

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: W40 JM Pump NEMA Premium Efficiency Three-Phase																		
Product code :	14837650																		
Catalog # :	05036OT3V324JMV-W40																		
Frame : 324/6JM Output : 50 HP (37 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 200/400 V Rated current : 137/68.3 A L. R. Amperes : 861/430 A LRC : 6.3x(Code G) No load current : 51.7/25.9 A Rated speed : 3560 rpm Slip : 1.11 % Rated torque : 73.8 ft.lb Locked rotor torque : 200 % Breakdown torque : 220 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 3.02 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 : IP23 Cooling method : IC01 - ODP Mounting : W-6 Rotation ¹ : Both (CW and CCW) Noise level ² : 75.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 443 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	91.5 91.7 93.0 93.0																		
Power Factor	0.46 0.72 0.81 0.84																		
Foundation loads																			
Max. traction																			
Max. compression																			
<table border="0" style="width:100%;"> <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;">6312 Z C3</td> <td style="text-align: center;">6211 Z C3</td> </tr> <tr> <td>Sealing</td> <td style="text-align: center;">Without Bearing Seal</td> <td style="text-align: center;">Without Bearing Seal</td> </tr> <tr> <td>Lubrication interval</td> <td style="text-align: center;">9829 h</td> <td style="text-align: center;">14226 h</td> </tr> <tr> <td>Lubricant amount</td> <td style="text-align: center;">21 g</td> <td style="text-align: center;">11 g</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	6312 Z C3	6211 Z C3	Sealing	Without Bearing Seal	Without Bearing Seal	Lubrication interval	9829 h	14226 h	Lubricant amount	21 g	11 g	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															
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



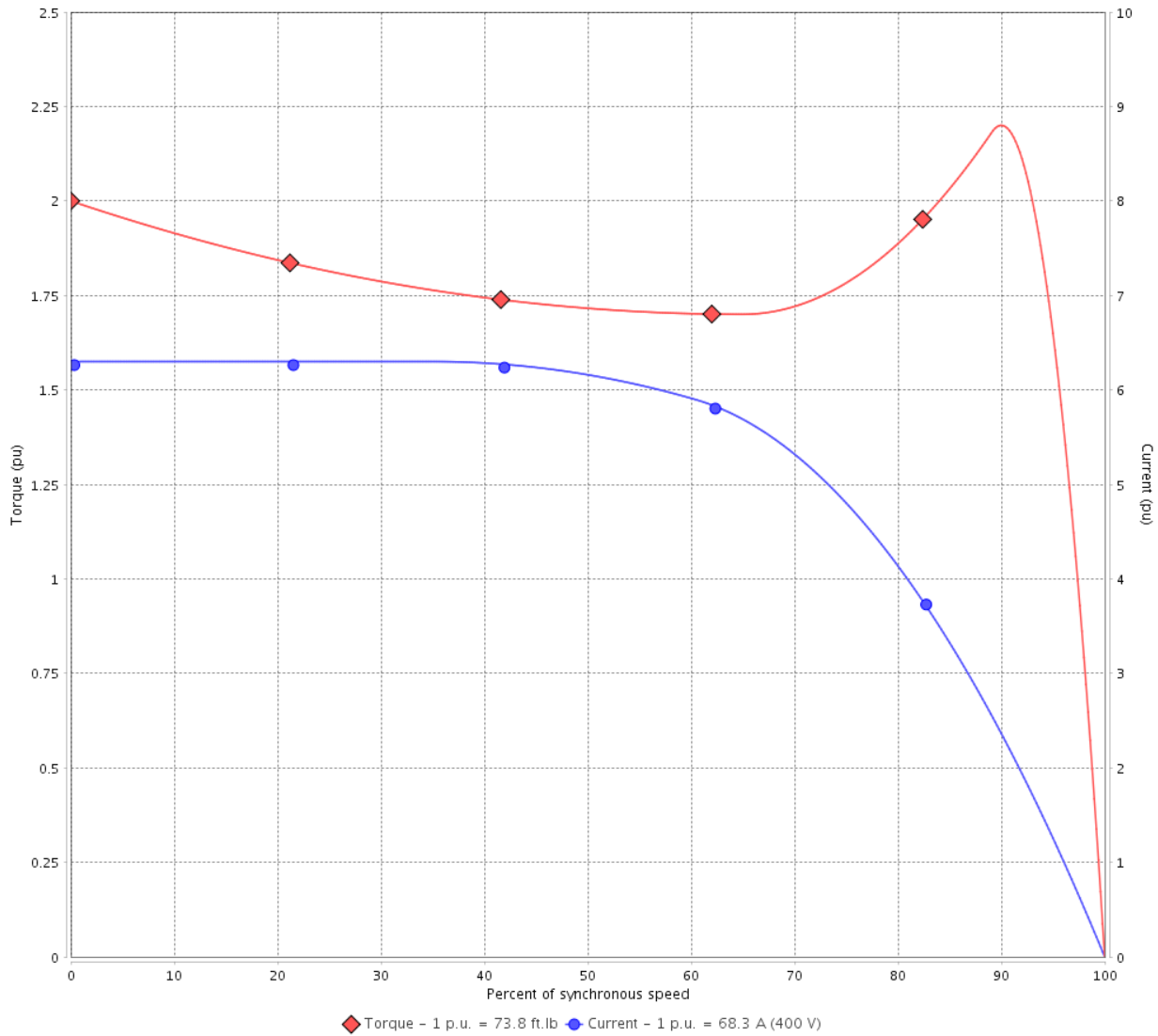
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 2P

