

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	13248829			
Catalog # :	003180T3V182TC-SG			
Frame : 182/4TC Output : 3 HP (2.2 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 200/400 V Rated current : 8.88/4.44 A L. R. Amperes : 74.6/37.3 A LRC : 8.4x(Code K) No load current : 4.76/2.38 A Rated speed : 1765 rpm Slip : 1.94 % Rated torque : 8.93 ft.lb Locked rotor torque : 220 % Breakdown torque : 330 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.3092 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> : 55.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 76.8 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	86.4    87.5    88.5    89.5			
Power Factor	0.35    0.60    0.73    0.80			
Foundation loads				
Max. traction : 150 lb				
Max. compression : 226 lb				
Bearing type	: <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6205 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.				
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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



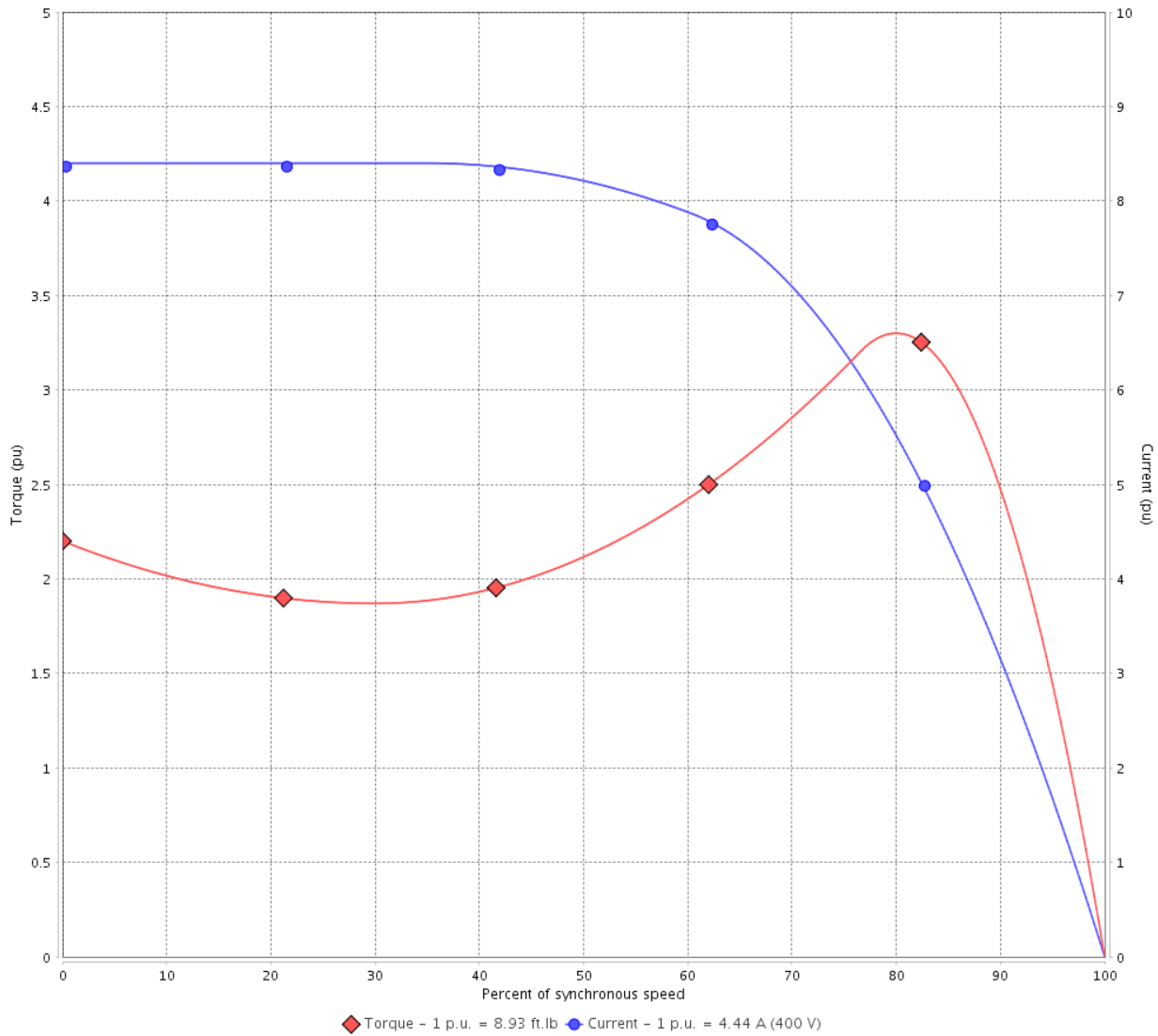
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13248829

