DATA SHEET

Three Phase Induction Motor - Squirrel Cage

Customer	:

Product line	: W40 JP Pump High Efficiency Three-Phase	Product code :	14830325
		Catalog # :	05036OP3EFP324JPV-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	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 117/58.4 A	Protection degree	: IP23
L. R. Amperes	: 677/339 A	Cooling method	: IC01 - ODP
LRC	: 5.8x(Code F)	Mounting	: W-6
No load current	: 33.8/16.9 A	Rotation[1]	: Both (CW and CCW)
Rated speed	: 3555 rpm	Starting method	: Direct On Line
Slip	: 1.25 %	Approx. weight[3]	: 443 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%
Efficiency (%)	91.5	91.7	92.4	92.4
Power Factor	0.54	0.78	0.84	0.86

Foundation loads

Max. traction

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
USABLE @208V 128A SF 1.00 SFA 128A

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

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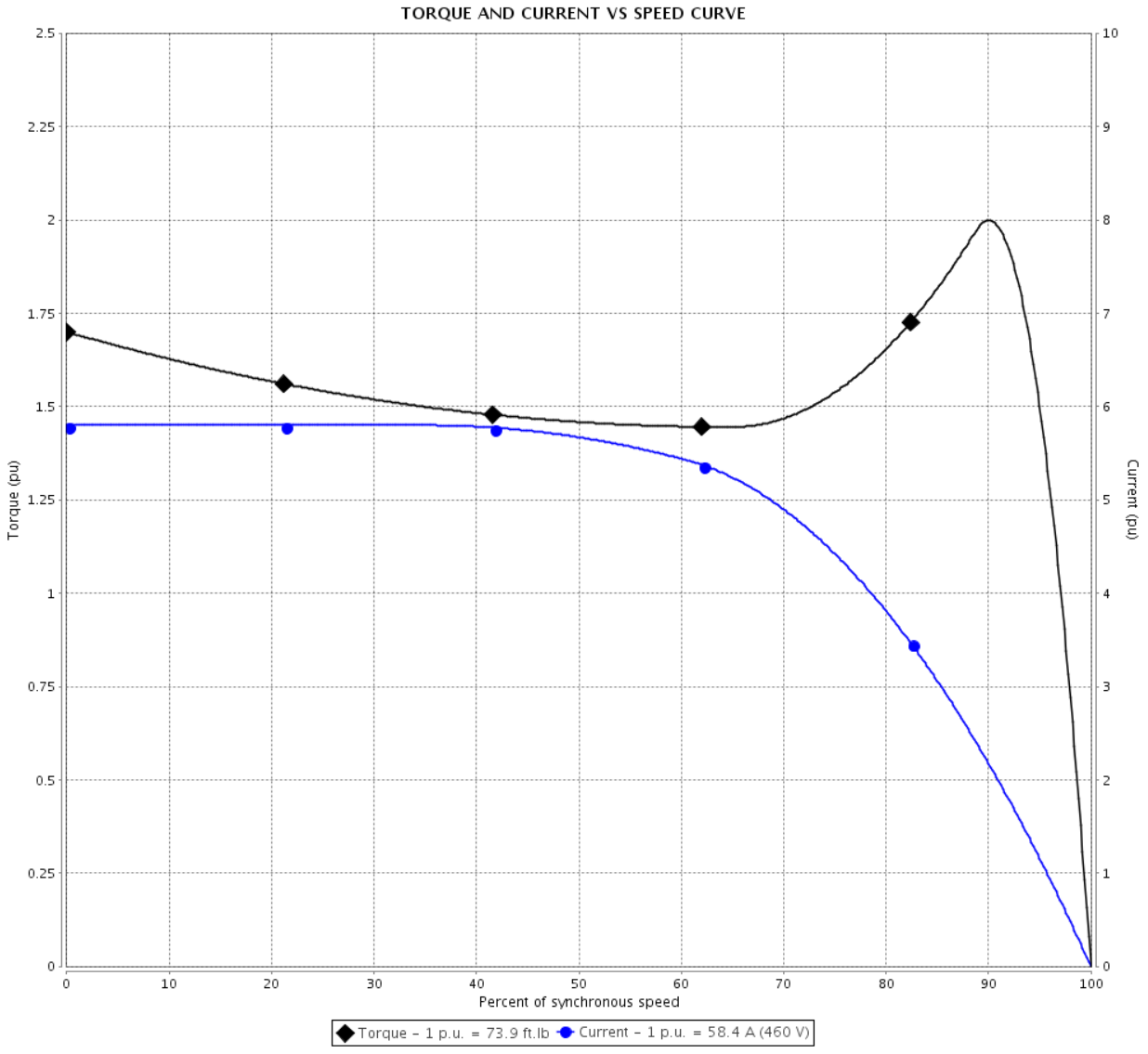

