

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	11767948																		
Catalog # :	00158ET3H145TC-W22																		
Frame : 143/5TC Output : 1.5 HP (1.1 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 1.62 A L. R. Amperes : 13.6 A LRC : 8.4x(Code L) No load current : 0.880 A Rated speed : 1755 rpm Slip : 2.50 % Rated torque : 4.49 ft.lb Locked rotor torque : 290 % Breakdown torque : 350 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.1431 sq.ft.lb Design : B	Locked rotor time : 25s (cold) 14s (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> : 51.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 51.9 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	81.3 82.5 85.5 86.5																		
Power Factor	0.35 0.60 0.70 0.79																		
Foundation loads																			
Max. traction	: 111 lb																		
Max. compression	: 163 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>: 6205 ZZ</td> <td>6204 ZZ</td> </tr> <tr> <td>Sealing</td> <td>: V'Ring</td> <td>V'Ring</td> </tr> <tr> <td>Lubrication interval</td> <td>: -</td> <td>-</td> </tr> <tr> <td>Lubricant amount</td> <td>: -</td> <td>-</td> </tr> <tr> <td>Lubricant type</td> <td colspan="2">: 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	
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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	12/04/2022		1 / 6																

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



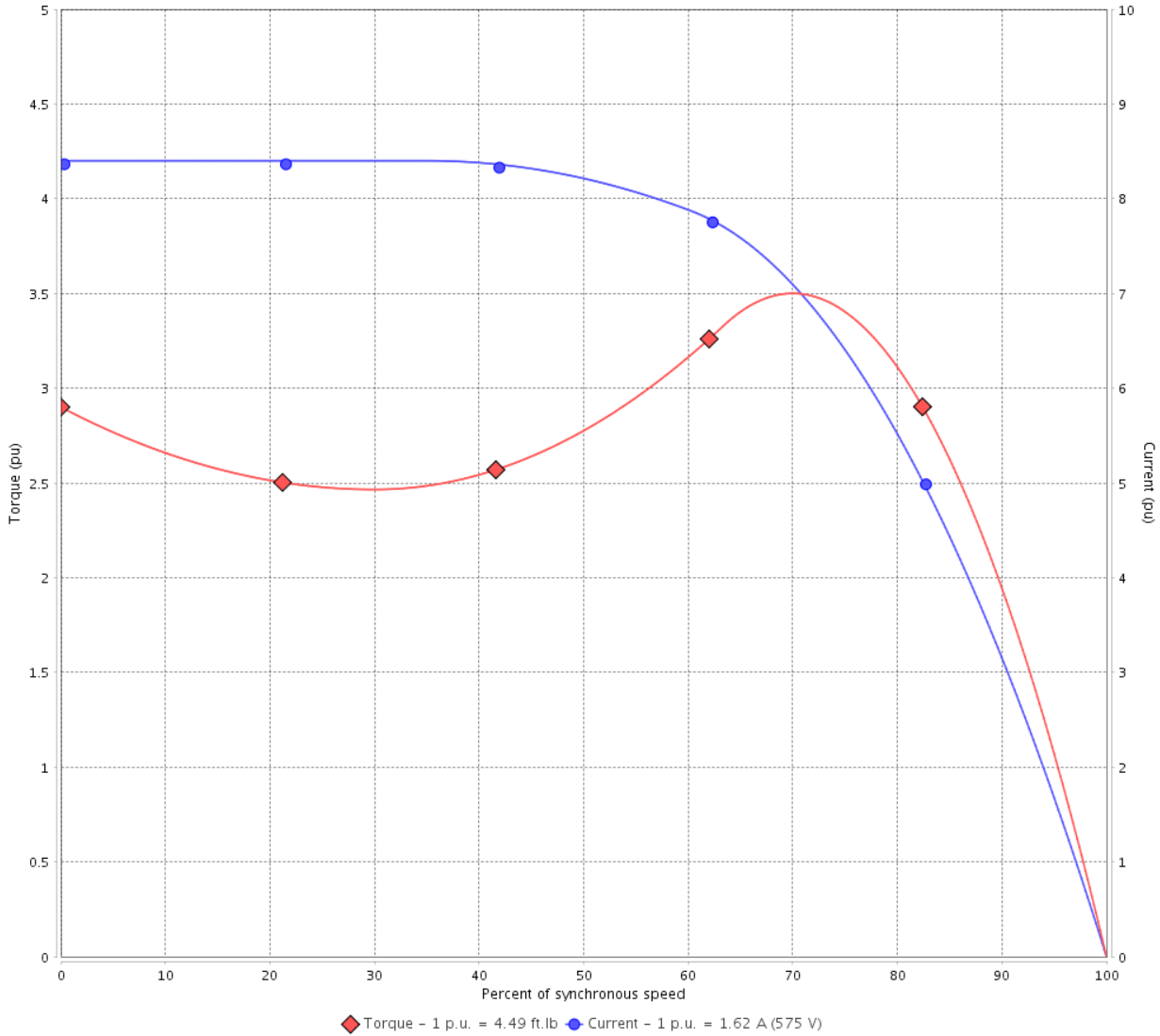
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11767948

