

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	11431937																		
Catalog # :	12512ST3HIE445T-W22																		
Frame : 444/5T Output : 125 HP Poles : 6 Frequency : 60 Hz Rated voltage : 575 V Rated current : 114 A L. R. Amperes : 721 A LRC : 6.3x(Code G) No load current : 40.0 A Rated speed : 1185 rpm Slip : 1.25 % Rated torque : 554 ft.lb Locked rotor torque : 210 % Breakdown torque : 229 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 104 sq.ft.lb Design : B	Locked rotor time : 34s (cold) 19s (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 : 69.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 1837 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	95.2 95.0 95.4 95.0																		
Power Factor	0.46 0.70 0.79 0.83																		
Foundation loads																			
Max. traction	: 2478 lb																		
Max. compression	: 4315 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;">6319 C3</td> <td style="text-align: center;">6316 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;">13000 h</td> <td style="text-align: center;">16000 h</td> </tr> <tr> <td>Lubricant amount :</td> <td style="text-align: center;">45 g</td> <td style="text-align: center;">34 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 :	6319 C3	6316 C3	Sealing :	Inpro/Seal	Inpro/Seal	Lubrication interval :	13000 h	16000 h	Lubricant amount :	45 g	34 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



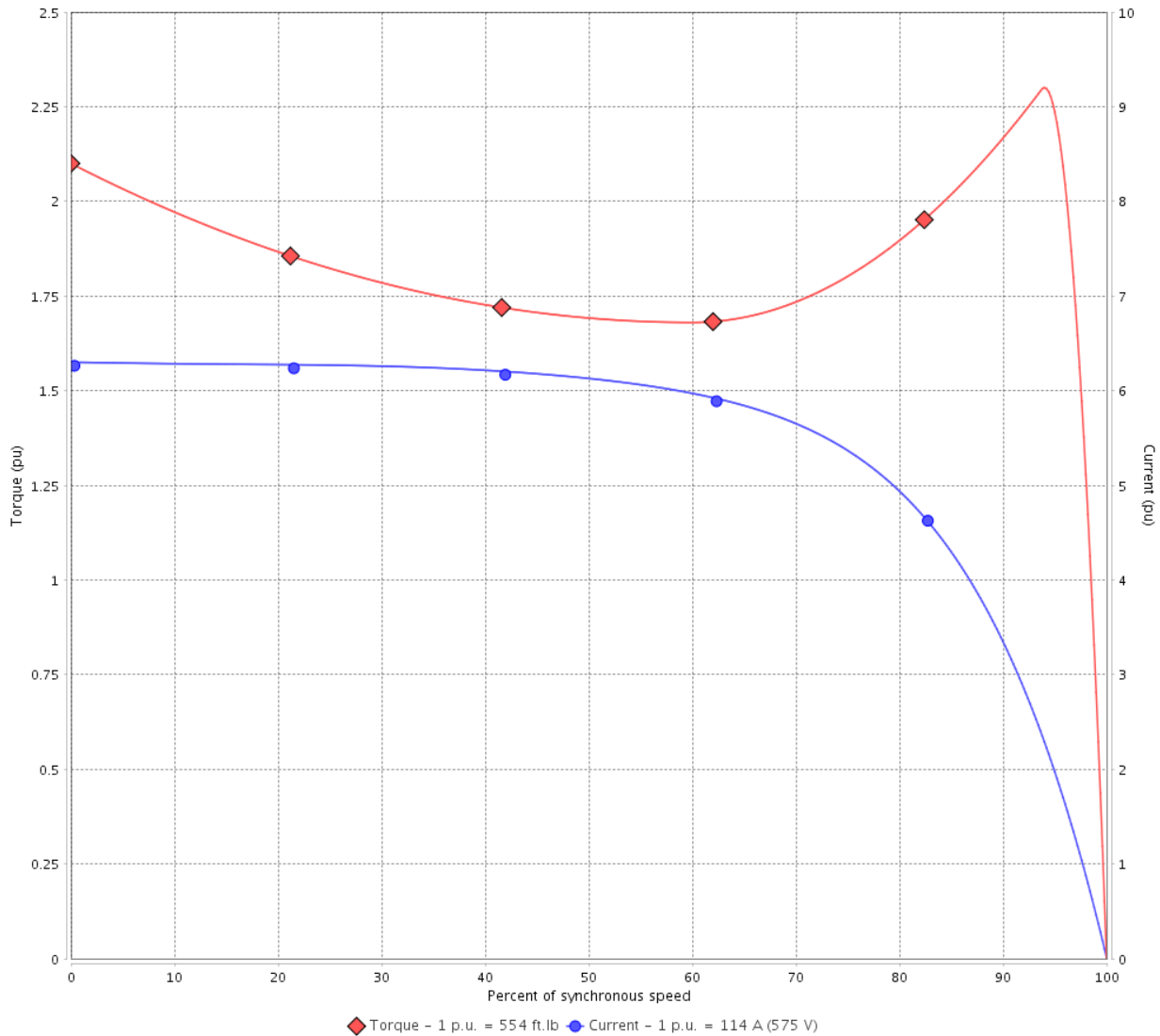
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11431937

