

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	12598385																		
Catalog # :	00118ET3H143JM-W22																		
Frame : 143/5JM Output : 1 HP (0.75 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 1.18 A L. R. Amperes : 10.1 A LRC : 8.6x(Code M) No load current : 0.752 A Rated speed : 1760 rpm Slip : 2.22 % Rated torque : 2.98 ft.lb Locked rotor torque : 290 % Breakdown torque : 350 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.1172 sq.ft.lb Design : B	Locked rotor time : 32s (cold) 18s (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> : 48.5 lb																		
Output	25%    50%    75%    100%																		
Efficiency (%)	78.4    80.0    84.0    85.5																		
Power Factor	0.31    0.55    0.68    0.75																		
Foundation loads																			
Max. traction : 66 lb																			
Max. compression : 115 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;">6206 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 :	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	14/04/2022		1 / 6																

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



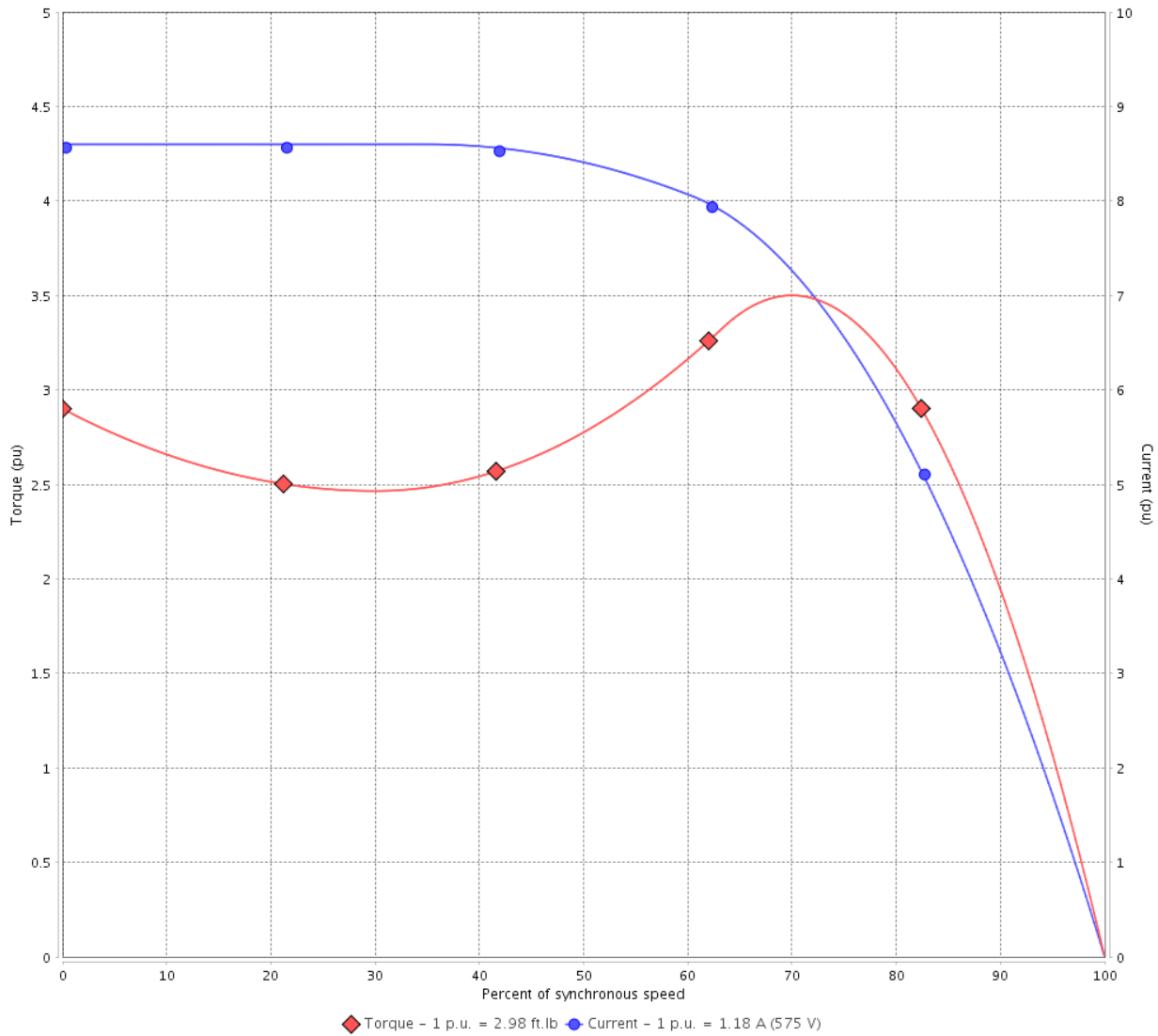
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12598385

