

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line		: W40 JM Pump NEMA Premium Efficiency Three-Phase		Product code : 14484719		
				Catalog # : 03036OT3V284JM-W40		
Frame	: 284JM			Locked rotor time	: 18s (cold) 10s (hot)	
Output	: 30 HP (22 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	: 80.5/40.2 A			Protection degree	: IP23	
L. R. Amperes	: 507/254 A			Cooling method	: IC01 - ODP	
LRC	: 6.3x(Code G)			Mounting	: F-1	
No load current	: 29.7/14.8 A			Rotation ¹	: Both (CW and CCW)	
Rated speed	: 3550 rpm			Noise level ²	: 73.0 dB(A)	
Slip	: 1.39 %			Starting method	: Direct On Line	
Rated torque	: 44.4 ft.lb			Approx. weight ³	: 373 lb	
Locked rotor torque	: 180 %					
Breakdown torque	: 260 %					
Insulation class	: F					
Service factor	: 1.25					
Moment of inertia (J)	: 1.59 sq.ft.lb					
Design	: B					
Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	90.0	90.2	91.7	91.7	Max. traction	
Power Factor	0.47	0.73	0.82	0.86	Max. compression	
		<u>Drive end</u>		<u>Non drive end</u>		
Bearing type	:		6311 Z C3	6211 Z C3		
Sealing	:		Without Bearing Seal	Without Bearing Seal		
Lubrication interval	:		20000 h	20000 h		
Lubricant amount	:		18 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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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



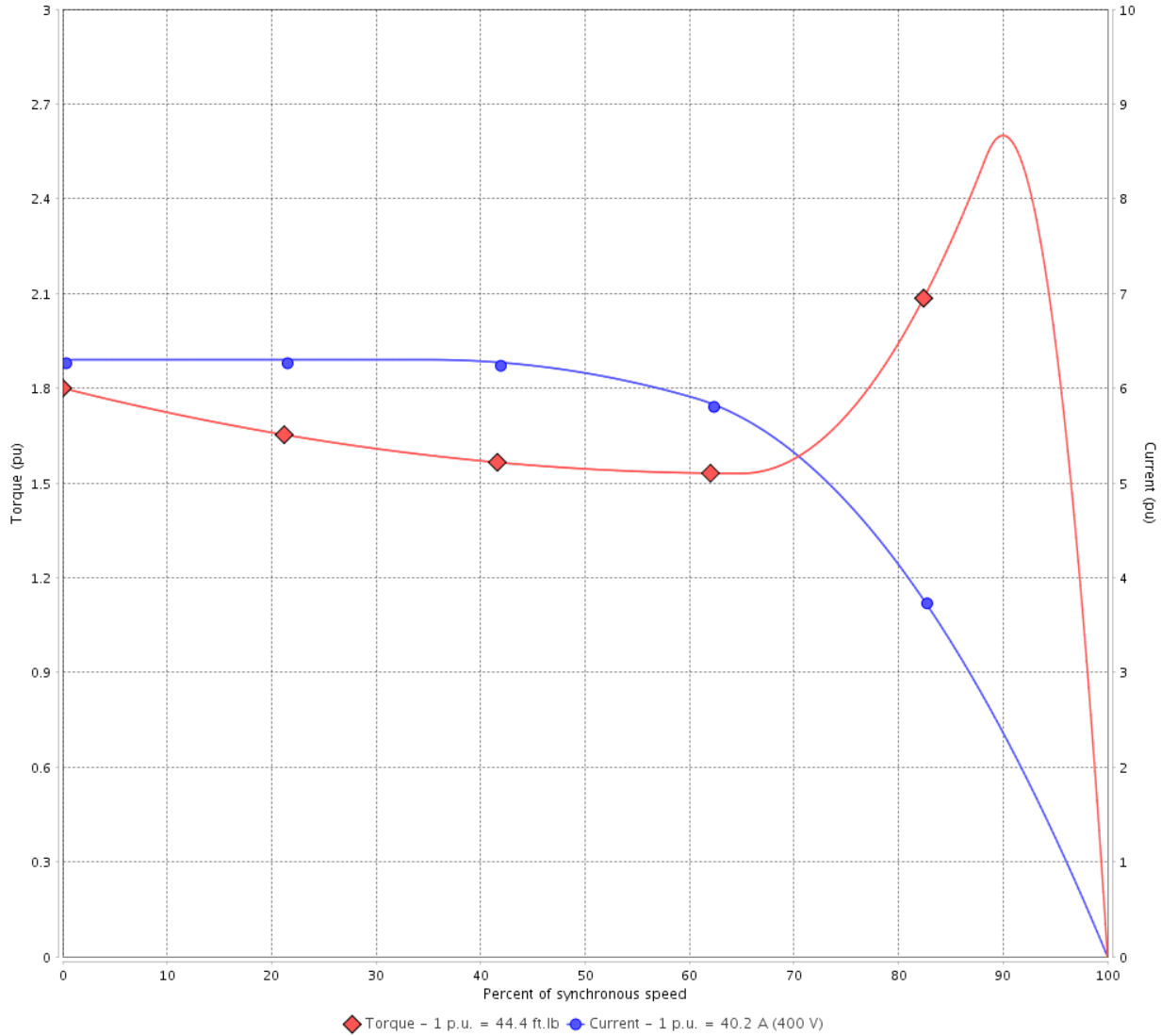
Customer :

