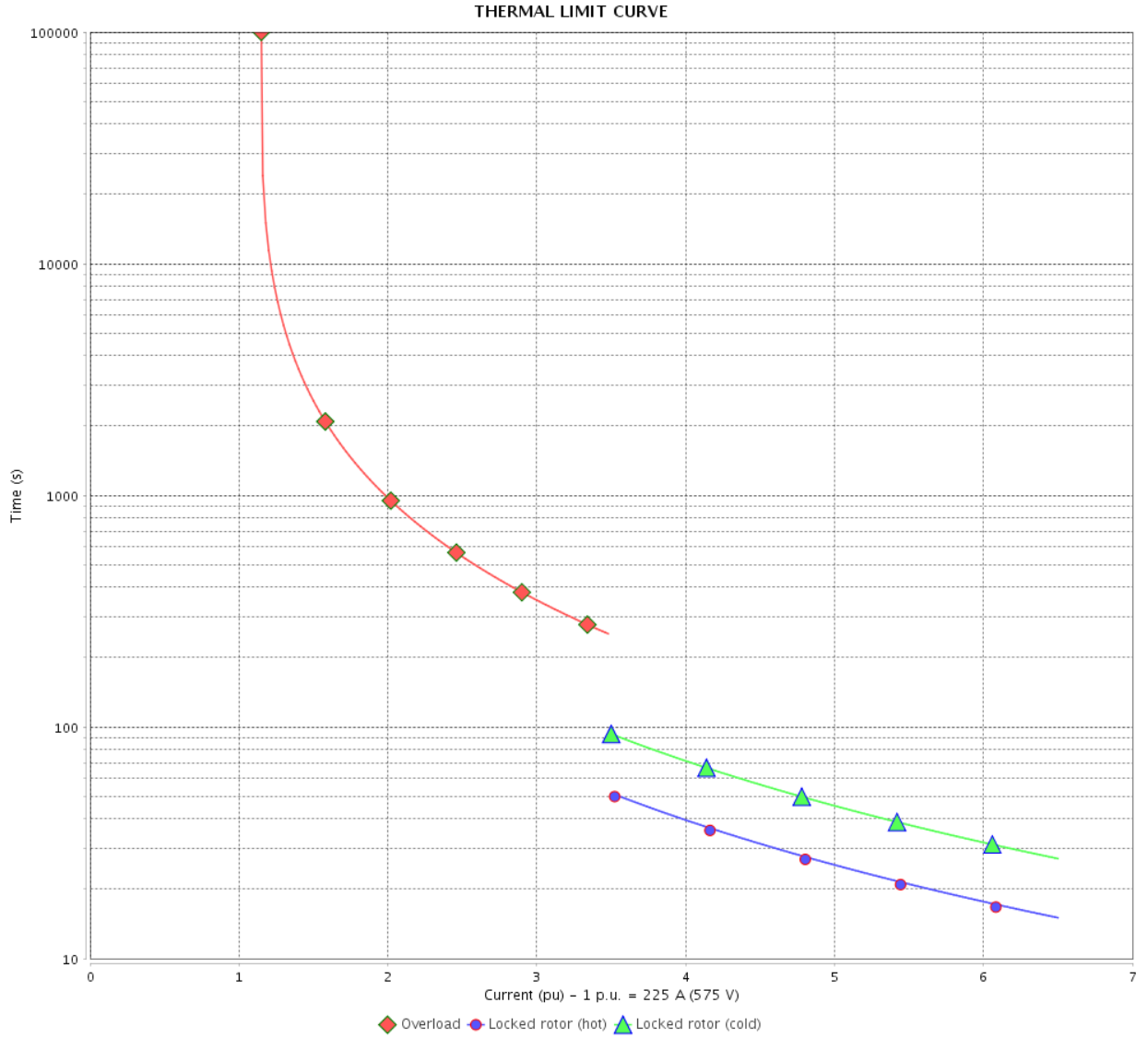
Rev.	Changes Summary	Performed	Checked	Date
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



