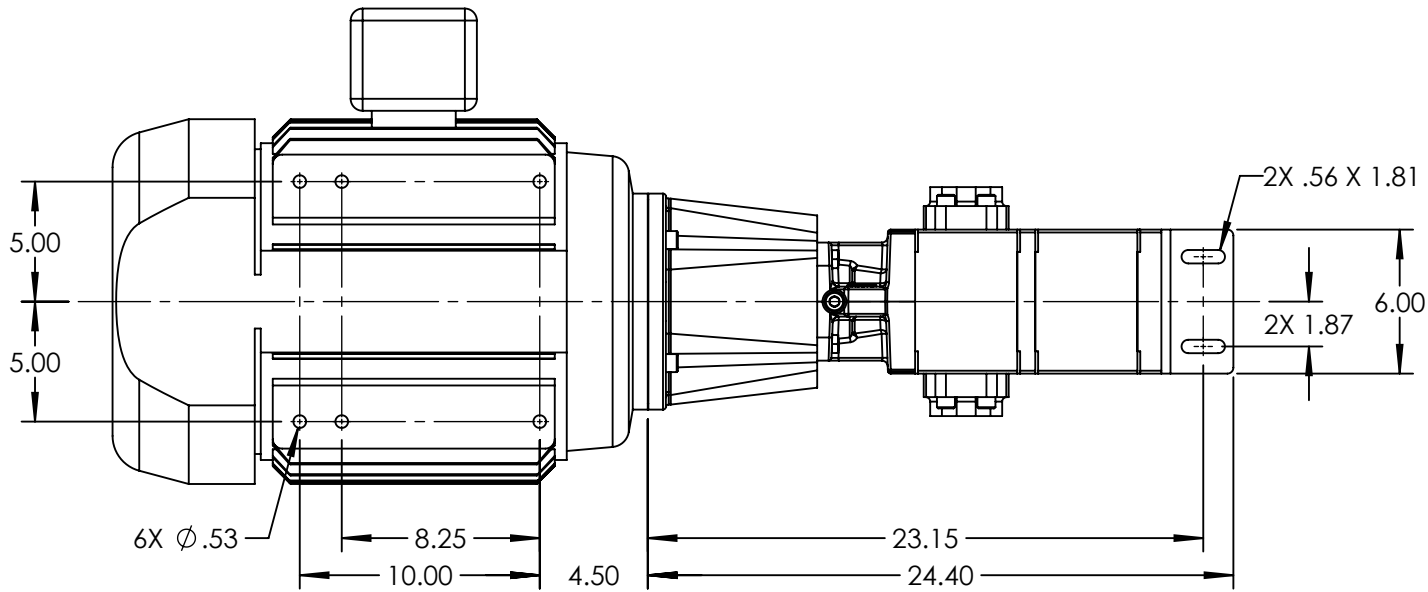
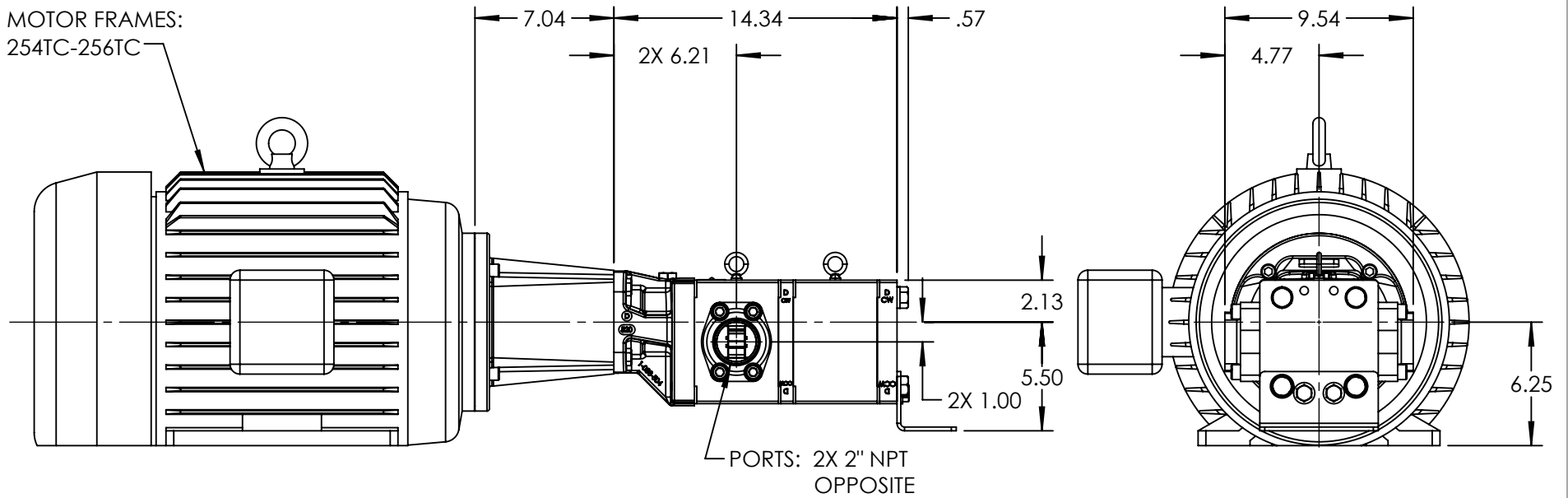