Performance	: 230/460 V 60 Hz 2P

Rated current	: 117/58.4 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

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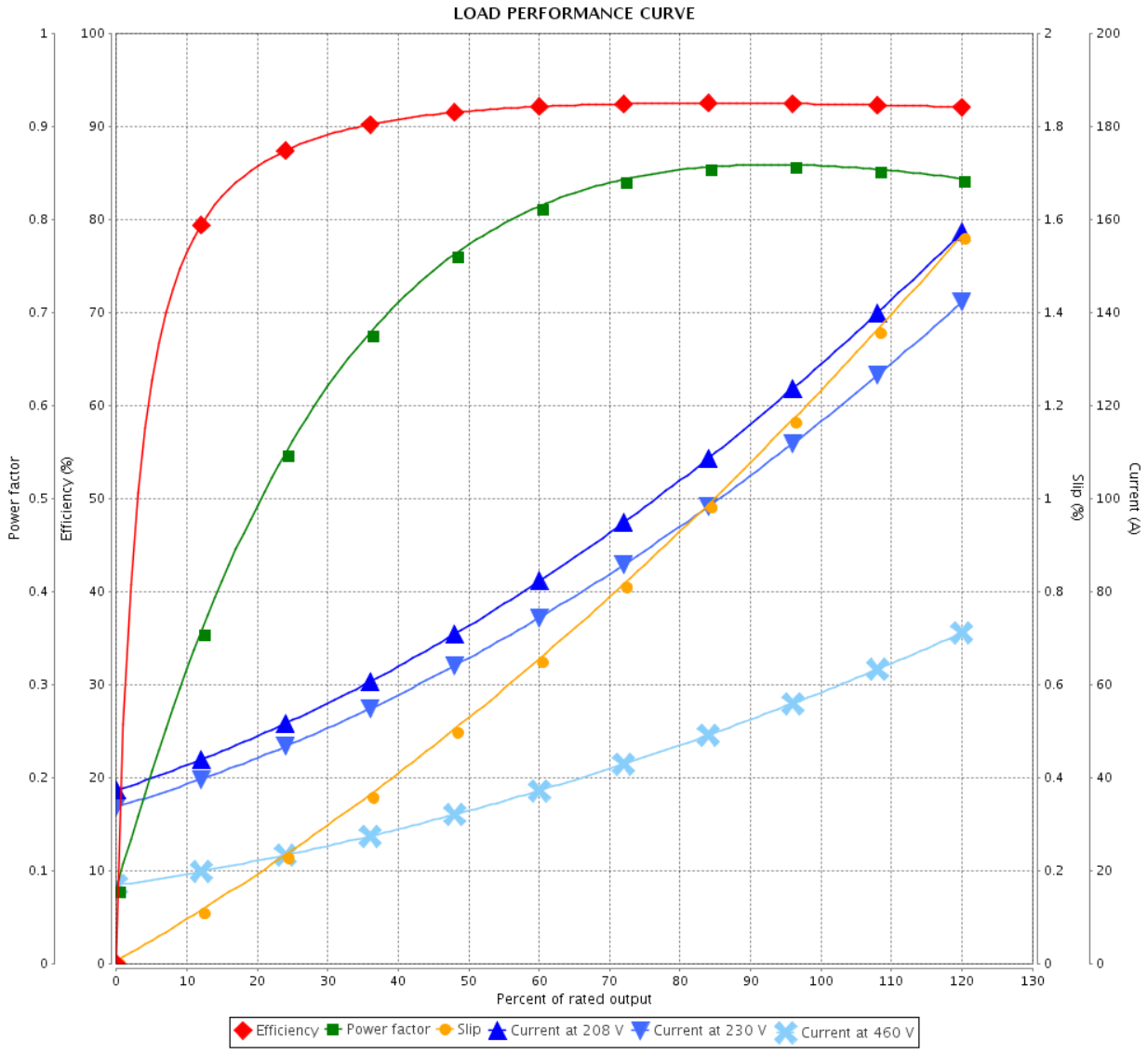

