

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: W40 JP Pump NEMA Premium Efficiency Three-Phase			
Product code :	14486218			
Catalog # :	02036OT3H254JP-W40			
Frame : 254JP Output : 20 HP (15 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 19.4 A L. R. Amperes : 122 A LRC : 6.3x(Code G) No load current : 6.72 A Rated speed : 3535 rpm Slip : 1.81 % Rated torque : 29.7 ft.lb Locked rotor torque : 200 % Breakdown torque : 280 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.8718 sq.ft.lb Design : B	Locked rotor time : 21s (cold) 12s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP23 Cooling method : IC01 - ODP Mounting : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Starting method : Direct On Line Approx. weight <sup>3</sup> : 214 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	90.0    90.2    91.0    91.0			
Power Factor	0.48    0.72    0.82    0.85			
Foundation loads				
Max. traction				
Max. compression				
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6209 Z C3			
Sealing	: Without Bearing Seal      Without Bearing Seal			
Lubrication interval	: 20000 h      20000 h			
Lubricant amount	: 13 g      9 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



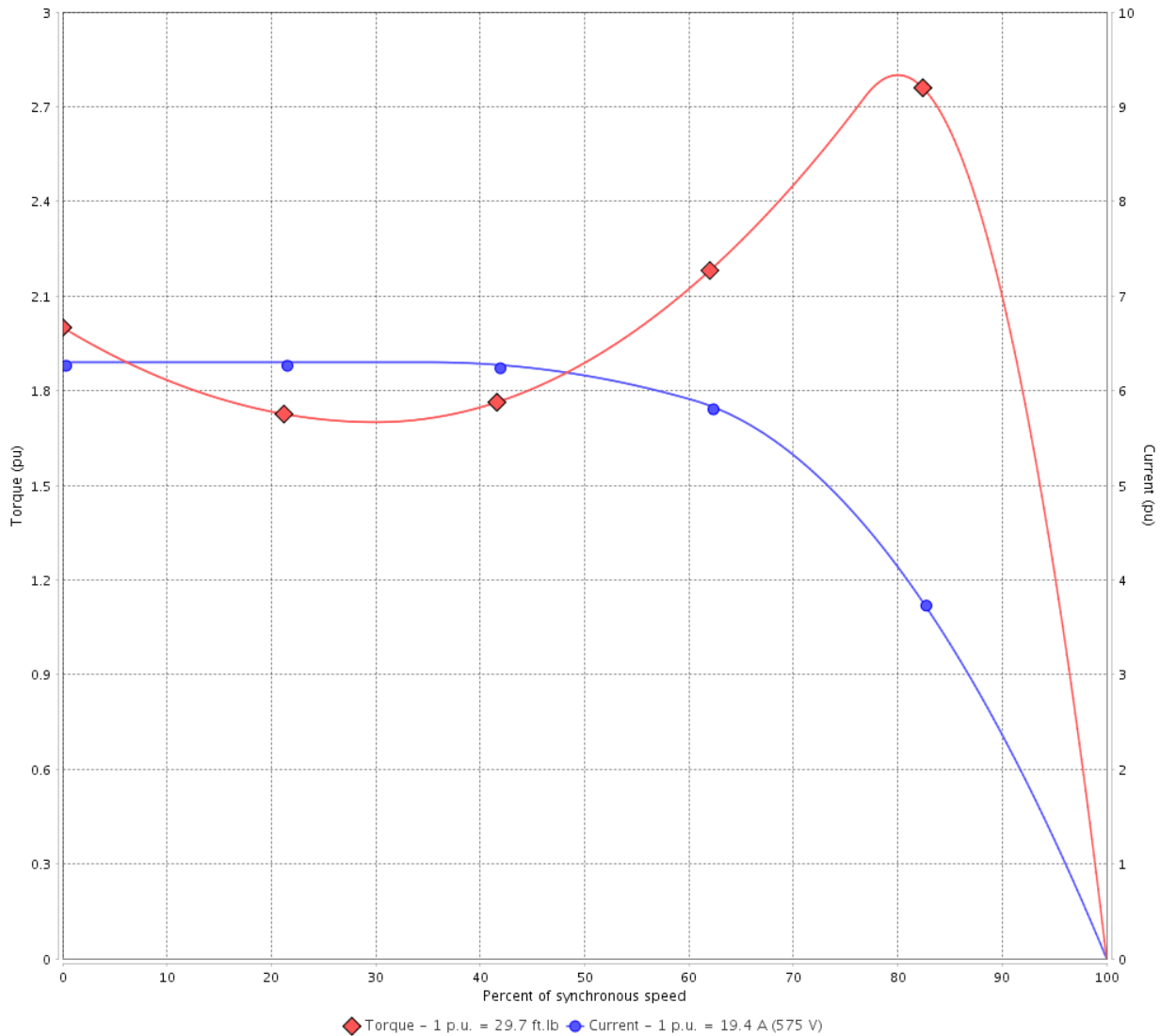
Customer :

