

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	: Automation Direct				
Product line	: Standard Efficiency Three-Phase		Product code :	14797641	
			Catalog # :	.5036ES3E56-S	
Frame	: 56		Locked rotor time	: 63s (cold) 35s (hot)	
Output	: 0.5 HP (0.37 kW)		Temperature rise	: 80 K	
Poles	: 2		Duty cycle	: Cont.(S1)	
Frequency	: 60 Hz		Ambient temperature	: -20°C to +40°C	
Rated voltage	: 208-230/460 V		Altitude	: 1000 m.a.s.l.	
Rated current	: 1.86-1.69/0.843 A		Protection degree	: IP55	
L. R. Amperes	: 13.0-11.8/5.90 A		Cooling method	: IC411 - TEFC	
LRC	: 7.0x(Code L)		Mounting	: F-1	
No load current	: 0.776-0.900/0.450 A		Rotation ¹	: Both (CW and CCW)	
Rated speed	: 3500 rpm		Noise level ²	: 68.0 dB(A)	
Slip	: 2.78 %		Starting method	: Direct On Line	
Rated torque	: 0.750 ft.lb		Approx. weight ³	: 19.6 lb	
Locked rotor torque	: 260 %				
Breakdown torque	: 300 %				
Insulation class	: F				
Service factor	: 1.15				
Moment of inertia (J)	: 0.0453 sq.ft.lb				
Output	25%	50%	75%	100%	
Efficiency (%)	50.9	55.0	62.0	68.0	
Power Factor	0.43	0.67	0.75	0.81	
	Foundation loads				
			Max. traction	: 18 lb	
			Max. compression	: 38 lb	
		<u>Drive end</u>		<u>Non drive end</u>	
Bearing type	:	6203 ZZ		6202 ZZ	
Sealing	:	V'Ring		Without Bearing Seal	
Lubrication interval	:	-		-	
Lubricant amount	:	-		-	
Lubricant type	:	Mobil Polyrex EM			
Notes					
USABLE @208V SF 1.00					
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

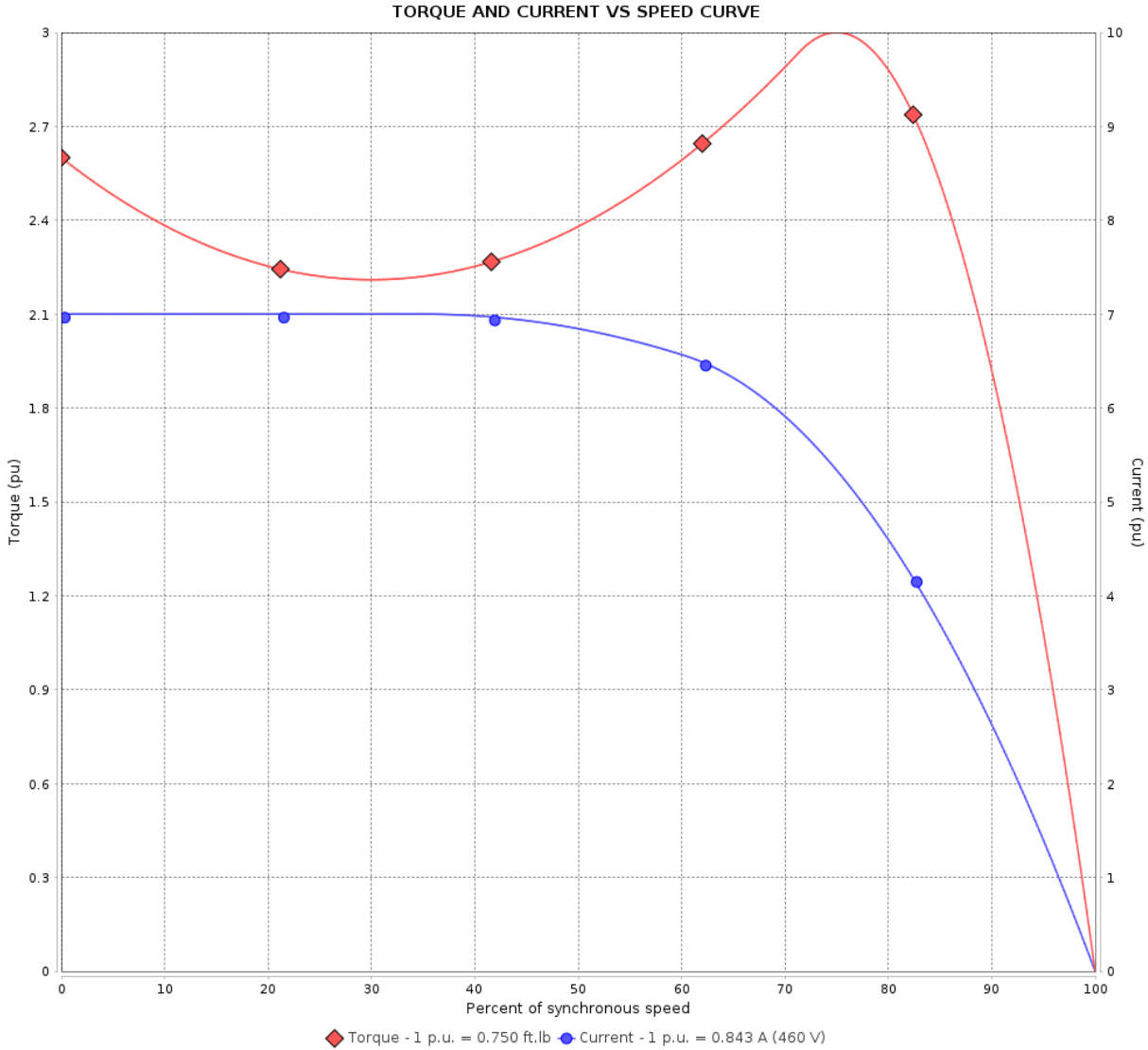
Product line : Standard Efficiency Three-Phase

