

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JP Pump NEMA Premium Efficiency Three-Phase      Product code : 14490330  
Catalog # : 06036OT3G326JP-W40

Frame	: 324/6JP	Locked rotor time	: 21s (cold) 12s (hot)
Output	: 60 HP (45 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 71.0 A	Protection degree	: IP23
L. R. Amperes	: 447 A	Cooling method	: IC01 - ODP
LRC	: 6.3x(Code G)	Mounting	: F-1
No load current	: 20.0 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3560 rpm	Noise level <sup>2</sup>	: 75.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 88.5 ft.lb	Approx. weight <sup>3</sup>	: 487 lb
Locked rotor torque	: 220 %		
Breakdown torque	: 229 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 3.82 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads
Efficiency (%)	91.7	92.4	93.0	93.6	Max. traction
Power Factor	0.51	0.73	0.82	0.85	Max. compression

		<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	:	19658 h	20000 h
Lubricant amount	:	21 g	11 g
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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Date	10/04/2020			

# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage

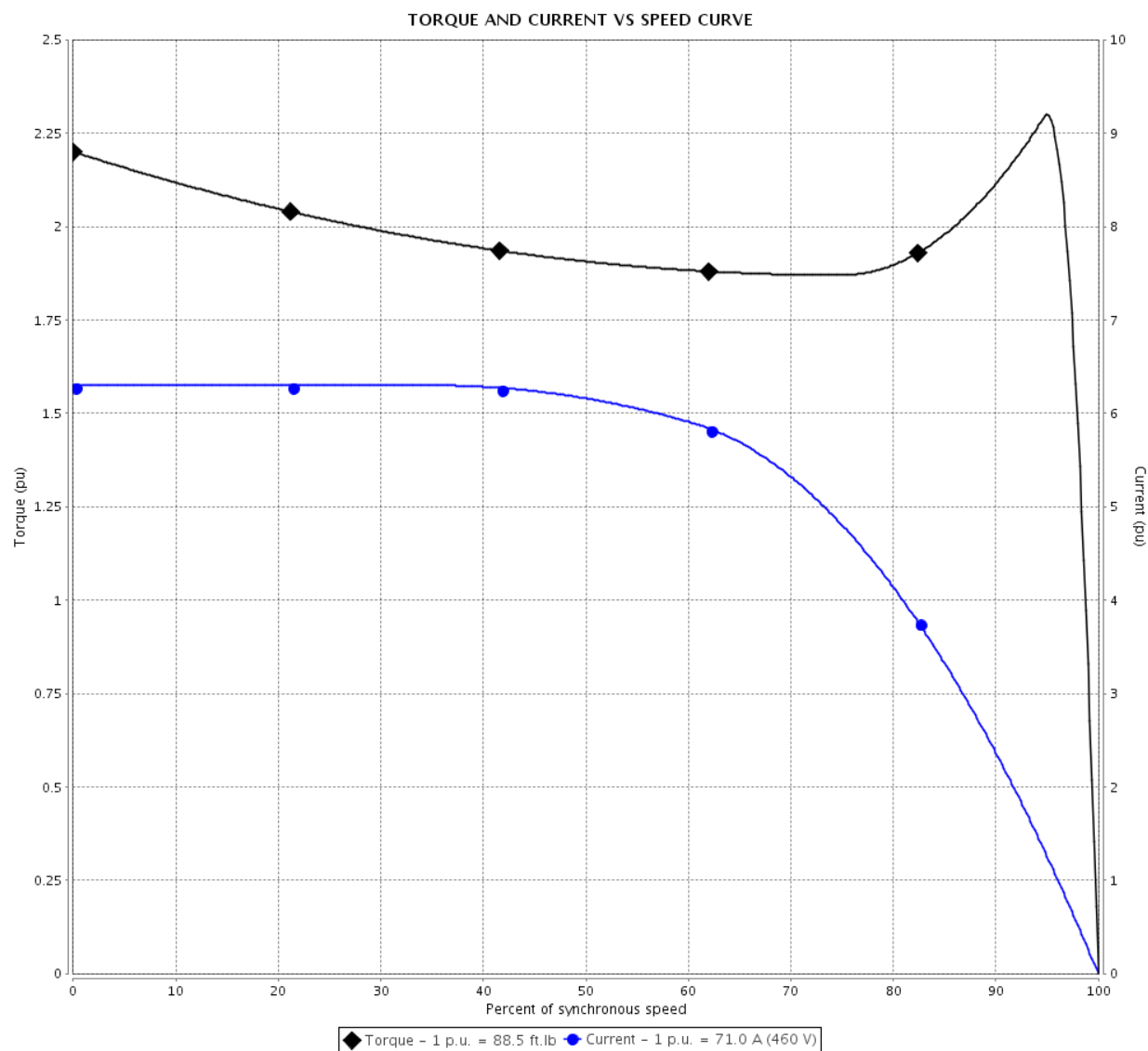


Customer :

Product line : W40 JP Pump NEMA Premium  
Efficiency Three-Phase

Product code : 14490330

Catalog # : 06036OT3G326JP-W40



Performance : 460 V 60 Hz 2P

Rated current	: 71.0 A	Moment of inertia (J)	: 3.82 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 88.5 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 3560 rpm	Design	: B

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

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Checked by				
Date	10/04/2020			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

