

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JP Pump NEMA Premium Efficiency Three-Phase      Product code : 14836797  
Catalog # : 07536OT3V364JPV-W40

Frame	: 364/5JP	Locked rotor time	: 34s (cold) 19s (hot)
Output	: 75 HP (55 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 200/400 V	Altitude	: 1000 m.a.s.l.
Rated current	: 195/97.5 A	Protection degree	: IP23
L. R. Amperes	: 1287/644 A	Cooling method	: IC01 - ODP
LRC	: 6.6x(Code G)	Mounting	: W-6
No load current	: 49.5/24.7 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 3555 rpm	Noise level <sup>2</sup>	: 84.0 dB(A)
Slip	: 1.25 %	Starting method	: Direct On Line
Rated torque	: 111 ft.lb	Approx. weight <sup>3</sup>	: 693 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 6.40 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	91.0	91.7	93.0	93.6	Max. traction	: 602 lb
Power Factor	0.56	0.77	0.84	0.87	Max. compression	: 1295 lb

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6212 Z C3
Sealing	:	Without Bearing Seal	Without Bearing Seal
Lubrication interval	:	7209 h	12143 h
Lubricant amount	:	27 g	13 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	11/04/2020			

# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage

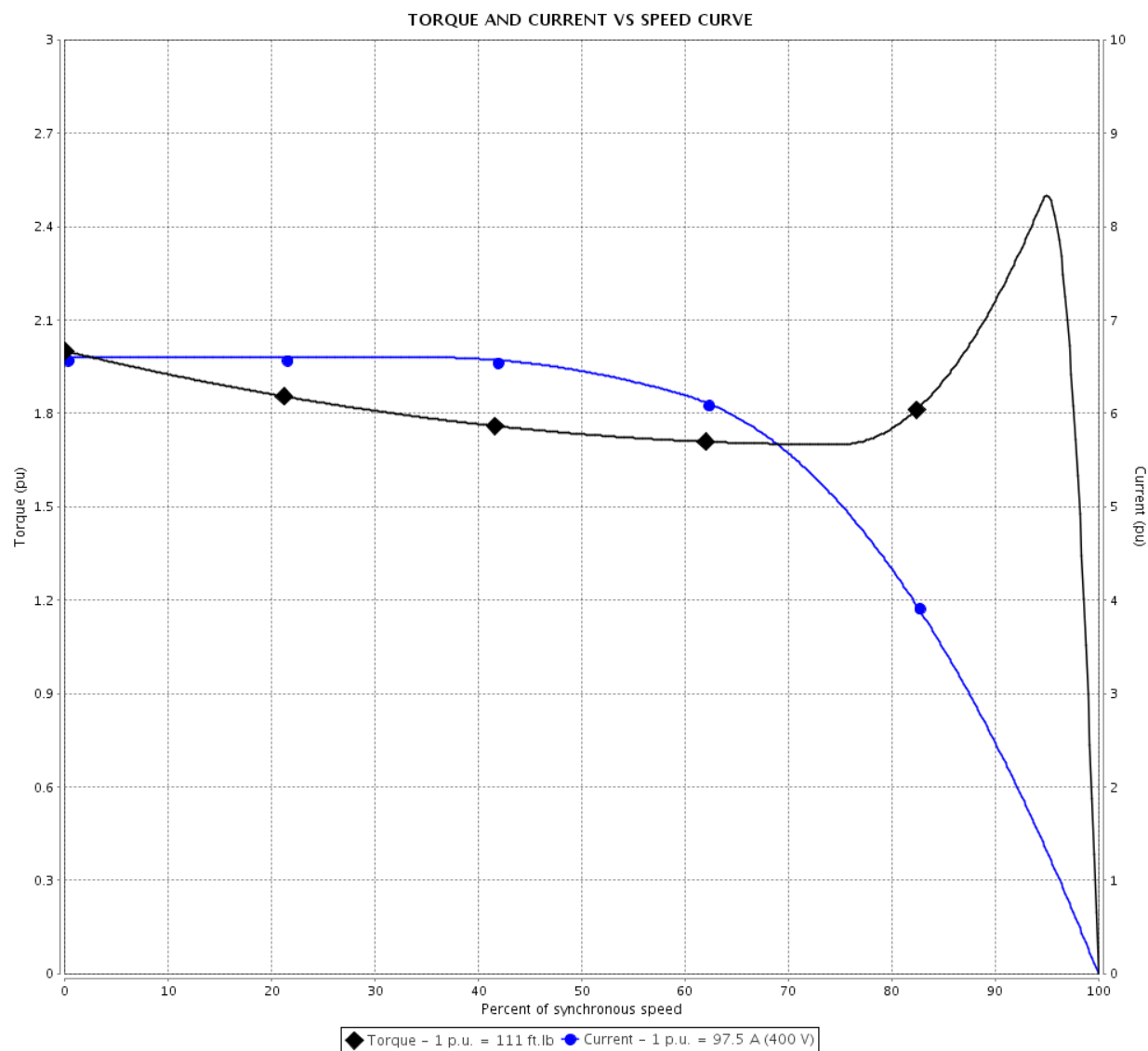


Customer :

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

Product code : 14836797

Catalog # : 07536OT3V364JPV-W40



Performance : 200/400 V 60 Hz 2P

Rated current : 195/97.5 A  
LRC : 6.6  
Rated torque : 111 ft.lb  
Locked rotor torque : 200 %  
Breakdown torque : 250 %  
Rated speed : 3555 rpm

Moment of inertia (J) : 6.40 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

Locked rotor time : 34s (cold) 19s (hot)

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Date	11/04/2020			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

