

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	13298533																		
Catalog # :	00336ET3H145JM-W22																		
Frame : 143/5JM Output : 3 HP (2.2 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 2.97 A L. R. Amperes : 24.0 A LRC : 8.1x(Code J) No load current : 1.04 A Rated speed : 3460 rpm Slip : 3.89 % Rated torque : 4.55 ft.lb Locked rotor torque : 330 % Breakdown torque : 360 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.0605 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> : 68.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 56.1 lb																		
Output	25%    50%    75%    100%																		
Efficiency (%)	85.2    85.5    86.5    86.5																		
Power Factor	0.47    0.70    0.81    0.86																		
Foundation loads																			
Max. traction	: 114 lb																		
Max. compression	: 171 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>: 6206 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	: 6206 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	13/04/2022		1 / 6																

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



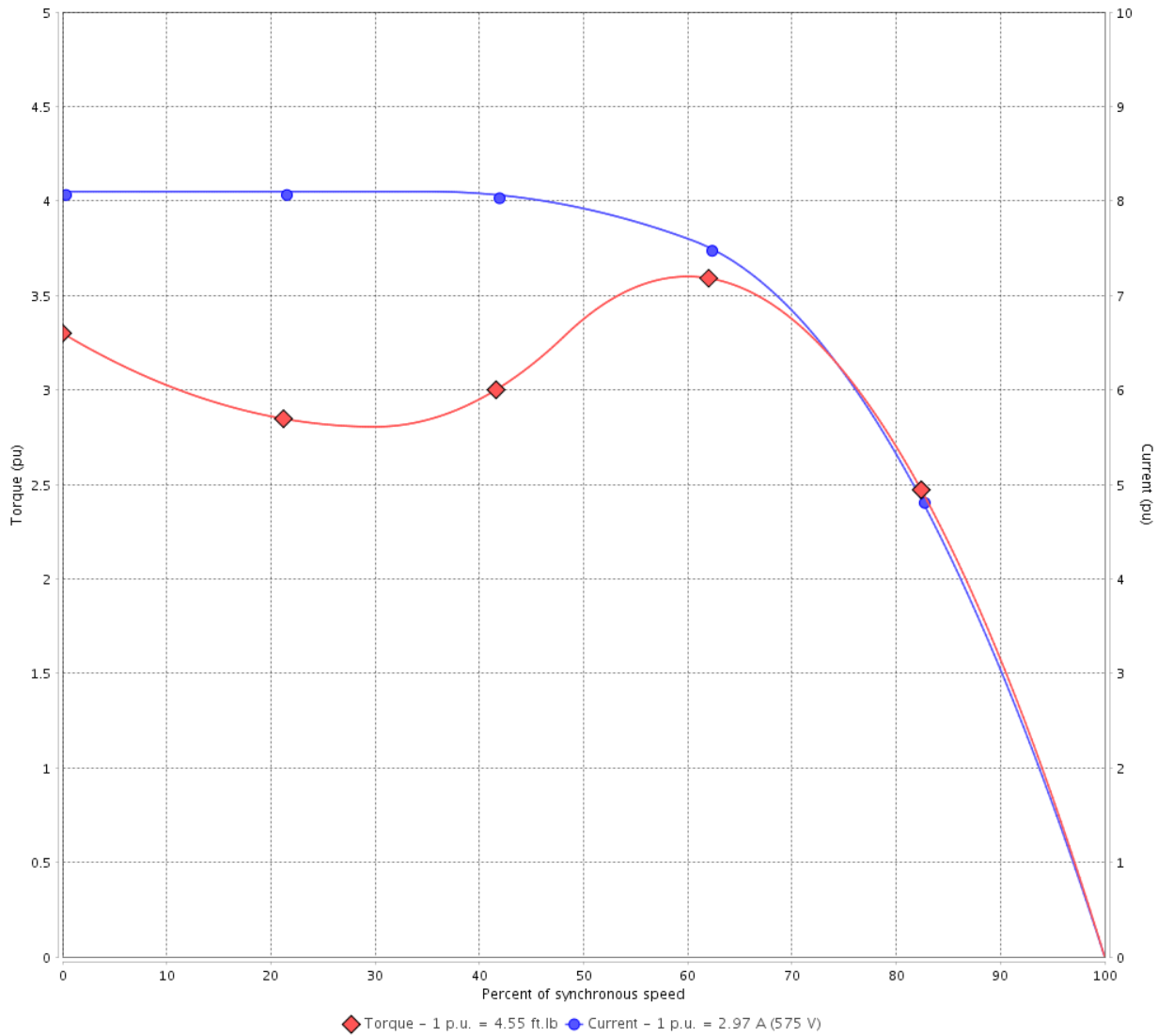
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13298533

