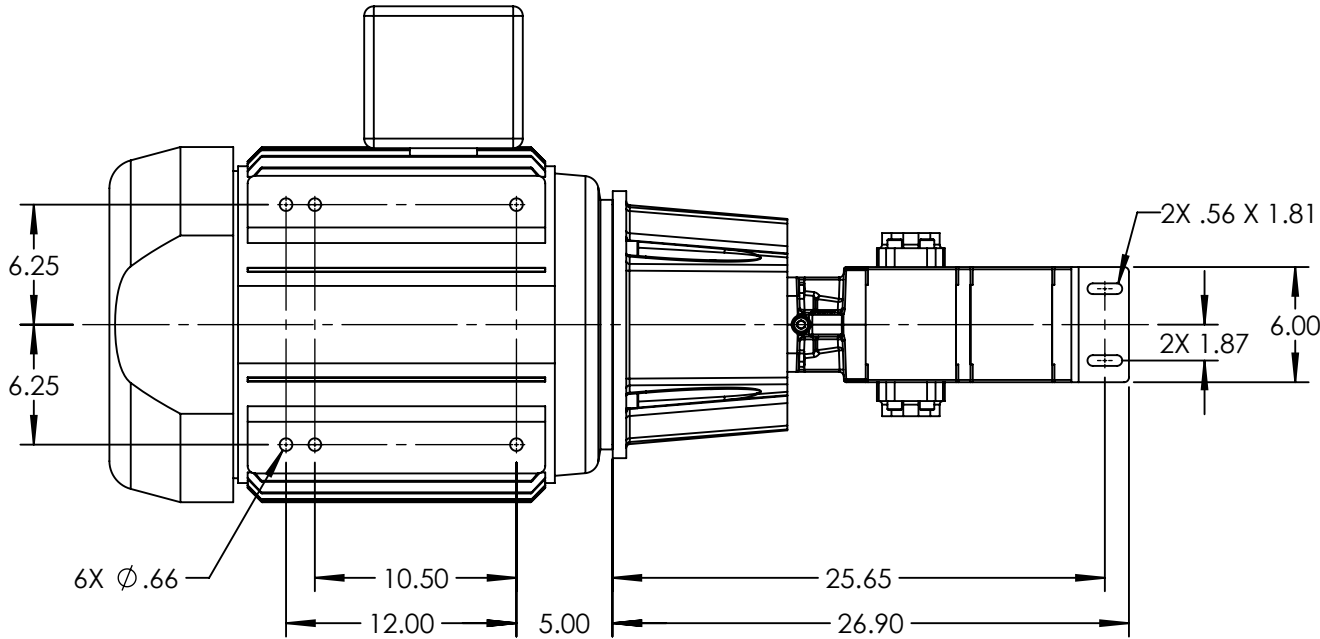
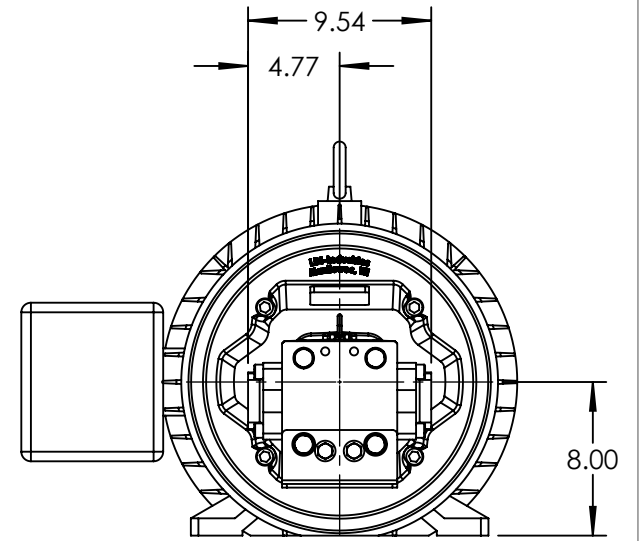
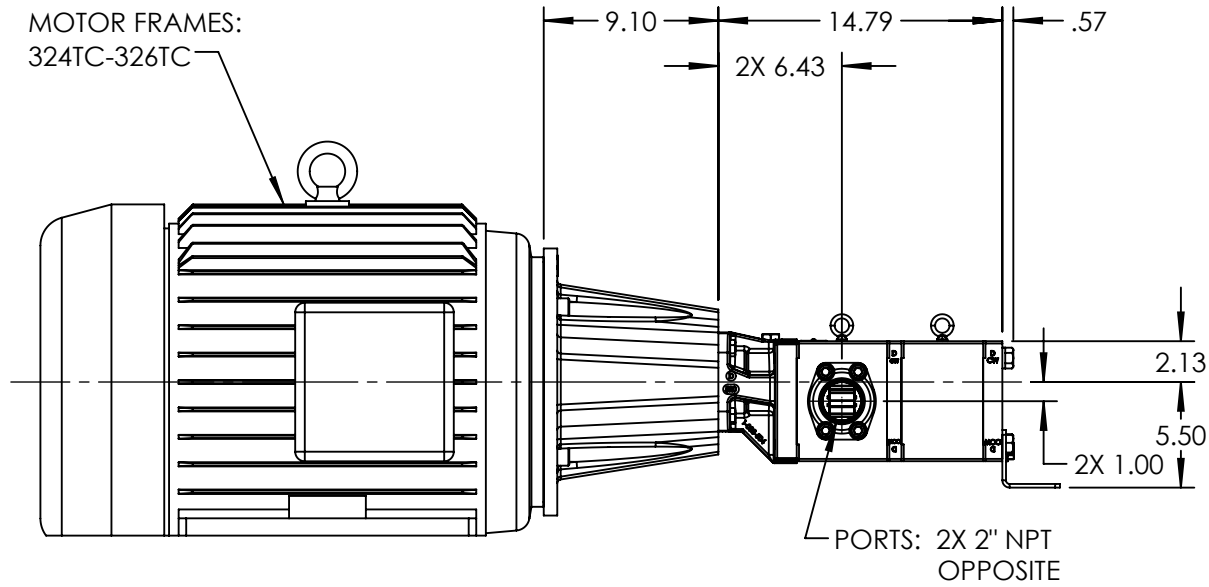