Rated current	: 137/68.3 A	Moment of inertia (J)	: 3.02 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 73.8 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 3560 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

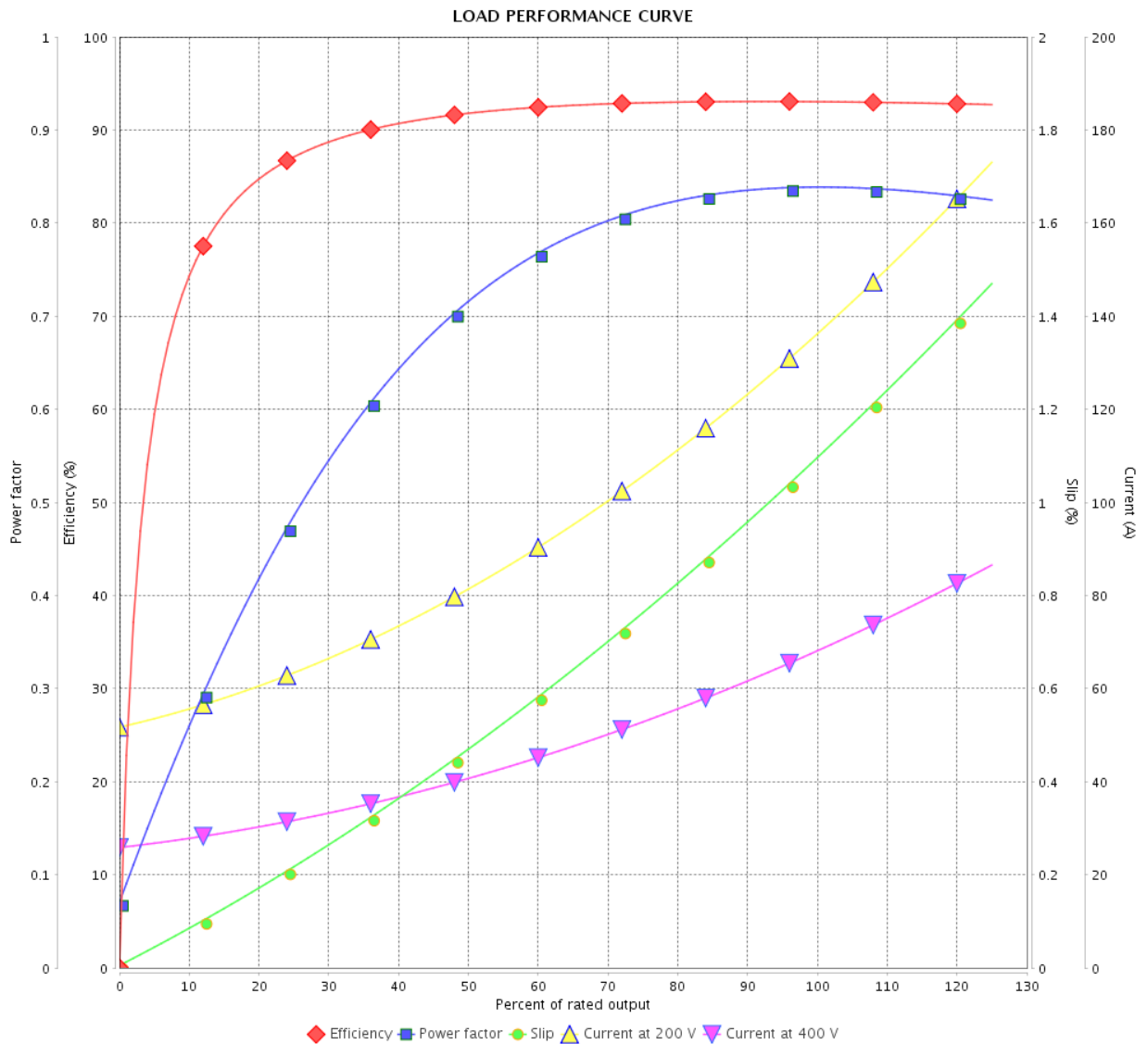


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Performance : 200/400 V 60 Hz 2P

