

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	12395532																		
Catalog # :	25012ET3H449T-W22																		
Frame : 447/9T Output : 250 HP (185 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 575 V Rated current : 234 A L. R. Amperes : 1425 A LRC : 6.1x(Code G) No load current : 96.0 A Rated speed : 1185 rpm Slip : 1.25 % Rated torque : 1110 ft.lb Locked rotor torque : 240 % Breakdown torque : 240 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 145 sq.ft.lb Design : B	Locked rotor time : 21s (cold) 12s (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> : 70.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 2958 lb																		
Output	25%    50%    75%    100%																		
Efficiency (%)	94.5    95.0    95.4    95.8																		
Power Factor	0.43    0.68    0.79    0.83																		
Foundation loads																			
Max. traction	: 5609 lb																		
Max. compression	: 8567 lb																		
	<table border="0" style="width:100%;"> <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>: 6322 C3</td> <td>6319 C3</td> </tr> <tr> <td>Sealing</td> <td>: WSeal</td> <td>WSeal</td> </tr> <tr> <td>Lubrication interval</td> <td>: 11000 h</td> <td>13000 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" style="text-align: center;">Mobil Polyrex EM</td> </tr> </table>		<u>Drive end</u>	<u>Non drive end</u>	Bearing type	: 6322 C3	6319 C3	Sealing	: WSeal	WSeal	Lubrication interval	: 11000 h	13000 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															
Performed by																			
Checked by			Page	Revision															
Date	13/04/2022		1 / 6																

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



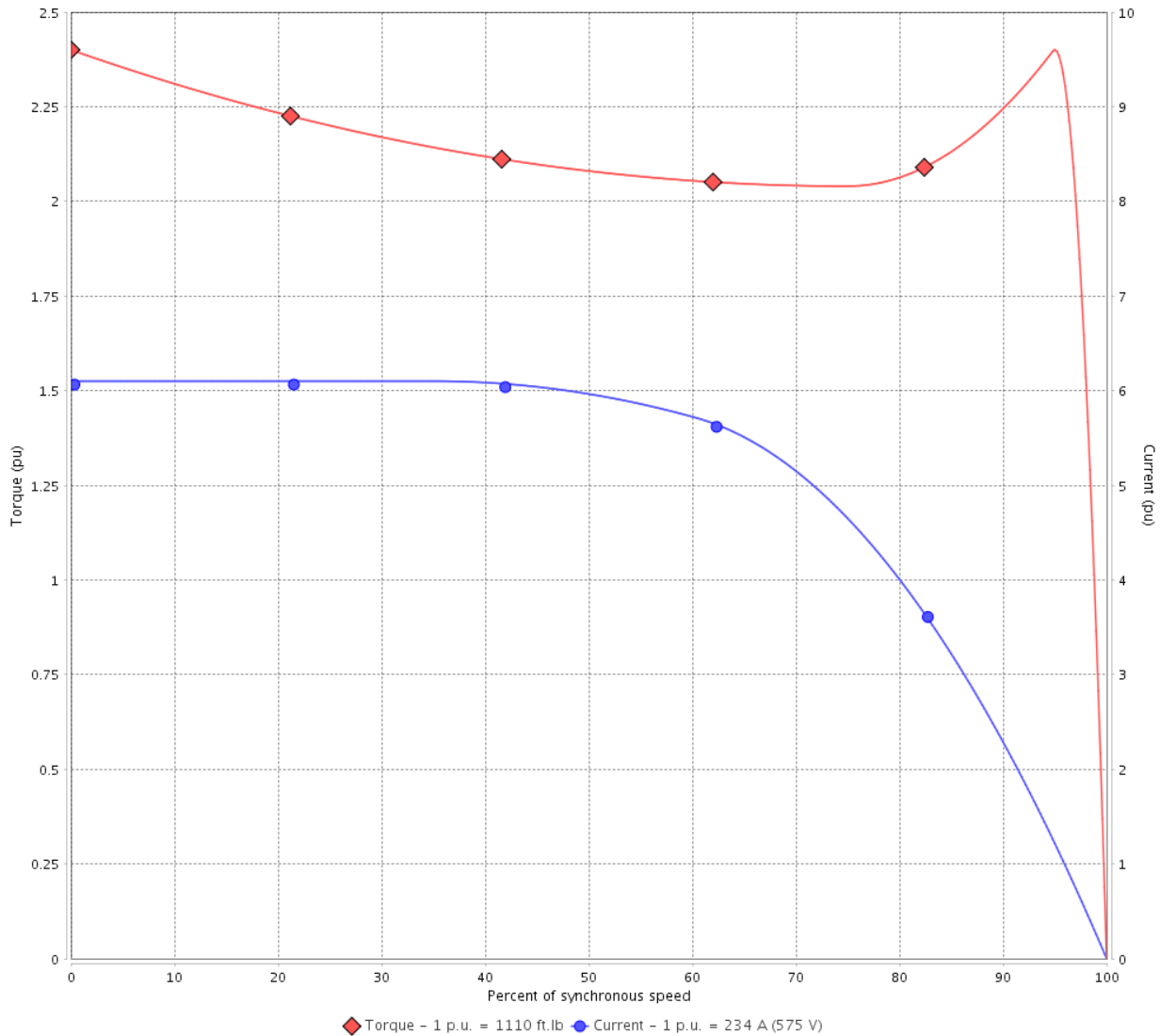
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12395532

