

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :																
Product line	: Standard Efficiency Three-Phase															
Product code :	14797778															
Catalog # :	.7536ES3H56C-S															
Frame : 56C Output : 0.75 HP (0.550 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 0.904 A L. R. Amperes : 6.33 A LRC : 7.0x(Code K) No load current : 0.440 A Rated speed : 3475 rpm Slip : 3.47 % Rated torque : 1.13 ft.lb Locked rotor torque : 250 % Breakdown torque : 290 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.0517 sq.ft.lb	Locked rotor time : 41s (cold) 23s (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> : 68.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 21.4 lb															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Output</td> <td>25%</td> <td>50%</td> <td>75%</td> <td>100%</td> </tr> <tr> <td>Efficiency (%)</td> <td>58.8</td> <td>62.0</td> <td>68.0</td> <td>72.0</td> </tr> <tr> <td>Power Factor</td> <td>0.45</td> <td>0.70</td> <td>0.79</td> <td>0.85</td> </tr> </table>	Output	25%	50%	75%	100%	Efficiency (%)	58.8	62.0	68.0	72.0	Power Factor	0.45	0.70	0.79	0.85	Foundation loads Max. traction : 21 lb Max. compression : 43 lb
Output	25%	50%	75%	100%												
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Power Factor	0.45	0.70	0.79	0.85												
Bearing type : Sealing : Lubrication interval : Lubricant amount : Lubricant type :	<table style="width:100%;"> <tr> <td style="text-align:center;"><u>Drive end</u></td> <td style="text-align:center;"><u>Non drive end</u></td> </tr> <tr> <td style="text-align:center;">6203 ZZ</td> <td style="text-align:center;">6202 ZZ</td> </tr> <tr> <td style="text-align:center;">V'Ring</td> <td style="text-align:center;">Without Bearing Seal</td> </tr> <tr> <td style="text-align:center;">-</td> <td style="text-align:center;">-</td> </tr> <tr> <td style="text-align:center;">-</td> <td style="text-align:center;">-</td> </tr> <tr> <td colspan="2" style="text-align:center;">Mobil Polyrex EM</td> </tr> </table>	<u>Drive end</u>	<u>Non drive end</u>	6203 ZZ	6202 ZZ	V'Ring	Without Bearing Seal	-	-	-	-	Mobil Polyrex EM				
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-	-															
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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	11/04/2022		1 / 5													

