

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: JM Pump NEMA Premium Efficiency Three-Phase																		
Product code :	14808417																		
Catalog # :	00158ET3H145JM-S																		
Frame : 143/5JM Output : 1.5 HP (1.1 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 1.62 A L. R. Amperes : 13.3 A LRC : 8.2x(Code K) No load current : 0.867 A Rated speed : 1750 rpm Slip : 2.78 % Rated torque : 4.50 ft.lb Locked rotor torque : 270 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1101 sq.ft.lb Design : B	Locked rotor time : 37s (cold) 21s (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 ¹ : Both (CW and CCW) Noise level ² : 52.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 42.4 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	85.2 85.5 86.5 86.5																		
Power Factor	0.35 0.59 0.72 0.79																		
Foundation loads																			
Max. traction : 96 lb																			
Max. compression : 139 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;">6203 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	6203 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

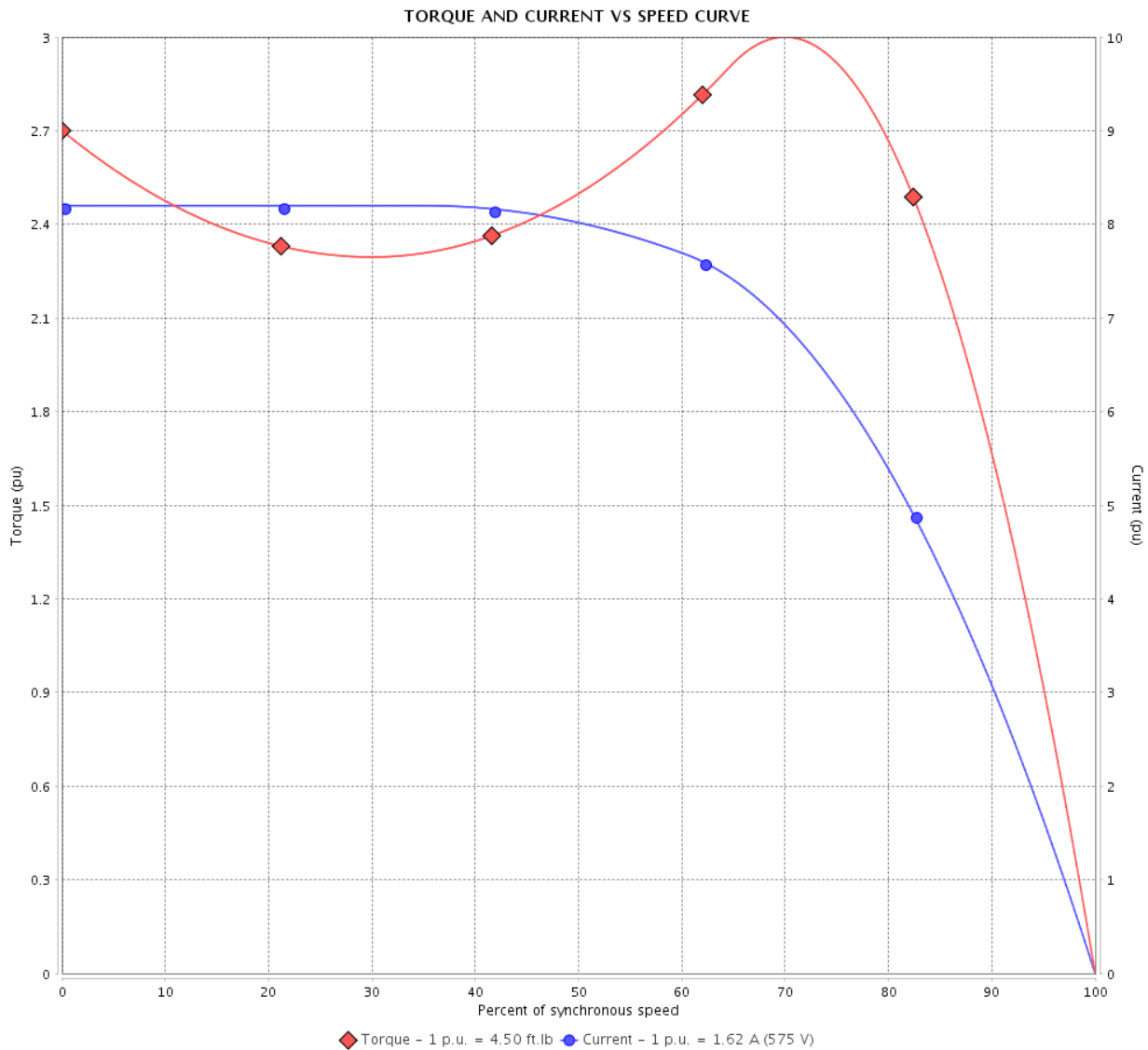


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Performance : 575 V 60 Hz 4P

Rated current	: 1.62 A	Moment of inertia (J)	: 0.1101 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 4.50 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1750 rpm	Design	: B

Locked rotor time : 37s (cold) 21s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