Rated current : 137/68.3 A
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 Locked rotor torque : 200 %
 Breakdown torque : 220 %
 Rated speed : 3560 rpm

Moment of inertia (J) : 3.02 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



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Duty cycle : Cont.(S1)
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Temperature rise : 80 K
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Heating constant

Cooling constant

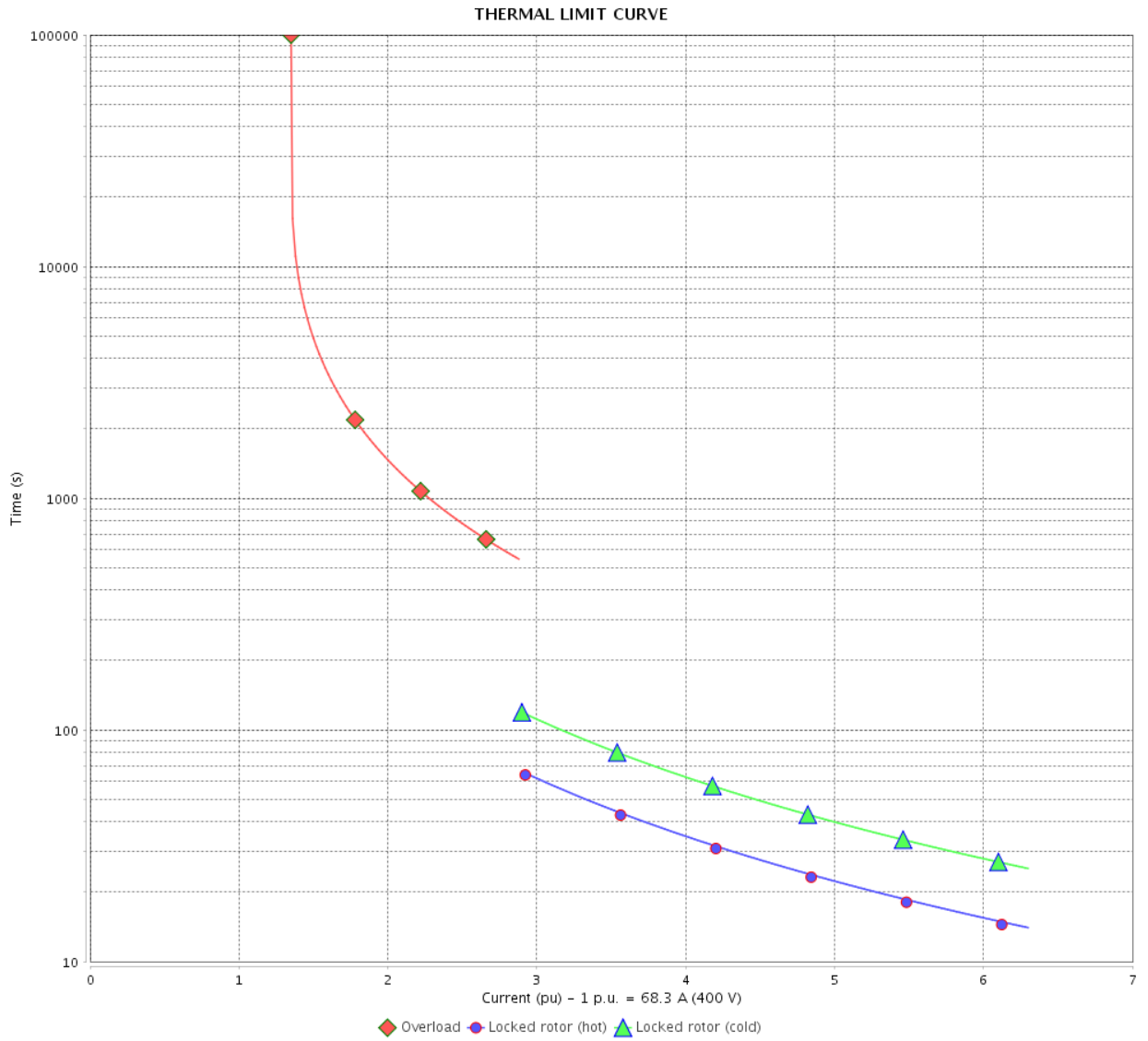
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

