

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: W40 JM Pump NEMA Premium Efficiency Three-Phase		Product code : 14837444	
				Catalog # : 03018OT3H286JMV-W40	
Frame	: 284/6JM		Locked rotor time	: 32s (cold) 18s (hot)	
Output	: 30 HP (22 kW)		Temperature rise	: 80 K	
Poles	: 4		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	: 27.9 A		Protection degree	: IP23	
L. R. Amperes	: 184 A		Cooling method	: IC01 - ODP	
LRC	: 6.6x(Code G)		Mounting	: W-6	
No load current	: 10.8 A		Rotation <sup>1</sup>	: Both (CW and CCW)	
Rated speed	: 1765 rpm		Noise level <sup>2</sup>	: 64.0 dB(A)	
Slip	: 1.94 %		Starting method	: Direct On Line	
Rated torque	: 89.0 ft.lb		Approx. weight <sup>3</sup>	: 407 lb	
Locked rotor torque	: 280 %				
Breakdown torque	: 270 %				
Insulation class	: F				
Service factor	: 1.25				
Moment of inertia (J)	: 4.52 sq.ft.lb				
Design	: B				
Output	25%	50%	75%	100%	
Efficiency (%)	93.4	93.6	94.1	94.1	
Power Factor	0.45	0.70	0.80	0.84	
Foundation loads					
Max. traction					
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



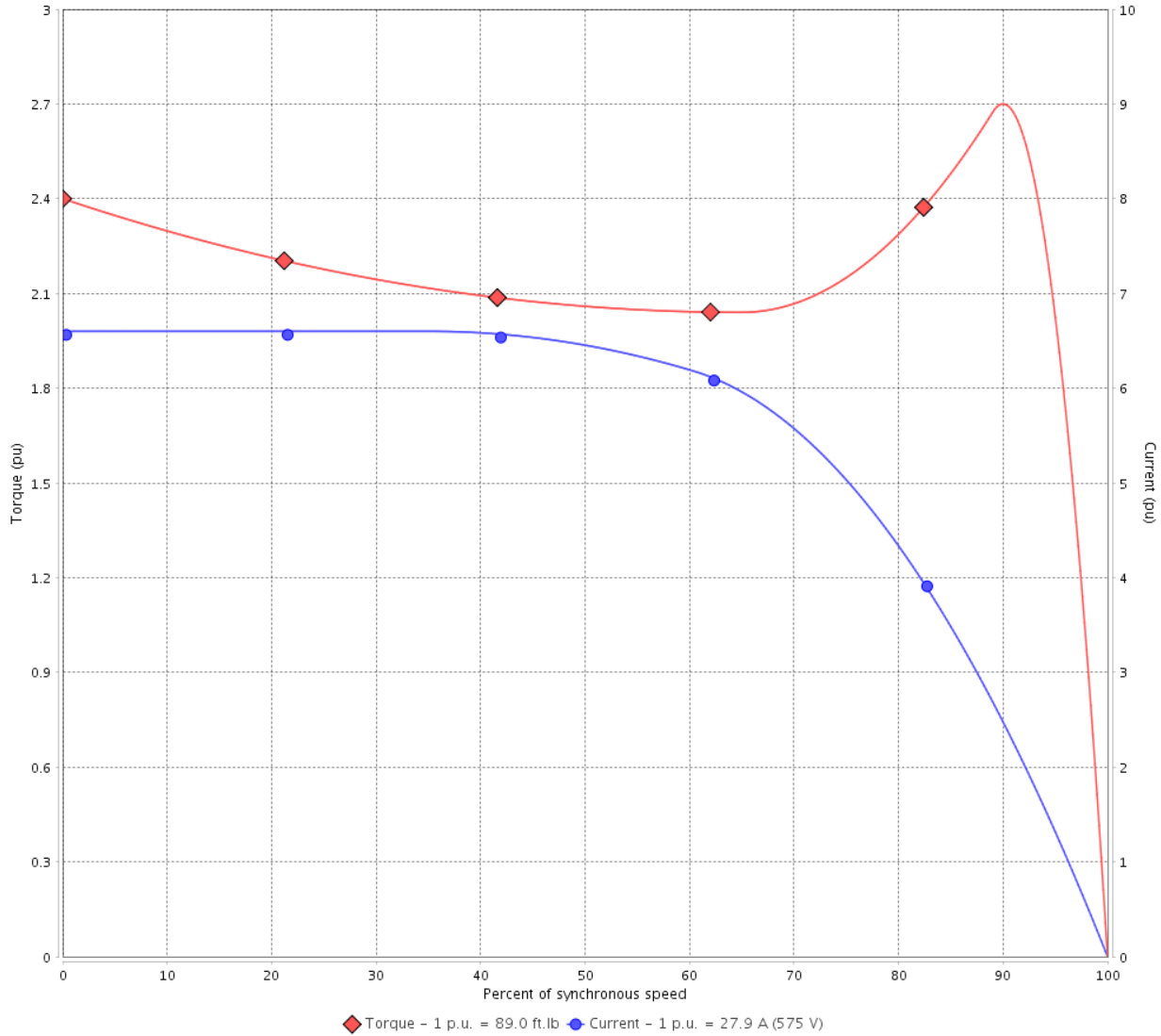
Customer :

