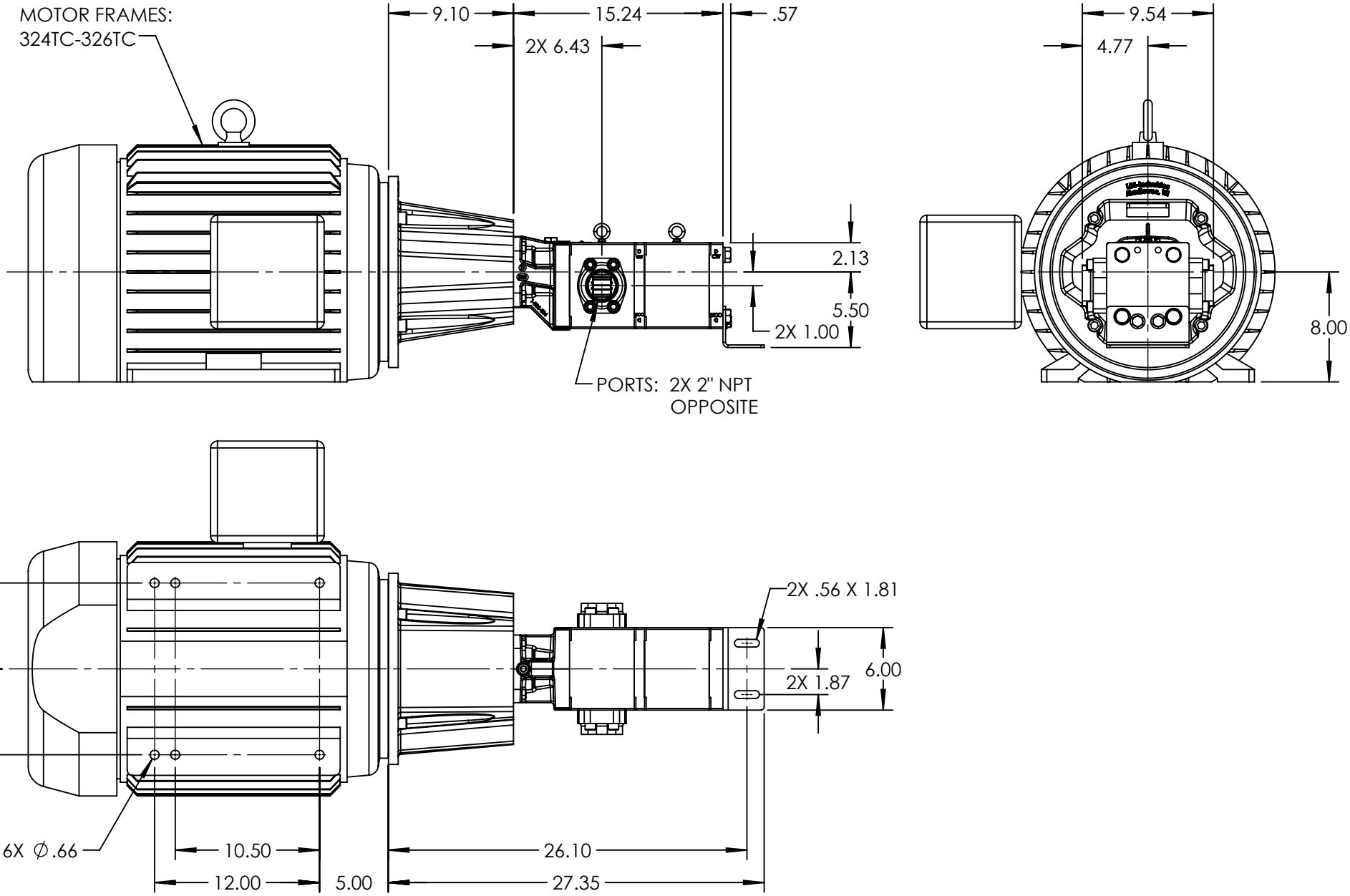


STANDARD MODELS: GB-41026-G0O-M, GB-41026-G1O-M

NOTES:

1. ALL DIMENSIONS ARE FOR REFERENCE ONLY.

STATE	Released	07/16/2021	DIMENSIONS ARE IN INCHES	VIKING PUMP	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-1026-075-U	SHEET 1 OF 1
DRAWN	bmanternach	7/1/2021	PROJECT:E331					REV. A.0
CHECKED	JAG	07/16/2021	WAS:					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[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	: 148 ft.lb	Approx. weight[3]	: 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%
Efficiency (%)	93.0	94.1	94.5
Power Factor	0.66	0.77	0.83

Foundation loads	
Max. traction	: 1477 lb
Max. compression	: 2088 lb

		Drive end	Non drive end
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

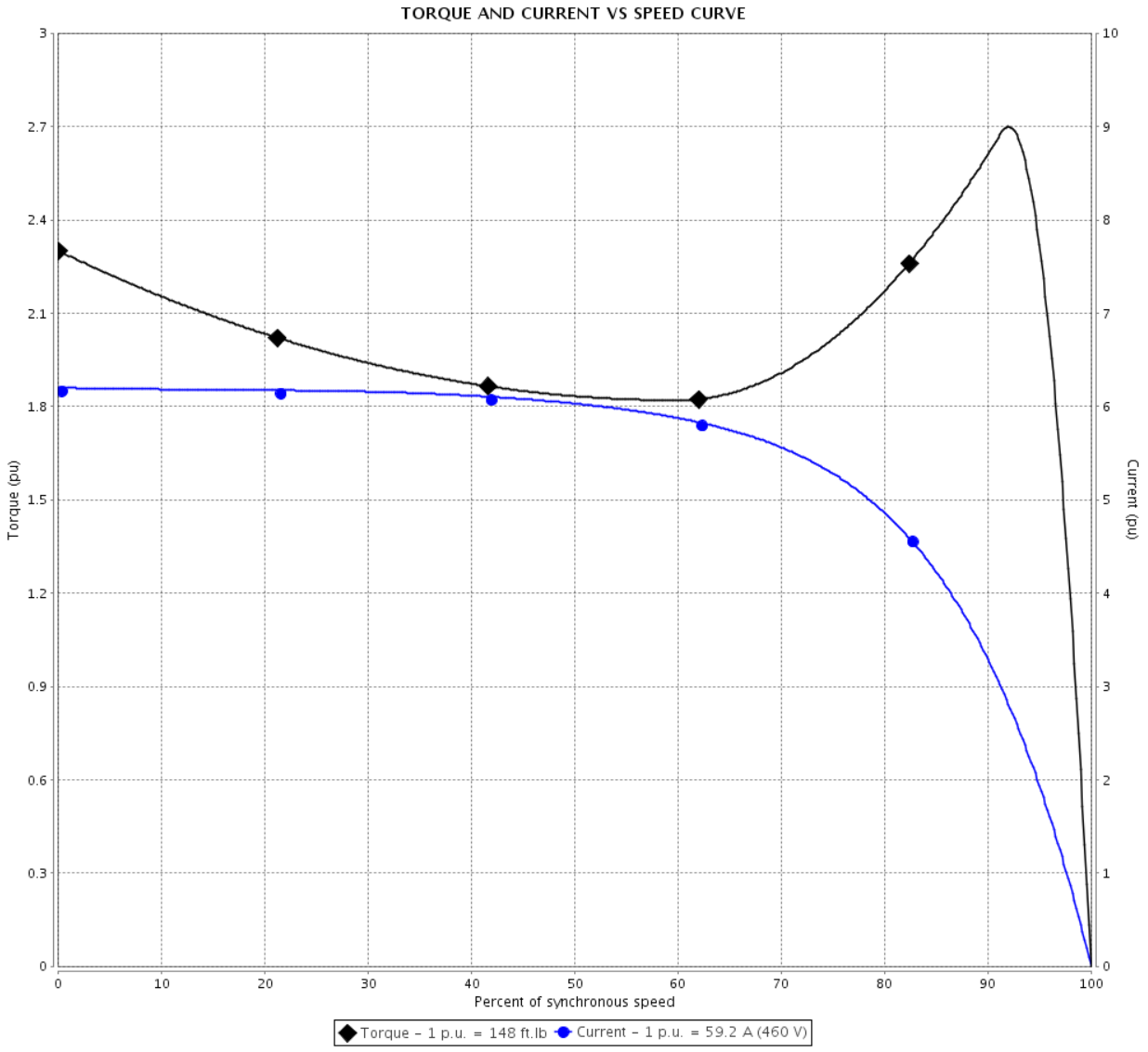
Performed by				
Checked by			Page	Revision
Date	27/02/2020		1 / 6	