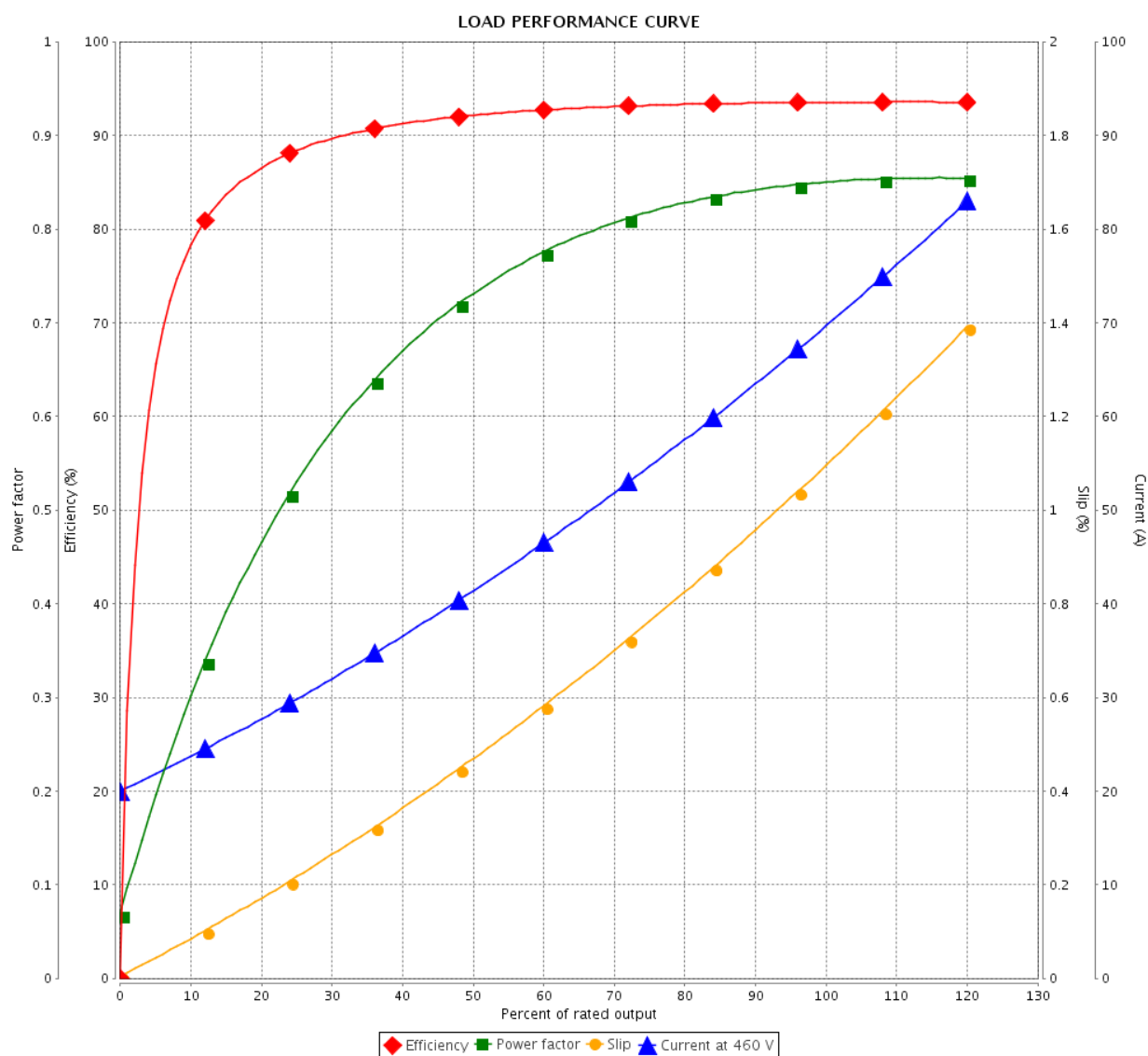


Customer :

Product line : W40 JP Pump NEMA Premium  
Efficiency Three-Phase

Product code : 14490330

Catalog # : 06036OT3G326JP-W40



Performance : 460 V 60 Hz 2P

Rated current : 71.0 A  
LRC : 6.3  
Rated torque : 88.5 ft.lb  
Locked rotor torque : 220 %  
Breakdown torque : 229 %  
Rated speed : 3560 rpm

Moment of inertia (J) : 3.82 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

## Three Phase Induction Motor - Squirrel Cage



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Efficiency Three-Phase

Product code : 14490330

Catalog # : 06036OT3G326JP-W40

Performance : 460 V 60 Hz 2P

Rated current	: 71.0 A	Moment of inertia (J)	: 3.82 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 88.5 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 3560 rpm	Design	: B

Heating constant

Cooling constant

Rev.

