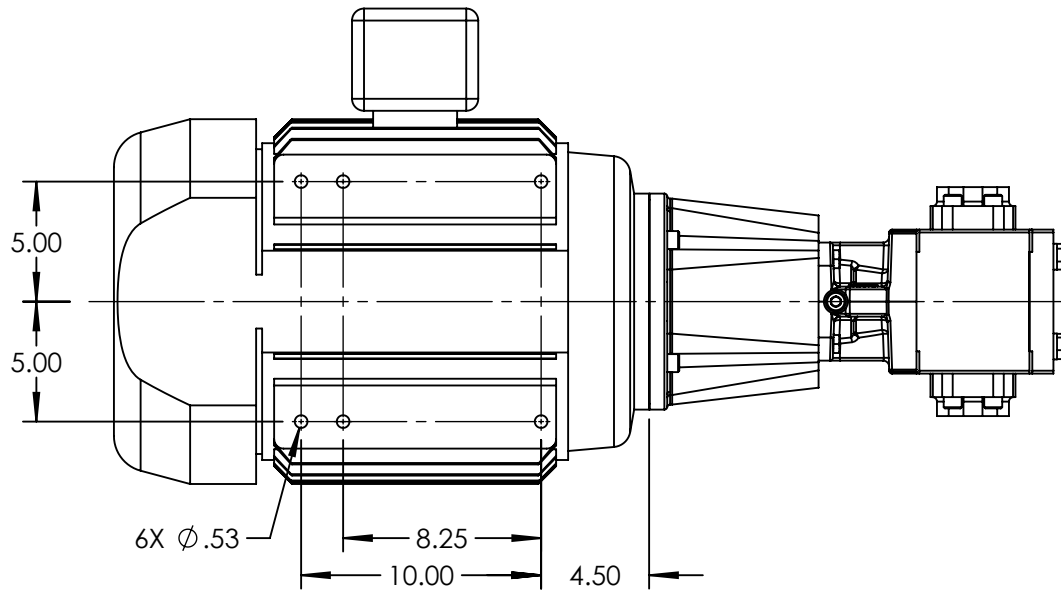
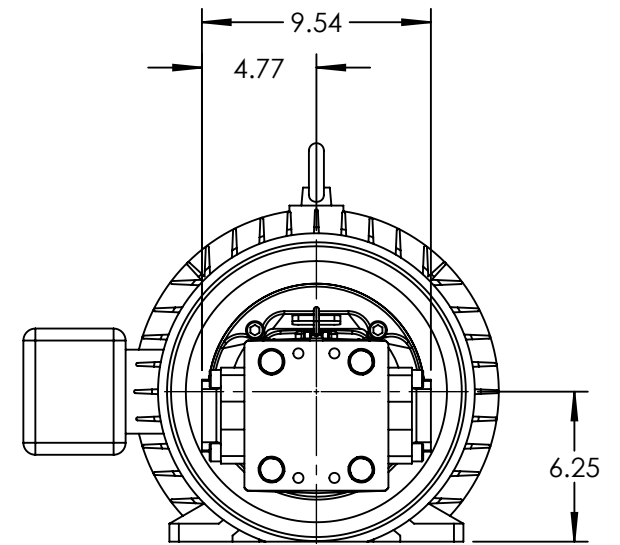
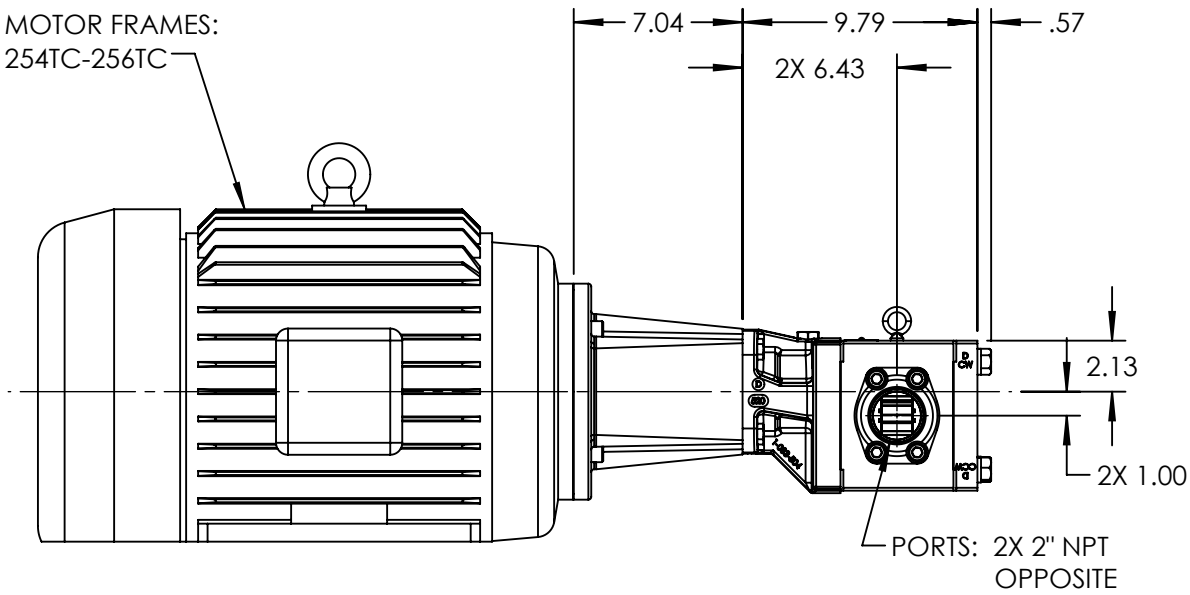


