

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line : JM Pump NEMA Premium Efficiency Three-Phase	Product code : 12845333																		
	Catalog # : 00158OT3V145JM-S																		
Frame : 143/5JM Output : 1.5 HP (1.1 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 200/400 V Rated current : 4.76/2.38 A L. R. Amperes : 41.4/20.7 A LRC : 8.7x(Code L) No load current : 2.76/1.38 A Rated speed : 1760 rpm Slip : 2.22 % Rated torque : 4.48 ft.lb Locked rotor torque : 280 % Breakdown torque : 330 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1426 sq.ft.lb Design : B	Locked rotor time : 27s (cold) 15s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Cooling method : IC01 - ODP Mounting : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 52.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 43.9 lb																		
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Output</td> <td>25%</td> <td>50%</td> <td>75%</td> <td>100%</td> </tr> <tr> <td>Efficiency (%)</td> <td>83.6</td> <td>84.0</td> <td>86.5</td> <td>86.5</td> </tr> <tr> <td>Power Factor</td> <td>0.32</td> <td>0.56</td> <td>0.69</td> <td>0.77</td> </tr> </table>	Output	25%	50%	75%	100%	Efficiency (%)	83.6	84.0	86.5	86.5	Power Factor	0.32	0.56	0.69	0.77	Foundation loads Max. traction : 106 lb Max. compression : 150 lb			
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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



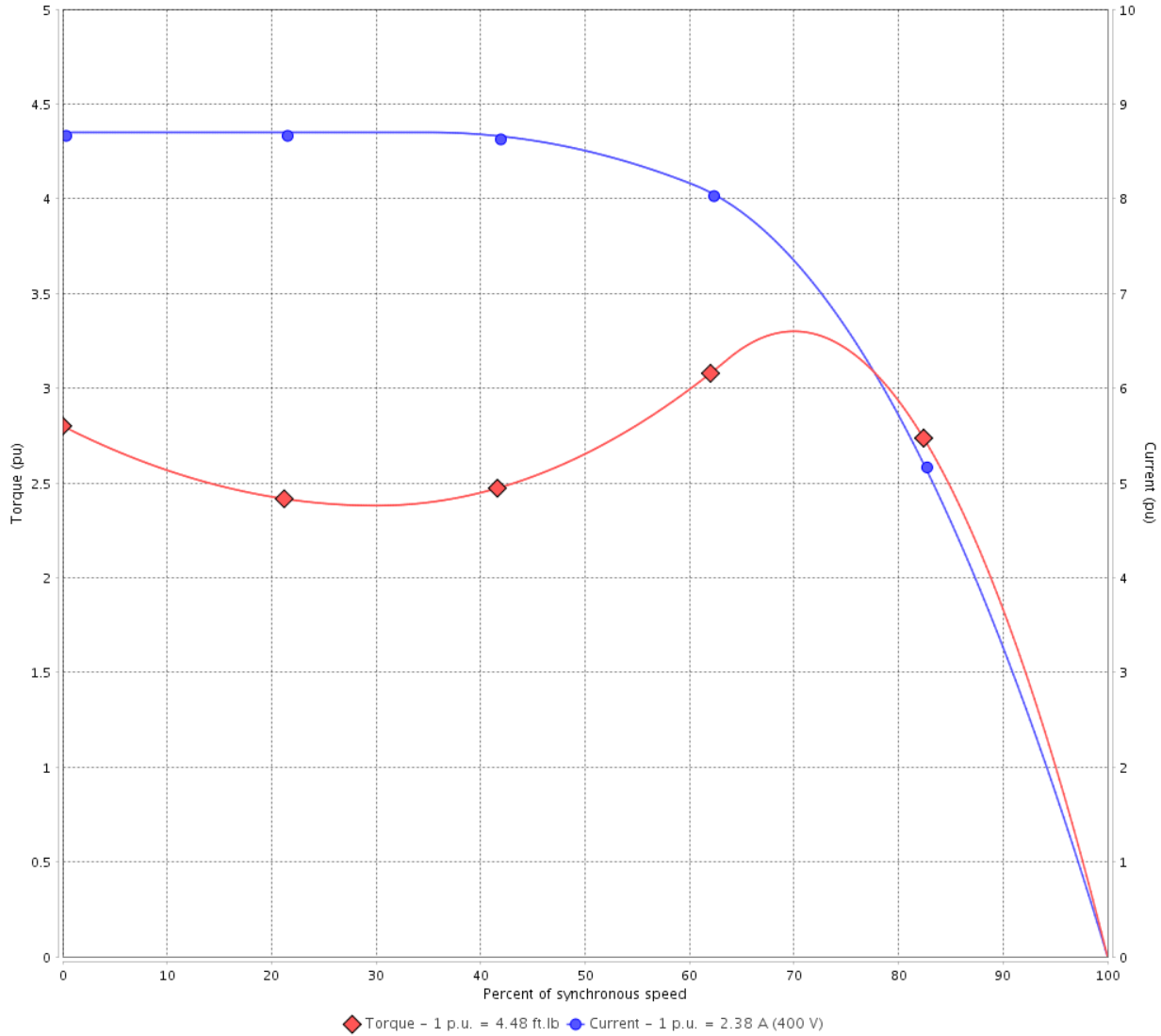
Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 12845333

