

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	: Automation Direct			
Product line	: Premium Efficiency Three-Phase		Product code :	14786569
			Catalog # :	00158ET3E56CFL-S
Frame	: 56C		Locked rotor time	: 37s (cold) 21s (hot)
Output	: 1.5 HP (1.1 kW)		Temperature rise	: 80 K
Poles	: 4		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	: 4.04/2.02 A		Protection degree	: IP55
L. R. Amperes	: 33.1/16.6 A		Cooling method	: IC411 - TEFC
LRC	: 8.2x(Code K)		Mounting	: F-1
No load current	: 2.17/1.08 A		Rotation ¹	: Both (CW and CCW)
Rated speed	: 1750 rpm		Noise level ²	: 52.0 dB(A)
Slip	: 2.78 %		Starting method	: Direct On Line
Rated torque	: 4.50 ft.lb		Approx. weight ³	: 36.6 lb
Locked rotor torque	: 270 %			
Breakdown torque	: 300 %			
Insulation class	: F			
Service factor	: 1.15			
Moment of inertia (J)	: 0.1101 sq.ft.lb			
Design	: B			
Output	25%	50%	75%	100%
Efficiency (%)	85.2	85.5	86.5	86.5
Power Factor	0.35	0.59	0.72	0.79
			Foundation loads	
			Max. traction	: 143 lb
			Max. compression	: 180 lb
			<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6204 ZZ	6202 ZZ	
Sealing	:	V'Ring	Without Bearing Seal	
Lubrication interval	:	-	-	
Lubricant amount	:	-	-	
Lubricant type	:	Mobil Polyrex EM		
Notes	USABLE @208V 4.47A SF 1.00 SFA 4.47A			
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.	
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : Automation Direct

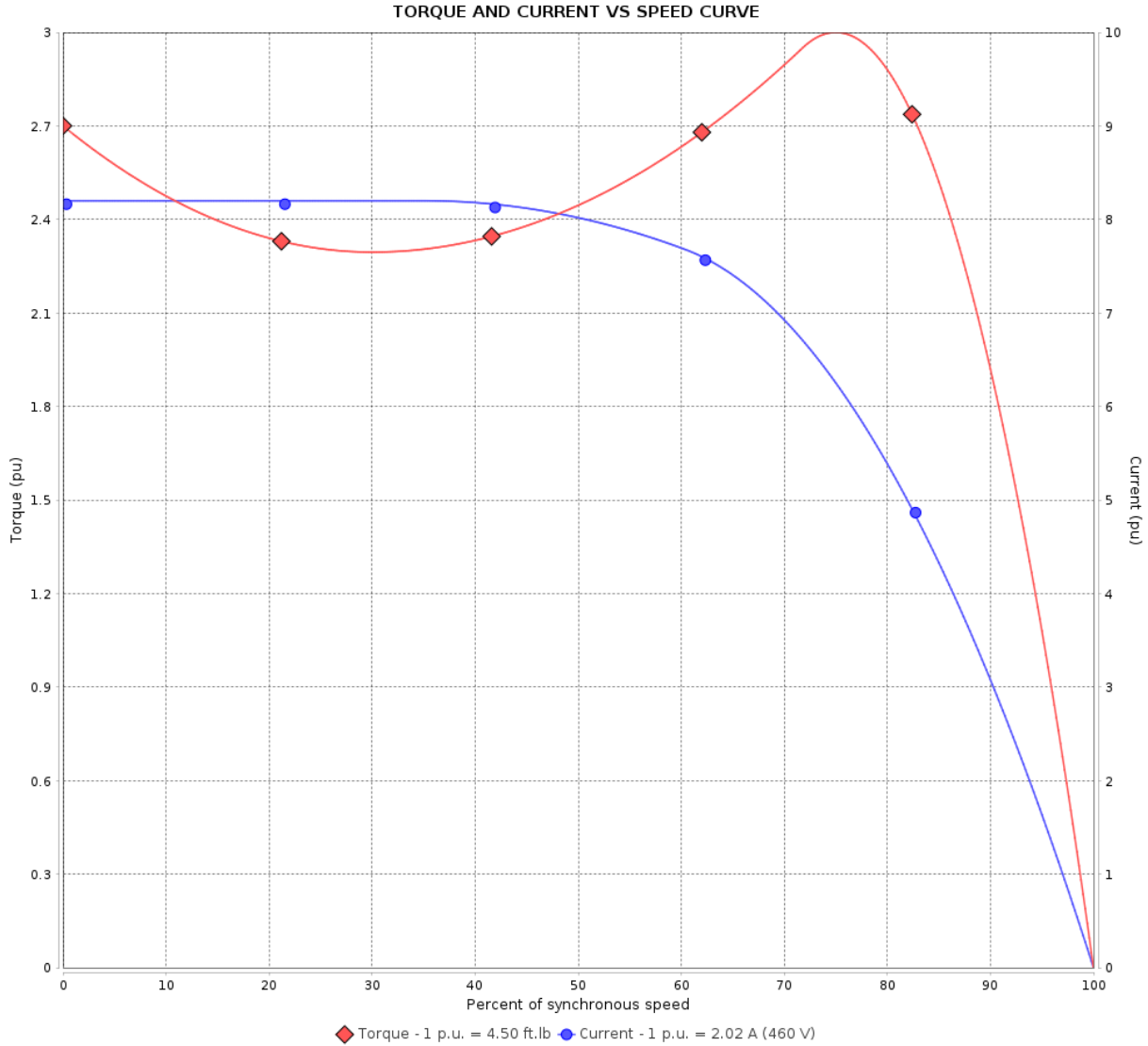
Product line : Premium Efficiency Three-Phase