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

Product code : 14484719

Catalog # : 03036OT3V284JM-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200/400 V 60 Hz 2P

Rated current	: 80.5/40.2 A	Moment of inertia (J)	: 1.59 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 44.4 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 3550 rpm	Design	: B

Locked rotor time : 18s (cold) 10s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

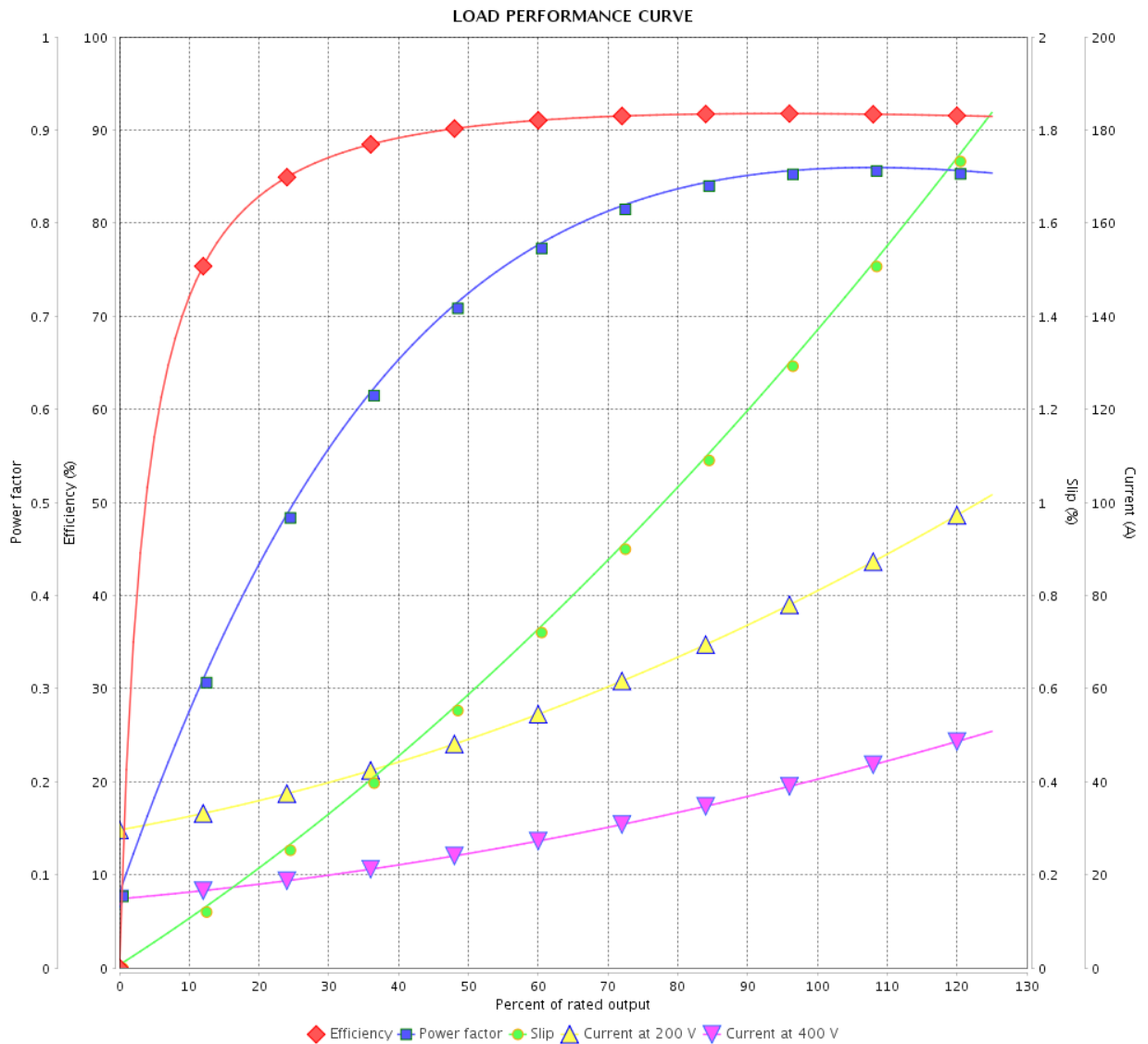


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Catalog # : 03036OT3V284JM-W40



Performance : 200/400 V 60 Hz 2P

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 Locked rotor torque : 180 %
 Breakdown torque : 260 %
 Rated speed : 3550 rpm

Moment of inertia (J) : 1.59 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



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LRC : 6.3
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Locked rotor torque : 180 %
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Rated speed : 3550 rpm

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Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