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

Product code : 14486218

Catalog # : 02036OT3H254JP-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 19.4 A	Moment of inertia (J)	: 0.8718 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 29.7 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 3535 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

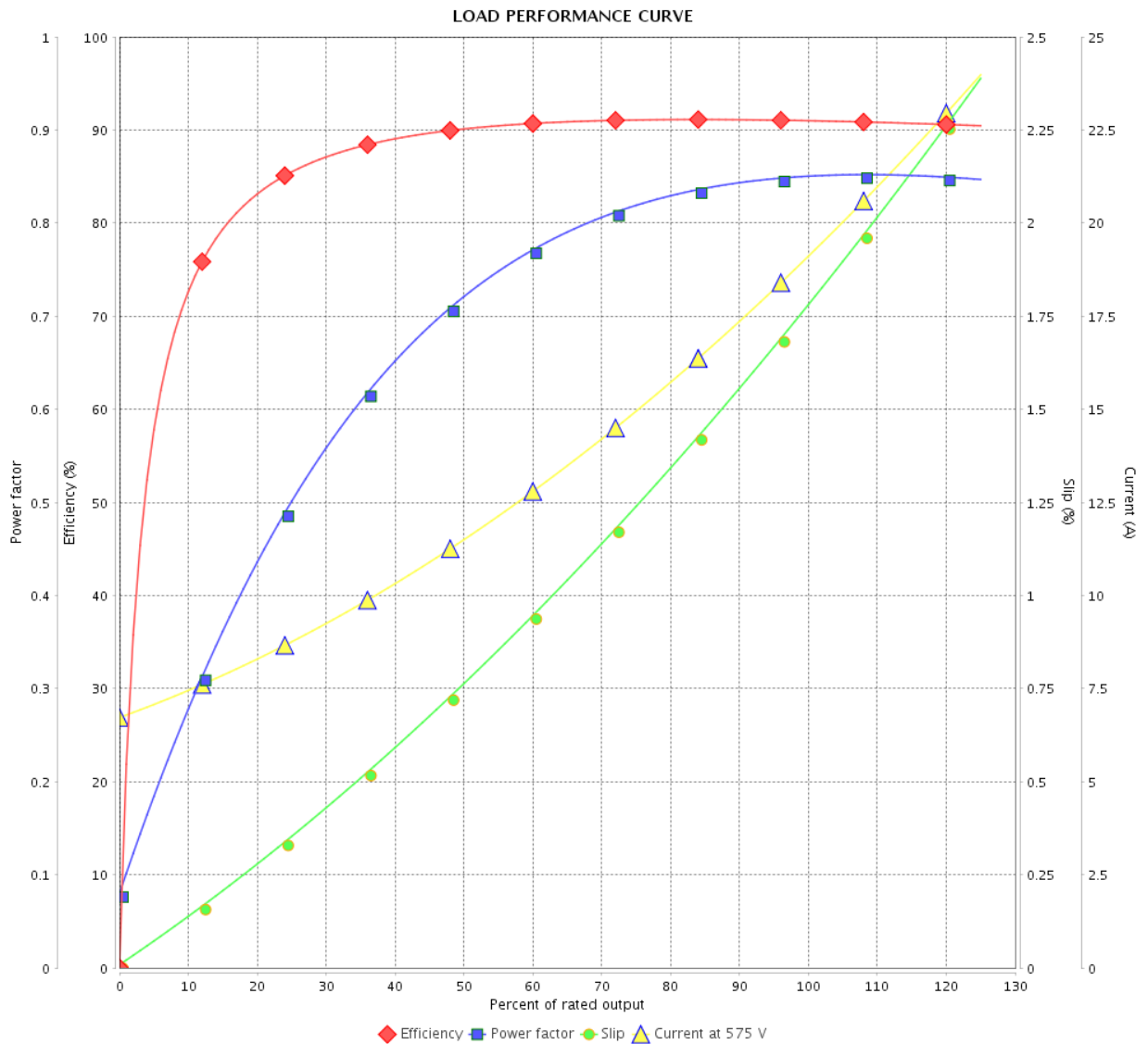


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Product code : 14486218

Catalog # : 02036OT3H254JP-W40



Performance : 575 V 60 Hz 2P

Rated current : 19.4 A  
 LRC : 6.3  
 Rated torque : 29.7 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 280 %  
 Rated speed : 3535 rpm