Product code :

14797641

Catalog # :

.5036ES3E56-S



Performance : 208-230/460 V 60 Hz 2P

Rated current	: 1.86-1.69/0.843 A	Moment of inertia (J)	: 0.0453 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 0.750 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	:
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3500 rpm		

Locked rotor time : 63s (cold) 35s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 5	Revision
Checked by				
Date	22/08/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



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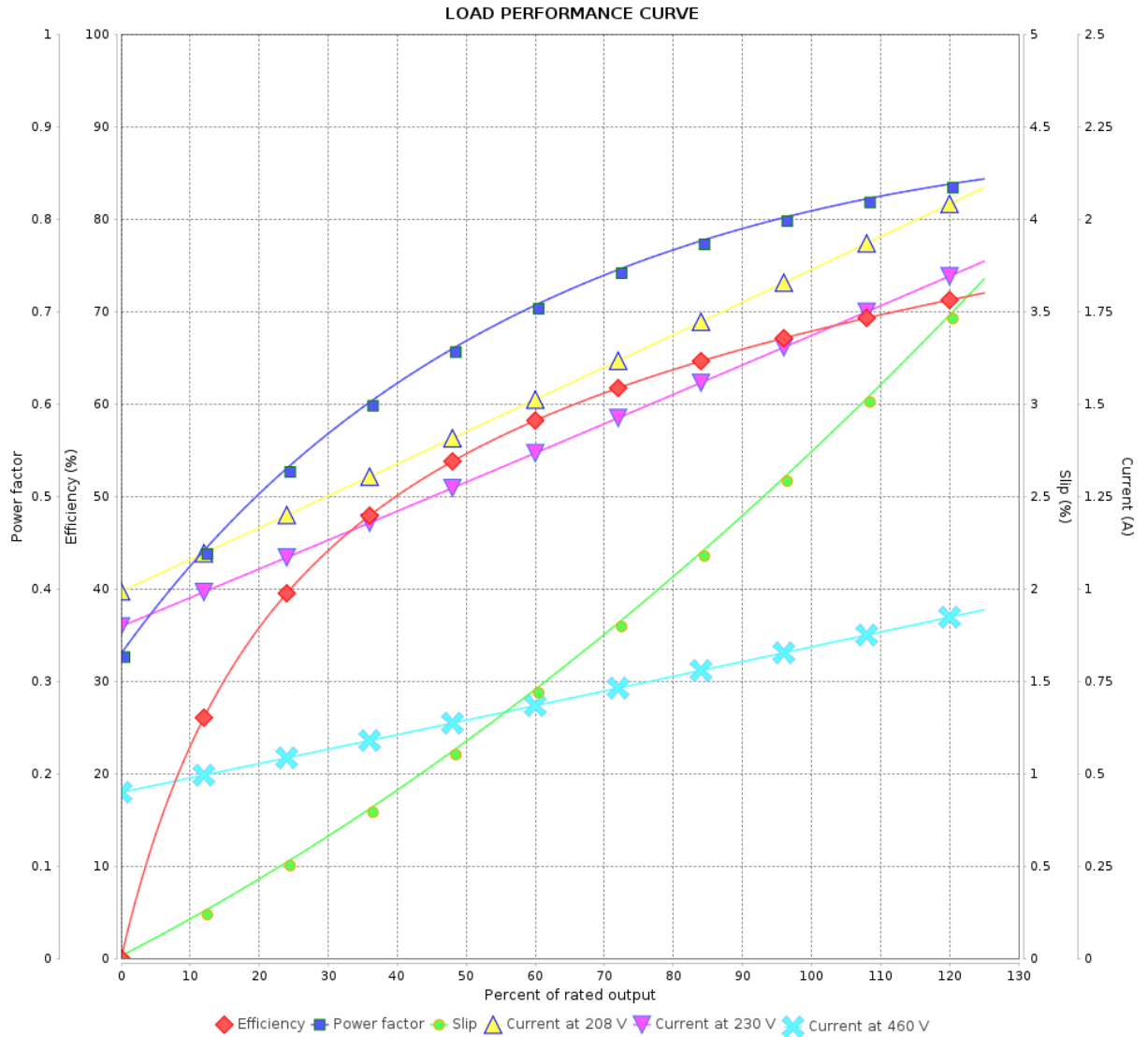
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 LRC : 7.0
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 Breakdown torque : 300 %
 Rated speed : 3500 rpm

