

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	12438113																		
Catalog # :	00136ET3H143T-W22																		
Frame : 143/5T Output : 1 HP (0.75 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 1.15 A L. R. Amperes : 9.45 A LRC : 8.2x(Code L) No load current : 0.568 A Rated speed : 3500 rpm Slip : 2.78 % Rated torque : 1.50 ft.lb Locked rotor torque : 320 % Breakdown torque : 400 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.0332 sq.ft.lb	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> : 68.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 40.4 lb																		
Output	25%    50%    75%    100%																		
Efficiency (%)	72.7    75.0    79.0    81.5																		
Power Factor	0.39    0.63    0.74    0.80																		
Foundation loads																			
Max. traction : 32 lb																			
Max. compression : 72 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 style="text-align: center;">6205 ZZ</td> <td style="text-align: center;">6204 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 :	6205 ZZ	6204 ZZ	Sealing :	V'Ring	V'Ring	Lubrication interval :	-	-	Lubricant amount :	-	-	Lubricant type :	Mobil Polyrex EM	
	<u>Drive end</u>	<u>Non drive end</u>																	
Bearing type :	6205 ZZ	6204 ZZ																	
Sealing :	V'Ring	V'Ring																	
Lubrication interval :	-	-																	
Lubricant amount :	-	-																	
Lubricant type :	Mobil Polyrex EM																		
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	11/04/2022		1 / 6																

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



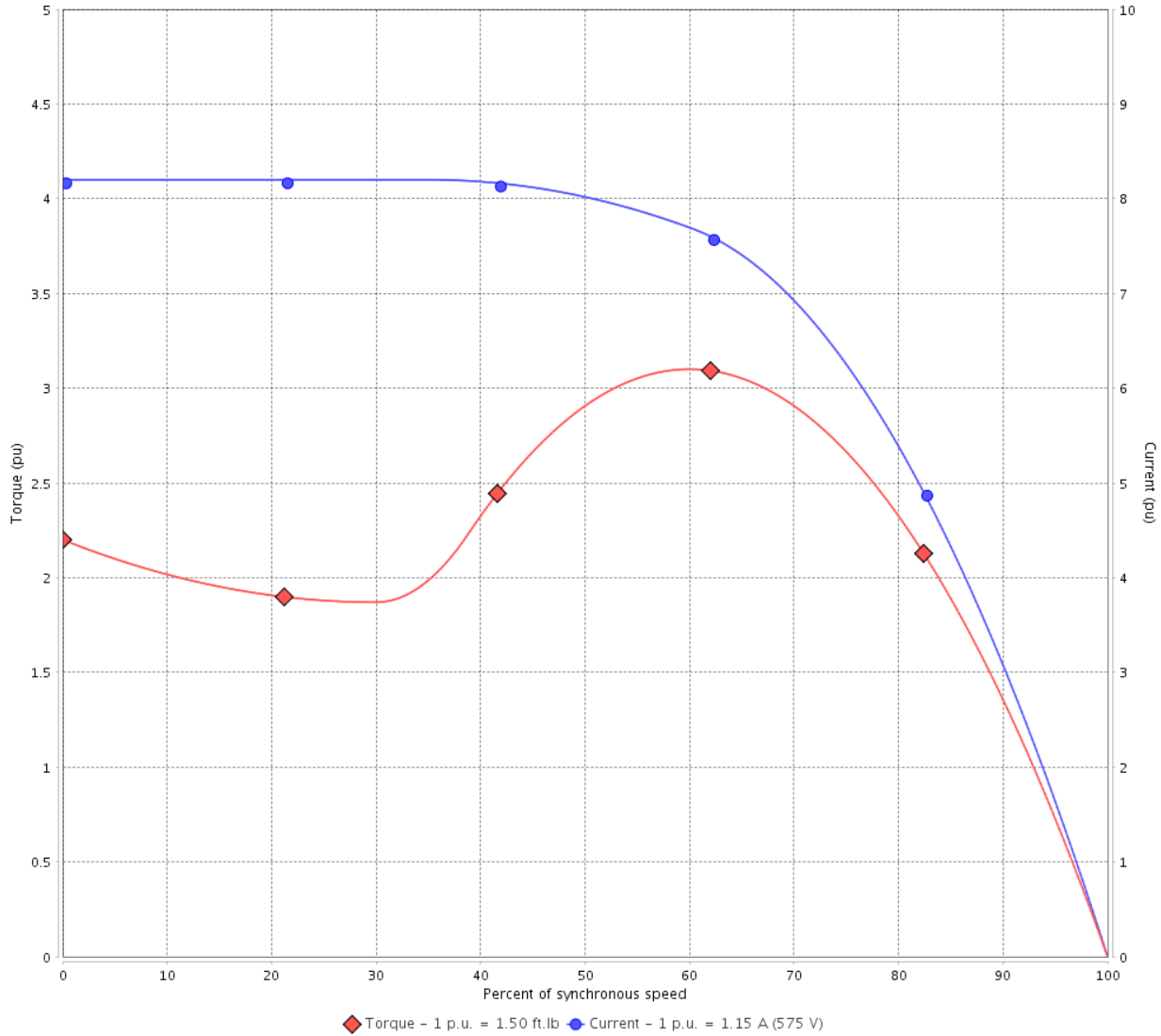
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438113

