

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :																			
Product line	: NEMA Premium Efficiency Three-Phase																		
Product code :	13248835																		
Catalog # :	005180T3V184TC-SG																		
Frame : 182/4TC Output : 5 HP (3.7 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 200/400 V Rated current : 14.6/7.28 A L. R. Amperes : 105/52.4 A LRC : 7.2x(Code J) No load current : 7.24/3.62 A Rated speed : 1760 rpm Slip : 2.22 % Rated torque : 14.9 ft.lb Locked rotor torque : 200 % Breakdown torque : 310 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.4003 sq.ft.lb Design : B	Locked rotor time : 21s (cold) 12s (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 : 55.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 90.8 lb																		
Output	25% 50% 75% 100%																		
Efficiency (%)	87.5 88.5 88.5 89.5																		
Power Factor	0.38 0.63 0.76 0.82																		
Foundation loads																			
Max. traction : 250 lb																			
Max. compression : 341 lb																			
<table style="width:100%; border: none;"> <tr> <td style="width: 50%;"></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;">6205 ZZ</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;">-</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	6205 ZZ	Sealing :	Without Bearing Seal	Without Bearing Seal	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.																			
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



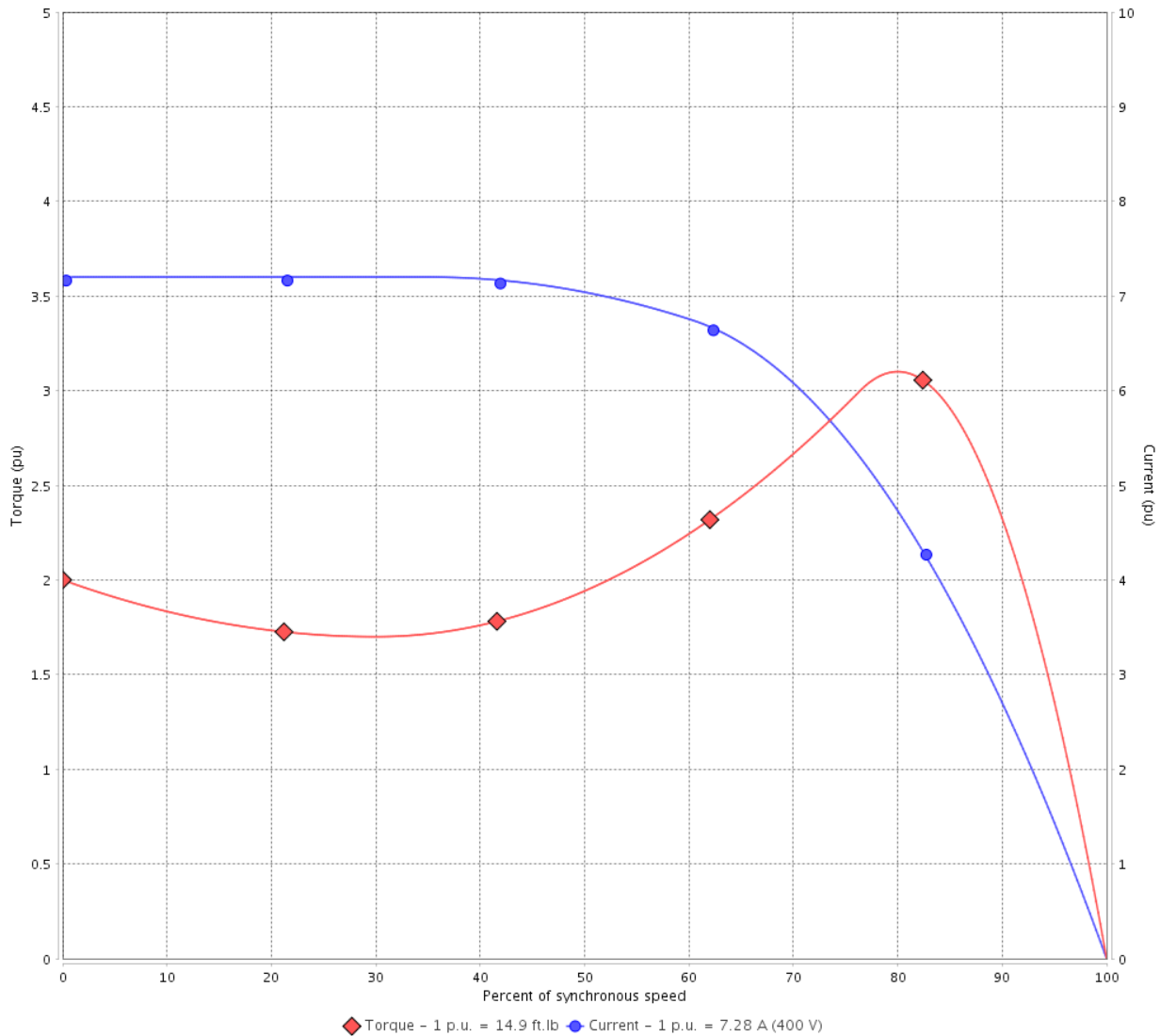
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 4P

