

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	14802731			
Catalog # :	00218ET3H145T-S			
Frame : 143/5T Output : 2 HP (1.5 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 2.18 A L. R. Amperes : 17.8 A LRC : 8.2x(Code K) No load current : 1.12 A Rated speed : 1745 rpm Slip : 3.06 % Rated torque : 6.02 ft.lb Locked rotor torque : 270 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1296 sq.ft.lb Design : B	Locked rotor time : 27s (cold) 15s (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> : 52.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 43.4 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	86.0    85.5    87.5    86.5			
Power Factor	0.35    0.60    0.73    0.80			
Foundation loads				
Max. traction	: 135 lb			
Max. compression	: 179 lb			
Bearing type	: <u>Drive end</u> 6205 ZZ <u>Non drive end</u> 6203 ZZ			
Sealing	: V'Ring      Without Bearing Seal			
Lubrication interval	: -      -			
Lubricant amount	: -      -			
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	13/04/2022		1 / 6	

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

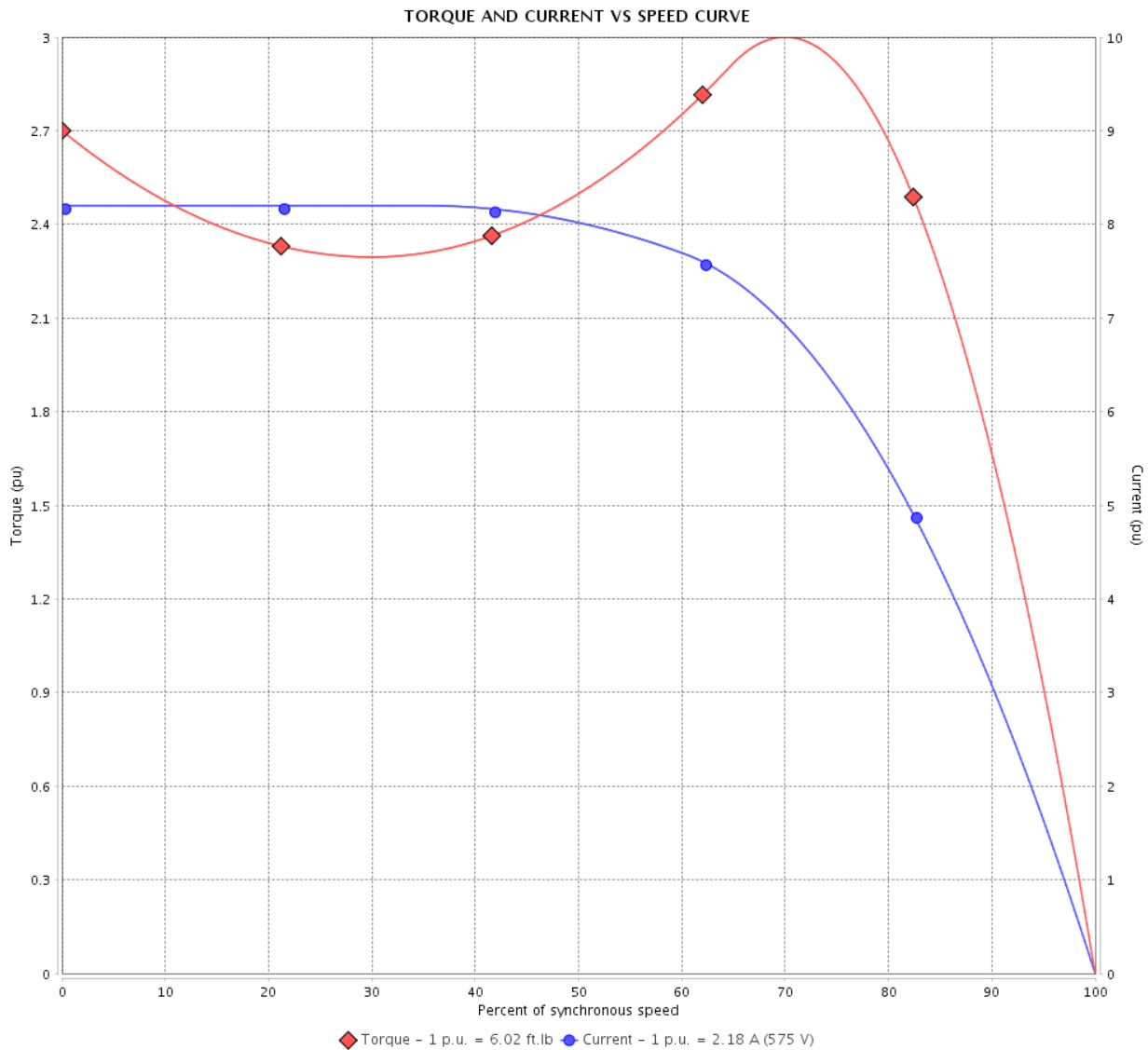


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14802731

Catalog # : 00218ET3H145T-S



Performance : 575 V 60 Hz 4P

Rated current	: 2.18 A	Moment of inertia (J)	: 0.1296 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 6.02 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1745 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	13/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