MOTOR FRAMES:  
324TC-326TC



STANDARD MODELS: GB-41022-G00-M, GB-41022-G10-M

NOTES:

1. ALL DIMENSIONS ARE FOR REFERENCE ONLY.

STATE	Released	07/16/2021
DRAWN	bmanernach	7/1/2021
CHECKED	JAG	07/16/2021

DIMENSIONS ARE IN INCHES
PROJECT: E331
WAS:



VIKING PUMP, INC.  
A Unit of IDEX Corporation  
Cedar Falls, IA 50613  
U.S.A.

THIS DRAWING IS THE PROPERTY OF VIKING PUMP, INC. AND IS PROPRIETARY IN GENERAL AND DETAIL. IT SHALL NOT BE COPIED OR ITS CONTENTS REVEALED TO OUTSIDE PARTIES WITHOUT THE WRITTEN CONSENT OF VIKING PUMP, INC.

3D

DWG. NO. GPV-1022-003-U  
SHEET 1 OF 1

REV. A.0  
07/16/2021

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase      Product code : 11438075  
Catalog # : 05018ET3E326TC-W22

Frame	: 324/6TC	Locked rotor time	: 27s (cold) 15s (hot)
Output	: 50 HP (37 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 208-230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 131-118/59.2 A	Protection degree	: IP55
L. R. Amperes	: 812-734/367 A	Cooling method	: IC411 - TEFC
LRC	: 6.2x(Code G)	Mounting	: F-1
No load current	: 40.5-47.0/23.5 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1775 rpm	Noise level <sup>2</sup>	: 66.0 dB(A)
Slip	: 1.39 %	Starting method	: Direct On Line
Rated torque	: 148 ft.lb	Approx. weight <sup>3</sup>	: 610 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 270 %		
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 (%)	93.0	94.1	94.5	Max. traction	: 1477 lb
Power Factor	0.66	0.77	0.83	Max. compression	: 2088 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	27/02/2020		1 / 6	