Catalog # : 00336ET3H145JM-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 2.97 A	Moment of inertia (J)	: 0.0605 sq.ft.lb
LRC	: 8.1	Duty cycle	: Cont.(S1)
Rated torque	: 4.55 ft.lb	Insulation class	: F
Locked rotor torque	: 330 %	Service factor	: 1.25
Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 3460 rpm	Design	: B

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

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Performed by			Page 2 / 6	Revision
Checked by				
Date	13/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

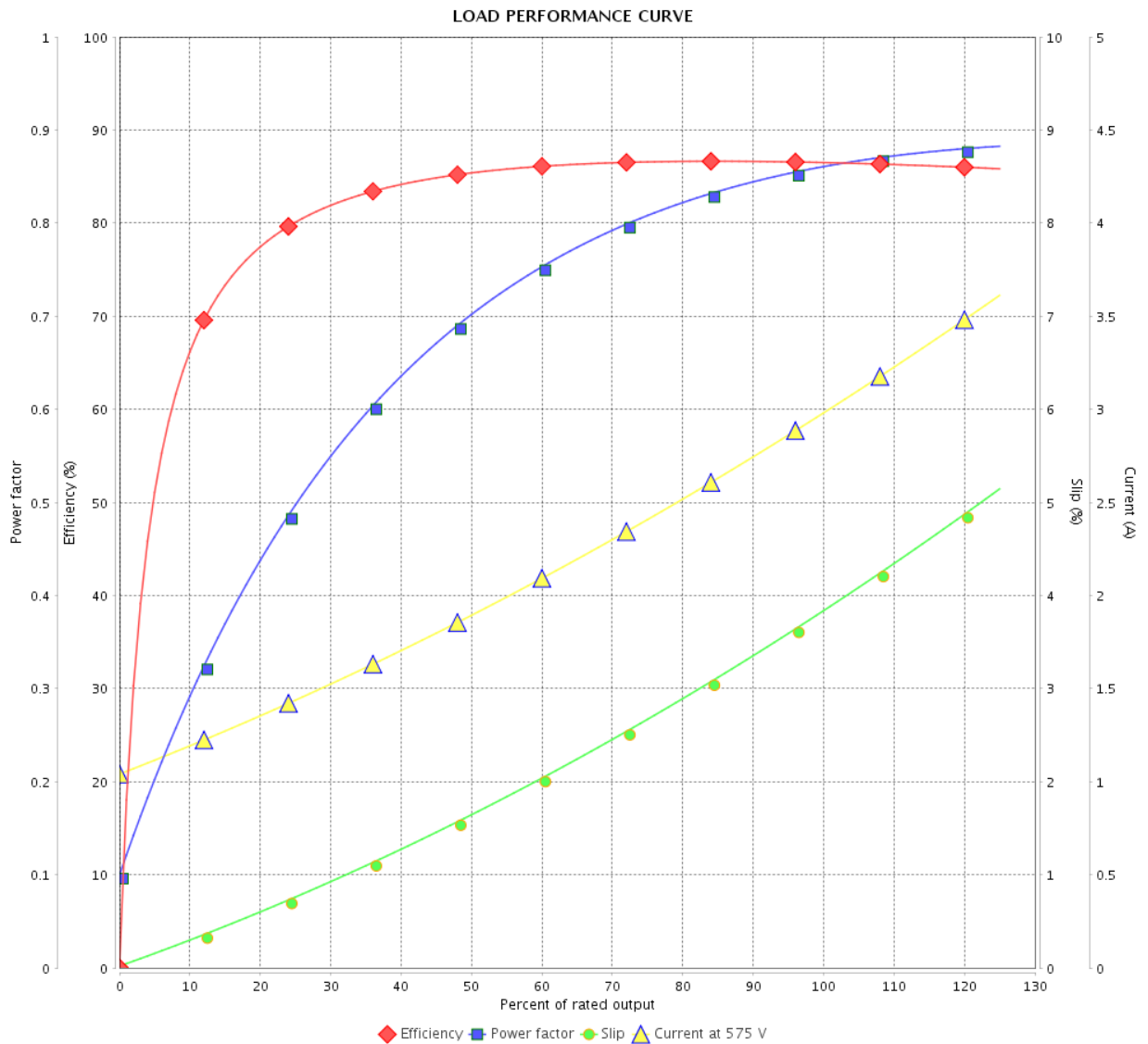


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13298533