Catalog # : 00136ET3H143T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 1.15 A	Moment of inertia (J)	: 0.0332 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 1.50 ft.lb	Insulation class	: F
Locked rotor torque	: 320 %	Service factor	: 1.25
Breakdown torque	: 400 %	Temperature rise	: 80 K
Rated speed	: 3500 rpm		

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	11/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

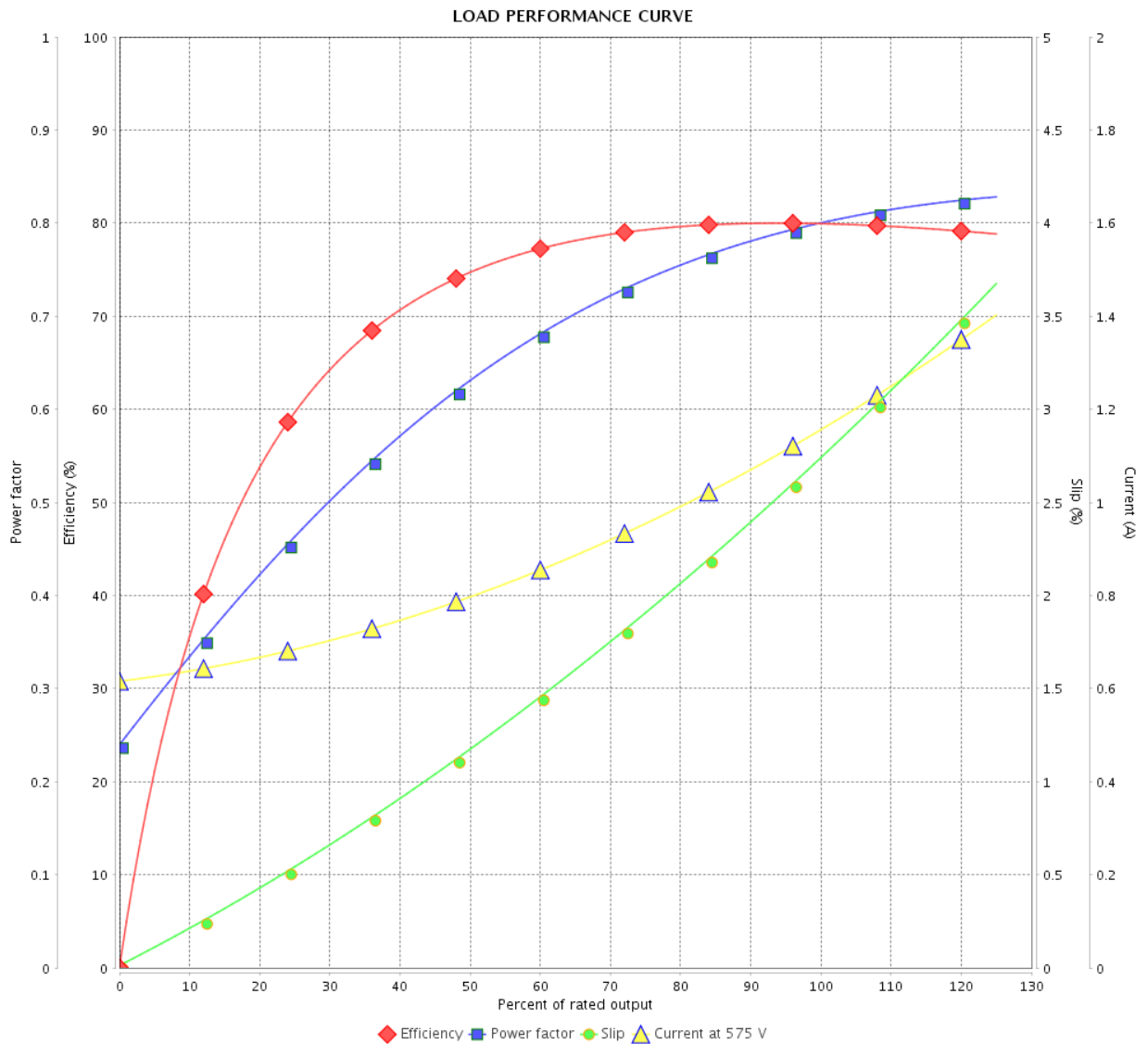


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438113

Catalog # : 00136ET3H143T-W22



Performance : 575 V 60 Hz 2P

Rated current : 1.15 A  
 LRC : 8.2  
 Rated torque : 1.50 ft.lb  
 Locked rotor torque : 320 %  
 Breakdown torque : 400 %  
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.0332 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by			3 / 6	
Date	11/04/2022			

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12438113  
Catalog # : 00136ET3H143T-W22

Performance : 575 V 60 Hz 2P

Rated current	: 1.15 A	Moment of inertia (J)	: 0.0332 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 1.50 ft.lb	Insulation class	: F
Locked rotor torque	: 320 %	Service factor	: 1.25
Breakdown torque	: 400 %	Temperature rise	: 80 K
Rated speed	: 3500 rpm		

