

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JP Pump High Efficiency Three-Phase Product code : 14830326
Catalog # : 05036OP3HFP324JPV-W4

Frame	: 324/6JP	Locked rotor time	: 36s (cold) 20s (hot)
Output	: 50 HP (37 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.
Rated current	: 46.7 A	Protection degree	: IP23
L. R. Amperes	: 271 A	Cooling method	: IC01 - ODP
LRC	: 5.8x(Code F)	Mounting	: W-6
No load current	: 13.5 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3555 rpm	Starting method	: Direct On Line
Slip	: 1.25 %	Approx. weight ³	: 442 lb
Rated torque	: 73.9 ft.lb		
Locked rotor torque	: 170 %		
Breakdown torque	: 200 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 3.01 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads
Efficiency (%)	91.5	91.7	92.4	92.4	Max. traction
Power Factor	0.54	0.78	0.84	0.86	Max. compression

	Drive end	Non drive end
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	

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
Performed by				
Checked by				
Date	10/04/2020			

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Revision

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



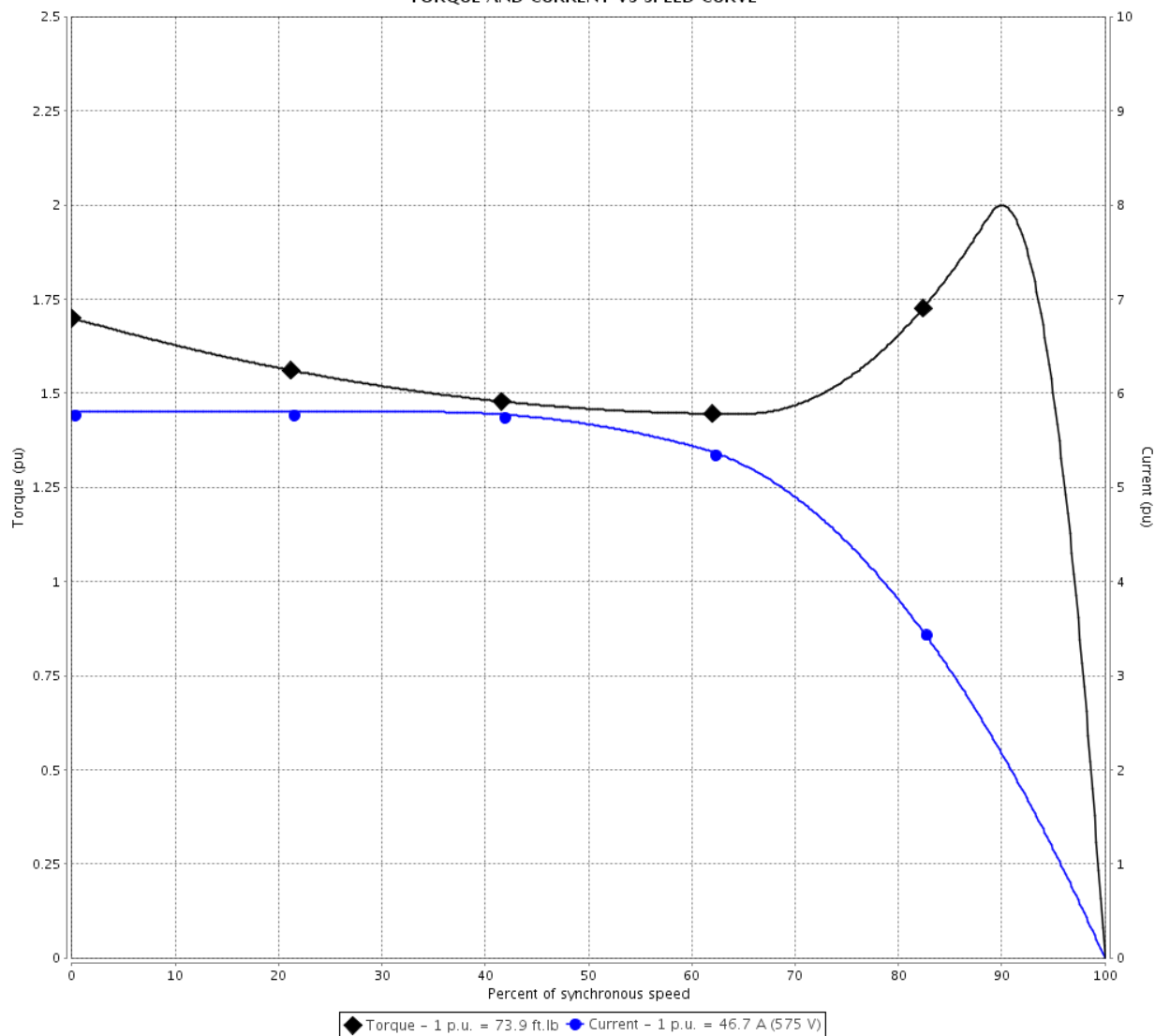
Customer :