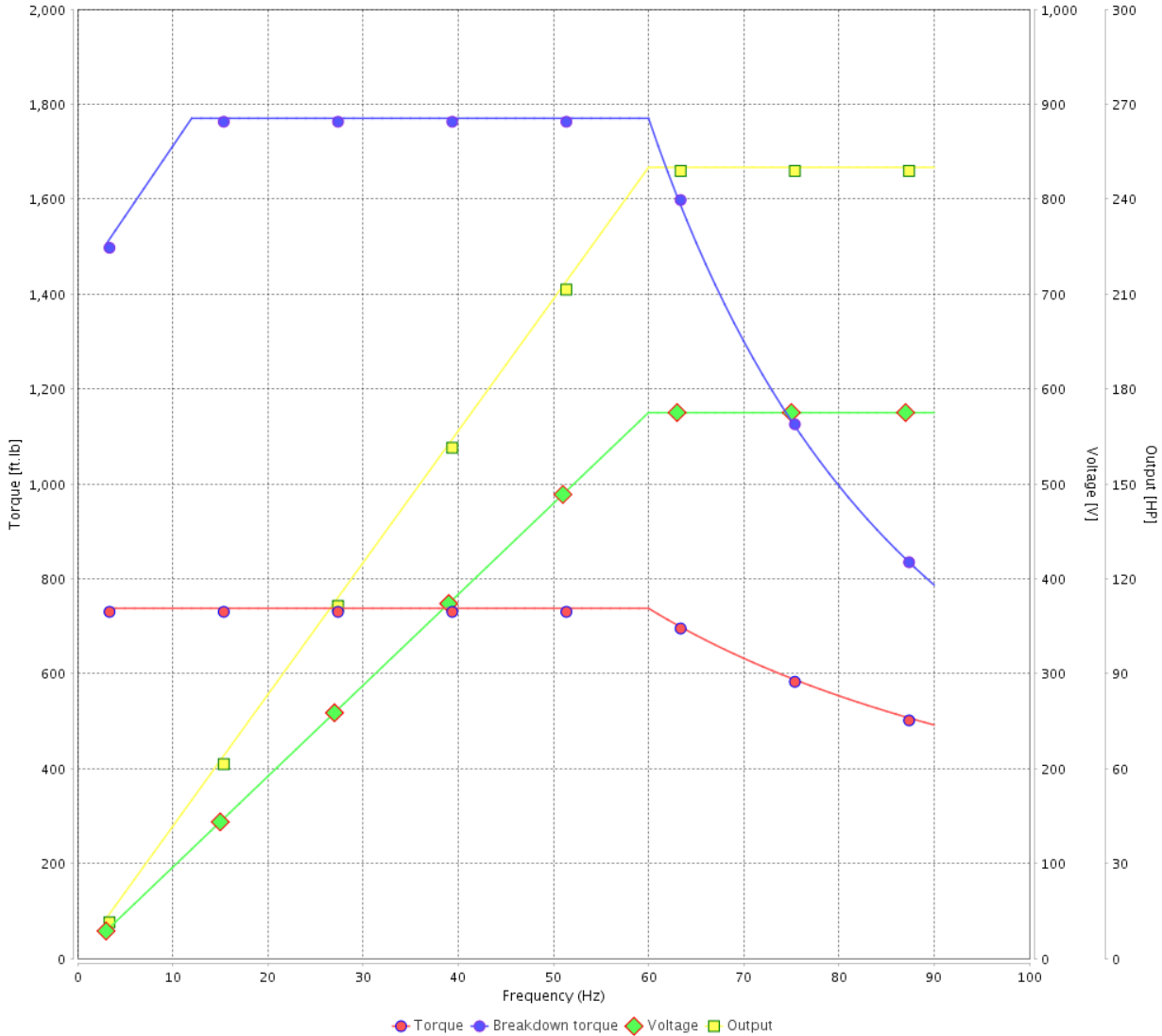
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VFD OPERATION CURVE