Catalog # : 00336ET3H145JM-W22



Performance : 575 V 60 Hz 2P

Rated current : 2.97 A  
 LRC : 8.1  
 Rated torque : 4.55 ft.lb  
 Locked rotor torque : 330 %  
 Breakdown torque : 360 %  
 Rated speed : 3460 rpm

Moment of inertia (J) : 0.0605 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 : 13298533  
Catalog # : 00336ET3H145JM-W22

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Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 3460 rpm	Design	: B

Heating constant

Cooling constant

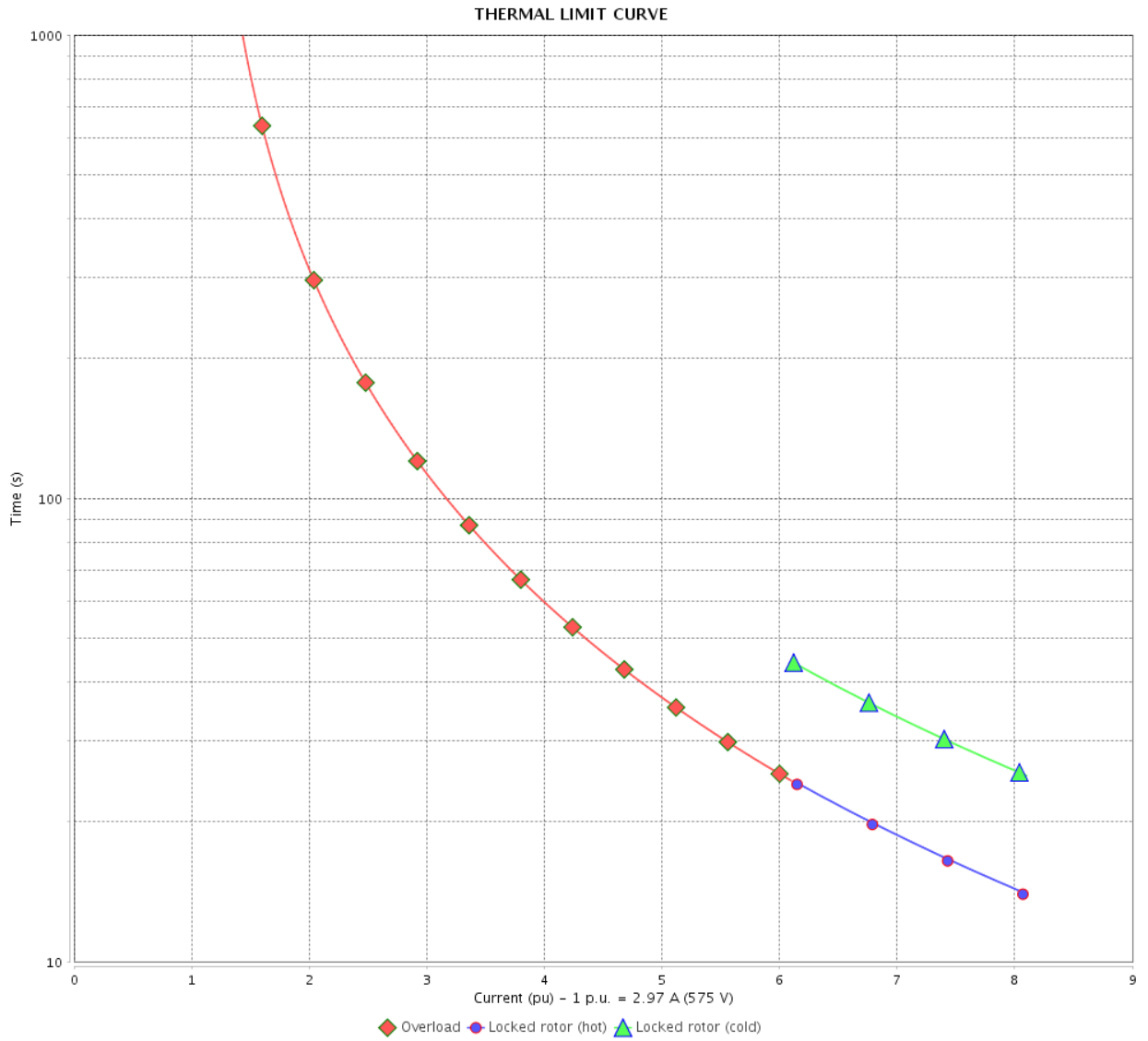
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Performed by		Page		Revision
Checked by		5 / 6		
Date	13/04/2022			