MOTOR FRAMES:  
254TC-256TC



STANDARD MODELS: GB-41013-G00-M, GB-41013-G10-M

NOTES:

1. ALL DIMENSIONS ARE FOR REFERENCE ONLY.

STATE	Released	07/16/2021	DIMENSIONS ARE IN INCHES
DRAWN	bmanternach	6/22/2021	
CHECKED	JAG	07/16/2021	



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

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3D

DWG. NO. GPV-1013-040-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 :	12446945																		
Catalog # :	01518ET3E254TC-W22																		
Frame : 254/6TC Output : 15 HP (11 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 208-230/460 V Rated current : 39.8-36.0/18.0 A L. R. Amperes : 255-230/115 A LRC : 6.4x(Code G) No load current : 11.7-13.6/6.80 A Rated speed : 1765 rpm Slip : 1.94 % Rated torque : 44.0 ft.lb Locked rotor torque : 229 % Breakdown torque : 270 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 2.62 sq.ft.lb Design : B	Locked rotor time : 30s (cold) 17s (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 <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 64.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 316 lb																		
Output	25%    50%    75%    100%																		
Efficiency (%)	90.2    91.0    91.7    92.4																		
Power Factor	0.44    0.68    0.78    0.83																		
Foundation loads																			
Max. traction : 489 lb																			
Max. compression : 805 lb																			
	<table border="0"> <tr> <td></td> <td style="text-align: center;"><u>Drive end</u></td> <td style="text-align: center;"><u>Non drive end</u></td> </tr> <tr> <td>Bearing type :</td> <td style="text-align: center;">6309 C3</td> <td style="text-align: center;">6209 C3</td> </tr> <tr> <td>Sealing :</td> <td style="text-align: center;">V'Ring</td> <td style="text-align: center;">V'Ring</td> </tr> <tr> <td>Lubrication interval :</td> <td style="text-align: center;">20000 h</td> <td style="text-align: center;">20000 h</td> </tr> <tr> <td>Lubricant amount :</td> <td style="text-align: center;">13 g</td> <td style="text-align: center;">9 g</td> </tr> <tr> <td>Lubricant type :</td> <td colspan="2" style="text-align: center;">Mobil Polyrex EM</td> </tr> </table>		<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	
	<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																			
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	23/08/2019		1 / 6																