Catalog # : 25012ET3H449T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 6P

Rated current	: 234 A	Moment of inertia (J)	: 145 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 1110 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1185 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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Date	13/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

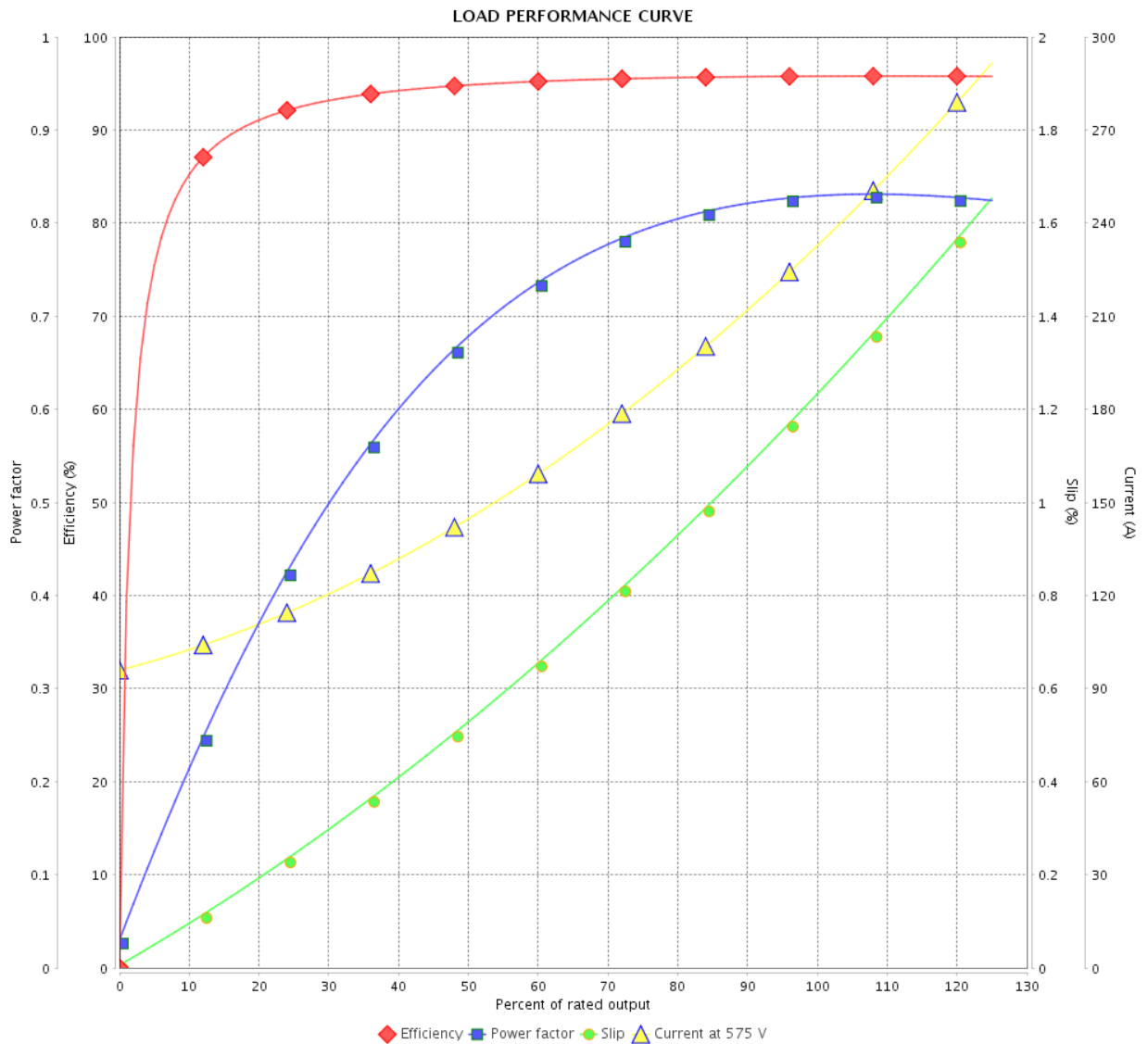


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12395532

Catalog # : 25012ET3H449T-W22



Performance : 575 V 60 Hz 6P

Rated current : 234 A  
 LRC : 6.1  
 Rated torque : 1110 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 240 %  
 Rated speed : 1185 rpm

Moment of inertia (J) : 145 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