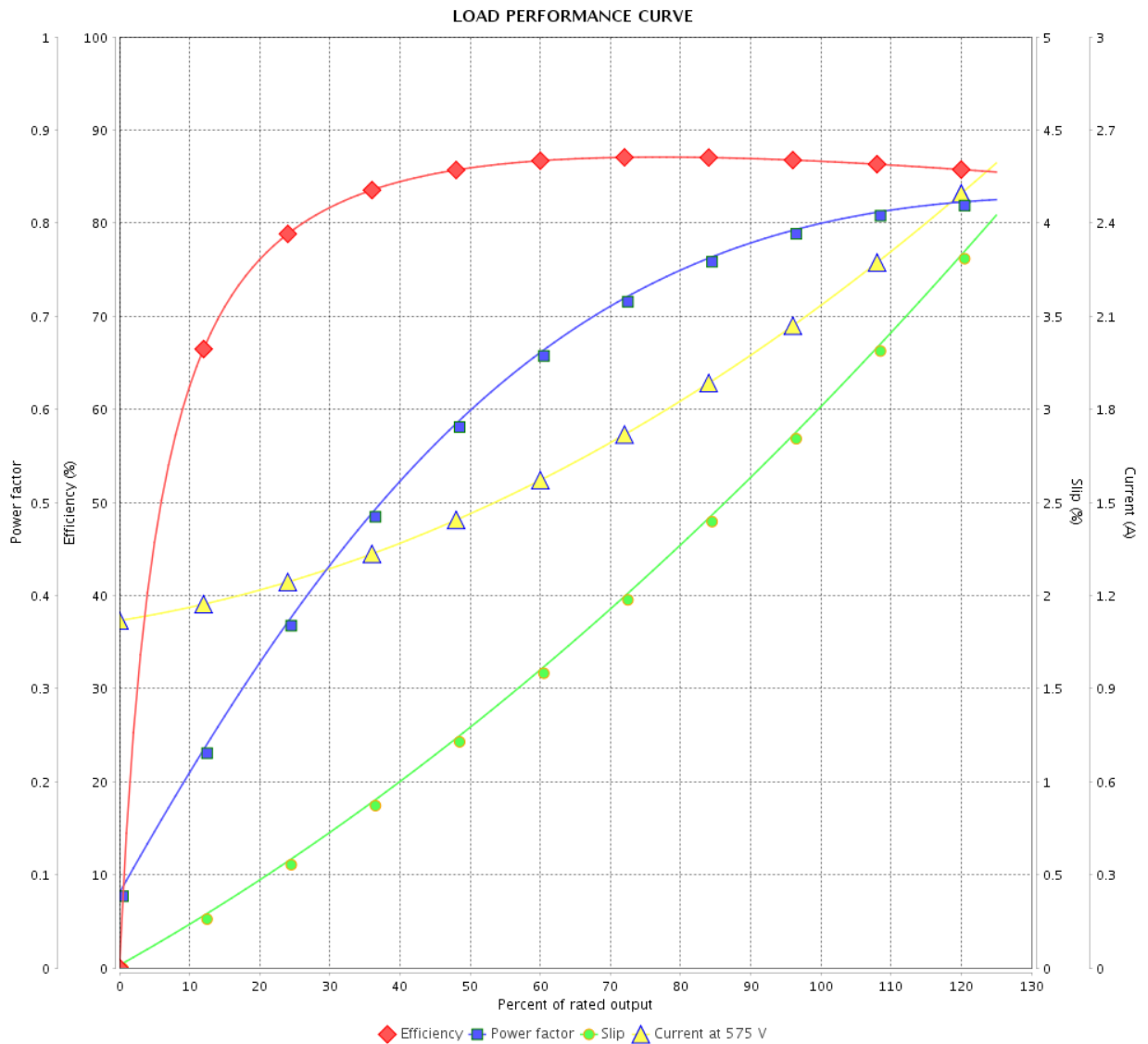


Customer : \_\_\_\_\_

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14802731

Catalog # : 00218ET3H145T-S



Performance : 575 V 60 Hz 4P

Rated current : 2.18 A  
 LRC : 8.2  
 Rated torque : 6.02 ft.lb  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1745 rpm