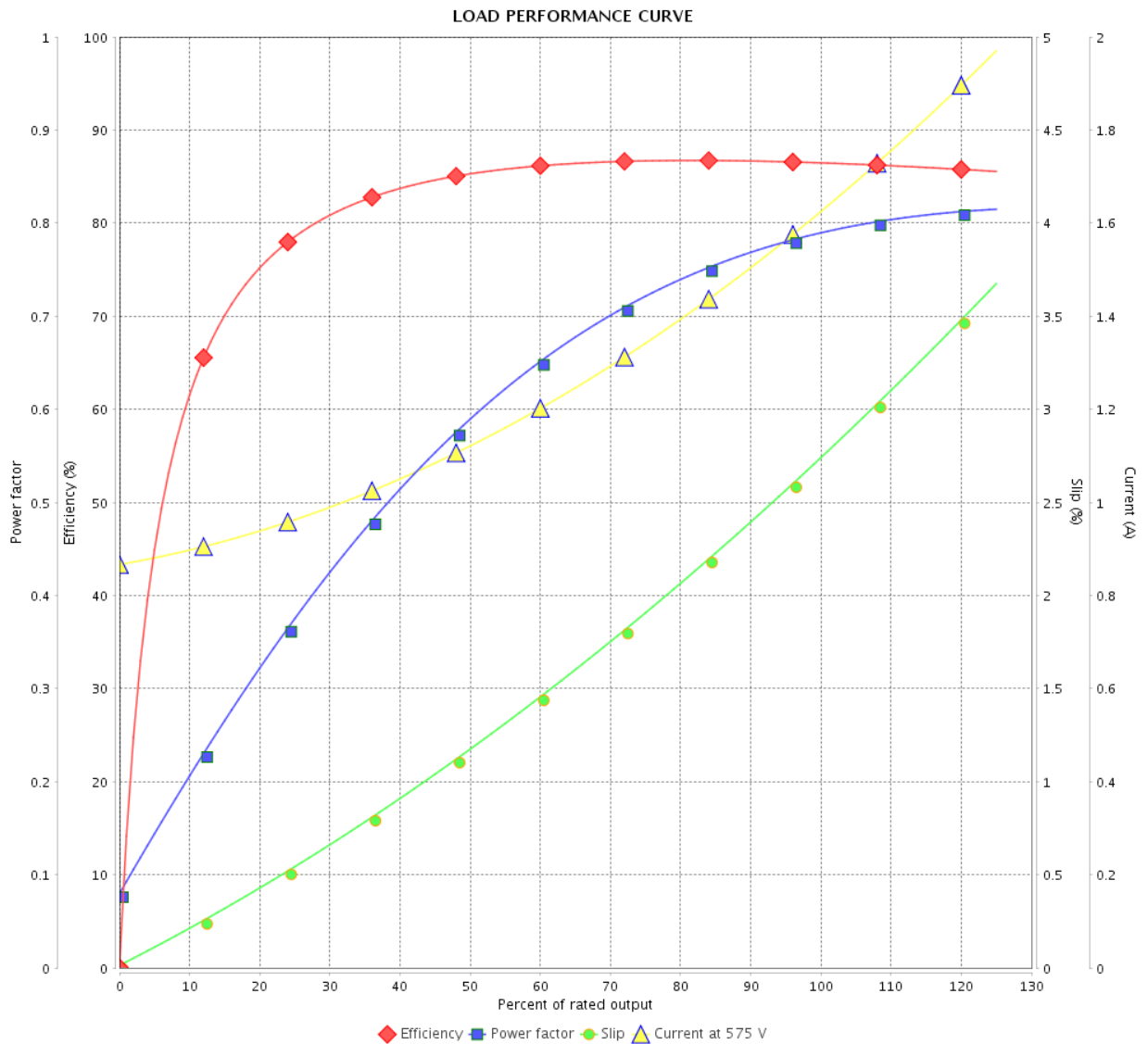


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THERMAL LIMIT CURVE



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Design : B

Heating constant

Cooling constant

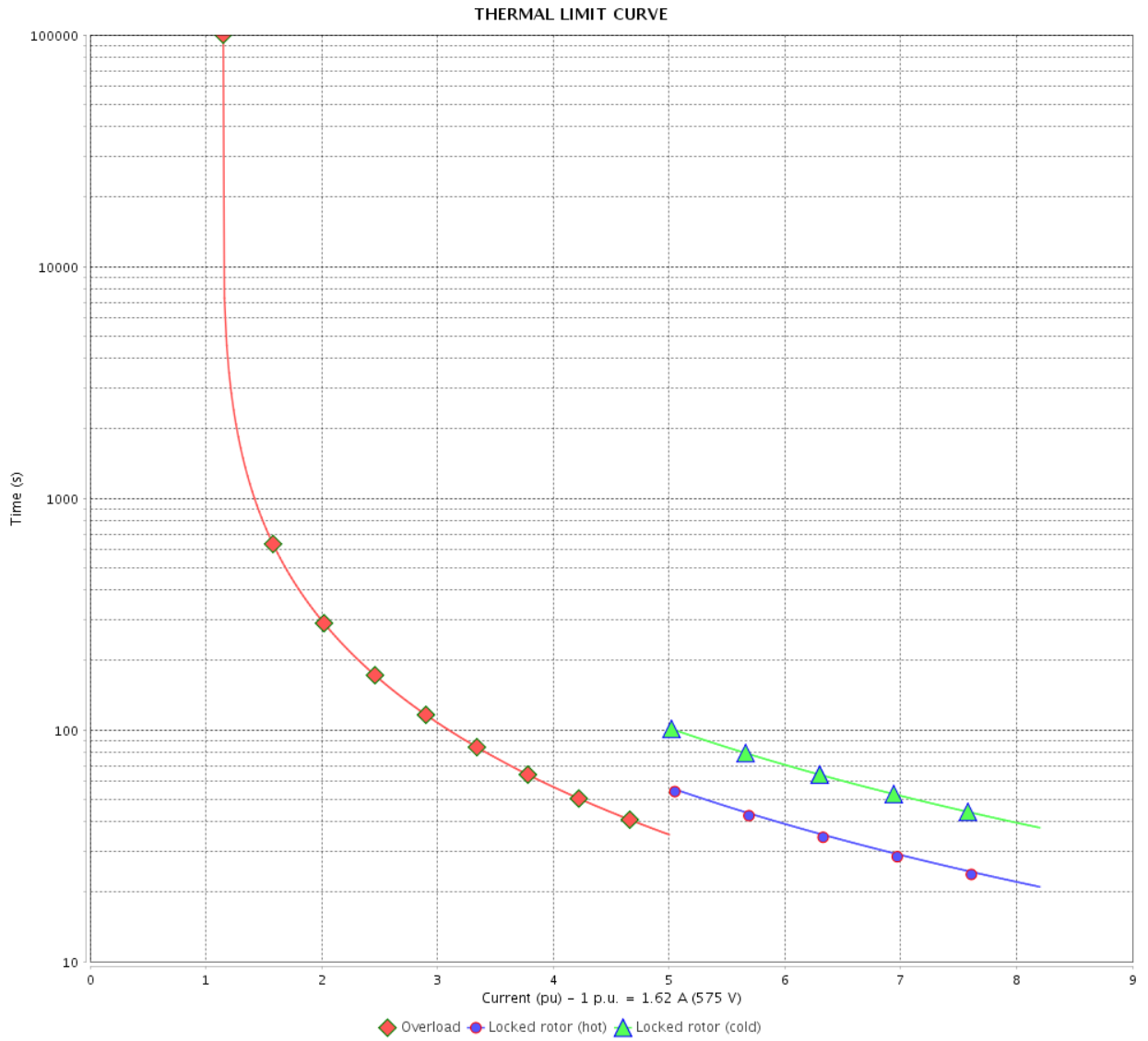
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

