

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :	
Product line	: NEMA Premium Efficiency Three-Phase
Product code :	13413918
Catalog # :	00118OT3P143TC-S
Frame : 143/5TC Output : 1 HP (0.75 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 200 V Rated current : 3.47 A L. R. Amperes : 27.8 A LRC : 8.0x(Code L) No load current : 2.20 A Rated speed : 1760 rpm Slip : 2.22 % Rated torque : 2.98 ft.lb Locked rotor torque : 290 % Breakdown torque : 360 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1101 sq.ft.lb Design : B	Locked rotor time : 39s (cold) 22s (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 : 52.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 34.4 lb
Output	25% 50% 75% 100%
Efficiency (%)	79.9 81.5 84.0 85.5
Power Factor	0.29 0.51 0.65 0.73
Foundation loads	
Max. traction	: 76 lb
Max. compression	: 110 lb
Bearing type	: <u>Drive end</u> 6205 ZZ <u>Non drive end</u> 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.	
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Checked by	Checked
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



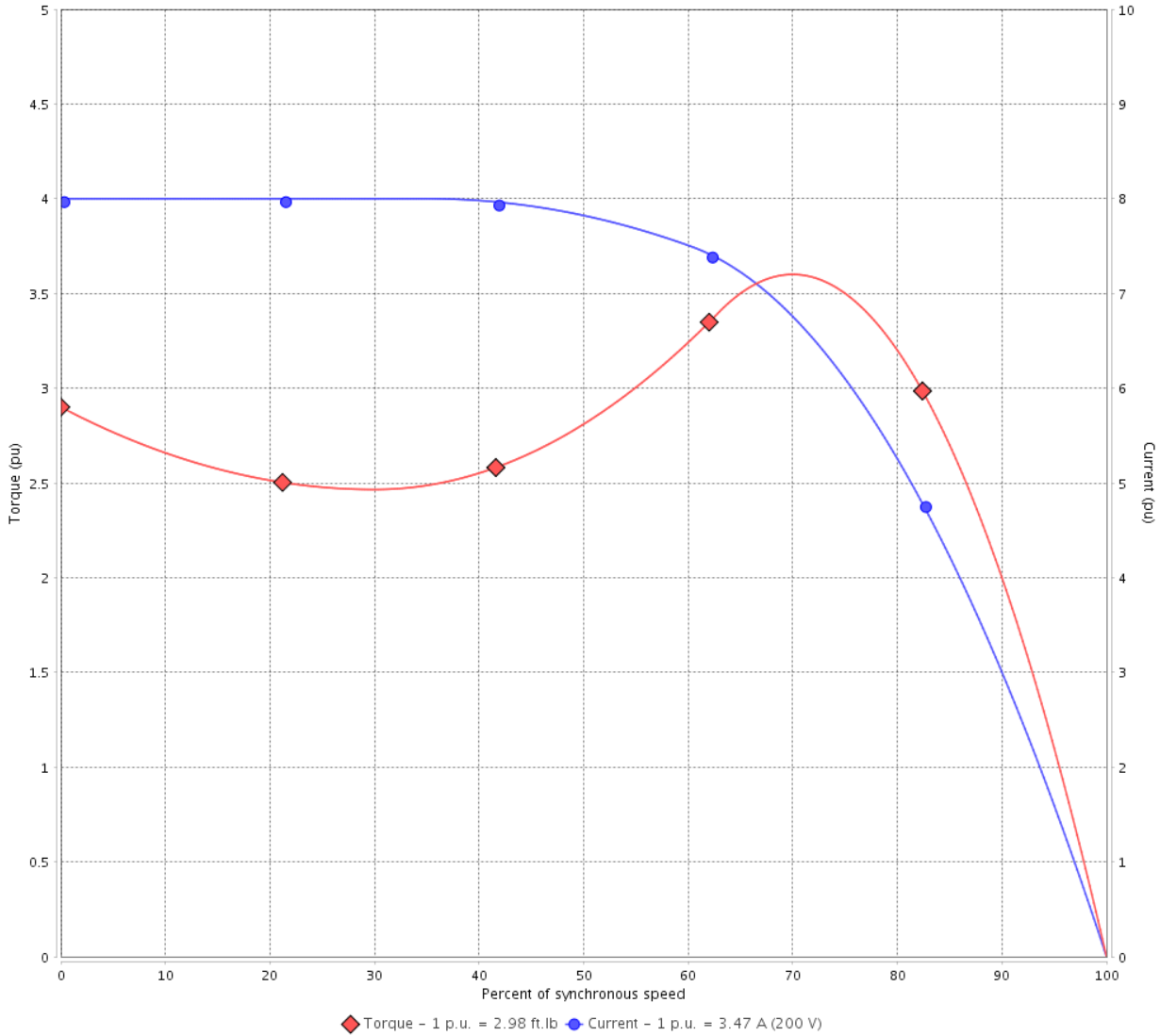
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 13413918