Catalog # : 12512ST3HIE445T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 6P

Rated current	: 114 A	Moment of inertia (J)	: 104 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 554 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1185 rpm	Design	: B

Locked rotor time : 34s (cold) 19s (hot)

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

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

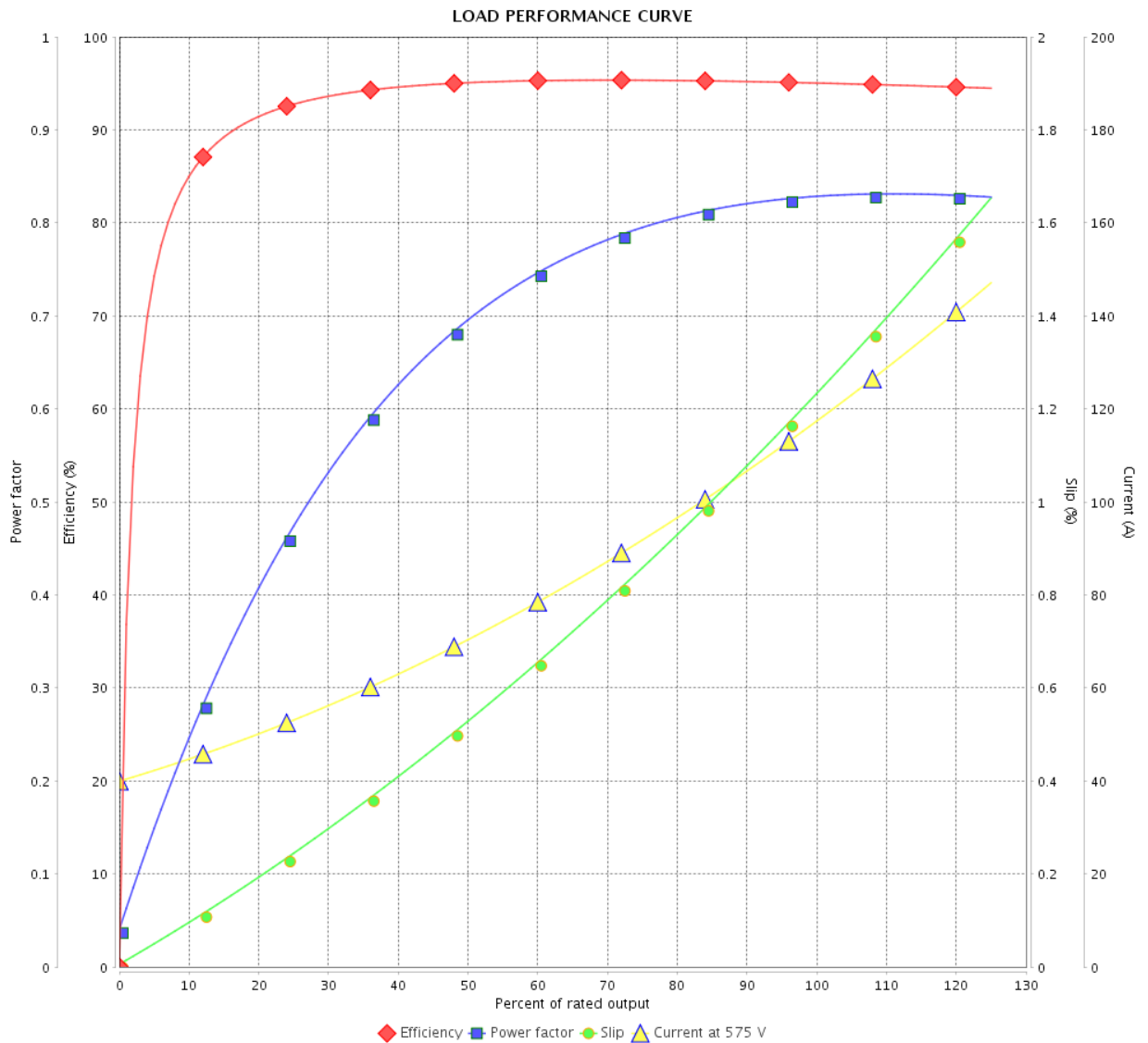


Customer :