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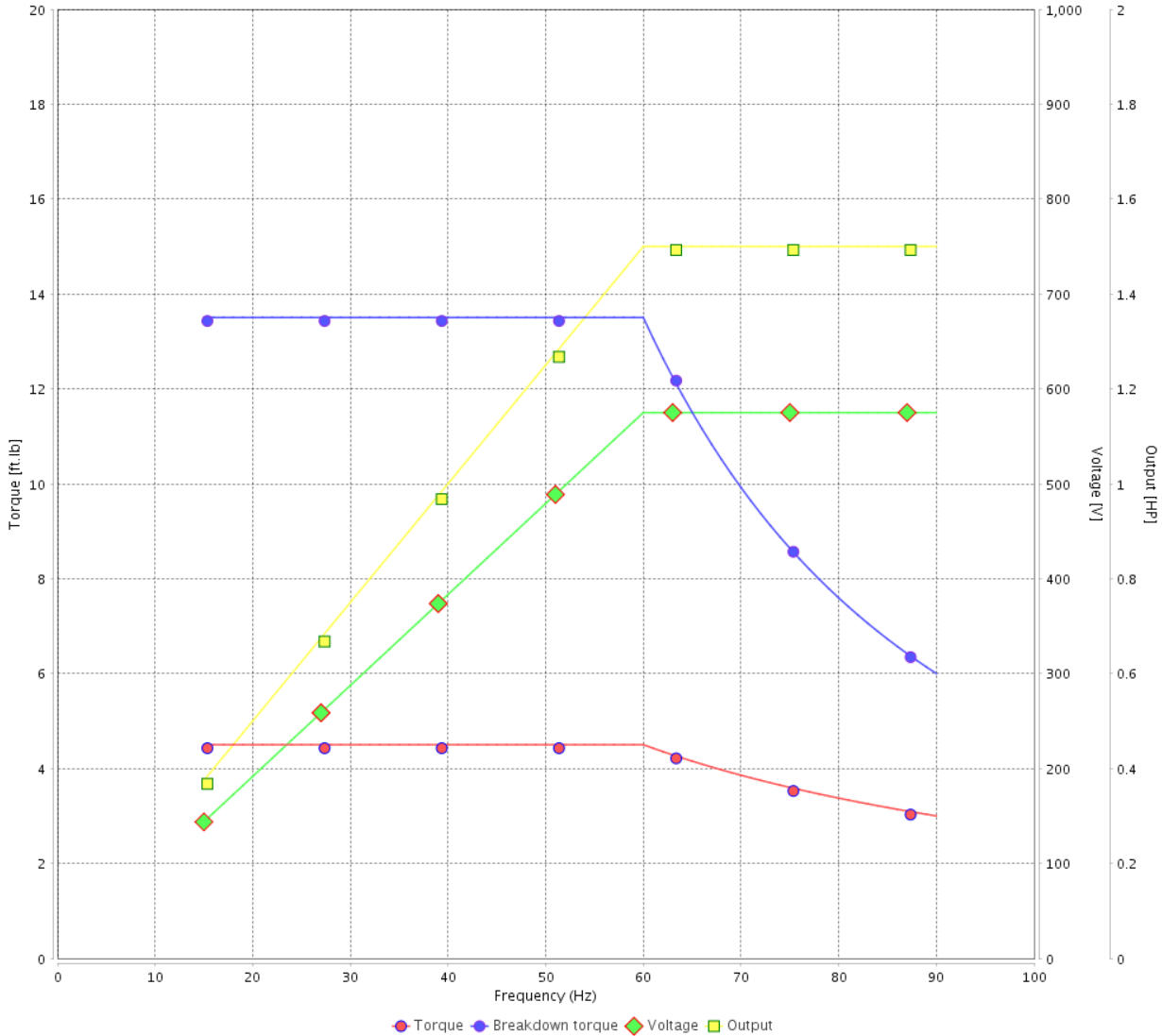
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Rev.	Changes Summary	Performed	Checked	Date
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1 2 3 4 5 6