Moment of inertia (J) : 0.1296 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		3 / 6		
Date		13/04/2022		

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 14802731  
Catalog # : 00218ET3H145T-S

Performance : 575 V 60 Hz 4P

Rated current	: 2.18 A	Moment of inertia (J)	: 0.1296 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 6.02 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1745 rpm	Design	: B

Heating constant

Cooling constant

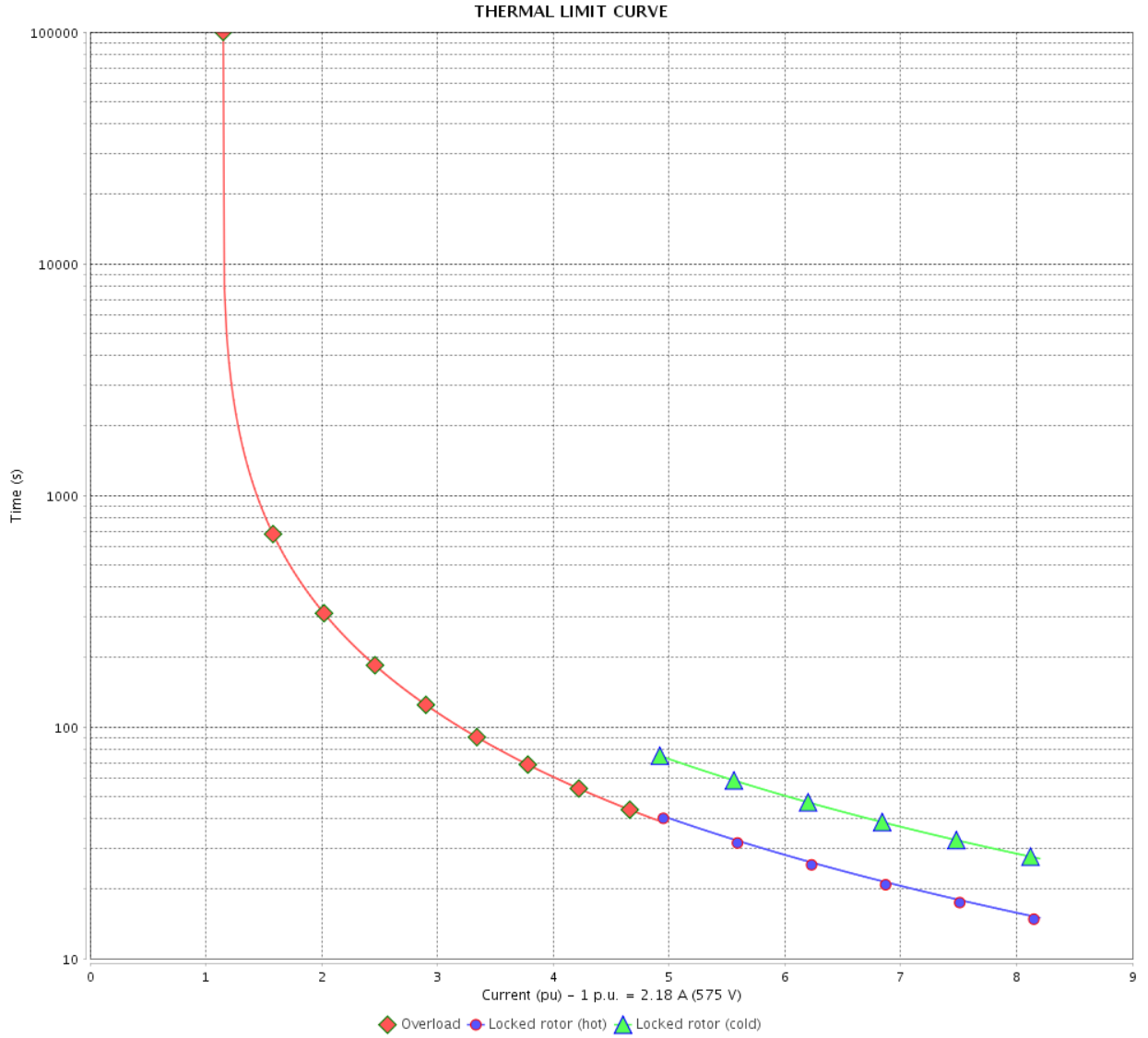
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		4 / 6	