Catalog # : 00158ET3H145TC-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 1.62 A	Moment of inertia (J)	: 0.1431 sq.ft.lb
LRC	: 8.4	Duty cycle	: Cont.(S1)
Rated torque	: 4.49 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1755 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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Date	12/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

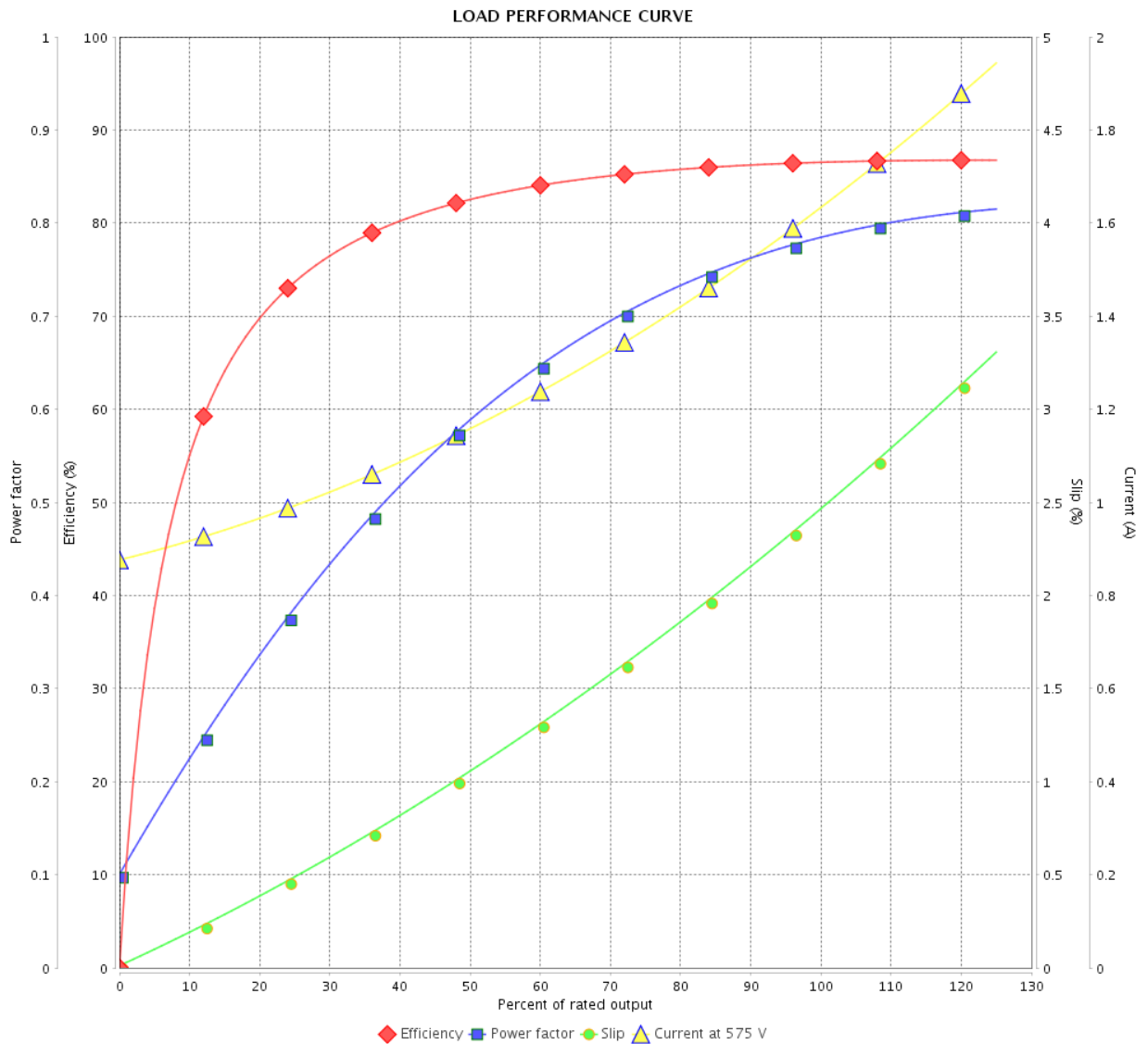


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11767948

Catalog # : 00158ET3H145TC-W22



Performance : 575 V 60 Hz 4P

Rated current : 1.62 A  
 LRC : 8.4  
 Rated torque : 4.49 ft.lb  
 Locked rotor torque : 290 %  
 Breakdown torque : 350 %  
 Rated speed : 1755 rpm

Moment of inertia (J) : 0.1431 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 : 11767948  
 Catalog # : 00158ET3H145TC-W22

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Locked rotor torque : 290 %	Service factor : 1.25
Breakdown torque : 350 %	Temperature rise : 80 K
Rated speed : 1755 rpm	Design : B