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

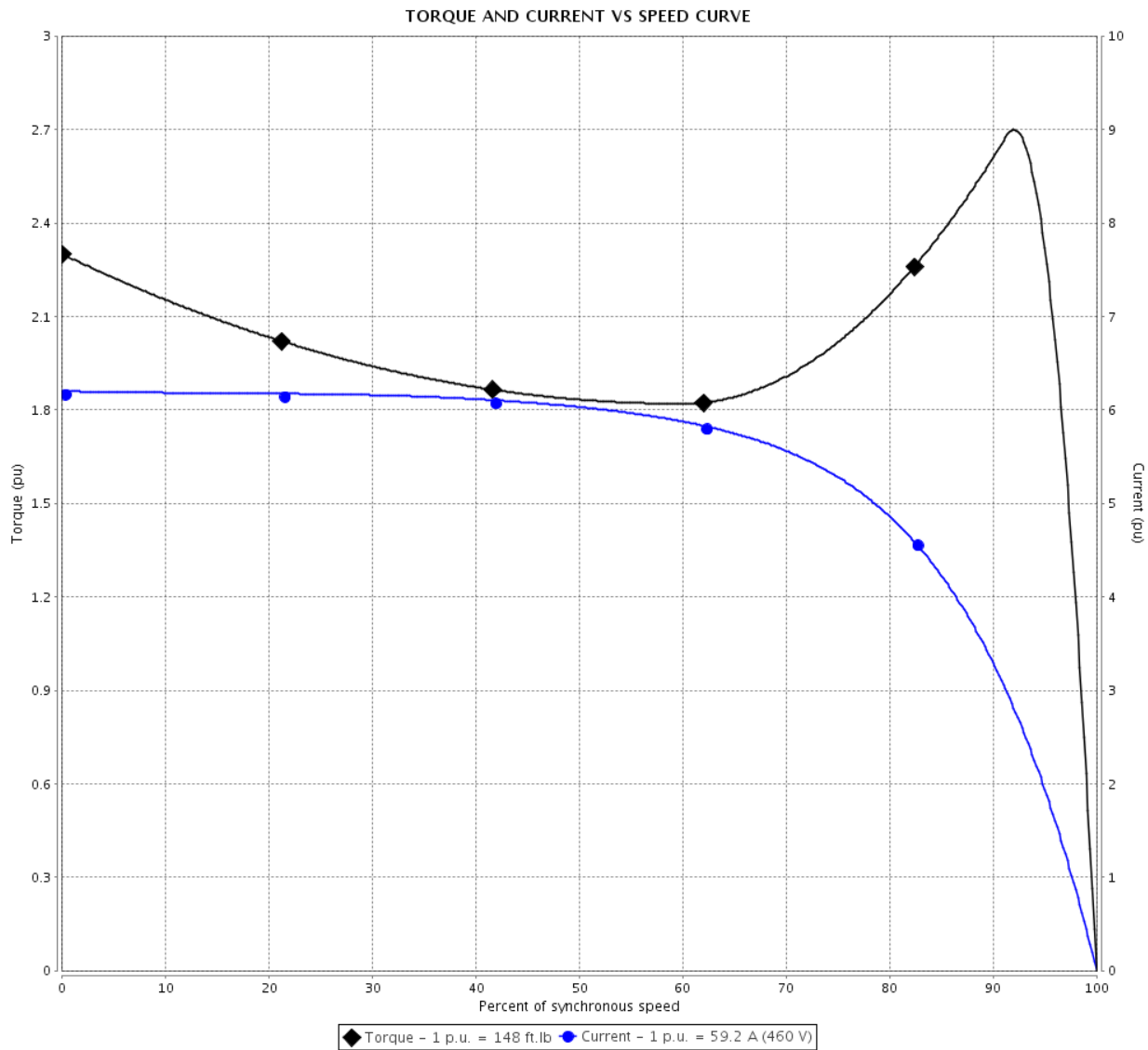


Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 11438075

Catalog # : 05018ET3E326TC-W22



Performance : 208-230/460 V 60 Hz 4P

Rated current	: 131-118/59.2 A	Moment of inertia (J)	: 9.16 sq.ft.lb
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 148 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

Locked rotor time : 27s (cold) 15s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	27/02/2020			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