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

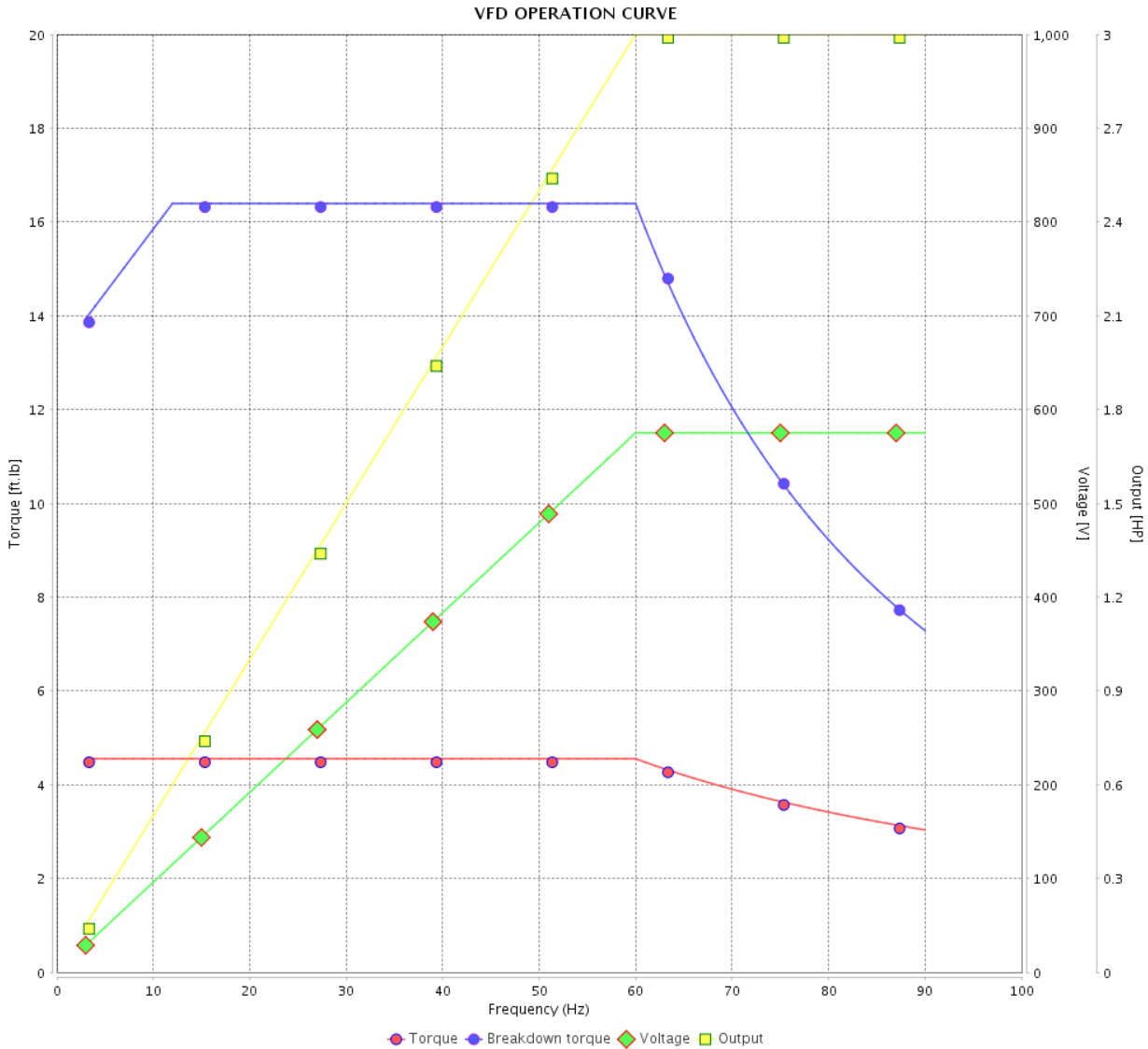


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13298533