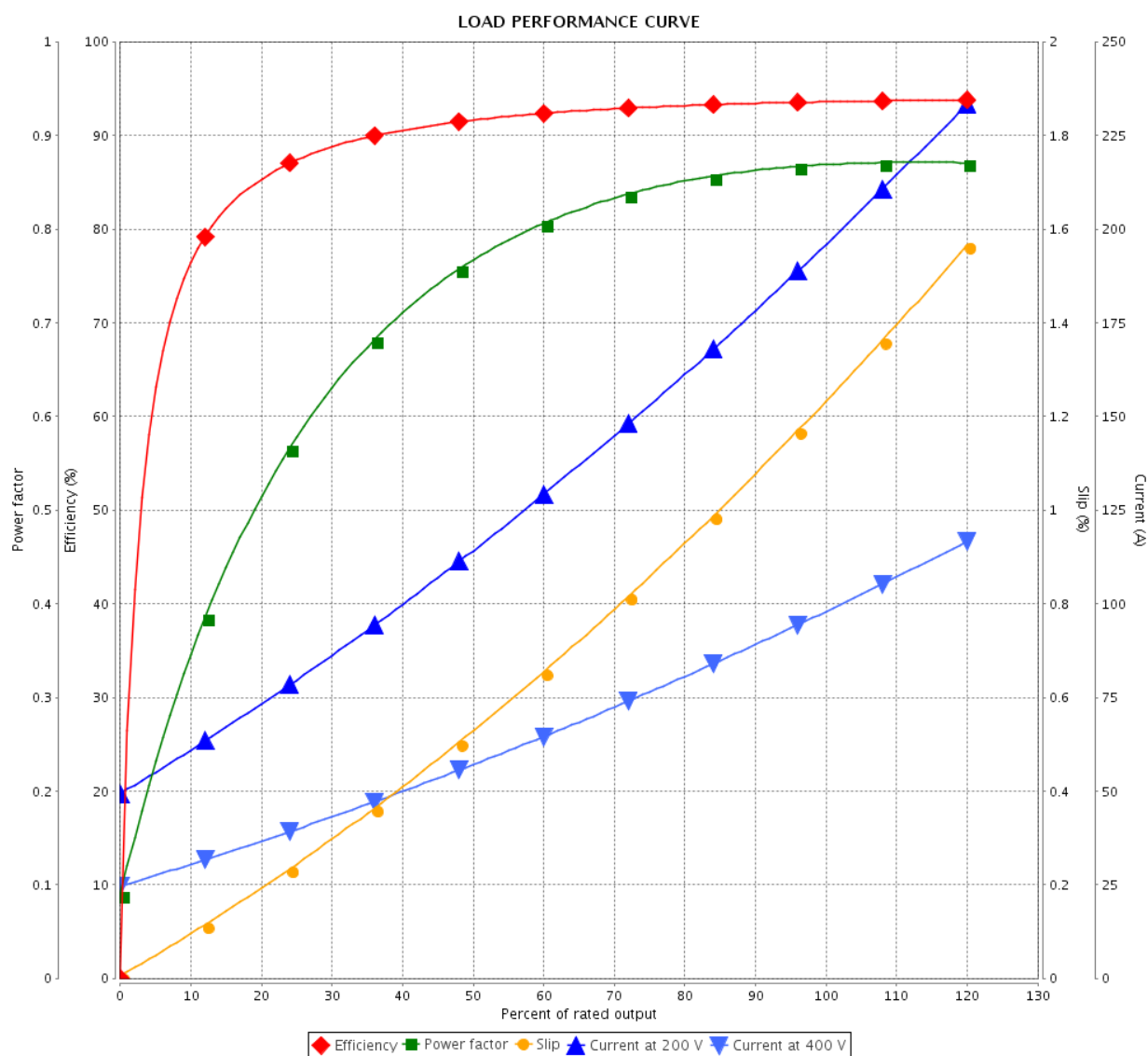


Customer :

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

Product code : 14836797

Catalog # : 07536OT3V364JPV-W40



Performance : 200/400 V 60 Hz 2P

Rated current : 195/97.5 A  
LRC : 6.6  
Rated torque : 111 ft.lb  
Locked rotor torque : 200 %  
Breakdown torque : 250 %  
Rated speed : 3555 rpm

Moment of inertia (J) : 6.40 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



Customer

:

Product line

: W40 JP Pump NEMA Premium  
Efficiency Three-Phase

Product code :

14836797

Catalog # :

07536OT3V364JPV-W40