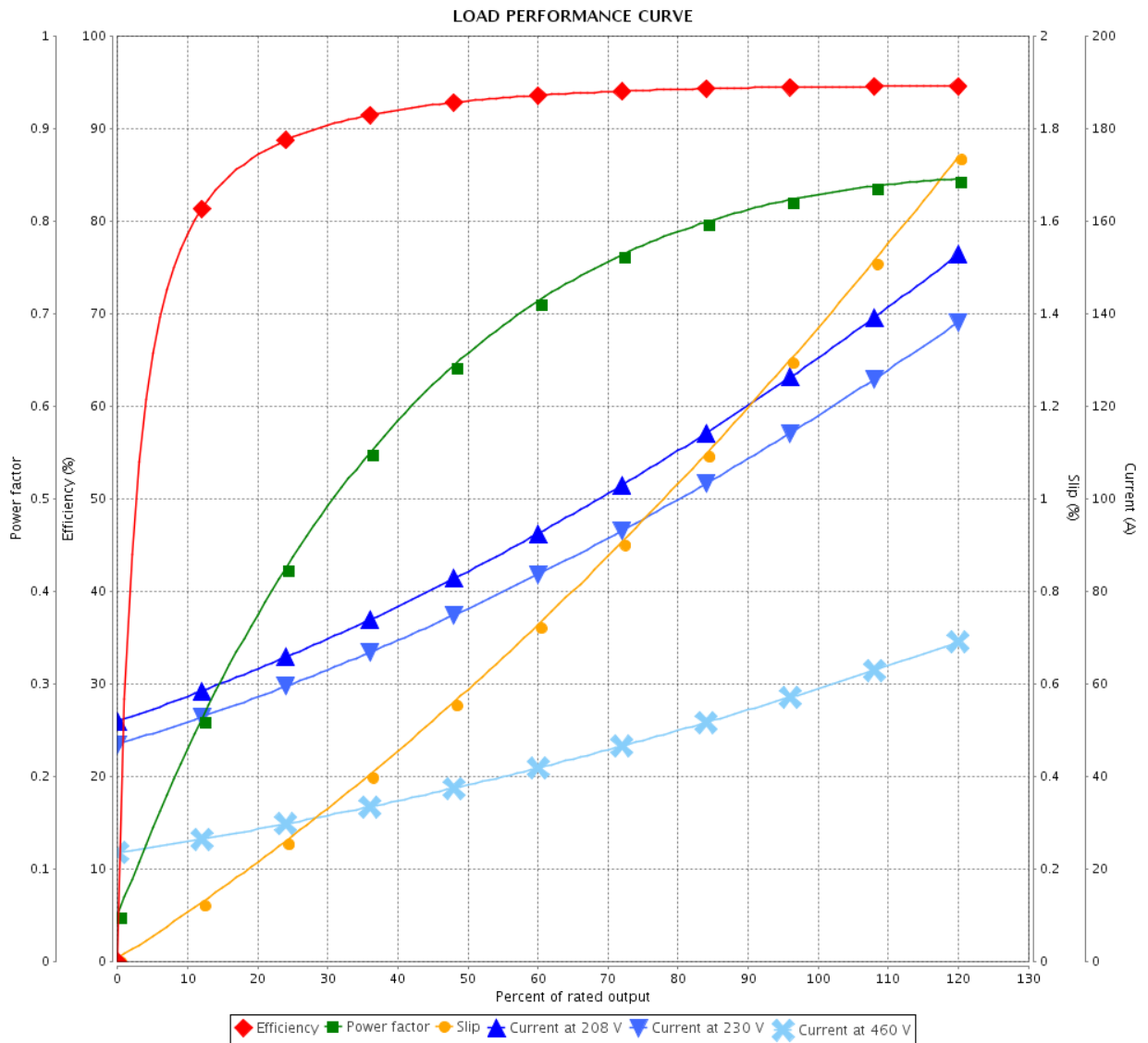


Customer : \_\_\_\_\_

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 11438075

Catalog # : 05018ET3E326TC-W22



Performance : 208-230/460 V 60 Hz 4P

Rated current : 131-118/59.2 A  
 LRC : 6.2  
 Rated torque : 148 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 270 %  
 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				
Date				

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase  
 Product code : 11438075  
 Catalog # : 05018ET3E326TC-W22

Performance : 208-230/460 V 60 Hz 4P

Rated current : 131-118/59.2 A	Moment of inertia (J) : 9.16 sq.ft.lb
LRC : 6.2	Duty cycle : Cont.(S1)
Rated torque : 148 ft.lb	Insulation class : F
Locked rotor torque : 229 %	Service factor : 1.25
Breakdown torque : 270 %	Temperature rise : 80 K
Rated speed : 1775 rpm	Design : B