# TORQUE AND CURRENT VS SPEED CURVE

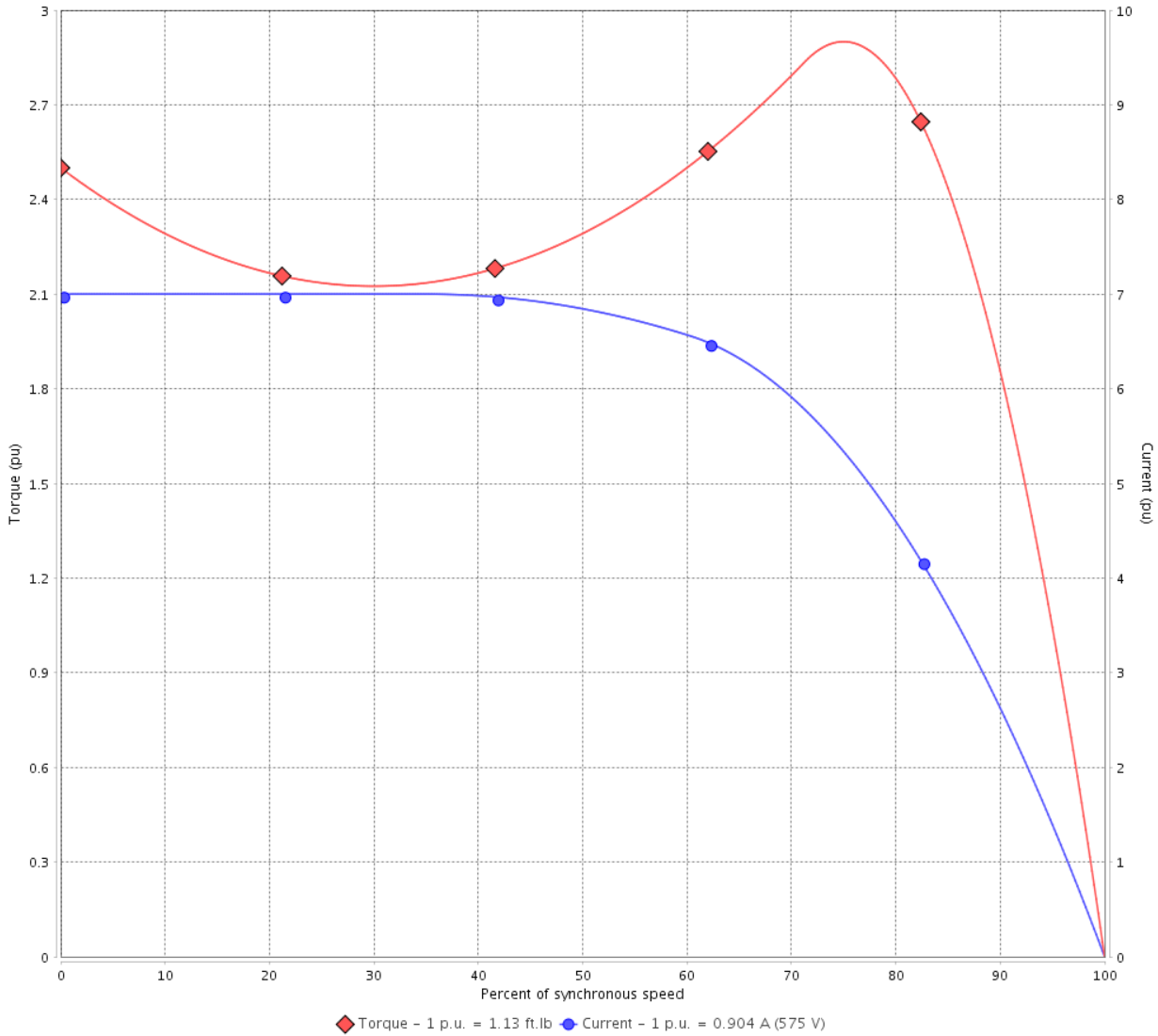
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase      Product code : 14797778  
 Catalog # : .7536ES3H56C-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 0.904 A	Moment of inertia (J)	: 0.0517 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 1.13 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.15
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 3475 rpm		

Locked rotor time : 41s (cold) 23s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



