

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	Product code :	12951333													
		Catalog # :	00156OT3V143JM-S													
Frame : 143/5JM Output : 1.5 HP (1.1 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 200/400 V Rated current : 4.25/2.13 A L. R. Amperes : 36.6/18.3 A LRC : 8.6x(Code K) No load current : 1.86/0.930 A Rated speed : 3510 rpm Slip : 2.50 % Rated torque : 2.24 ft.lb Locked rotor torque : 210 % Breakdown torque : 330 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.0835 sq.ft.lb Design : B	Locked rotor time : 34s (cold) 19s (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 ¹ : Both (CW and CCW) Noise level ² : 62.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 29.3 lb															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Output</td> <td style="width: 10%;">25%</td> <td style="width: 10%;">50%</td> <td style="width: 10%;">75%</td> <td style="width: 10%;">100%</td> </tr> <tr> <td>Efficiency (%)</td> <td>81.1</td> <td>81.5</td> <td>84.0</td> <td>84.0</td> </tr> <tr> <td>Power Factor</td> <td>0.45</td> <td>0.73</td> <td>0.83</td> <td>0.89</td> </tr> </table>	Output	25%	50%	75%	100%	Efficiency (%)	81.1	81.5	84.0	84.0	Power Factor	0.45	0.73	0.83	0.89	Foundation loads Max. traction : 49 lb Max. compression : 79 lb
Output	25%	50%	75%	100%												
Efficiency (%)	81.1	81.5	84.0	84.0												
Power Factor	0.45	0.73	0.83	0.89												
	<u>Drive end</u>	<u>Non drive end</u>														
Bearing type :	6206 ZZ	6203 ZZ														
Sealing :	Without Bearing Seal	Without Bearing Seal														
Lubrication interval :	-	-														
Lubricant amount :	-	-														
Lubricant type :	Mobil Polyrex EM															
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												
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



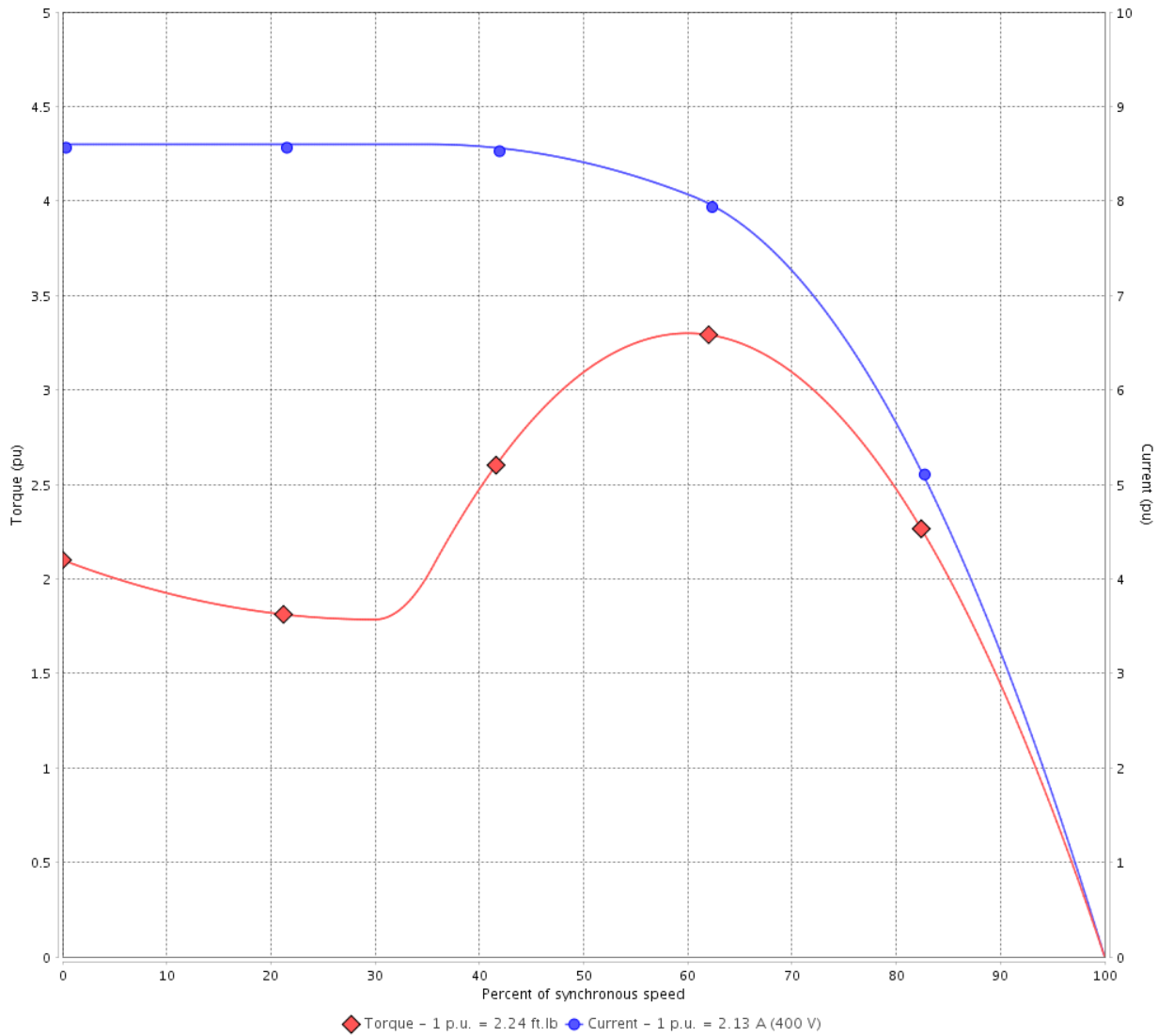
Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 12951333

