

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	:				
Product line	:	NEMA Premium Efficiency Three-Phase	Product code :	12156286	
			Catalog # :	04018ET3H324JP-W22	
Frame	:	324JP	Locked rotor time	: 36s (cold) 20s (hot)	
Output	:	40 HP (30 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	:	37.7 A	Protection degree	: IP55	
L. R. Amperes	:	230 A	Cooling method	: IC411 - TEFC	
LRC	:	6.1x(Code G)	Mounting	: F-1	
No load current	:	13.6 A	Rotation ¹	: Both (CW and CCW)	
Rated speed	:	1775 rpm	Noise level ²	: 66.0 dB(A)	
Slip	:	1.39 %	Starting method	: Direct On Line	
Rated torque	:	118 ft.lb	Approx. weight ³	: 561 lb	
Locked rotor torque	:	229 %			
Breakdown torque	:	240 %			
Insulation class	:	F			
Service factor	:	1.25			
Moment of inertia (J)	:	9.16 sq.ft.lb			
Design	:	B			
Output	50%	75%	100%	Foundation loads	
Efficiency (%)	93.6	94.1	94.1	Max. traction	
Power Factor	0.72	0.80	0.85	Max. compression	
				: 809 lb	
				: 1370 lb	
		<u>Drive end</u>	<u>Non drive end</u>		
Bearing type	:	6312 C3	6212 C3		
Sealing	:	V'Ring	V'Ring		
Lubrication interval	:	20000 h	20000 h		
Lubricant amount	:	21 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.		
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			1 / 6	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



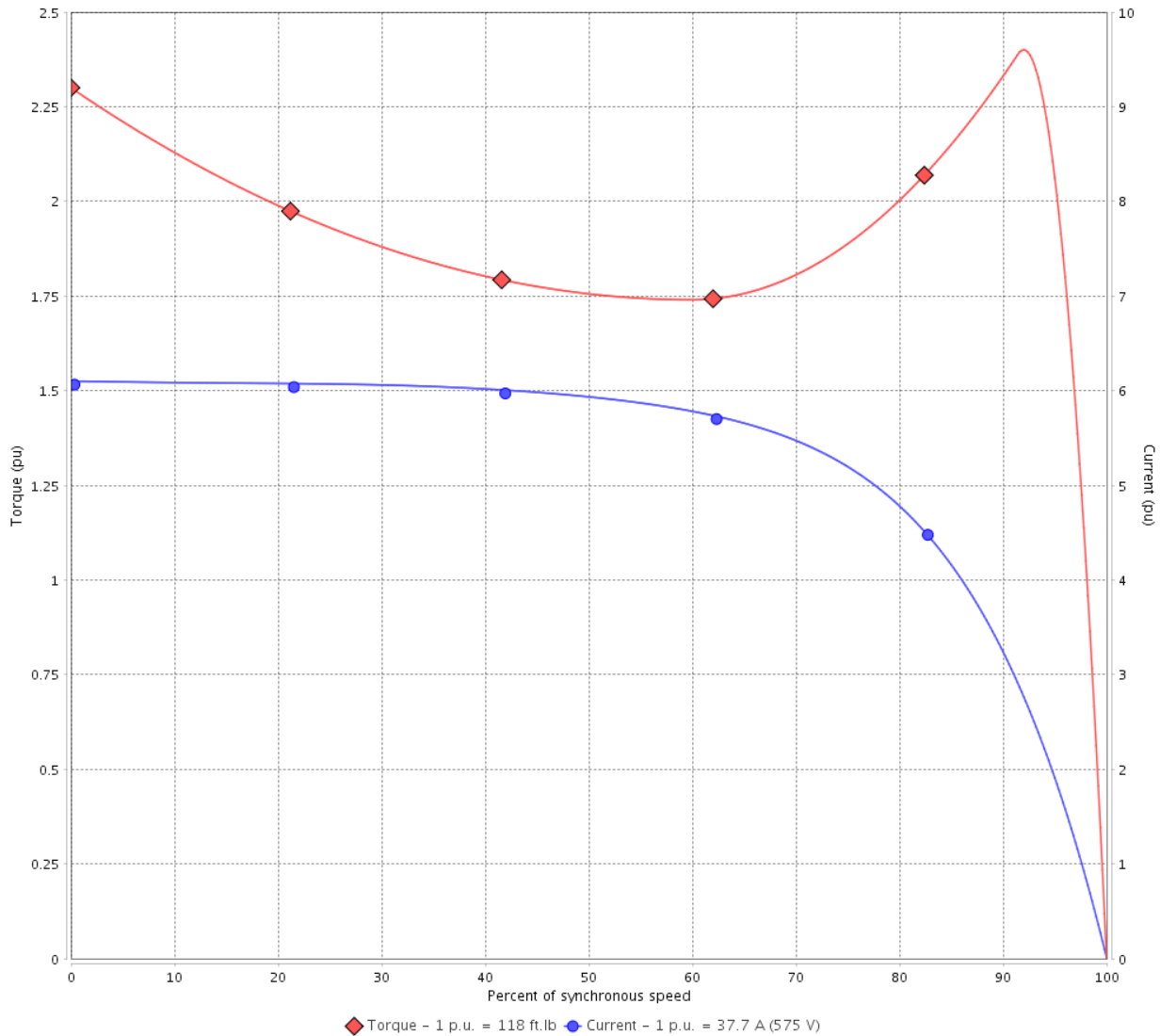
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12156286