Catalog # : 001180T3P143TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200 V 60 Hz 4P

Rated current	: 3.47 A	Moment of inertia (J)	: 0.1101 sq.ft.lb
LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.15
Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Locked rotor time : 39s (cold) 22s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

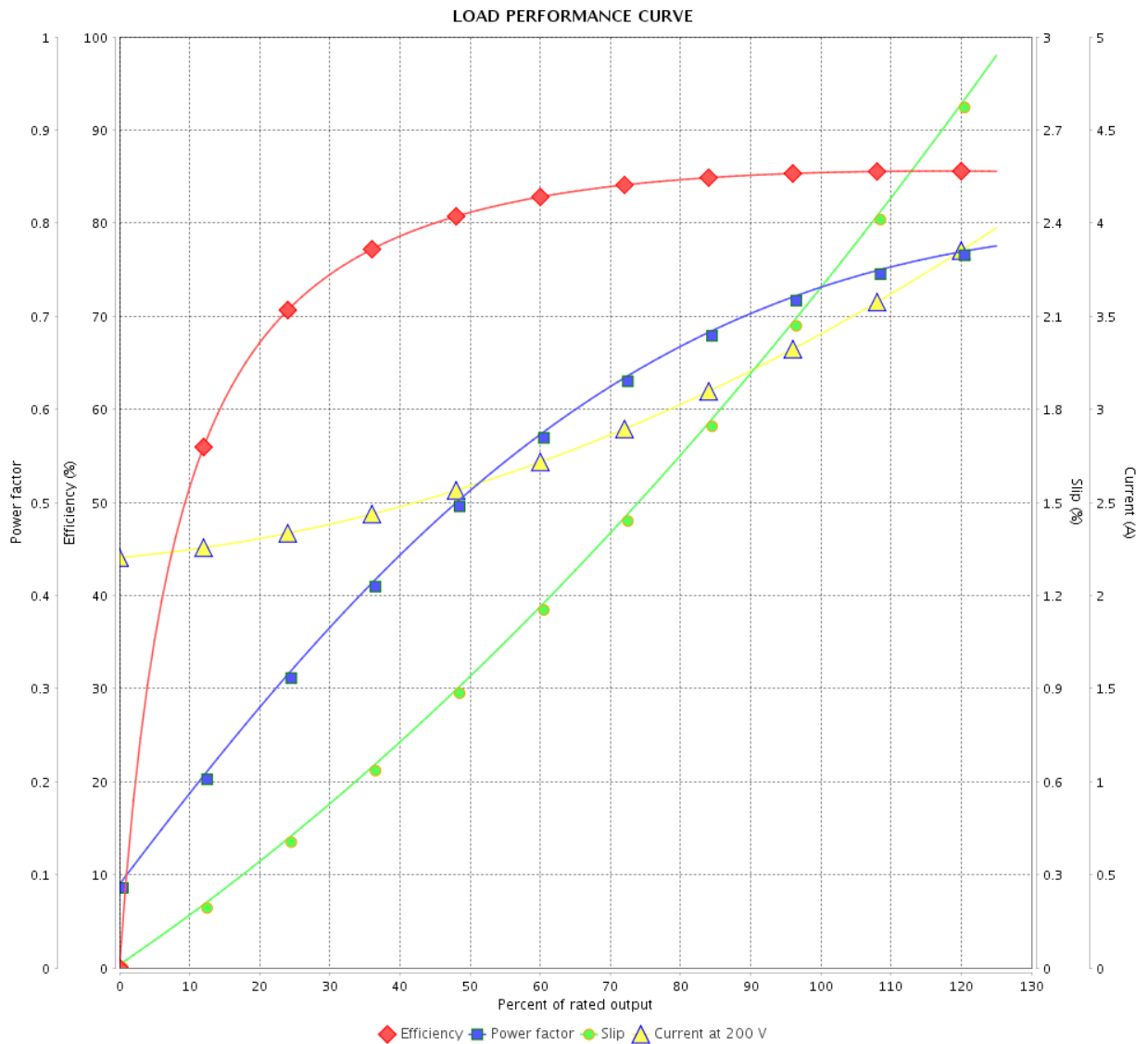


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Product line : NEMA Premium Efficiency Three-Phase