Rated current : 14.6/7.28 A
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 Rated torque : 14.9 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 310 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.4003 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 21s (cold) 12s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

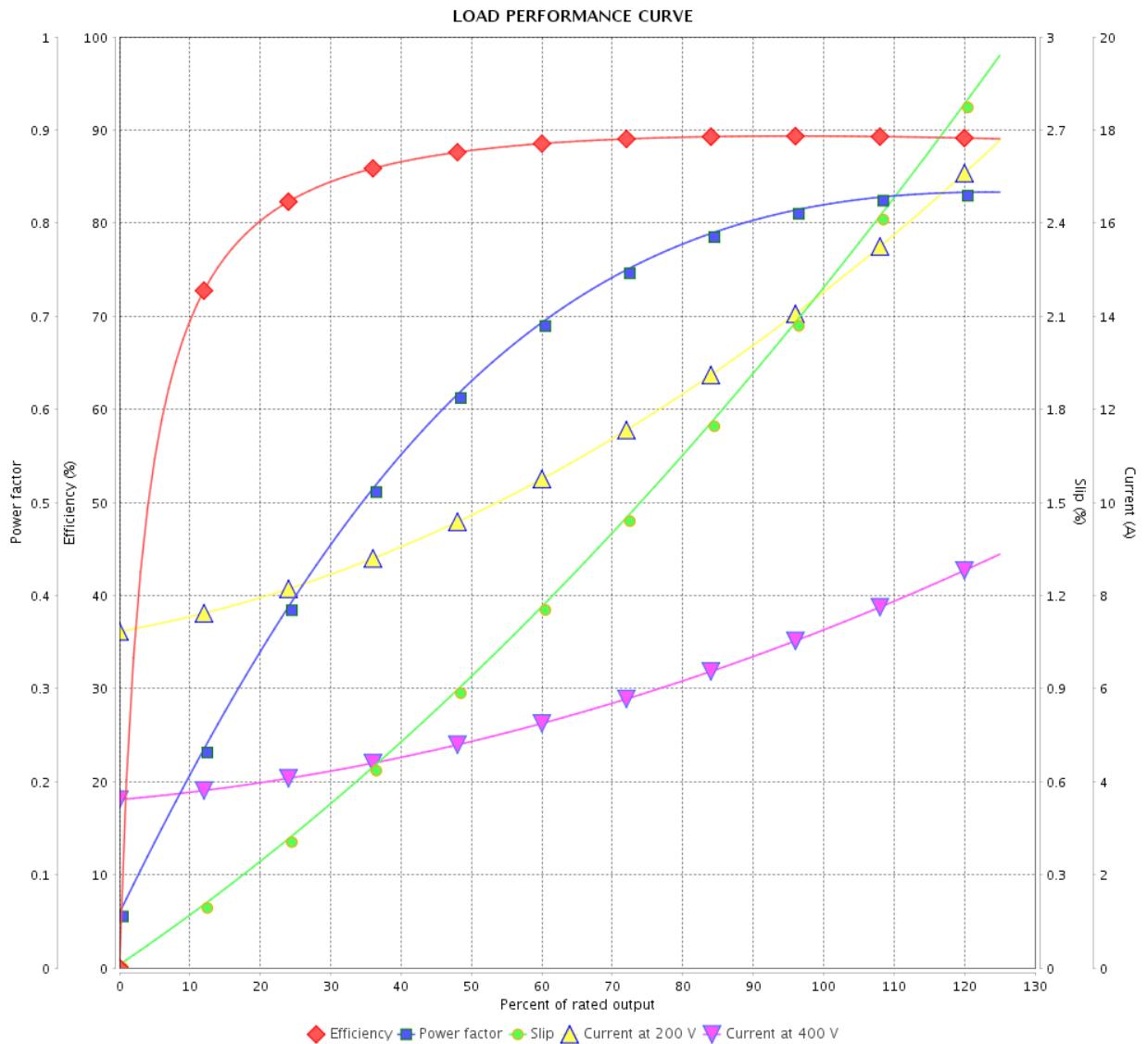


