

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	: Automation Direct			
Product line	: Standard Efficiency Three-Phase		Product code :	14593683
			Catalog # :	.5018ES3EBMW56CFL-S
Frame	: W56C		Locked rotor time	: 28s (cold) 16s (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	: 208-230/460 V		Altitude	: 1000 m.a.s.l.
Rated current	: 1.98-1.79/0.896 A		Protection degree	: IP55
L. R. Amperes	: 11.9-10.8/5.38 A		Cooling method	: IC411 - TEFC
LRC	: 6.0x(Code K)		Mounting	: F-1
No load current	: 1.20-1.40/0.698 A		Rotation ¹	: Both (CW and CCW)
Rated speed	: 1730 rpm		Noise level ²	: 50.0 dB(A)
Slip	: 3.89 %		Starting method	: Direct On Line
Rated torque	: 1.52 ft.lb		Approx. weight ³	: 25.3 lb
Locked rotor torque	: 260 %			
Breakdown torque	: 280 %			
Insulation class	: F			
Service factor	: 1.15			
Moment of inertia (J)	: 0.0399 sq.ft.lb			
Output	25%	50%	75%	100%
Efficiency (%)	60.0	62.0	70.0	72.0
Power Factor	0.27	0.49	0.62	0.72
	Foundation loads			
			Max. traction	: 32 lb
			Max. compression	: 58 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
Performed by			Page	Revision
Checked by				
Date	31/08/2022		1 / 6	

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Brake information

Voltage: 208-230/460//190/380 V
Brake Torque: 2.95 ft.lb

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	31/08/2022		2 / 6	

TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

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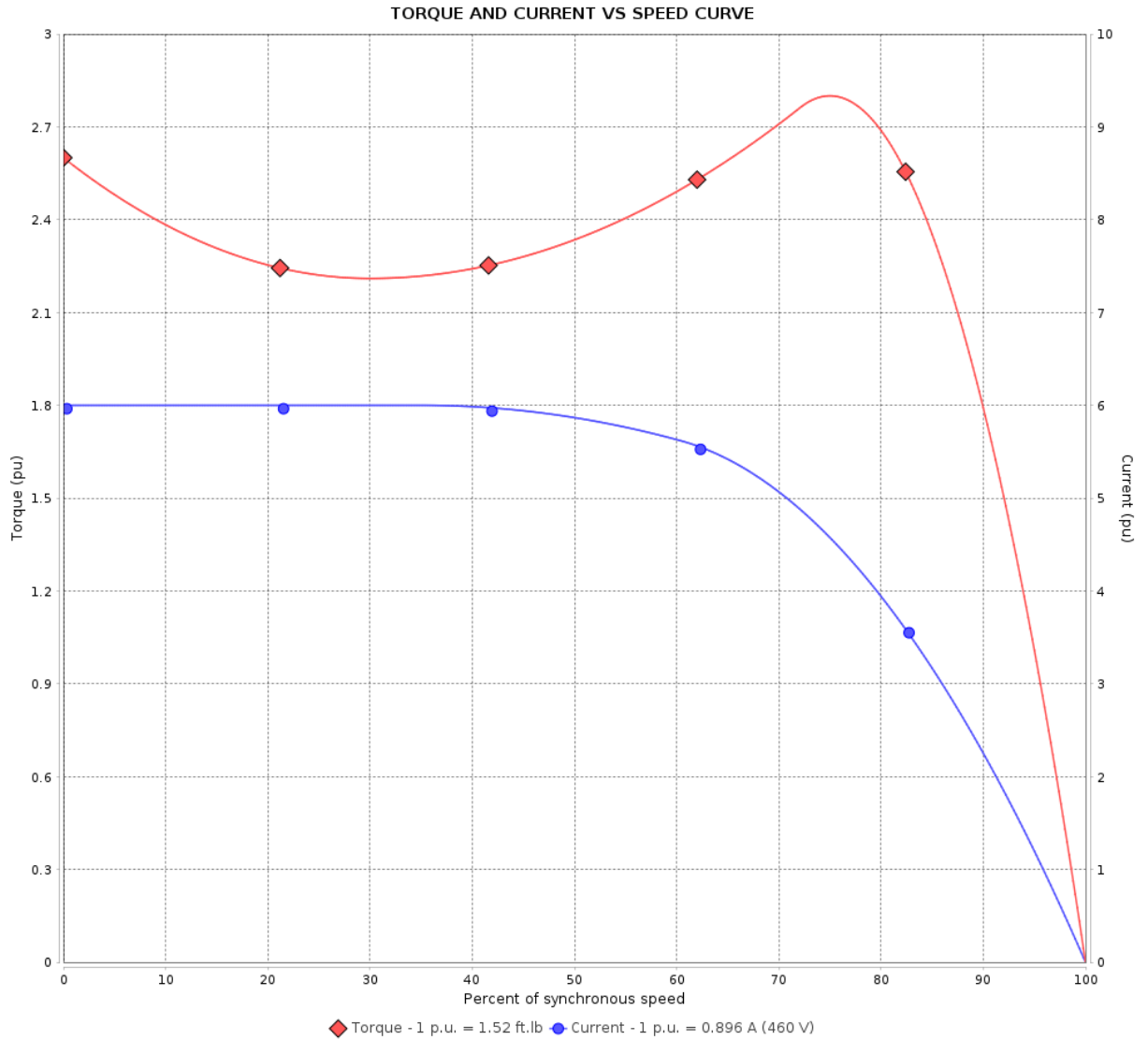
Product line : Standard Efficiency Three-Phase

