

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	:					
Product line	:	Standard Efficiency Three-Phase	Product code :	14797029		
			Catalog # :	.5018ES3H56-S		
Frame	:	56	Locked rotor time	:	36s (cold) 20s (hot)	
Output	:	0.5 HP (0.37 kW)	Temperature rise	:	80 K	
Poles	:	4	Duty cycle	:	Cont.(S1)	
Frequency	:	60 Hz	Ambient temperature	:	-20°C to +40°C	
Rated voltage	:	575 V	Altitude	:	1000 m.a.s.l.	
Rated current	:	0.690 A	Protection degree	:	IP55	
L. R. Amperes	:	4.83 A	Cooling method	:	IC411 - TEFC	
LRC	:	7.0x(Code L)	Mounting	:	F-1	
No load current	:	0.480 A	Rotation ¹	:	Both (CW and CCW)	
Rated speed	:	1760 rpm	Noise level ²	:	52.0 dB(A)	
Slip	:	2.22 %	Starting method	:	Direct On Line	
Rated torque	:	1.49 ft.lb	Approx. weight ³	:	21.6 lb	
Locked rotor torque	:	240 %				
Breakdown torque	:	300 %				
Insulation class	:	F				
Service factor	:	1.15				
Moment of inertia (J)	:	0.0584 sq.ft.lb				
Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	65.4	68.0	74.0	77.0	Max. traction	
Power Factor	0.28	0.48	0.61	0.70	Max. compression	
					: 33 lb	
					: 54 lb	
Bearing type	:	<u>Drive end</u> 6203 ZZ	<u>Non drive end</u> 6202 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
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase

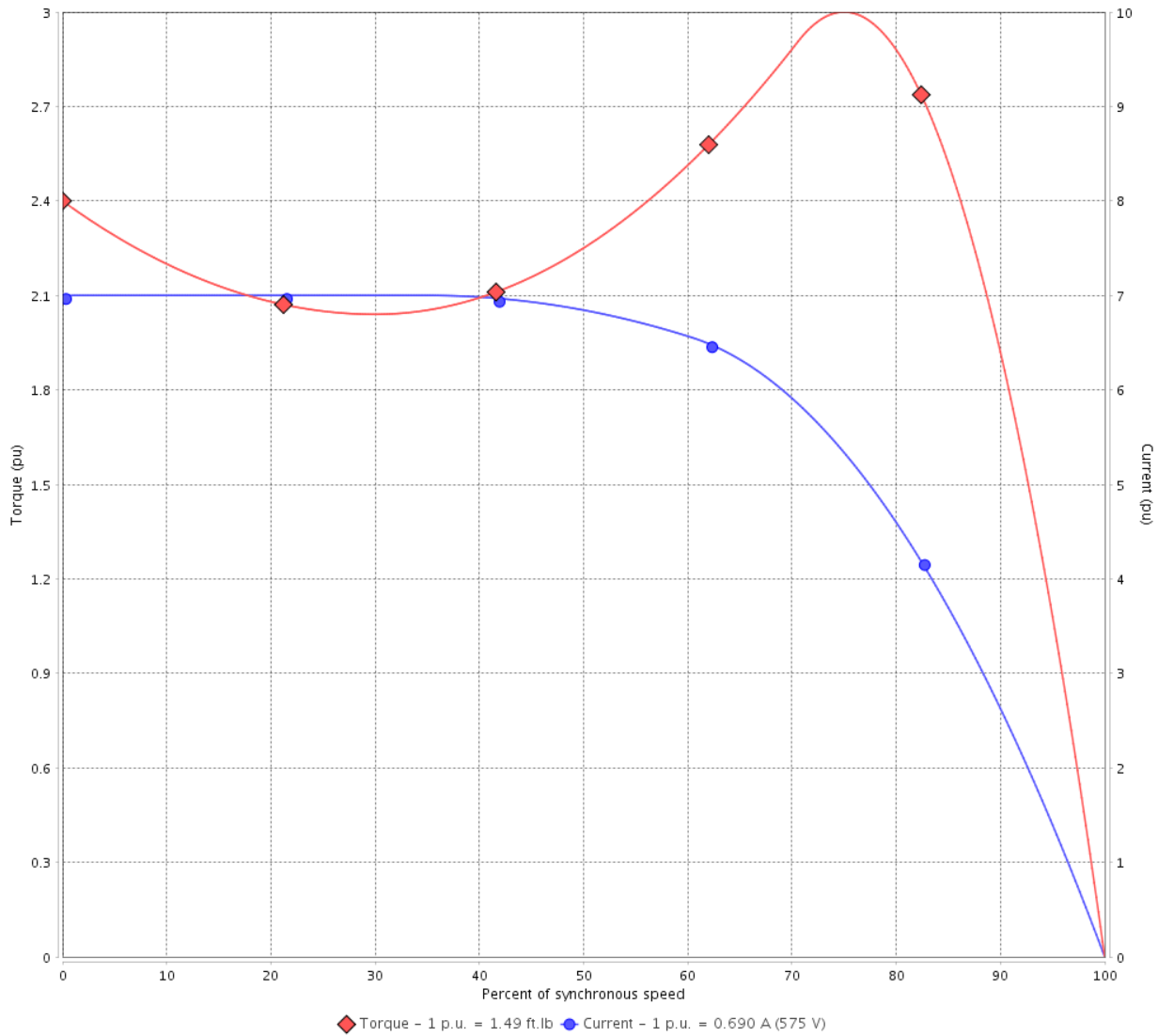
Product code :