# 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

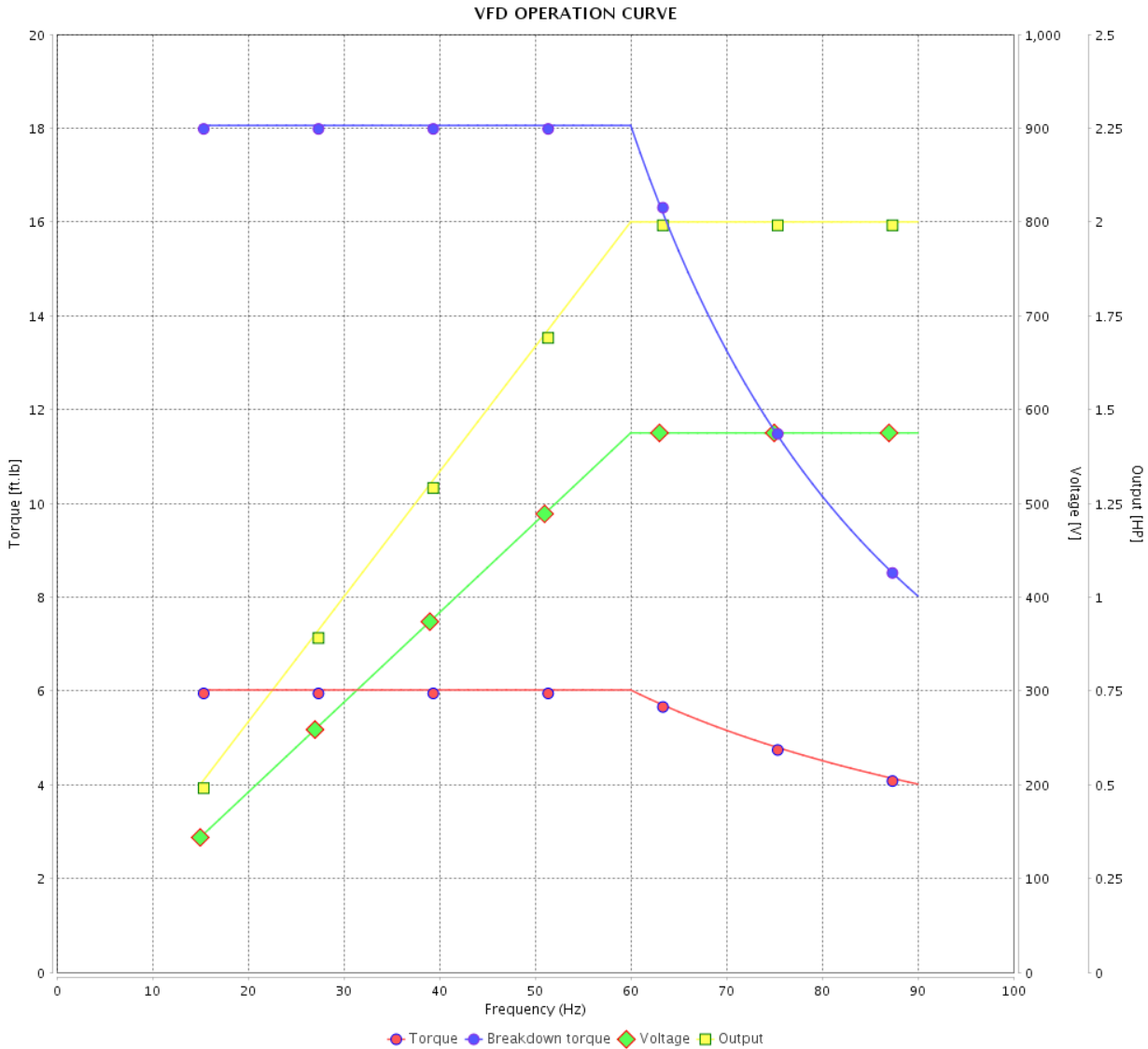


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14802731

Catalog # : 00218ET3H145T-S



Performance : 575 V 60 Hz 4P

Rated current : 2.18 A  
 LRC : 8.2  
 Rated torque : 6.02 ft.lb  
 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
 Rated speed : 1745 rpm

Moment of inertia (J) : 0.1296 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	13/04/2022			