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



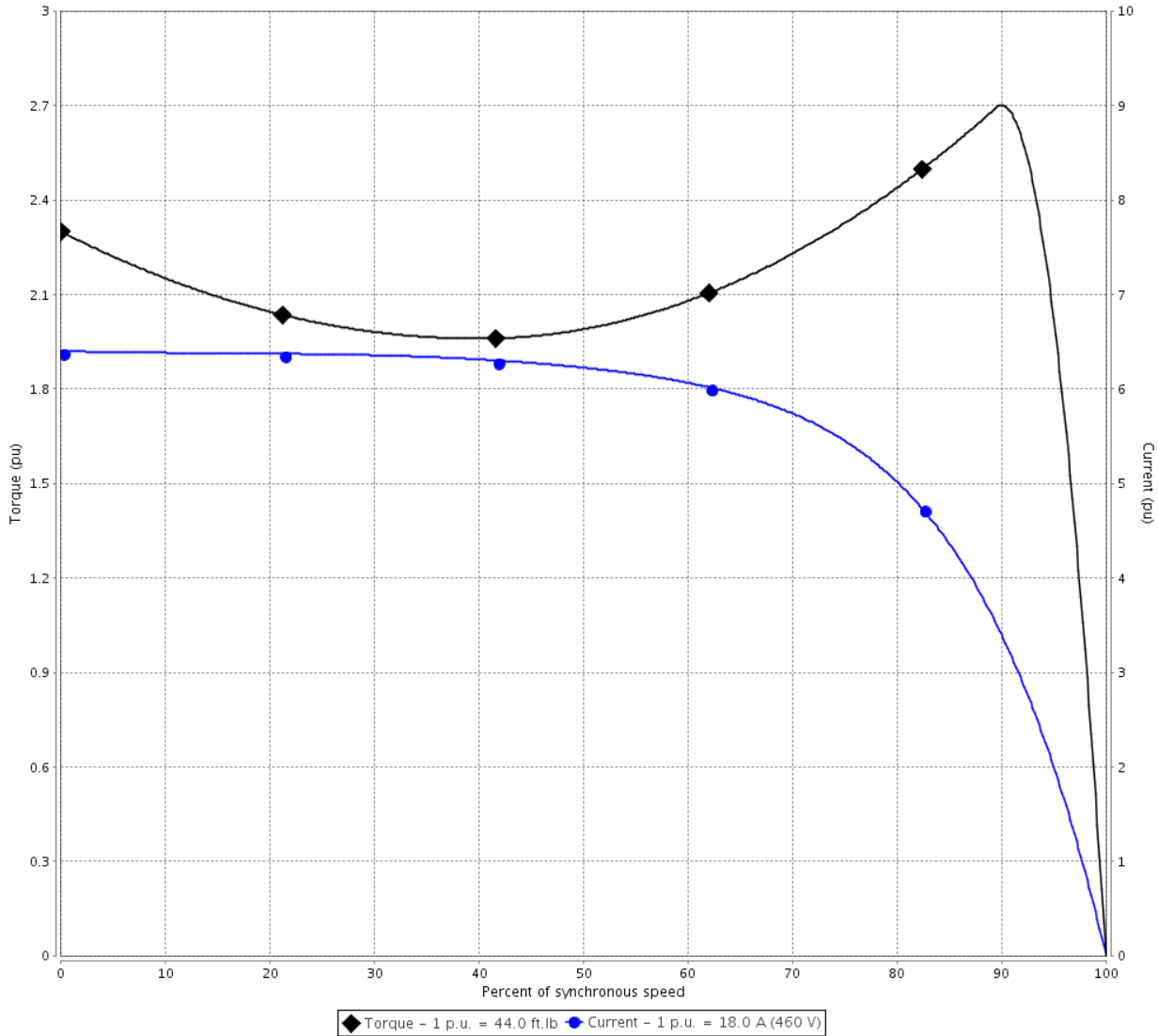
Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12446945

Catalog # : 01518ET3E254TC-W22

TORQUE AND CURRENT VS SPEED CURVE



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

Rated current	: 39.8-36.0/18.0 A	Moment of inertia (J)	: 2.62 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 44.0 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1765 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	23/08/2019			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