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Performance : 230/460 V 60 Hz 4P

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 Breakdown torque : 300 %
 Rated speed : 1750 rpm

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 Duty cycle : Cont.(S1)
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 Service factor :
 Temperature rise : 80 K
 Design : B

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



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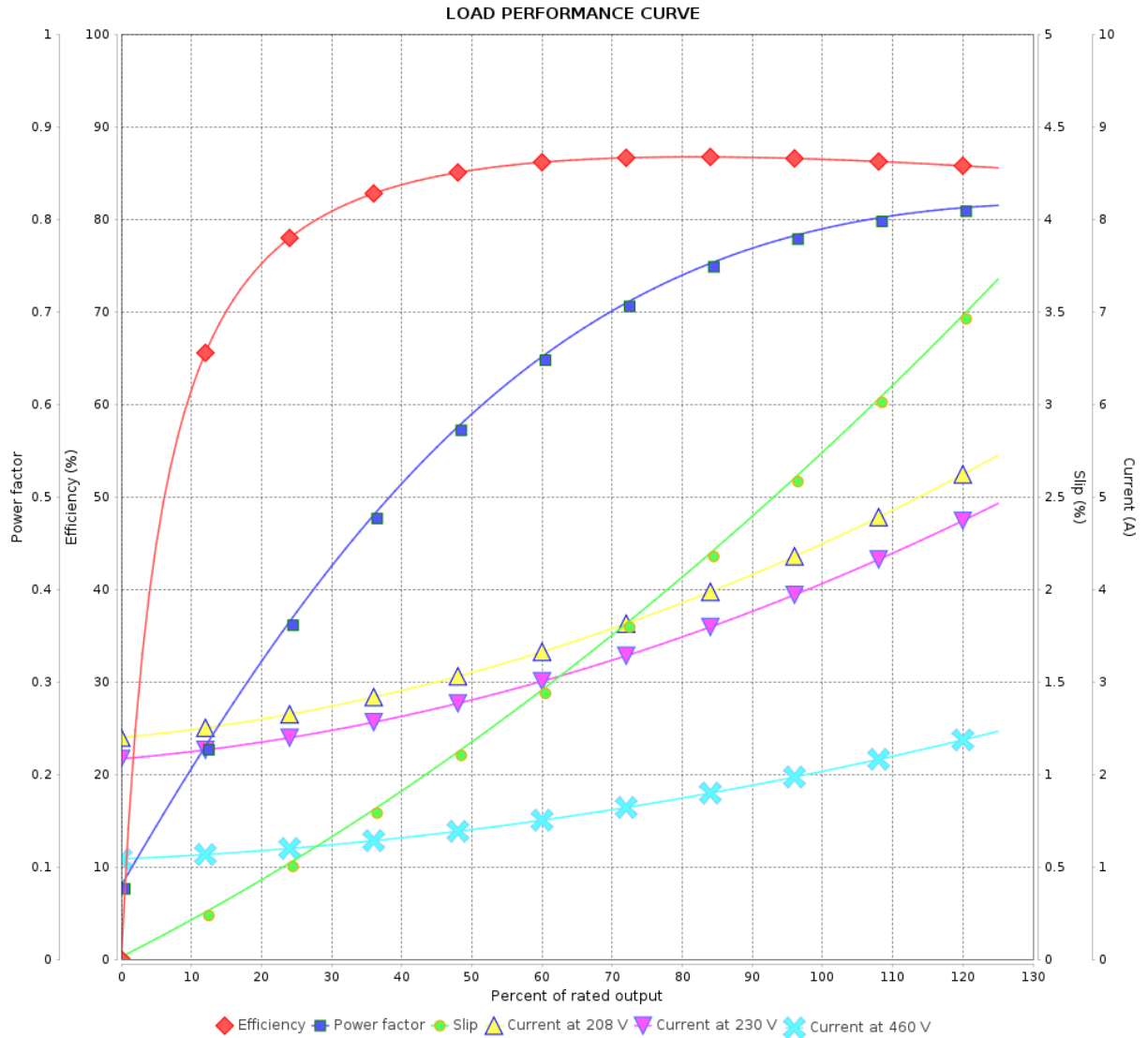
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THERMAL LIMIT CURVE

