

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	12438229																		
Catalog # :	00109ET3H182T-W22																		
Frame : 182/4T Output : 1 HP (0.75 kW) Poles : 8 Frequency : 60 Hz Rated voltage : 575 V Rated current : 1.84 A L. R. Amperes : 11.0 A LRC : 6.0x(Code M) No load current : 1.36 A Rated speed : 875 rpm Slip : 2.78 % Rated torque : 6.00 ft.lb Locked rotor torque : 300 % Breakdown torque : 350 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.3991 sq.ft.lb Design : B	Locked rotor time : 39s (cold) 22s (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> : 50.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 83.1 lb																		
Output	25%    50%    75%    100%																		
Efficiency (%)	72.4    74.0    77.0    78.5																		
Power Factor	0.18    0.32    0.42    0.52																		
Foundation loads																			
Max. traction : 92 lb																			
Max. compression : 175 lb																			
	<table border="0" style="width:100%;"> <tr> <td style="width: 50%;"></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;">6207 ZZ</td> <td style="text-align: center;">6206 ZZ</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;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Lubricant amount :</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</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 :	6207 ZZ	6206 ZZ	Sealing :	V'Ring	V'Ring	Lubrication interval :	-	-	Lubricant amount :	-	-	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



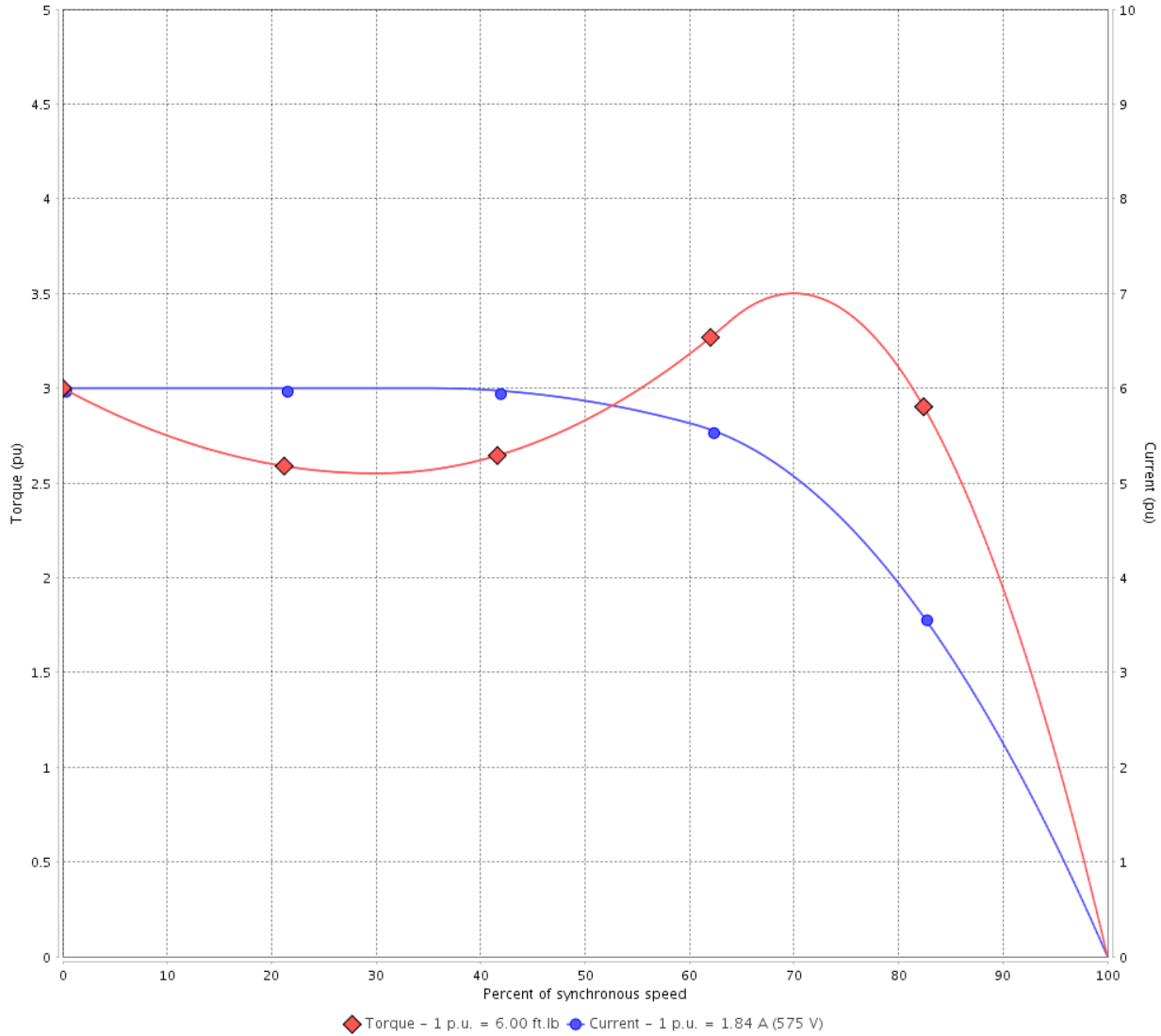
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438229