Catalog # : 00158OT3V145JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 4P

Rated current : 4.76/2.38 A  
 LRC : 8.7  
 Rated torque : 4.48 ft.lb  
 Locked rotor torque : 280 %  
 Breakdown torque : 330 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.1426 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Locked rotor time : 27s (cold) 15s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	12/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

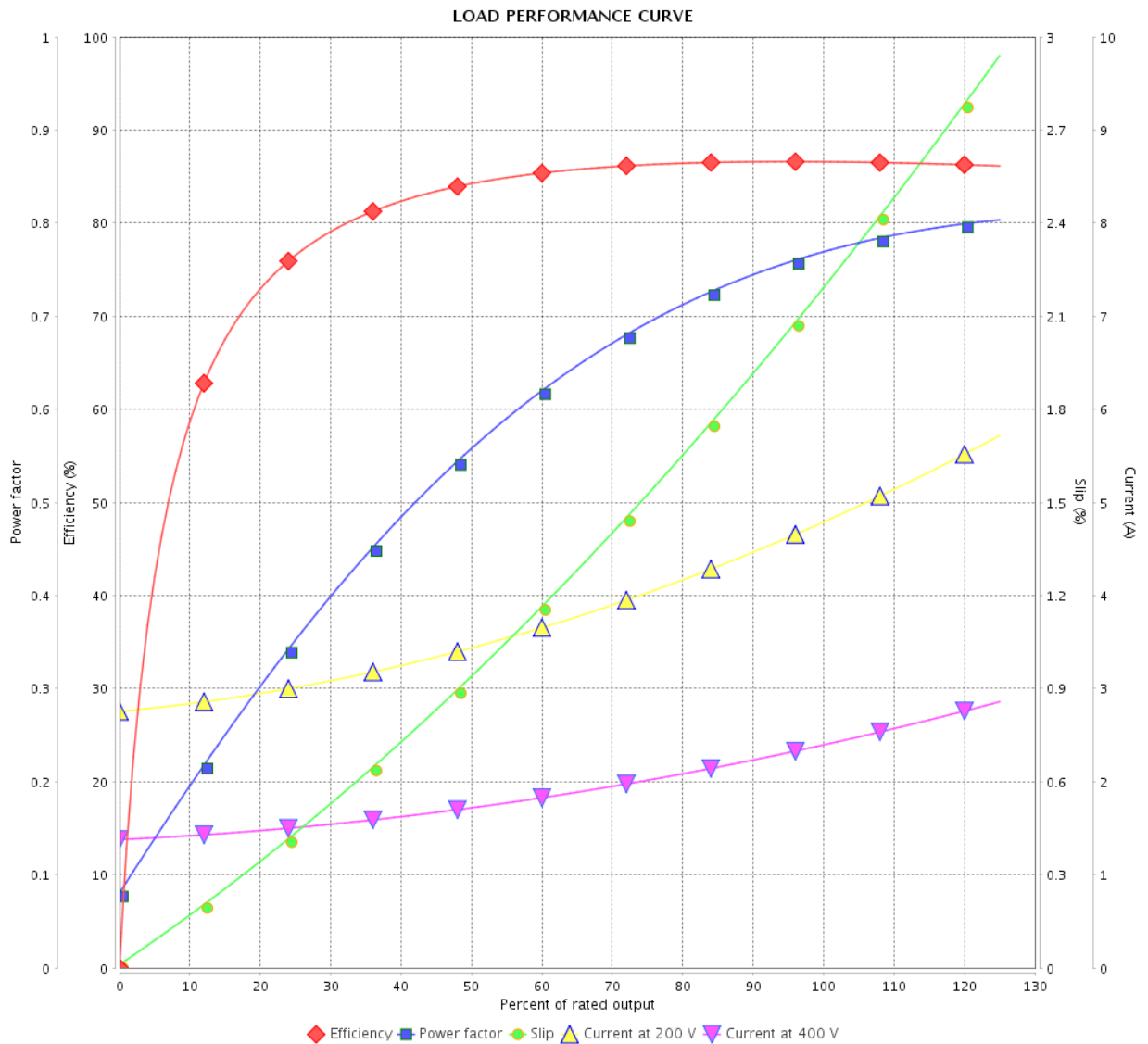


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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by			3 / 6	
Date	12/04/2022			

# THERMAL LIMIT CURVE



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Design : B

Heating constant

Cooling constant

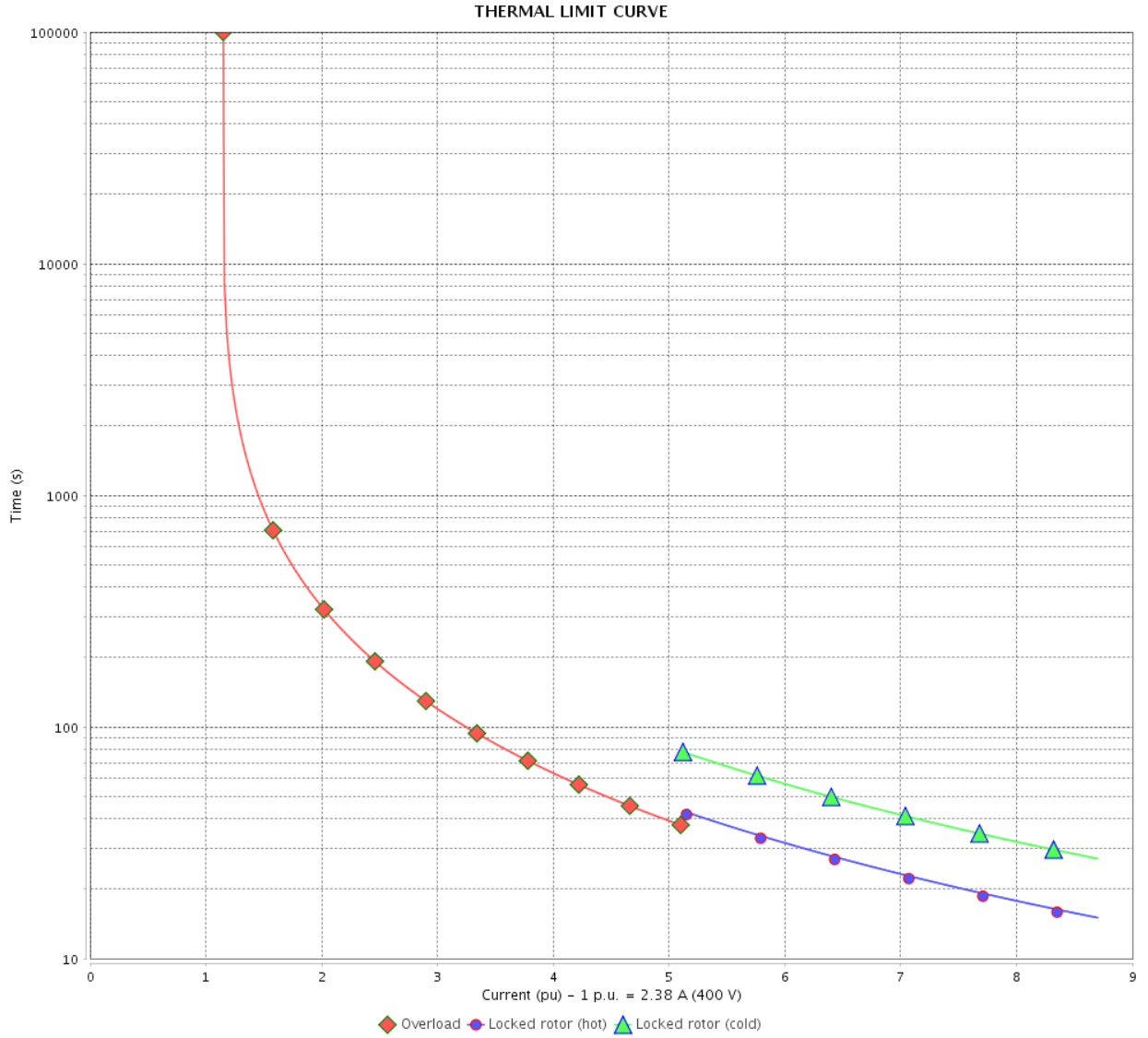
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	12/04/2022		4 / 6	