Product code :

14593683

Catalog # :

.5018ES3EBMW56CFL-S



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 Breakdown torque : 280 %
 Rated speed : 1730 rpm

Moment of inertia (J) : 0.0399 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K

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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 6	Revision
Checked by				
Date	31/08/2022			

LOAD PERFORMANCE CURVE

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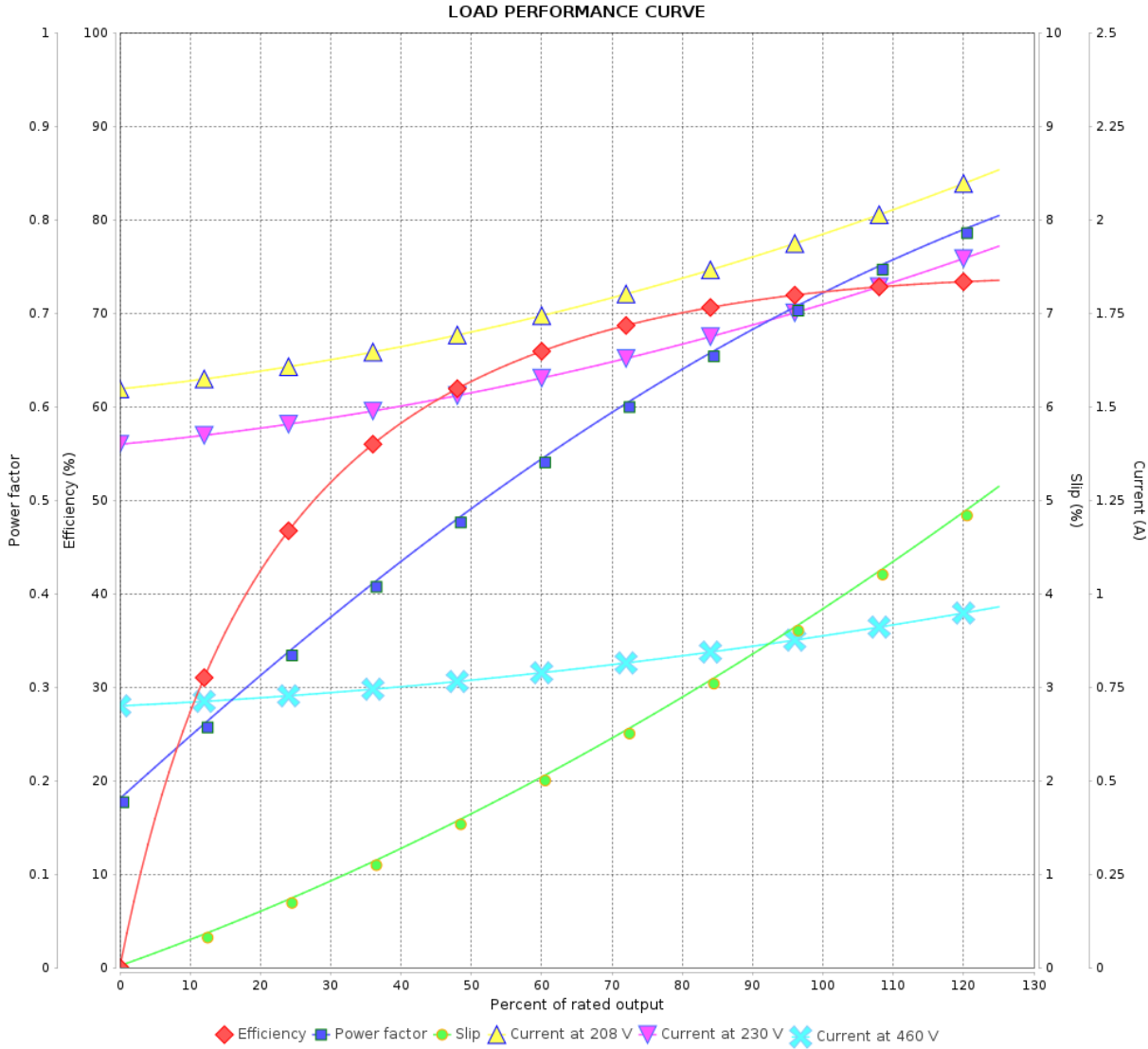
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 6	Revision
Checked by				
Date	31/08/2022			