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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K

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Performed by			Page	Revision
Checked by				
Date				

THERMAL LIMIT CURVE

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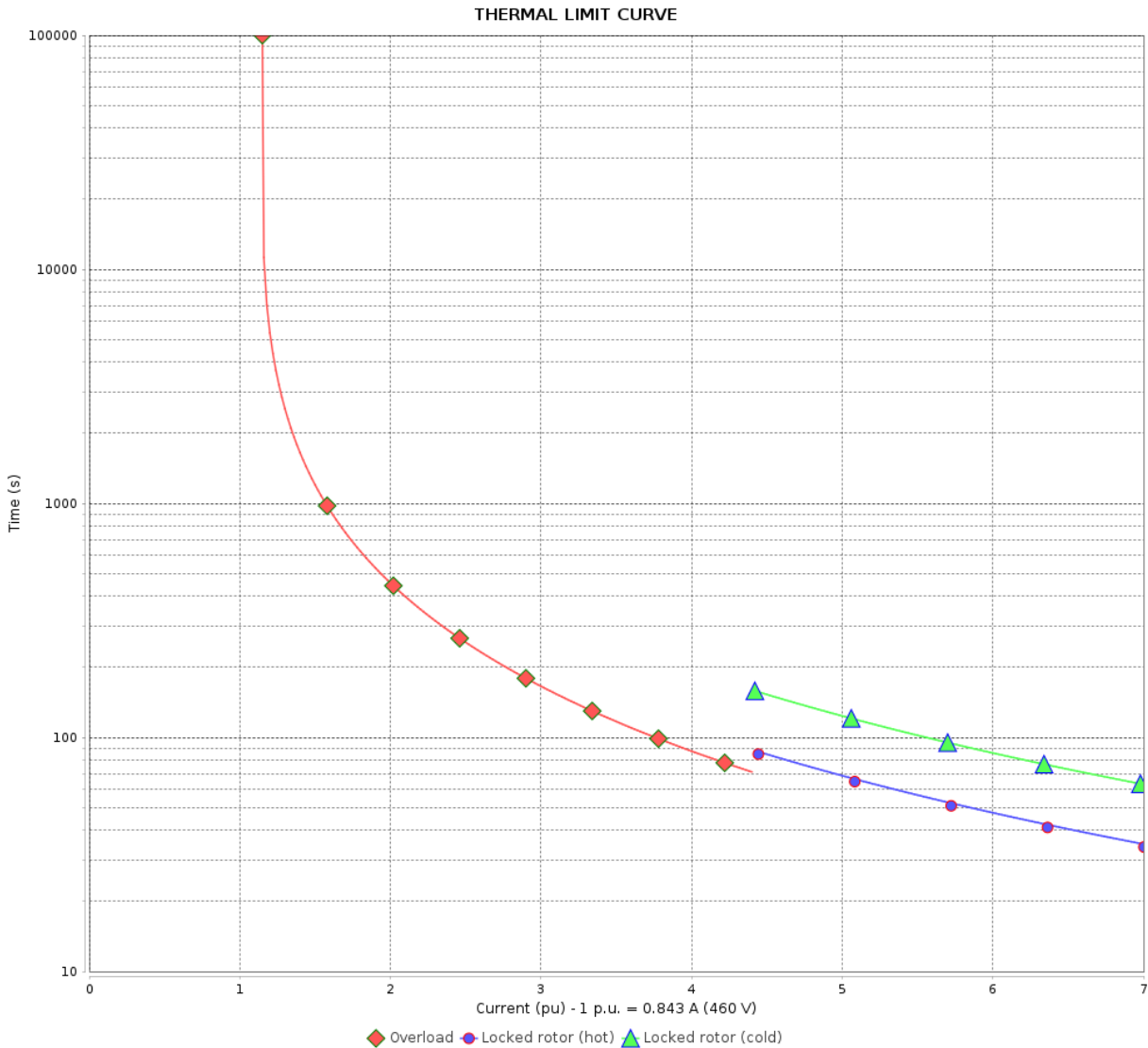
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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by	22/08/2022	Page		Revision
Checked by		4 / 5		
Date				