# 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



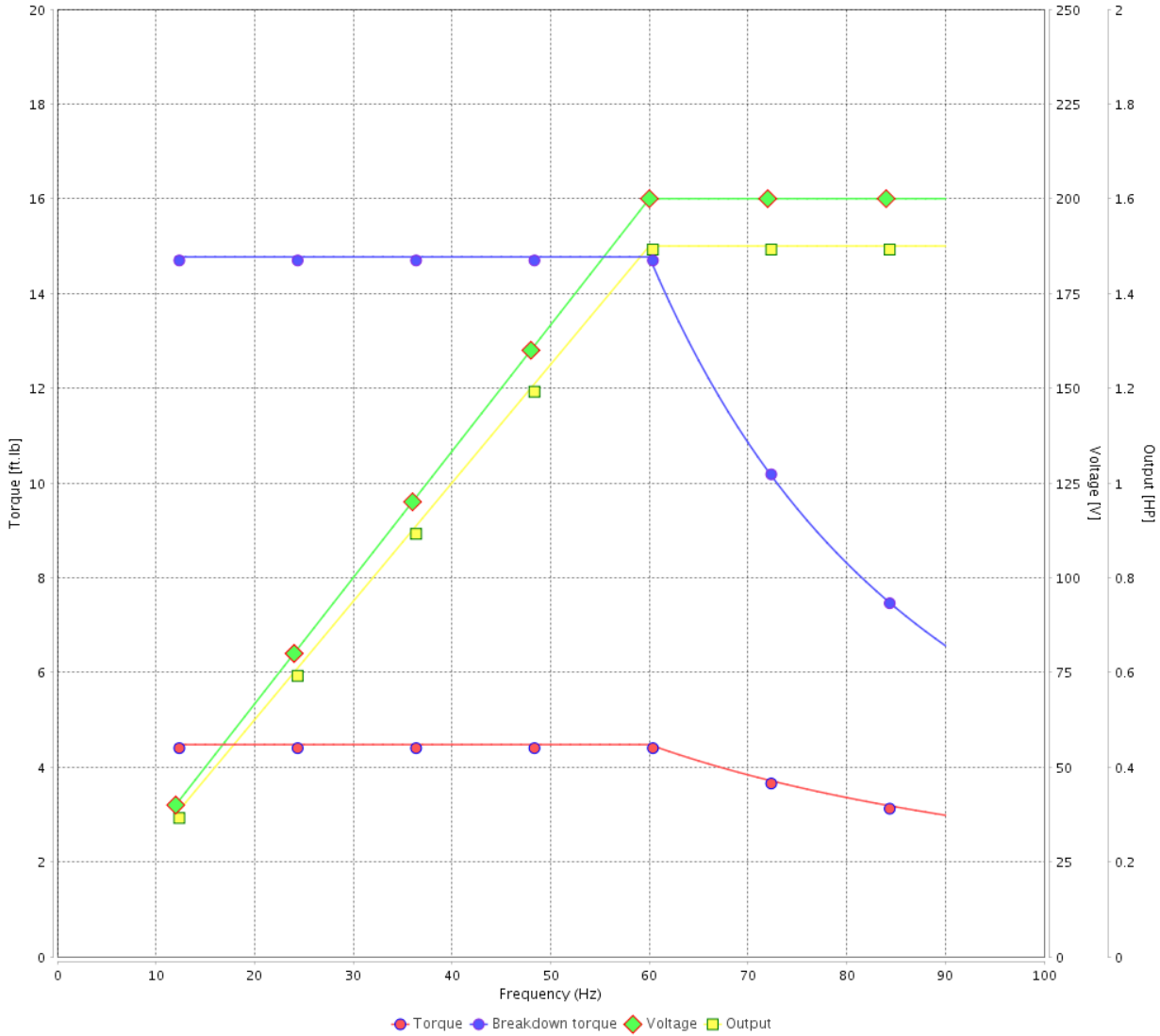
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1 2 3 4 5 6