Moment of inertia (J) : 0.8718 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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Locked rotor torque : 200 %  
Breakdown torque : 280 %  
Rated speed : 3535 rpm

Moment of inertia (J) : 0.8718 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

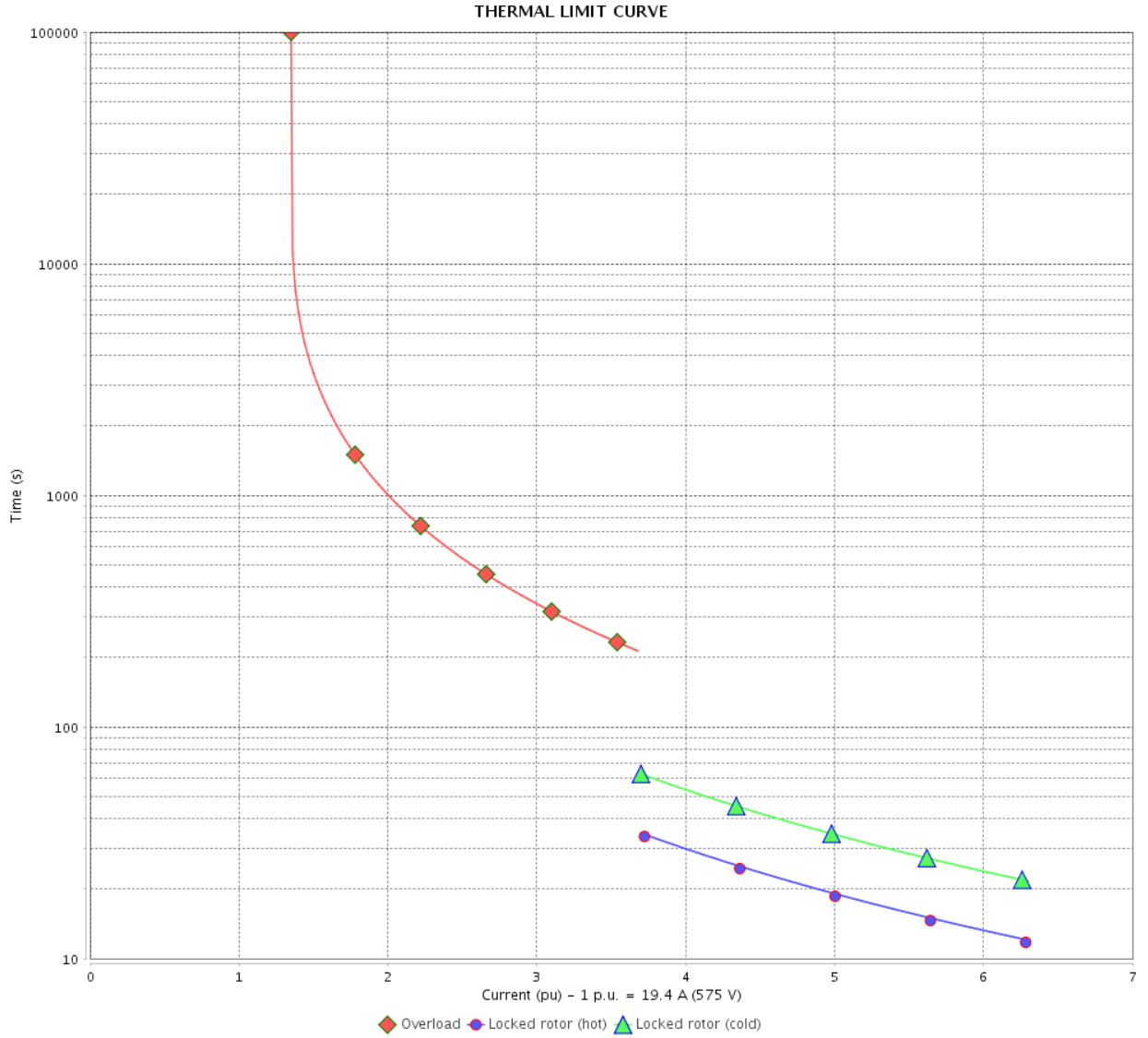
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