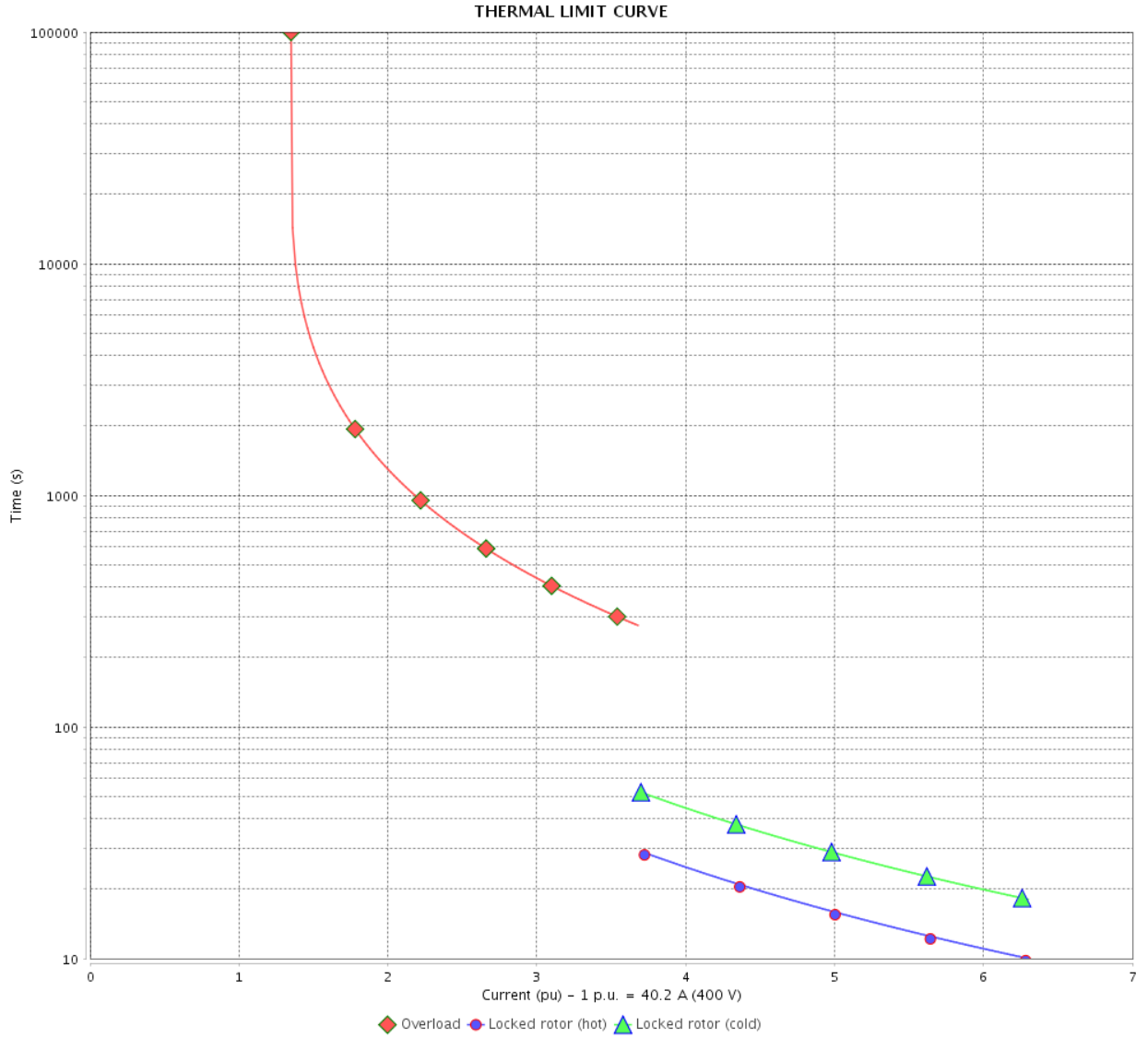
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