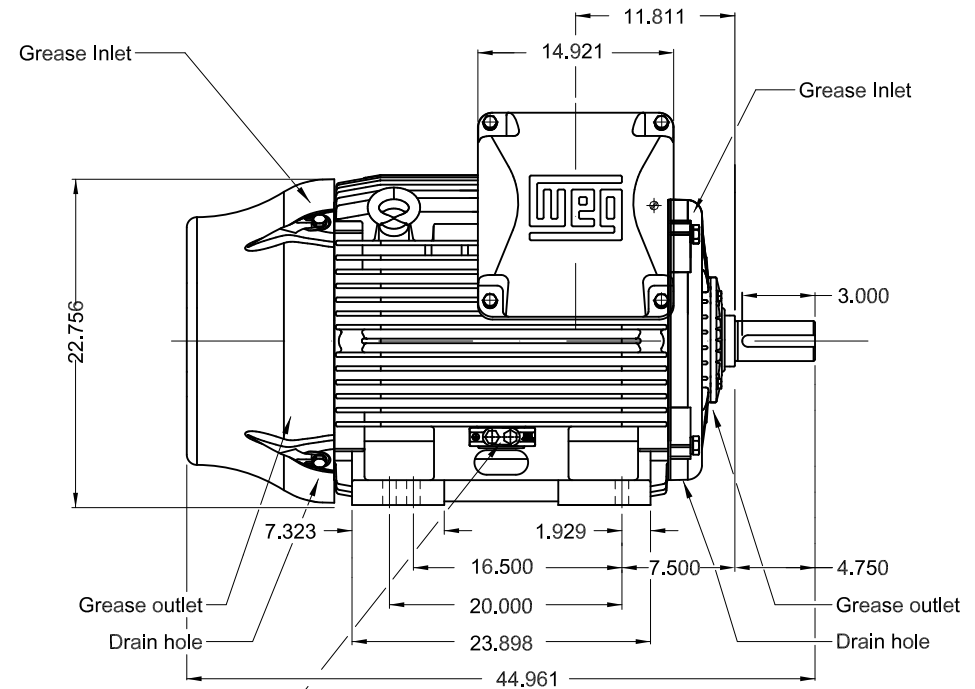
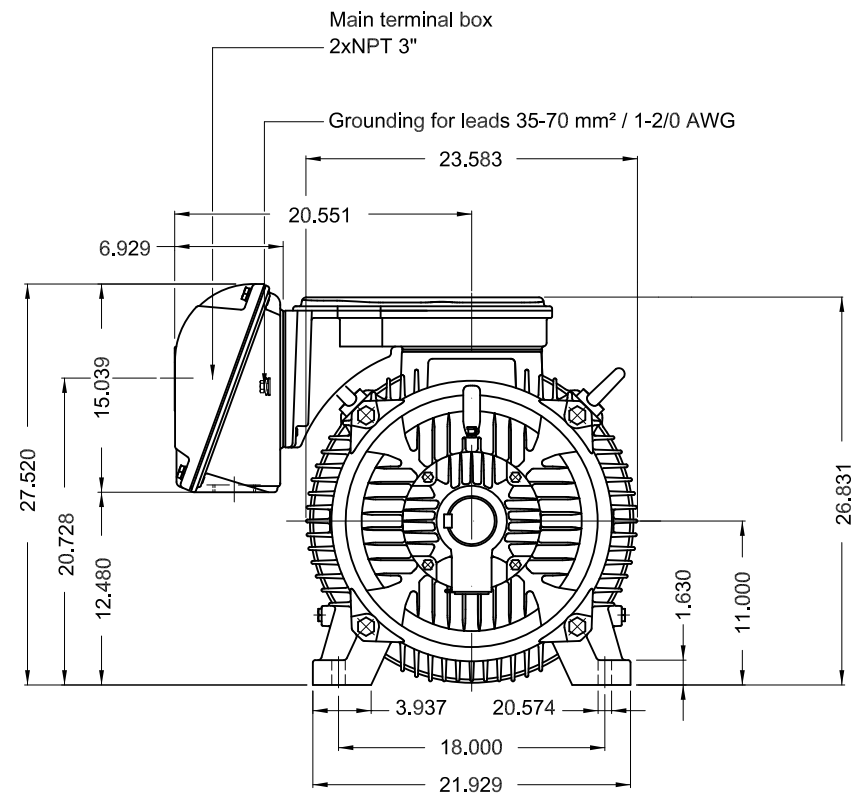


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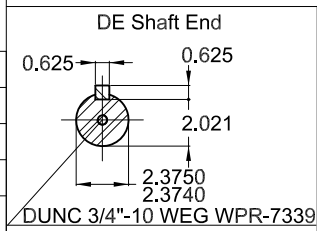


Grounding for leads 25-185 mm² / 3AWG-350MCM

250 HP 04 Poles 60 Hz

Dimensions in inches

TS shaft end
 Color RAL 5009
 Painting plan 203A
 Mounting NEMA F-1
 Mounting B3R(D)



ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR W22 PREM. EFF.					
CHECKED		FRAME 445/7TS IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
 WDD



SHEET 1 / 1

MODEL 25018ET3H447TS-W22
MADE IN MEXICO
13473782



*Inverter Duty Motor
Severe Duty*

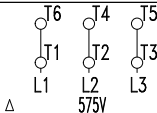


FOR SAFE AREA
MOD.TE1BFOXON



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, 1.0SF, T3

PH 3	FR 445/7TS	HP(kW) 250(185)		Hz 60
V 575		A 225		IP55
NEMA NOM EFF		96.2	%	RPM 1780
ENCL TEFC	DUTY	CONT.		INS. CL. F Δ T 80 K
PF 0.86		DES B	CODE G	AMB. 40°C
SF 1.15	SFA 259		ALT 1000 m.a.s.l.	



→ 6314-C3(27g)
→ 6314-C3(27g)

MOBIL POLYREX EM
12000 h

2513 Lbs