

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer	: Automation Direct				
Product line	: NEMA Premium Efficiency Three-Phase		Product code :	14802850	
			Catalog # :	00336ET3E145TC-S	
Frame	: 143/5TC		Locked rotor time	: 18s (cold) 10s (hot)	
Output	: 3 HP (2.2 kW)		Temperature rise	: 80 K	
Poles	: 2		Duty cycle	: Cont.(S1)	
Frequency	: 60 Hz		Ambient temperature	: -20°C to +40°C	
Rated voltage	: 230/460 V		Altitude	: 1000 m.a.s.l.	
Rated current	: 7.02/3.51 A		Protection degree	: IP55	
L. R. Amperes	: 66.7/33.3 A		Cooling method	: IC411 - TEFC	
LRC	: 9.5x(Code K)		Mounting	: F-1	
No load current	: 2.56/1.28 A		Rotation <sup>1</sup>	: Both (CW and CCW)	
Rated speed	: 3500 rpm		Noise level <sup>2</sup>	: 68.0 dB(A)	
Slip	: 2.78 %		Starting method	: Direct On Line	
Rated torque	: 4.50 ft.lb		Approx. weight <sup>3</sup>	: 50.1 lb	
Locked rotor torque	: 300 %				
Breakdown torque	: 380 %				
Insulation class	: F				
Service factor	: 1.15				
Moment of inertia (J)	: 0.1663 sq.ft.lb				
Design	: B				
Output	25%	50%	75%	100%	
Efficiency (%)	83.6	84.0	86.5	86.5	
Power Factor	0.51	0.78	0.87	0.91	
	Foundation loads				
			Max. traction	: 136 lb	
			Max. compression	: 186 lb	
		<u>Drive end</u>	<u>Non drive end</u>		
Bearing type	:	6205 ZZ	6203 ZZ		
Sealing	:	V'Ring	Without Bearing Seal		
Lubrication interval	:	-	-		
Lubricant amount	:	-	-		
Lubricant type	:	Mobil Polyrex EM			
Notes					
USABLE @208V 7.76A SF 1.00 SFA 7.76A					
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					
Date	23/08/2022			Page	Revision
				1 / 5	

# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage

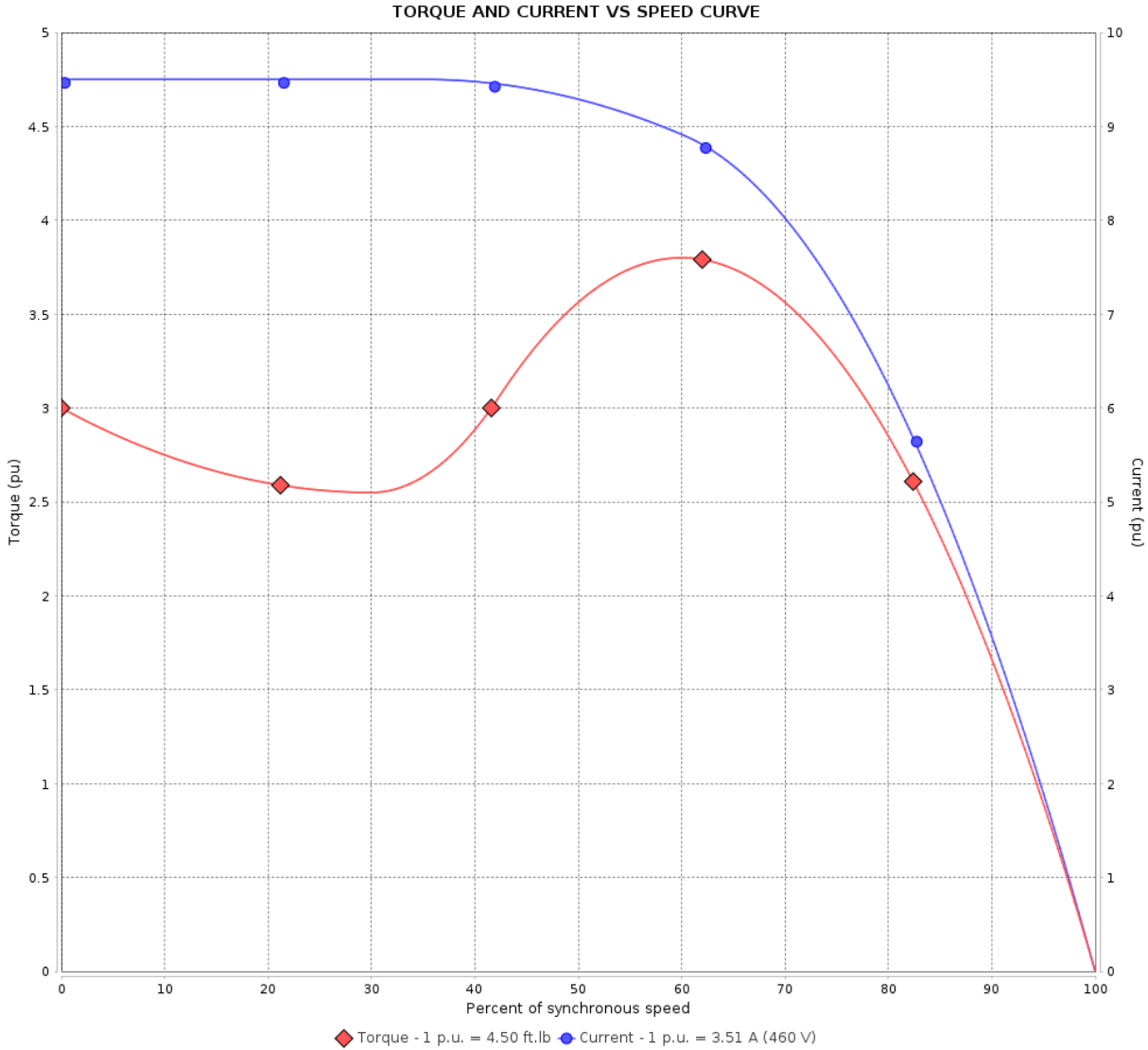


Customer : Automation Direct

Product line : NEMA Premium Efficiency Three-Phase

Product code :  
Catalog # :

14802850  
00336ET3E145TC-S



Performance : 230/460 V 60 Hz 2P

Rated current : 7.02/3.51 A  
 LRC : 9.5  
 Rated torque : 4.50 ft.lb  
 Locked rotor torque : 300 %  
 Breakdown torque : 380 %  
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.1663 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K  
 Design : B

Locked rotor time : 18s (cold) 10s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 5	Revision
Checked by				
Date	23/08/2022			



# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer : Automation Direct

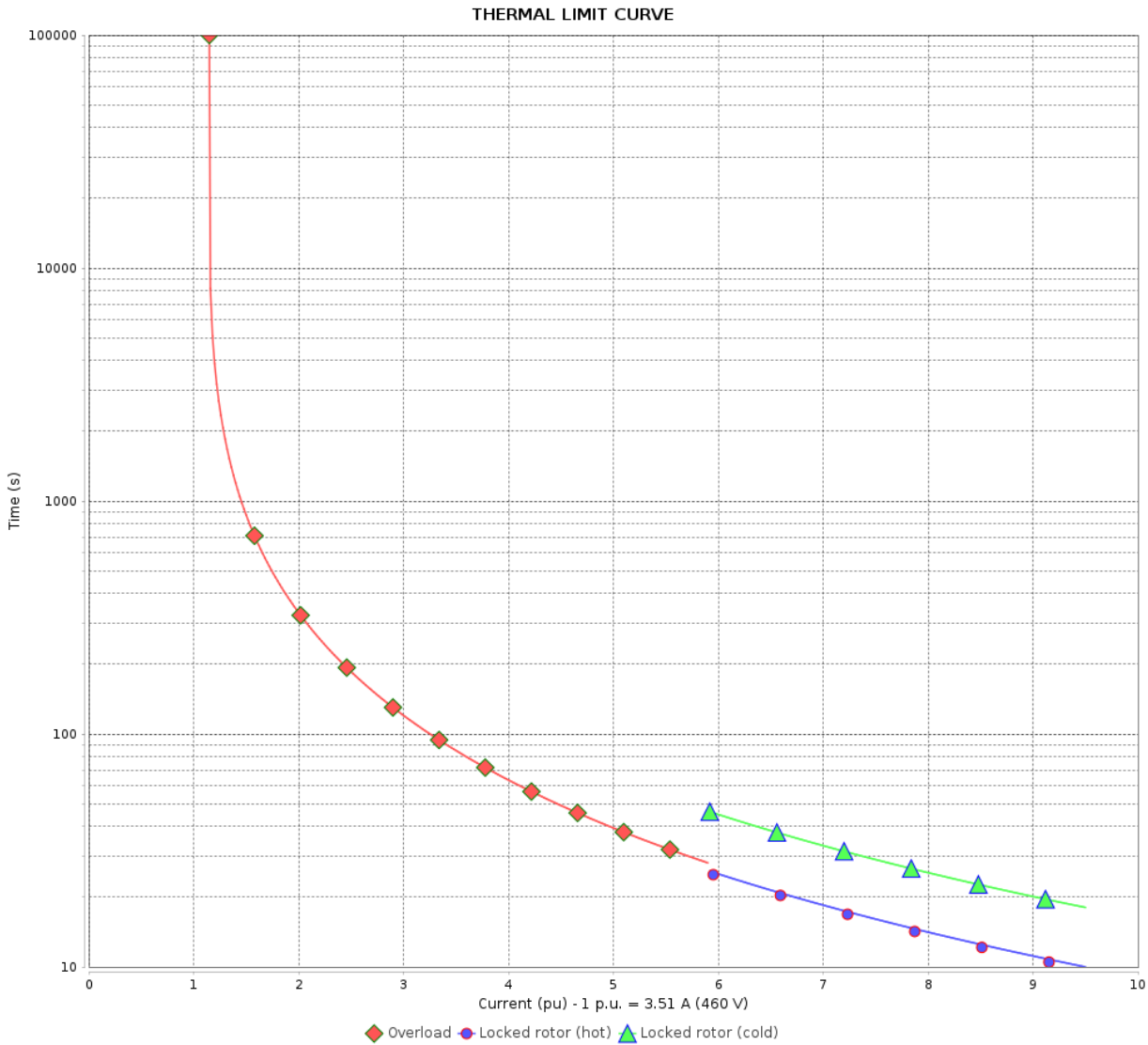
Product line : NEMA Premium Efficiency Three-Phase

Product code :

14802850

Catalog # :

00336ET3E145TC-S



Performance : 230/460 V 60 Hz 2P

Rated current : 7.02/3.51 A  
 LRC : 9.5  
 Rated torque : 4.50 ft.lb  
 Locked rotor torque : 300 %  
 Breakdown torque : 380 %  
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.1663 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor :  
 Temperature rise : 80 K  
 Design : B

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by	23/08/2022	Page 4 / 5		Revision
Checked by				
Date				

# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

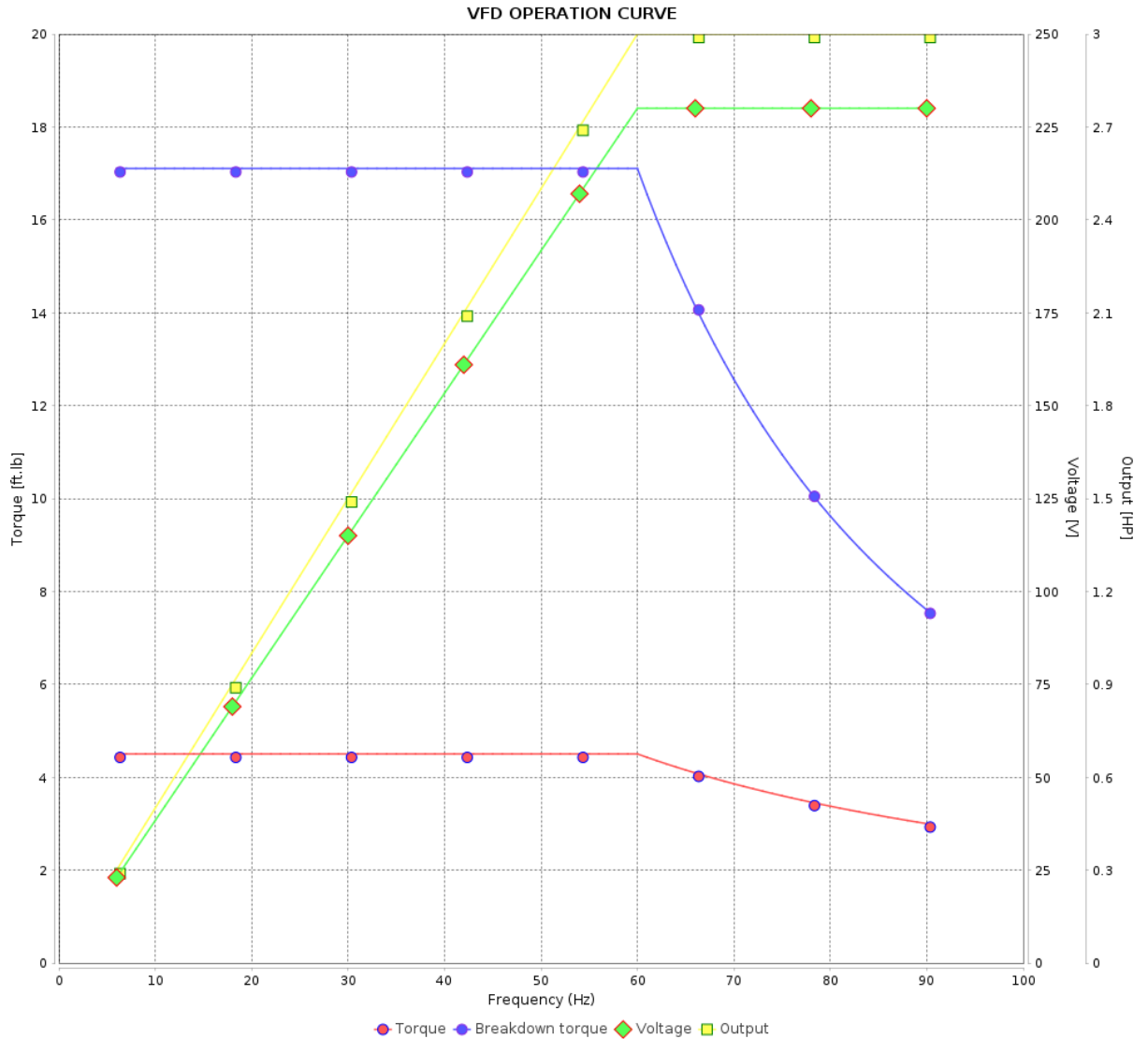


Customer : Automation Direct

Product line : NEMA Premium Efficiency Three-Phase

Product code :  
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14802850  
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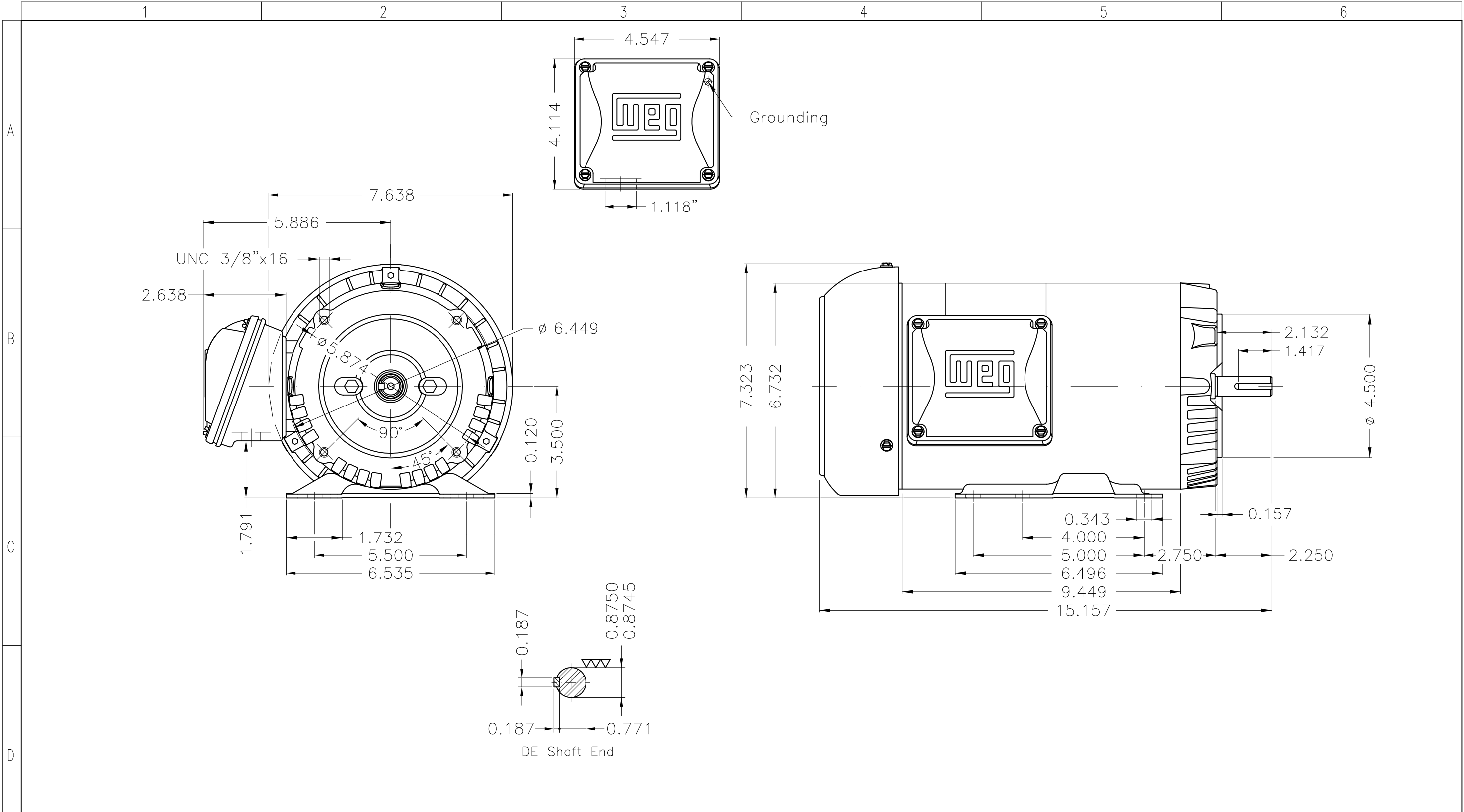


