

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer : Automation Direct																			
Product line : Premium Efficiency Three-Phase	Product code : 14786571 Catalog # : 00218ET3E56CFL-S																		
Frame : 56C Output : 2 HP (1.5 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 230/460 V Rated current : 5.44/2.72 A L. R. Amperes : 44.6/22.3 A LRC : 8.2x(Code K) No load current : 2.80/1.40 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> : 41.1 lb																		
<table border="1"> <tr> <td>Output</td> <td>25%</td> <td>50%</td> <td>75%</td> <td>100%</td> </tr> <tr> <td>Efficiency (%)</td> <td>86.0</td> <td>85.5</td> <td>87.5</td> <td>86.5</td> </tr> <tr> <td>Power Factor</td> <td>0.35</td> <td>0.60</td> <td>0.73</td> <td>0.80</td> </tr> </table>	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 : 195 lb Max. compression : 236 lb			
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Notes USABLE @208V 6.02A SF 1.00 SFA 6.02A																			
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	22/08/2022		1 / 5																

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : Automation Direct

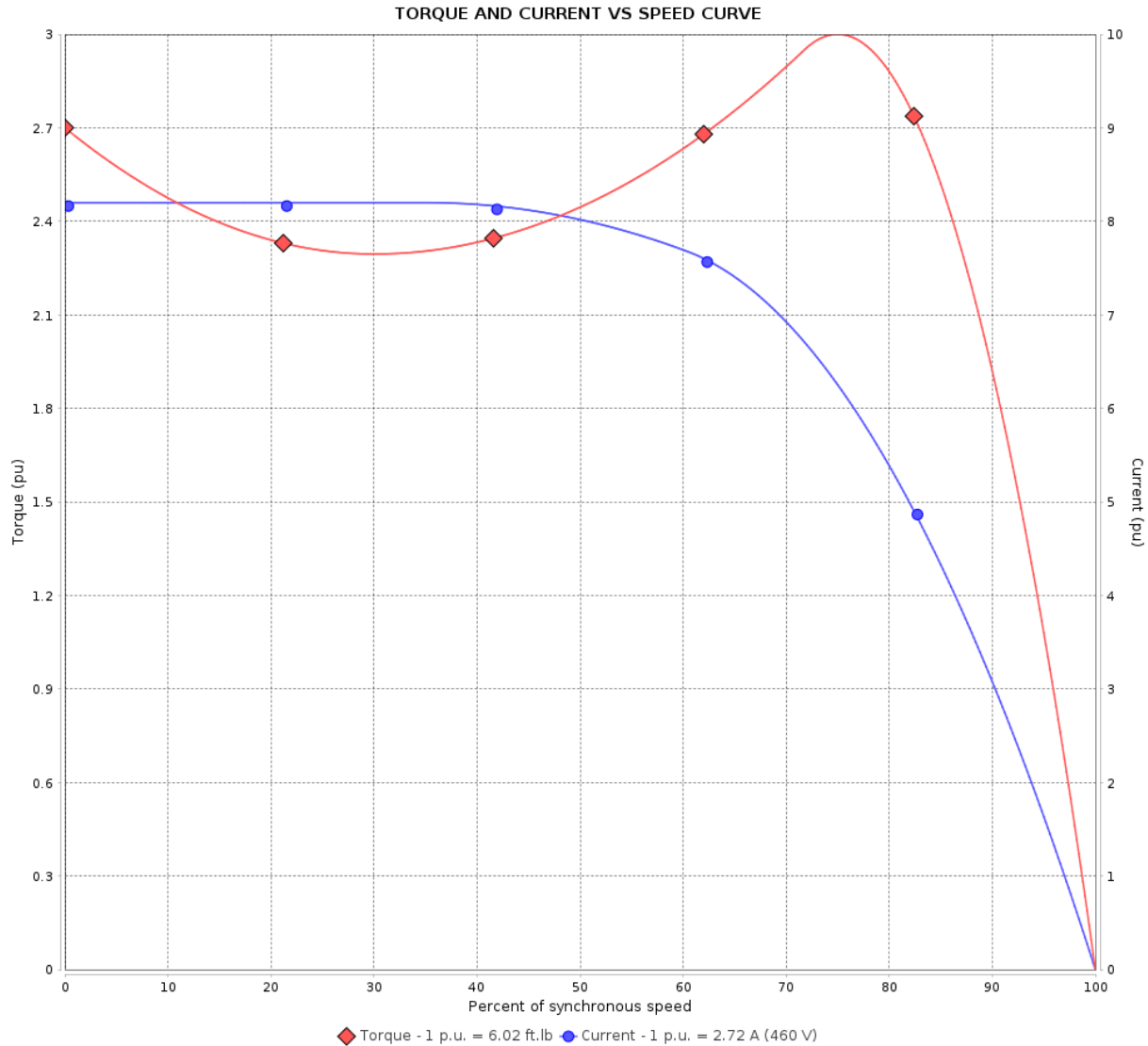
Product line : Premium Efficiency Three-Phase