Catalog # : 00156OT3V143JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 2P

Rated current	: 4.25/2.13 A	Moment of inertia (J)	: 0.0835 sq.ft.lb
LRC	: 8.6	Duty cycle	: Cont.(S1)
Rated torque	: 2.24 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 3510 rpm	Design	: B

Locked rotor time : 34s (cold) 19s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

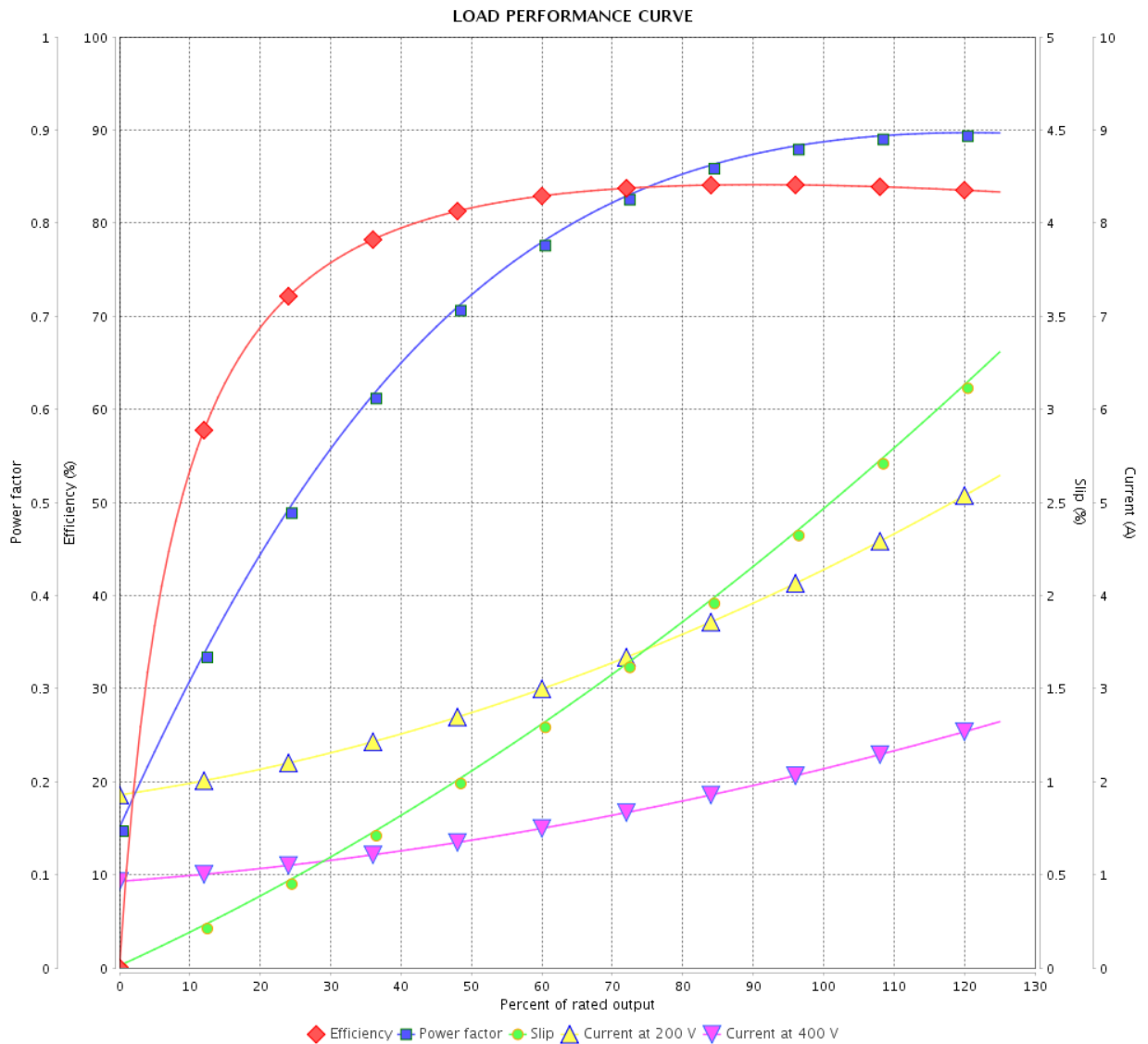