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

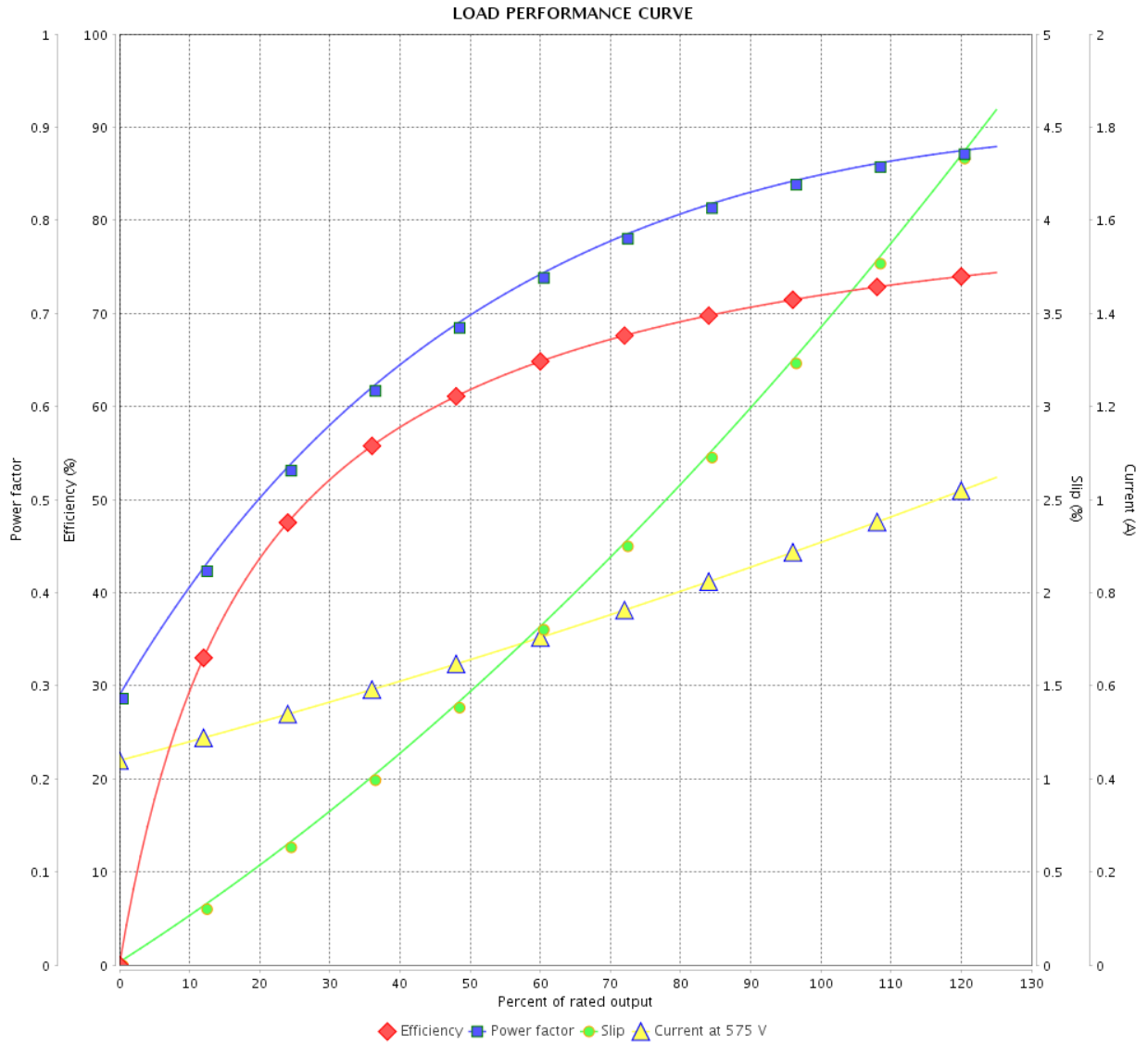
Product line : Standard Efficiency Three-Phase

Product code :

14797778

Catalog # :

.7536ES3H56C-S



Performance : 575 V 60 Hz 2P

Rated current : 0.904 A  
 LRC : 7.0  
 Rated torque : 1.13 ft.lb  
 Locked rotor torque : 250 %  
 Breakdown torque : 290 %  
 Rated speed : 3475 rpm

Moment of inertia (J) : 0.0517 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K

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Date				
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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

