

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line		: W40 JP Pump NEMA Premium Efficiency Three-Phase		Product code : 14485013			
				Catalog # : 01518OT3H254JP-W40			
Frame	:	254JP		Locked rotor time	:	30s (cold) 17s (hot)	
Output	:	15 HP (11 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	:	14.0 A		Protection degree	:	IP23	
L. R. Amperes	:	89.6 A		Cooling method	:	IC01 - ODP	
LRC	:	6.4x(Code G)		Mounting	:	F-1	
No load current	:	5.76 A		Rotation <sup>1</sup>	:	Both (CW and CCW)	
Rated speed	:	1770 rpm		Noise level <sup>2</sup>	:	62.0 dB(A)	
Slip	:	1.67 %		Starting method	:	Direct On Line	
Rated torque	:	44.4 ft.lb		Approx. weight <sup>3</sup>	:	269 lb	
Locked rotor torque	:	240 %					
Breakdown torque	:	280 %					
Insulation class	:	F					
Service factor	:	1.25					
Moment of inertia (J)	:	2.72 sq.ft.lb					
Design	:	B					
Output	25%	50%	75%	100%	Foundation loads		
Efficiency (%)	91.0	91.7	92.4	93.0	Max. traction		
Power Factor	0.42	0.66	0.78	0.85	Max. compression		
		<u>Drive end</u>		<u>Non drive end</u>			
Bearing type	:	6309 Z C3		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.			
Rev.	Changes Summary			Performed	Checked	Date	
Performed by							
Checked by					Page	Revision	
Date	13/04/2022				1 / 6		

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



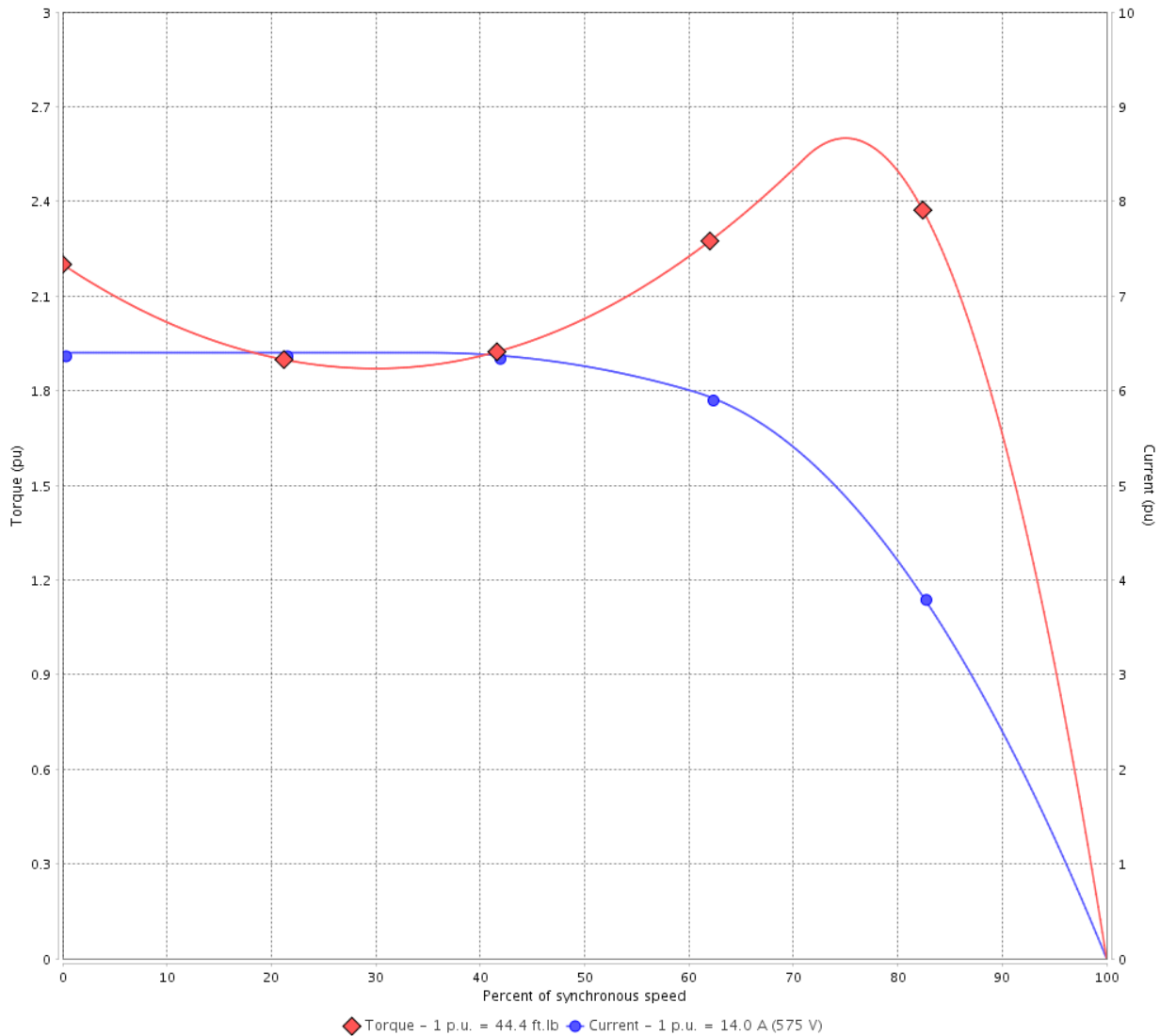
Customer :