Heating constant

Cooling constant

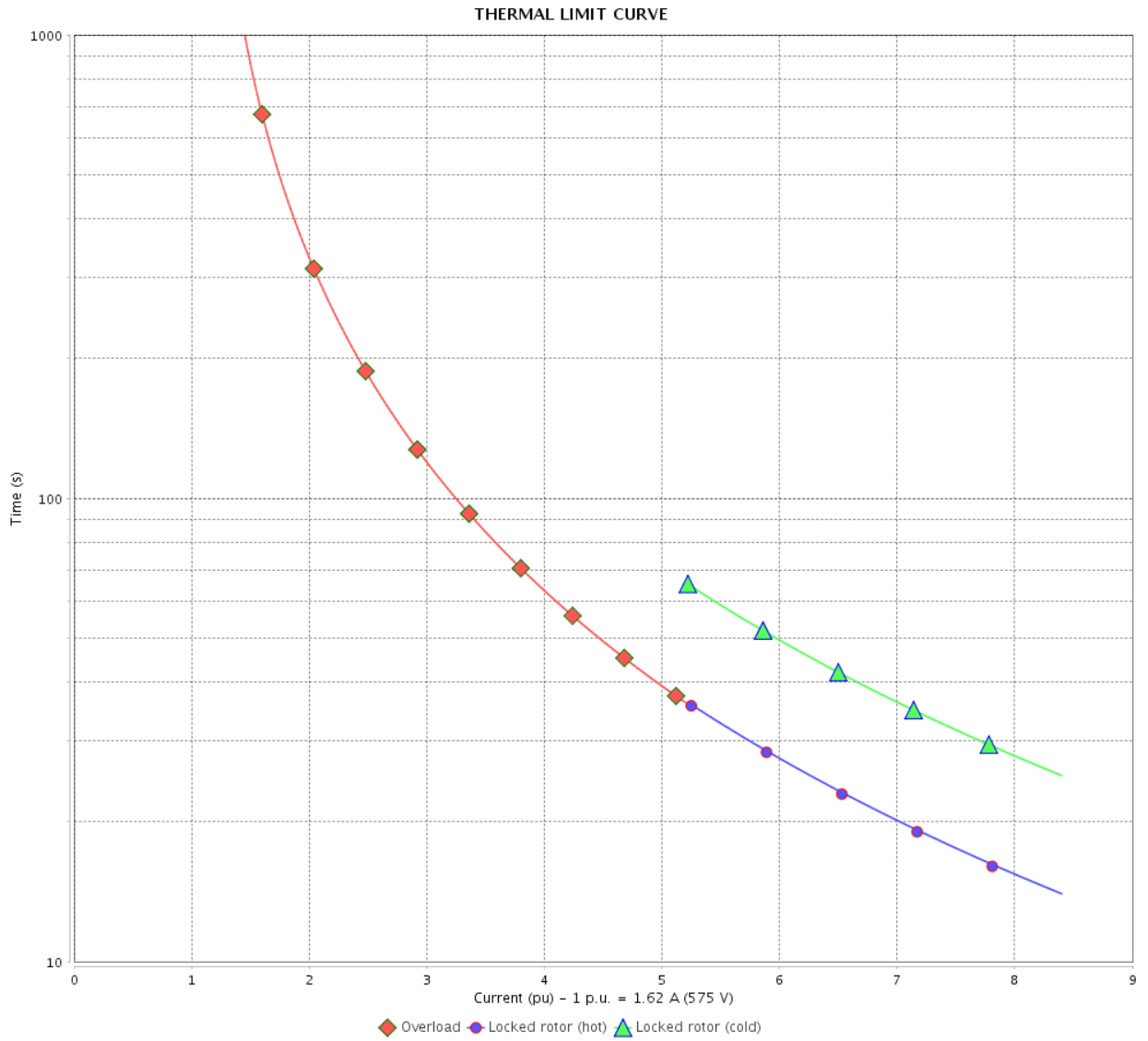
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date	12/04/2022			

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Performed by				
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			Page 5 / 6	Revision