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Heating constant

Cooling constant

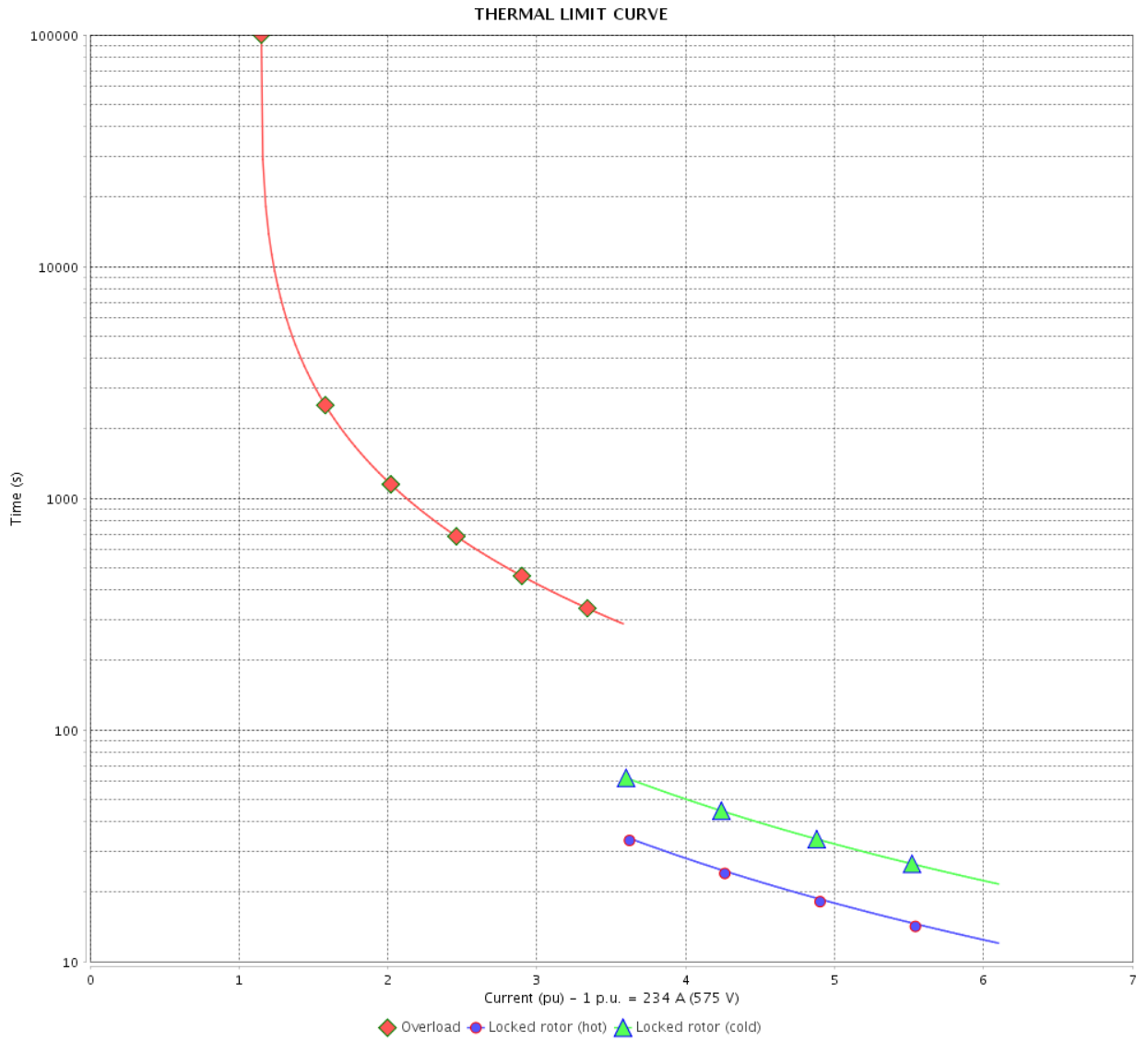
Rev.	Changes Summary	Performed	Checked	Date
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Performed by		Page 5 / 6		Revision
Checked by				
Date				

