

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	12447105																		
Catalog # :	02536ET3H284TSC-W22																		
Frame : 284/6TSC Output : 25 HP (18.5 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 23.0 A L. R. Amperes : 145 A LRC : 6.3x(Code G) No load current : 6.40 A Rated speed : 3545 rpm Slip : 1.53 % Rated torque : 37.1 ft.lb Locked rotor torque : 200 % Breakdown torque : 250 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 2.69 sq.ft.lb Design : B	Locked rotor time : 30s (cold) 17s (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> : 72.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 402 lb																		
Output	25%    50%    75%    100%																		
Efficiency (%)	90.8    91.0    91.7    91.7																		
Power Factor	0.55    0.79    0.86    0.88																		
Foundation loads																			
Max. traction : 202 lb																			
Max. compression : 604 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;">V'Ring</td> <td style="text-align: center;">V'Ring</td> </tr> <tr> <td>Lubrication interval :</td> <td style="text-align: center;">14000 h</td> <td style="text-align: center;">17000 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 :	V'Ring	V'Ring	Lubrication interval :	14000 h	17000 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															
Performed by																			
Checked by			Page	Revision															
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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



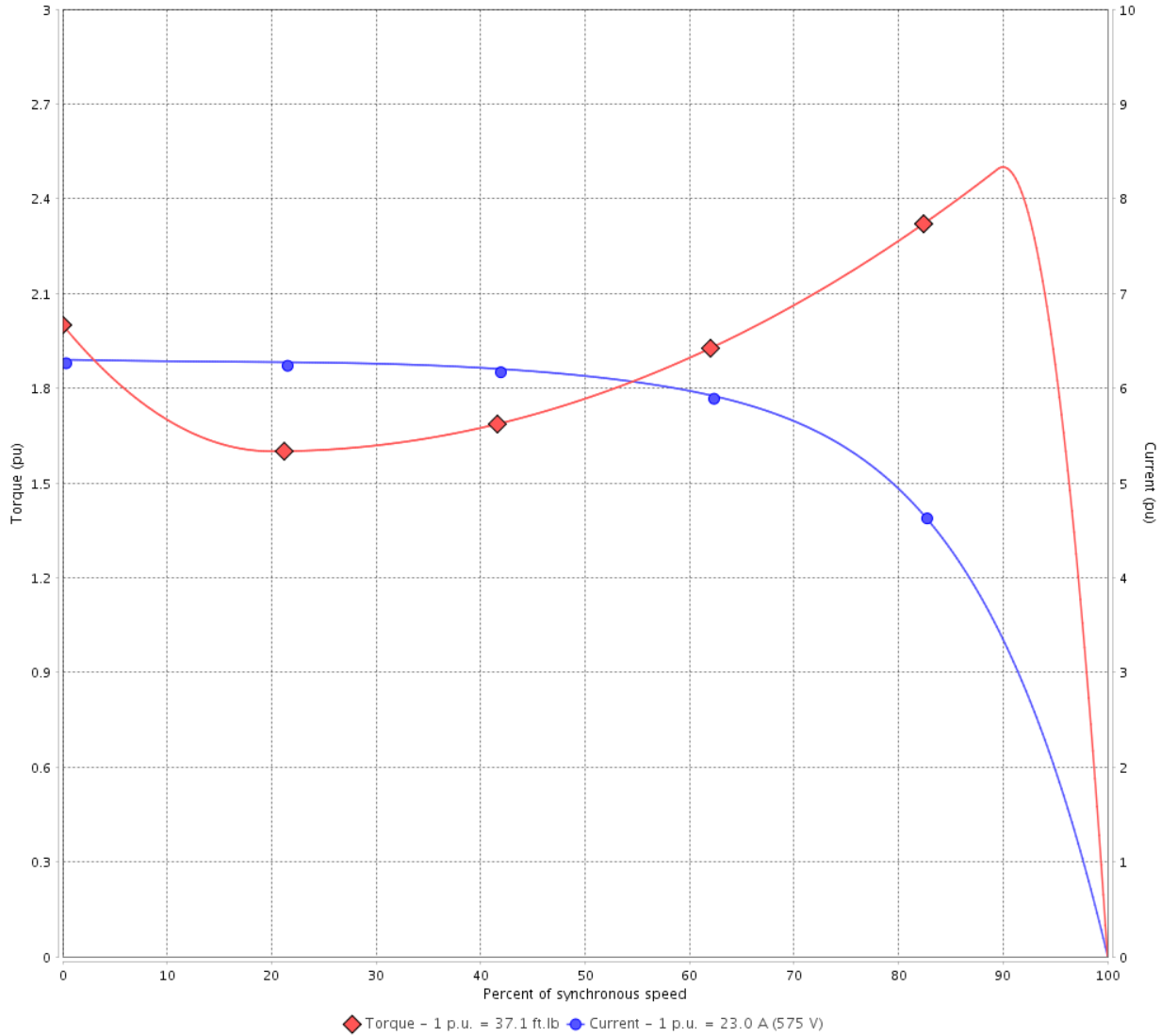
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Product code : 12447105