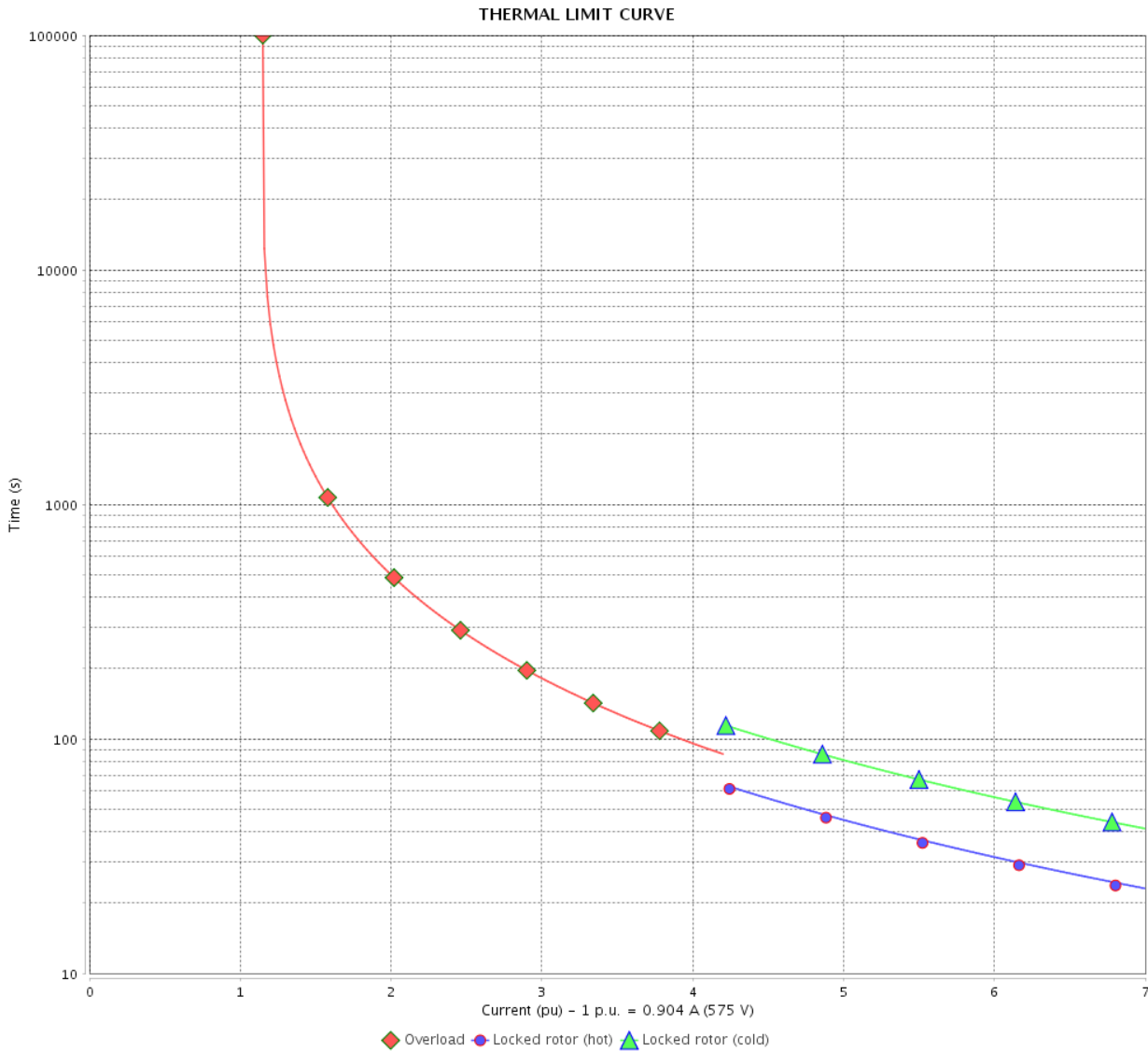
Product line : Standard Efficiency Three-Phase

Product code :

14797778

Catalog # :

.7536ES3H56C-S



Performance : 575 V 60 Hz 2P

Rated current : 0.904 A  
 LRC : 7.0  
 Rated torque : 1.13 ft.lb  
 Locked rotor torque : 250 %  
 Breakdown torque : 290 %  
 Rated speed : 3475 rpm

Moment of inertia (J) : 0.0517 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K