Heating constant

Cooling constant

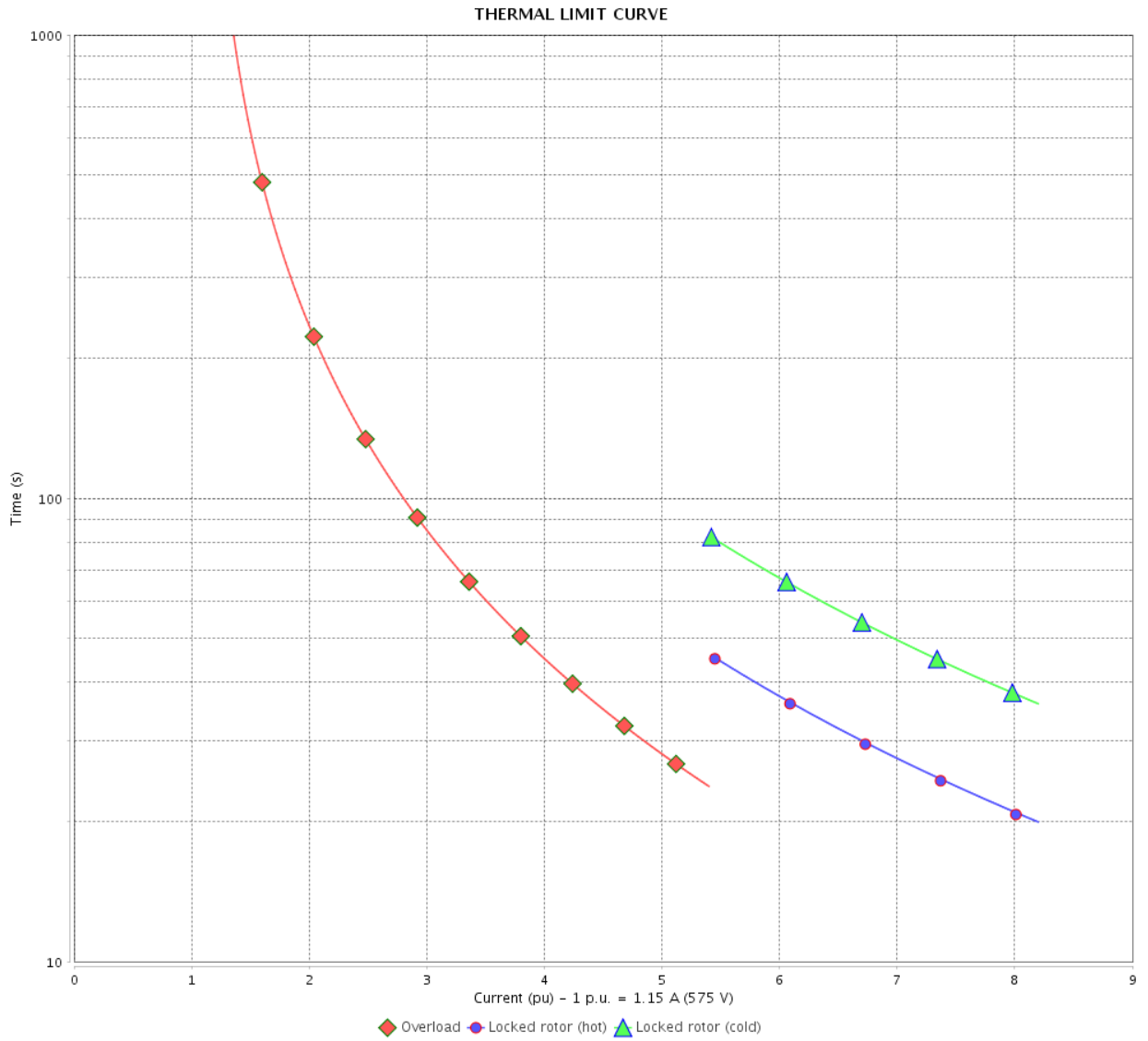
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	11/04/2022		4 / 6	

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 6		Revision
Checked by				
Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