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

Product code : 14837444

Catalog # : 03018OT3H286JMV-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 27.9 A	Moment of inertia (J)	: 4.52 sq.ft.lb
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 89.0 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

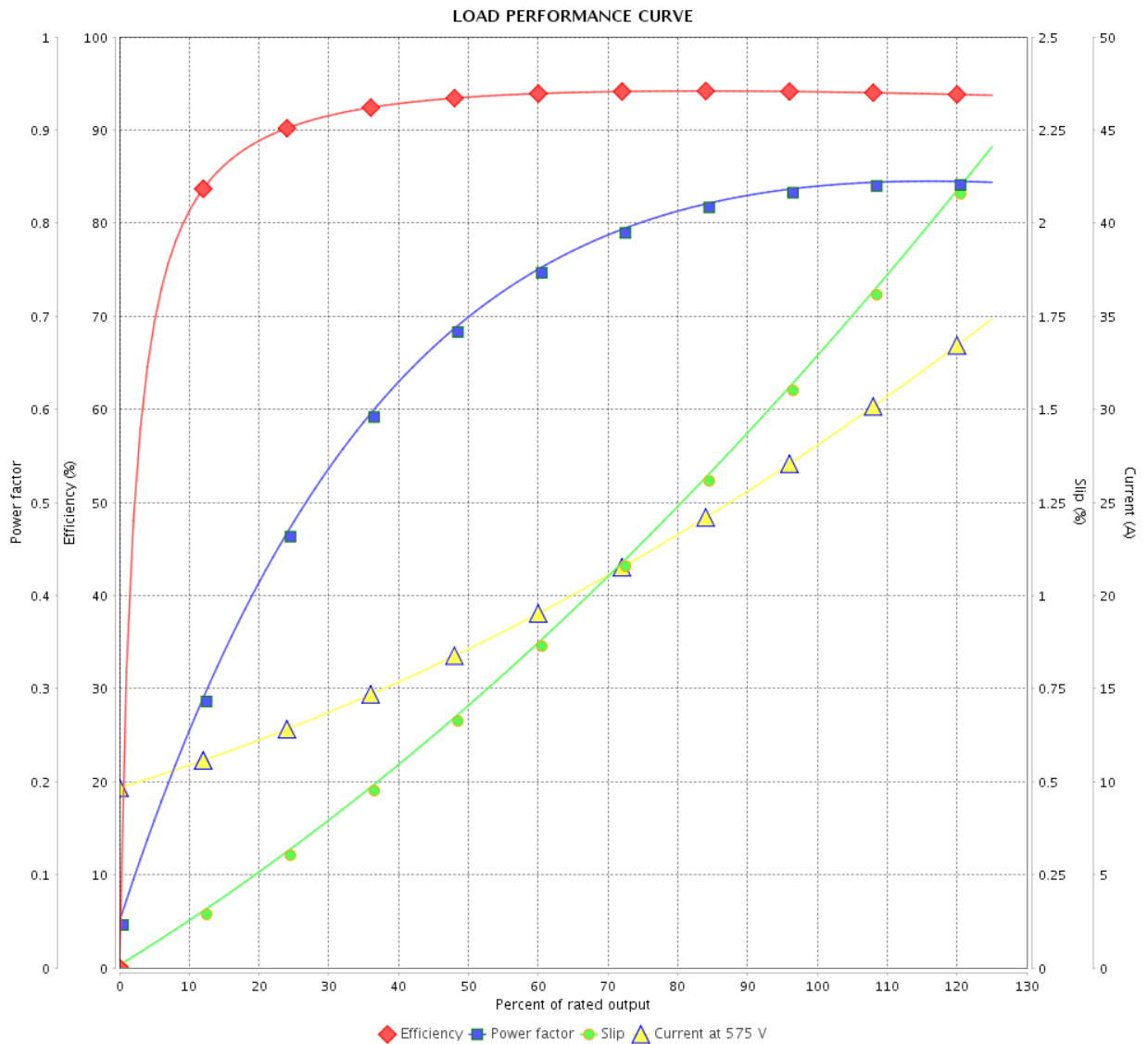


Customer :

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

Product code : 14837444

Catalog # : 03018OT3H286JMV-W40



Performance : 575 V 60 Hz 4P

Rated current : 27.9 A  
 LRC : 6.6  
 Rated torque : 89.0 ft.lb  
 Locked rotor torque : 280 %  
 Breakdown torque : 270 %  
 Rated speed : 1765 rpm

Moment of inertia (J) : 4.52 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 :

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Efficiency Three-Phase

Product code : 14837444

Catalog # : 03018OT3H286JMV-W40

Performance : 575 V 60 Hz 4P

Rated current	: 27.9 A	Moment of inertia (J)	: 4.52 sq.ft.lb
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 89.0 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