Heating constant

Cooling constant

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Date				

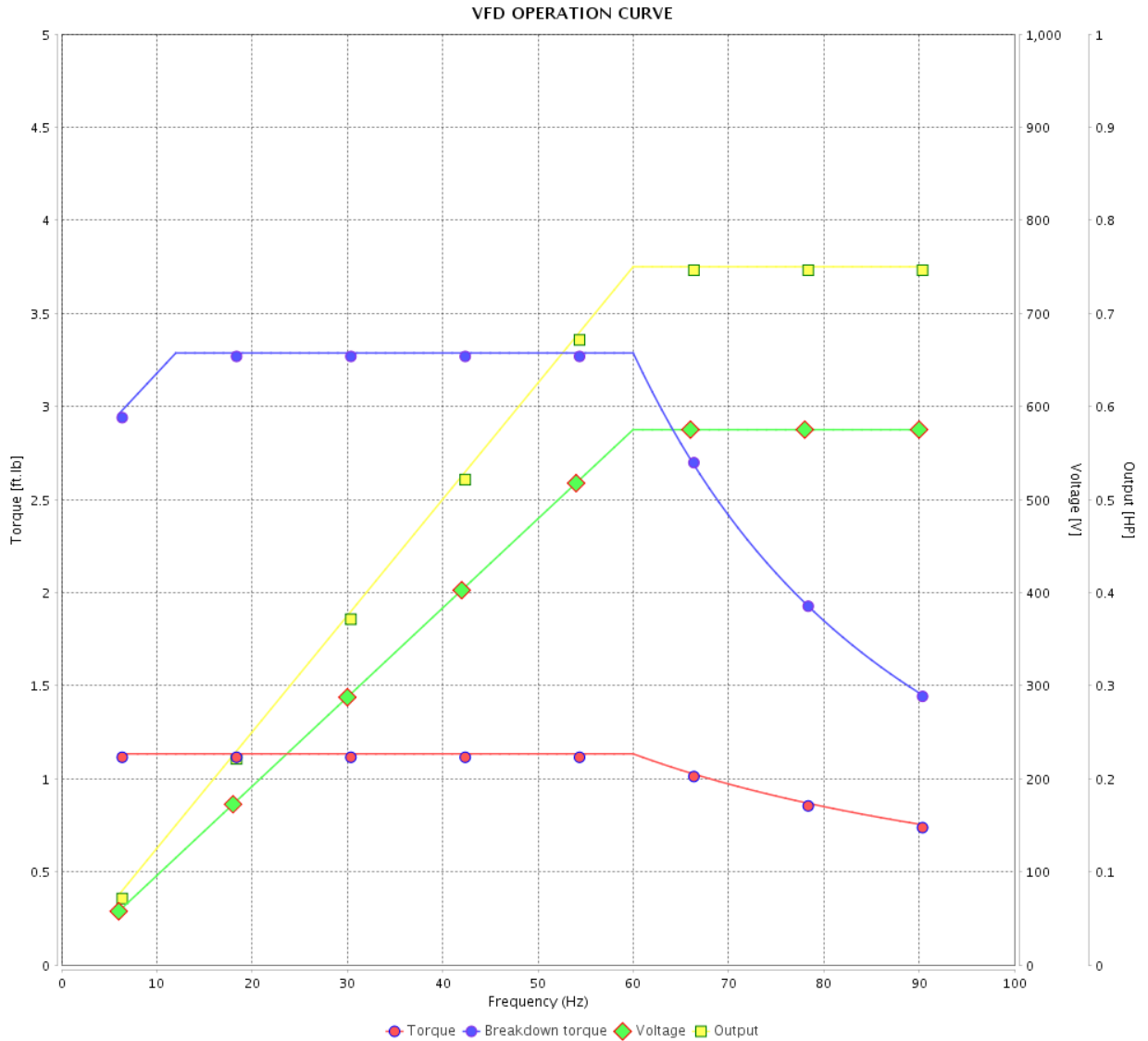
# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage



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

Product line : Standard Efficiency Three-Phase      Product code : 14797778  
 Catalog # : .7536ES3H56C-S