Catalog # : 003180T3V182TC-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 4P

Rated current	: 8.88/4.44 A	Moment of inertia (J)	: 0.3092 sq.ft.lb
LRC	: 8.4	Duty cycle	: Cont.(S1)
Rated torque	: 8.93 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

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

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

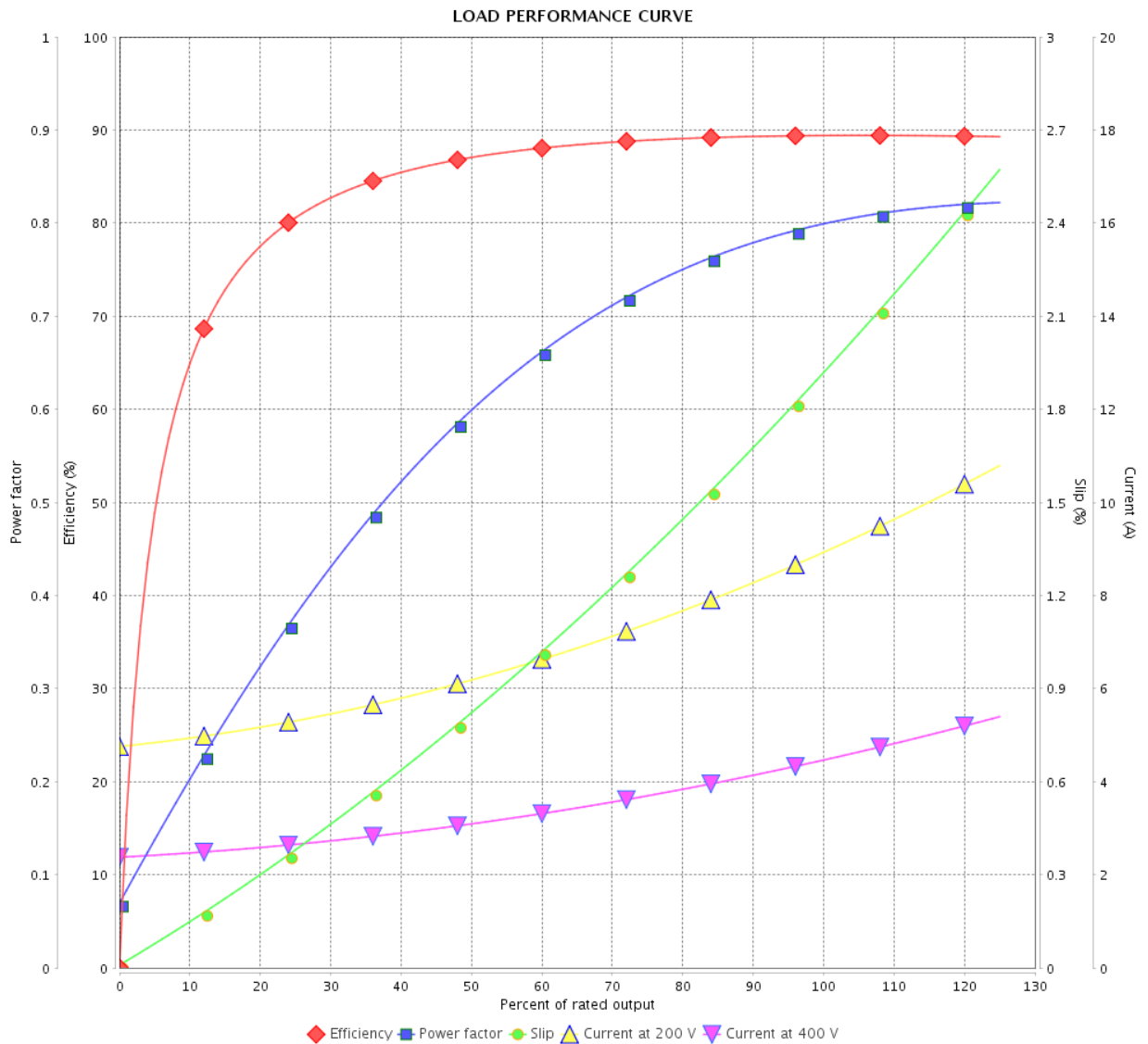


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13248829

Catalog # : 003180T3V182TC-SG



Performance : 200/400 V 60 Hz 4P

Rated current : 8.88/4.44 A  
 LRC : 8.4  
 Rated torque : 8.93 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 330 %  
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.3092 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 13248829  
Catalog # : 00318OT3V182TC-SG