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Performance : 200 V 60 Hz 4P

Rated current : 3.47 A
 LRC : 8.0
 Rated torque : 2.98 ft.lb
 Locked rotor torque : 290 %
 Breakdown torque : 360 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.1101 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



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Heating constant

Cooling constant

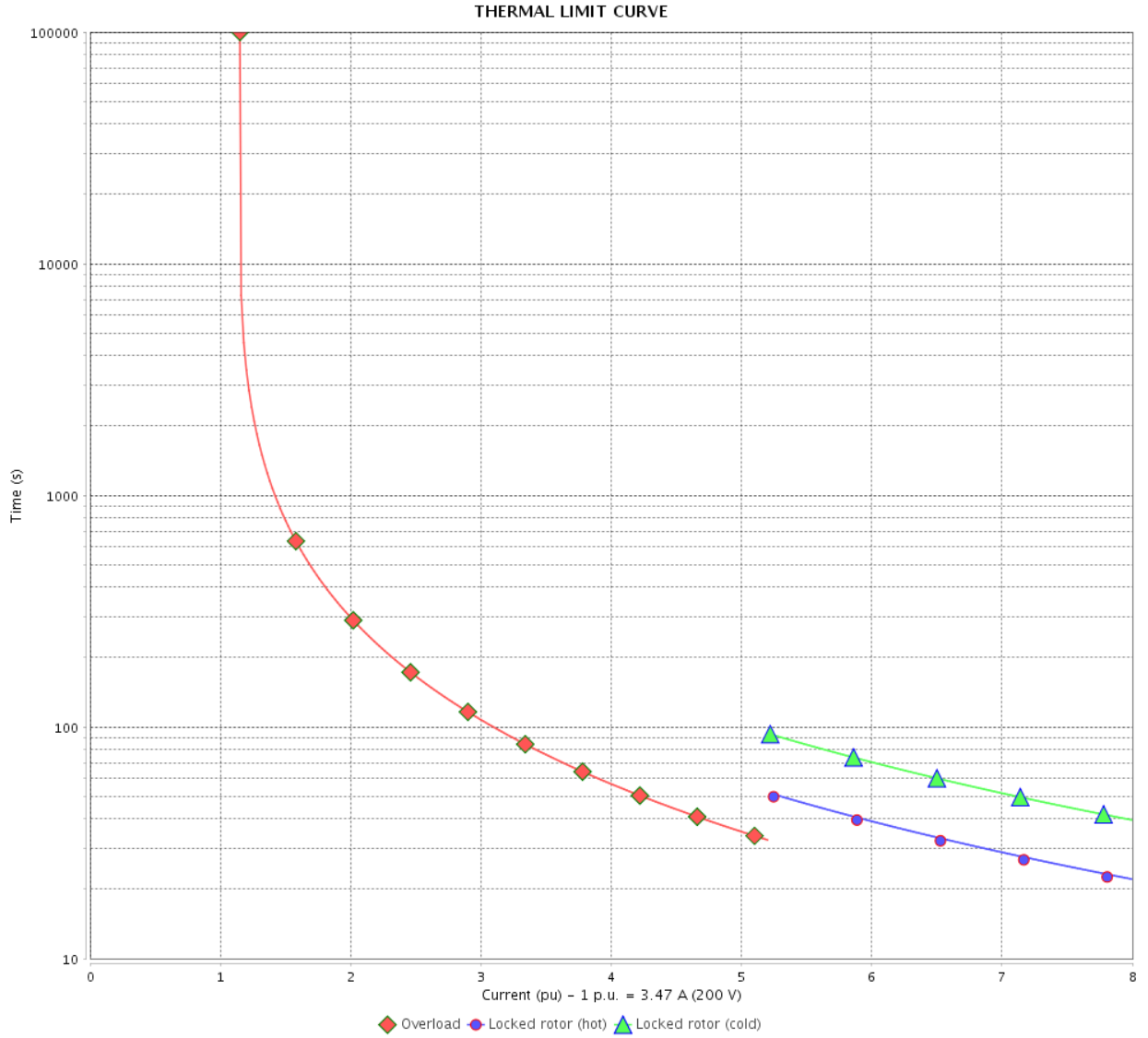
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