Catalog # : 04018ET3H324JP-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current	: 37.7 A	Moment of inertia (J)	: 9.16 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 118 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

Locked rotor time : 36s (cold) 20s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	12/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

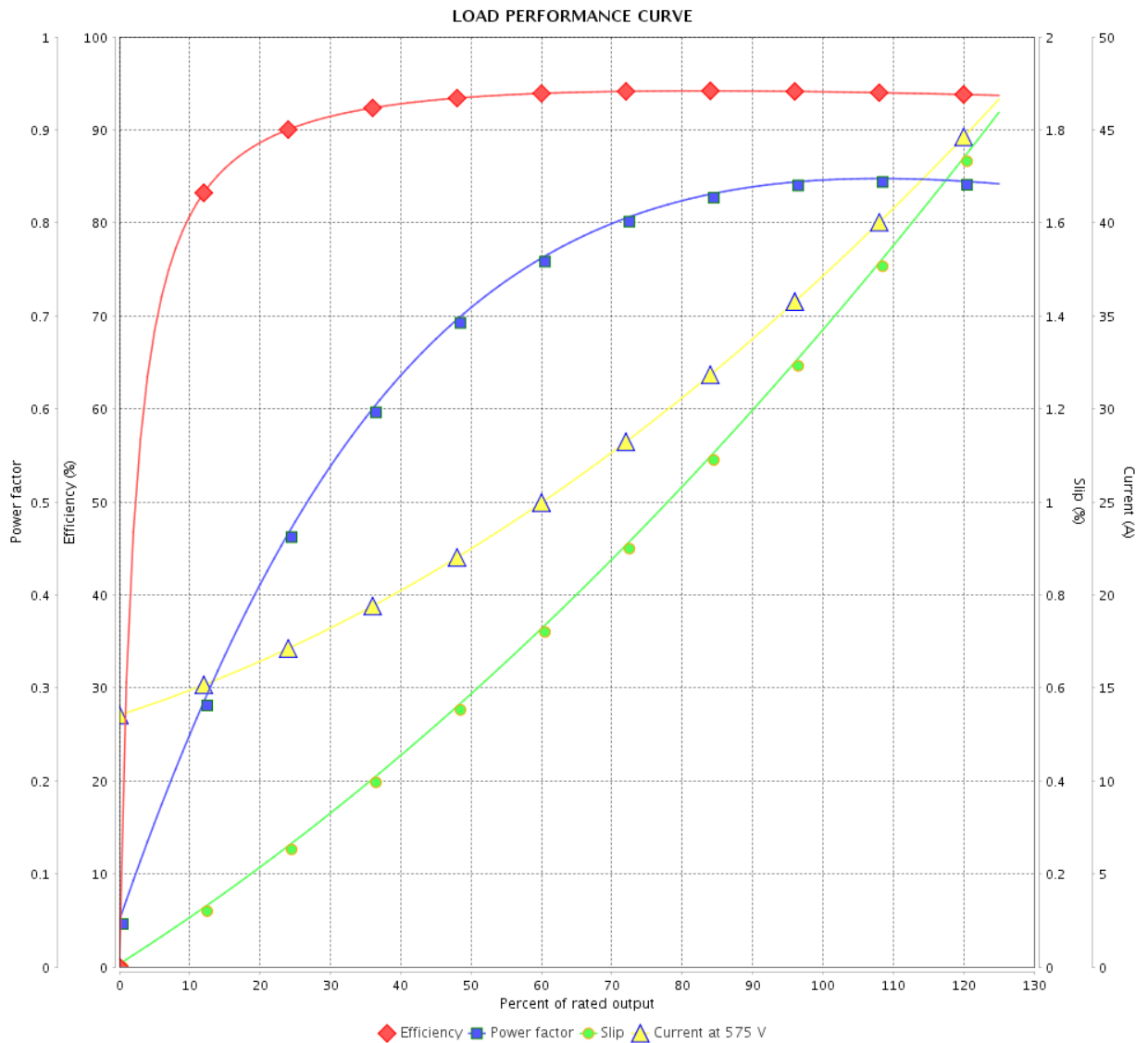


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12156286

Catalog # : 04018ET3H324JP-W22



Performance : 575 V 60 Hz 4P

Rated current : 37.7 A
 LRC : 6.1
 Rated torque : 118 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 240 %