VFD OPERATION CURVE

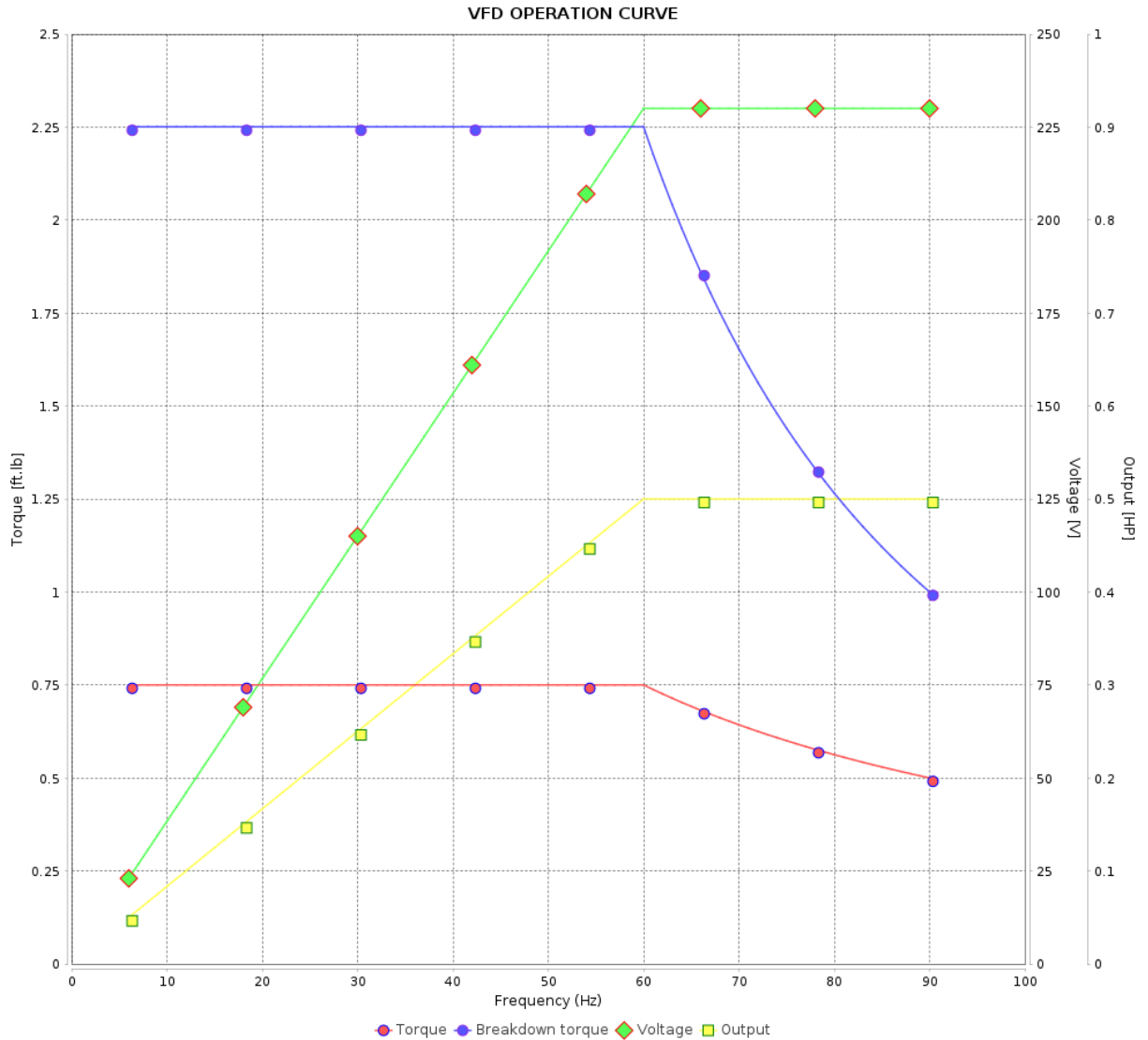
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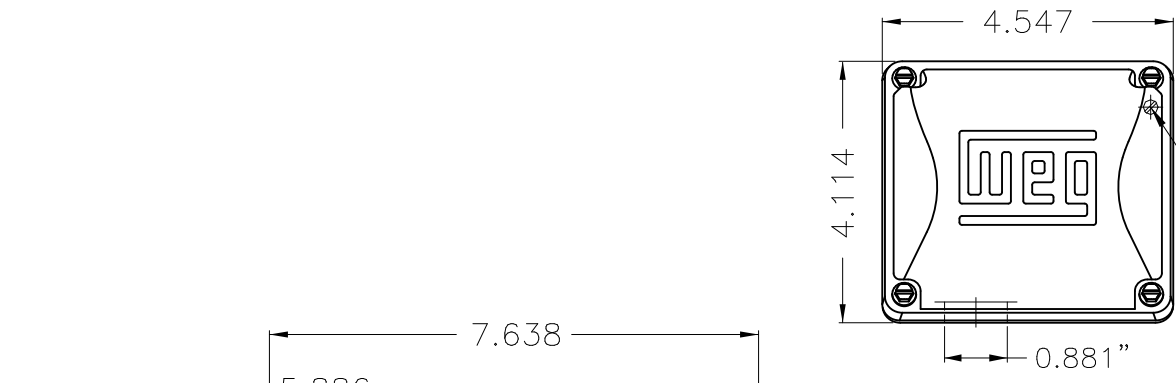
A