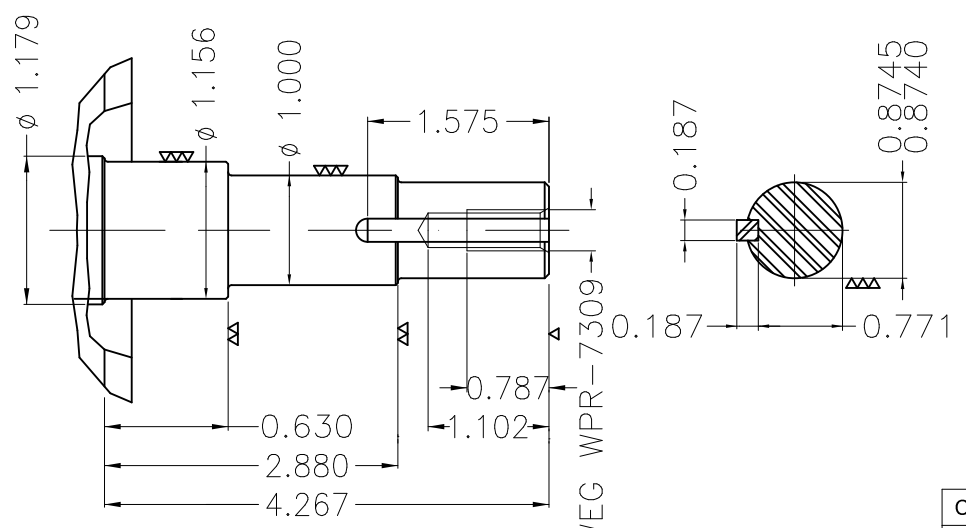
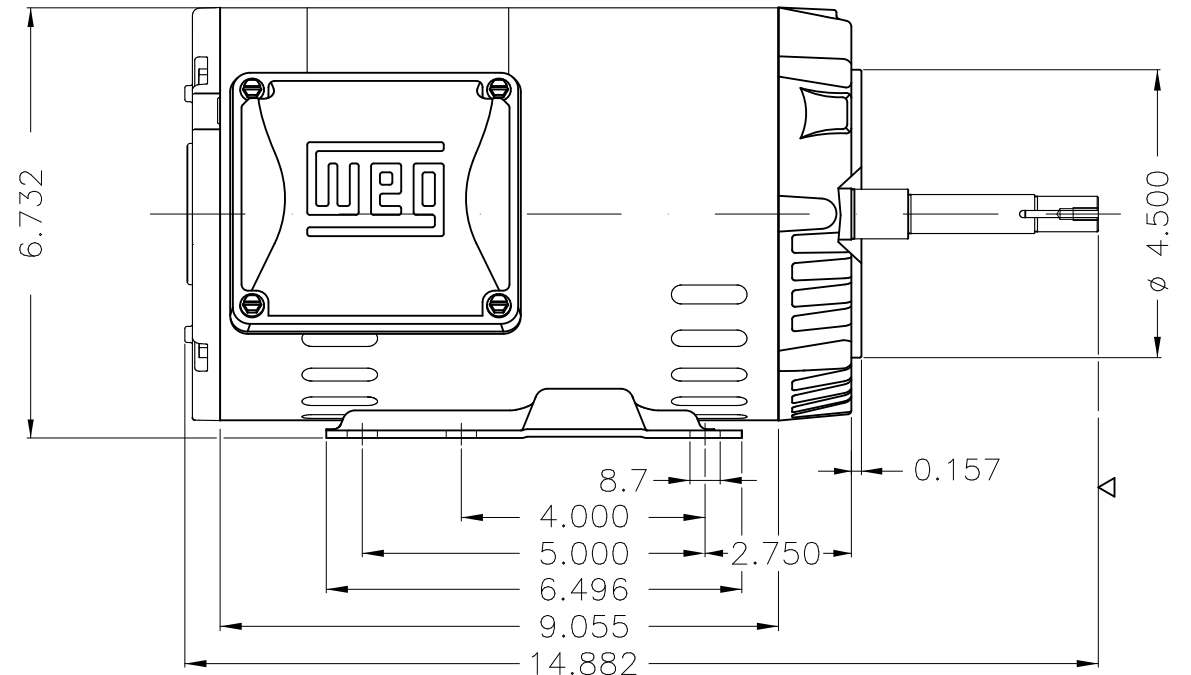
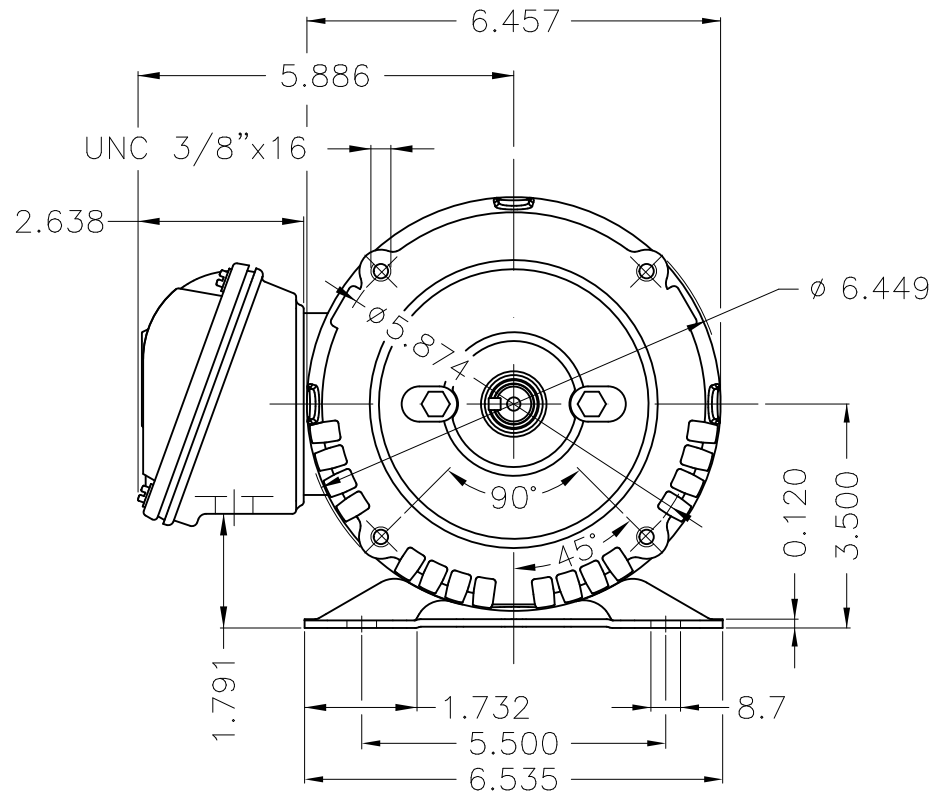
A