 Rated speed : 1775 rpm

Moment of inertia (J) : 9.16 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	12/04/2022			

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
 Product code : 12156286
 Catalog # : 04018ET3H324JP-W22

Performance : 575 V 60 Hz 4P

Rated current : 37.7 A	Moment of inertia (J) : 9.16 sq.ft.lb
LRC : 6.1	Duty cycle : Cont.(S1)
Rated torque : 118 ft.lb	Insulation class : F
Locked rotor torque : 229 %	Service factor : 1.25
Breakdown torque : 240 %	Temperature rise : 80 K
Rated speed : 1775 rpm	Design : B

Heating constant

Cooling constant

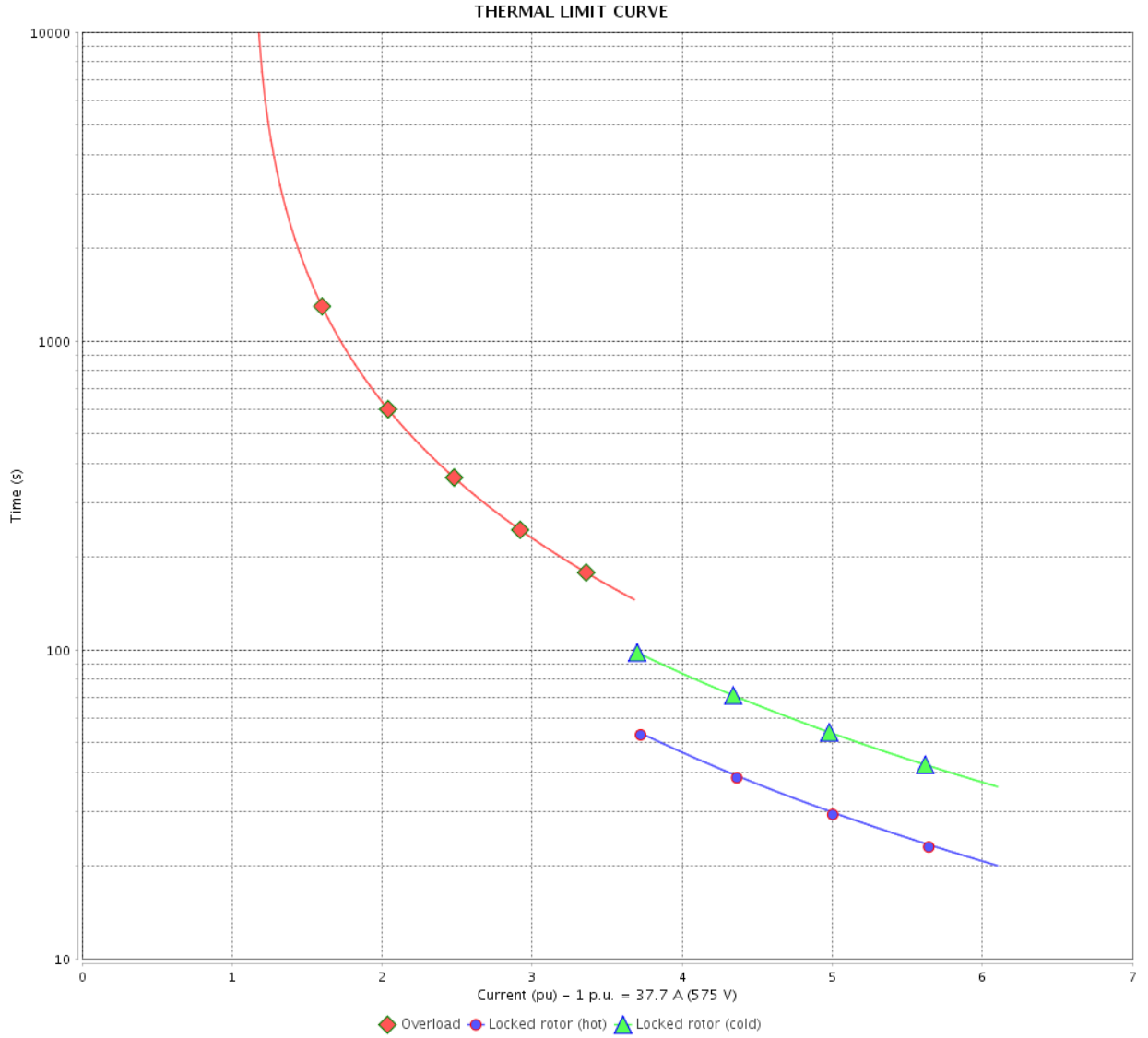
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