Product code :

14786571

Catalog # :

00218ET3E56CFL-S



Performance : 230/460 V 60 Hz 4P

Rated current : 5.44/2.72 A  
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 Locked rotor torque : 270 %  
 Breakdown torque : 300 %  
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Moment of inertia (J) : 0.1296 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K  
 Design : B

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

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

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

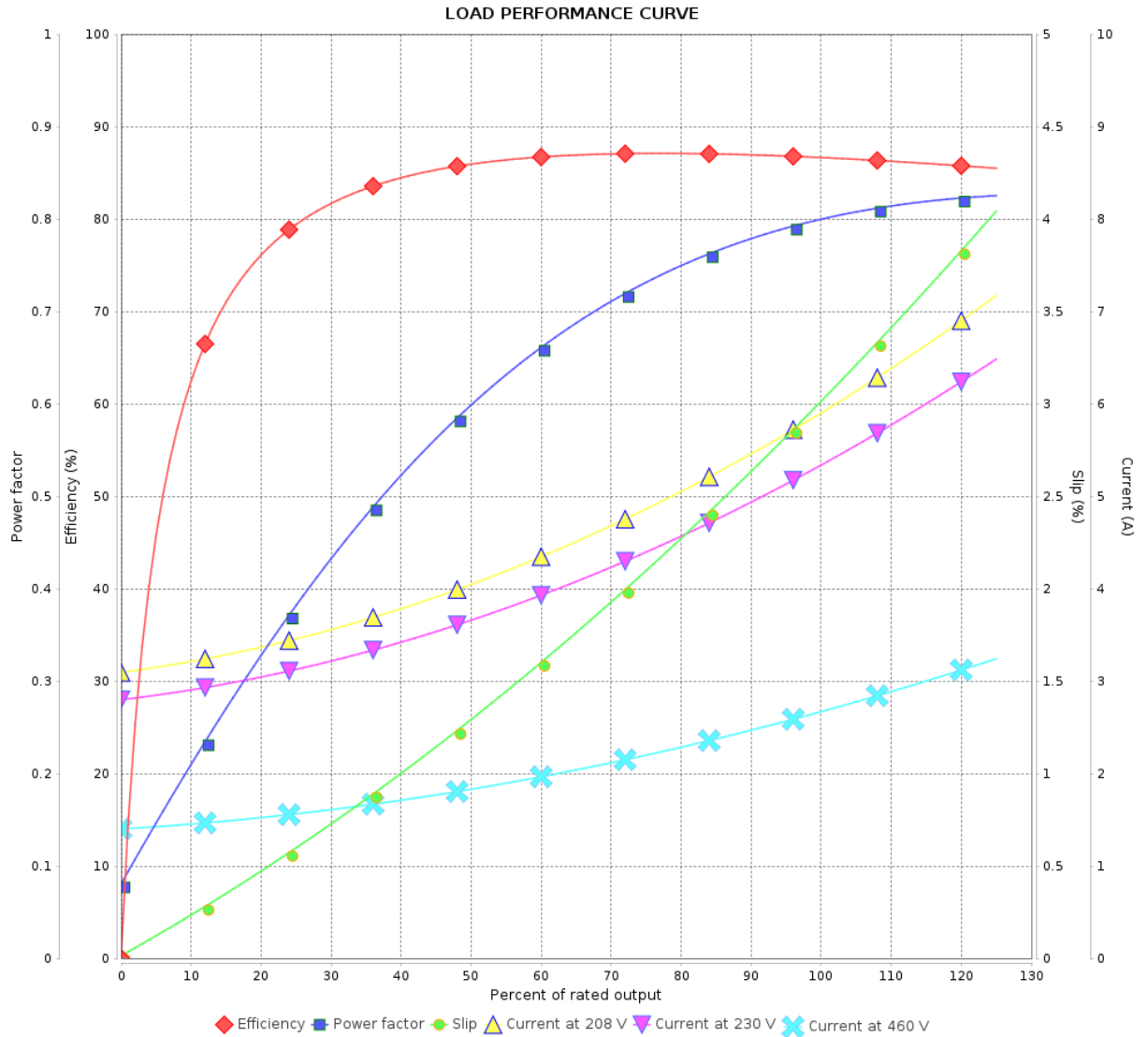


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14786571  
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Rev.	Changes Summary	Performed	Checked	Date
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Checked by				
Date				

# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer : Automation Direct

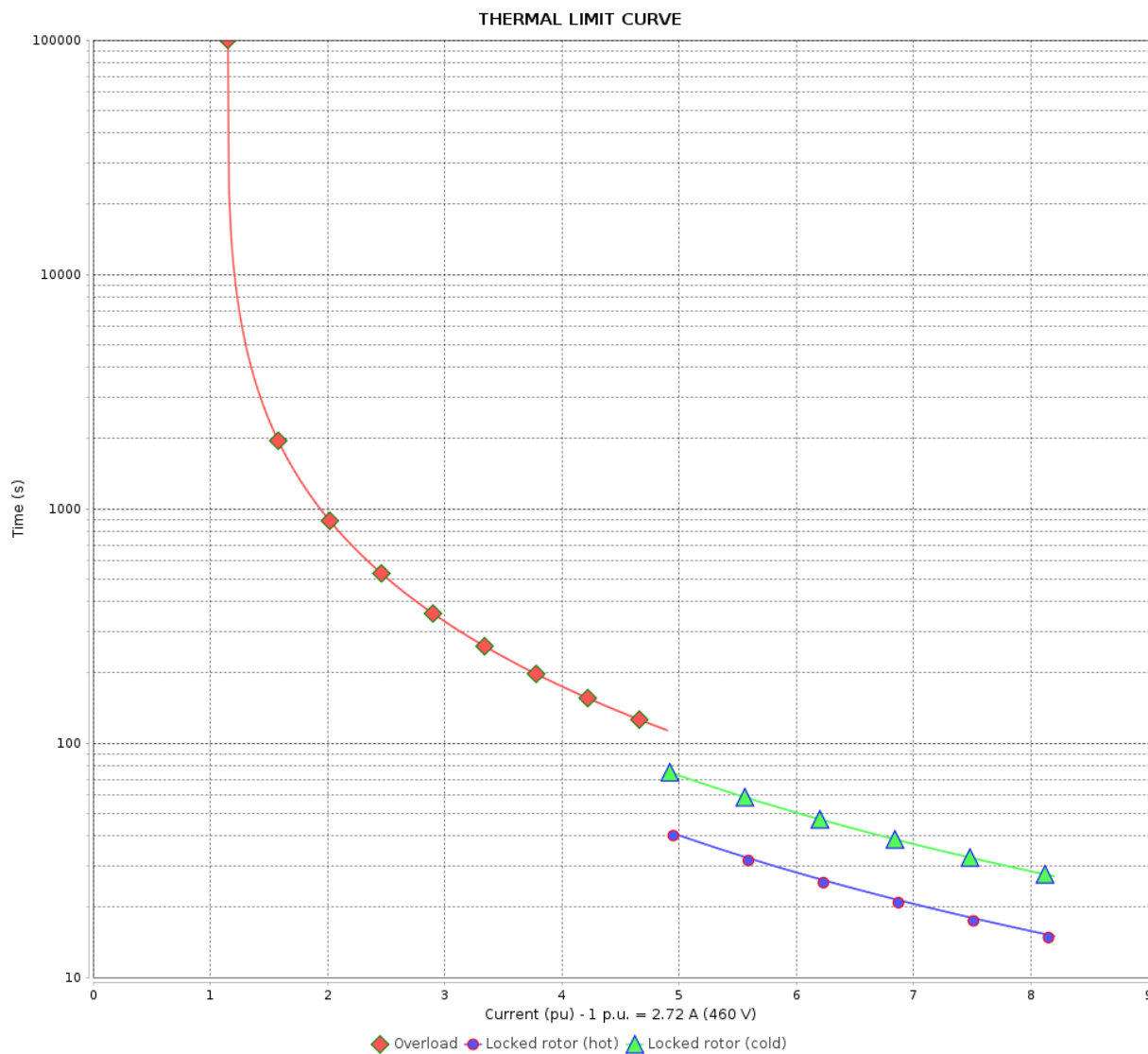
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 Design : B