VFD OPERATION CURVE

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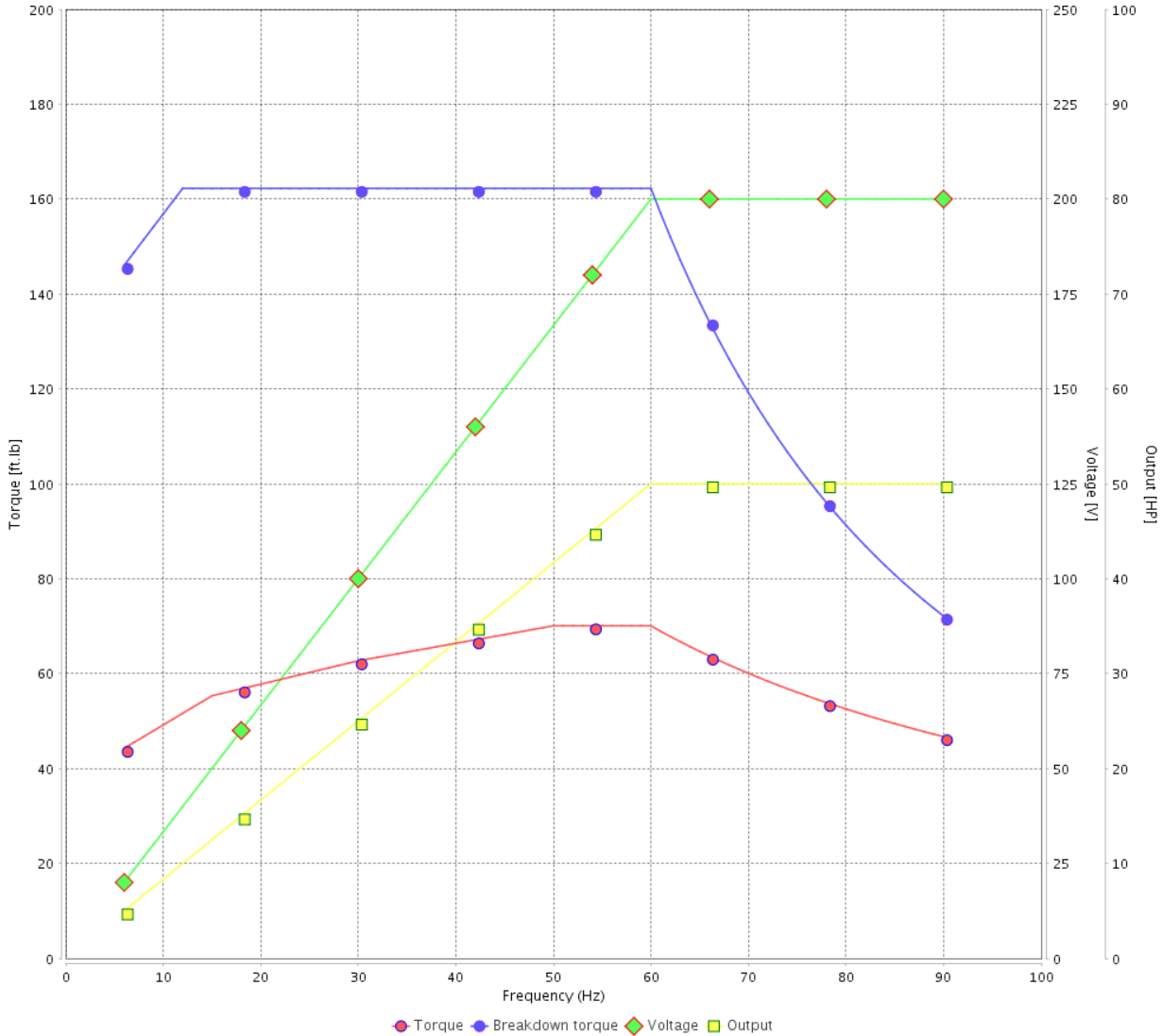
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VFD OPERATION CURVE