Catalog # : 00118ET3H143JM-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 1.18 A	Moment of inertia (J)	: 0.1172 sq.ft.lb
LRC	: 8.6	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

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Date	14/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

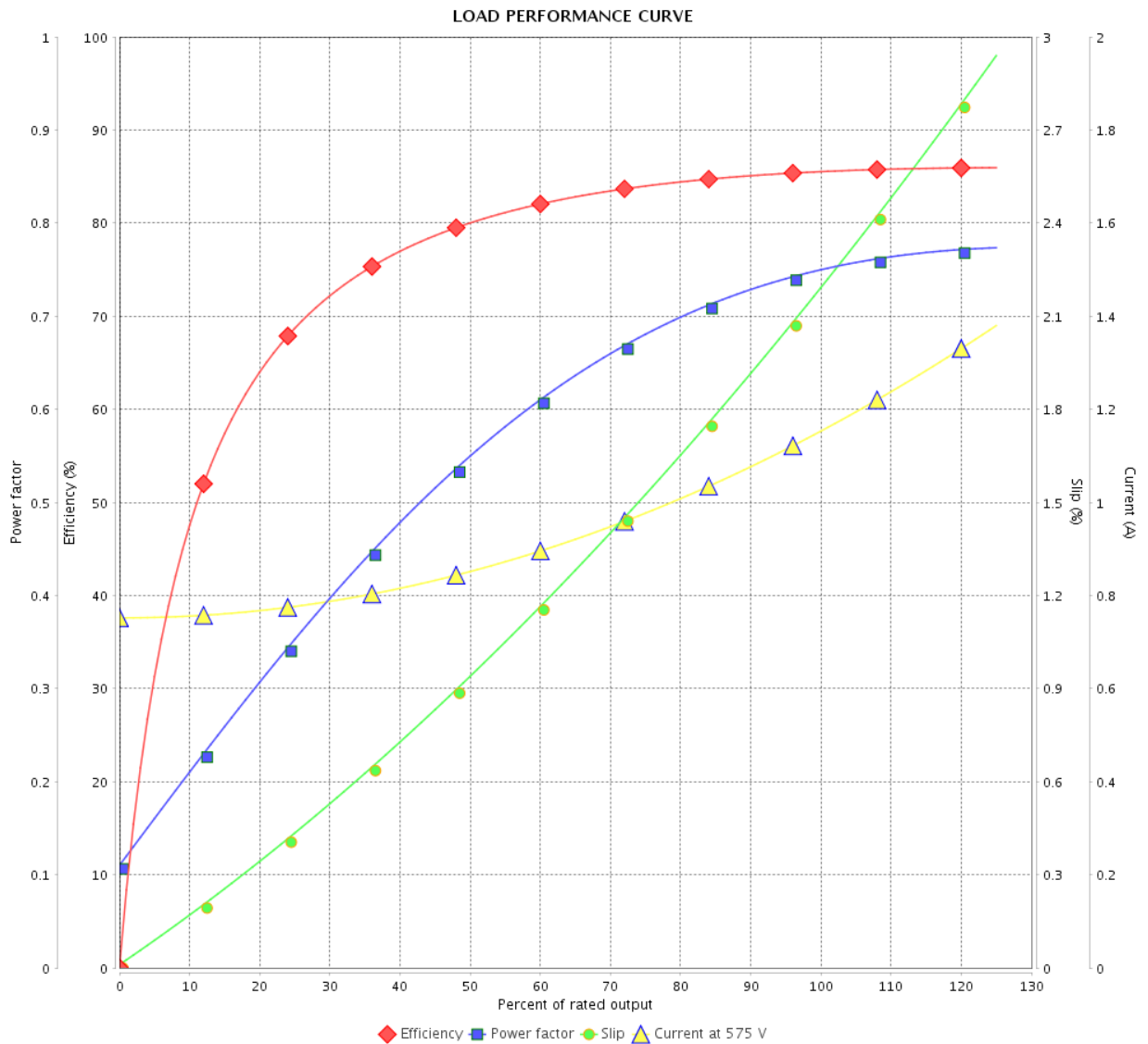


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12598385

Catalog # : 00118ET3H143JM-W22



Performance : 575 V 60 Hz 4P

Rated current : 1.18 A  
 LRC : 8.6  