14797029

Catalog # :

.5018ES3H56-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 4P

Rated current : 0.690 A
 LRC : 7.0
 Rated torque : 1.49 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 300 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0584 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K

Locked rotor time : 36s (cold) 20s (hot)

Rev.	Changes Summary	Performed	Checked	Date
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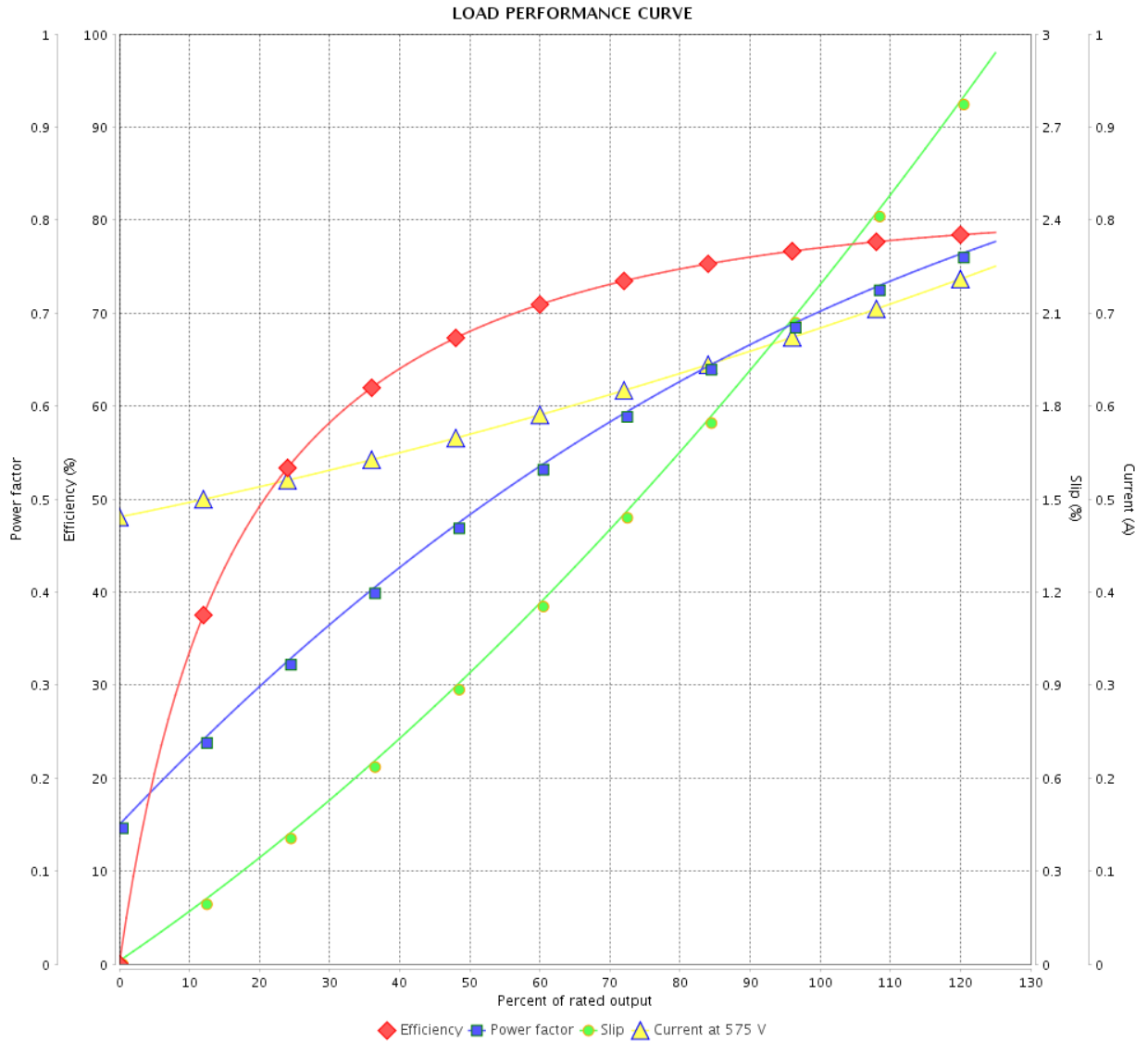
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