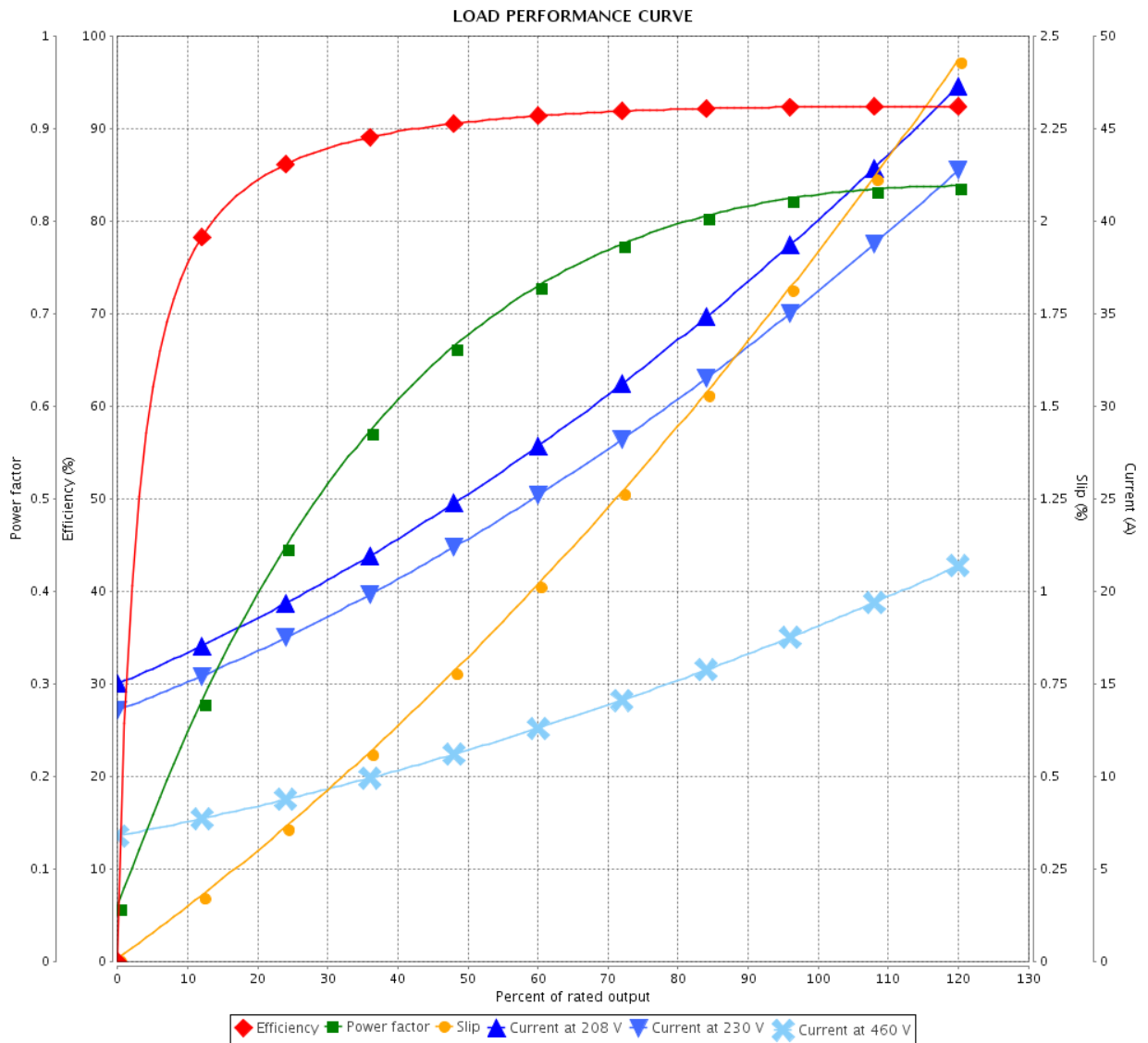


Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12446945

Catalog # : 01518ET3E254TC-W22



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

Rated current : 39.8-36.0/18.0 A  
 LRC : 6.4  
 Rated torque : 44.0 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 270 %  
 Rated speed : 1765 rpm

Moment of inertia (J) : 2.62 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		23/08/2019		

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 12446945

Catalog # : 01518ET3E254TC-W22

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

Rated current : 39.8-36.0/18.0 A  
LRC : 6.4  
Rated torque : 44.0 ft.lb  
Locked rotor torque : 229 %  
Breakdown torque : 270 %  
Rated speed : 1765 rpm

Moment of inertia (J) : 2.62 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