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THERMAL LIMIT CURVE



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LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 14.9 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Heating constant

Cooling constant

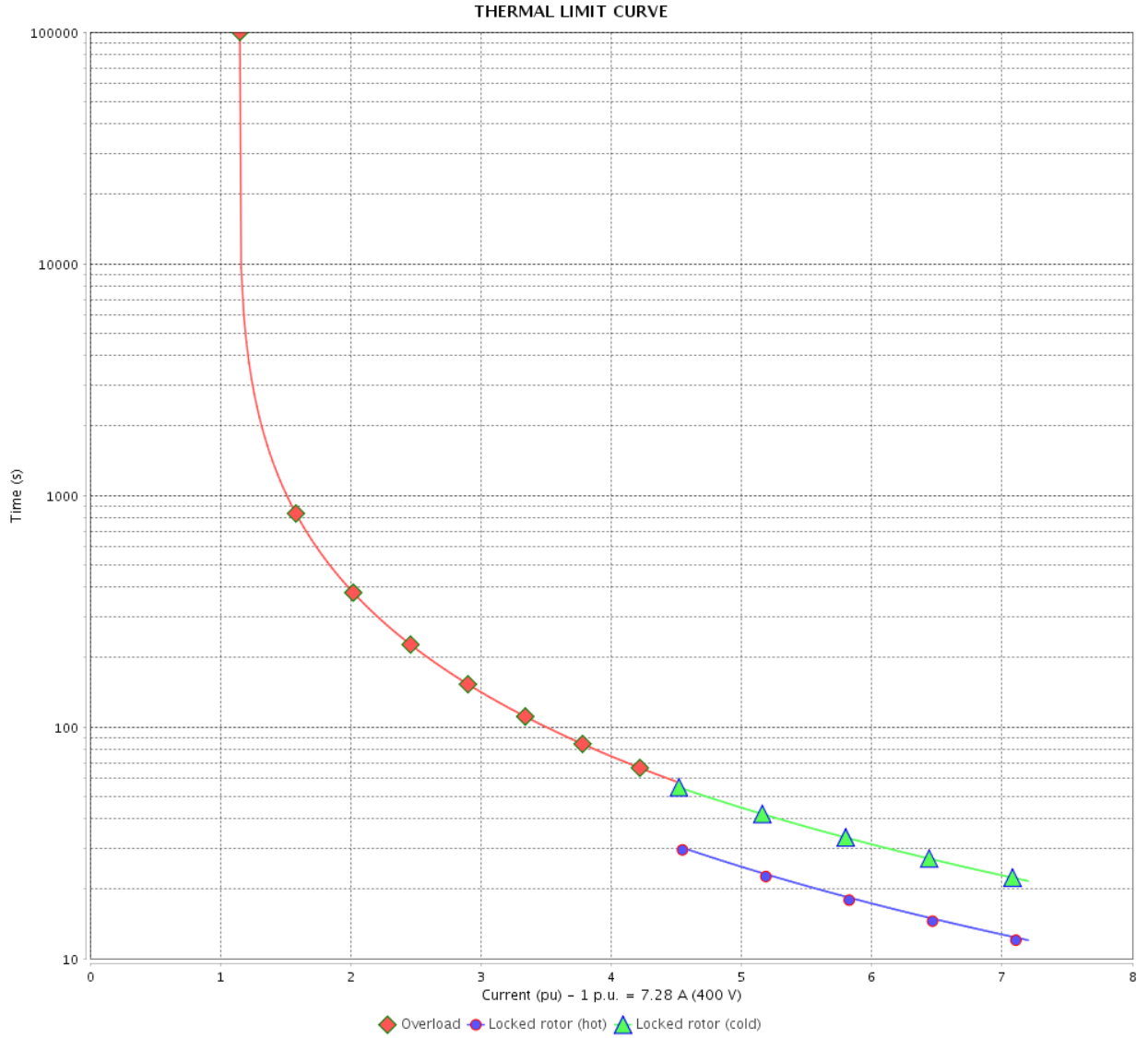
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