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



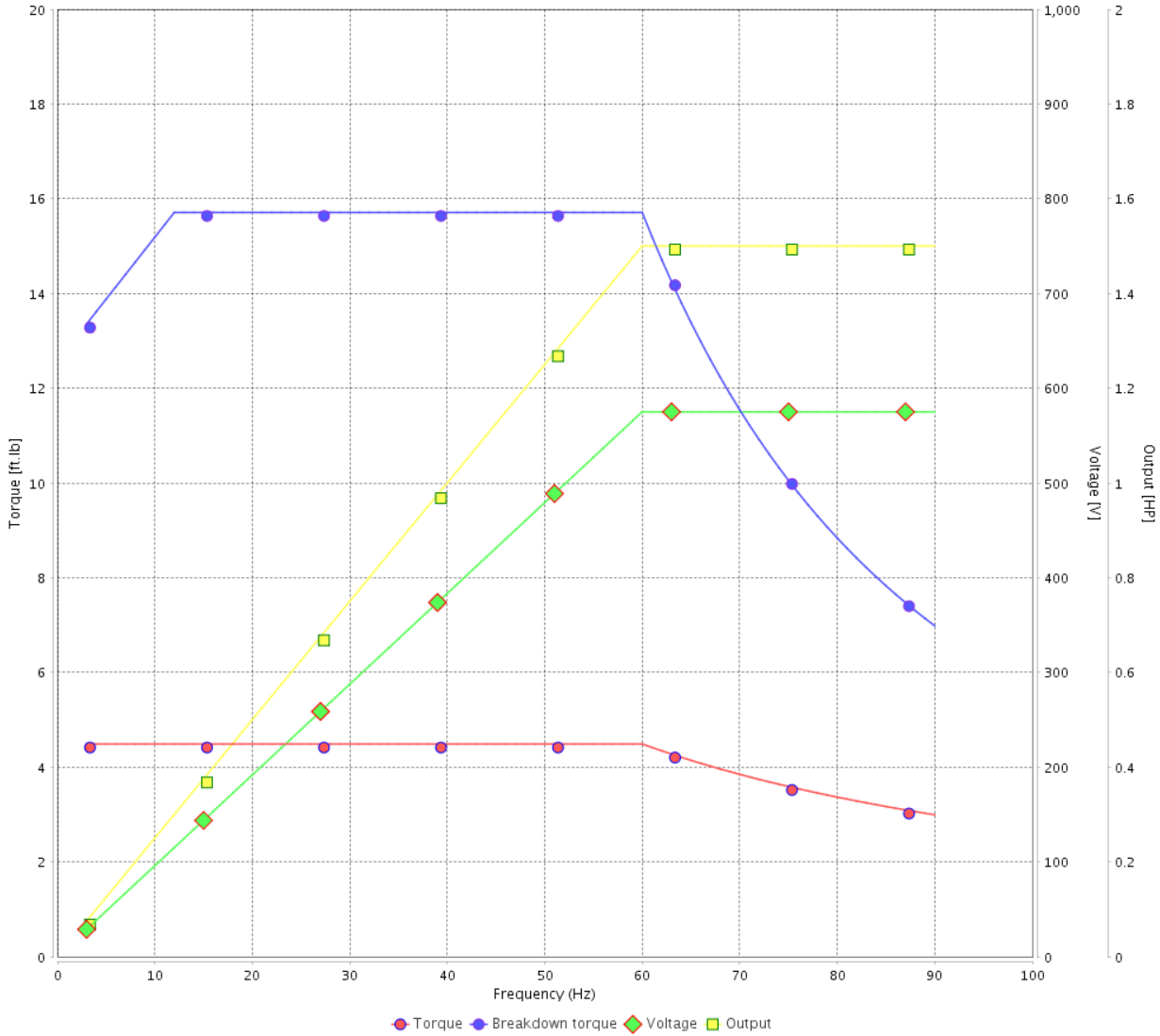
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VFD OPERATION CURVE