Catalog # : 00336ET3H145JM-W22

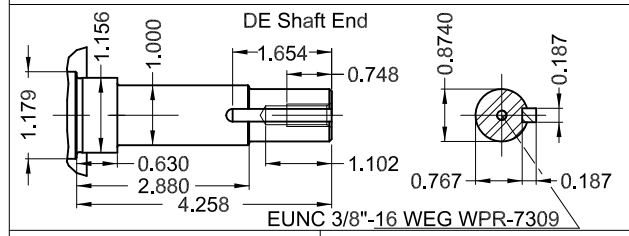
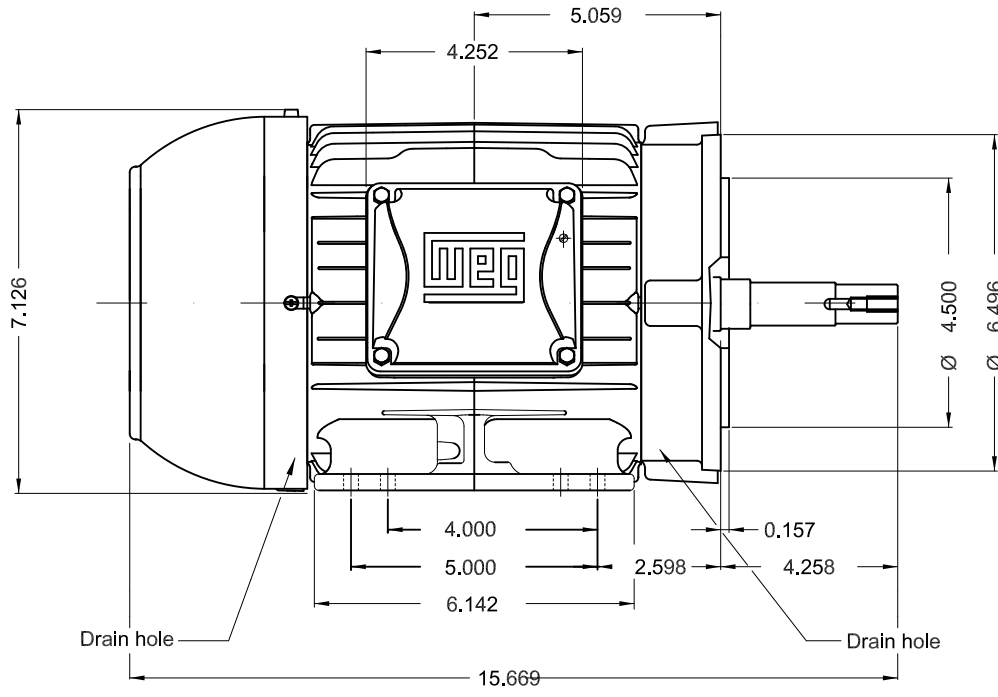
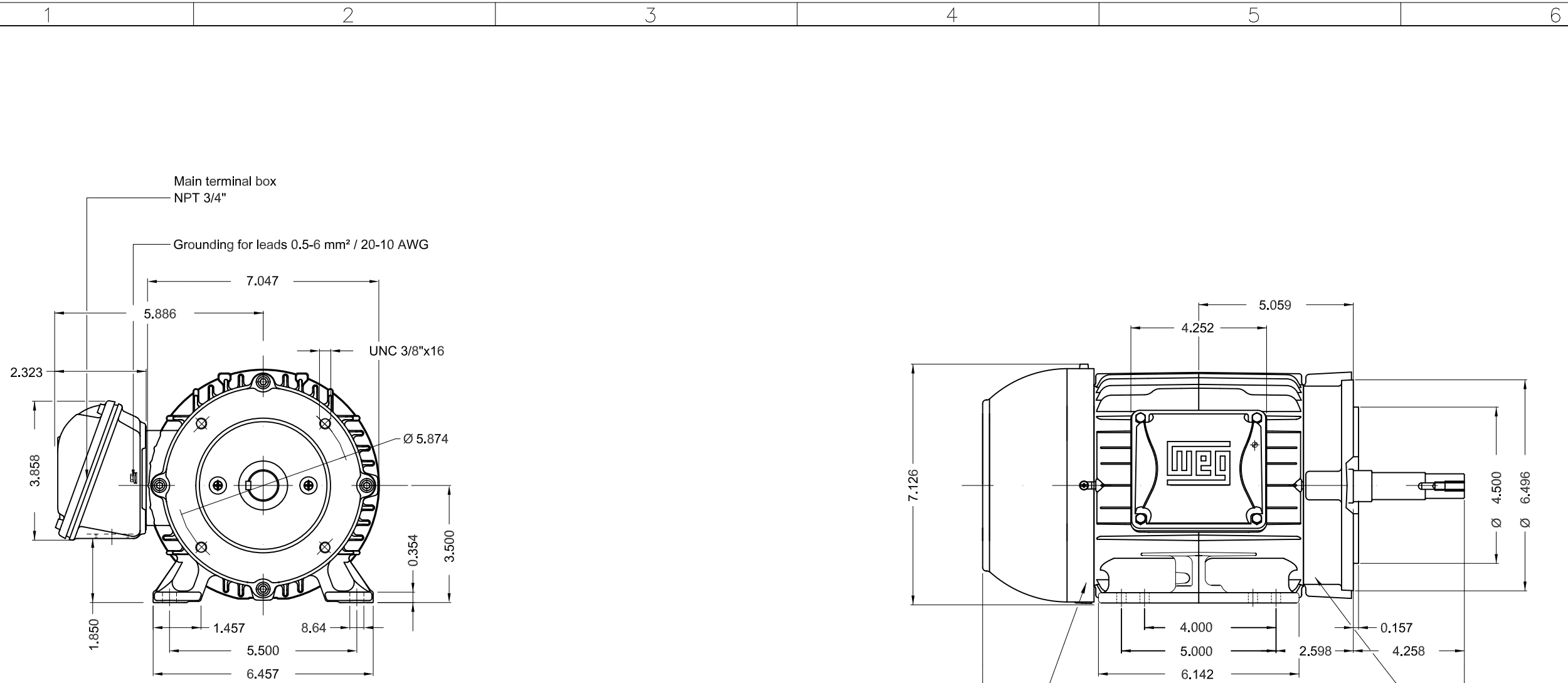