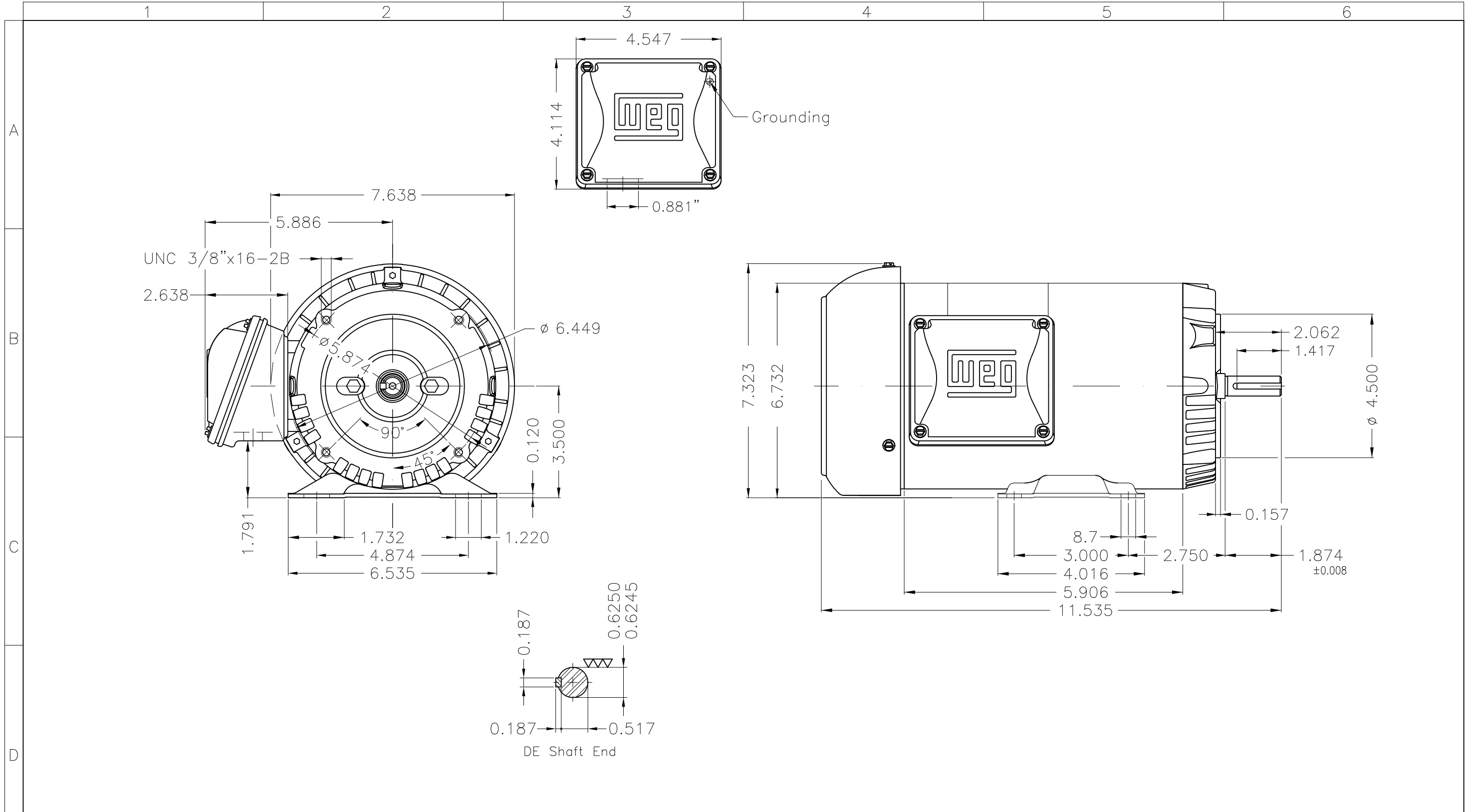


Performance : 575 V 60 Hz 2P

Rated current : 0.904 A  
 LRC : 7.0  
 Rated torque : 1.13 ft.lb  
 Locked rotor torque : 250 %  
 Breakdown torque : 290 %  
 Rated speed : 3475 rpm

Moment of inertia (J) : 0.0517 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K

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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	PIRWUSER	THREE PH. MOTOR ROLLED STEEL					
CHECKED		FRAME 56C IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

0.75 HP 02 Poles 60 Hz

PREVIEW  
 WDD



MADE IN MEXICO

**MAT: 14797778**

**W01.TE0IC0X0X**

**MODEL 7536ES3H56C-S**

**17JAN2022 B/N:**

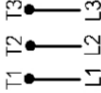


**For 60Hz: Class I, Zone 2, IIC  
Class I, Div.2, Gr. A,B,C,D - T3  
DIV 2 Inverter Duty (SF1.00)  
CT 2:1/VT 1000:1**

PH 3	Hz 60	HP 0.75
FR 56C		KW 0.55
DUTY CONT.		V 575
ALT 1000 m.a.s.l		A 0.904
INS CL F AT 80K	IP55	SFA 1.04
AMB 40°C	DES -	SF 1.15
ENCL TEFC	CODE K	PF 0.85
		RPM 3475
		NEMA NOM. EFF 72.0%

**For safe area-inverter duty motor For use on VPWM 1000:1 VT, 10:1 CT**

**DE 6203-ZZ ODE 6202-ZZ MOBIL POLYREX EM**



T1-BLU  
T2-WHT  
T3-ORG



**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.