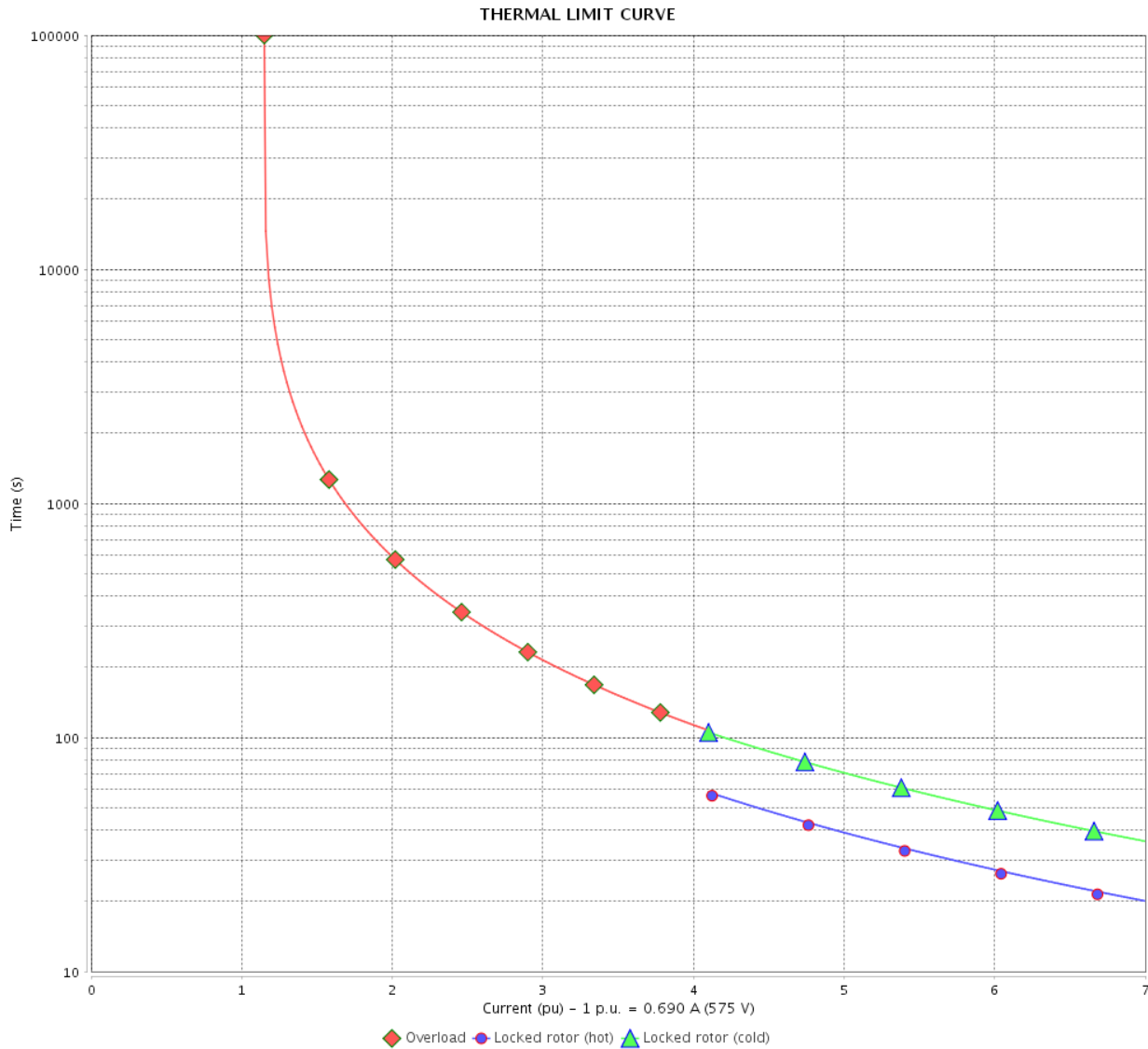
Product line : Standard Efficiency Three-Phase