Heating constant  
 Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
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# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

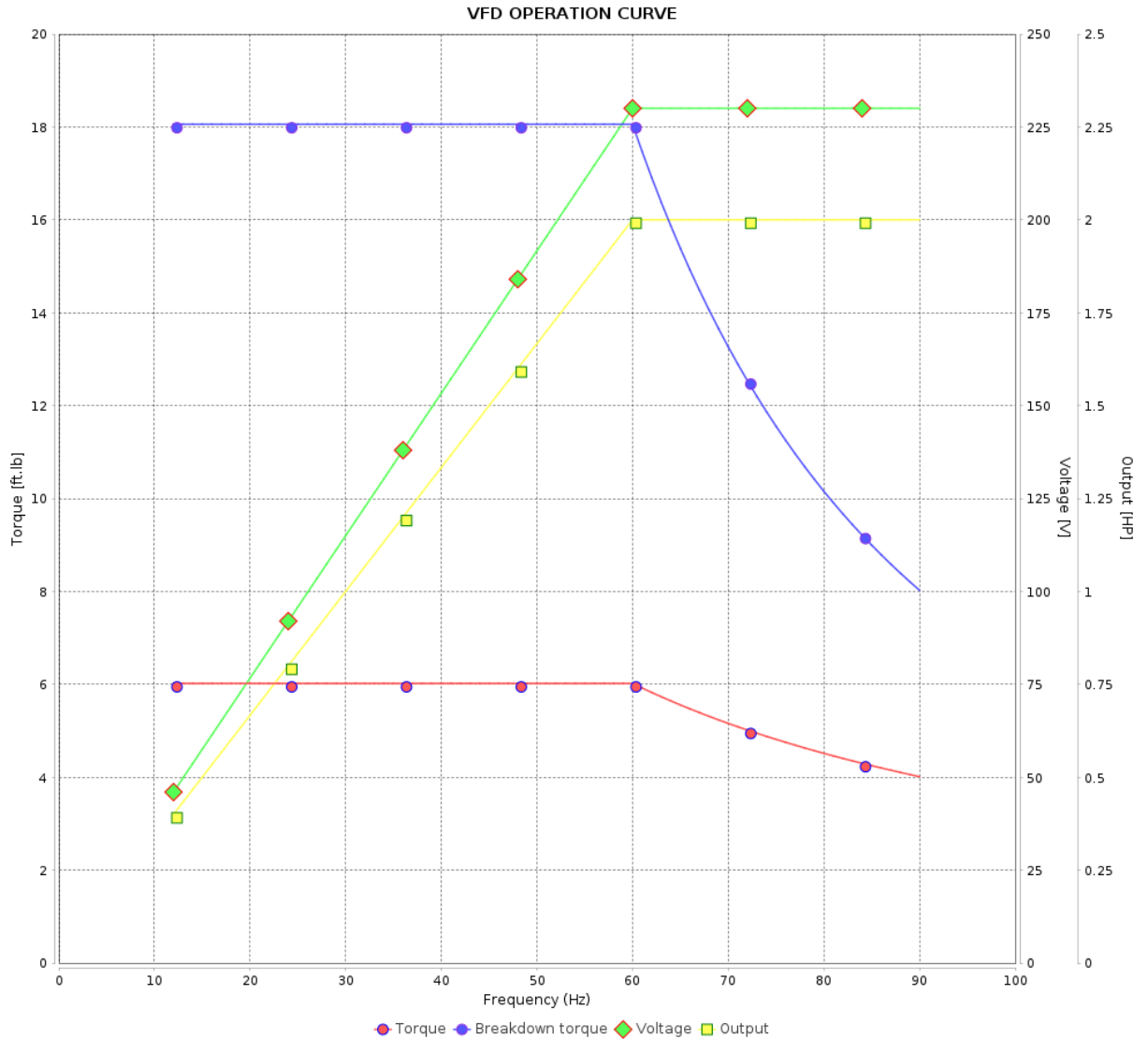