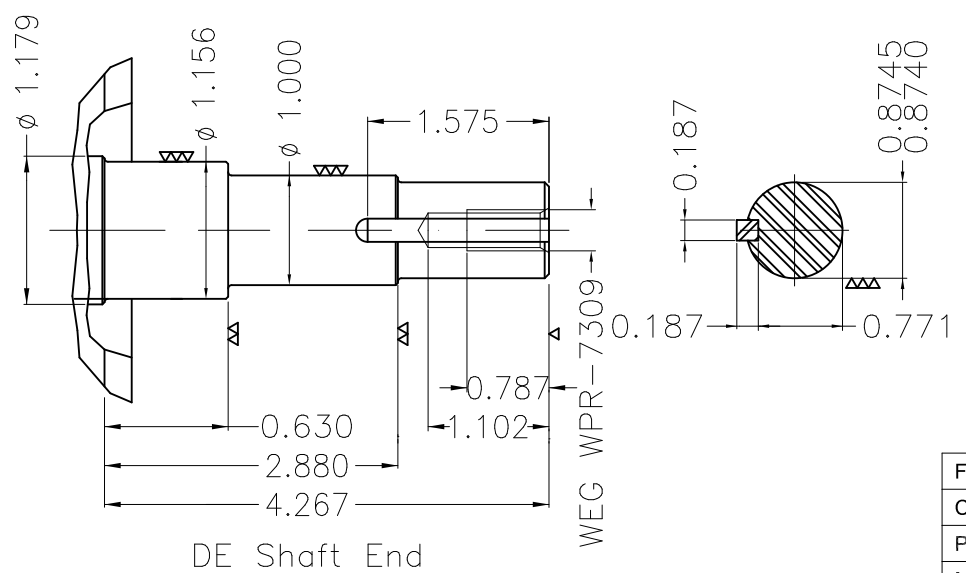
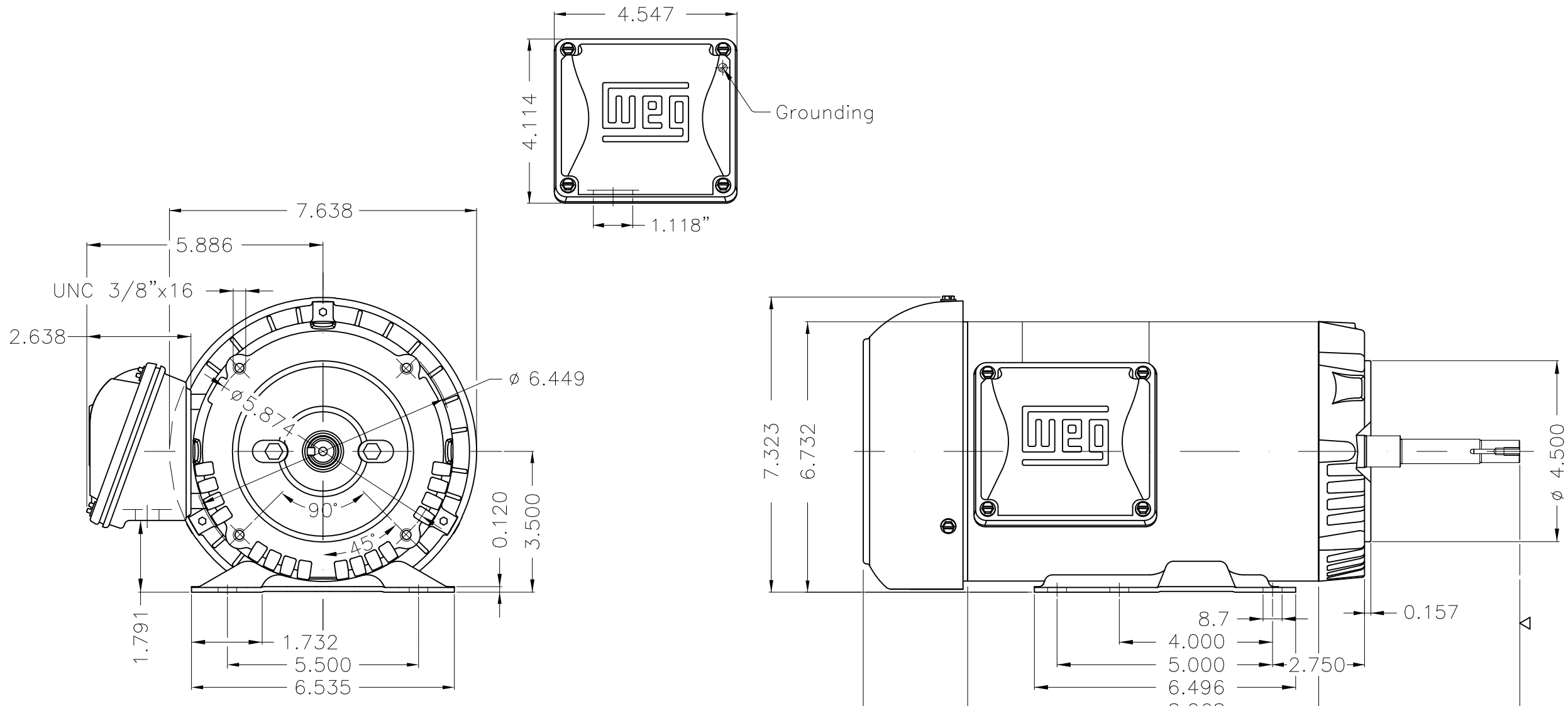
A