 Rated torque : 2.98 ft.lb  
 Locked rotor torque : 290 %  
 Breakdown torque : 350 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.1172 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 : 12598385  
Catalog # : 00118ET3H143JM-W22

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Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Heating constant

Cooling constant

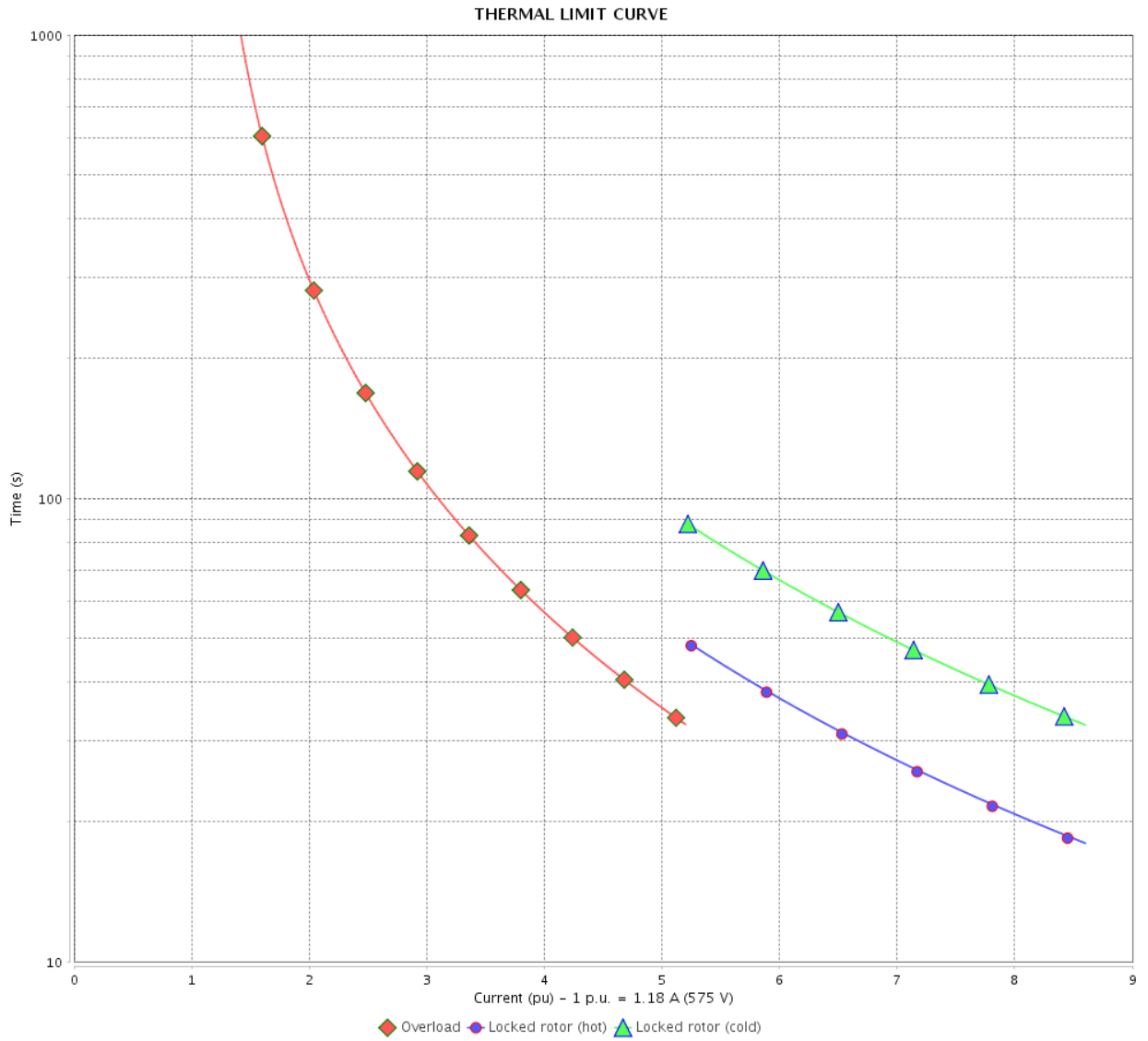
Rev.	Changes Summary	Performed	Checked	Date
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