MOTOR FRAMES:
254TC-256TC



NOTES:

1. ALL DIMENSIONS ARE FOR REFERENCE ONLY.

STANDARD MODELS: GB-41018-G00-M, GB-41018-G10-M

STATE	Released	07/15/2021
DRAWN	bmanernach	6/22/2021
CHECKED	JAG	07/15/2021

DIMENSIONS ARE IN INCHES
PROJECT: E331
WAS:



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

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3D

DWG. NO. SHEET 1 OF 1
GPV-1018-030-U

REV. A.0
07/15/2021

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line : W22 NEMA Premium Efficiency Three-Phase	Product code : 11440444 Catalog # : 02018ET3E256TC-W22					
Frame : 254/6TC Output : 20 HP (15 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 230/460 V Rated current : 48.2/24.1 A L. R. Amperes : 333/166 A LRC : 6.9x(Code H) No load current : 19.2/9.60 A Rated speed : 1770 rpm Slip : 1.67 % Rated torque : 59.3 ft.lb Locked rotor torque : 240 % Breakdown torque : 260 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 3.10 sq.ft.lb Design : B	Locked rotor time : 54s (cold) 30s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 64.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 343 lb					
Output 50% 75% 100% Efficiency (%) 91.7 92.4 93.0 Power Factor 0.68 0.79 0.84	Foundation loads Max. traction : 723 lb Max. compression : 1065 lb					
Losses at normative operating points (speed;torque), in percentage of rated output power						
P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
7.5	6.4	5.8	3.6	2.5	1.6	1.1
		<u>Drive end</u>	<u>Non drive end</u>			
Bearing type	:	6309 C3	6209 C3			
Sealing	:	V'Ring	V'Ring			
Lubrication interval	:	20000 h	20000 h			
Lubricant amount	:	13 g	9 g			
Lubricant type	:	Mobil Polyrex EM				
Notes USABLE @208V 53.3A SF 1.15 SFA 61.3A						
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	13/11/2023				1 / 6	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