Catalog # : 00109ET3H182T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 8P

Rated current	: 1.84 A	Moment of inertia (J)	: 0.3991 sq.ft.lb
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 6.00 ft.lb	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 875 rpm	Design	: B

Locked rotor time : 39s (cold) 22s (hot)

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Date	11/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

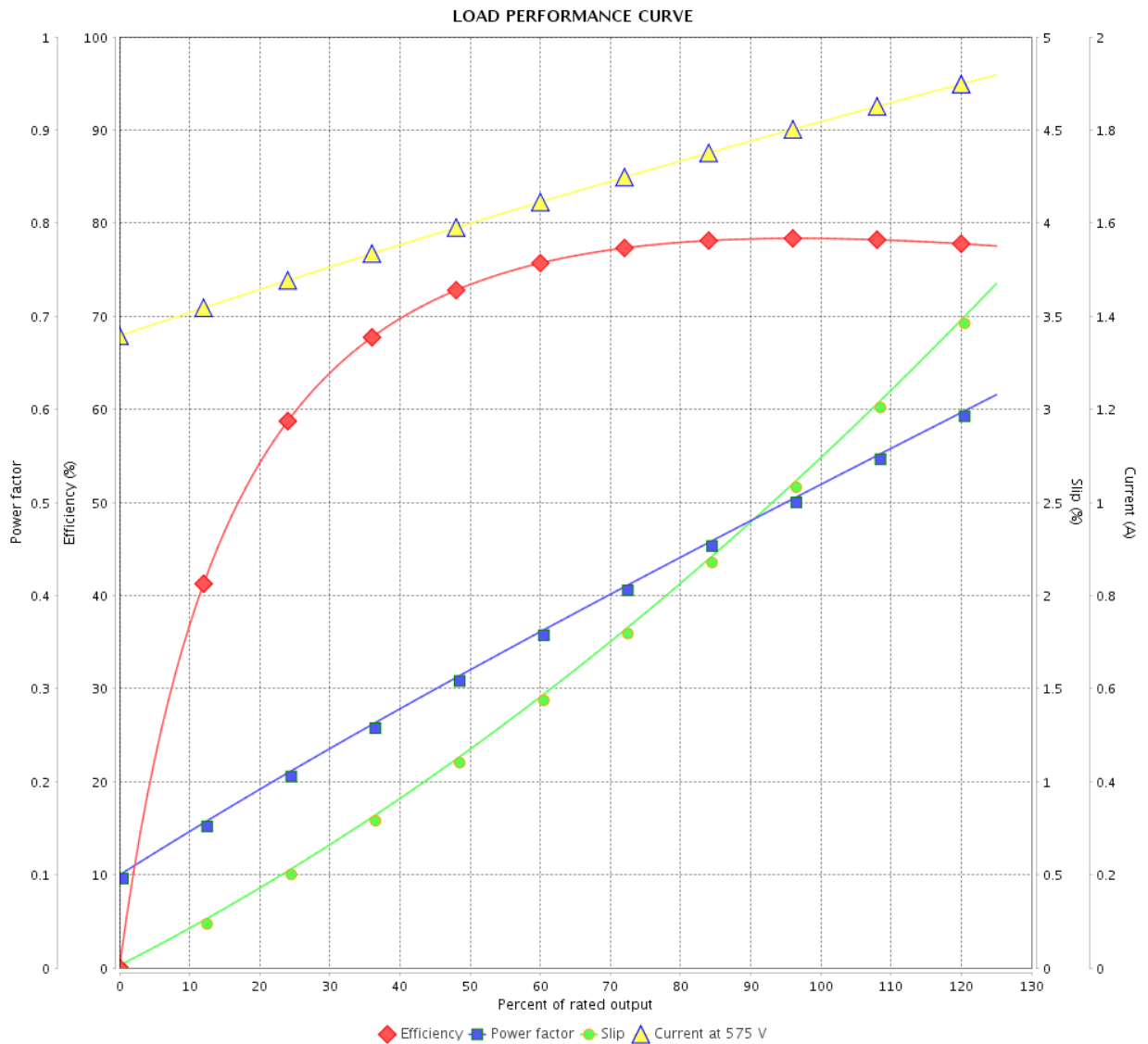


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438229

Catalog # : 00109ET3H182T-W22



Performance : 575 V 60 Hz 8P