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

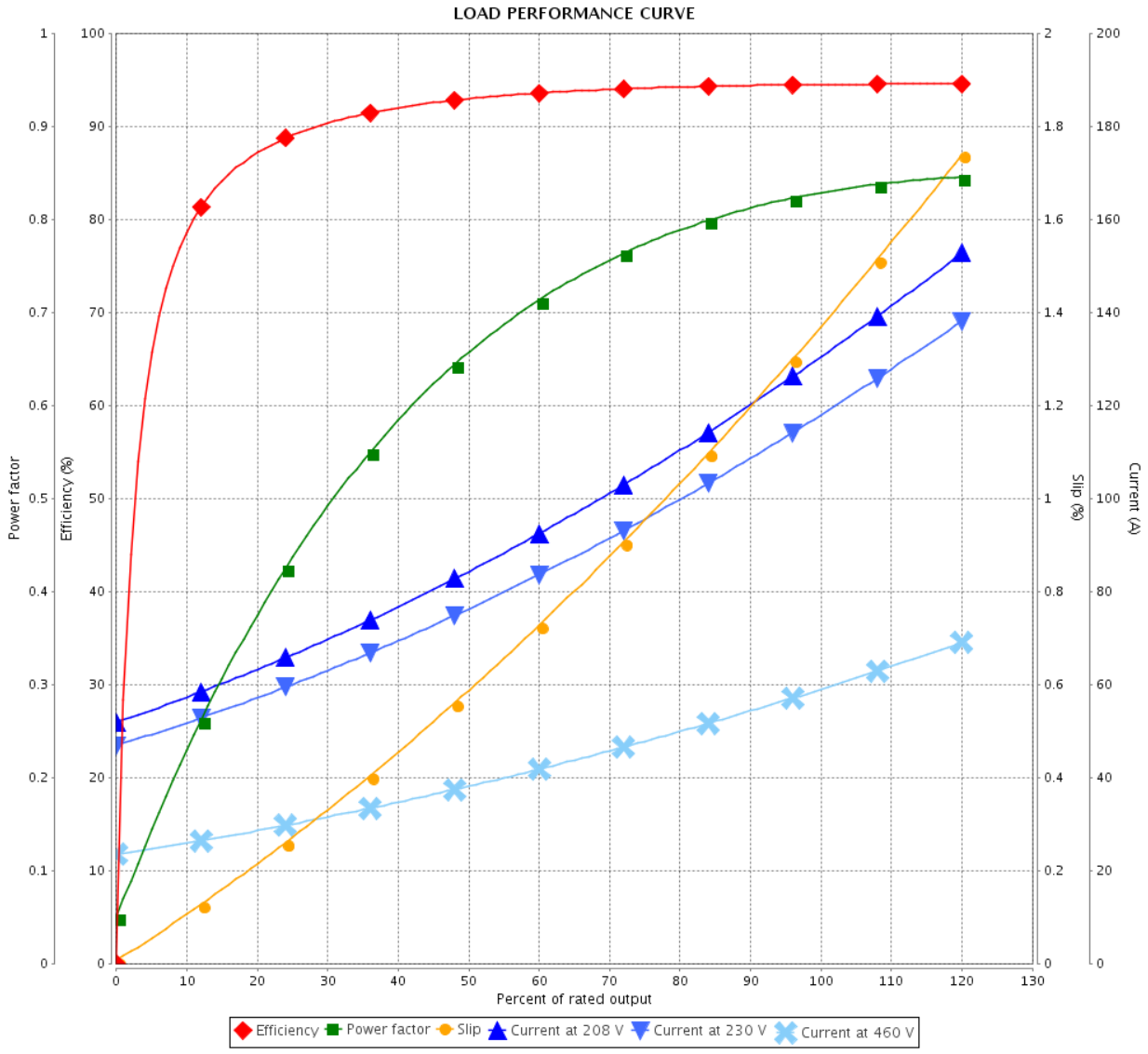
Performed by				
Checked by			Page	Revision
Date	27/02/2020		2 / 6	