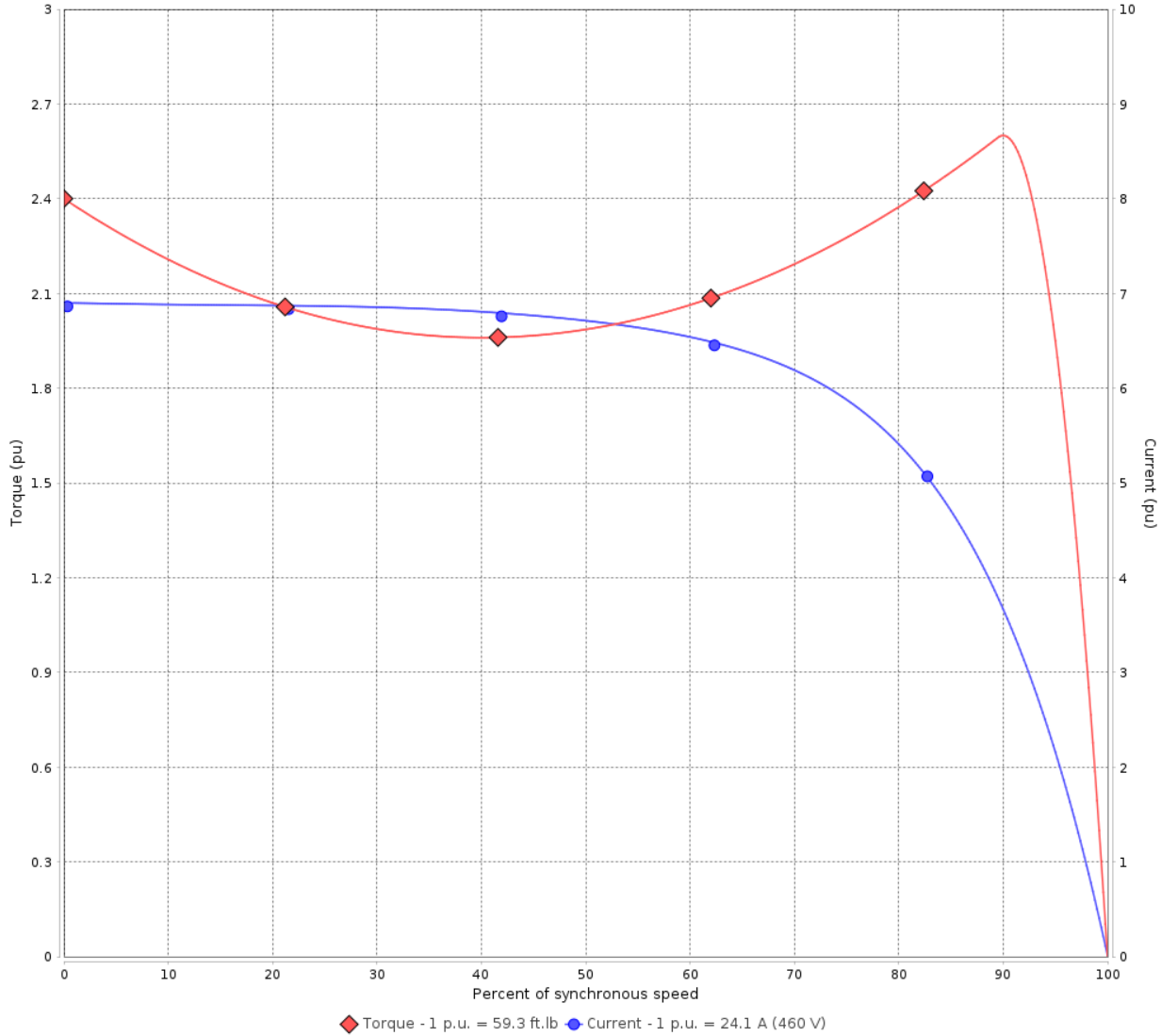
Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11440444

Catalog # : 02018ET3E256TC-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current	: 48.2/24.1 A	Moment of inertia (J)	: 3.10 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 59.3 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

Locked rotor time : 54s (cold) 30s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	13/11/2023			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