Performance : 200/400 V 60 Hz 4P

Rated current	: 8.88/4.44 A	Moment of inertia (J)	: 0.3092 sq.ft.lb
LRC	: 8.4	Duty cycle	: Cont.(S1)
Rated torque	: 8.93 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

Heating constant

Cooling constant

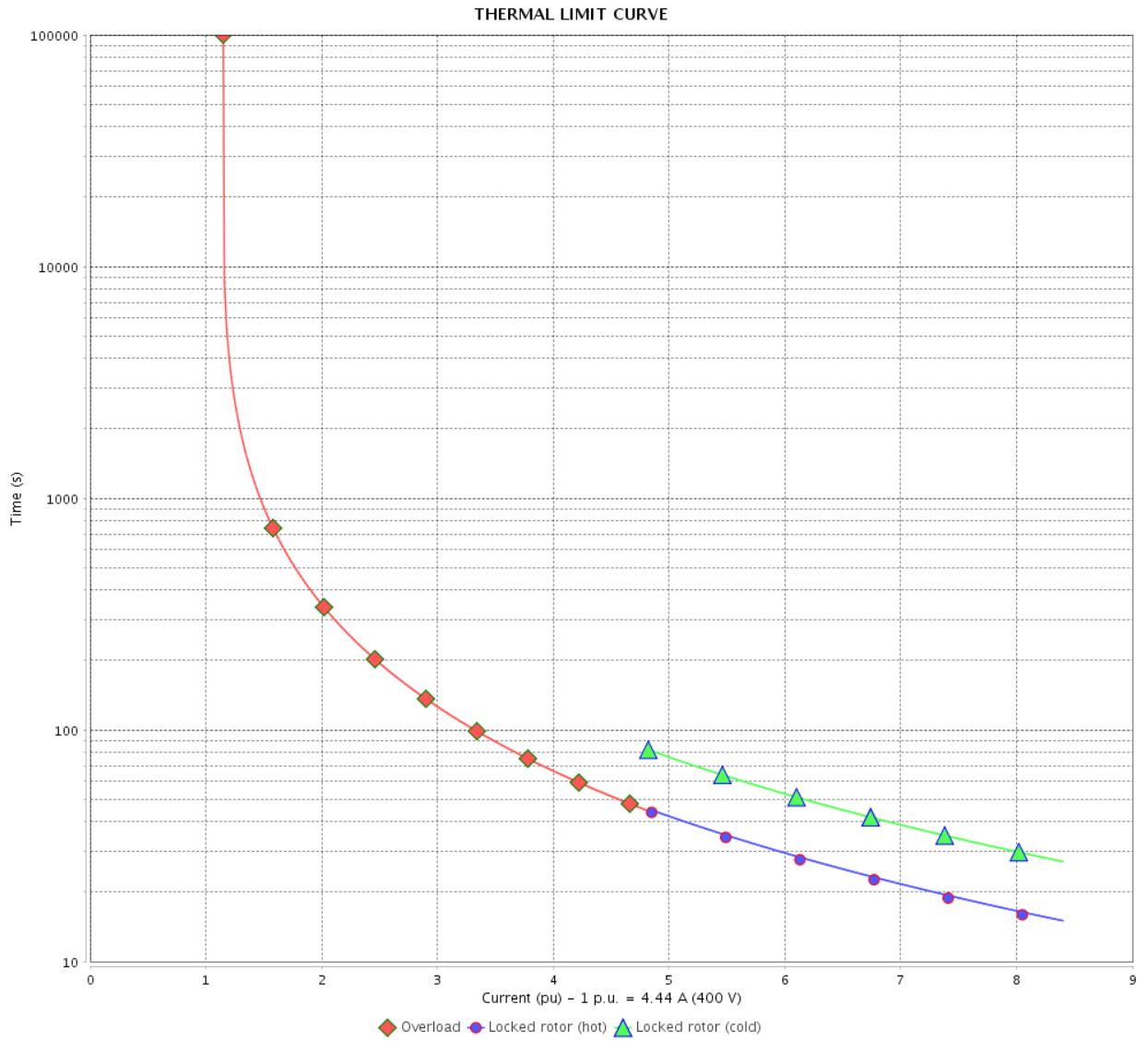
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