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	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

Rev.	Changes Summary	Performed	Checked	Date

Performed by				
Checked by			Page	Revision
Date	27/02/2020		3 / 6	

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	

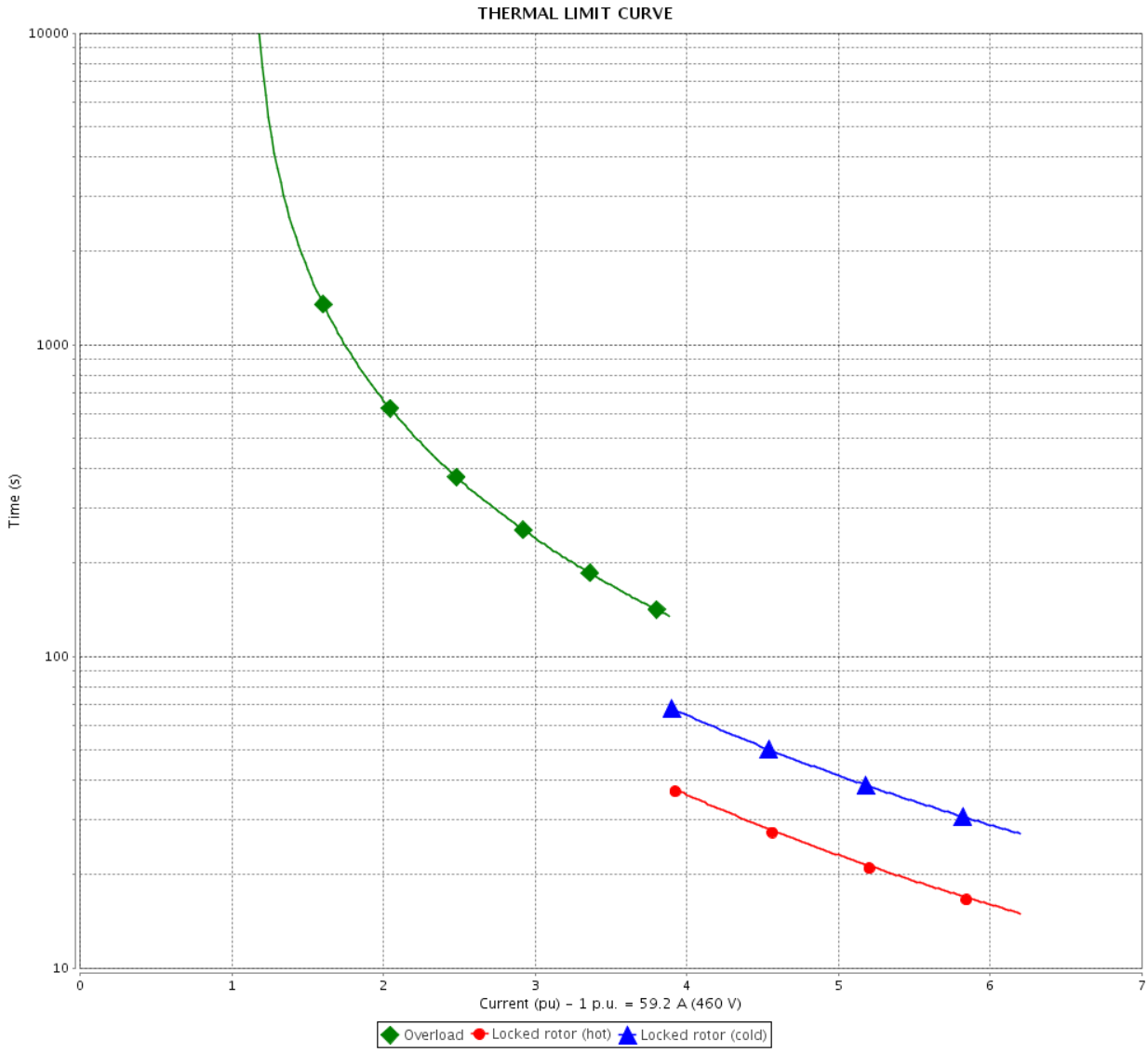
Rev.	Changes Summary	Performed	Checked	Date