Heating constant

Cooling constant

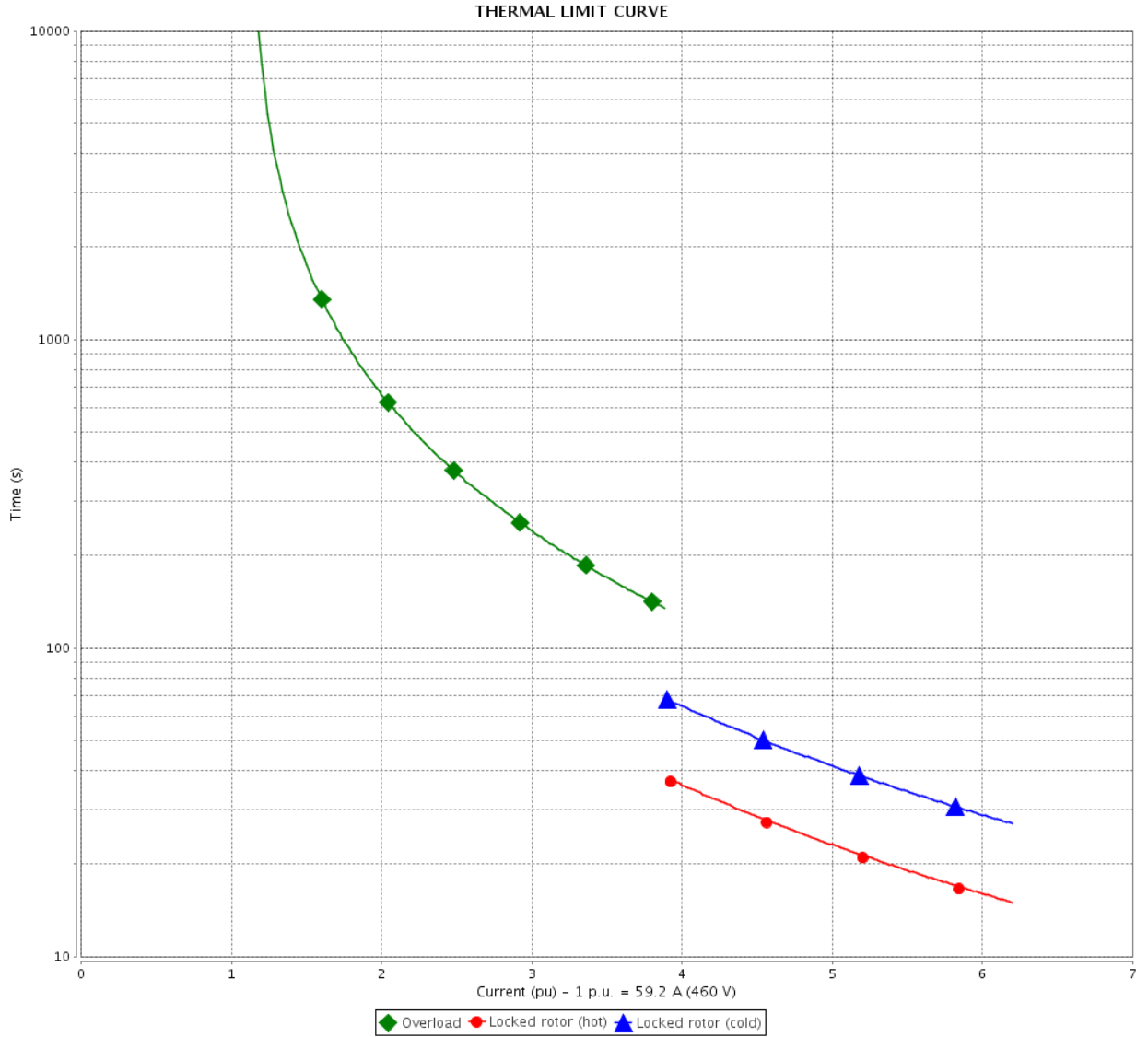
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date	27/02/2020			