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Product code : 11431937

Catalog # : 12512ST3HIE445T-W22



Performance : 575 V 60 Hz 6P

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 Locked rotor torque : 210 %
 Breakdown torque : 229 %
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 Insulation class : F
 Service factor : 1.15
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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

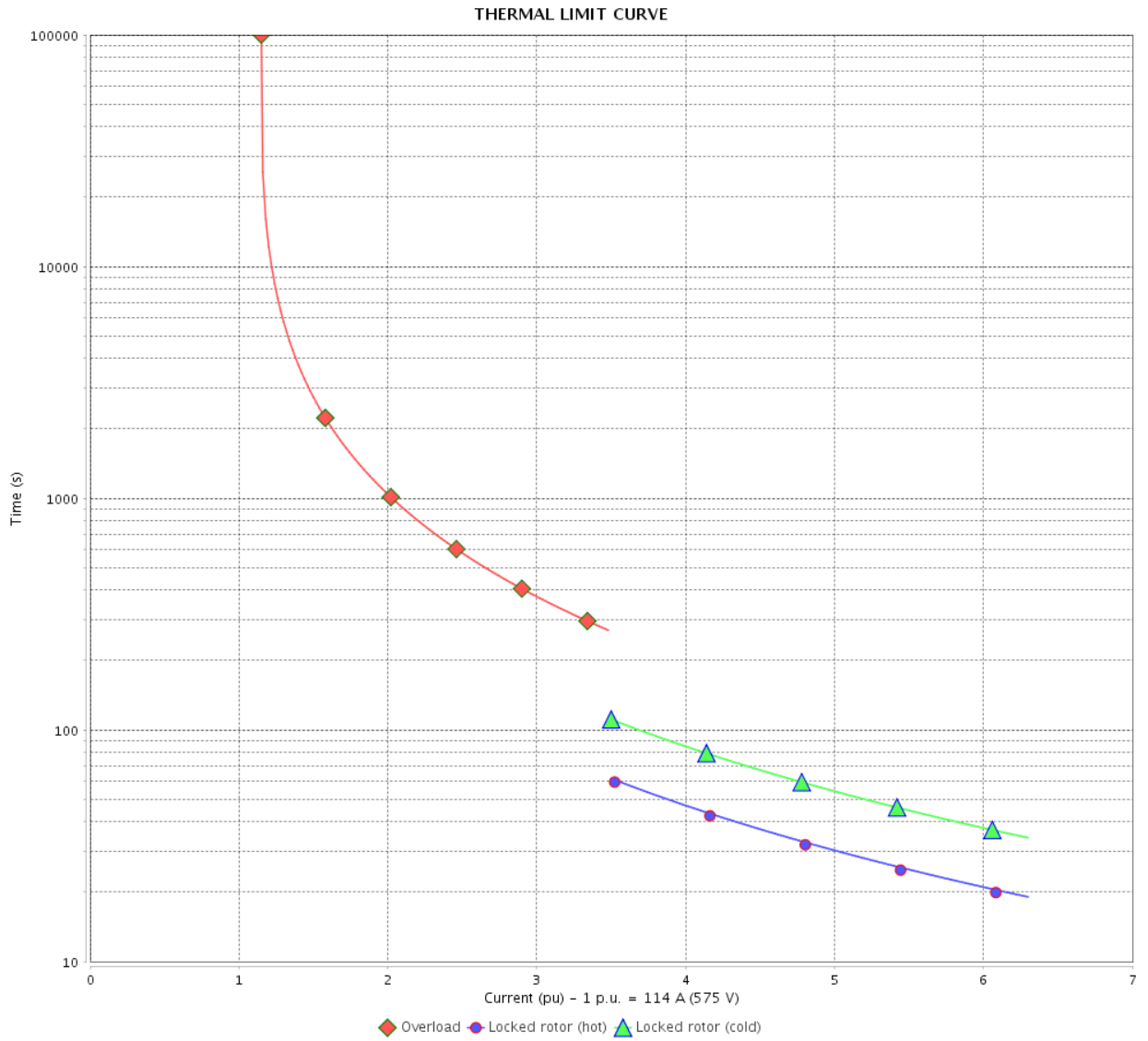
Rev.	Changes Summary	Performed	Checked	Date
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