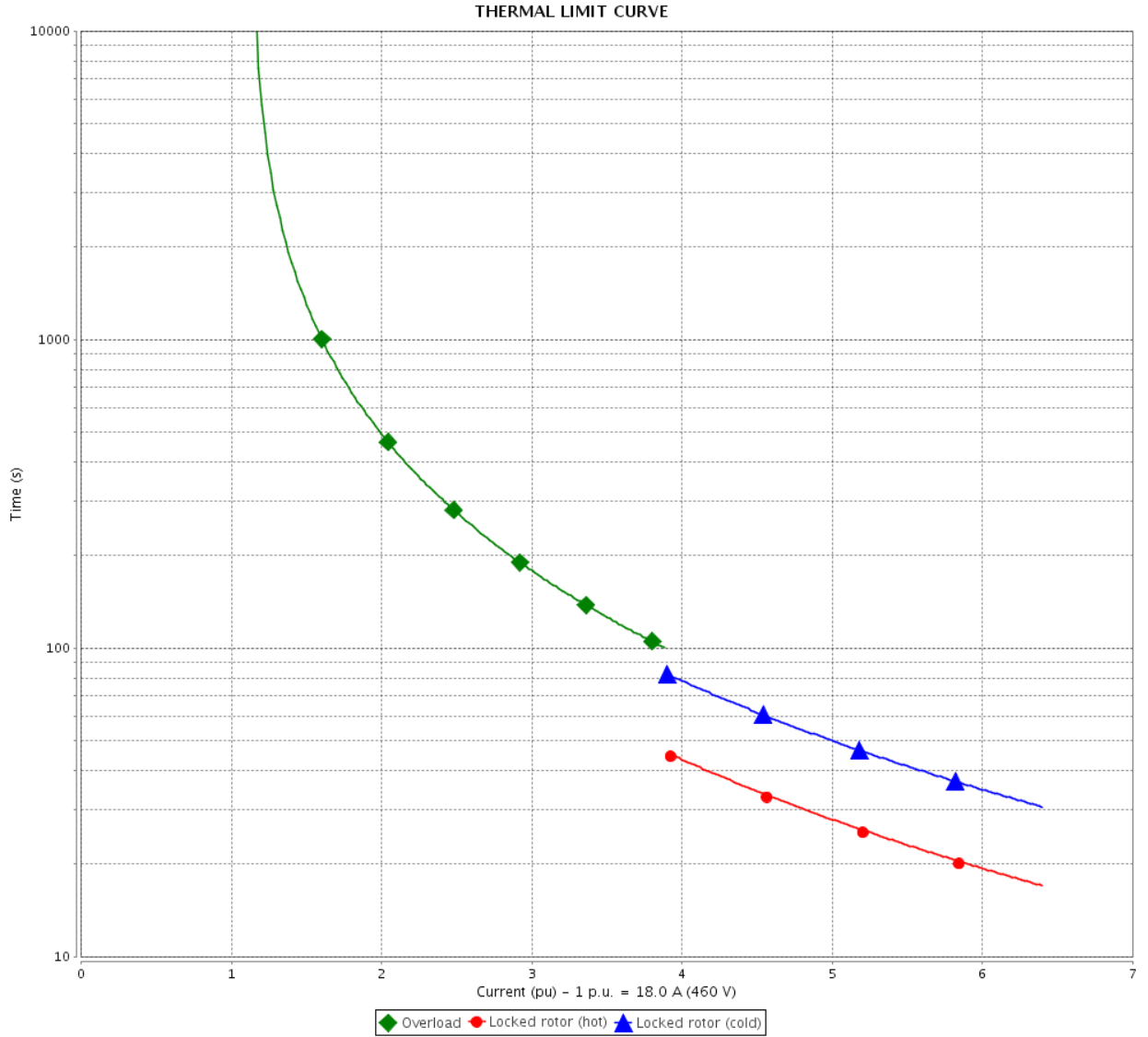
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	23/08/2019		4 / 6	

# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

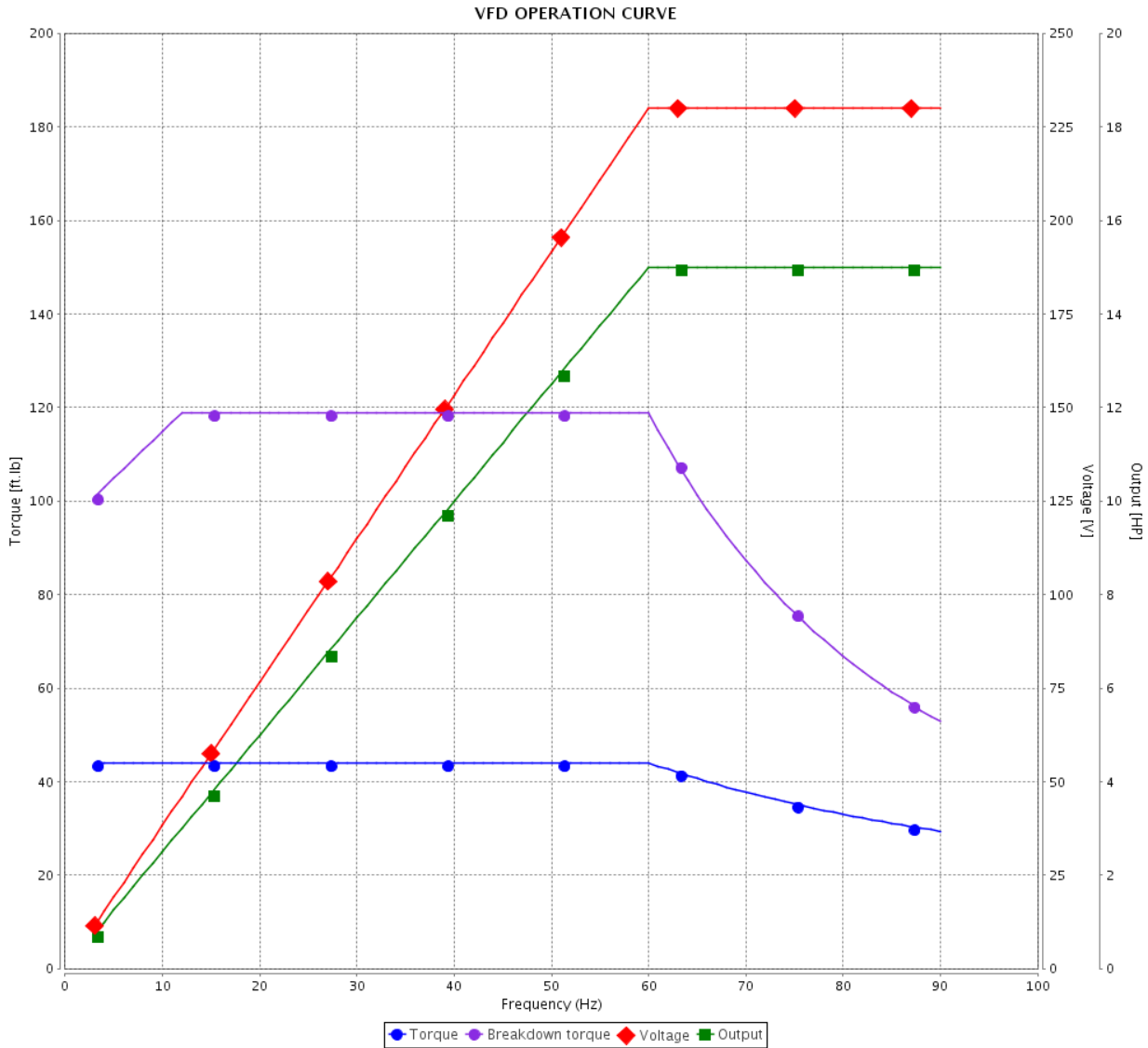


Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 12446945

Catalog # : 01518ET3E254TC-W22



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

Rated current : 39.8-36.0/18.0 A  
 LRC : 6.4  
 Rated torque : 44.0 ft.lb  
 Locked rotor torque : 229 %  
 Breakdown torque : 270 %  
 Rated speed : 1765 rpm

Moment of inertia (J) : 2.62 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