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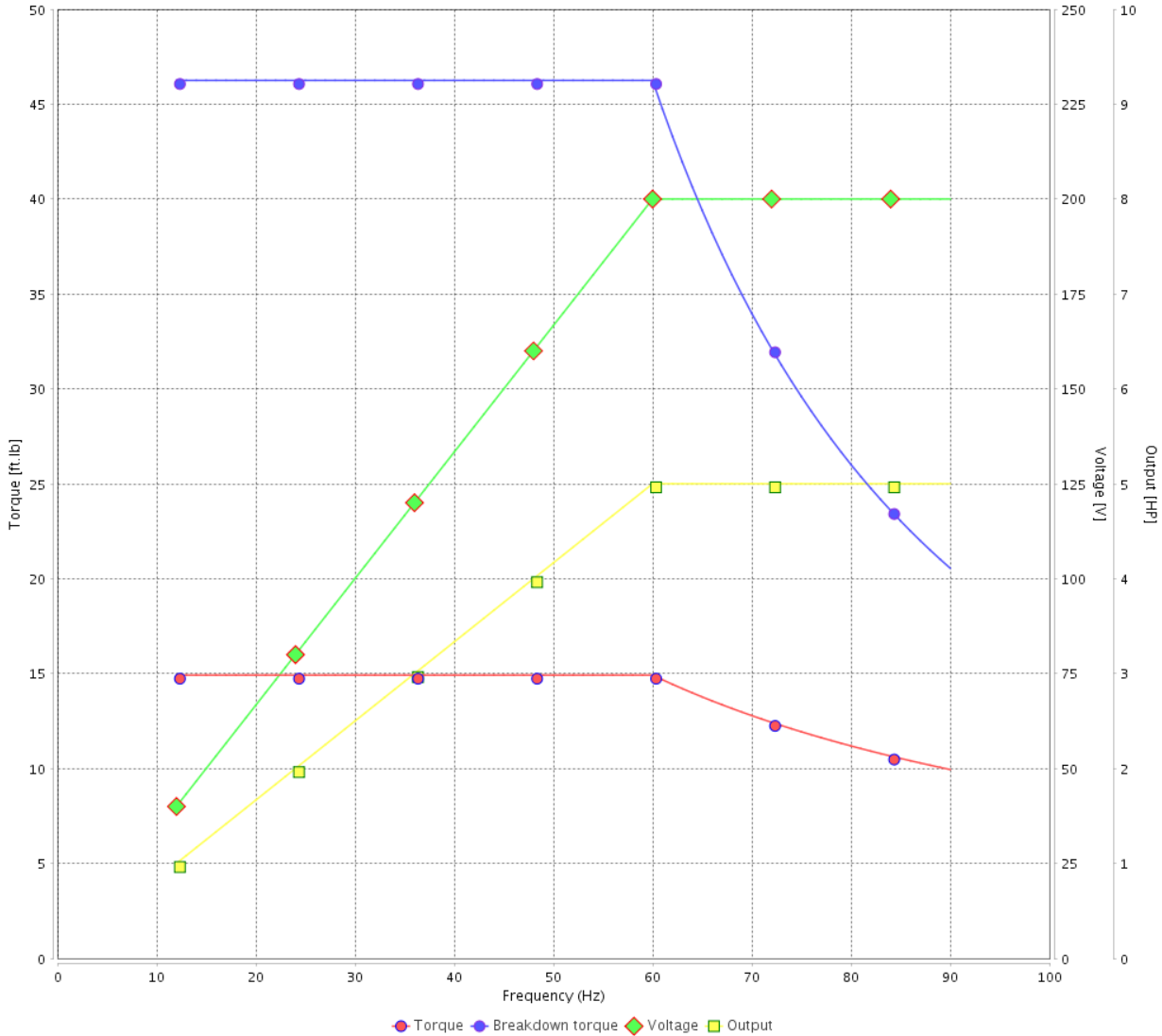
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VFD OPERATION CURVE