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

Product code : 14485013

Catalog # : 01518OT3H254JP-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 14.0 A	Moment of inertia (J)	: 2.72 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 44.4 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

Locked rotor time : 30s (cold) 17s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	13/04/2022			

# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

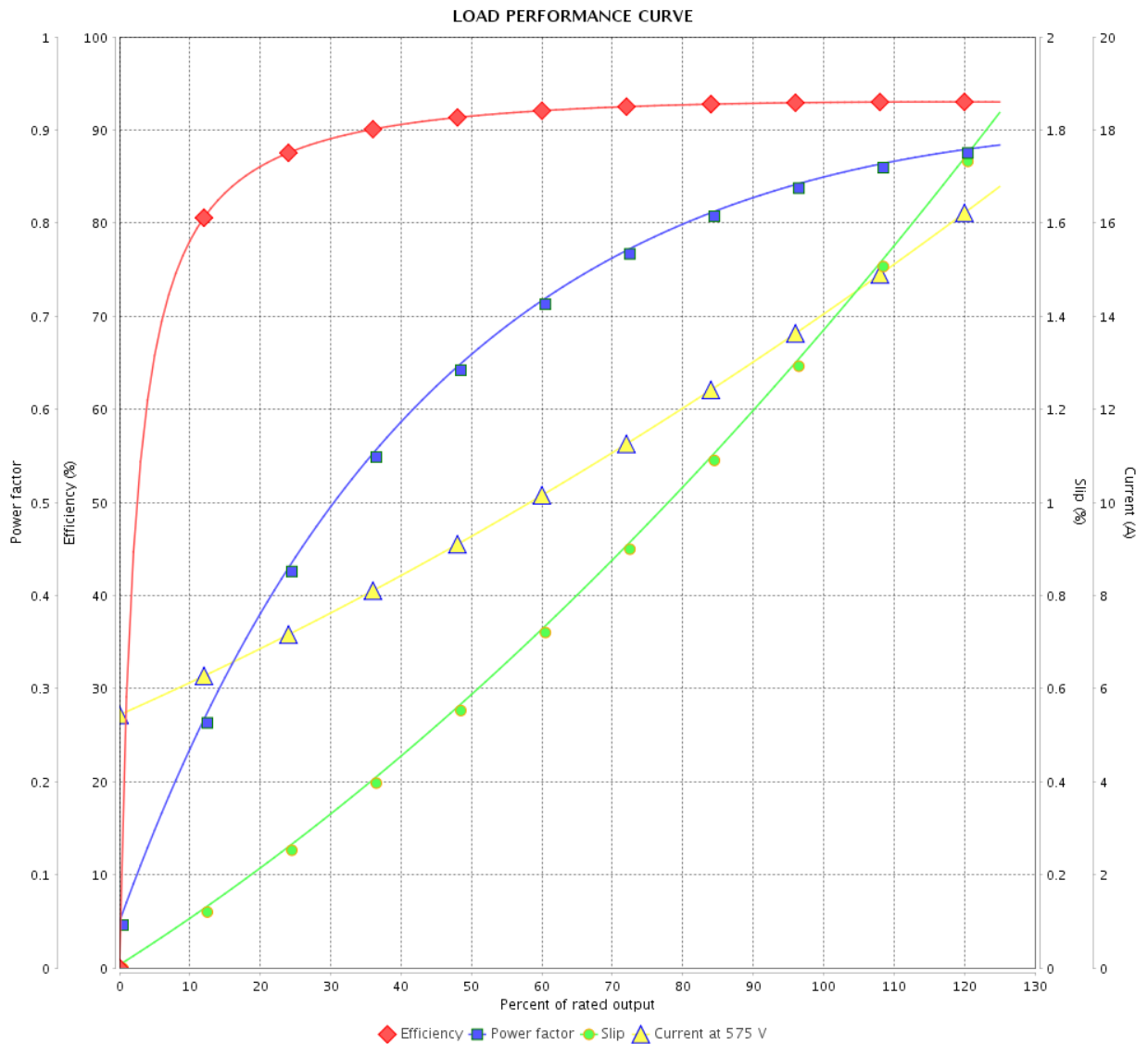


Customer : \_\_\_\_\_

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

Product code : 14485013

Catalog # : 01518OT3H254JP-W40



Performance : 575 V 60 Hz 4P

Rated current : 14.0 A  
 LRC : 6.4  
 Rated torque : 44.4 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 280 %  
 Rated speed : 1770 rpm

Moment of inertia (J) : 2.72 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		3 / 6		
Date		13/04/2022		

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14485013

Catalog # : 01518OT3H254JP-W40

Performance : 575 V 60 Hz 4P

Rated current : 14.0 A  
LRC : 6.4  
Rated torque : 44.4 ft.lb  
Locked rotor torque : 240 %  
Breakdown torque : 280 %  
Rated speed : 1770 rpm

Moment of inertia (J) : 2.72 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