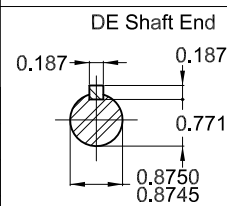
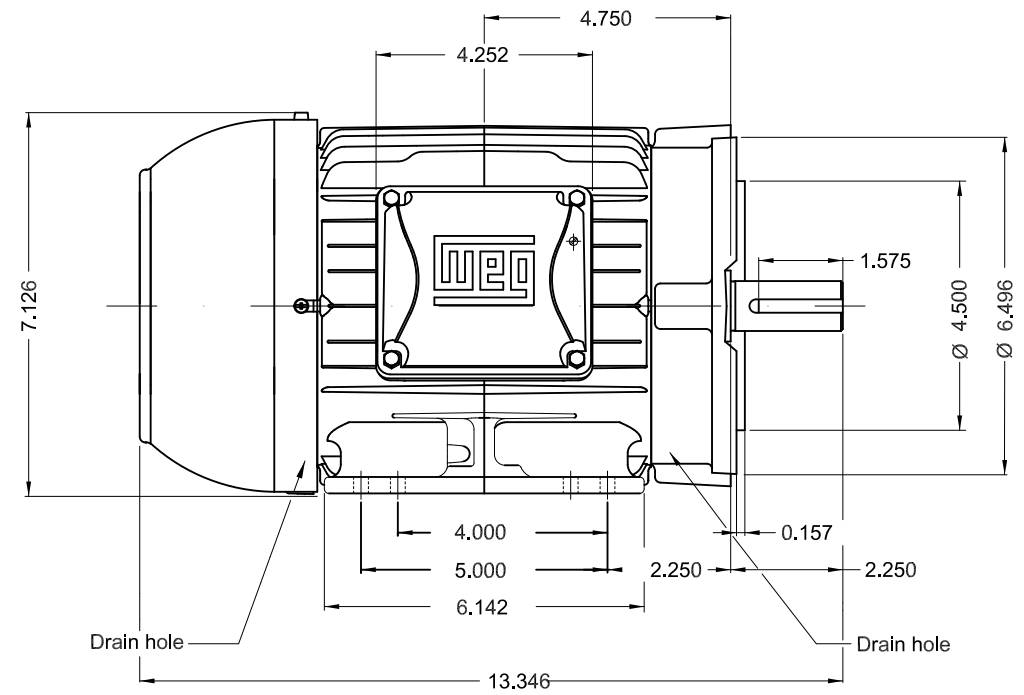
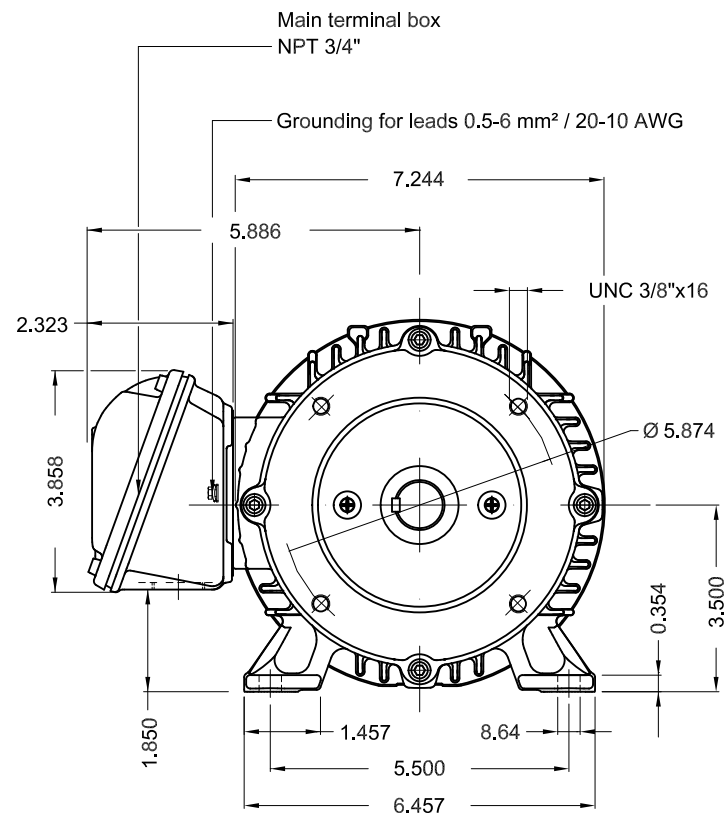


Performance : 575 V 60 Hz 4P

Rated current : 1.62 A  
 LRC : 8.4  
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 Locked rotor torque : 290 %  
 Breakdown torque : 350 %  
 Rated speed : 1755 rpm

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 Duty cycle : Cont.(S1)  
 Insulation class : F  
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Bearing cap  
 Color RAL 5009  
 Painting plan 207A  
 Mounting B34R(D)

1.5 HP 04 Poles 60 Hz

Dimensions in inches

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF.					
CHECKED		FRAME 143/5TC IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

**PREVIEW**  
 WDD



MADE IN MEXICO  
11767948



MODEL 00158ET3H145TC-W22

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. 143/5TC 1000m.a.s.l. IP55 TEFC 52lb

V 575

A 1.62

HP 1.5

kW 1.1

SF 1.25

SFA 2.03

RPM 1755

PF 0.79

AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 86.5%

DUTY CONT.

DES B Code L