# VFD OPERATION CURVE

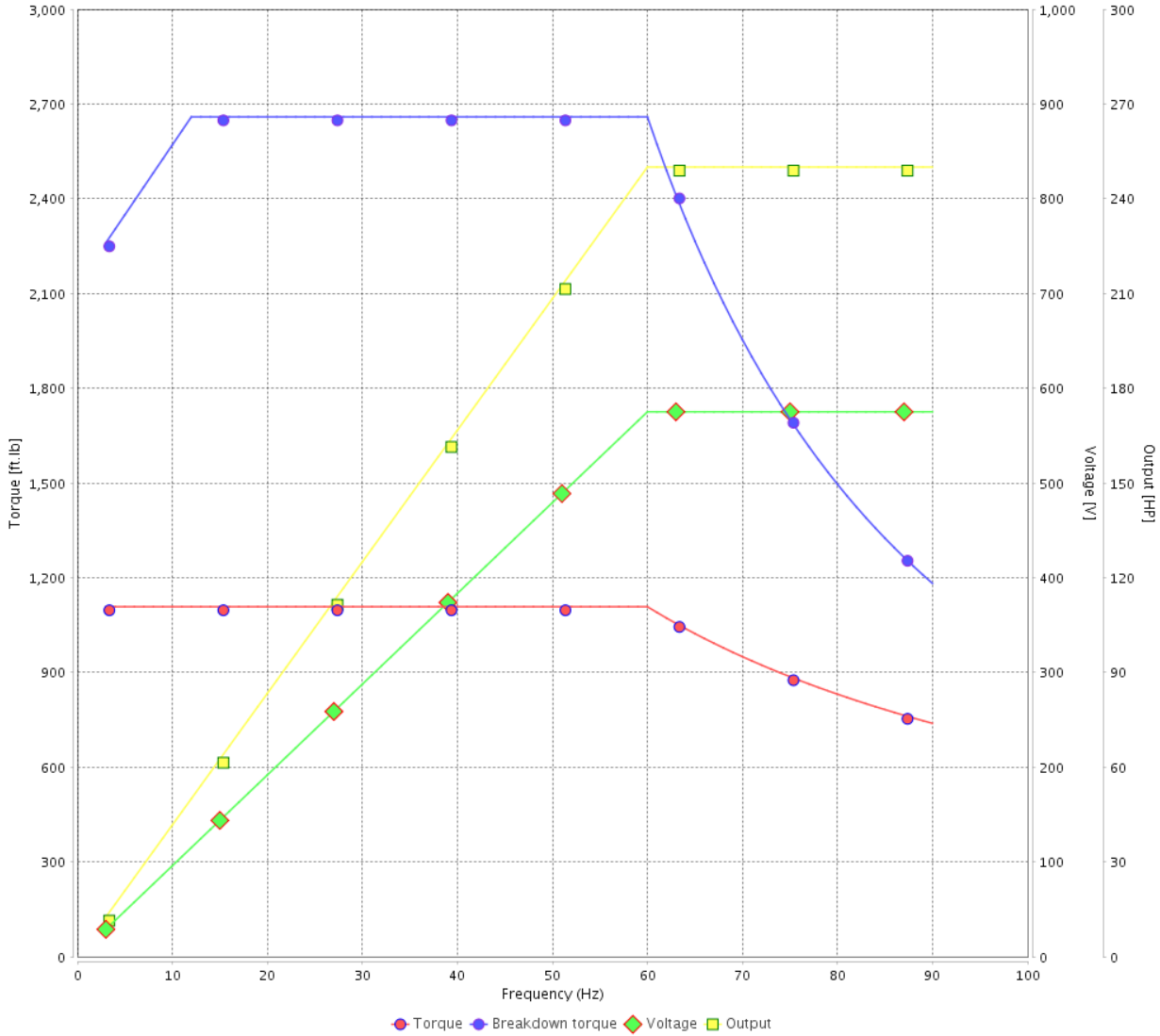
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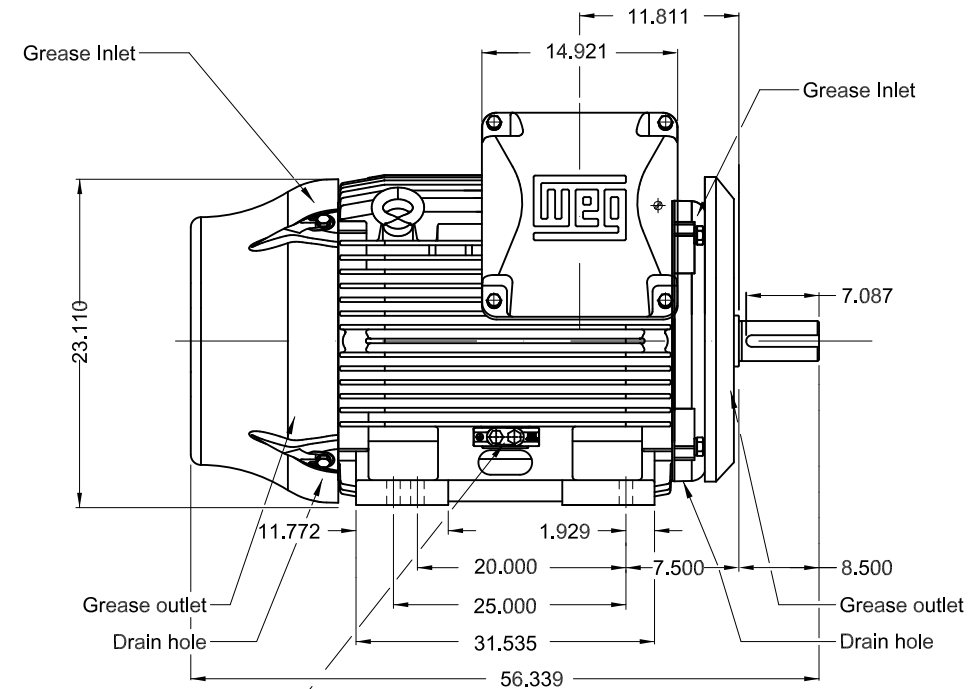
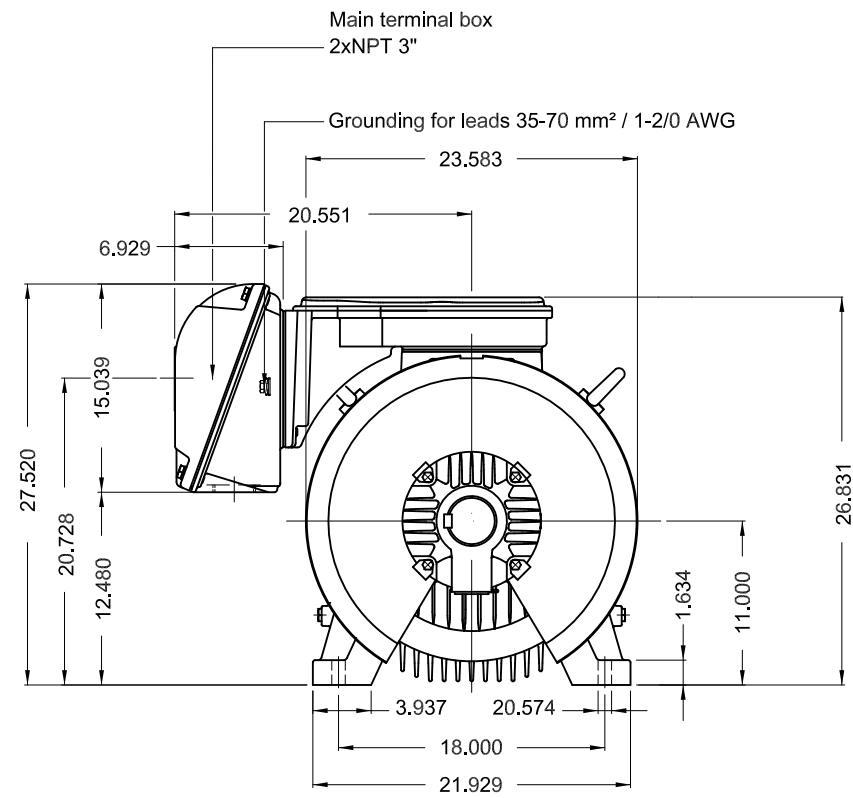
VFD OPERATION CURVE



Performance : 575 V 60 Hz 6P

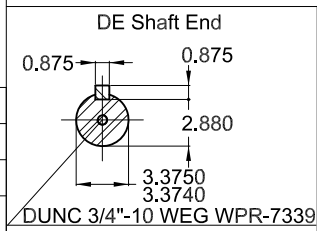
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Grounding for leads 25-185 mm<sup>2</sup> / 3AWG-350MCM

Drive-End Air Deflector  
 Color RAL 5009  
 Painting plan 203A  
 Mounting B3R(D)



250 HP 06 Poles 60 Hz

A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR W22 PREM. EFF.					
CHECKED		FRAME 447/9T 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 - T3

HT250506NPBBW22449T

Inverter Duty Motor  
Severe Duty

PH3 60Hz Fr. 447/9T 1000m.a.s.l. IP55 TEFC 2957lb

V 575

A 234

HP 250

kW 185

SF 1.15

SFA 269

RPM 1185

PF 0.83

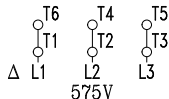
AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 95.8%

DUTY CONT.

DES B Code G



→ 6322-C3 (60g)

→ 6319-C3 (45g)



MOBIL POLYREX EM (11000h)



MADE IN BRAZIL  
12395532