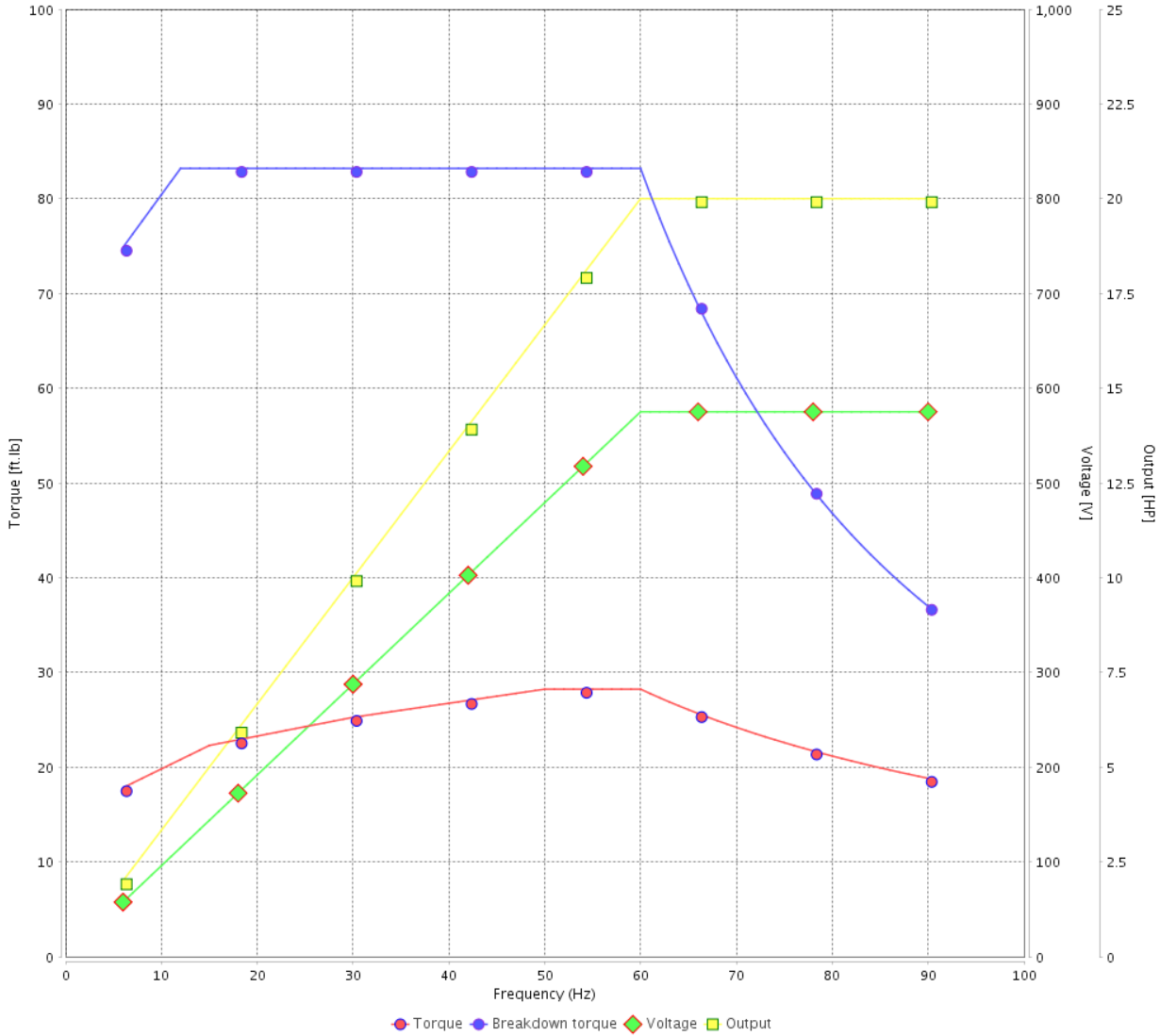
Customer : \_\_\_\_\_

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

Product code : 14486218

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VFD OPERATION CURVE

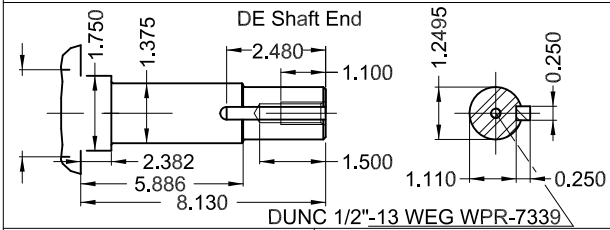
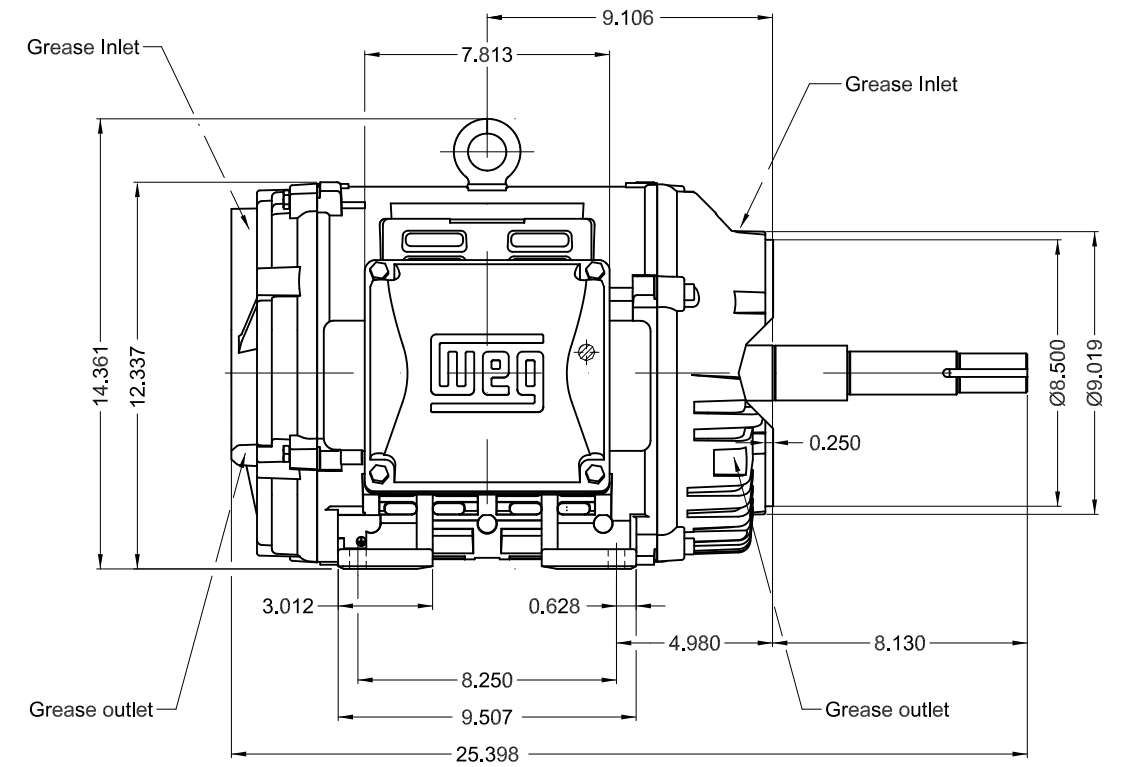