1 2 3 4 5 6

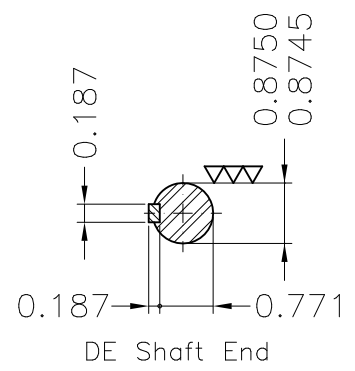
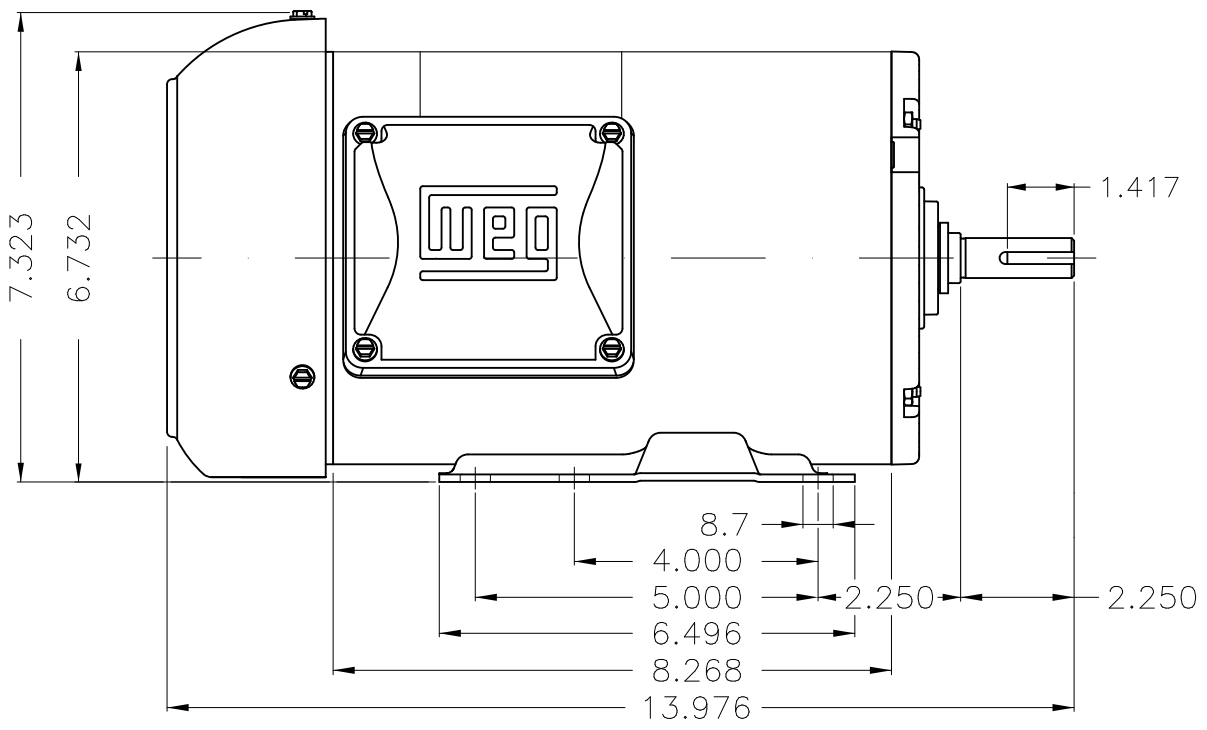
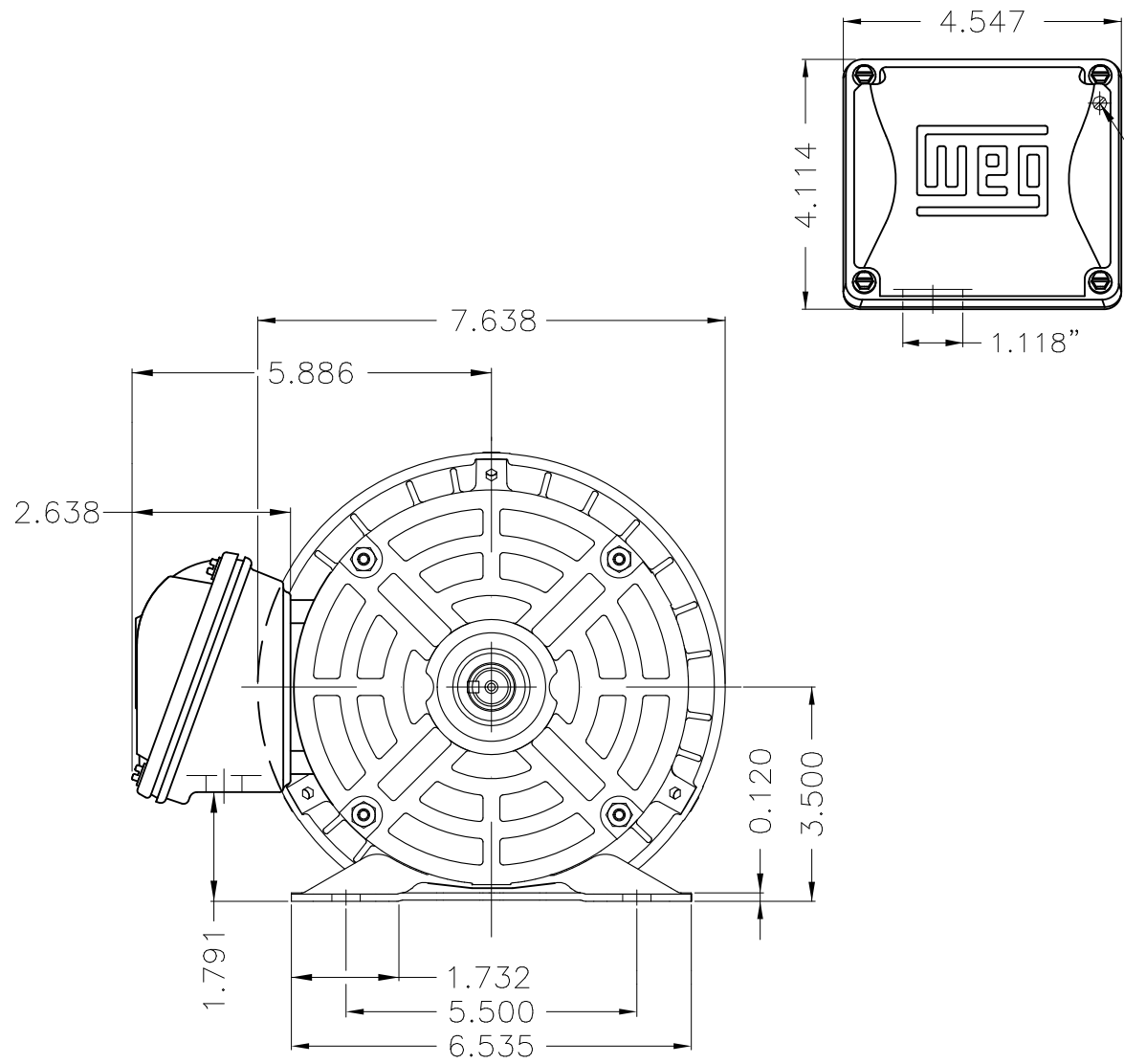
A