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THERMAL LIMIT CURVE



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Duty cycle : Cont.(S1)
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Service factor : 1.15
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

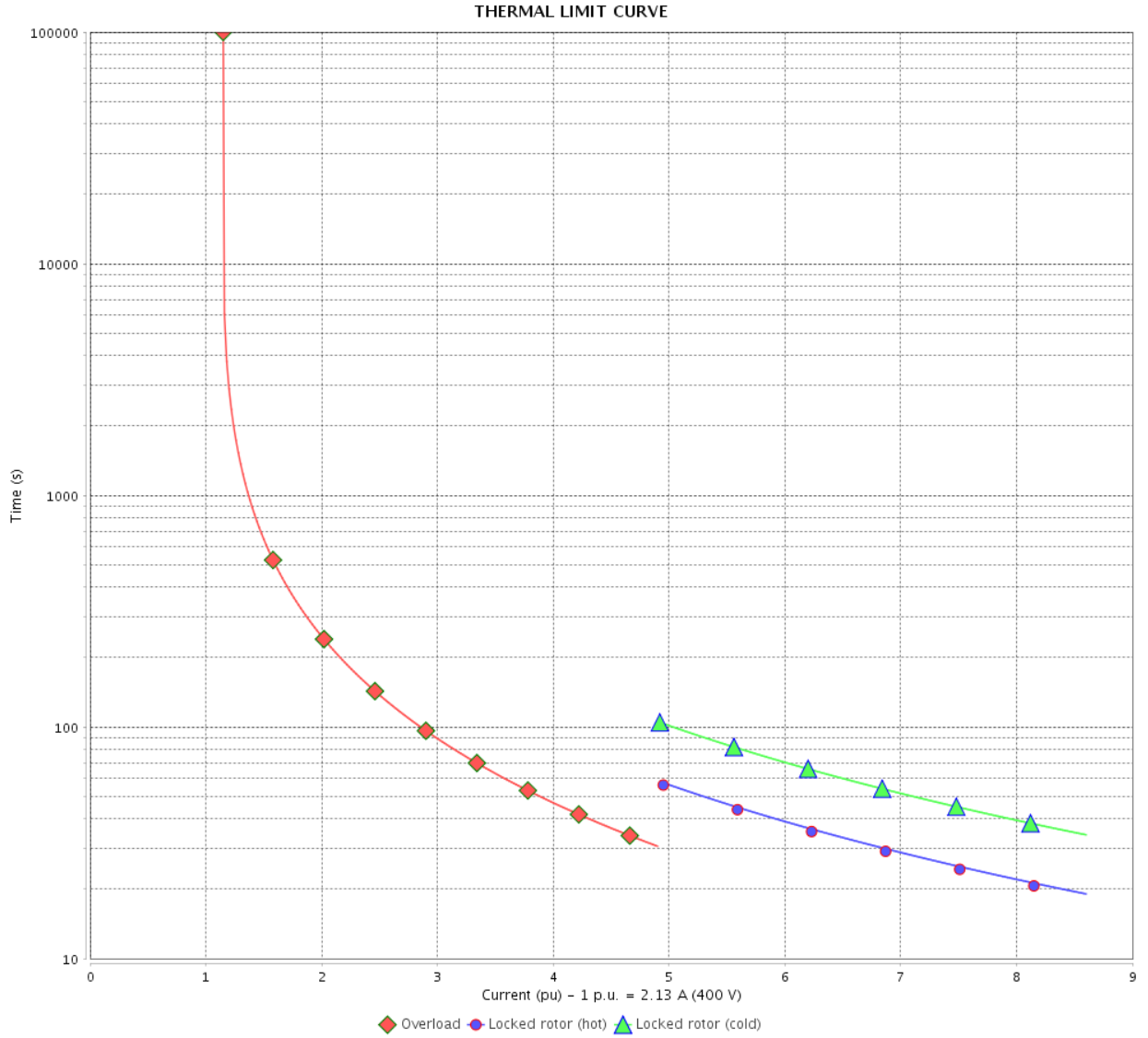
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