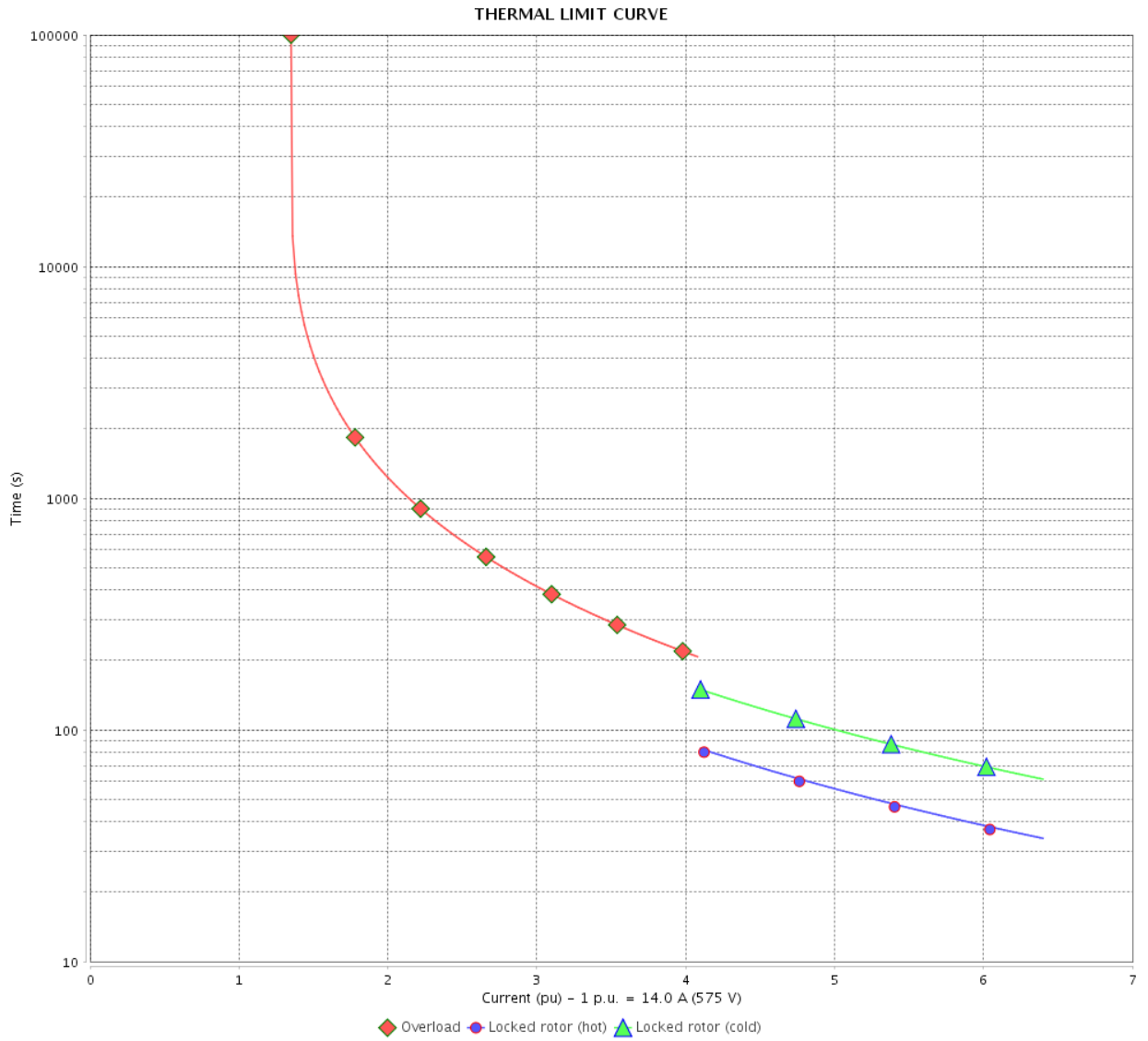
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	13/04/2022		Page 4 / 6	Revision

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 6		Revision
Checked by				
Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