Heating constant

Cooling constant

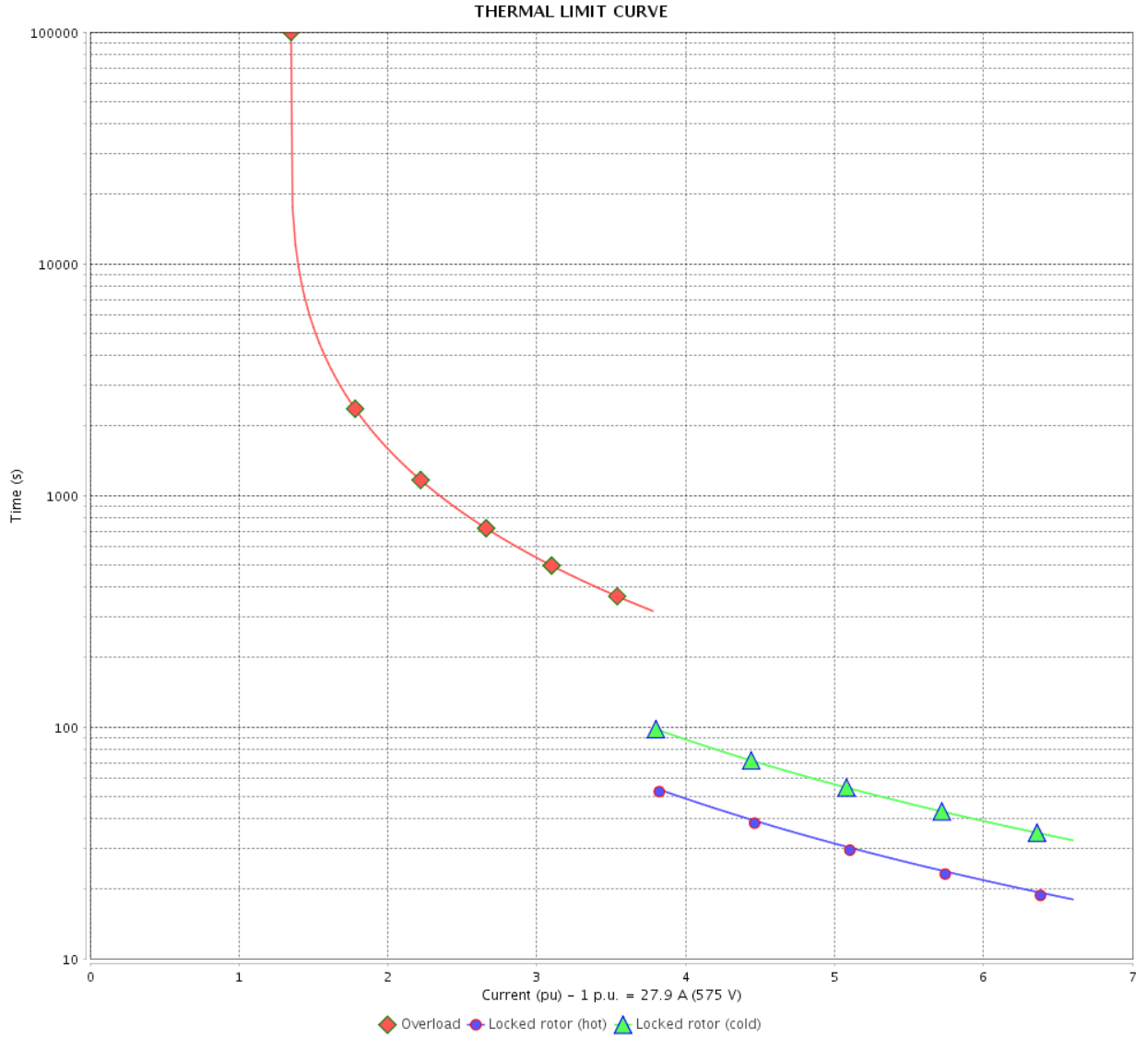
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