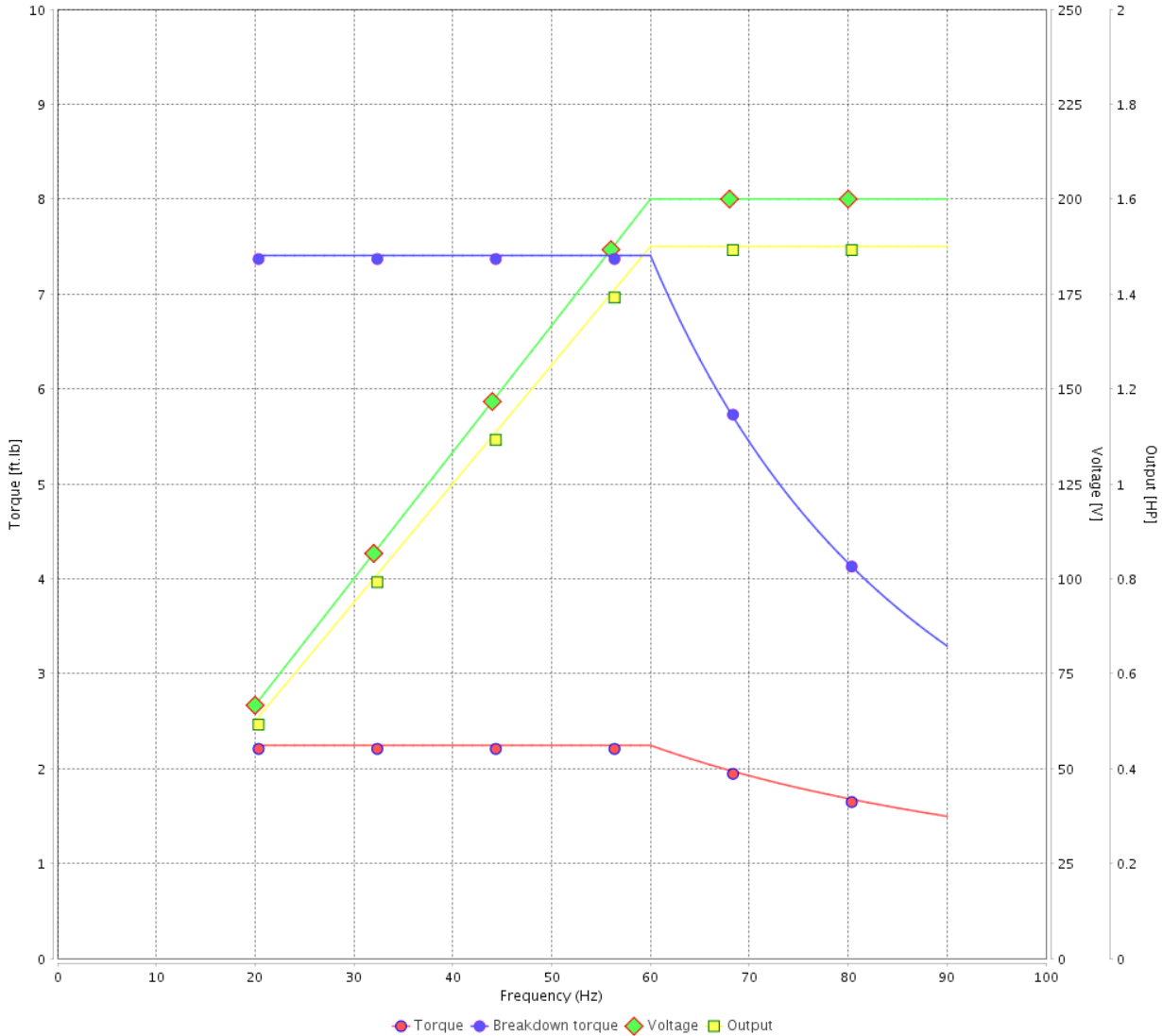
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VFD OPERATION CURVE