B

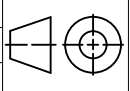
C

D

E



Fan cover - steel plate  
 Color Munsell N 1 matte black  
 Painting plan 207N  
 Mounting F-1/B3R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	 THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 143/5T IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

2 HP 04 Poles 60 Hz

A

PREVIEW  
 WDD



Dimensions in inches XME A3

**NEMA  
Premium**

MADE IN MEXICO

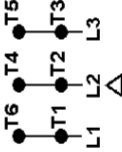
**MAT: 14802731 CC029A**  
**W01.TE0IC0X0N**  
**MODEL 00218ET3H145T-S**  
**30MAR2022 B/N:**

**For 60Hz: Class I, Zone 2, IIC**  
**Class I, Div.2, Gr. A,B,C,D - T3**  
**Div 2 Inverter Duty (SF1.00)**  
**CT 2:1/VT 1000:1**

PH 3	Hz 60	HP 2.0
FR 143/5T		KW 1.5
DUTY CONT.		V 575
ALT 1000 m.a.s.l.		A 2.18
INS CL F AT 80K	IP55	SFA 2.51
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE K	PF 0.80
		RPM 1745
		NEMA NOM. EFF 86.5%

**For safe area-Inverter duty motor For use on VPWM 1000:1 VT, 4:1 CT**

**DE 6205-ZZ ODE 6203-ZZ MOBIL POLYREX EM**



T1-BLU  
 T2-WHT  
 T3-ORG  
 T4-YEL  
 T5-BLK  
 T6-GRY

**INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION**

**WARNING:** Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical shocks. Disconnect power source before servicing unit.



**AVERTISSEMENT:** Le moteur doit être mis à la terre

conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.