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1 2 3 4 5 6

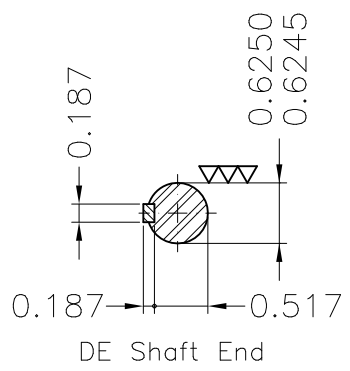
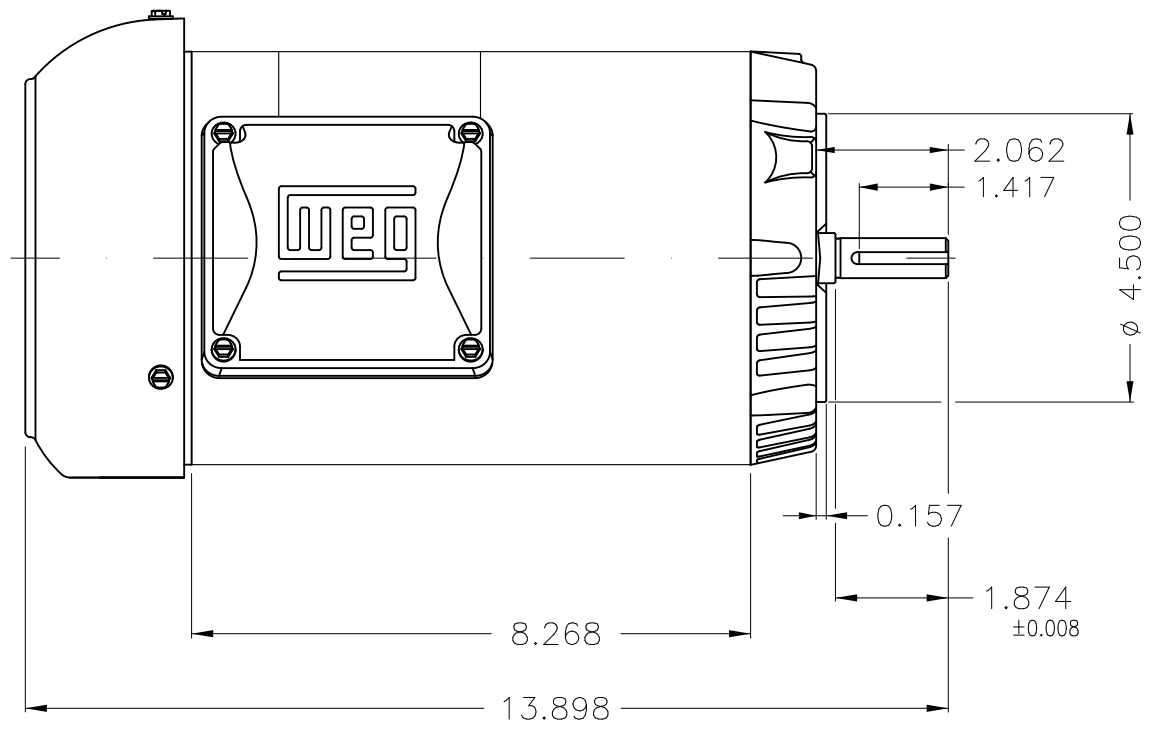
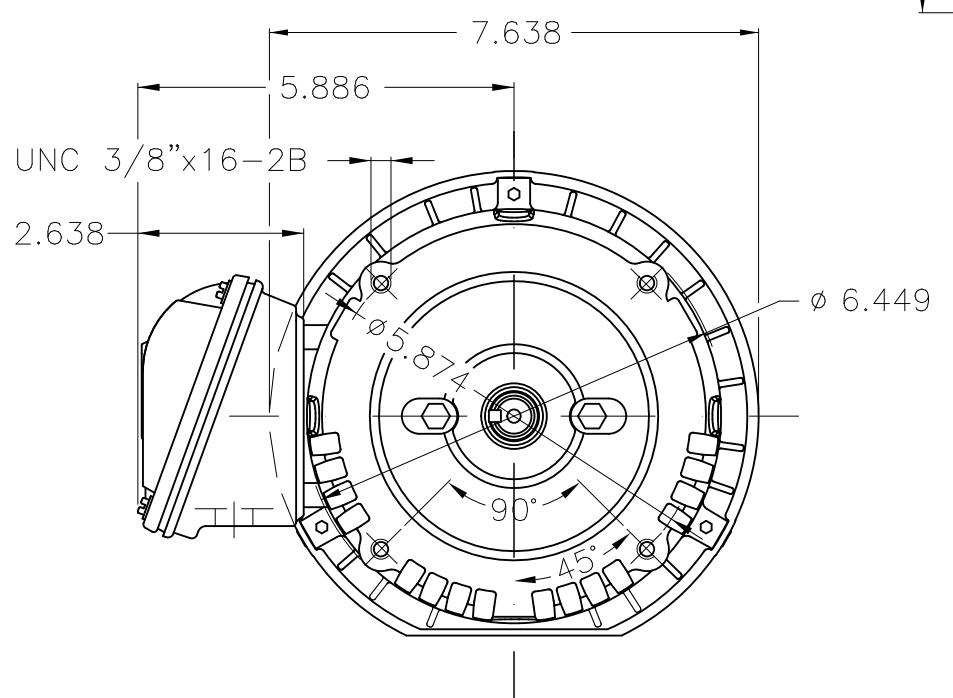
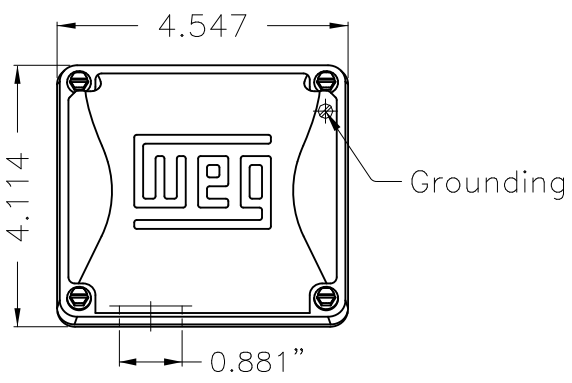
A