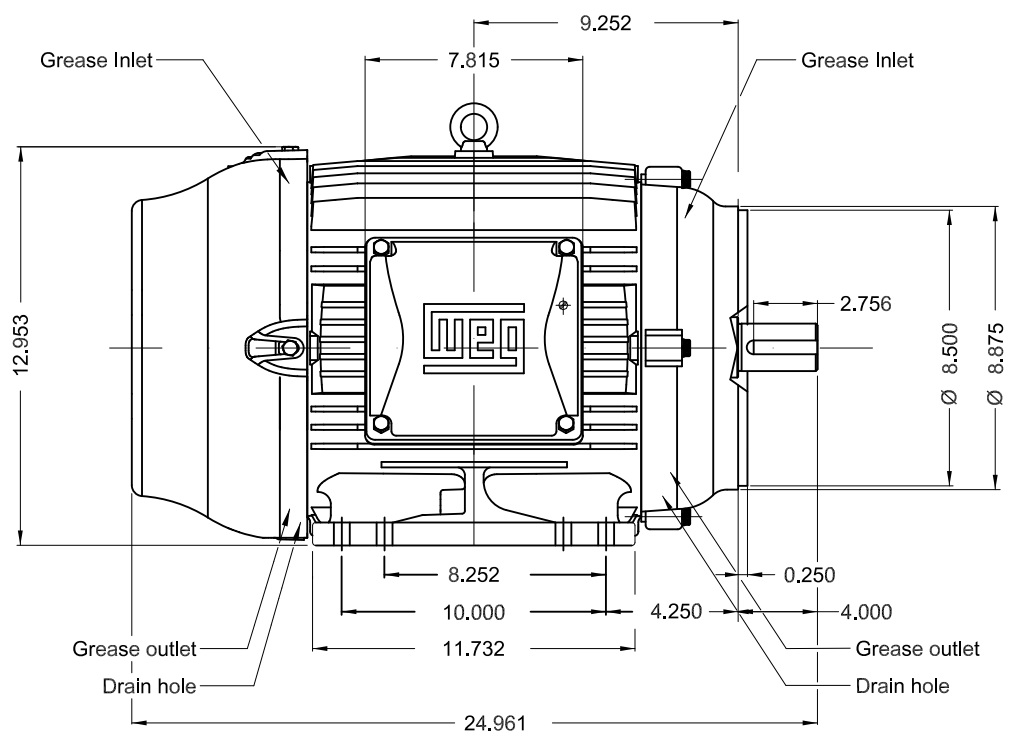
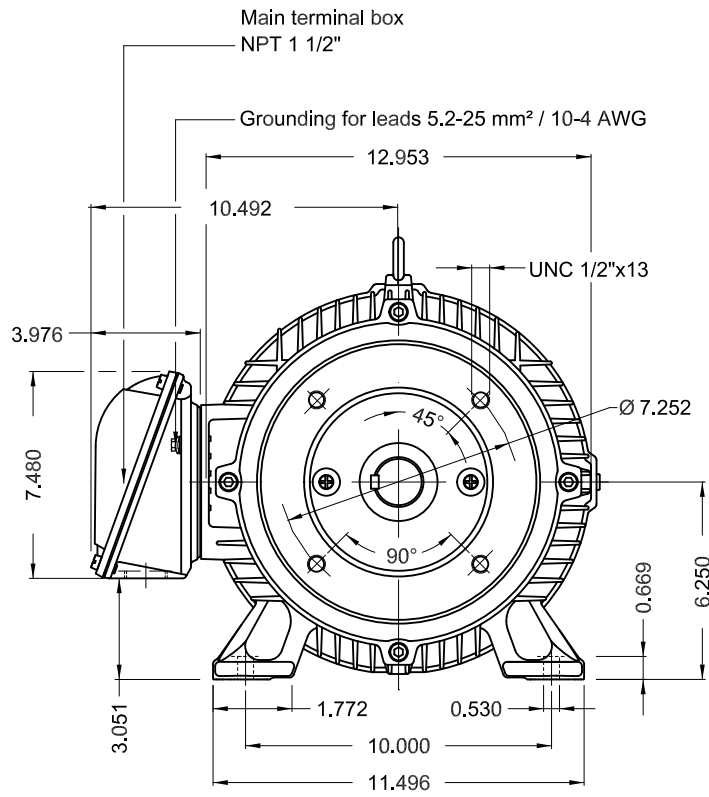
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	23/08/2019			

1 2 3 4 5 6

A

B

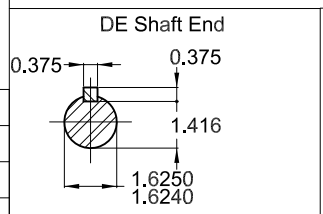
C



D

E

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



15 HP 04 Poles 60Hz A

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

Dimensions in inches

XME A3





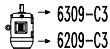
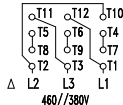
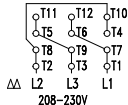
FOR SAFE AREA  
MOD.TE1BFOXON



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

CT015404NPW22  
MADE IN BRAZIL  
12446945

PH 3	FR 254/6TC	HP(kW) 15.0(11.0)	Hz 60
V 230/460	A 36.0/18.0	RPM 1765	DES B
NEMA NOM EFF 92.4 %	INS. CL. F ΔT 80 K	IP55	
ENCL TEFC	DUTY CONT.	AMB. 40°C	
CODE G	PF 0.83	SF 1.25	SFA 45.0/22.5
USABLE @208V 39.8 A	SF 1.15	SFA 45.8	
15HP 11kW 50Hz 380V 21.5A 1455RPM SF1.00 EFF 90.2% (IE2)	ALT 1000 m.a.s.l.	315 Lbs	



MOBIL POLYREX EM  
13 g 20000 h