Catalog # : 02536ET3H284TSC-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 23.0 A	Moment of inertia (J)	: 2.69 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 37.1 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 3545 rpm	Design	: B

Locked rotor time : 30s (cold) 17s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

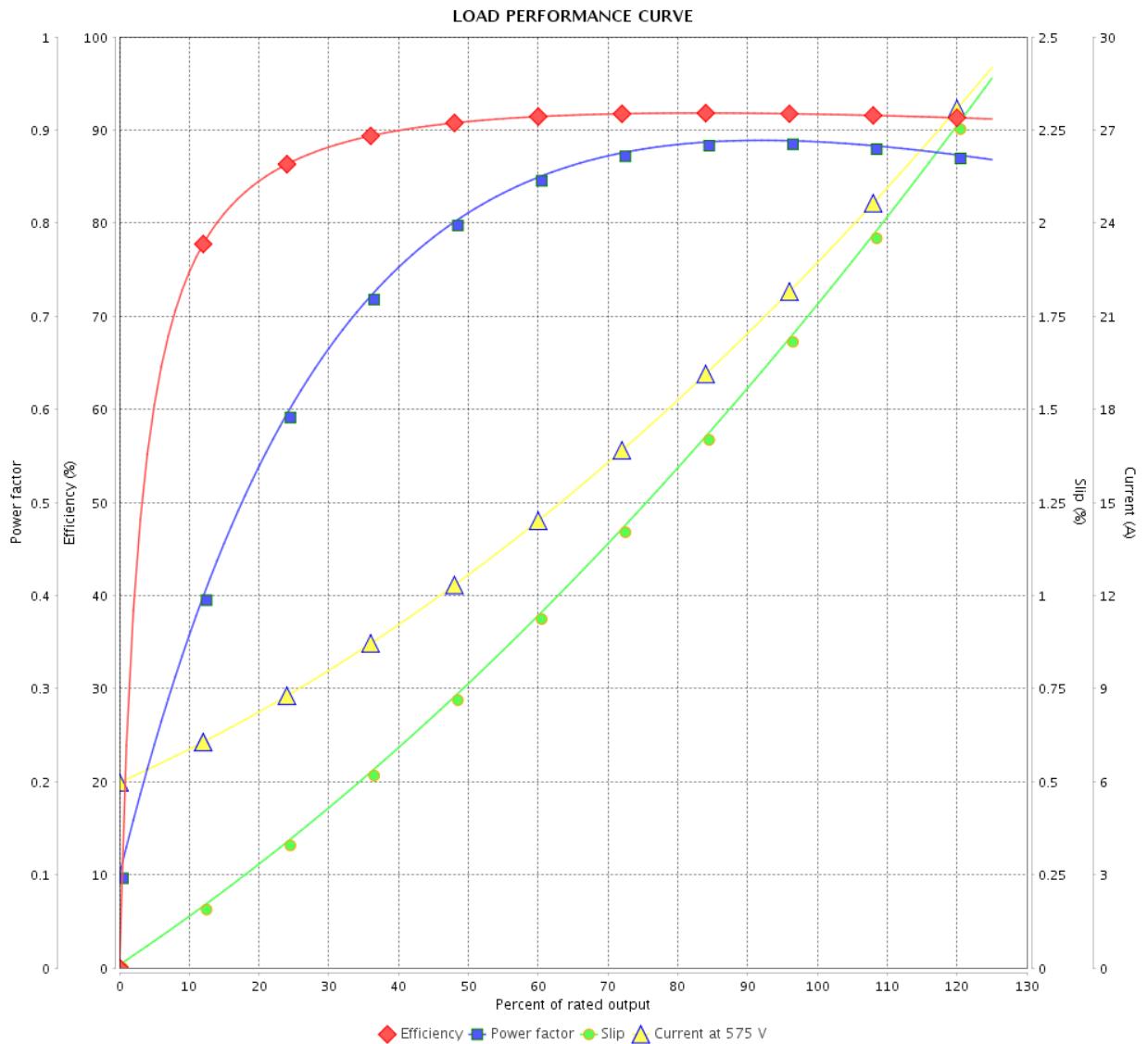


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12447105

Catalog # : 02536ET3H284TSC-W22



Performance : 575 V 60 Hz 2P

Rated current : 23.0 A  
 LRC : 6.3  
 Rated torque : 37.1 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 250 %  