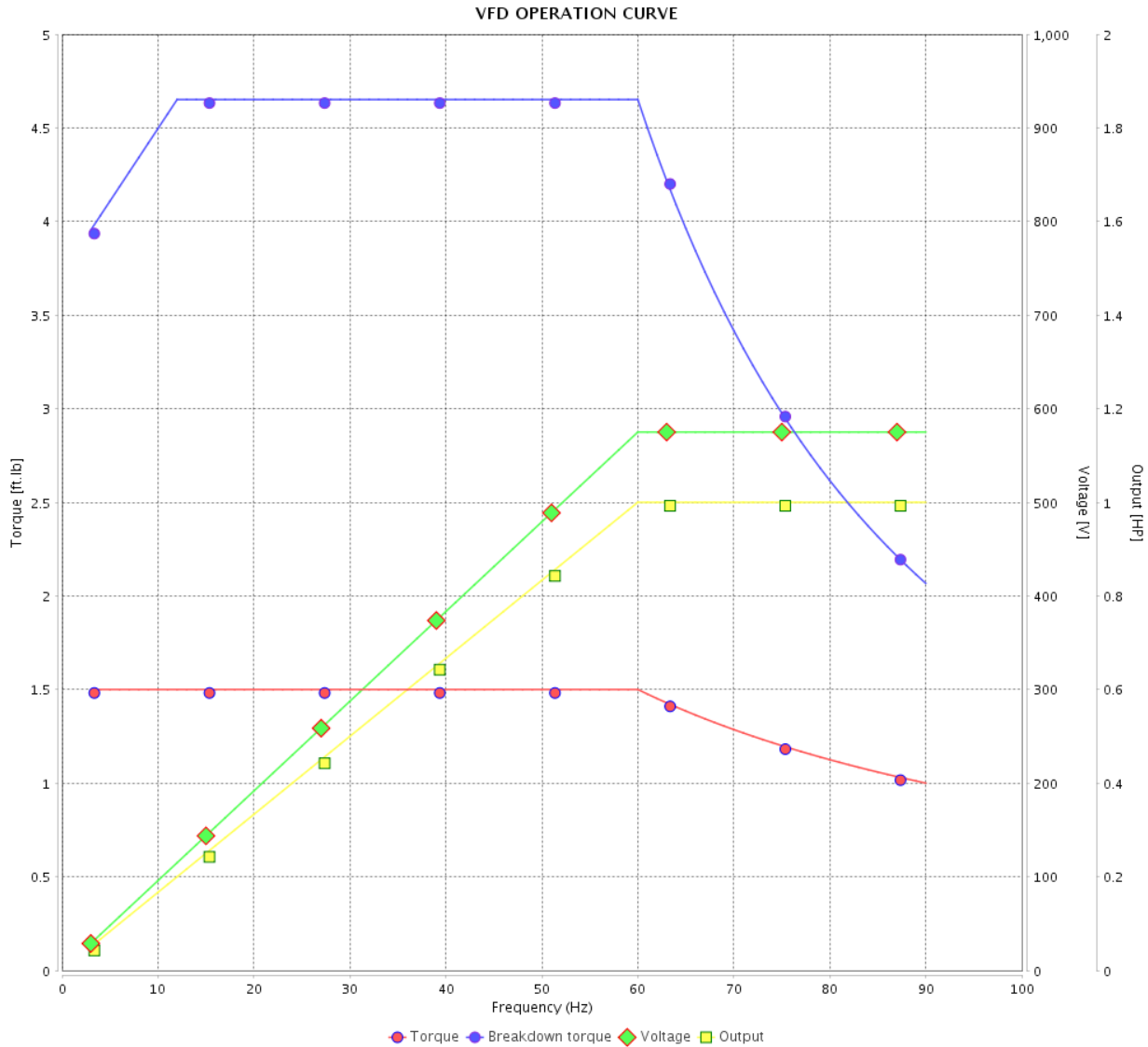


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12438113

Catalog # : 00136ET3H143T-W22

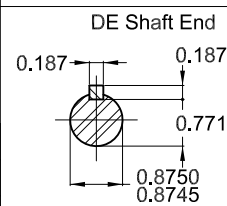
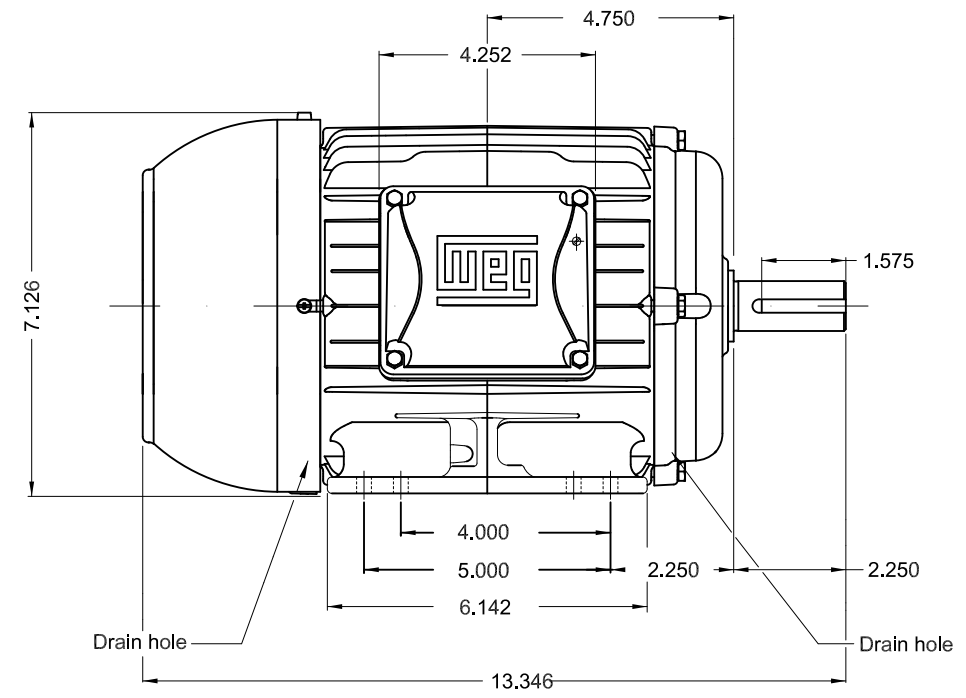
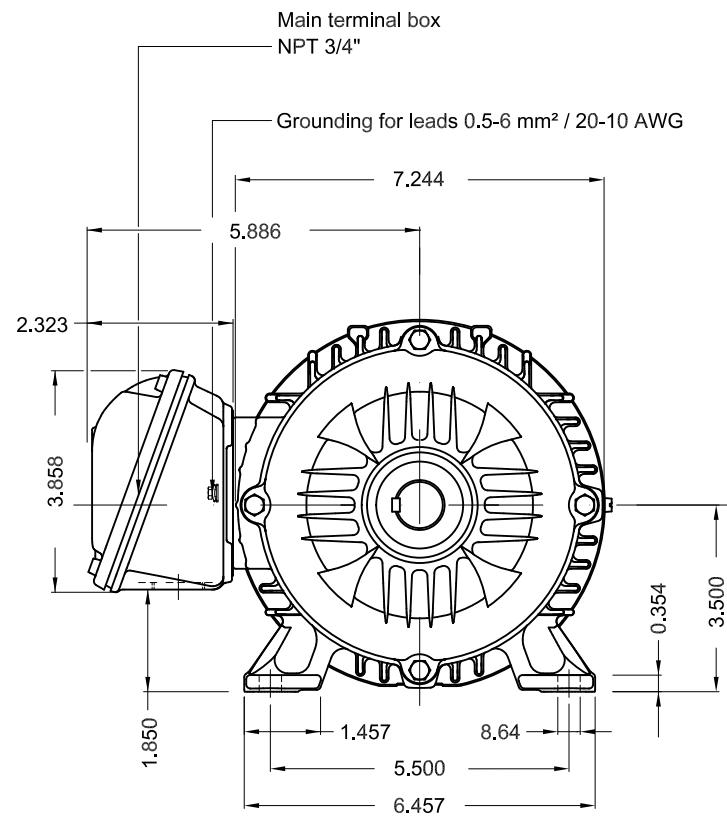


Performance : 575 V 60 Hz 2P

Rated current : 1.15 A  
 LRC : 8.2  
 Rated torque : 1.50 ft.lb  
 Locked rotor torque : 320 %  
 Breakdown torque : 400 %  
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.0332 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K

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



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

1 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 143/5T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

**PREVIEW**  
 WDD



SHEET 1 / 1

Dimensions in inches

XME A3

MADE IN BRAZIL  
12438113



**NEMA**  
Premium

**W22**

HT000502NPW22

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

PH3 60Hz Fr. 143/5T 1000m.a.s.l. IP55 TEFC 38lb

V 575

A 1.18

HP 1.0

kW 0.75

SF 1.25

SFA 1.47

RPM 3500

PF 0.80

AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 80.0%

DUTY CONT.

DES - Code L