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

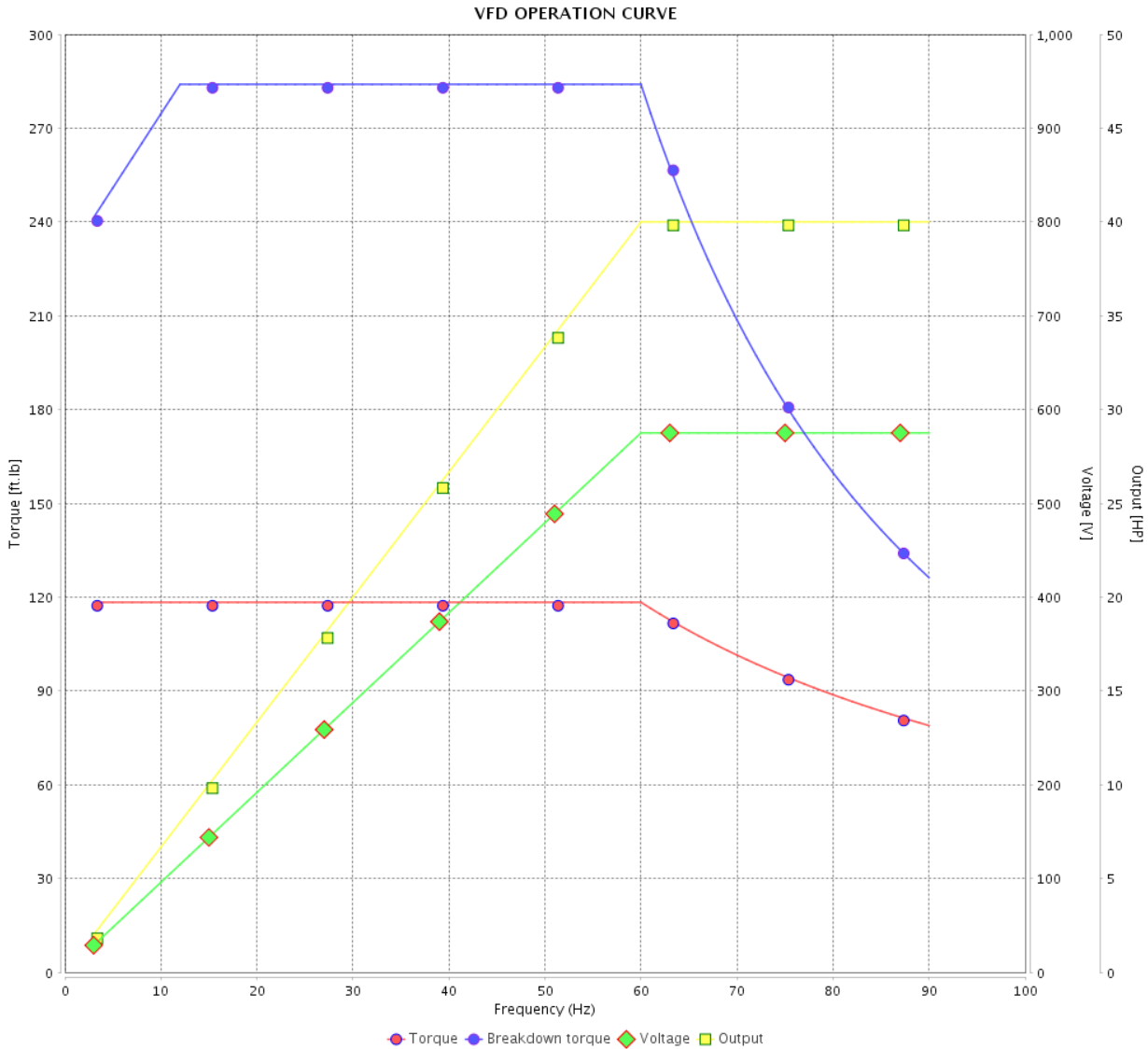


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12156286