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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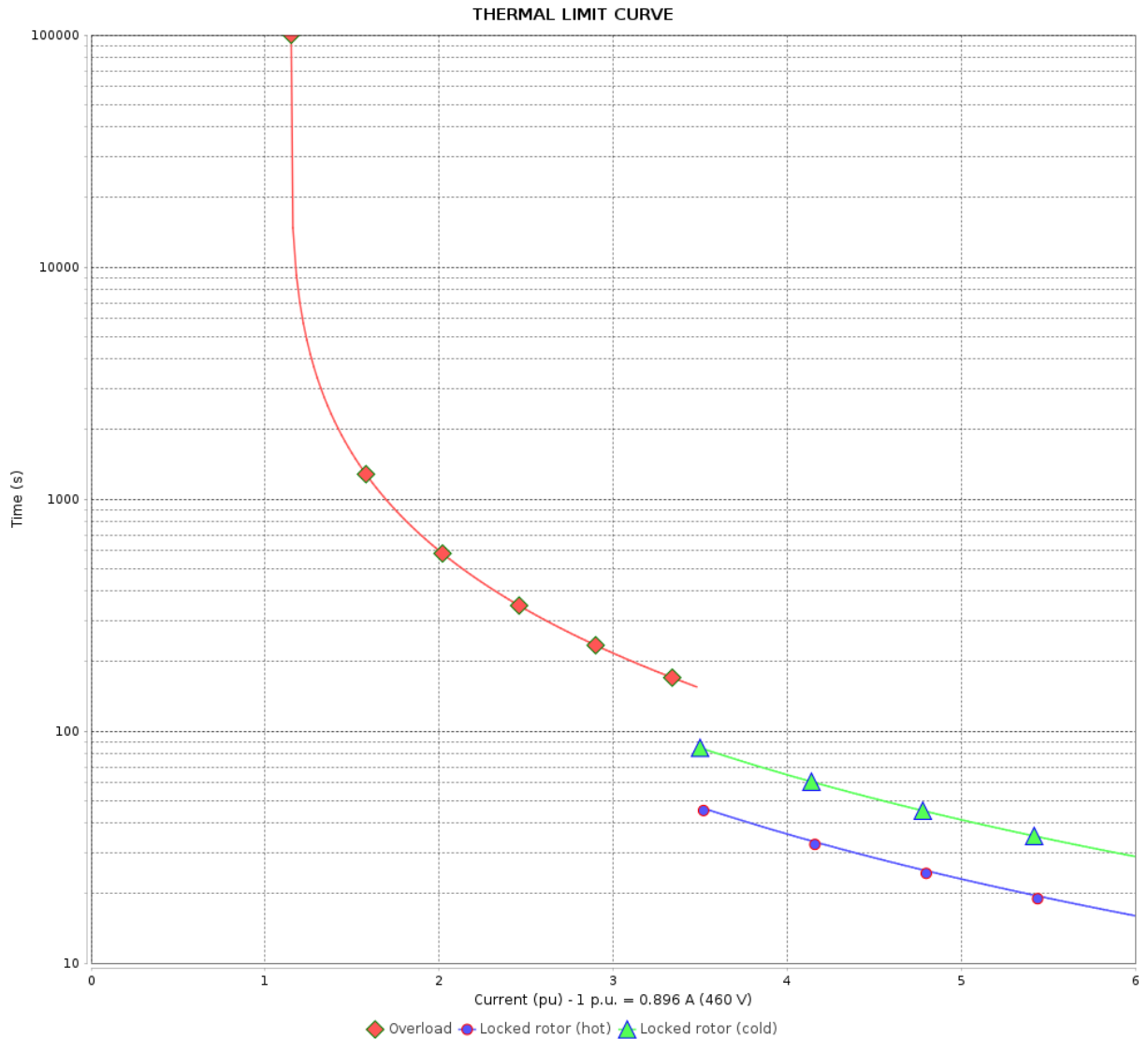
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Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date				
		Page	Revision	
		5 / 6		