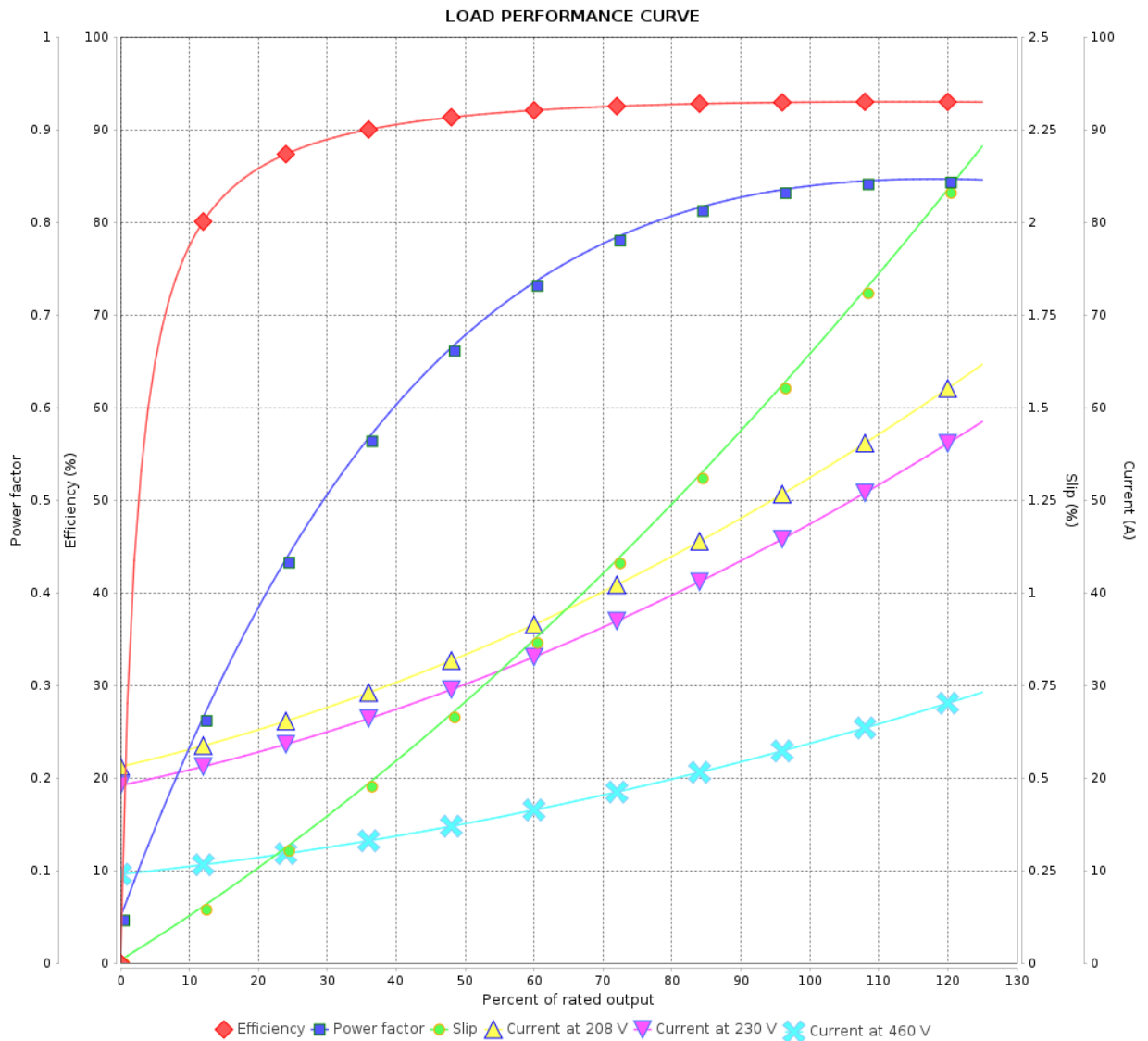


Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11440444

Catalog # : 02018ET3E256TC-W22



Performance : 230/460 V 60 Hz 4P

Rated current : 48.2/24.1 A
 LRC : 6.9
 Rated torque : 59.3 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 260 %
 Rated speed : 1770 rpm

Moment of inertia (J) : 3.10 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		13/11/2023		

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11440444

Catalog # : 02018ET3E256TC-W22

Performance : 230/460 V 60 Hz 4P

Rated current : 48.2/24.1 A
LRC : 6.9
Rated torque : 59.3 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 260 %
Rated speed : 1770 rpm

Moment of inertia (J) : 3.10 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