B

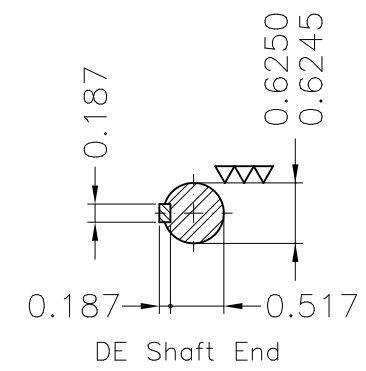
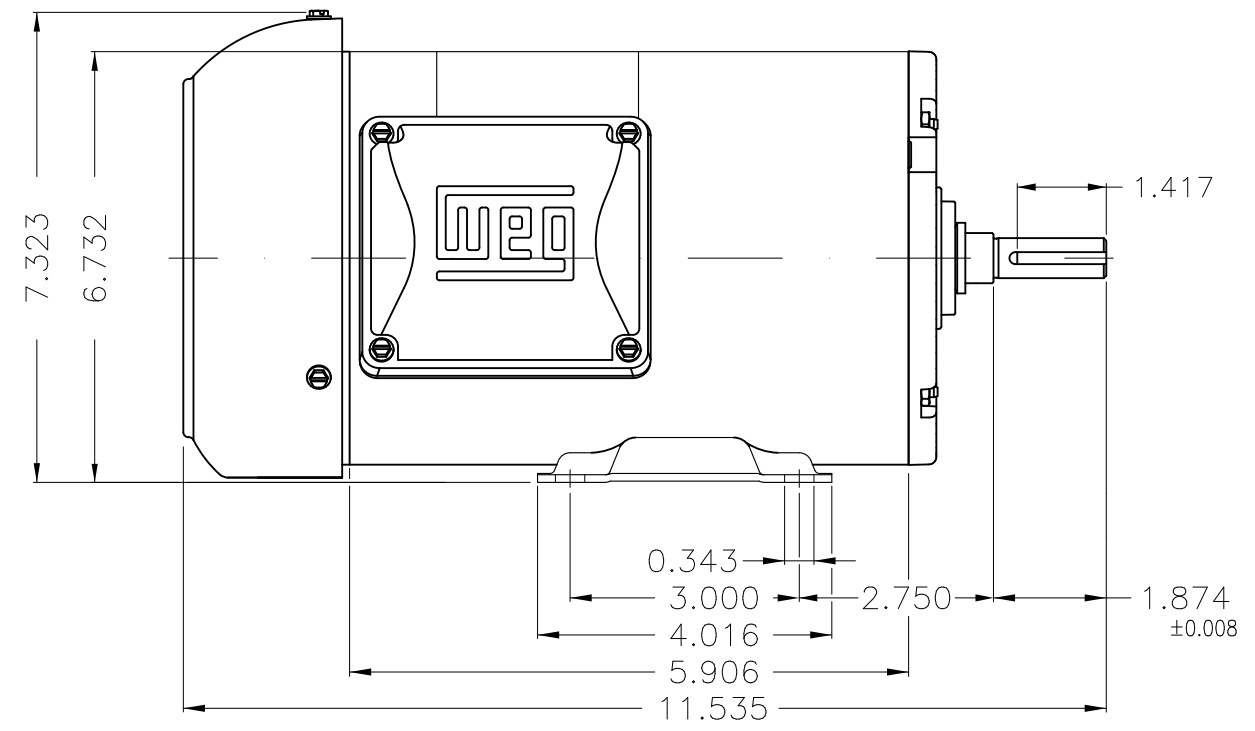
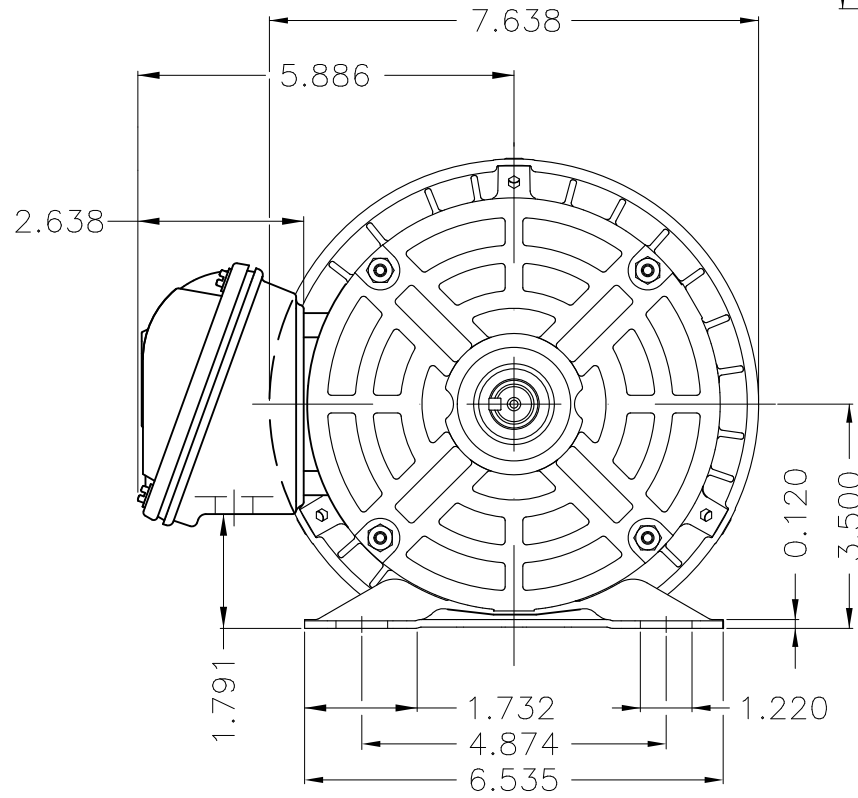
C

D


E



Grounding



DE Shaft End

Fan cover - steel plate									
Without coating									
Mounting B3D									
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR ROLLED STEEL				PREVIEW WDD			
CHECKED		FRAME 56 IP55 TEFC							
RELEASED									
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1				

0.5 HP 02 Poles 60 Hz

A



MADE IN MEXICO

MAT: 14797641

W01.TE0IC0X0X

MODEL .5036ES3E56-S



**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 0.50
FR 56		KW 0.37
DUTY CONT.		V 208-230/460
ALT 1000 m.a.s.l.		A 1.86-1.69/0.843
INS CL F AT 80K	IP55	SFA 1.86-1.94/0.969
AMB 40°C	DES -	SF 1.15
ENCL TEFC	CODE L	PF 0.81
USABLE @ 208V SF1.00		RPM 3500
		NEMA NOM. EFF 68.0%

ALTERNATE RATING: 0.50HP 50Hz 190-220/380-415V SF1.15
1.78-1.68/0.890-0.878A 2865RPM EFF 71.5% (IE2) IEC 60034-1

For safe area-Inverter duty motor For 60Hz use on VPWM 1000:1 VT, 10:1 CT

DE 6203-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.