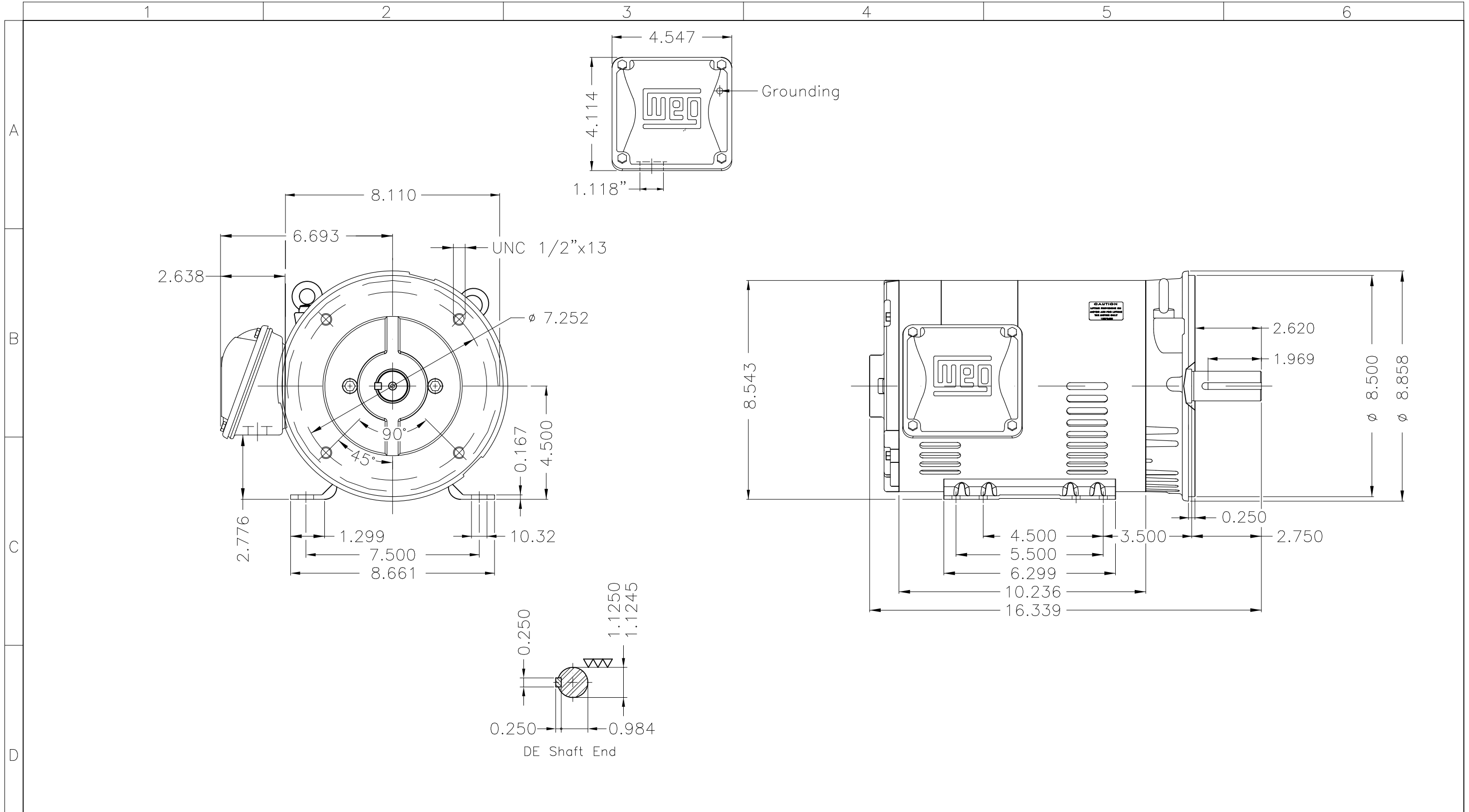


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Internal AEGIS ground ring on the DE
 Color Munsell N 1 matte black
 Painting plan 207N
 Mounting F-1/B34R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.					
CHECKED		FRAME 182/4TC IP21 ODP					
RELEASED							
REL DT.		WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1		

5 HP 04 Poles 60 Hz

A

PREVIEW
WDD