Product line : W40 JP Pump High Efficiency
Three-Phase

Product code : 14830326

Catalog # : 05036OP3HFP324JPV-
W4

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 46.7 A	Moment of inertia (J)	: 3.01 sq.ft.lb
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 73.9 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.15
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 3555 rpm	Design	: B

Locked rotor time : 36s (cold) 20s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

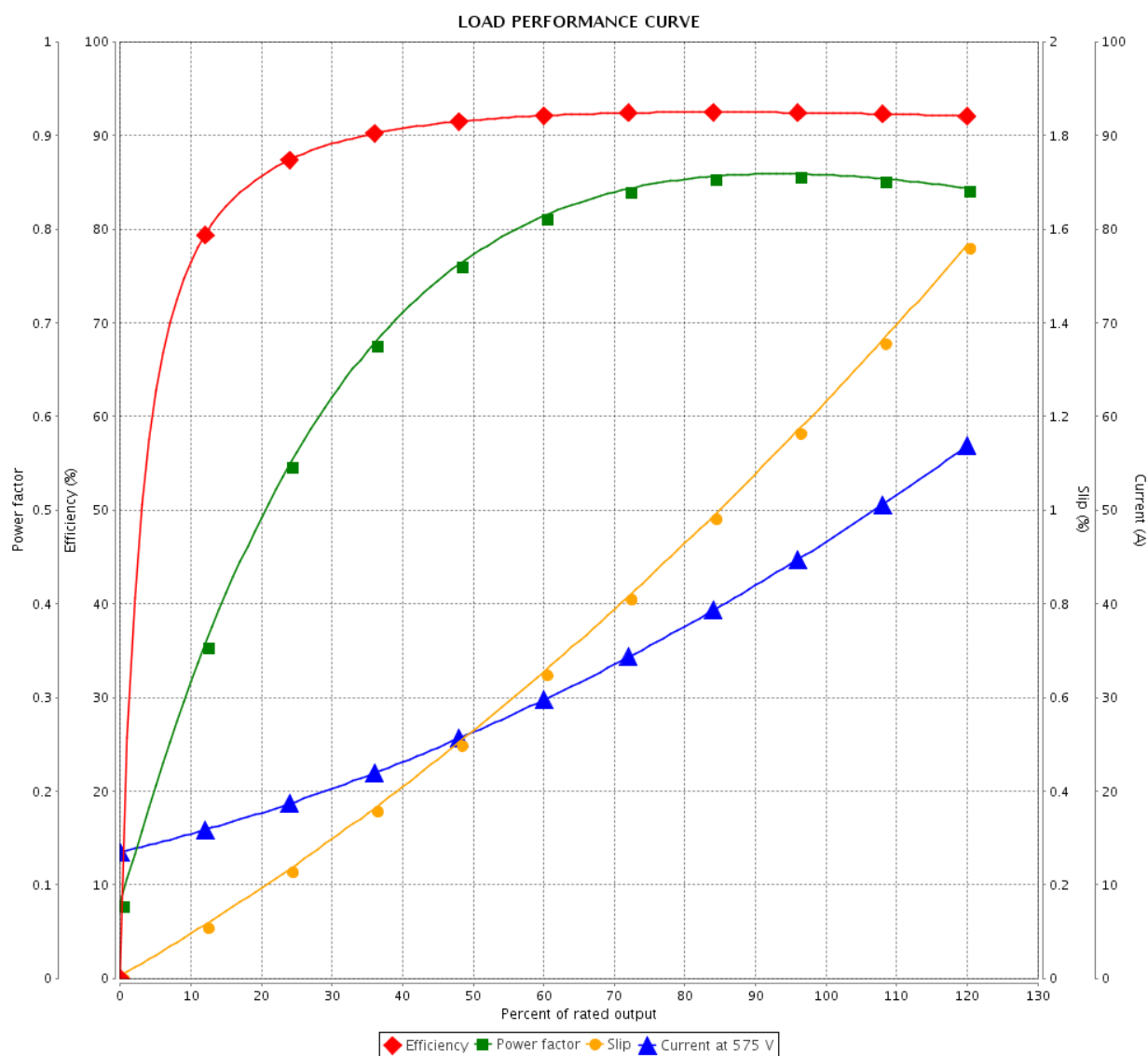


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Rated torque : 73.9 ft.lb
Locked rotor torque : 170 %
Breakdown torque : 200 %
Rated speed : 3555 rpm