B

C

D

E



EUNC 3/8"-16 WEG WPR-7309

DE Shaft End

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	PIRWUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSE 143							
CHECKED		FRAME 143/5JM IP21 ODP							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

PREVIEW

WDD



1.5 HP 04 Poles 60 Hz



**NEMA**  
**Premium**



MADE IN MEXICO

**MAT: 12845333 CC029A**

**W01.T00IC0X0N**

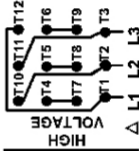
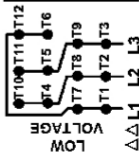
**MODEL 001580T3V145JM-S**

**26NOV2021 B/N:**

<b>PH 3</b>	<b>Hz 60</b>	<b>HP 1.5</b>
<b>FR 143/5JM</b>		<b>KW 1.1</b>
<b>DUTY CONT.</b>		<b>V 200/400</b>
<b>ALT 1000 m.a.s.l.</b>		<b>A 4.76/2.38</b>
<b>INS CL F AT 80K</b>		<b>SFA 5.47/2.74</b>
<b>AMB 40°C</b>	<b>DES B</b>	<b>SF 1.15</b>
<b>ENCL ODP</b>	<b>CODE L</b>	<b>PF 0.77</b>
		<b>RPM 1760</b>
		<b>NEMA NOM. EFF 86.5%</b>

**Inverter duty motor For use on VPWM 1000:1 VT, 5:1 CT**

<b>DE 6206-ZZ</b>	<b>ODE 6203-ZZ</b>	<b>MOBIL POLYREX EM</b>
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T1-BLU T2-WHT  
 T3-ORG T4-YEL  
 T5-BLK T6-GRY  
 T7-PNK T8-RED  
 T9-BRK RED  
 T10-CURRY  
 T11-GRN T12-VLT

**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.