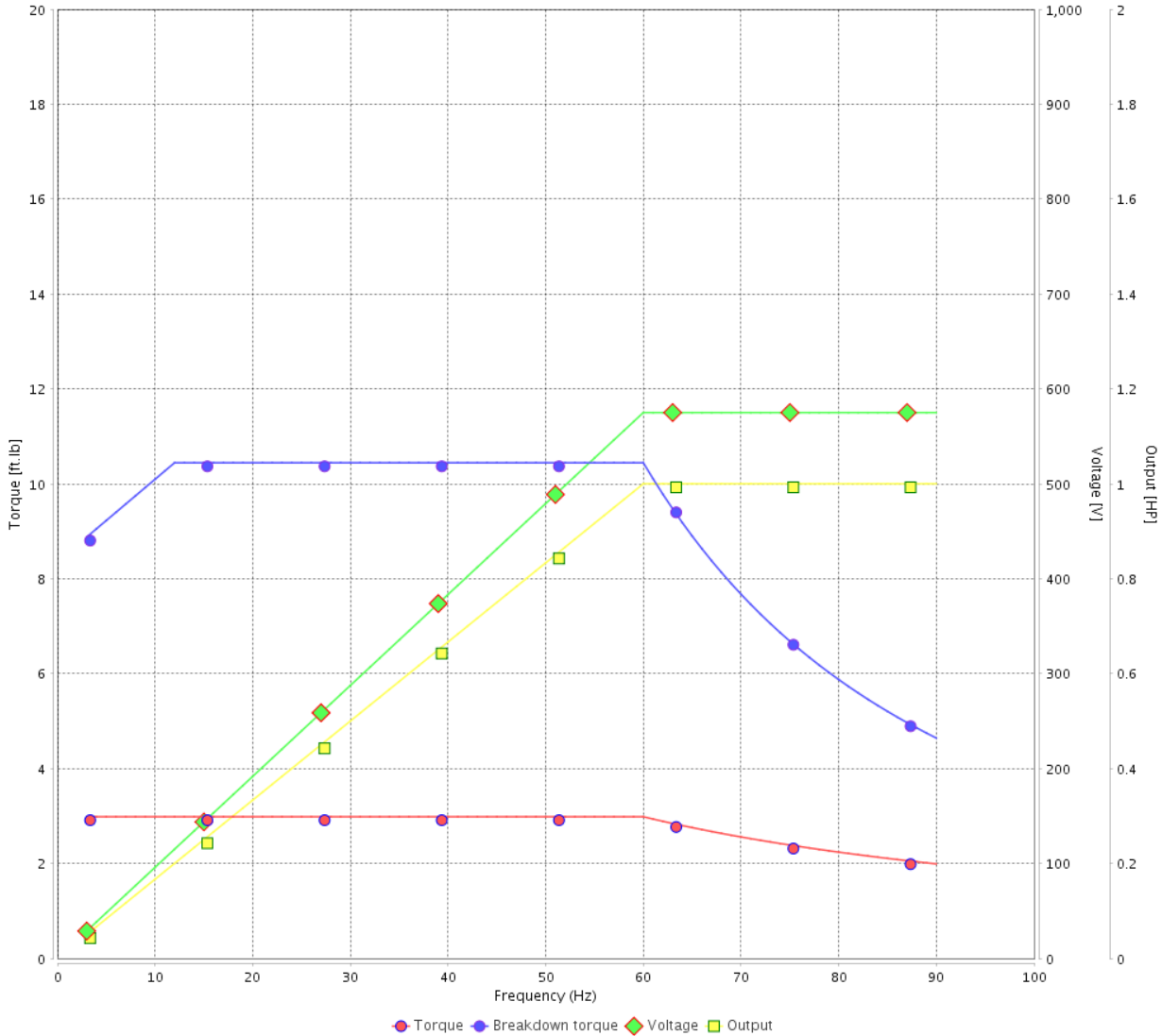
Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