Moment of inertia (J) : 3.01 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



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Product line

: W40 JP Pump High Efficiency
Three-Phase

Product code :

14830326

Catalog # :

05036OP3HFP324JPV-
W4

Performance : 575 V 60 Hz 2P

Rated current

: 46.7 A

LRC

: 5.8

Rated torque

: 73.9 ft.lb

Locked rotor torque

: 170 %

Breakdown torque

: 200 %

Rated speed

: 3555 rpm

Moment of inertia (J)

: 3.01 sq.ft.lb

Duty cycle

: Cont.(S1)

Insulation class

: F

Service factor

: 1.15

Temperature rise

: 80 K

Design

: B

Heating constant

Cooling constant

Rev.

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Checked

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Date

10/04/2020

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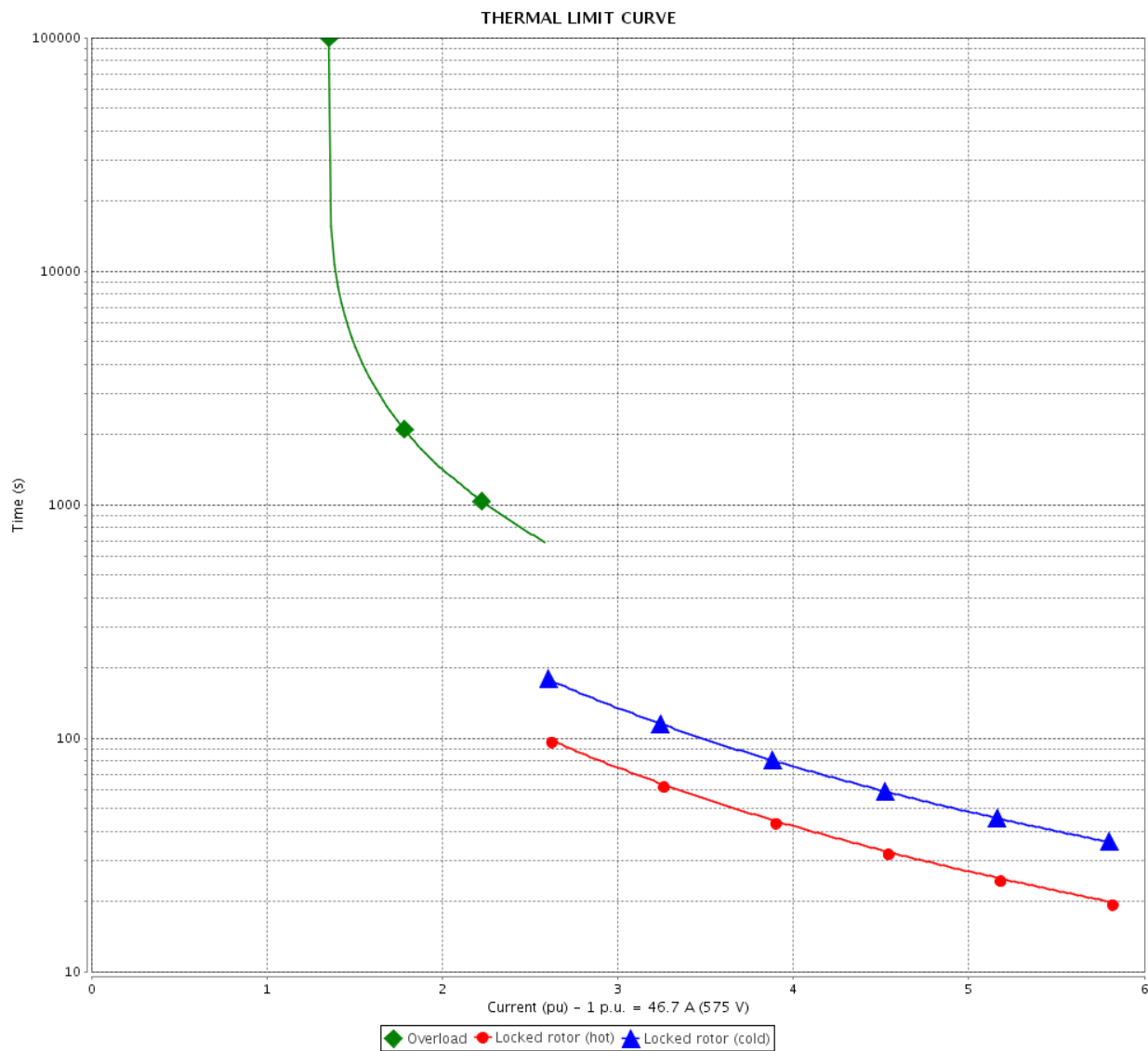
Revision