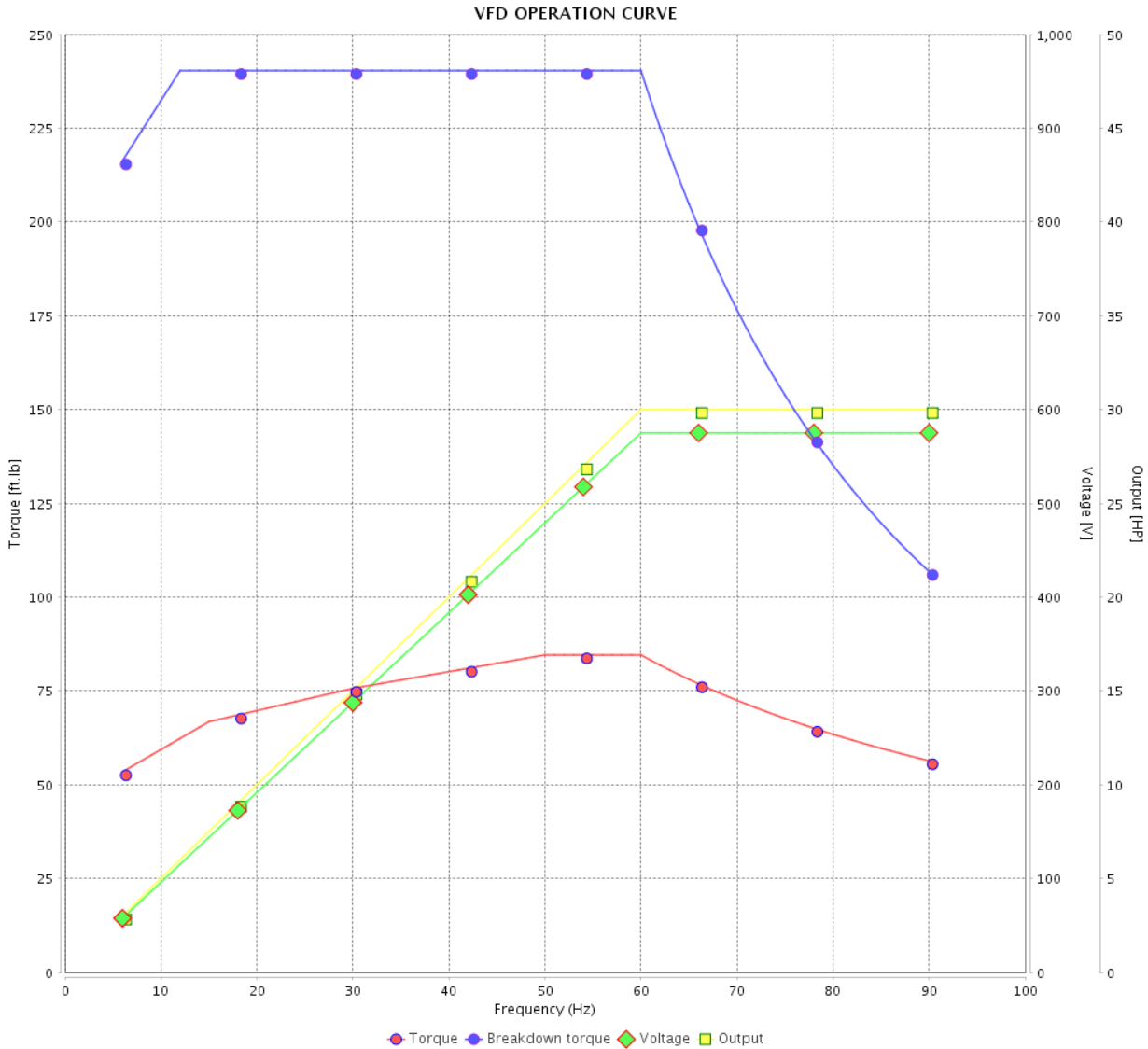


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Product line : W40 JM Pump NEMA Premium Efficiency Three-Phase