 Rated speed : 3545 rpm

Moment of inertia (J) : 2.69 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 : 12447105  
Catalog # : 02536ET3H284TSC-W22

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Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 3545 rpm	Design	: B

Heating constant

Cooling constant

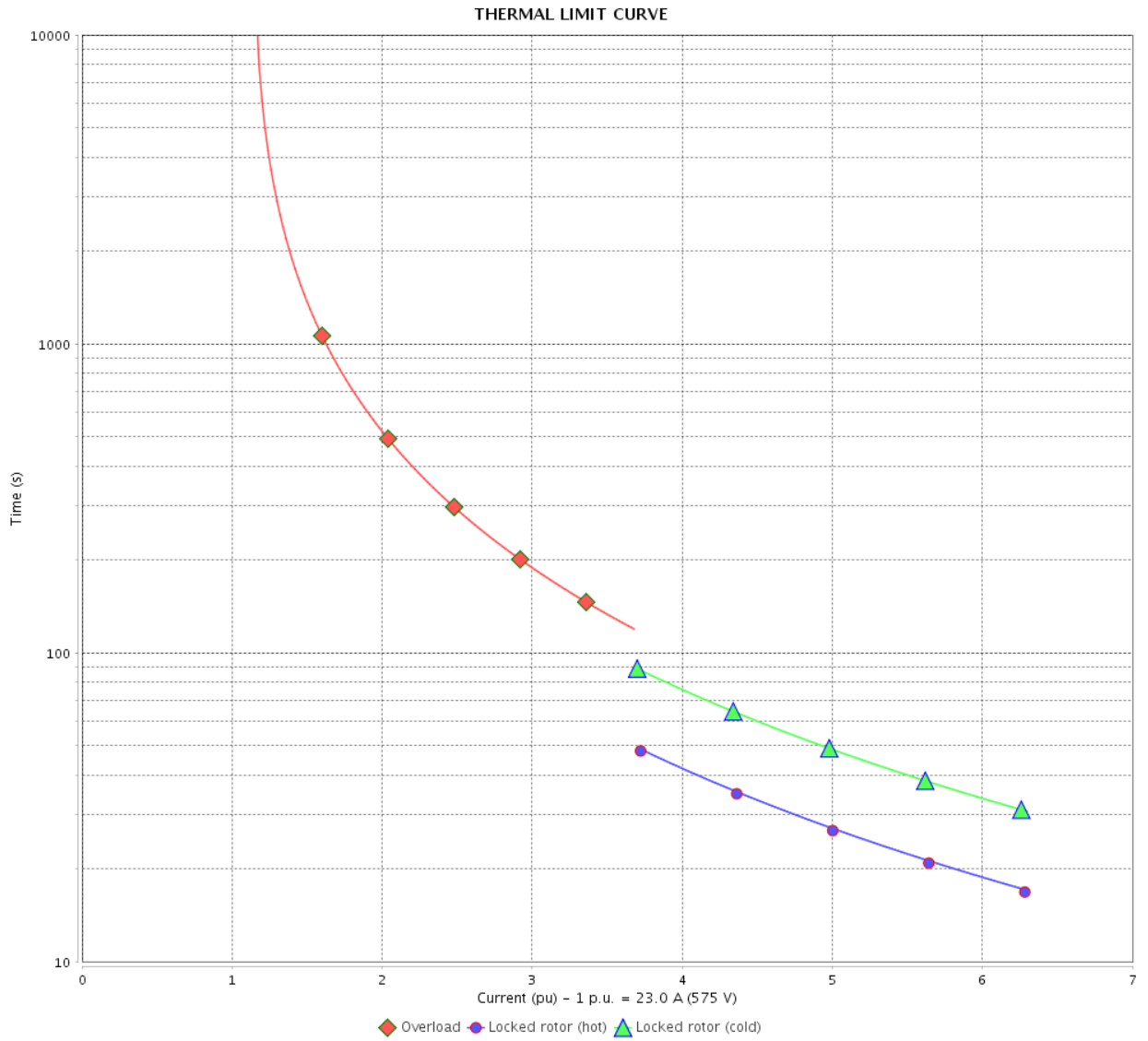
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Performed by		Page		Revision
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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