Product code :

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.5018ES3H56-S



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 LRC : 7.0
 Rated torque : 1.49 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 300 %
 Rated speed : 1760 rpm

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 Service factor : 1.15
 Temperature rise : 80 K

Heating constant

Cooling constant

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

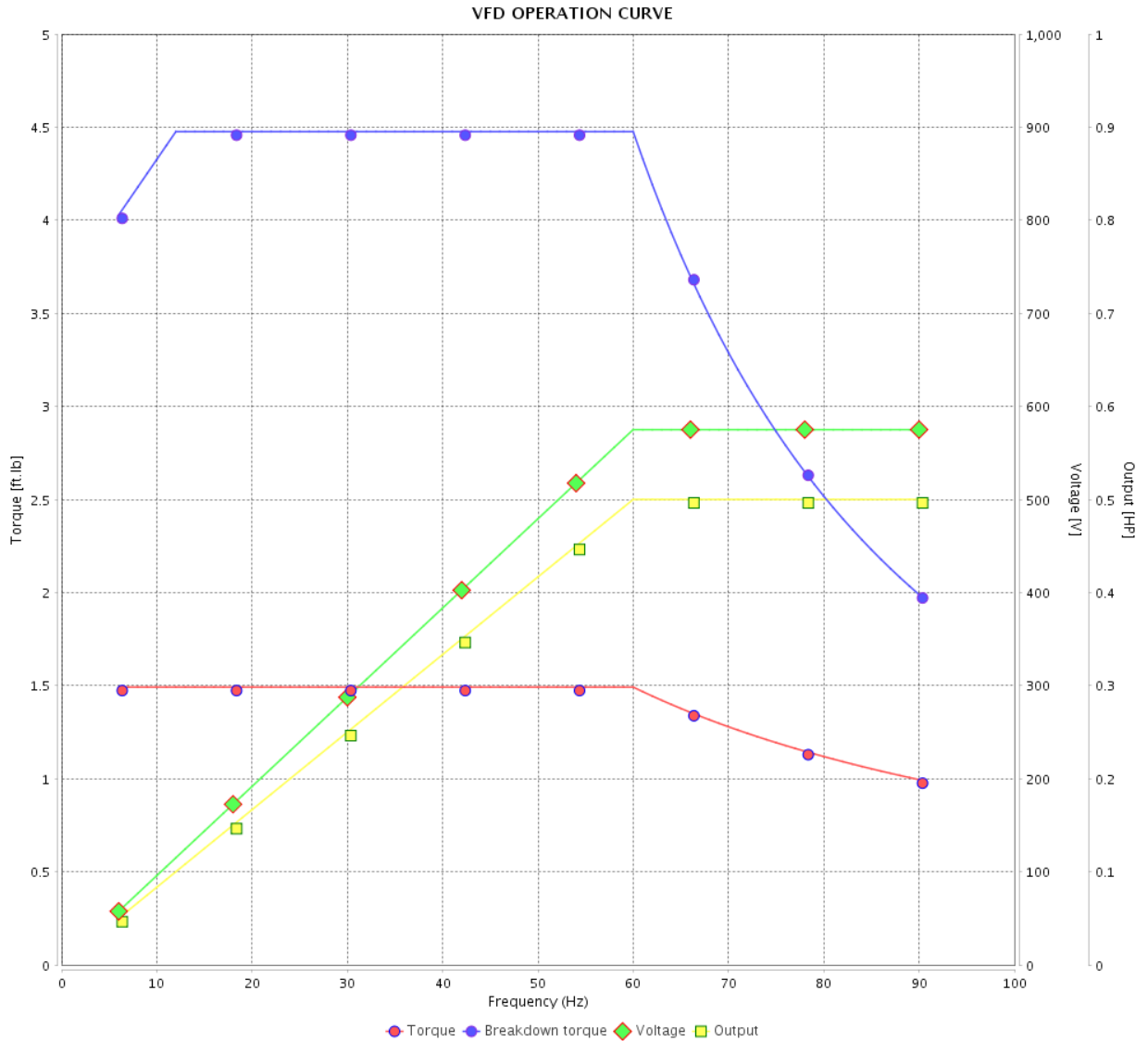
VFD OPERATION CURVE

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 Locked rotor torque : 240 %
 Breakdown torque : 300 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0584 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K