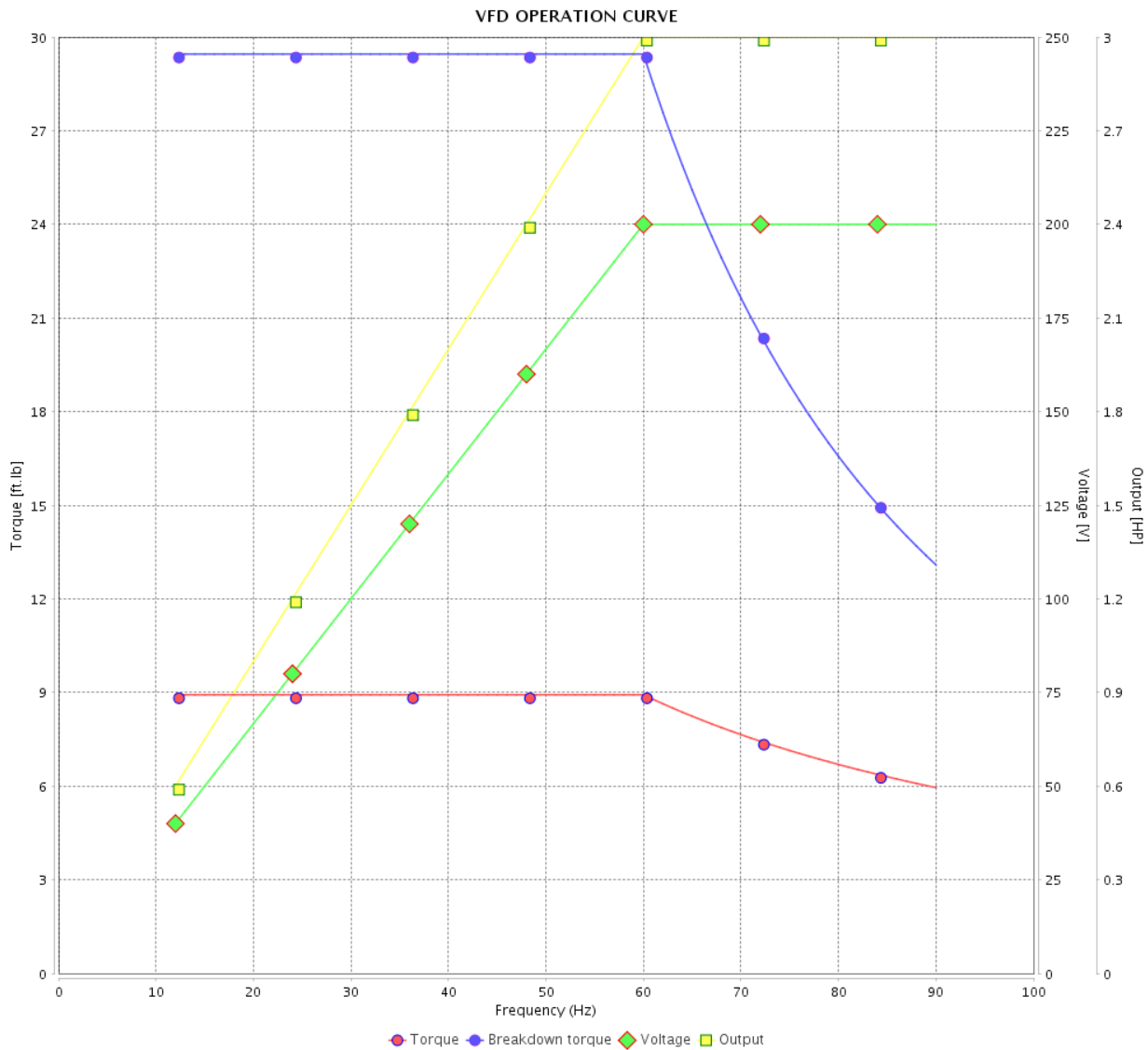


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13248829

Catalog # : 003180T3V182TC-SG

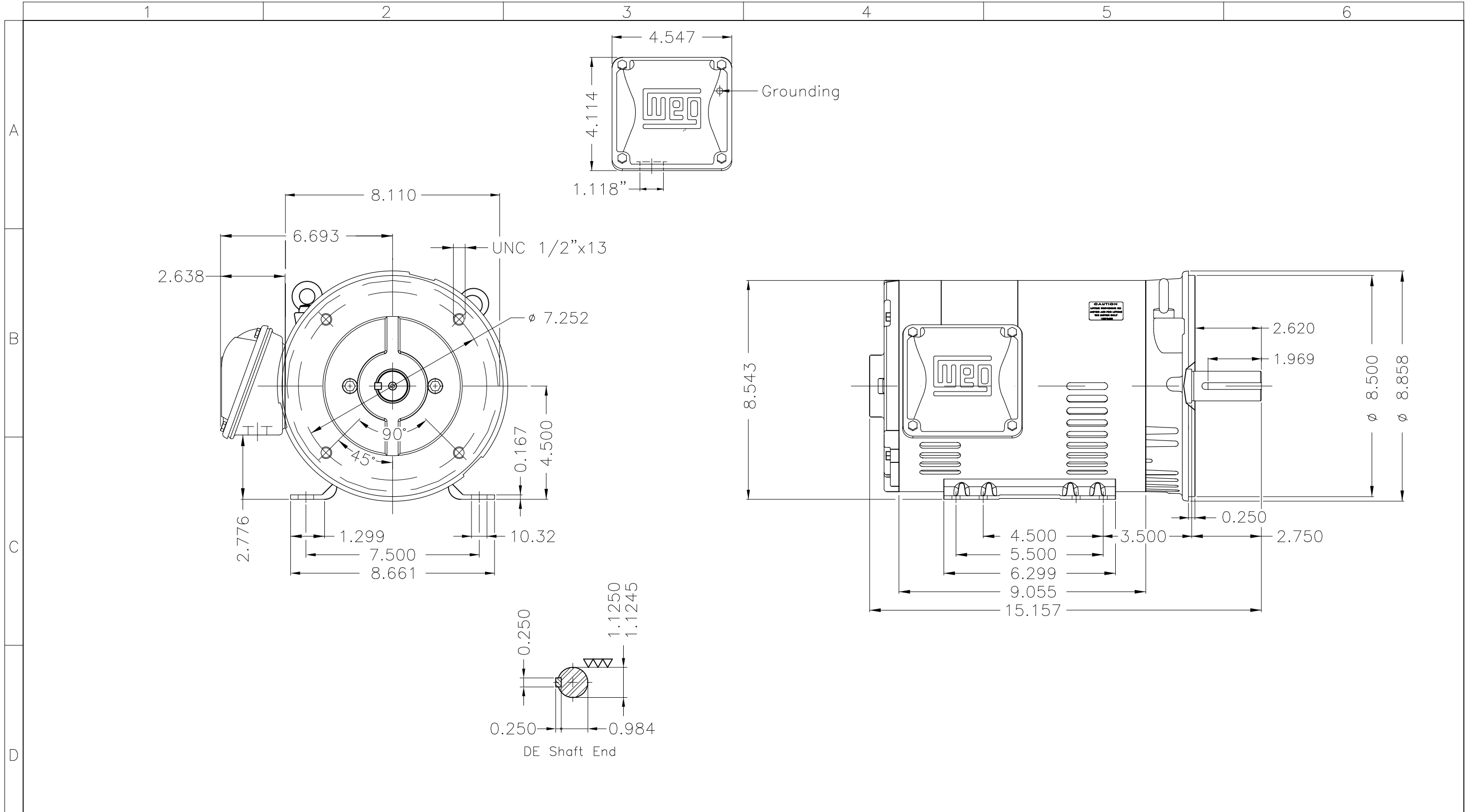


Performance : 200/400 V 60 Hz 4P

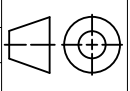
Rated current : 8.88/4.44 A  
 LRC : 8.4  
 Rated torque : 8.93 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 330 %  
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.3092 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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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. FRAME 182/4TC IP21 ODP					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET		1 / 1	

3 HP 04 Poles 60 Hz

A

PREVIEW

WDD