Performance	: 230/460 V 60 Hz 2P		
Rated current	: 117/58.4 A	Moment of inertia (J)	: 3.01 sq.ft.lb
LRC	: 5.8	Duty cycle	: Cont.(S1)
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage

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		Catalog # :	05036OP3EFP324JPV-W4

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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

Heating constant	
Cooling constant	

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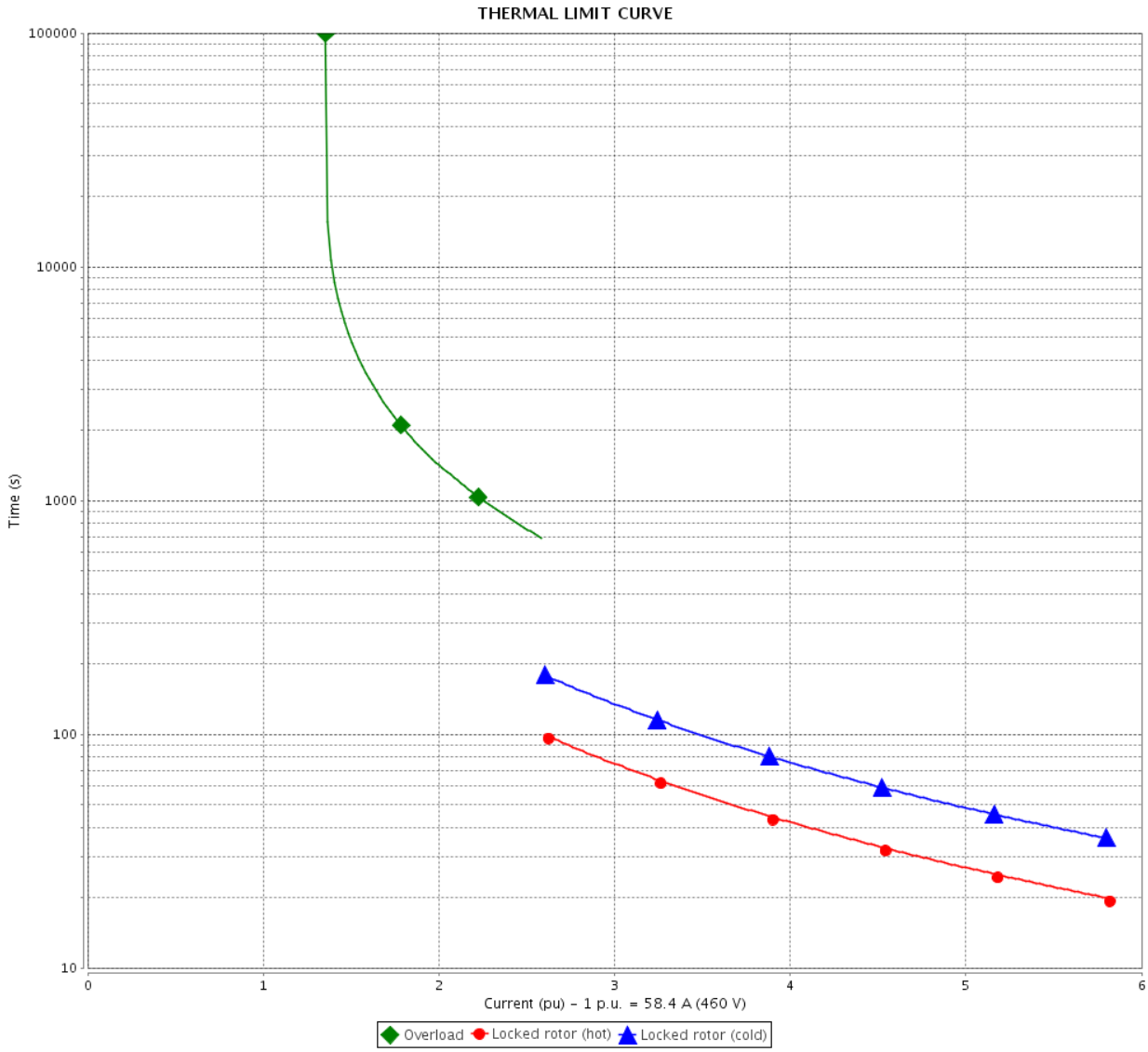
THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage

Customer :



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

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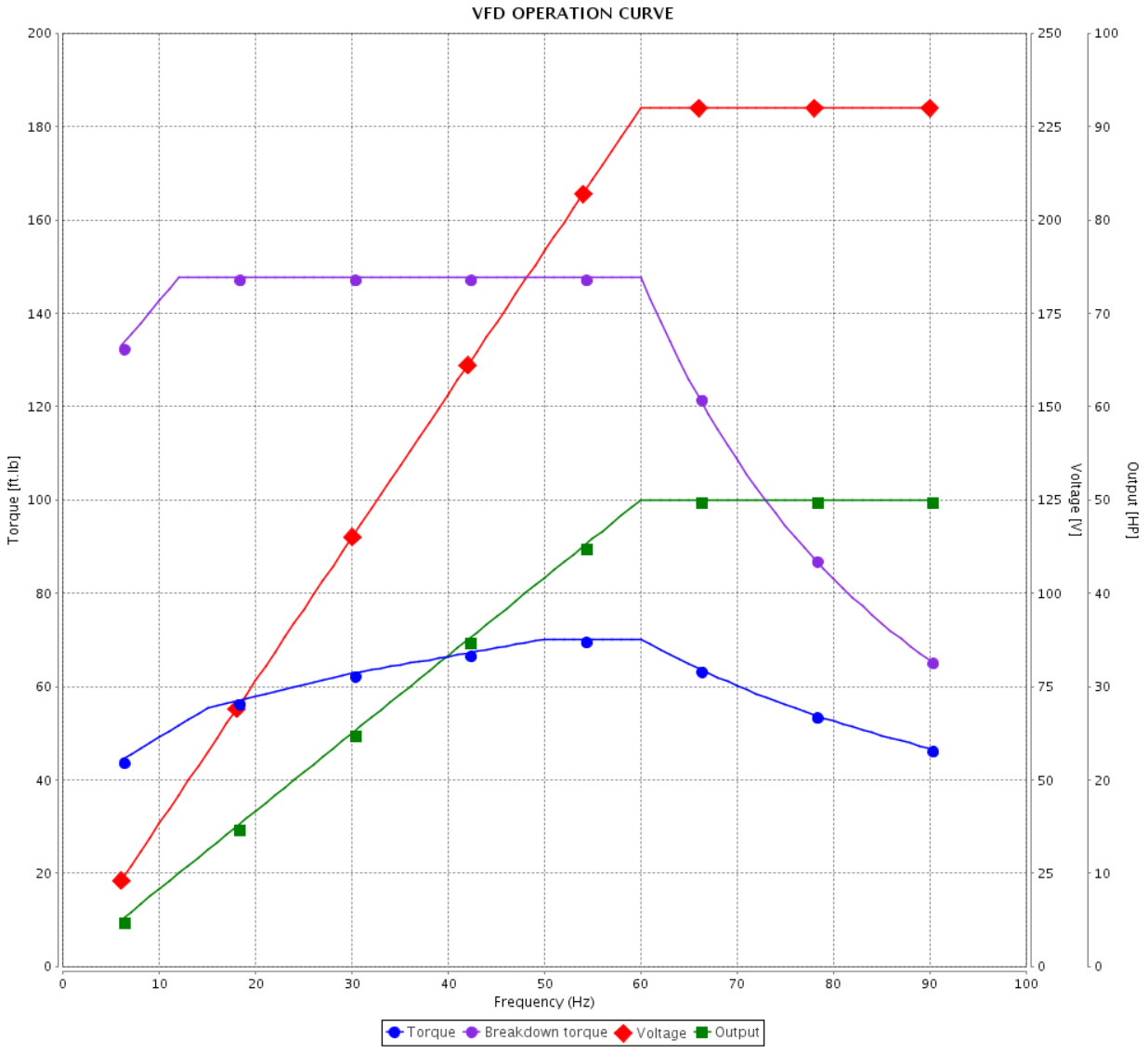

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LRC	: 5.8	Duty cycle	: Cont.(S1)
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Rated speed	: 3555 rpm	Design	: B