B

C

D

E



Fan cover - steel plate  
 Color Munsell N 1 matte black  
 Painting plan 207N  
 Mounting F-1/B14R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.					
CHECKED		FRAME 56C IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	PREVIEW		WDD	
			SHEET		1 / 1		

2 HP 04 Poles 60 Hz



Dimensions in inches XME A3



**NEMA**  
**Premium**



3PT9



FOR SAFE AREA

Energy Verified

MADE IN BRAZIL

**MAT: 14786571 CC029A**

**W01.TE0IC0X0X**

**MODEL 00218ET3E56CFL-S**

**15AUG2022 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 56C		KW 1.5
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 5.44/2.72
INS CL F AT 80K	IP55	SFA 6.26/3.13
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE K	PF 0.80
USABLE @ 208V 6.02A		RPM 1745
SF1.00		NEMA NOM. EFF 86.5%

ALTERNATE RATING: 2.0HP	50Hz	190-220/380-415V	SF1.15
6.50-5.79/3.25-3.07A	1415RPM	EFF 82.6% (IE1)	IEC 60034-1

For safe area-inverter duty motor For 60Hz use on VPWM 1000:1 VT, 5:1 CT

DE 6204-ZZ	ODE 6202-ZZ	MOBIL POLYREX EM
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T1-BLU T2-WHT  
T3-ORG T4-YEL  
T5-BLK T6-GRY  
T7-PNK T8-RED  
T9-BRK RED

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.