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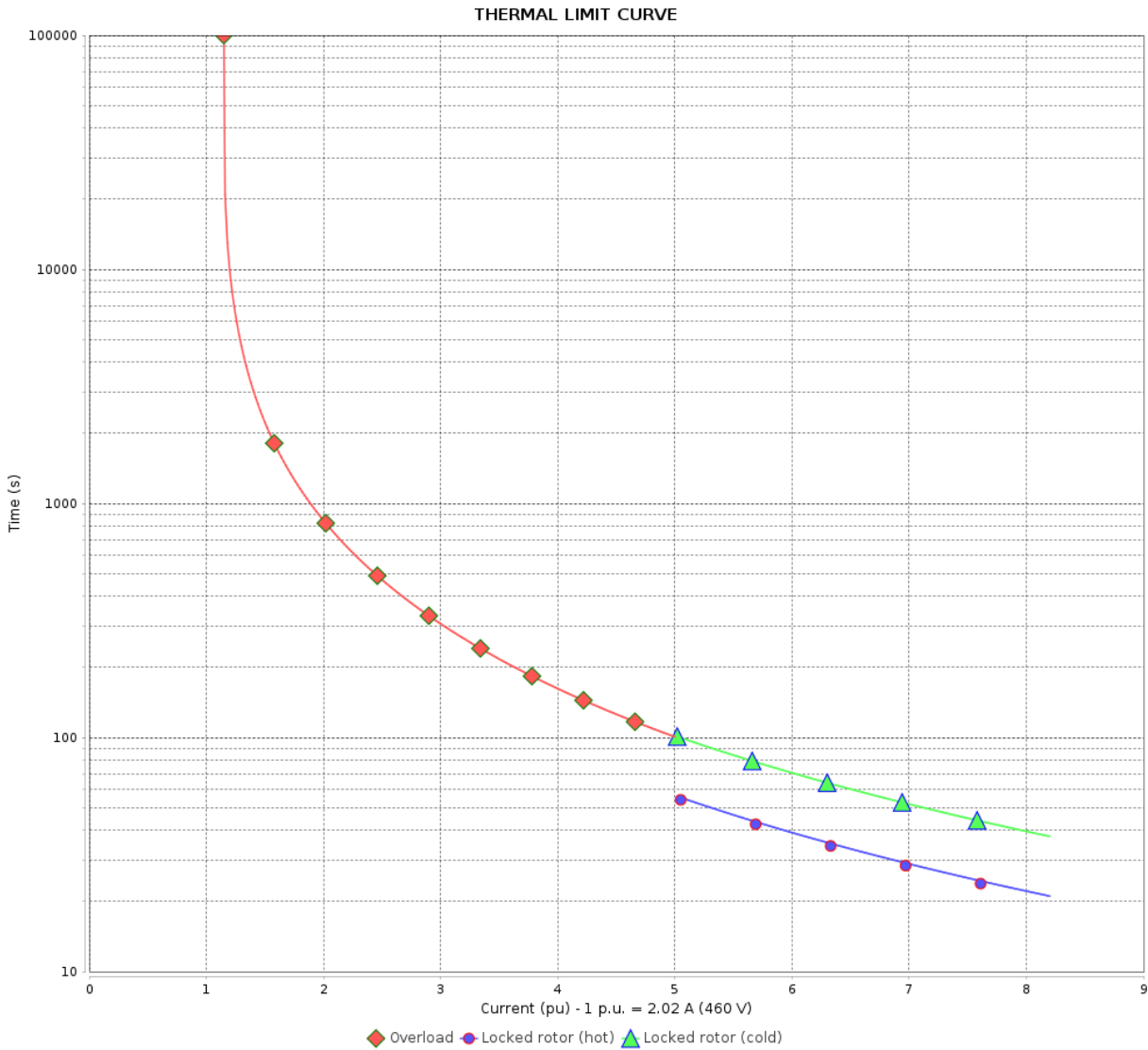
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Heating constant