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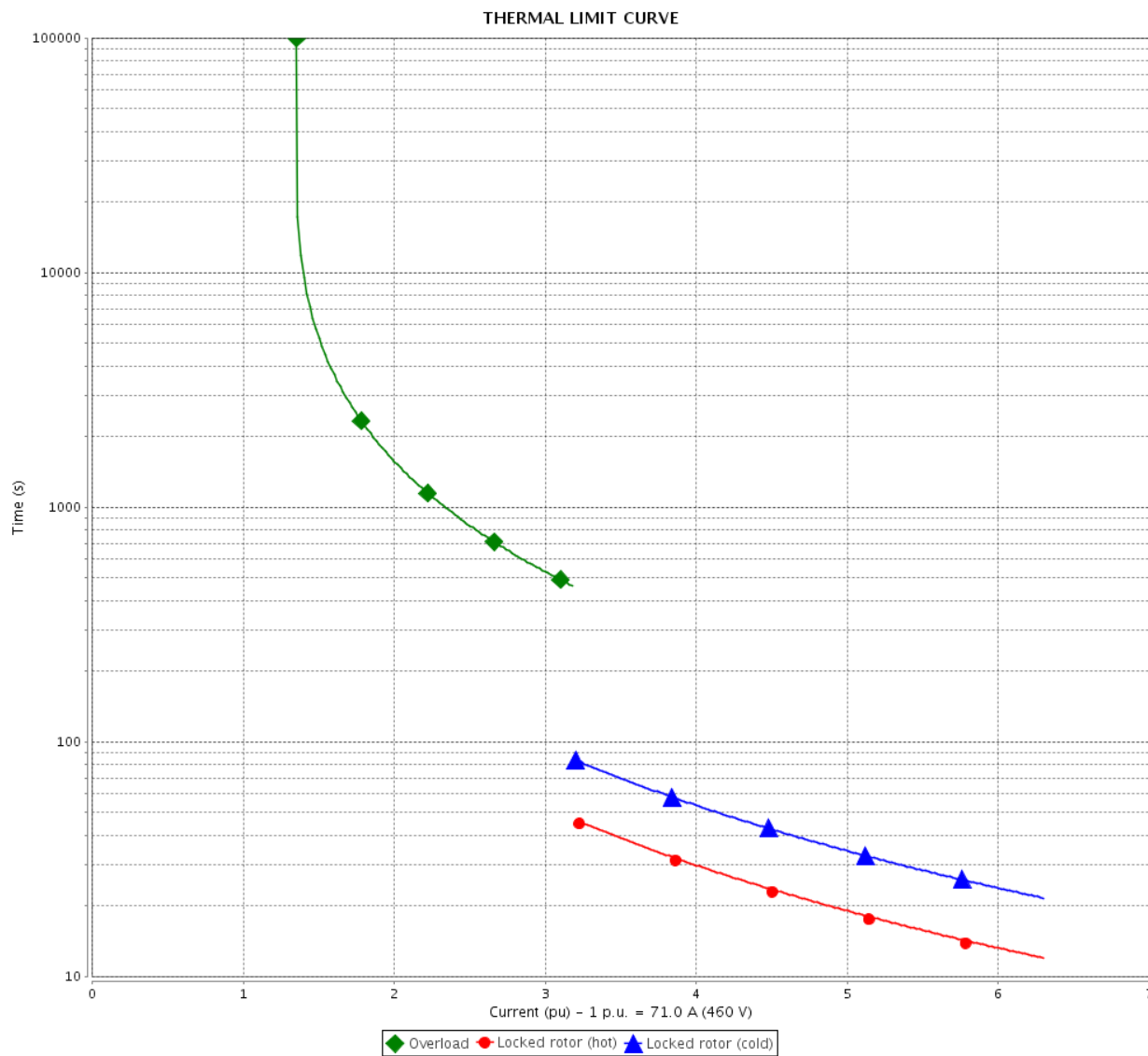
Revision