Performance : 200/400 V 60 Hz 2P

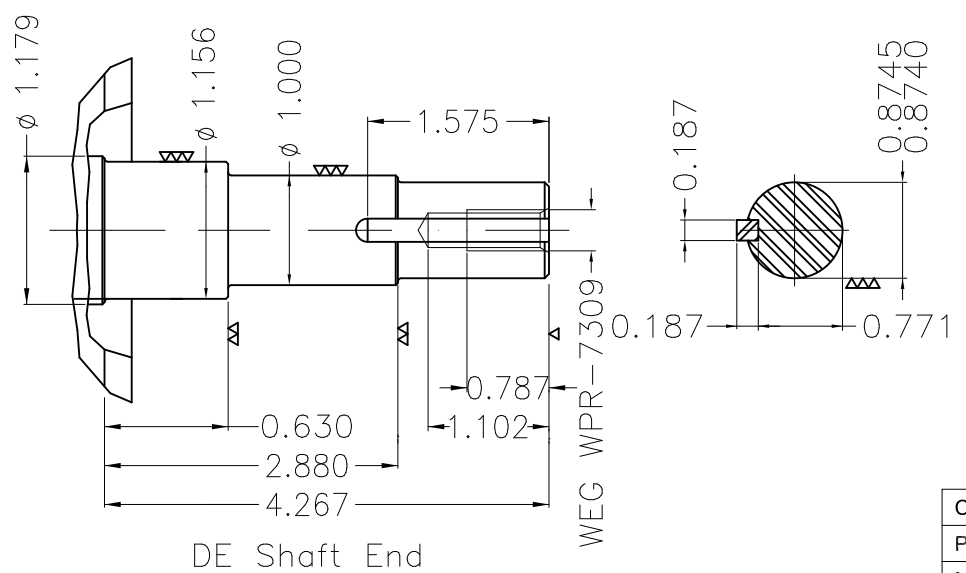
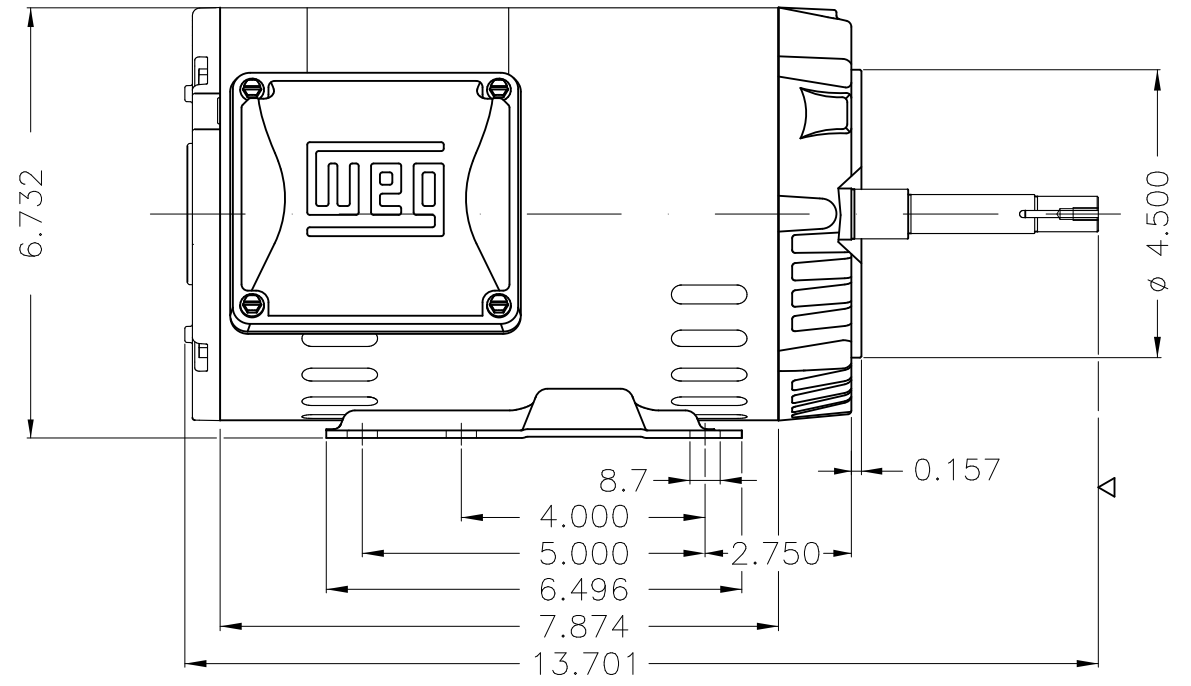
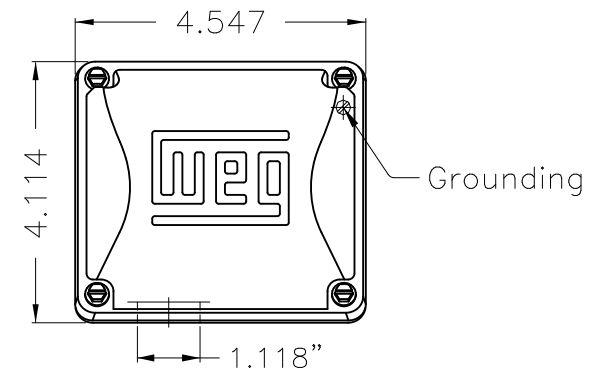