Performance : 575 V 60 Hz 2P

Rated current : 2.97 A  
 LRC : 8.1  
 Rated torque : 4.55 ft.lb  
 Locked rotor torque : 330 %  
 Breakdown torque : 360 %  
 Rated speed : 3460 rpm

Moment of inertia (J) : 0.0605 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
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Date				



Color RAL 5009  
 Painting plan 207A  
 Mounting NEMA F-1  
 Mounting B34R(D)

3 HP 02 Poles 60 Hz A

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

**PREVIEW**

WDD

**W22**

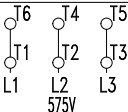
CC029A

® Inverter Duty Motor  
Severe Duty

13298533

MADE IN BRAZIL MODEL 00336ET3H145JM-W22

PH 3	FR 143/5JM	HP(kW) 3.0(2.2)	Hz 60	SF 1.25	PF 0.86
V 575	A 2.97	RPM 3460	INS. CL.F	ΔT 80 K	
NEMA NOM EFF 86.5 %				DES B	DUTY CONT.
ENCL TEFC			IP55	SFA 3.71	ALT 1000 m.a.s.l.
					CODE J



MOBIL POLYREX EM

55 Lbs

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

VT1000:1, CT20:1, 1.0SF, T4A

FOR SAFE AREA  
MOD.TE1BFOXON