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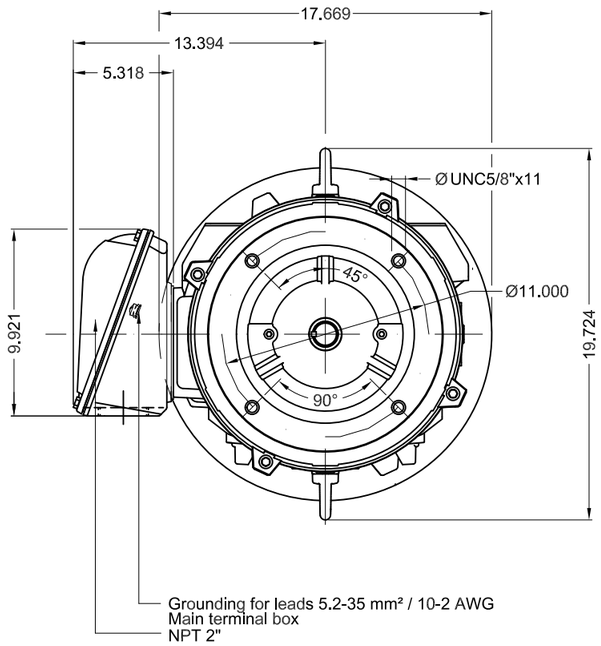
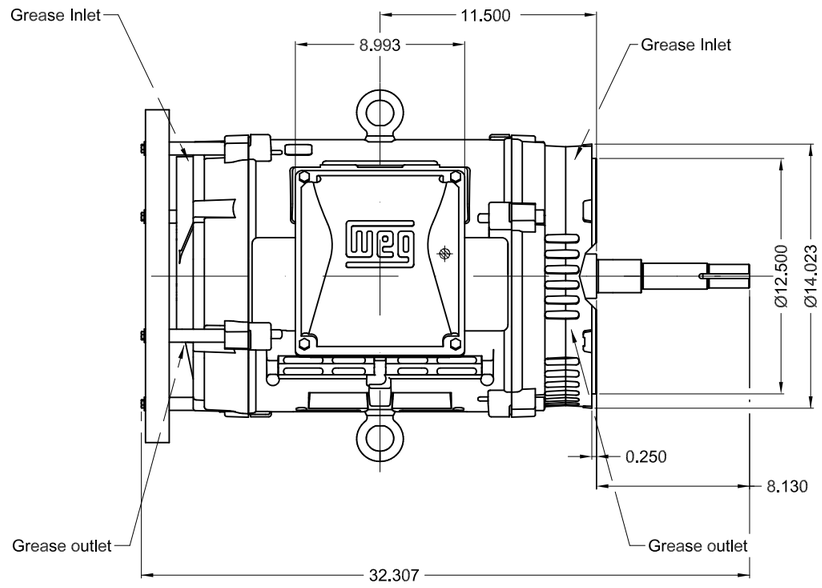
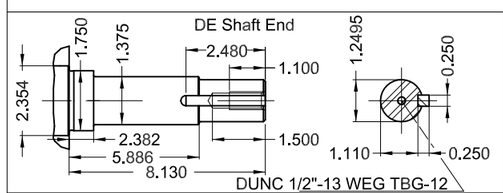






Color RAL 3002	
Painting plan 203A	
Mounting NEMA W-6	
Mounting V18	

50 HP 02 Poles 60Hz | A

1:8

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER

EXECUTED	PIRWBUSER	THREE PHASE W40 MOTOR HIGH EFF	PREVIEW
CHECKED		FRAME 324/6JP IP23 ODP	WDD
RELEASED			
REL DT.		WMO Jaragua do Sul Product Engineering	SHEET 1 / 1

Dimensions in inches

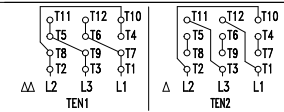
XME A3

W40

Severe Duty

6BYN LISTED EX5990 FIRE PUMP MOTOR

PH	FR	HP(kW)	Hz	
V —	A —	RPM	DES —	
NEMA NOM EFF — %	INS. CL.	ΔT K		
ENCL ODP	DUTY	AMB.		
CODE	PF	SF	SFA	
USABLE @208V				



ALT 1000 m.a.s.l.

Lbs