Performance : 200/400 V 60 Hz 2P

Rated current : 195/97.5 A  
LRC : 6.6  
Rated torque : 111 ft.lb  
Locked rotor torque : 200 %  
Breakdown torque : 250 %  
Rated speed : 3555 rpm

Moment of inertia (J) : 6.40 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

Rev.

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Checked

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Performed by

Checked by

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11/04/2020

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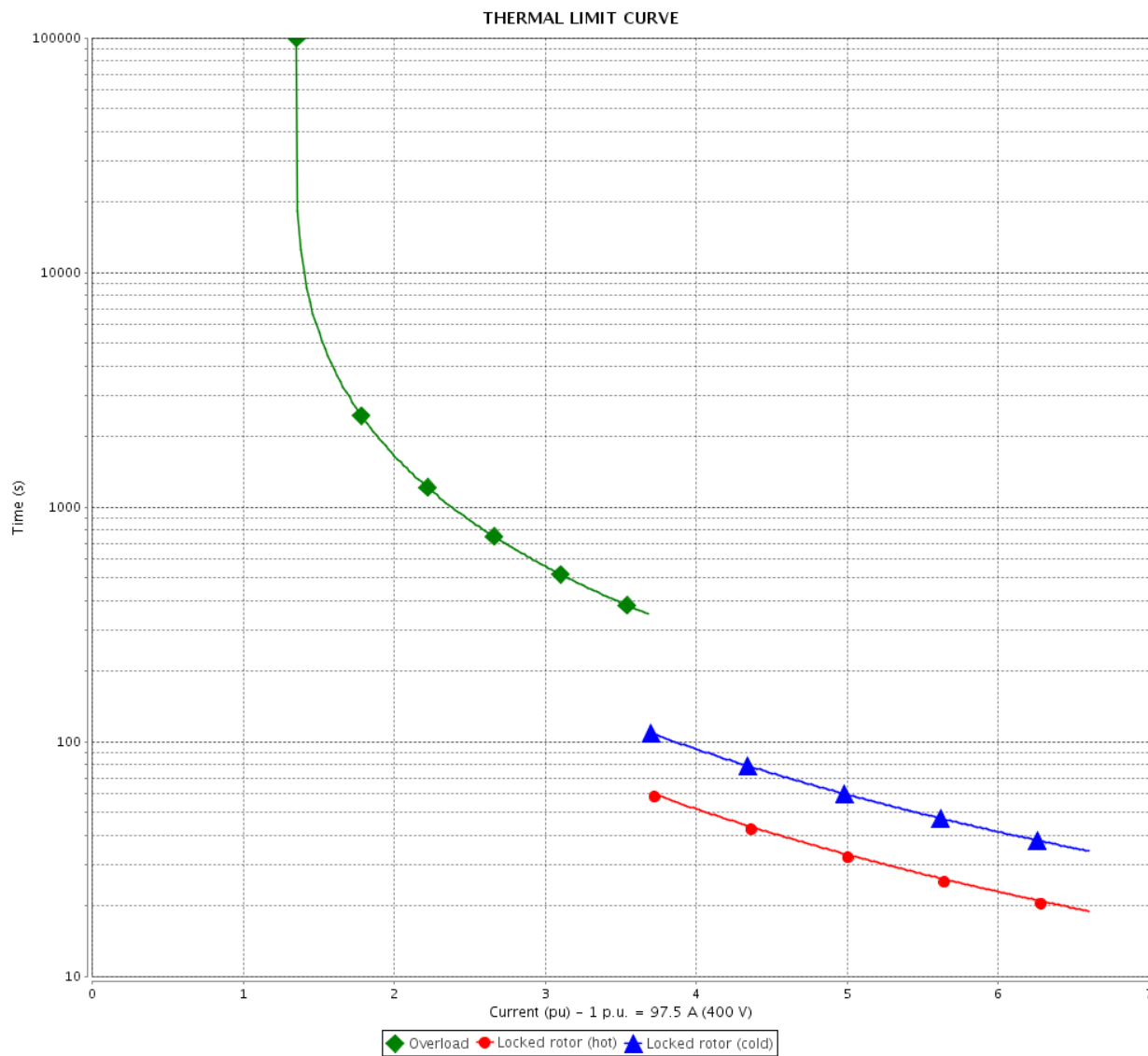
Revision