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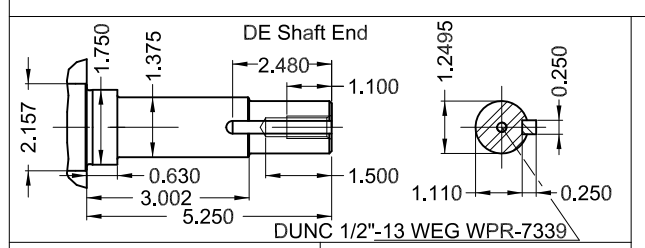
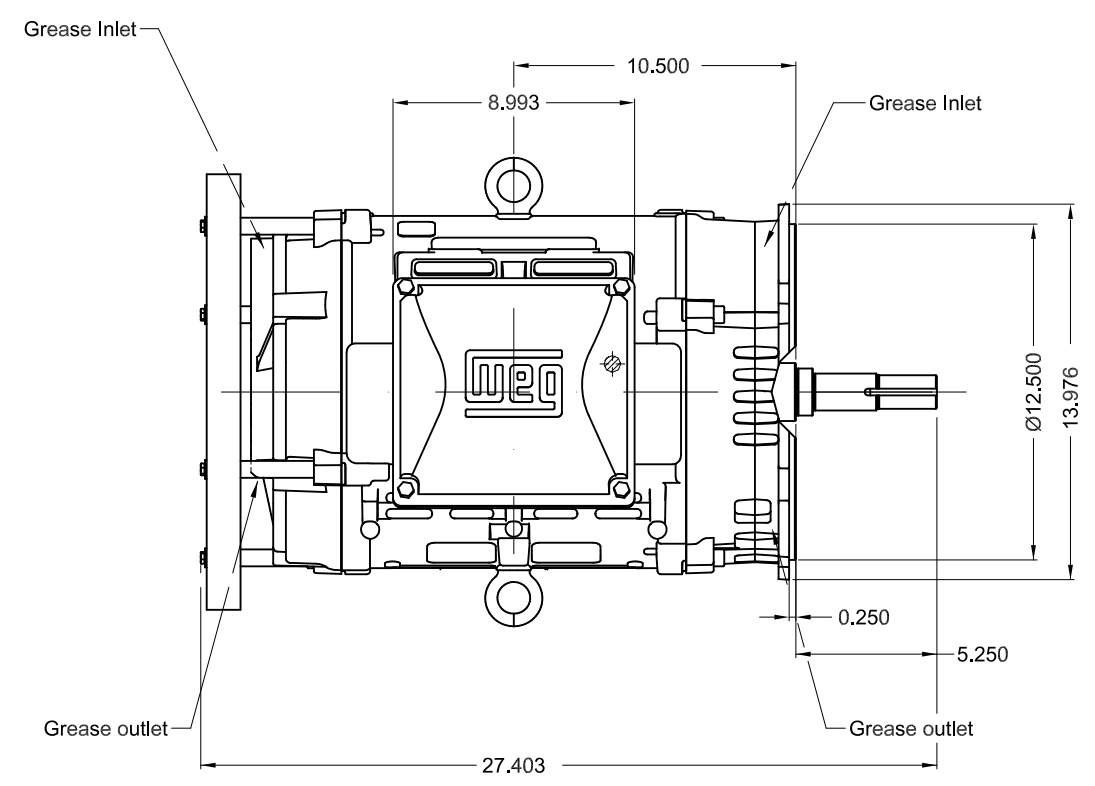
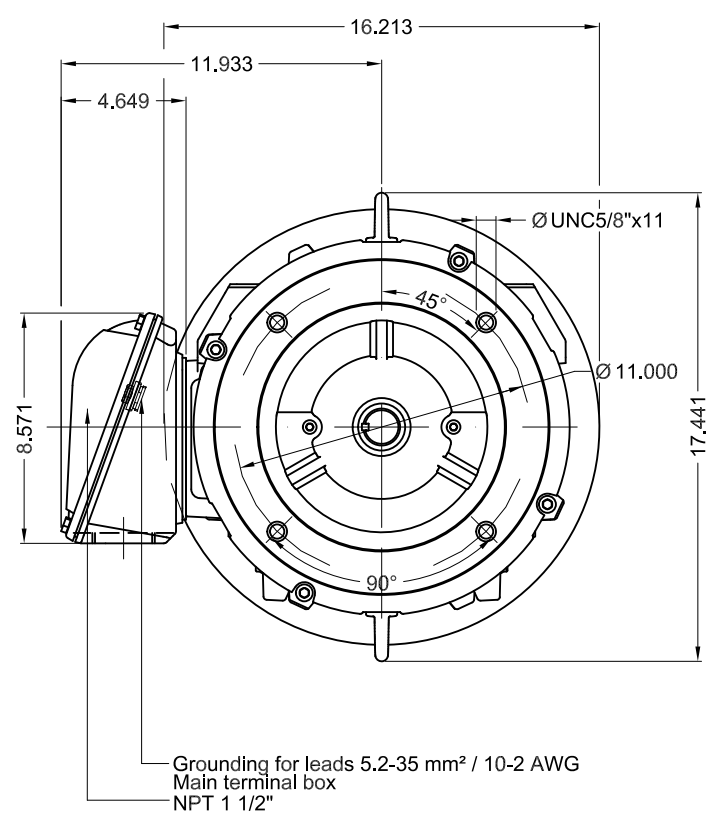


Performance : 575 V 60 Hz 4P

Rated current : 27.9 A  
 LRC : 6.6  
 Rated torque : 89.0 ft.lb  
 Locked rotor torque : 280 %  
 Breakdown torque : 270 %  
 Rated speed : 1765 rpm

Moment of inertia (J) : 4.52 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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30 HP 04 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-EST.					
CHECKED		FRAME 284/6JM IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

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

**PREVIEW**  
 WDD