B

C

D

E



EUNC 3/8"-16 WEG WPR-7309

DE Shaft End

Fan cover - steel plate						
Color Munsell N 1 matte black						
Painting plan 207N						
Mounting F-1/B34R(D)						

ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRBUSER		THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSE 1/2"			<p>PREVIEW</p> <p>WDD</p>		<p>REL DT.</p>	<p>Product Engineering</p>
CHECKED			FRAME 143/5JM IP55 TEFC						
RELEASED									
REL DT.		WMO	Jaragua do Sul						<p>SHEET 1 / 1</p>

1.5 HP 04 Poles 60 Hz



NEMA
Premium



MADE IN MEXICO

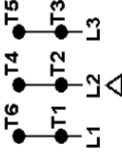
MAT: 14808417 CC029A
W01.TE0IC0X0N
JM001504NPW01
01MAR2022 B/N:

For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3
Div 2 Inverter Duty (SF1.00)
CT 2:1/VT 1000:1

PH 3	Hz 60	HP 1.5
FR 143/5JM		KW 1.1
DUTY CONT.		V 575
ALT 1000 m.a.s.l.		A 1.62
INS CL F AT 80K	IP55	SFA 1.86
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE K	PF 0.79
		RPM 1750
		NEMA NOM. EFF 86.5%

For safe area-Inverter duty motor For use on VPWM 1000:1 VT, 4:1 CT

DE 6206-ZZ ODE 6203-ZZ MOBIL POLYREX EM



T1-BLU
T2-WHT
T3-ORG
T4-YEL
T5-BLK
T6-GRY

INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

WARNING: Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical shocks. Disconnect power source before servicing unit.



AVERTISSEMENT: Le moteur doit être mis à la terre

conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.