Rev.	Changes Summary	Performed	Checked	Date
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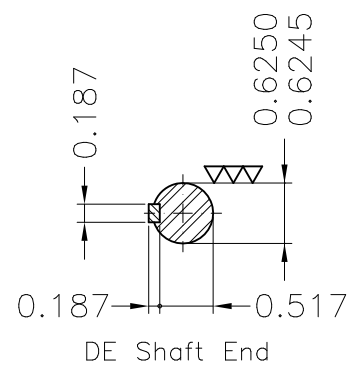
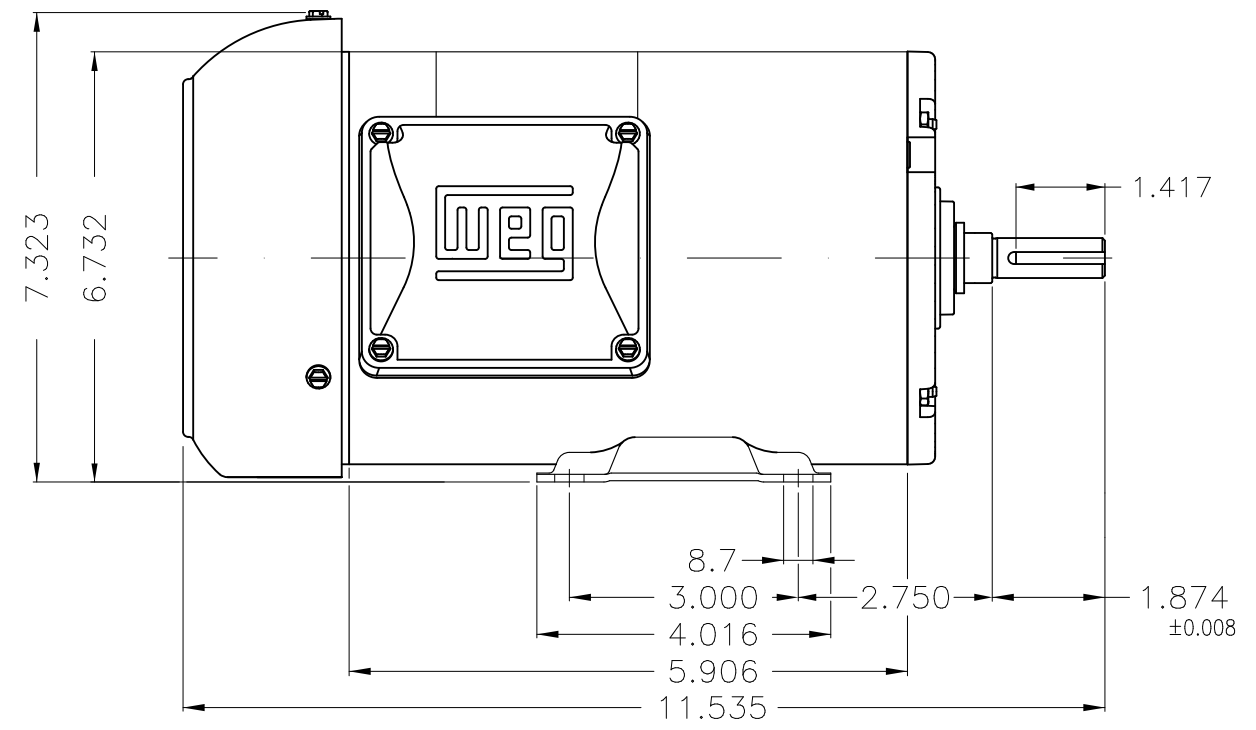
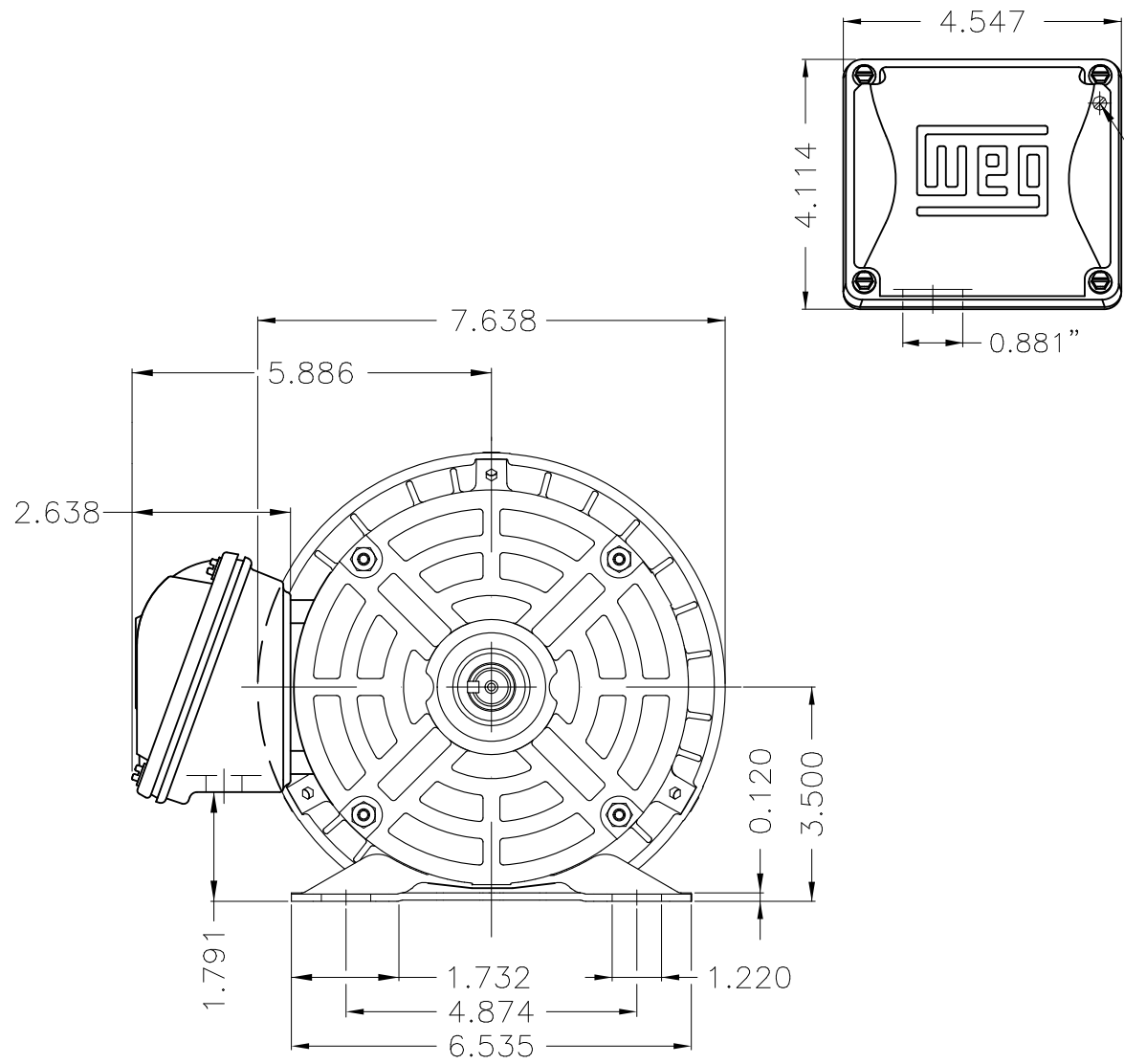
A

B


C

D

E



Dimensions in inches

Fan cover - steel plate											
Without coating											
Mounting F-1/B3R(D)											
ECM	LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	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 04 Poles 60 Hz



MADE IN BRAZIL

MAT: 14797029

W01.TE0IC0X0X

MODEL .5018ES3H56-S

17MAR2022 B/N:

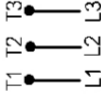


**For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3
DIV 2 Inverter Duty (SF1.00)
CT 2:1/VT 1000:1**

PH 3	Hz 60	HP 0.50
FR 56		KW 0.37
DUTY CONT.		V 575
ALT 1000 m.a.s.l		A 0.690
INS CL F AT 80K	IP55	SFA 0.793
AMB 40°C	DES -	SF 1.15
ENCL TEFC	CODE L	PF 0.70
		RPM 1760
		NEMA NOM. EFF 77.0%

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.