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

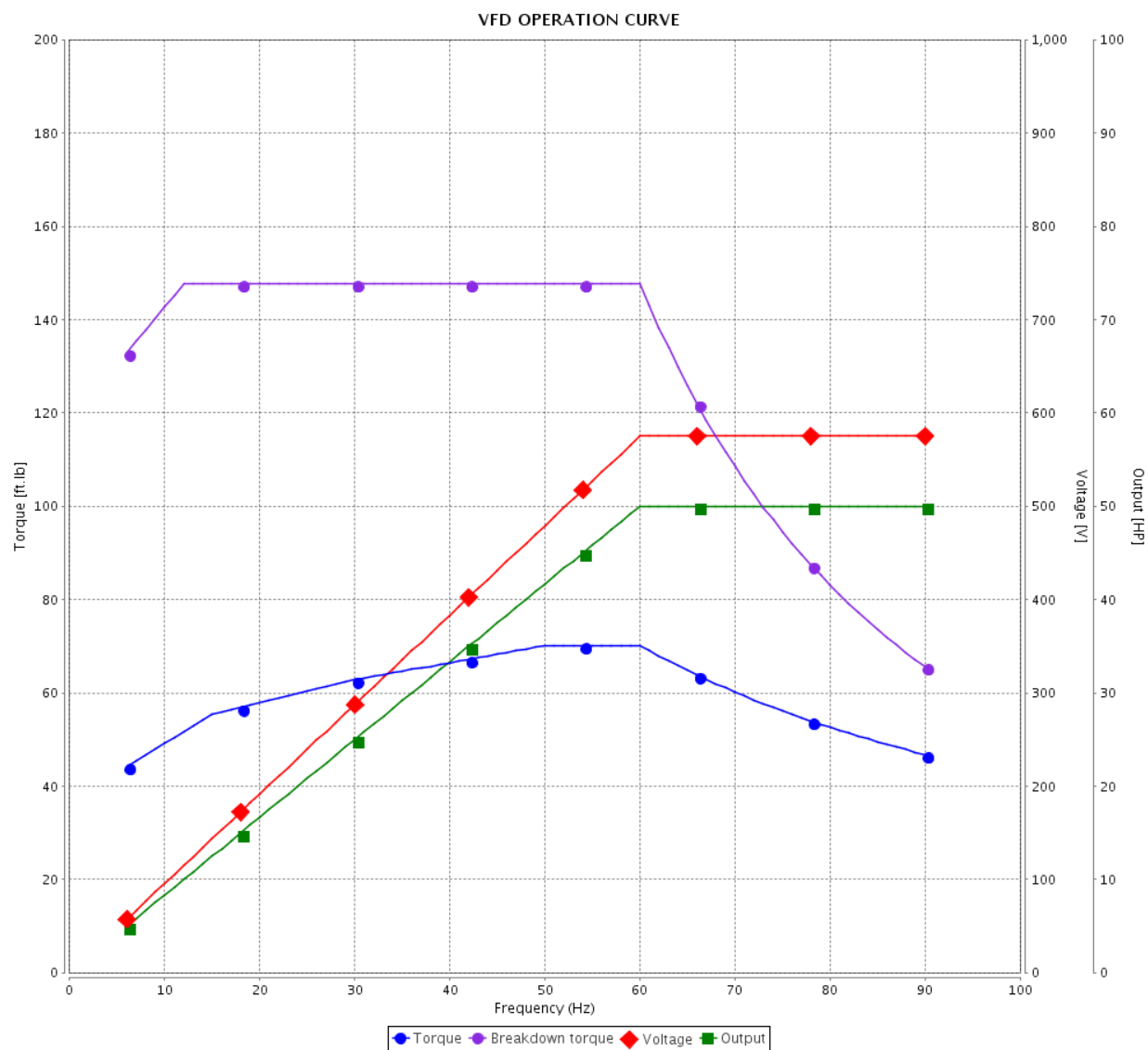


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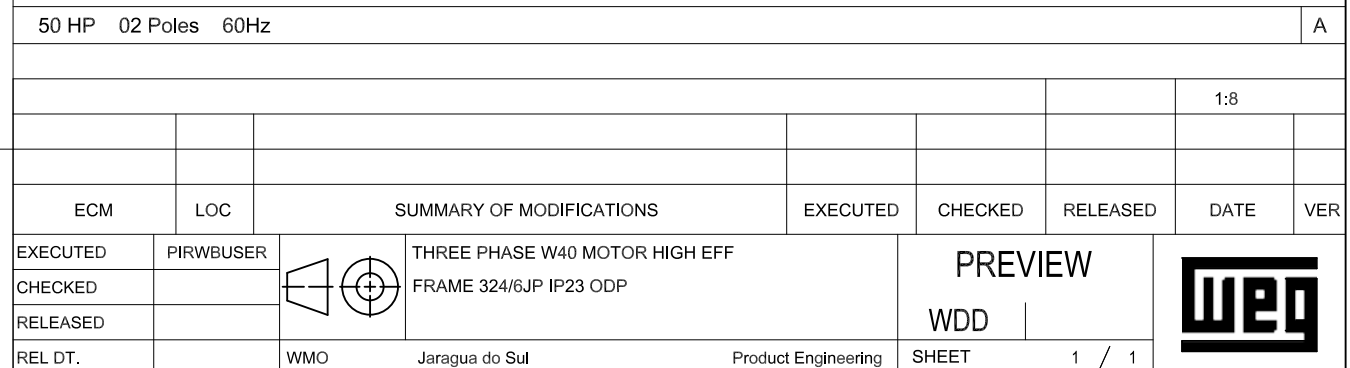
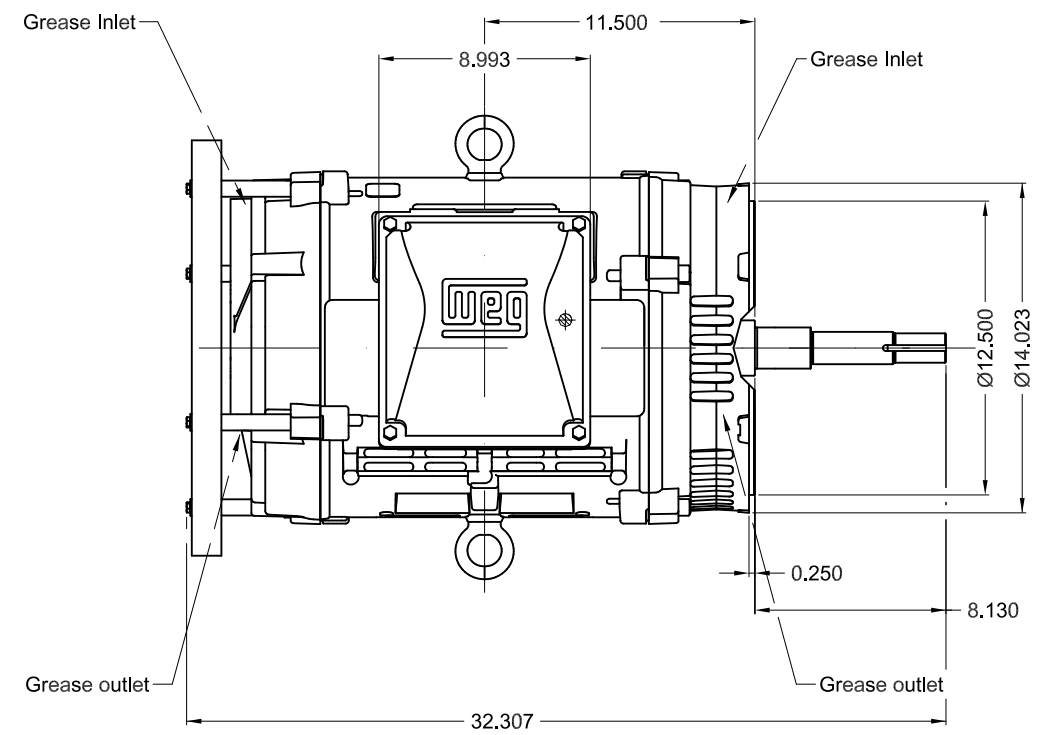


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W40

*Severe Duty*

PH	FR		HP(kW)		Hz	
V —		A —				
NEMA NOM EFF		—	%	RPM		
ENCL ODP	DUTY		INS. CL.	ΔT	K	
PF		DES —	CODE	AMB.		KLUBERSYNTH BHP 72-102
SF	SFA		ALT 1000 m.a.s.l.			
					Lbs	