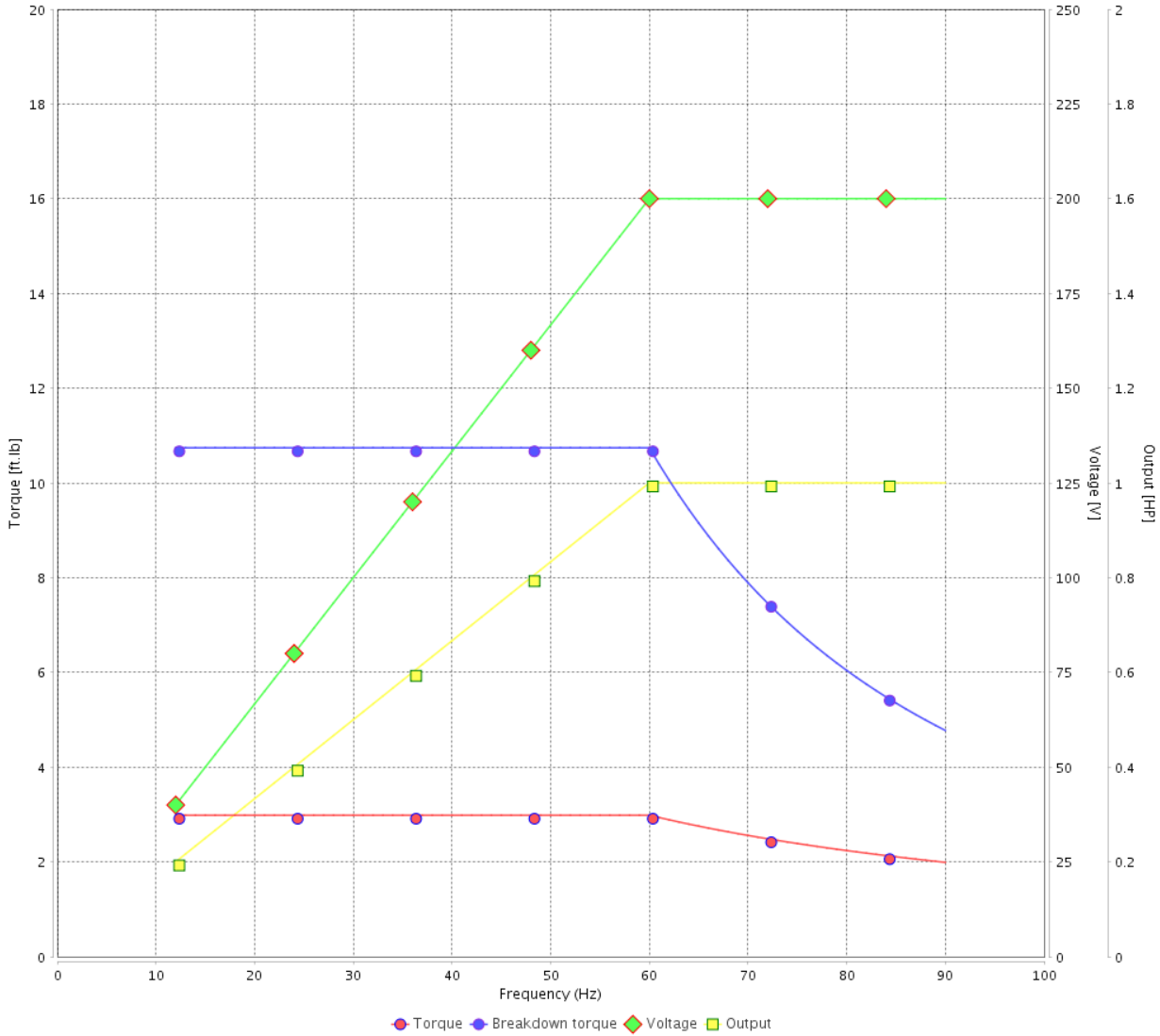
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Product line : NEMA Premium Efficiency Three-Phase