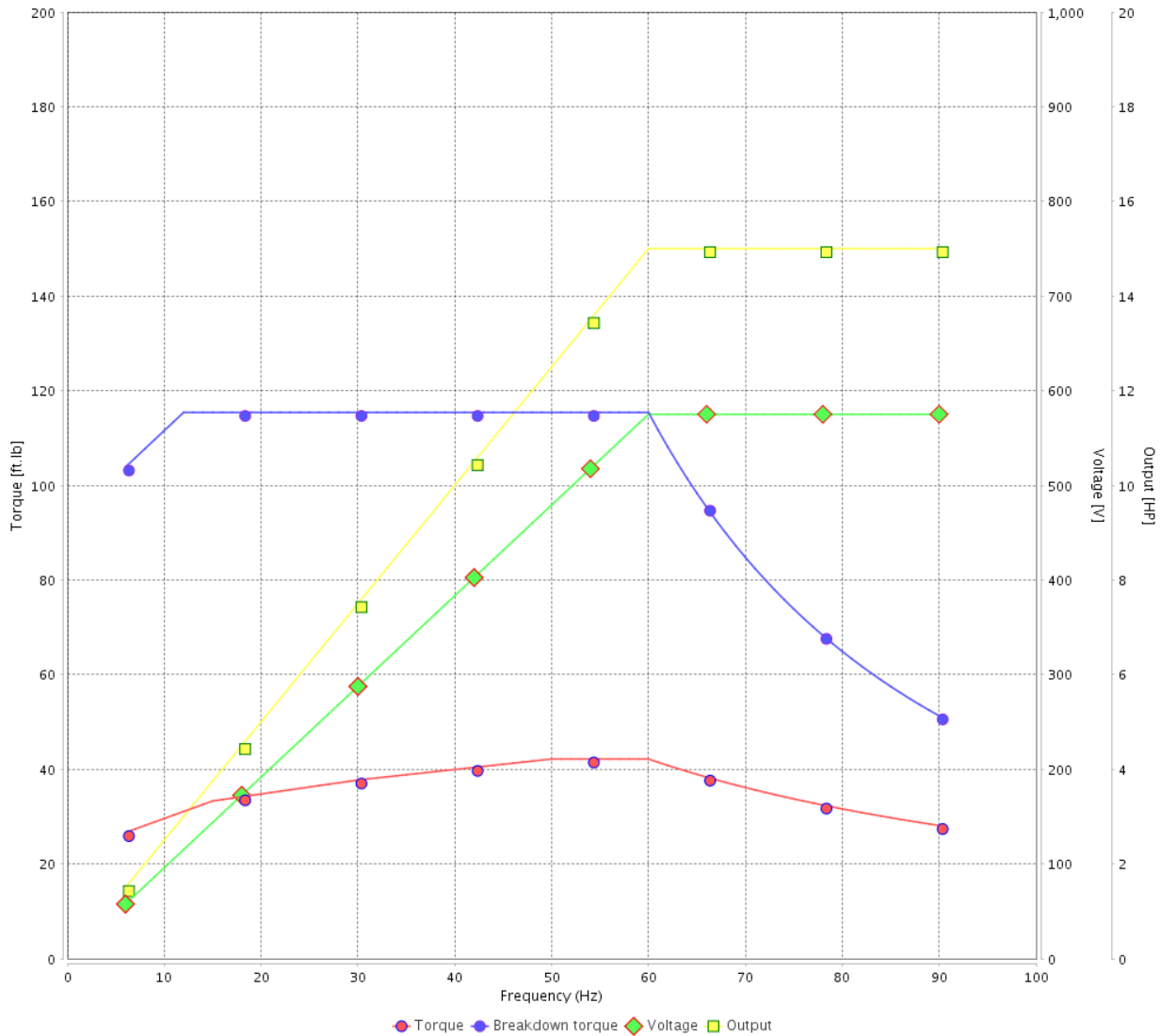
Customer :