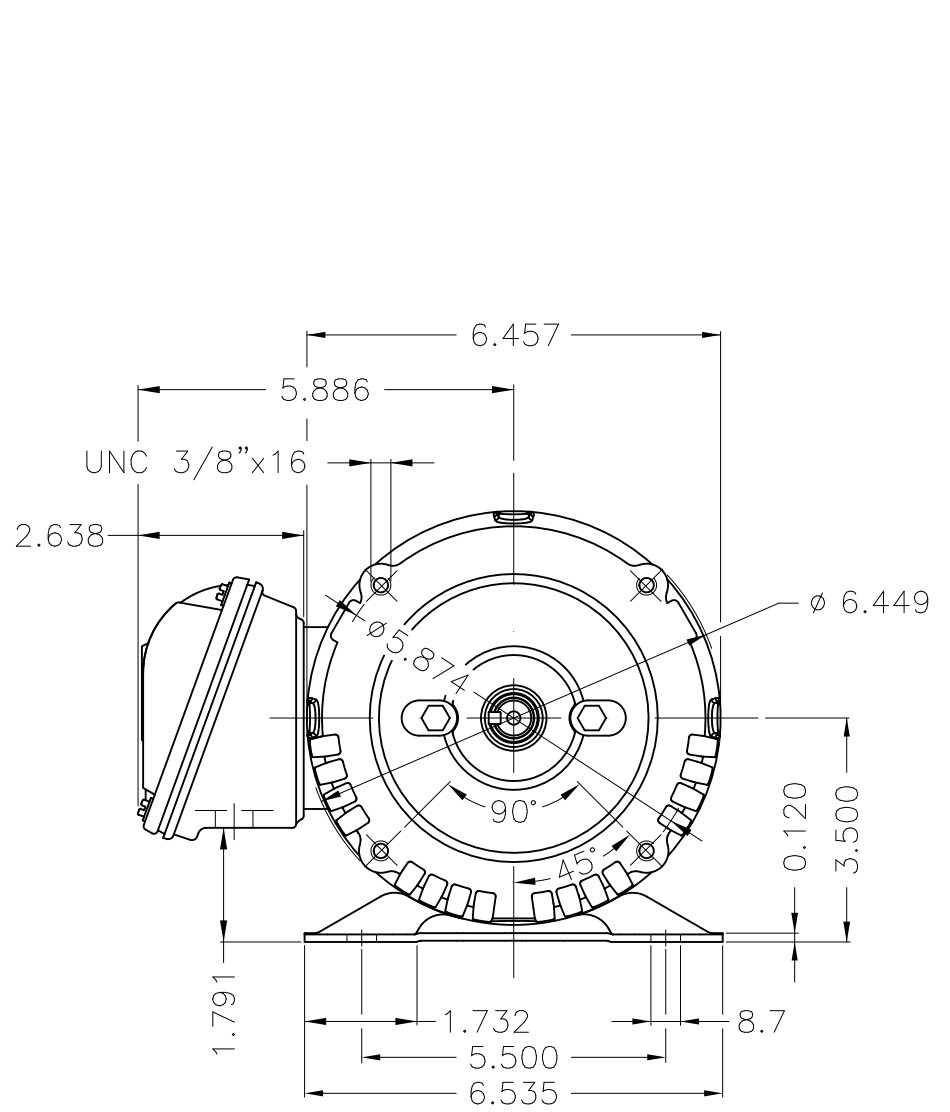
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1 2 3 4 5 6

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					

1.5 HP 02 Poles 60 Hz