Performed by				
Checked by			Page	Revision
Date	27/02/2020		4 / 6	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage

Customer :



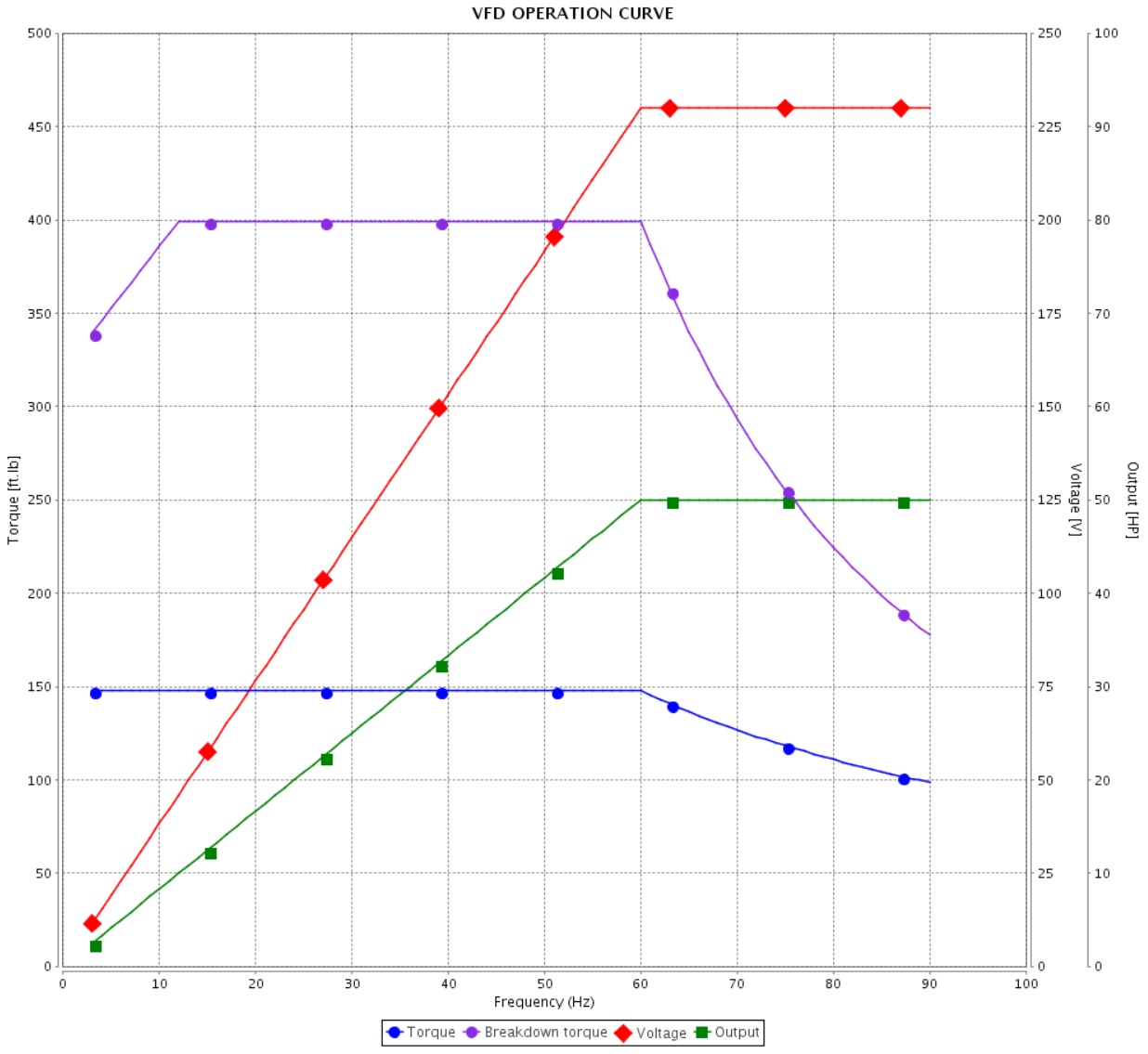
Rev.	Changes Summary	Performed	Checked	Date