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



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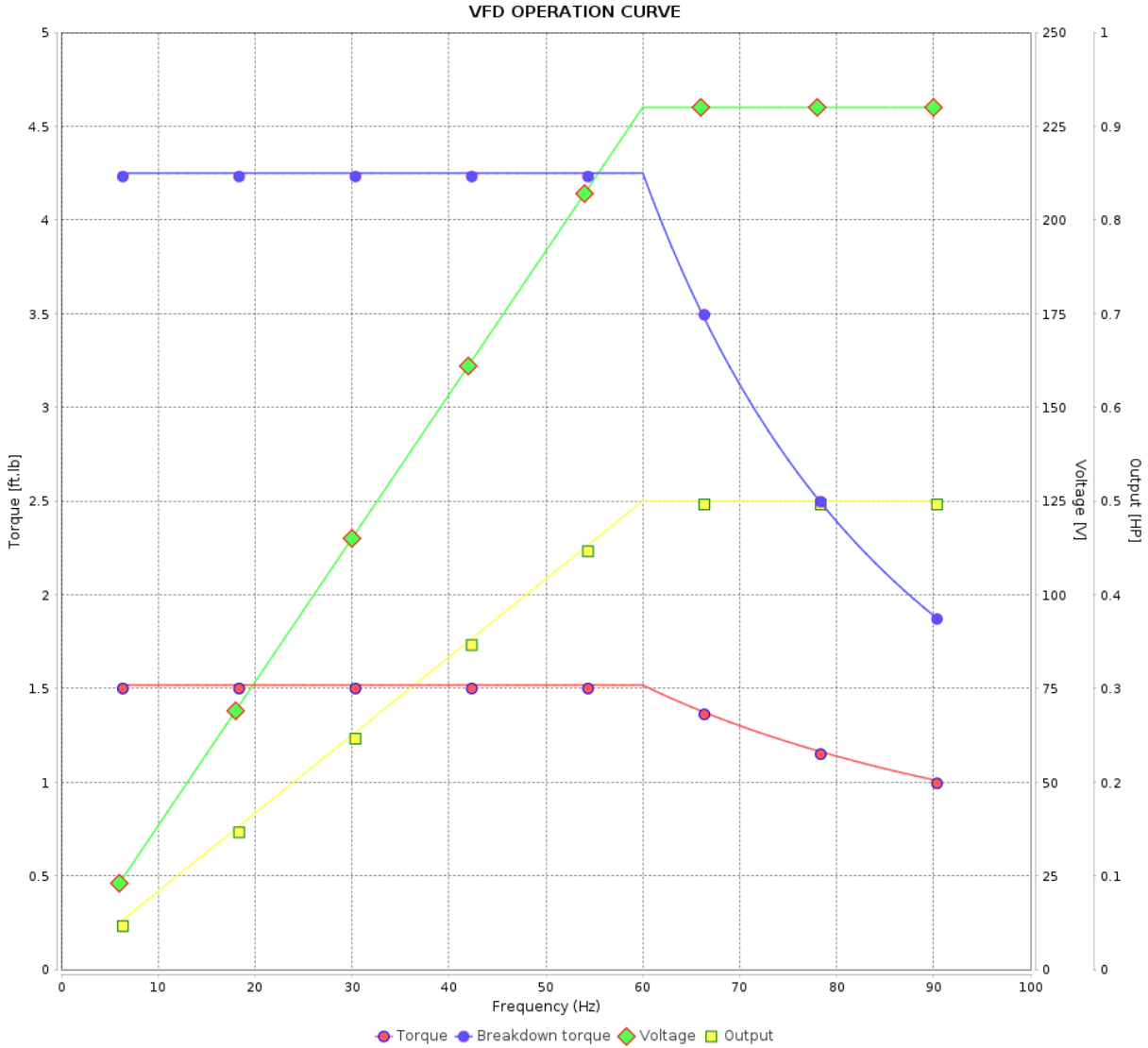
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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		6 / 6		
Date	31/08/2022			