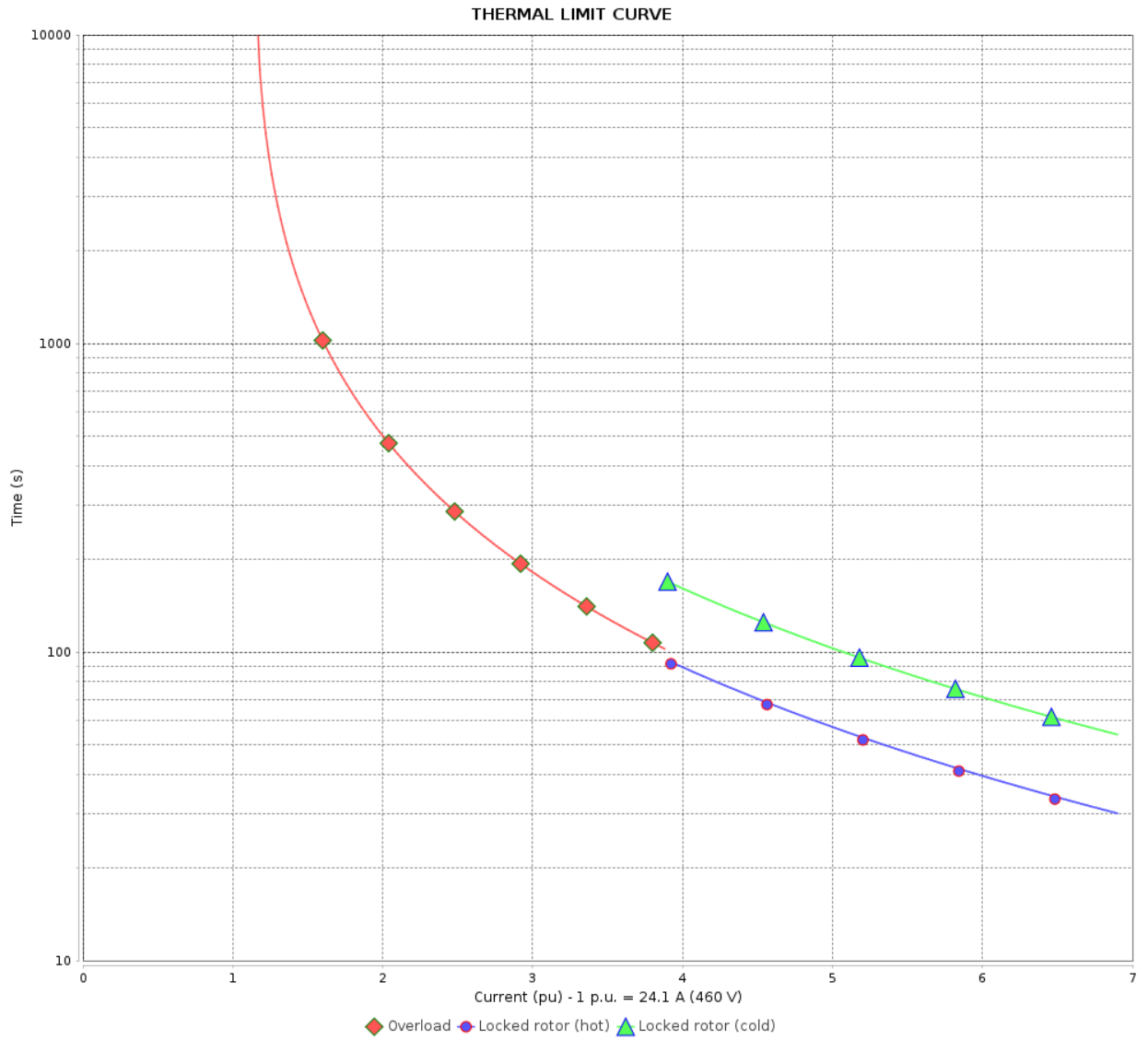
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/11/2023		4 / 6	