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VFD OPERATION CURVE

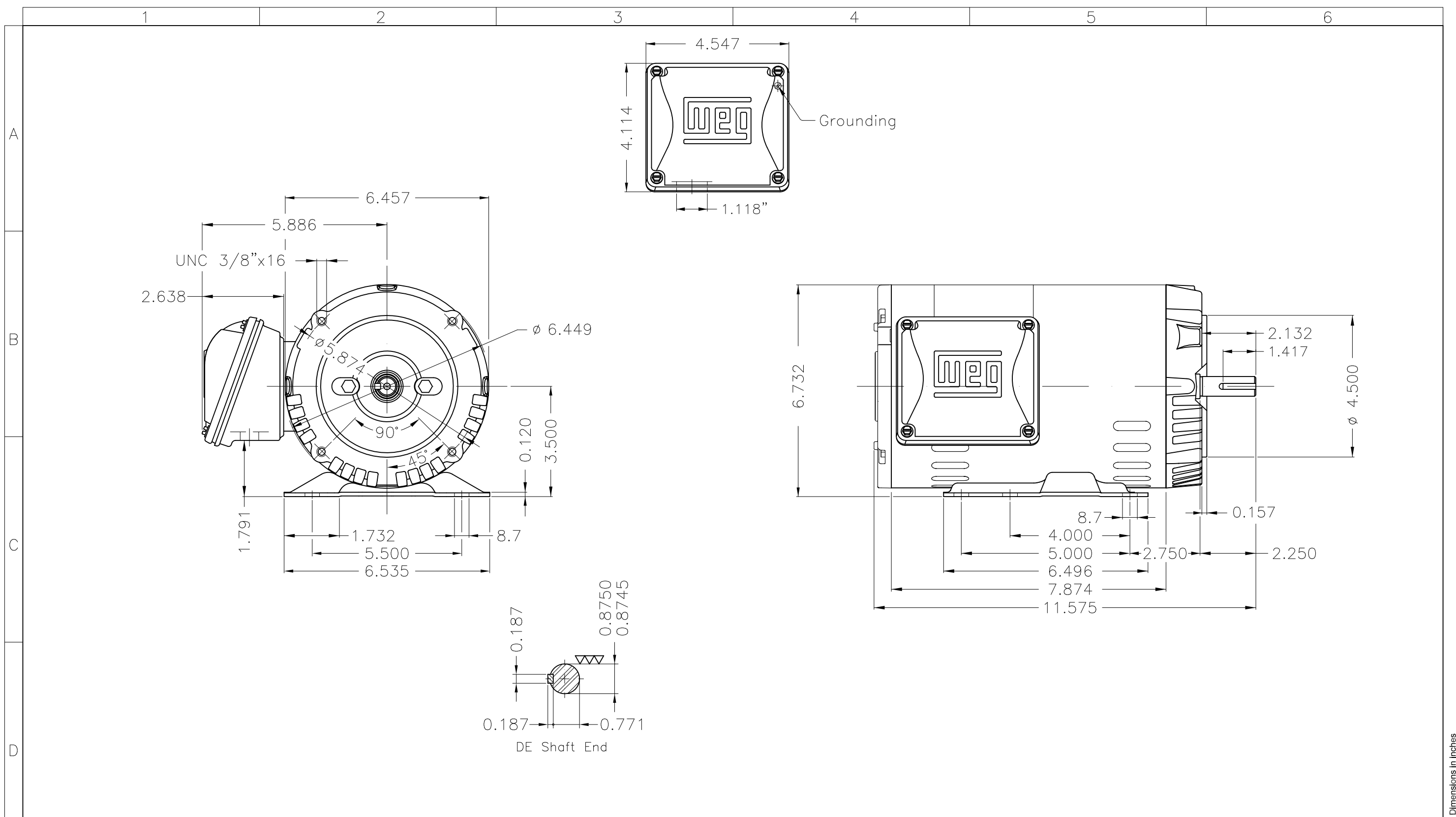


Performance : 200 V 60 Hz 4P

Rated current : 3.47 A
 LRC : 8.0
 Rated torque : 2.98 ft.lb
 Locked rotor torque : 290 %
 Breakdown torque : 360 %
 Rated speed : 1760 rpm


Moment of inertia (J) : 0.1101 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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A
B
C
D
E

1 2 3 4 5 6

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.			PREVIEW	WDD	SHEET	1 / 1	
CHECKED		FRAME 143/5TC IP21 ODP							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

1 HP 04 Poles 60 Hz

A