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Date	11/04/2020				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

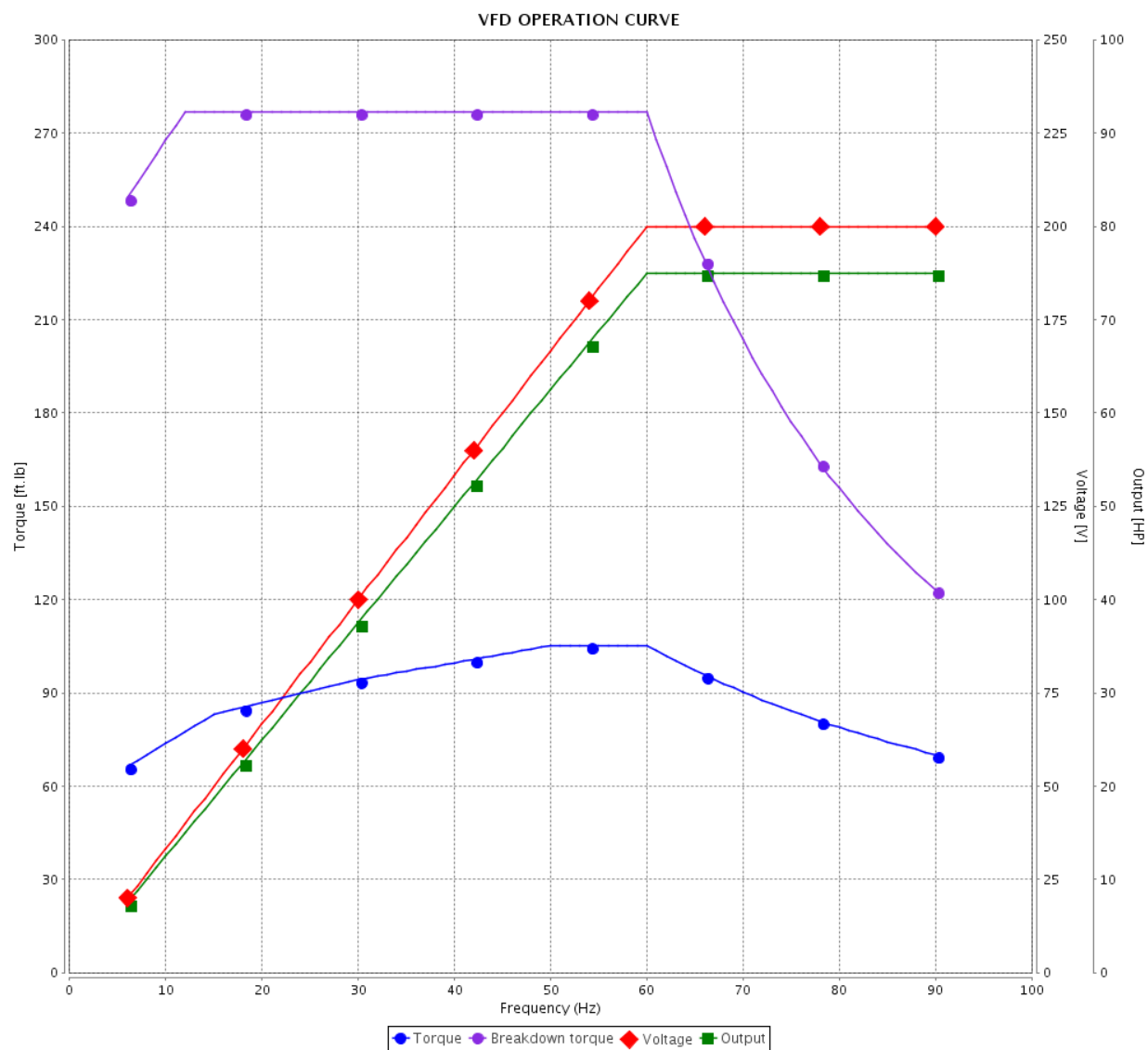


Customer :