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

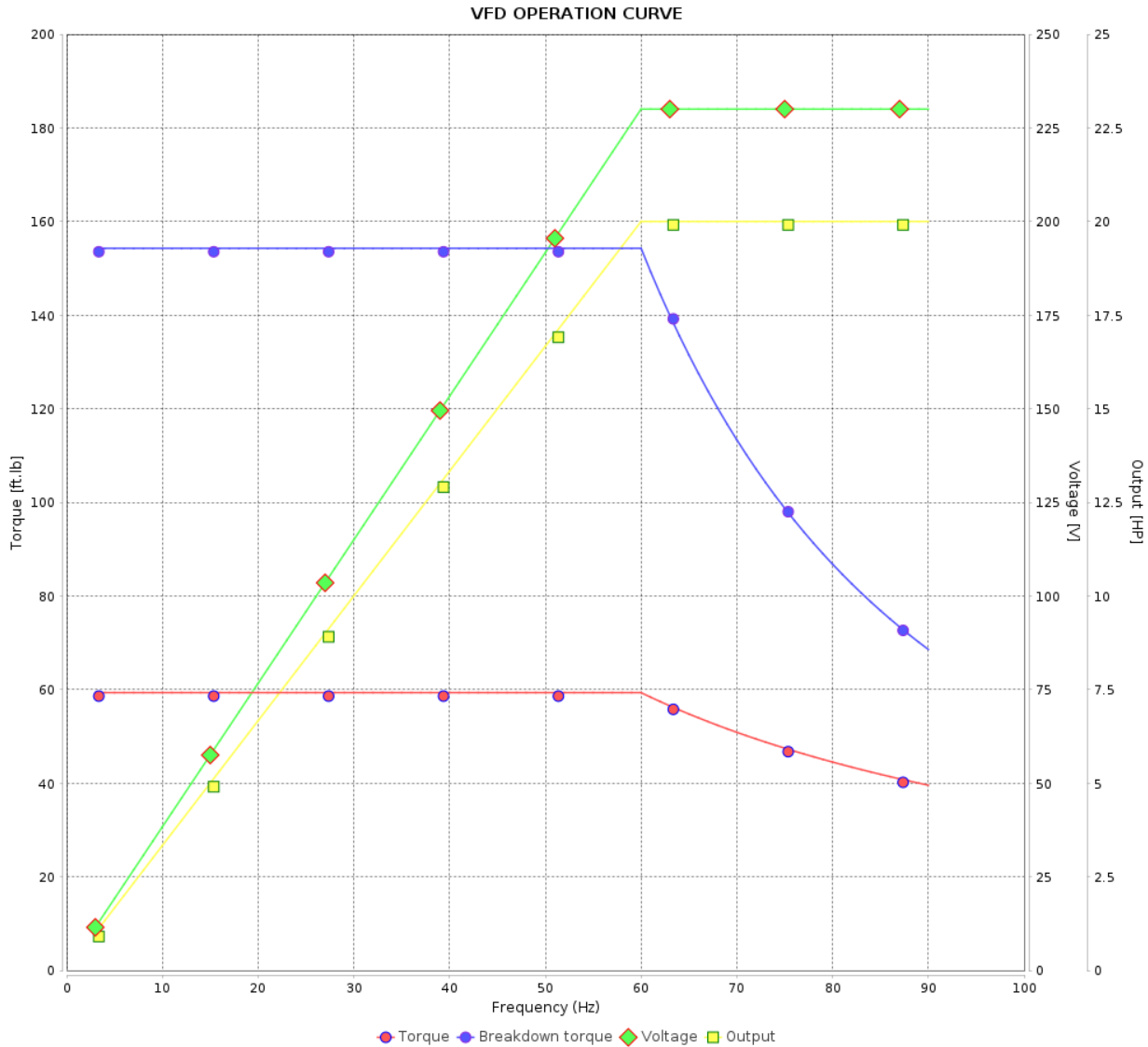


Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11440444

Catalog # : 02018ET3E256TC-W22

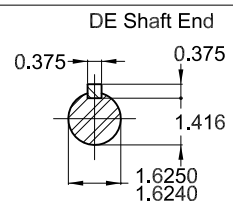
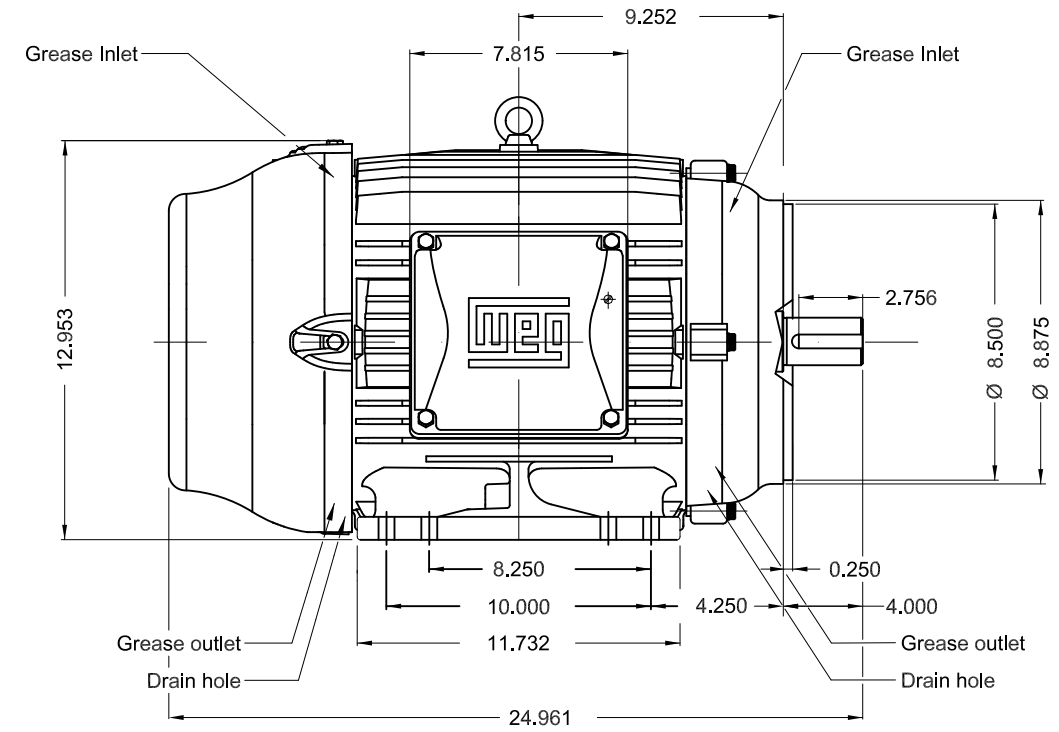
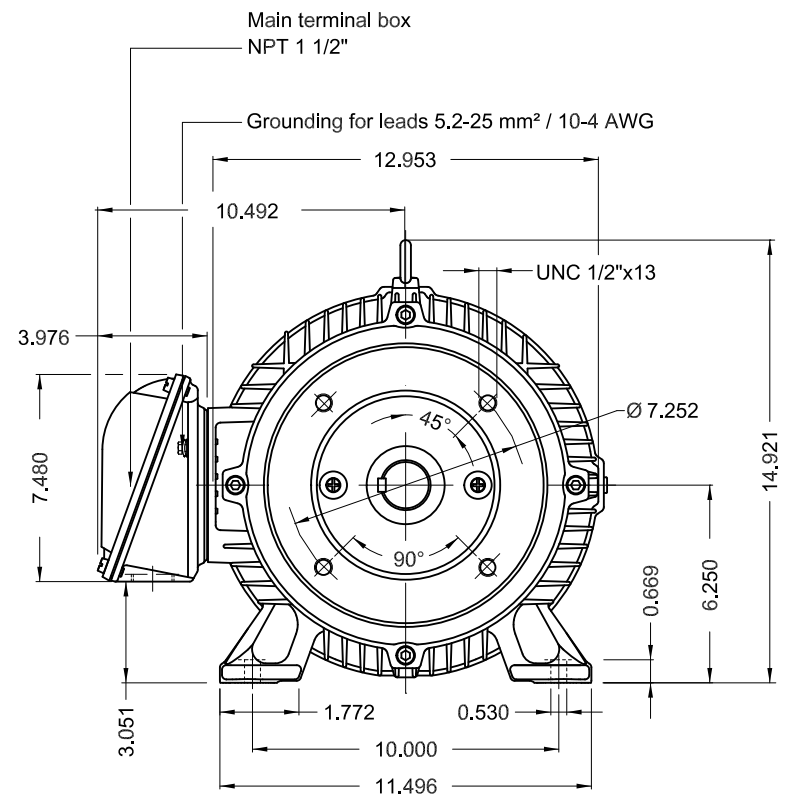


Performance : 230/460 V 60 Hz 4P

Rated current : 48.2/24.1 A
 LRC : 6.9
 Rated torque : 59.3 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 260 %
 Rated speed : 1770 rpm

Moment of inertia (J) : 3.10 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				



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

20 HP 04 Poles 60 Hz A

						USERADMIN								00	
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER					
EXECUTED	USERADMIN	THREE PH. MOTOR W22 NEMA PREM. EFF.										PREVIEW			
CHECKED		FRAME 254/6TC IP55 TEFC										WDD		00	
RELEASED												SHEET		1 / 1	
REL. DATE		WMO Jaragua do Sul		Product Engineering											





FOR SAFE AREA
Mod. TE1BFOXON
CC029A



For use on 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 use on PWM: Gr. A, B, C, D and F,
VT 1000:1, CT 20:1, 1.00SF - T3A

MODEL 02018ET3E256TC-W22

Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. 254/6TC 1000m.a.s.l. IP55 TEFC 343lb

V 230/460

A 48.2/24.1

HP 20

kW 15

SF 1.25

SFA 60.3/30.1

RPM 1770

PF 0.84

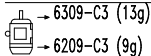
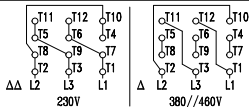
AMB 40°C

INS cl. F DT80K NEMA NOM EFF 93.0%

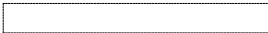
DUTY CONT.

DES B Code H

20HP 15kW 50Hz 380V 29.4A 1455RPM SF 1.00 EFF 90.2% (IE1)



MOBIL POLYREX EM (20000h)



MADE IN MEXICO

11440444