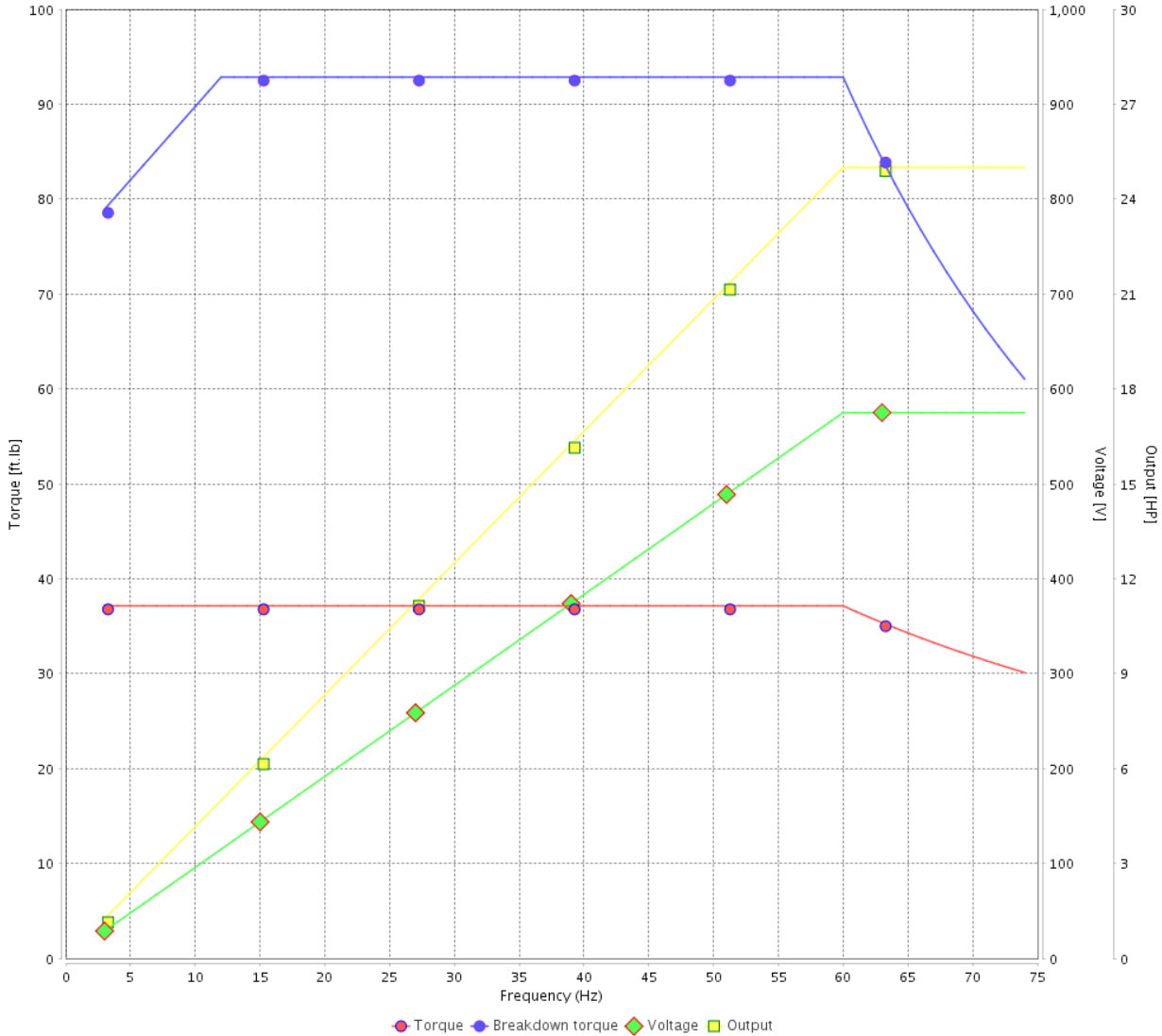
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Catalog # : 02536ET3H284TSC-W22