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

Product code : 14836797

Catalog # : 07536OT3V364JPV-W40

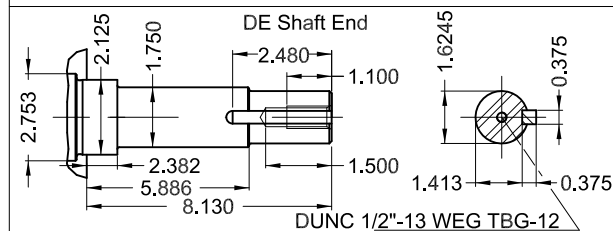
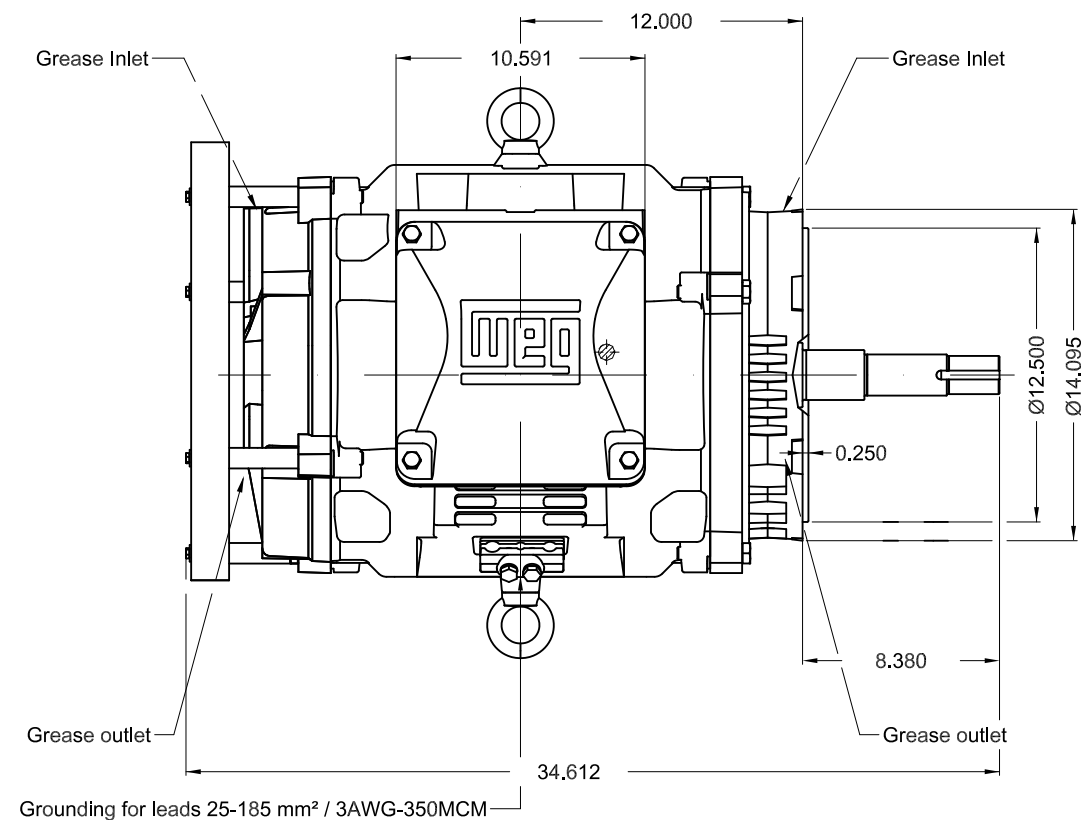
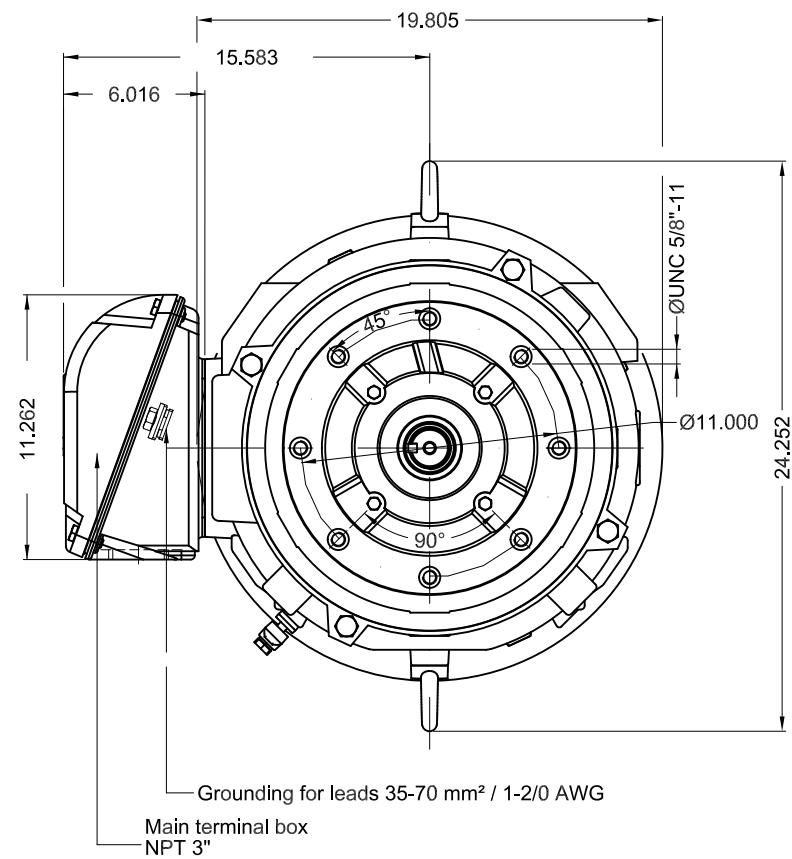


Performance : 200/400 V 60 Hz 2P

Rated current : 195/97.5 A  
LRC : 6.6  
Rated torque : 111 ft.lb  
Locked rotor torque : 200 %  
Breakdown torque : 250 %  
Rated speed : 3555 rpm

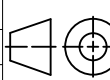

Moment of inertia (J) : 6.40 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

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75 HP 02 Poles 60Hz A

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ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER		THREE PHASE W40 MOTOR NEMA PREMIUM EFF FRAME 364/5JP IP23 ODP			PREVIEW  WDD			
CHECKED									
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1			

Color RAL 5009  
Painting plan 203A  
Mounting NEMA W-6  
Mounting V18



W40

NEMA  
Premium®3PT9  
LISTED*Severe Duty*

PH	FR	HP(kW)		Hz	
V —		A —			
NEMA NOM EFF		—	%	RPM	
ENCL ODP	DUTY		INS. CL.	$\Delta T$ K	
PF		DES —	CODE	AMB.	
SF	SFA		ALT 1000 m.a.s.l.		
					Lbs

KLUBERSYNTH BHP 72-102