Catalog # : 04018ET3H324JP-W22

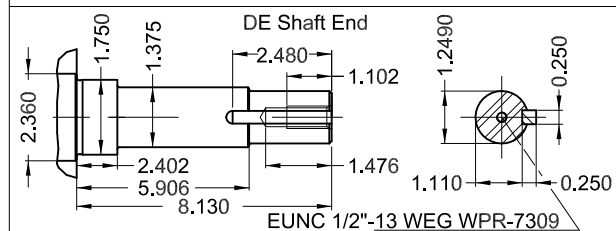
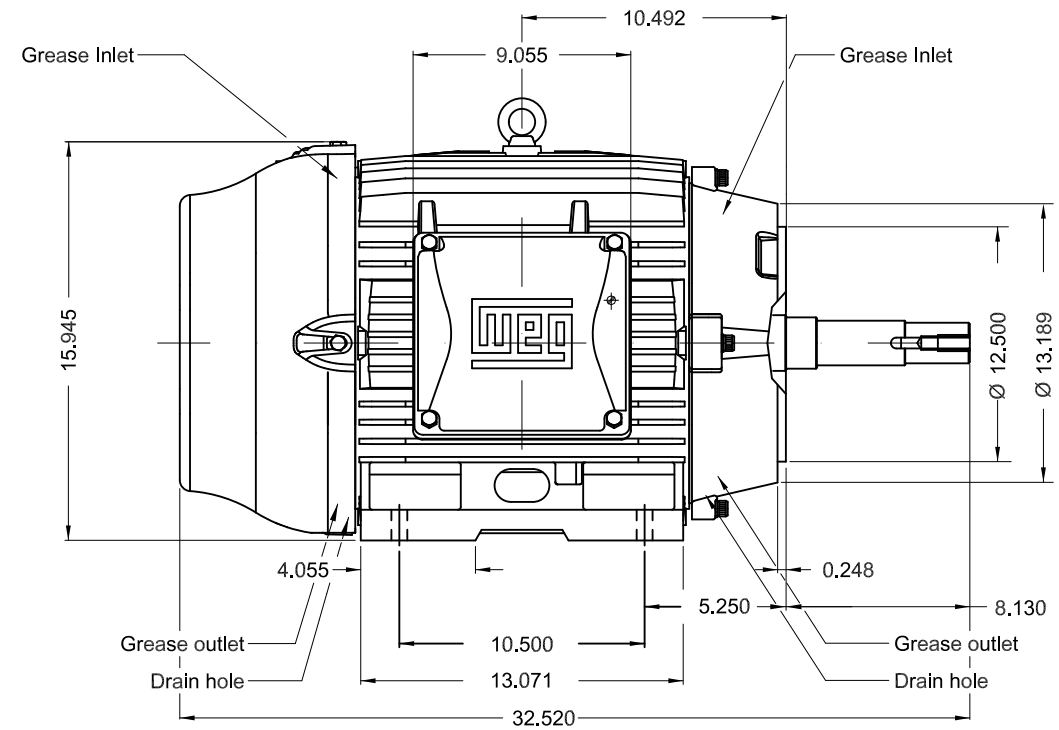
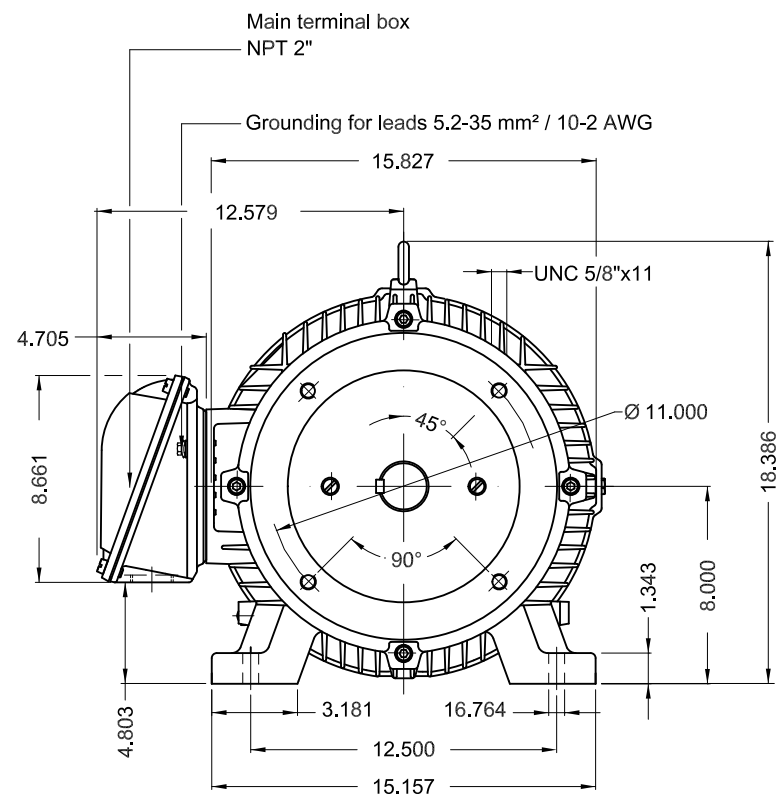