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

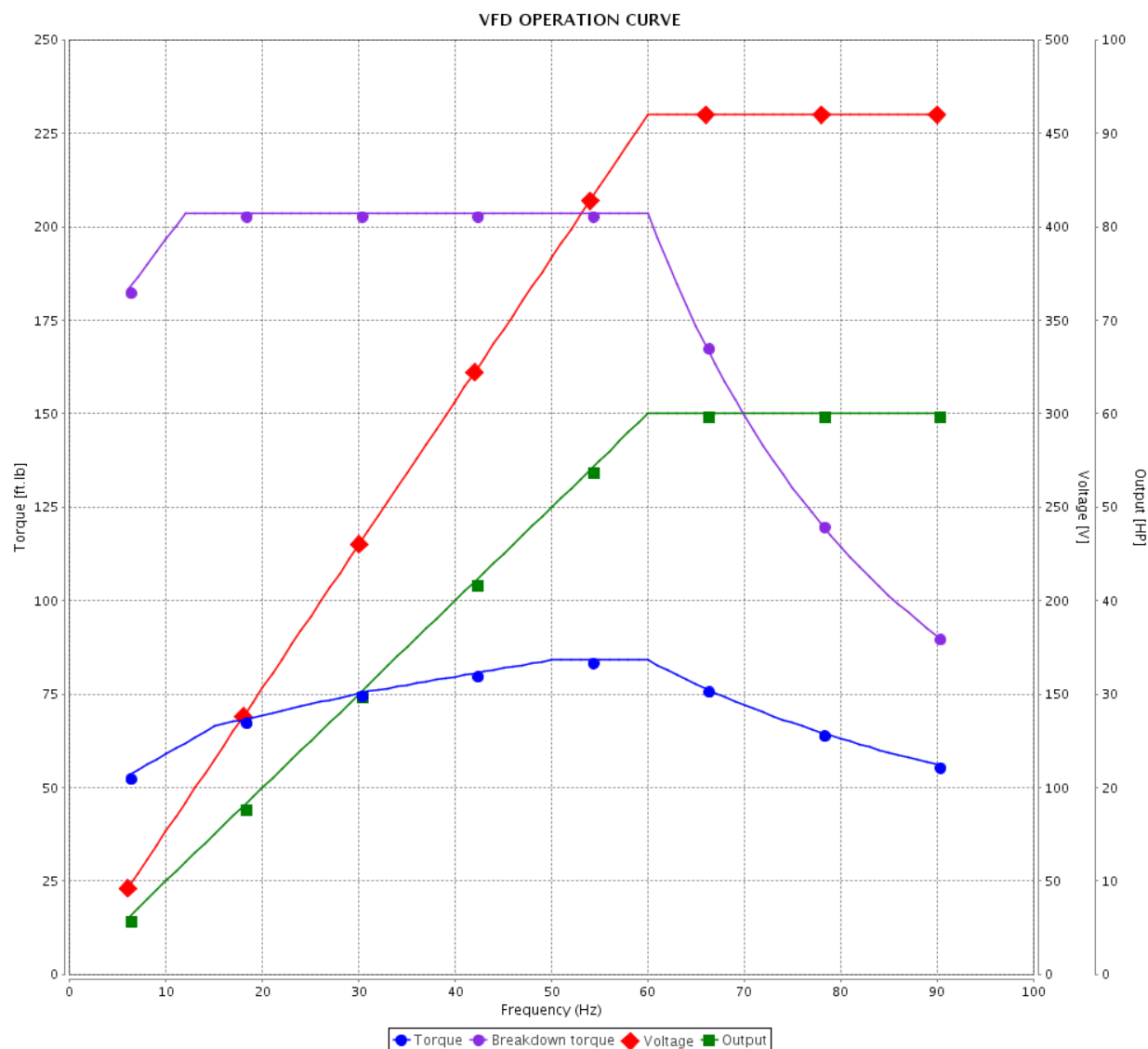


Customer :