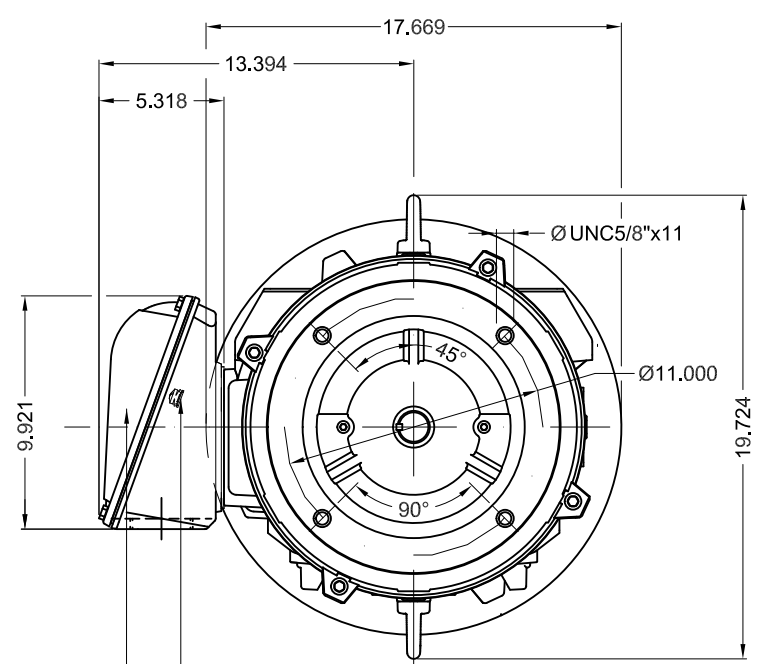


Performance : 200/400 V 60 Hz 2P

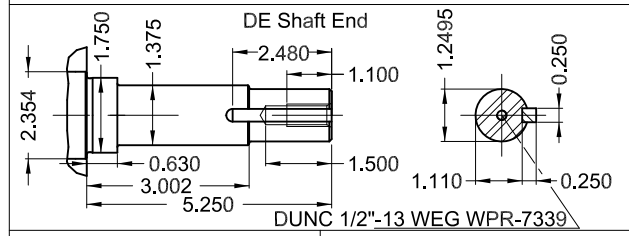
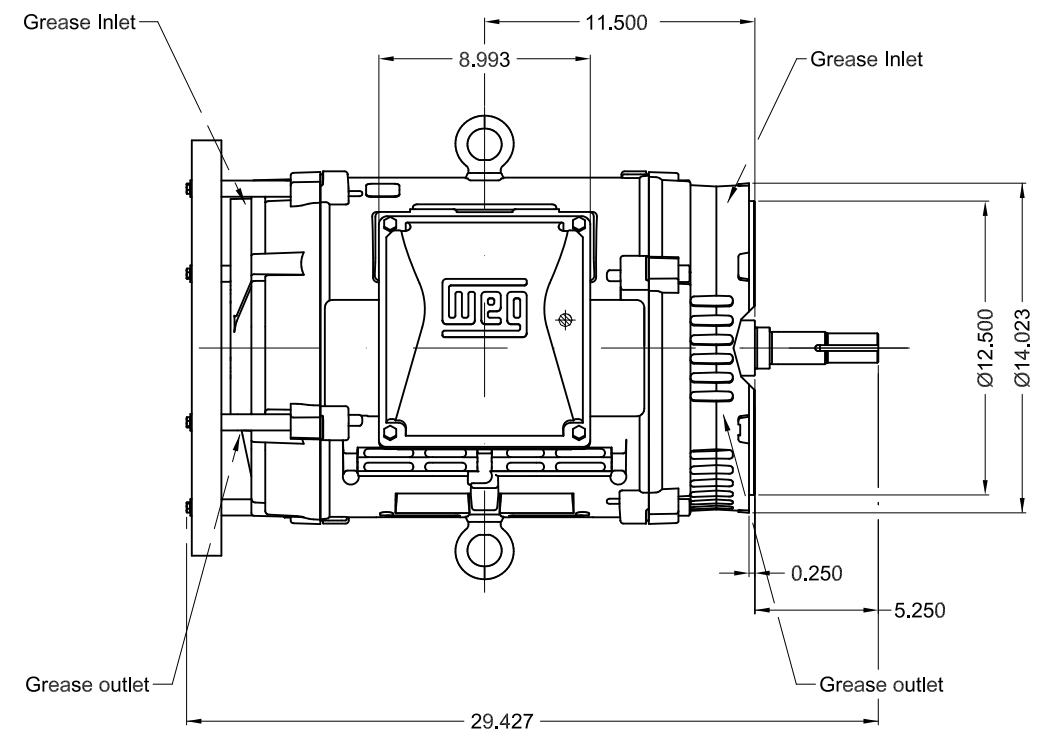
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Grounding for leads 5.2-35 mm² / 10-2 AWG
Main terminal box
NPT 2"



50 HP 02 Poles 60 Hz A

1:8

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 CLOSE COUPLED PUMP JM TYPE PREM-EST.					
CHECKED		FRAME 324/6JM IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

Color RAL 5009
Painting plan 203A
Mounting NEMA W-6
Mounting V18

PREVIEW
WDD