VFD OPERATION CURVE



Performance : 575 V 60 Hz 2P

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 Breakdown torque : 250 %  
 Rated speed : 3545 rpm

Moment of inertia (J) : 2.69 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

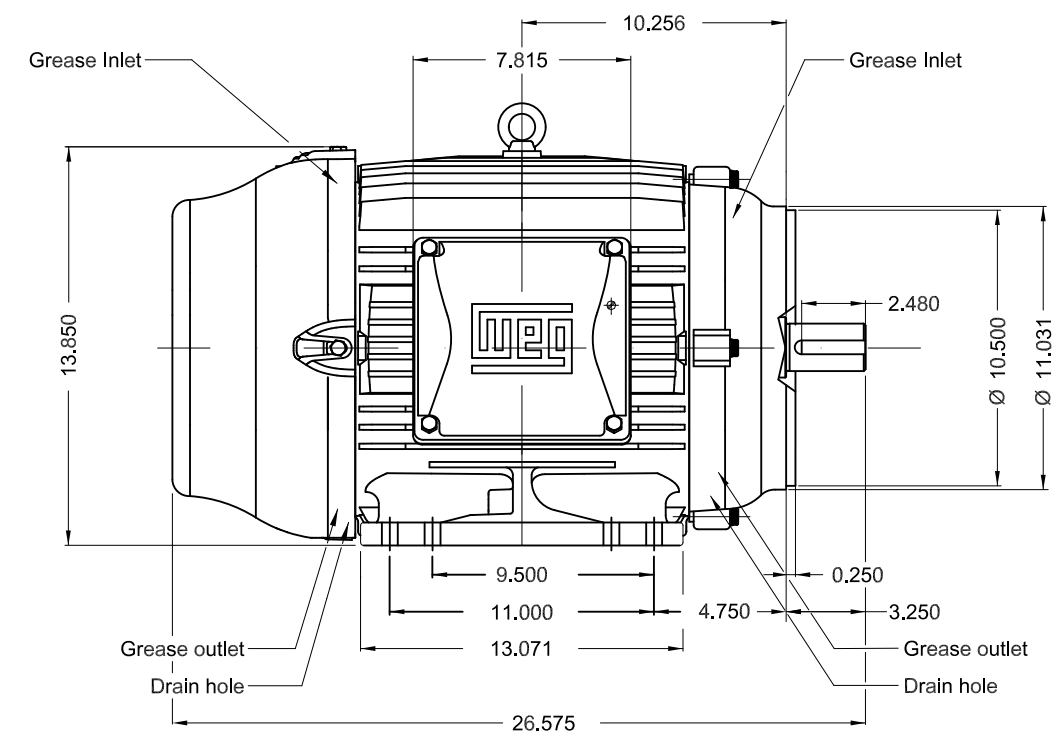
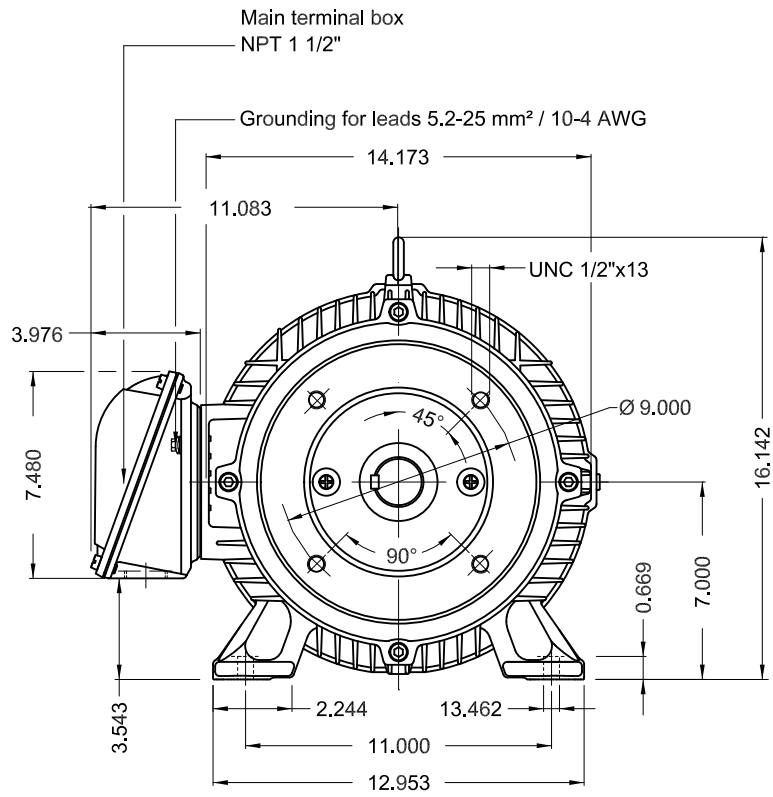
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Date	14/04/2022			

1 2 3 4 5 6

A

B

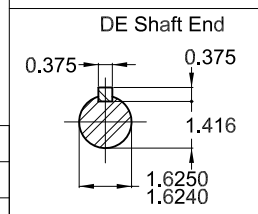
C



D

E

Color RAL 5009  
 Painting plan 203A  
 Mounting B34R(D)



25 HP 02 Poles 60 Hz A

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

PREVIEW  
 WDD



SHEET 1 / 1

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 - T4  
For use on PWM: Gr. A, B, C, D and F,  
VT 1000:1, CT 20:1, 1.00SF - T3A

MODEL 02536ET3H284TSC-W22

Inverter Duty Motor  
Severe Duty

PH3 60Hz Fr. 284/6TSC 1000m.a.s.l. IP55 TEFC 404lb

V 575

A 23.0

HP 25

kW 18.5

SF 1.25

SFA 28.8

RPM 3545

PF 0.88

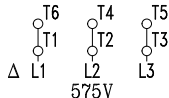
AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 91.7%

DUTY CONT.

DES B Code G

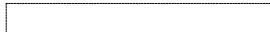


→ 6311-C3 (18g)

→ 6211-C3 (11g)



MOBIL POLYREX EM (14000h)



MADE IN BRAZIL  
12447105