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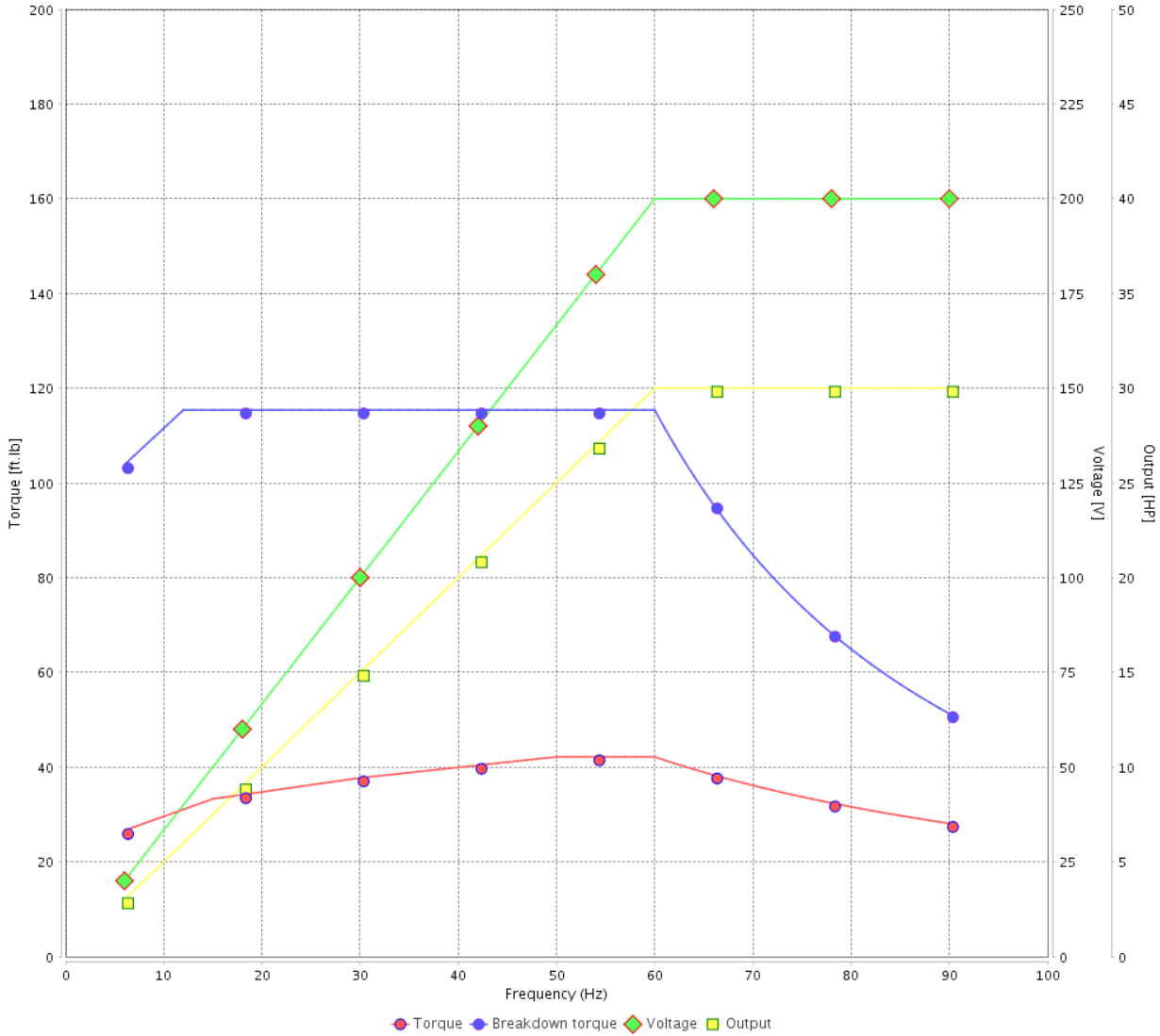
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VFD OPERATION CURVE