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VFD OPERATION CURVE

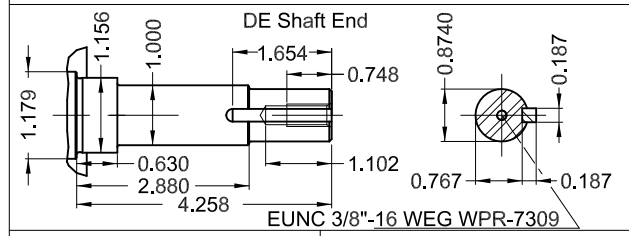
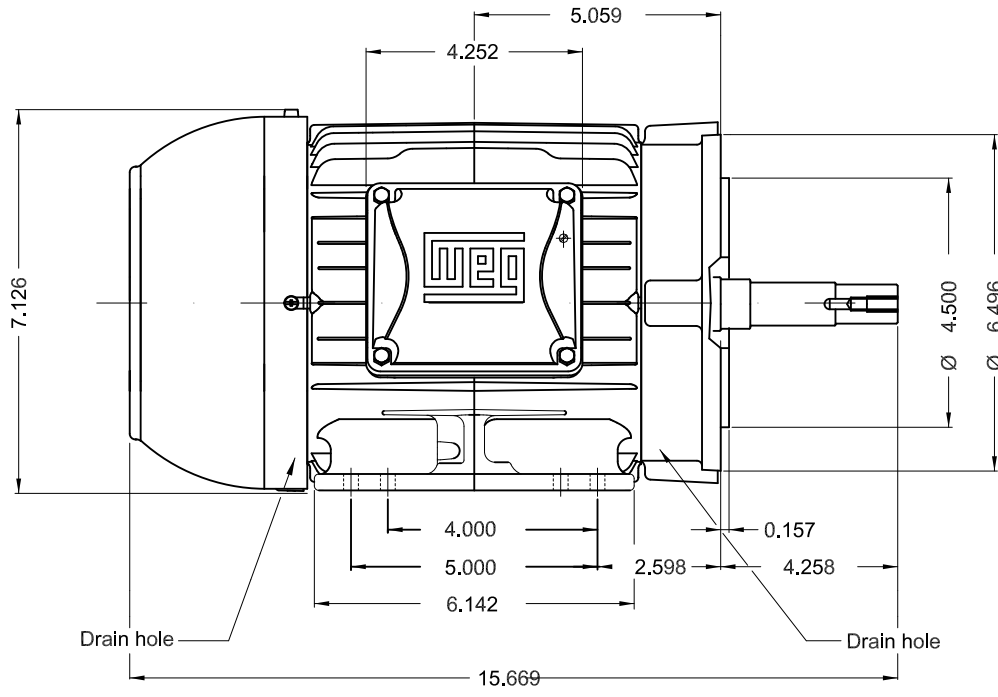
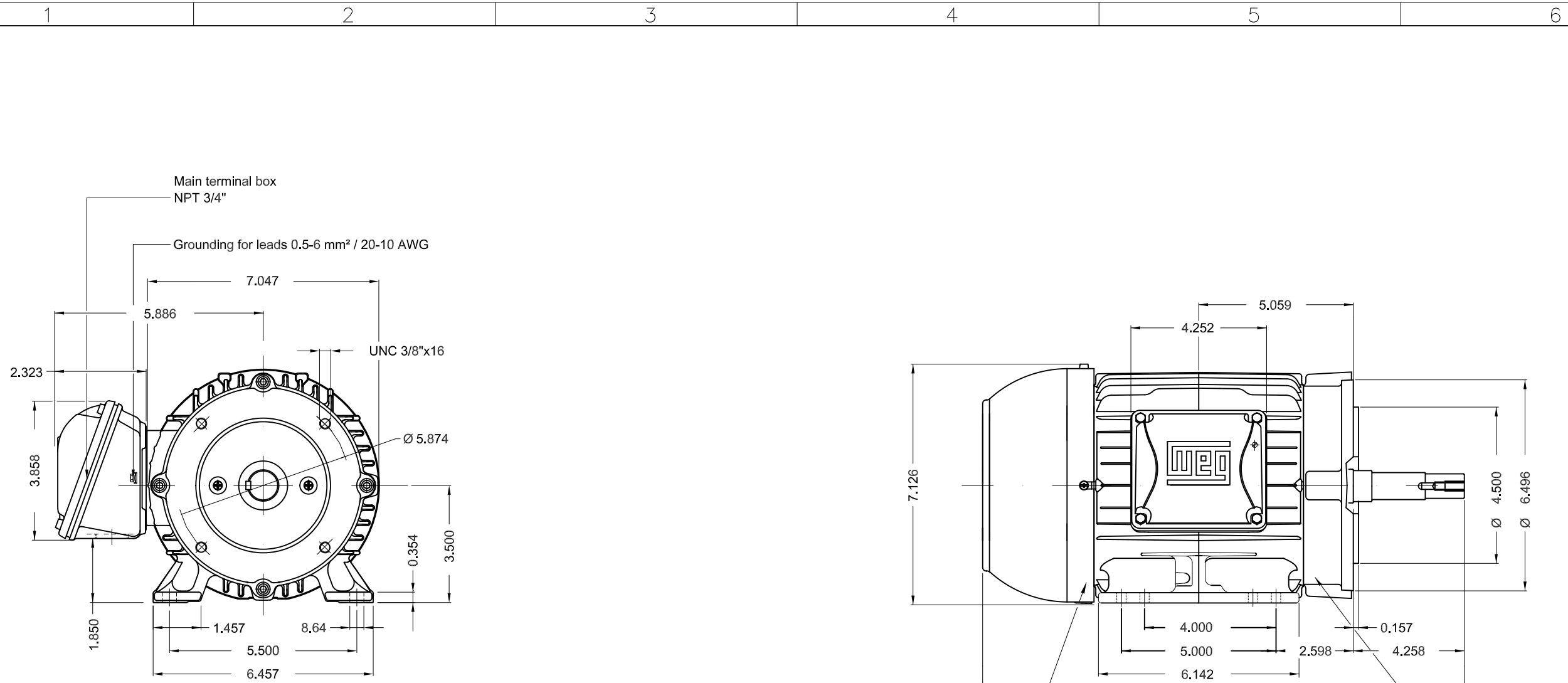


Performance : 575 V 60 Hz 4P

Rated current : 1.18 A  
 LRC : 8.6  
 Rated torque : 2.98 ft.lb  
 Locked rotor torque : 290 %  
 Breakdown torque : 350 %  
 Rated speed : 1760 rpm

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1 HP 04 Poles 60 Hz A

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

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**

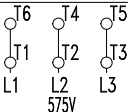
CC029A

® Inverter Duty Motor  
Severe Duty

12598385

MADE IN MEXICO MODEL 00118ET3H143JM-W22

PH 3	FR 143/5JM	HP(kW) 1.0(0.75)	Hz 60	SF 1.25	PF 0.75
V 575	A 1.18	RPM 1760	INS. CL.F $\Delta$ T 80 K		
NEMA NOM EFF 85.5 % DES B DUTY CONT.				AMB 40°C	
ENCL TEFC	IP55	SFA 1.47	ALT 1000 m.a.s.l.		
					CODE M



MOBIL POLYREX EM

49 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