Performed by				
Checked by			Page	Revision
Date	27/02/2020		5 / 6	

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

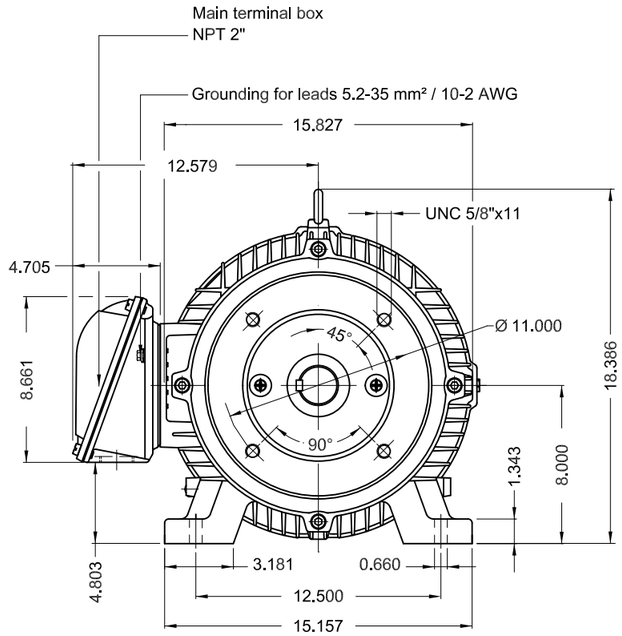
Customer	:		
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	11438075
		Catalog # :	05018ET3E326TC-W22

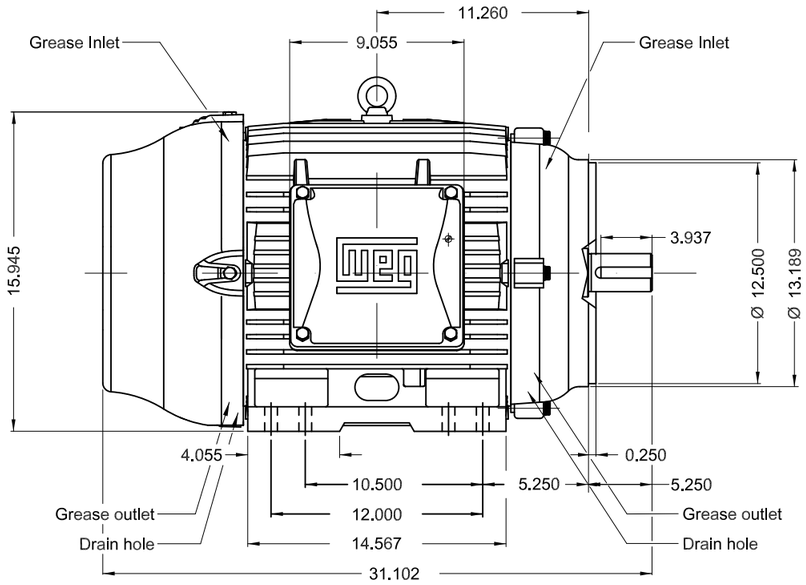


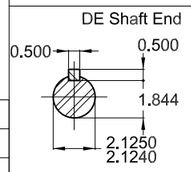
Performance	: 208-230/460 V 60 Hz 4P		
Rated current	: 131-118/59.2 A	Moment of inertia (J)	: 9.16 sq.ft.lb
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 148 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date

Performed by				
Checked by			Page	Revision
Date	27/02/2020		6 / 6	







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	PREVIEW
CHECKED		FRAME 324/6TC IP55 TEFC	WDD
RELEASED			
REL DT.		WMO Jaragua do Sul Product Engineering	SHEET 1 / 1

Dimensions in inches
XME A3

W22 NEMA Premium®

CC029A

Inverter Duty Motor
Severe Duty

c UL us LISTED 3PT9

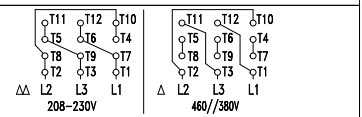
FOR SAFE AREA
MOD.TE1BF0XON

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

c CSA us Energy Verified

MODEL 05018ET3E326TC-W22
MADE IN MEXICO
11438075

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	ΔT 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)					



6312-C3
6212-C3

MOBIL POLYREX EM
21 g 20000 h

ALT 1000 m.a.s.l. 611 Lbs