Rated current : 1.84 A  
 LRC : 6.0  
 Rated torque : 6.00 ft.lb  
 Locked rotor torque : 300 %  
 Breakdown torque : 350 %  
 Rated speed : 875 rpm

Moment of inertia (J) : 0.3991 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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Locked rotor torque	: 300 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 875 rpm	Design	: B

Heating constant

Cooling constant

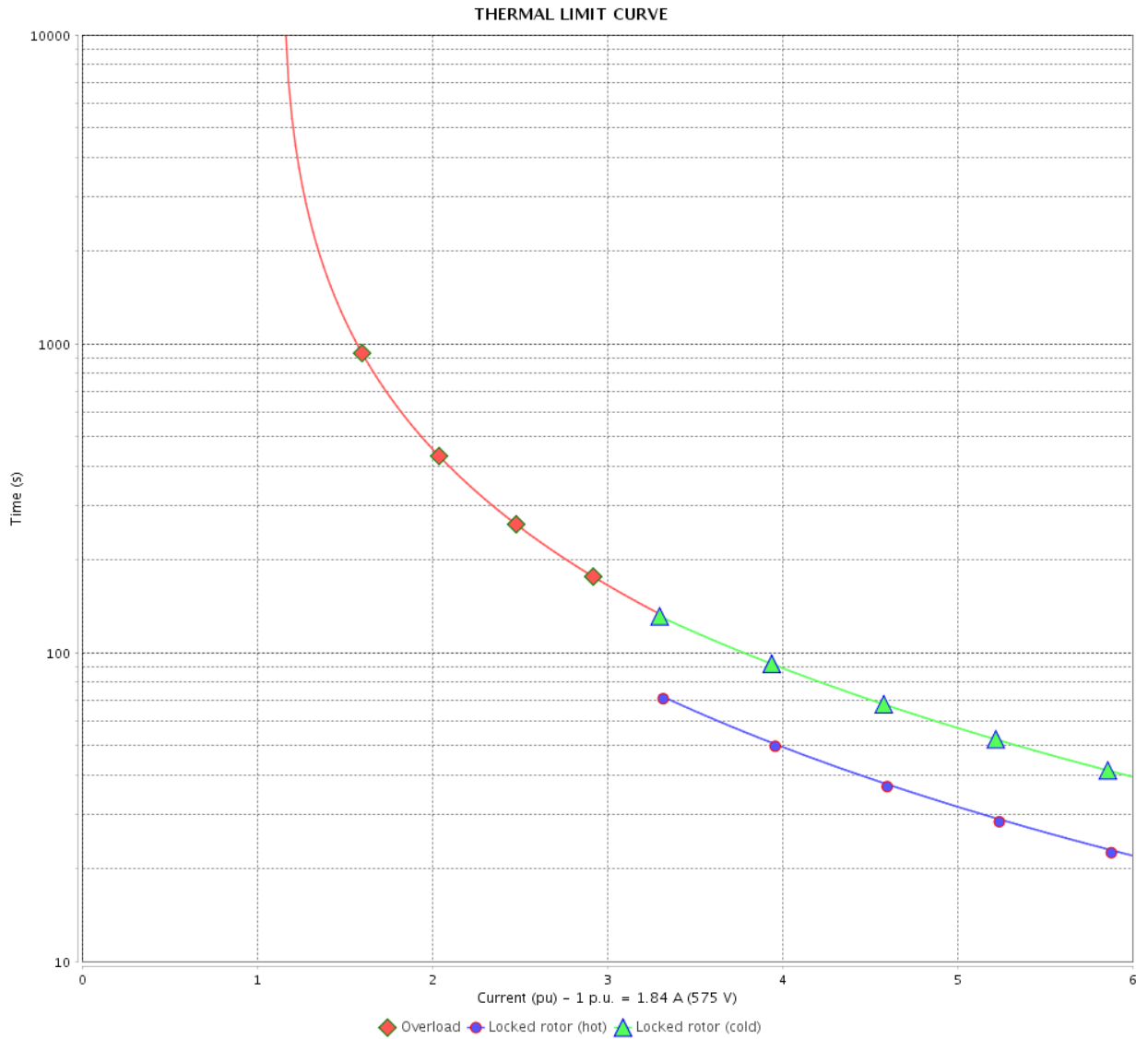
Rev.	Changes Summary	Performed	Checked	Date
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Checked by				
Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