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

Product code : 14485013

Catalog # : 01518OT3H254JP-W40

VFD OPERATION CURVE

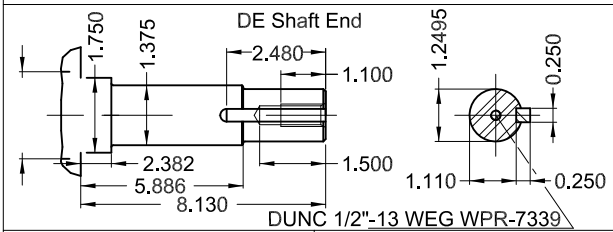
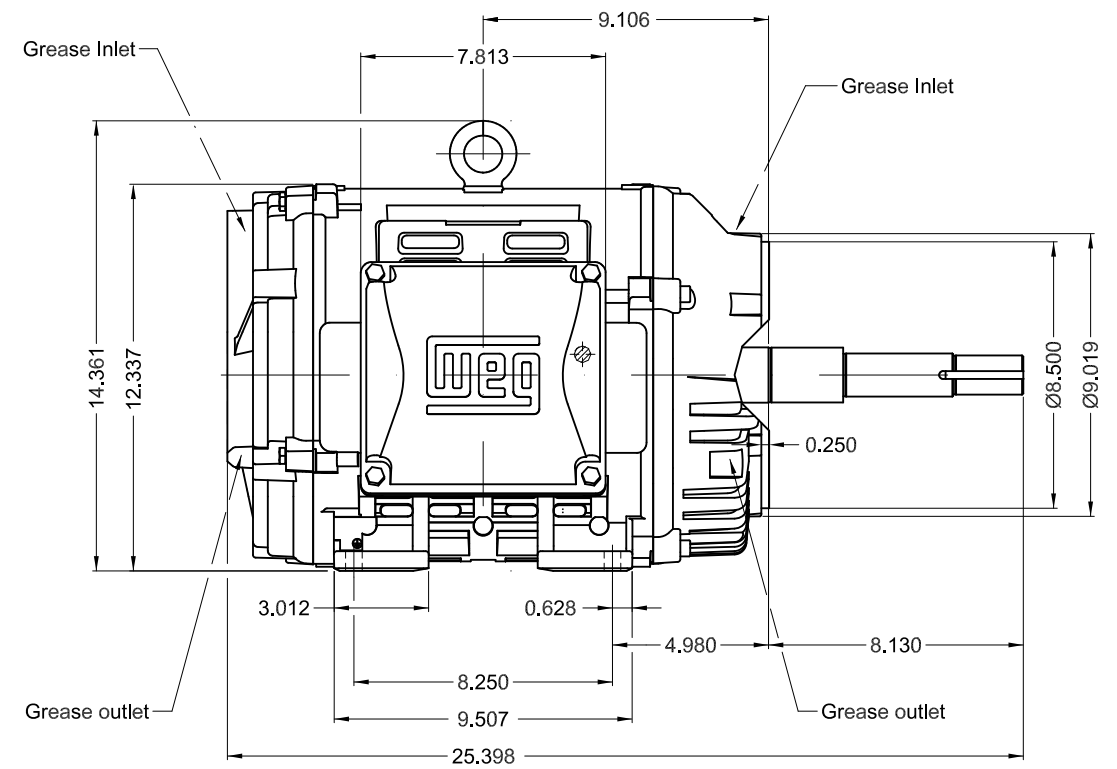
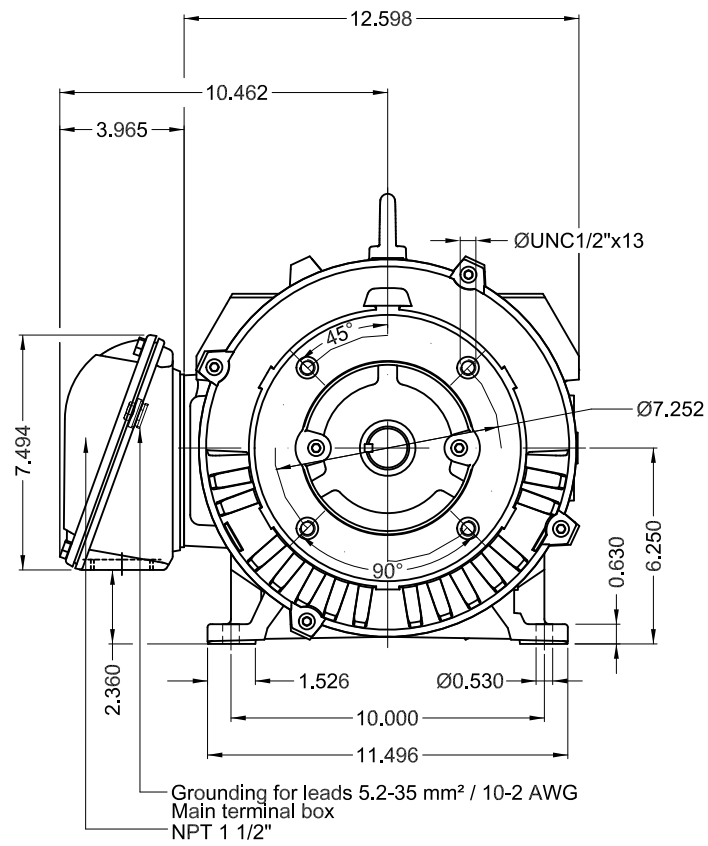


Performance : 575 V 60 Hz 4P

Rated current : 14.0 A  
 LRC : 6.4  
 Rated torque : 44.4 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 280 %  
 Rated speed : 1770 rpm

Moment of inertia (J) : 2.72 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	13/04/2022			



15 HP 04 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	WDD	SHEET	1 / 1	

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