1 2 3 4 5 6

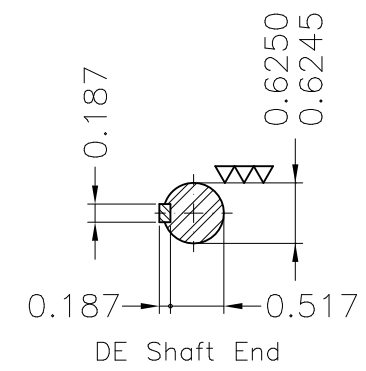
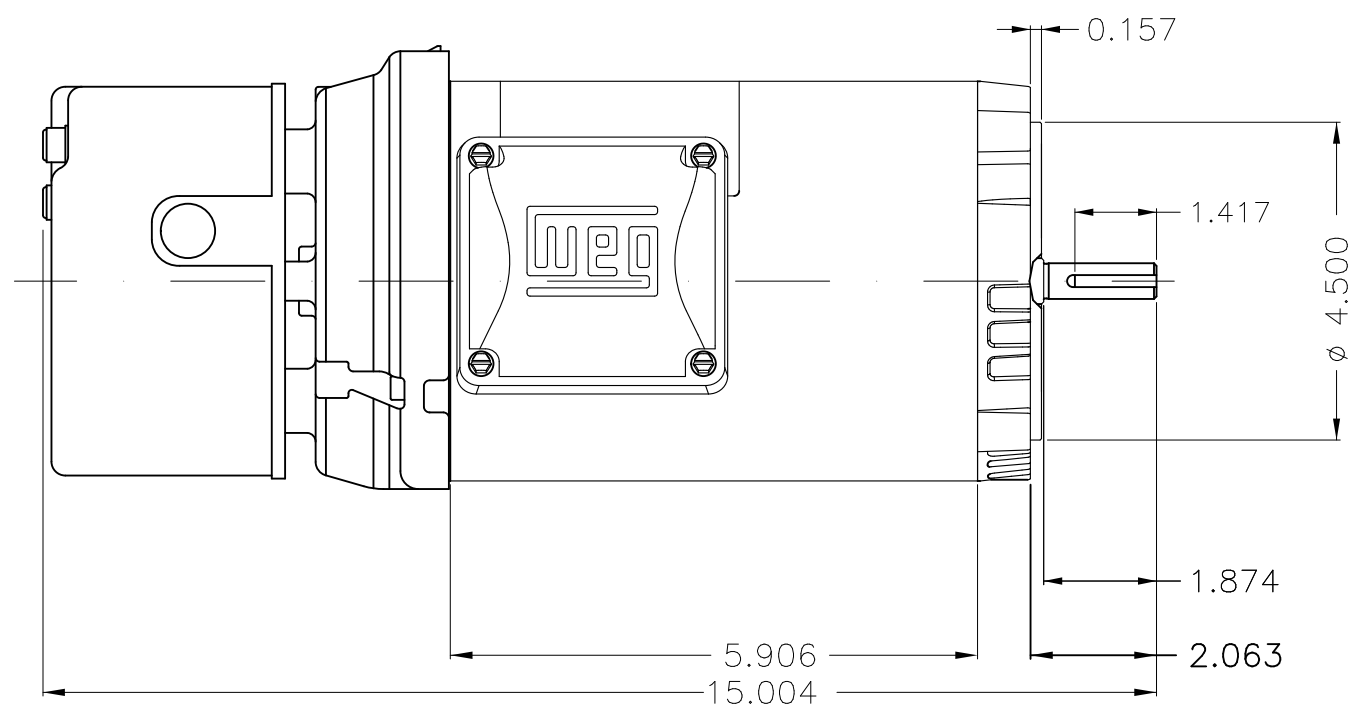
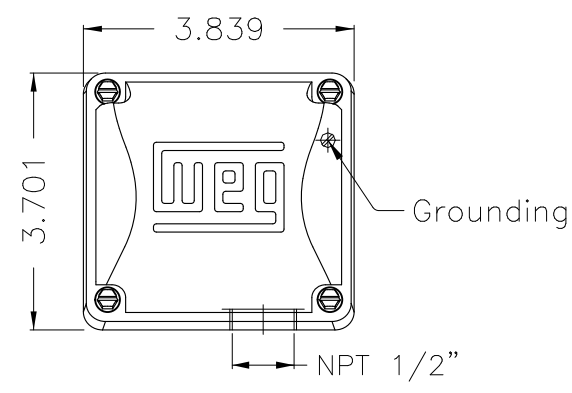
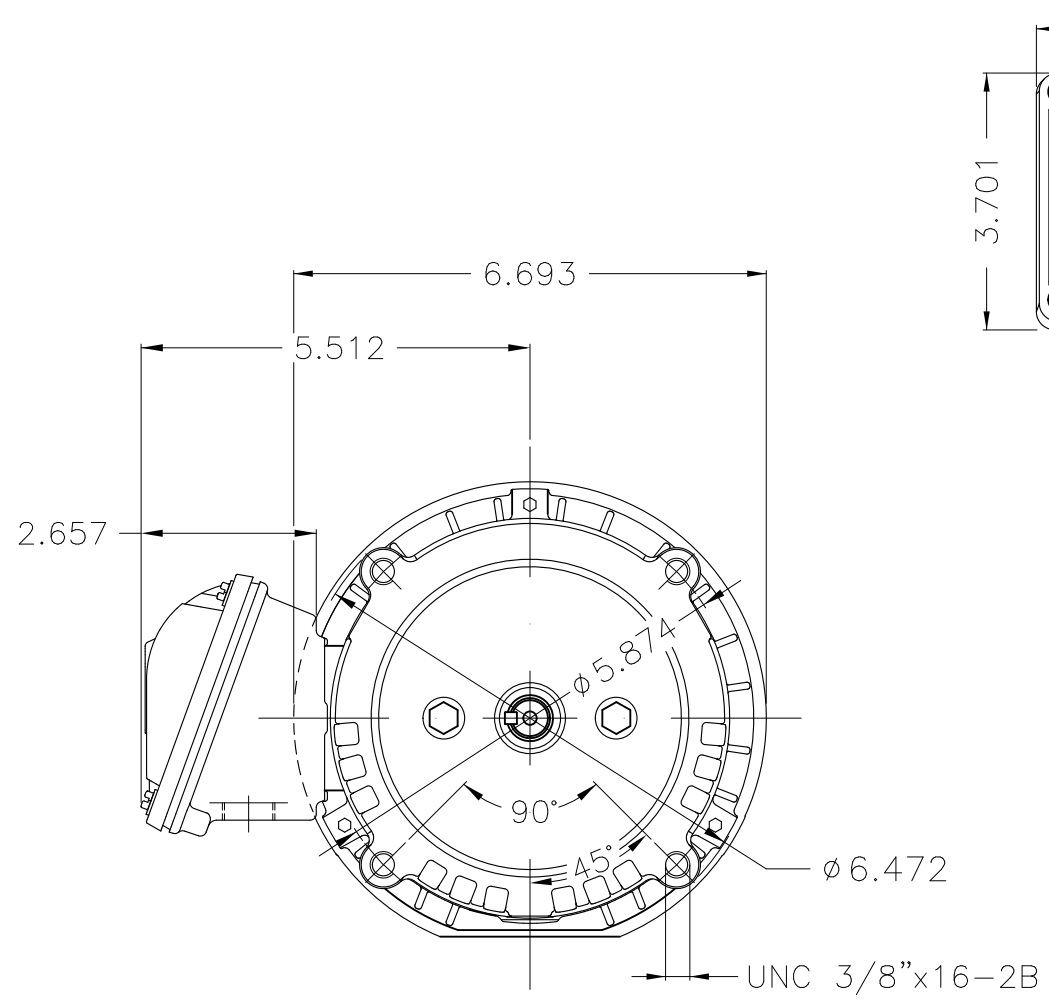
A

B

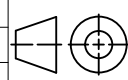
C

D

E



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 FRAME W56C IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	PREVIEW WDD		SHEET 1 / 1	

0.5 HP 04 Poles 60 Hz





MADE IN MEXICO

MAT: 14593683

W01.TE0IC0X0X

MODEL .5018ES3EBMW56CFL-S

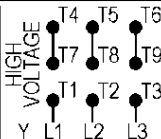
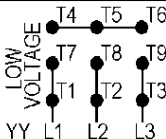
13APR2022 B/N:

PH 3	Hz 60	HP 0.50
FR W58C		KW 0.37
DUTY CONT.		V 208-230/460
ALT 1000 m.a.s.l		A 1.98-1.79/0.896
INS CL F ΔT 80K	IP55	SFA 1.98-2.06/1.03
AMB 40°C	DES -	SF 1.15
ENCL TEFC	CODE K	PF 0.72
USABLE @ 208V SF1.00		RPM 1730
		NEMA NOM. EFF 72.0%

ALTERNATE RATING: 0.50HP 50Hz 190-220/380-415V SF1.00
 2.04-1.98/1.02-1.05A 1400RPM EFF 87.0% (IE1) IEC 60034-1

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

DE 8203-ZZ	ODE 8202-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.