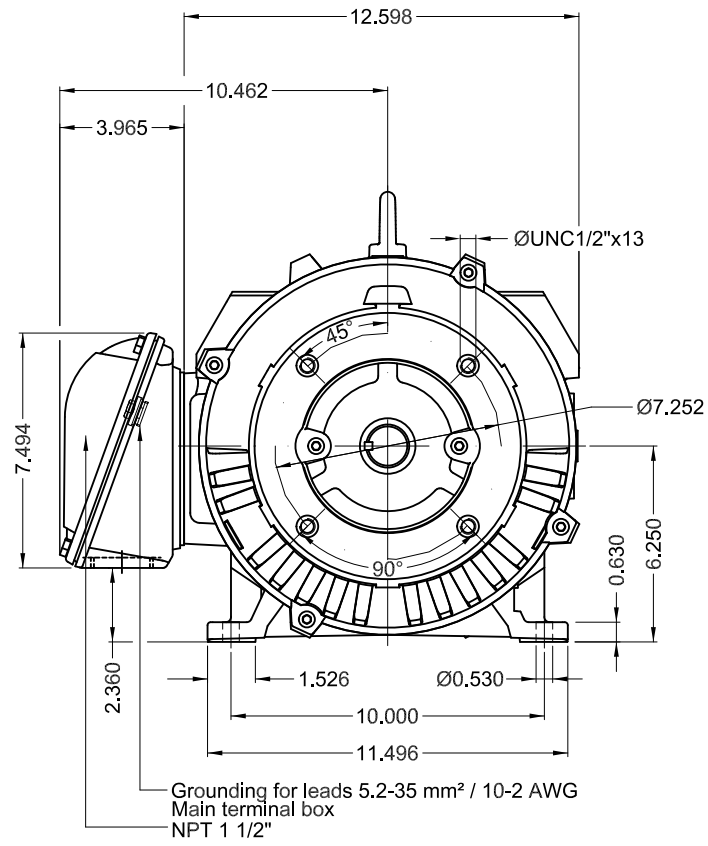


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20 HP 02 Poles 60 Hz

Dimensions in inches

1:6

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 CLOSE COUPLED PUMP JP TYPE PREM. FT. FRAME 254JP IP23 ODP					
CHECKED							
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**