Cooling constant

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VFD OPERATION CURVE

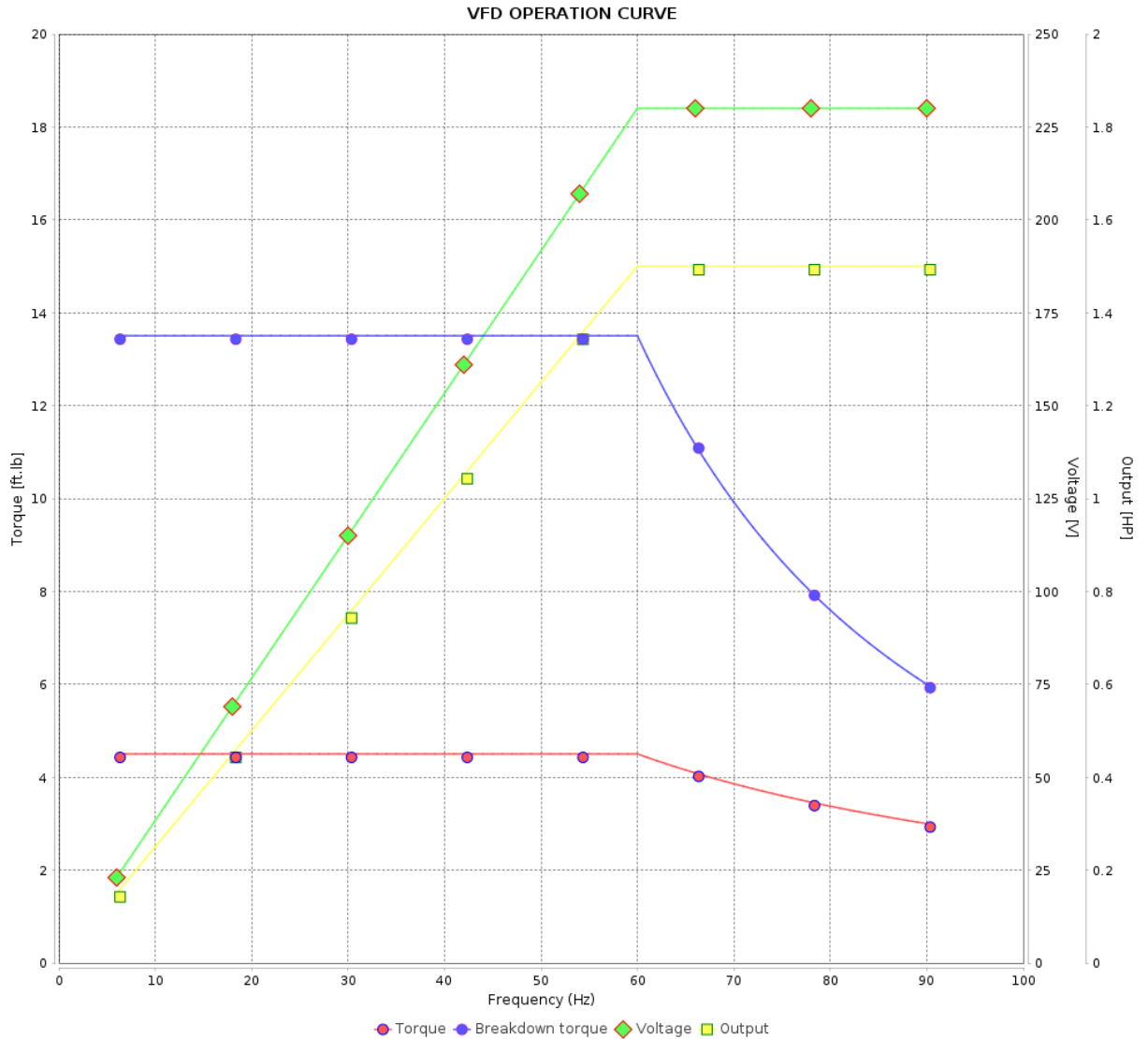
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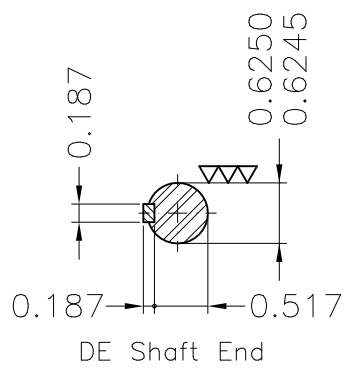
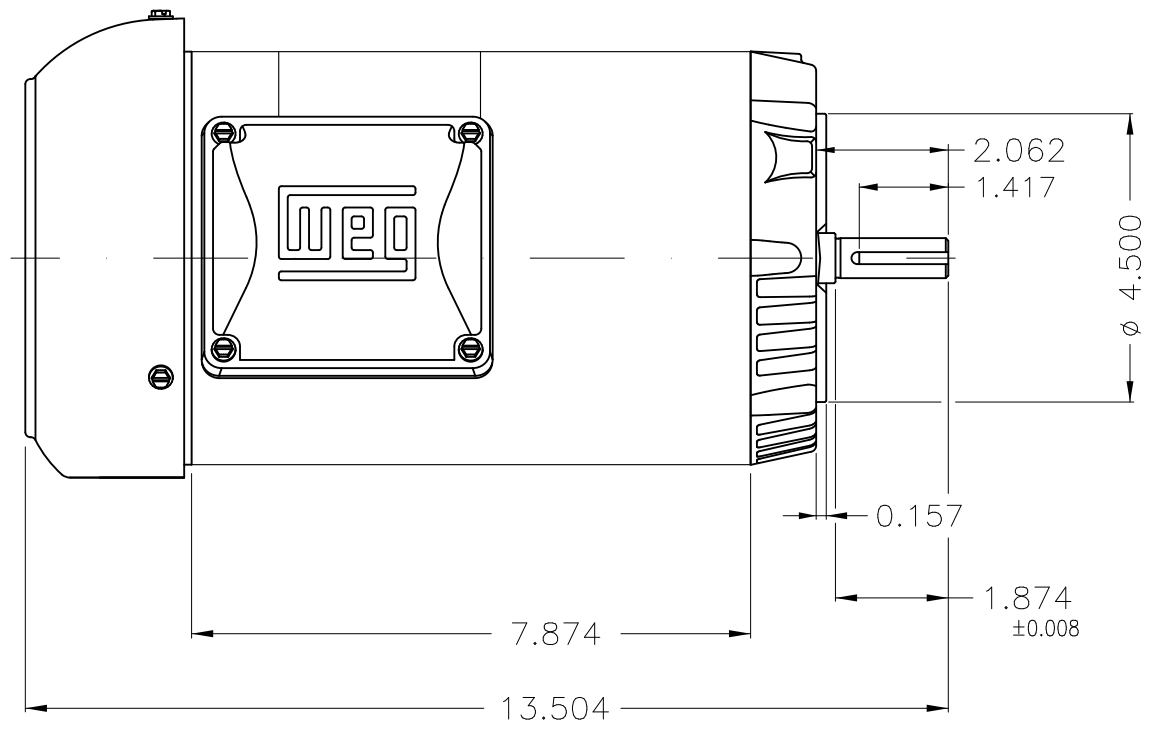
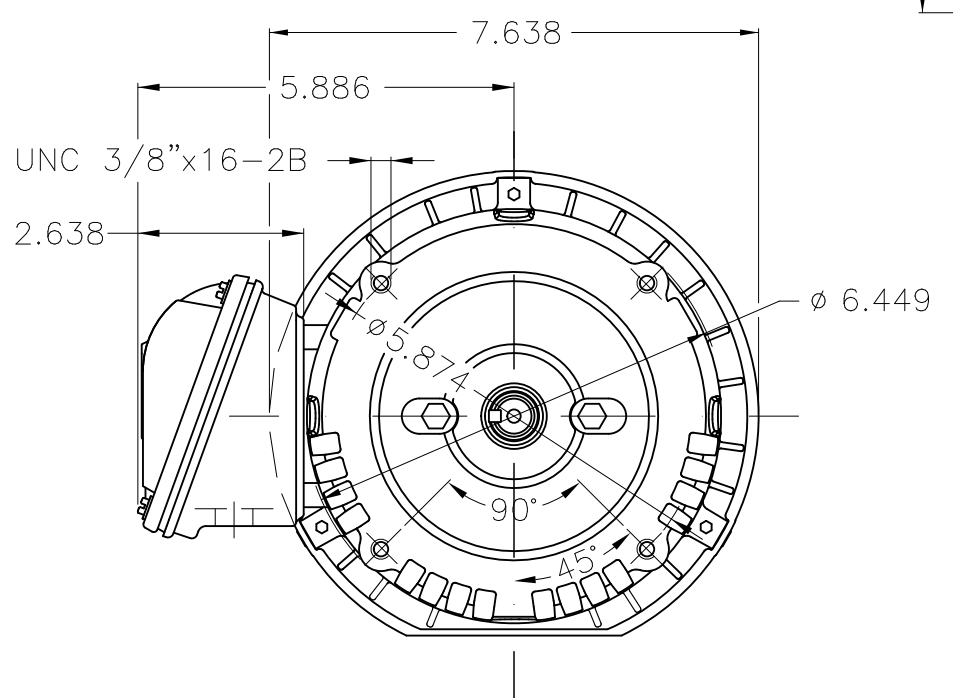
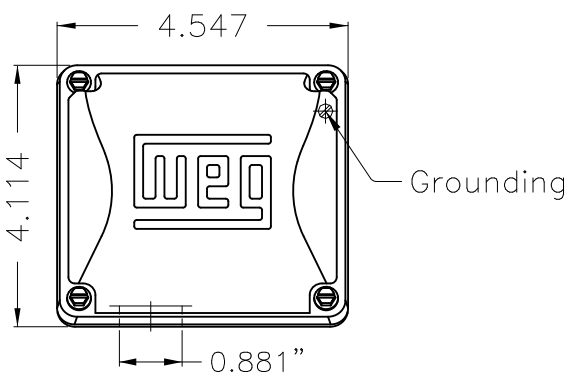
A

B

C

D

E



Fan cover - steel plate
 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 PREM. EFF.					
CHECKED		FRAME 56C IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	PREVIEW		WDD	
			SHEET		1 / 1		

1.5 HP 04 Poles 60 Hz

A





NEMA
Premium



MADE IN BRAZIL

MAT: 14786569 CC029A

W01.TE0IC0X0X

MODEL 00158ET3E56CFL-S

03AUG2022 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 1.5
FR 56C		KW 1.1
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 4.04/2.02
INS CL F AT 80K	IP55	SFA 4.65/2.32
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE K	PF 0.79
USABLE @ 208V 4.47A		RPM 1750
SF1.00		NEMA NOM. EFF 86.5%

ALTERNATE RATING: 1.5HP 50Hz 190-220/380-415V SF1.15
4.82-4.28/2.41-2.27A 1420RPM EFF 82.7% (IE2) IEC 60034-1

For safe area-inverter duty motor For 60Hz use on VPWM 1000:1 VT, 5:1 CT

DE 6204-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.