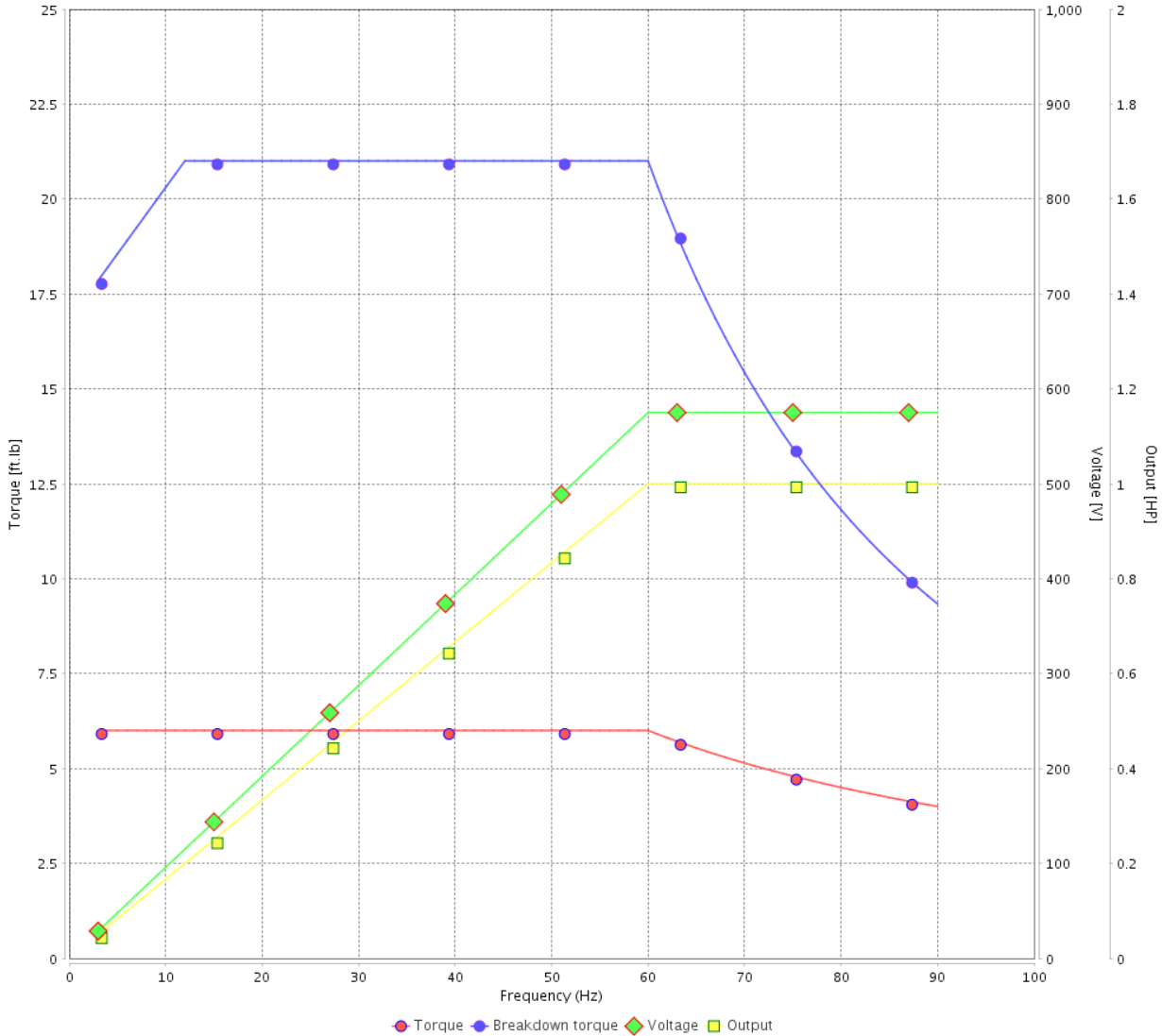
Customer :