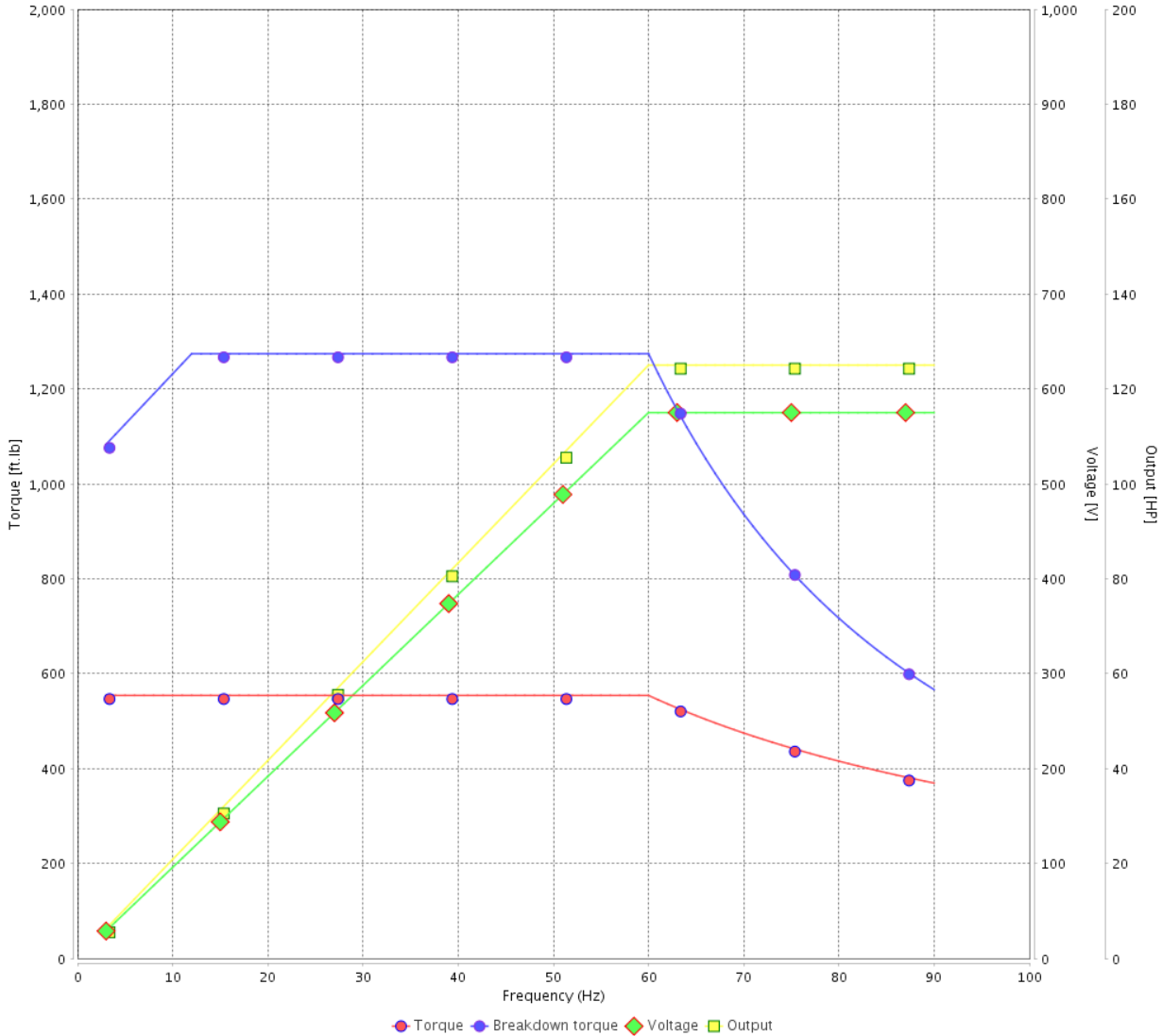
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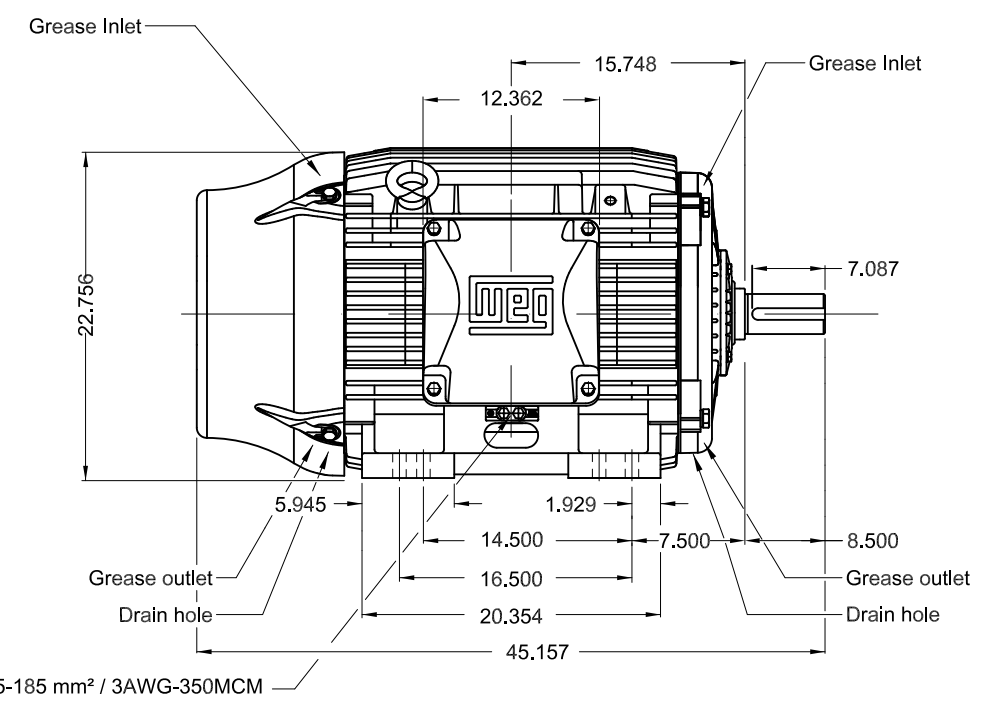
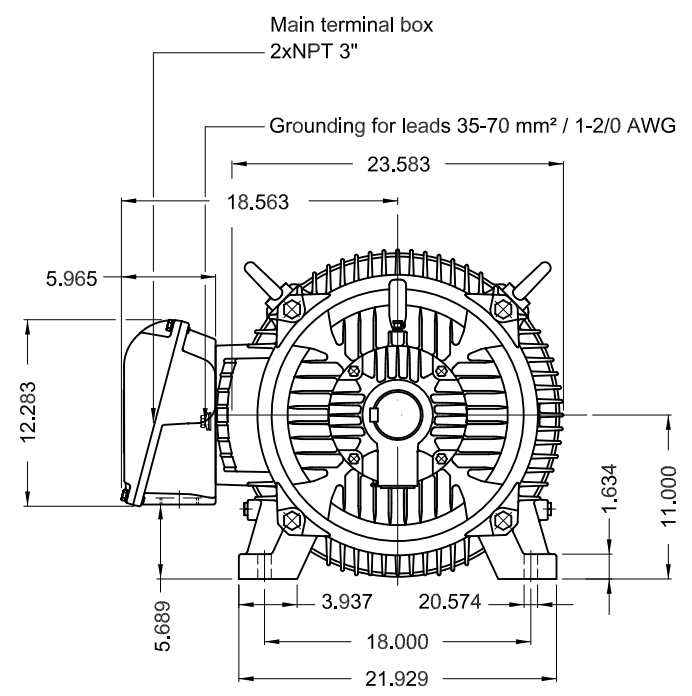
Rev.	Changes Summary	Performed	Checked	Date
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1 2 3 4 5 6

A

B

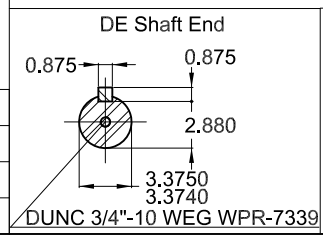
C



D

E

Without vertical jackscrews
 Color RAL 5009
 Painting plan 202E
 Mounting B3R(D)



125 HP 06 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR IEEE 841 W22 PREM. EFF.					
CHECKED		FRAME 444/5T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
 WDD



Dimensions in inches XME A3



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 - T3A

21660017



Inverter Duty Motor
Severe Duty

MADE IN BRAZIL
11431937

PH3 60Hz Fr. 444/5T 1000m.a.s.l. IP55 TEFC 1837lb

V 575

A 114

HP 125

kW 90

SF 1.15

SFA 131

RPM 1185

PF 0.83

AMB 40°C

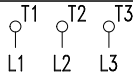
INS cl. F DT80K

NEMA NOM EFF 95.0%

DUTY CONT.

DES B Code G

GUARANT. EFF 94.1%



575V



→ 6319-C3 (45g) 95BC03X30

→ 6316-C3 (34g) 80BC03X30



MOBIL POLYREX EM (13000h)