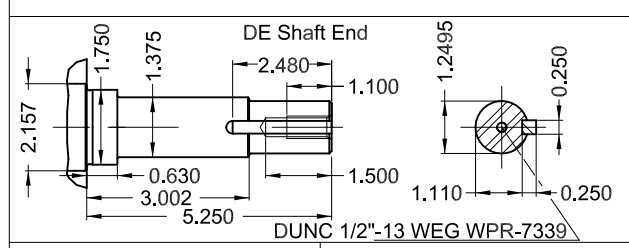
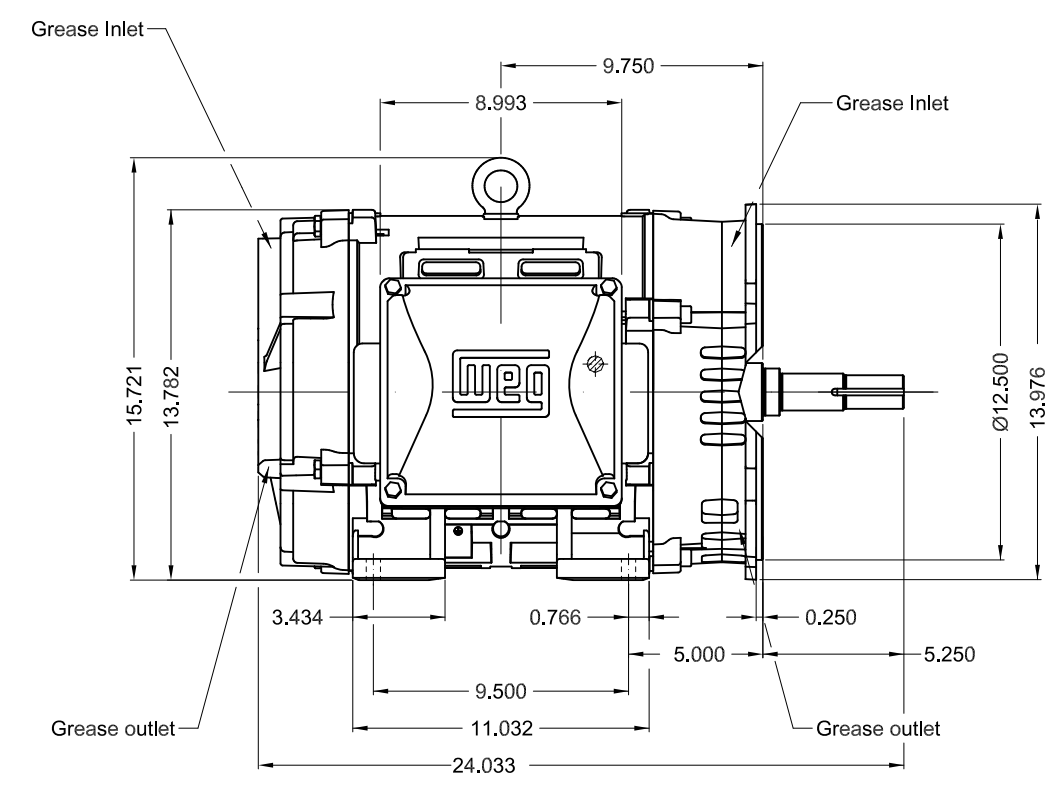
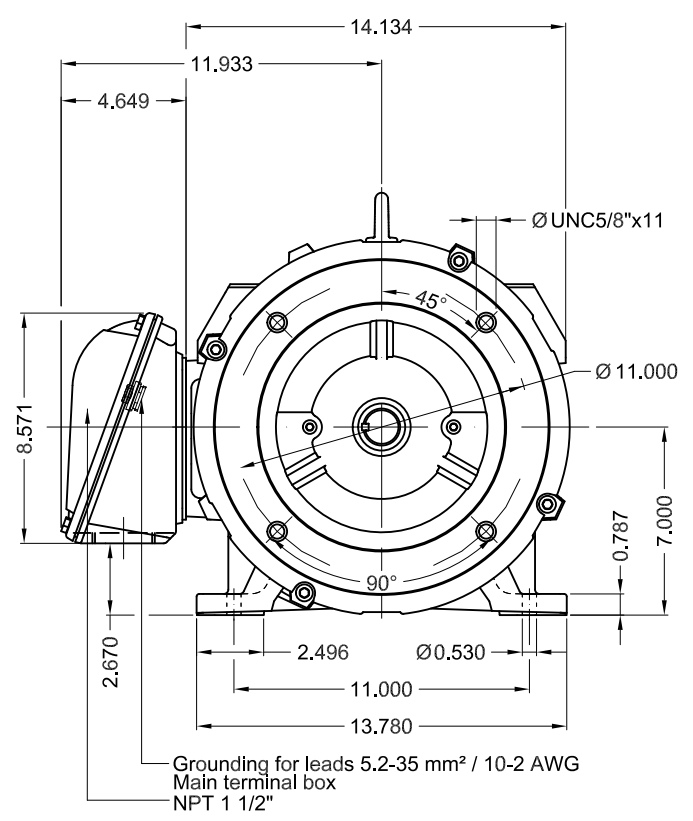


Performance : 200/400 V 60 Hz 2P

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30 HP 02 Poles 60 Hz A

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ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 CLOSE COUPLED PUMP JM TYPE PREM-SET					
CHECKED		FRAME 284JM IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

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

PREVIEW

WDD

Dimensions in inches XME A3