Performance : 230/460 V 60 Hz 2P

Rated current : 7.02/3.51 A  
 LRC : 9.5  
 Rated torque : 4.50 ft.lb  
 Locked rotor torque : 300 %  
 Breakdown torque : 380 %  
 Rated speed : 3500 rpm

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 Duty cycle : Cont.(S1)  
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 Temperature rise : 80 K  
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Date				



Fan cover - steel plate										
Color Munsell N 1 matte black										
Painting plan 207N										
Mounting F-1/B34R(D)										
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.				PREVIEW		WDD		
CHECKED		FRAME 143/5TC IP55 TEFC				WDD		SHEET 1 / 1		
RELEASED										
REL DT.		WMO	Jaragua do Sul	Product Engineering						

3 HP 02 Poles 60 Hz

A REL DT. WMO Jaragua do Sul Product Engineering SHEET 1 / 1





**NEMA**  
**Premium**

®



3PT9

US LISTED  
FOR SAFE AREA



Energy Verified

MADE IN BRAZIL

**MAT: 14802850 CC029A**

**W01.TE0IC0X0N**

**MODEL 00336ET3E145TC-S**

**17AUG2022 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**

<b>PH 3</b>	<b>Hz 60</b>	<b>HP 3.0</b>
<b>FR 143/5TC</b>		<b>KW 2.2</b>
<b>DUTY CONT.</b>		<b>V 230/460</b>
<b>ALT 1000 m.a.s.l.</b>		<b>A 7.02/3.51</b>
<b>INS CL F AT 80K</b>	<b>IP55</b>	<b>SFA 8.07/4.04</b>
<b>AMB 40°C</b>	<b>DES B</b>	<b>SF 1.15</b>
<b>ENCL TEFC</b>	<b>CODE K</b>	<b>PF 0.91</b>
<b>USABLE @ 208V 7.76A</b>		<b>RPM 3500</b>
<b>SF1.00</b>		<b>NEMA NOM. EFF 86.5%</b>
<b>ALTERNATE RATING: 3.0HP 50Hz 190-220/380-415V SF1.15</b>		
<b>8.50-7.38/4.25-3.91A 2870RPM EFF 84.6% (IE2) IEC 60034-1</b>		
<b>For safe area-Inverter duty motor For 60Hz use on VPWM 1000:1 VT, 10:1 CT</b>		
<b>DE 6205-ZZ</b>	<b>ODE 6203-ZZ</b>	<b>MOBIL POLYREX EM</b>



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.**