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

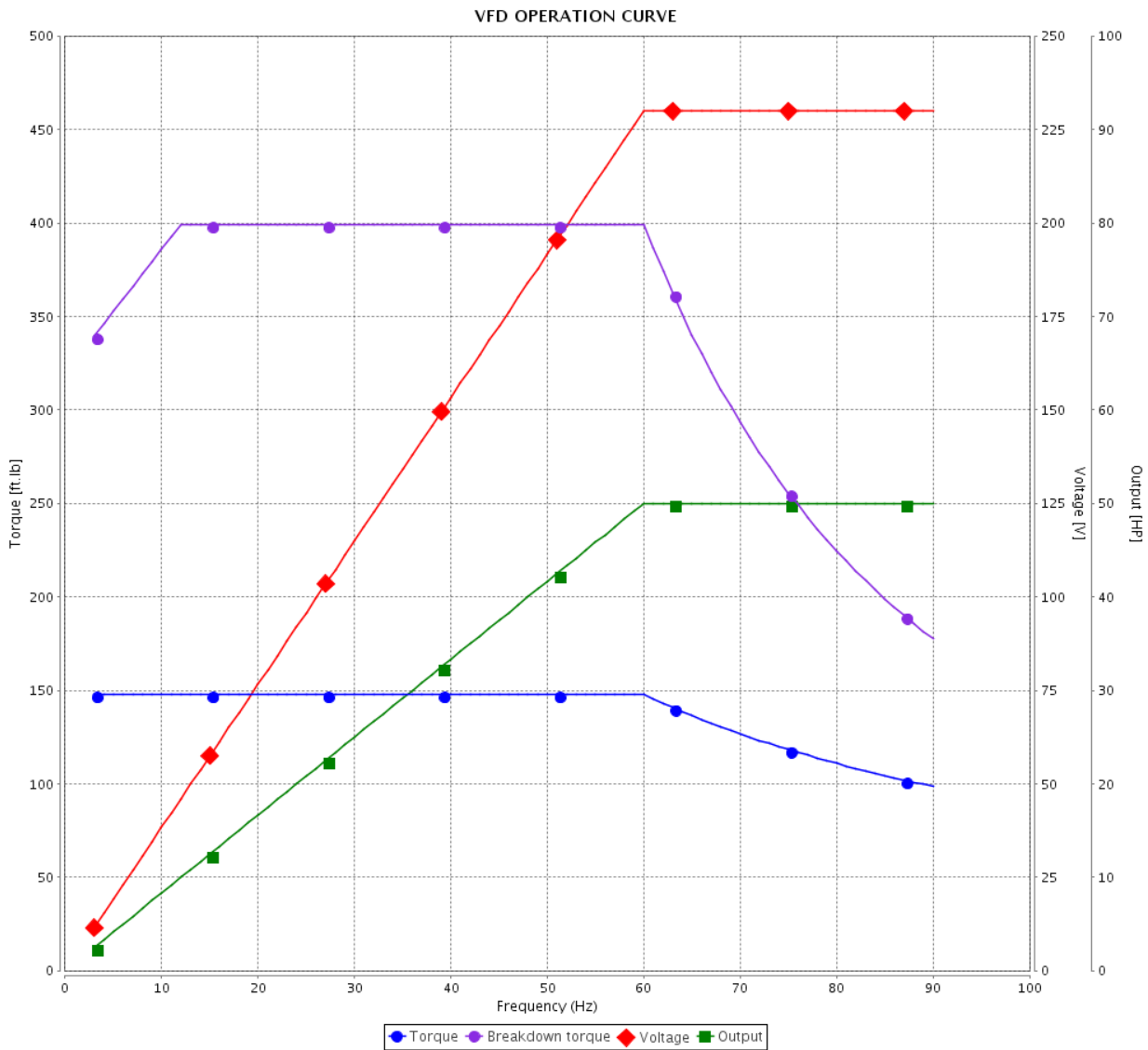


Customer : \_\_\_\_\_

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 11438075

Catalog # : 05018ET3E326TC-W22

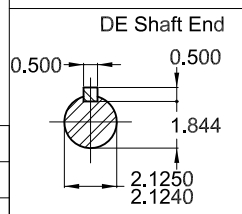
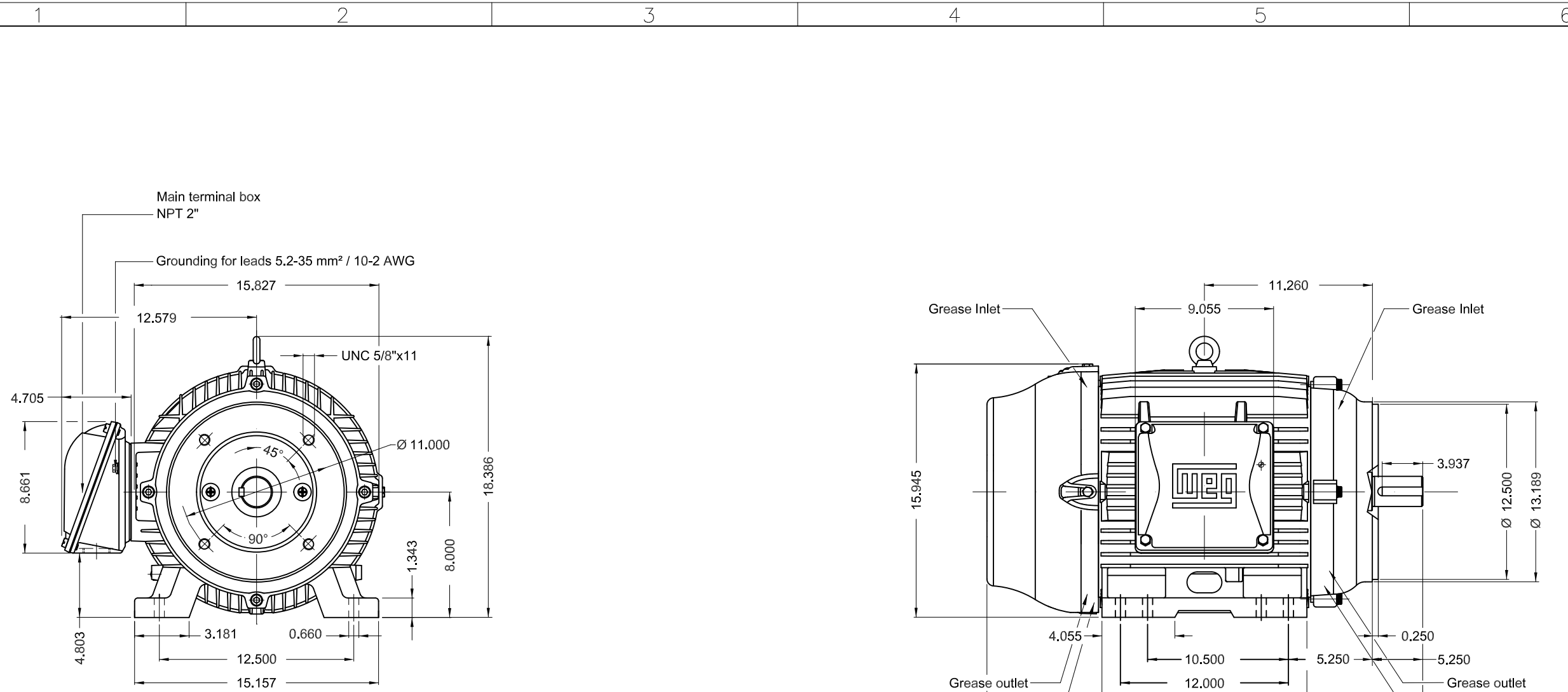


Performance : 208-230/460 V 60 Hz 4P

Rated current : 131-118/59.2 A  
LRC : 6.2  
Rated torque : 148 ft.lb  
Locked rotor torque : 229 %  
Breakdown torque : 270 %  
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	27/02/2020			




Color RAL 5009  
 Painting plan 203A  
 Mounting B34R(D)

50 HP 04 Poles 60Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PHASE W22 MOTOR - NEMA PREMIUM EFF					
CHECKED		FRAME 324/6TC IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

**PREVIEW**

WDD