Performance : 575 V 60 Hz 4P

Rated current : 37.7 A
 LRC : 6.1
 Rated torque : 118 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 240 %
 Rated speed : 1775 rpm

Moment of inertia (J) : 9.16 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

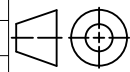
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	12/04/2022			



40 HP 04 Poles 60 Hz

Dimensions in inches

Without vertical jackscrews
 Color RAL 5009
 Painting plan 203A
 Mounting B34R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	 THREE PH. MOTOR JM/JP/JET PUMP W22 PREM. EFF. FRAME 324JP IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO		Jaragua do Sul	Product Engineering	SHEET	1 / 1	

PREVIEW
WDD



MODEL 04018ET3H324JP-W22
MADE IN BRAZIL
12156286



*Inverter Duty Motor
Severe Duty*

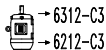
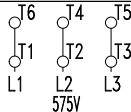


FOR SAFE AREA
MOD.TE1BFOXON



Class I, Div 2, Gr. A, B, C and D - T3
Class I, Zone 2, IIC - T3
Class II, Div 2, Gr. F and G - T4
For use on PWM, Gr. A, B, C, D and F,
VT 1000:1, CT 20:1, 1.0SF, T3A

PH 3	FR 324JP	HP(kW) 40(30)		Hz 60
V 575		A 37.7		IP55
NEMA NOM EFF		94.1	%	RPM 1775
ENCL TEFC	DUTY CONT.		INS. CL. F ΔT 80 K	
PF 0.85		DES B	CODE G	AMB. 40°C
SF 1.25	SFA 47.1		ALT 1000 m.a.s.l.	



→ 6312-C3
→ 6212-C3

MOBIL POLYREX EM
21 g 20000 h

560 Lbs