Product line : W40 JP Pump NEMA Premium  
Efficiency Three-Phase

Product code : 14490330

Catalog # : 06036OT3G326JP-W40

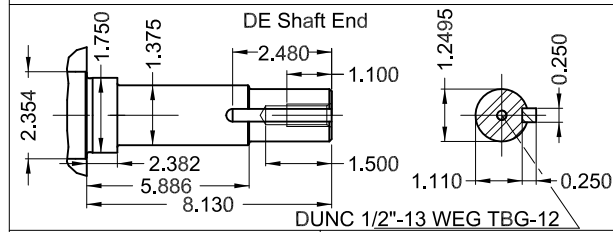
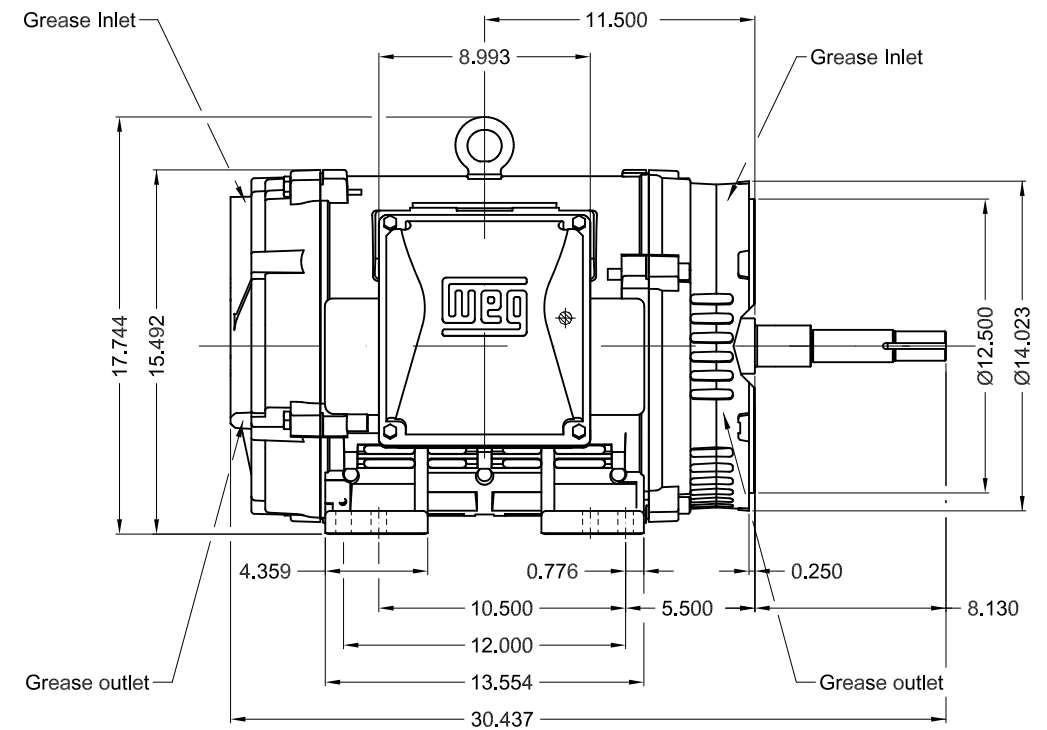
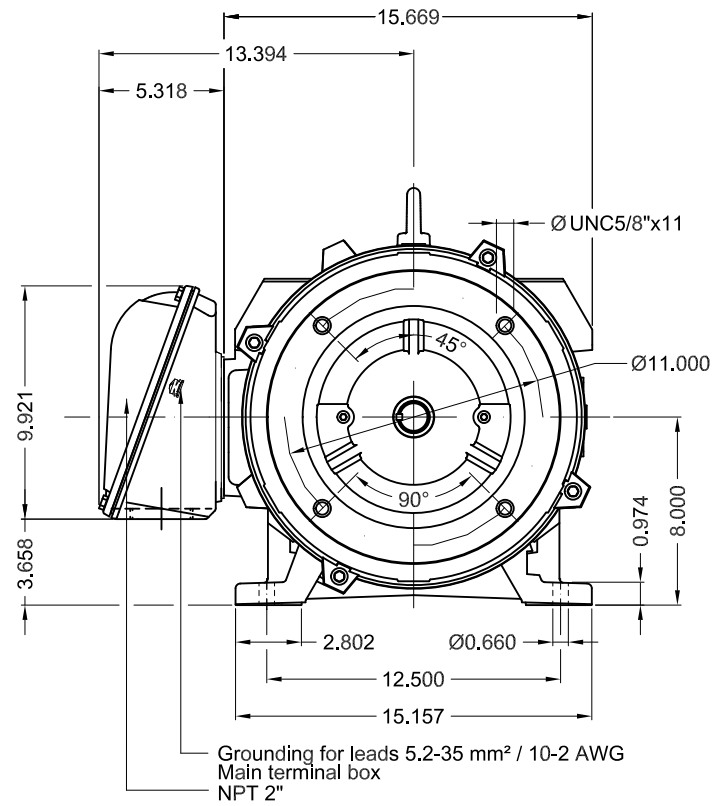


Performance : 460 V 60 Hz 2P

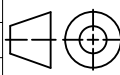

Rated current : 71.0 A  
LRC : 6.3  
Rated torque : 88.5 ft.lb  
Locked rotor torque : 220 %  
Breakdown torque : 229 %  
Rated speed : 3560 rpm

Moment of inertia (J) : 3.82 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

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Date	10/04/2020				



Color RAL 5009  
Painting plan 203A  
Mounting NEMA F-1  
Mounting B34R(D)

60 HP 02 Poles 60Hz										A			
										1:8			
ECM		LOC		SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER	
EXECUTED		PIRWUSER			THREE PHASE W40 MOTOR NEMA PREMIUM EFF FRAME 324/6JP IP23 ODP					PREVIEW			
CHECKED										WDD			
RELEASED													
REL DT.				WMO	Jaragua do Sul			Product Engineering		SHEET	1 / 1		