MODEL 05018ET3E326TC-W22  
MADE IN MEXICO  
11438075



Inverter Duty Motor  
Severe Duty



FOR SAFE AREA  
MOD.TE1BFOXON

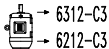
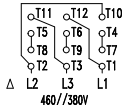
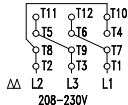


For 60Hz: Class I, Div 2, Gr. A, B, C and D - T3  
Class I, Zone 2, IIC - T3

Class II, Div 2, Gr. F and G - T4

For 60Hz use on PWM, Gr. A, B, C, D and F,  
VT 1000:1, CT 20:1, 1.0SF, T3A

PH 3	FR 324/6TC	HP(kW) 50.0(37.0)	Hz 60
V 230/460	A 118/59.2	RPM 1775	DES B
NEMA NOM EFF 94.5 %	INS. CL. F $\Delta$ T 80 K	IP55	
ENCL TEFC	DUTY CONT.	AMB. 40°C	
CODE G	PF 0.83	SF 1.25	SFA 148/74.0
USABLE @208V 131 A	SF 1.15	SFA 151	
50HP 37kW 50Hz 380V 71.6A 1460RPM SF1.00 EFF 92.4% (IE1)	ALT 1000 m.a.s.l.	611 Lbs	



MOBIL POLYREX EM  
21 g 20000 h