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VFD OPERATION CURVE



Performance : 575 V 60 Hz 8P

Rated current : 1.84 A  
 LRC : 6.0  
 Rated torque : 6.00 ft.lb  
 Locked rotor torque : 300 %  
 Breakdown torque : 350 %  
 Rated speed : 875 rpm

Moment of inertia (J) : 0.3991 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

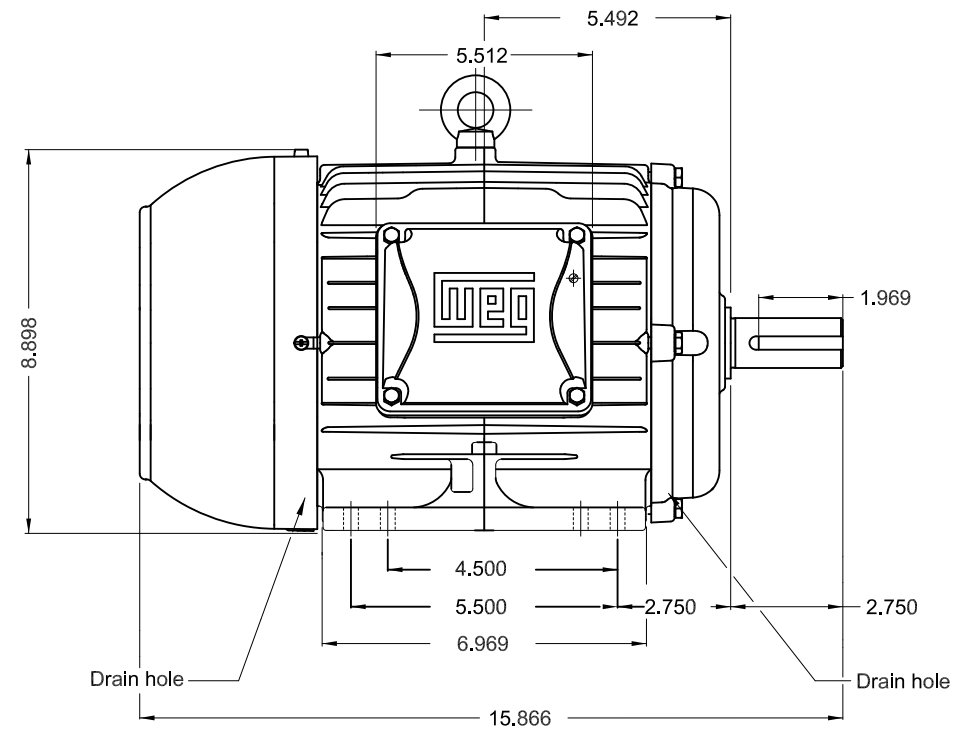
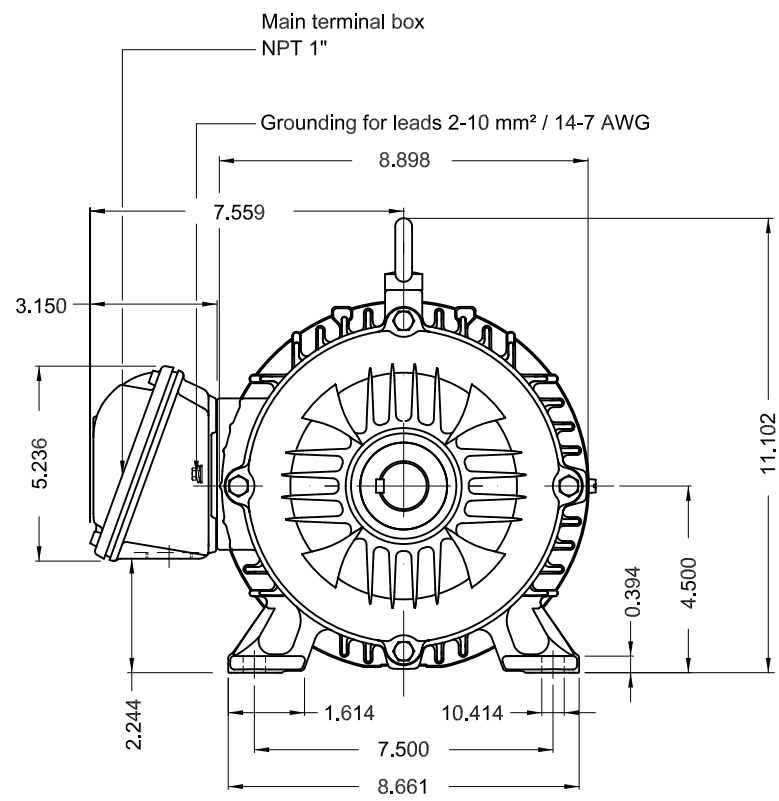
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
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Date	11/04/2022			

1 2 3 4 5 6

A

B

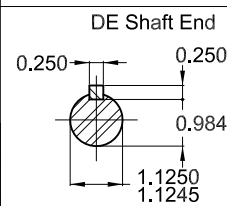
C



D

E

Color RAL 5009  
 Painting plan 207A  
 Mounting B3R(D)



1 HP 08 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF.					
CHECKED		FRAME 182/4T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

**PREVIEW**  
**WDD**



Dimensions in inches XME A3

MADE IN BRAZIL  
12438229



**NEMA**  
Premium

**W22**

HT000508NPW22

Inverter Duty Motor  
Severe Duty



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 - T5  
For use on PWM: Gr. A, B, C, D, F and G,  
VT 1000:1, CT 20:1, 1.00SF - T4A



FOR SAFE AREA  
Mod. TE1BFOXON  
CC029A

PH3 60Hz Fr. 182/4T 1000m.a.s.l. IP55 TEFC 83lb

V 575

A 1.84

HP 1.0

kW 0.75

SF 1.25

SFA 2.30

RPM 875

PF 0.52

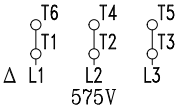
AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 78.5%

DUTY CONT.

DES B Code M



MOBIL POLYREX EM