

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	: Automation Direct				
Product line	: Standard Efficiency Three-Phase		Product code :	14796862	
			Catalog # :	.2518ES3E56C-S	
Frame	: 56C		Locked rotor time	: 68s (cold) 38s (hot)	
Output	: 0.25 HP (0.18 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	: 1.15-1.04/0.521 A		Protection degree	: IP55	
L. R. Amperes	: 7.26-6.56/3.28 A		Cooling method	: IC411 - TEFC	
LRC	: 6.3x(Code M)		Mounting	: F-1	
No load current	: 0.776-0.900/0.450 A		Rotation ¹	: Both (CW and CCW)	
Rated speed	: 1765 rpm		Noise level ²	: 52.0 dB(A)	
Slip	: 1.94 %		Starting method	: Direct On Line	
Rated torque	: 0.744 ft.lb		Approx. weight ³	: 18.9 lb	
Locked rotor torque	: 240 %				
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 (%)	54.4	57.5	66.0	70.0	
Power Factor	0.24	0.43	0.54	0.62	
	Foundation loads				
			Max. traction	: 20 lb	
			Max. compression	: 39 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.		
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : Automation Direct

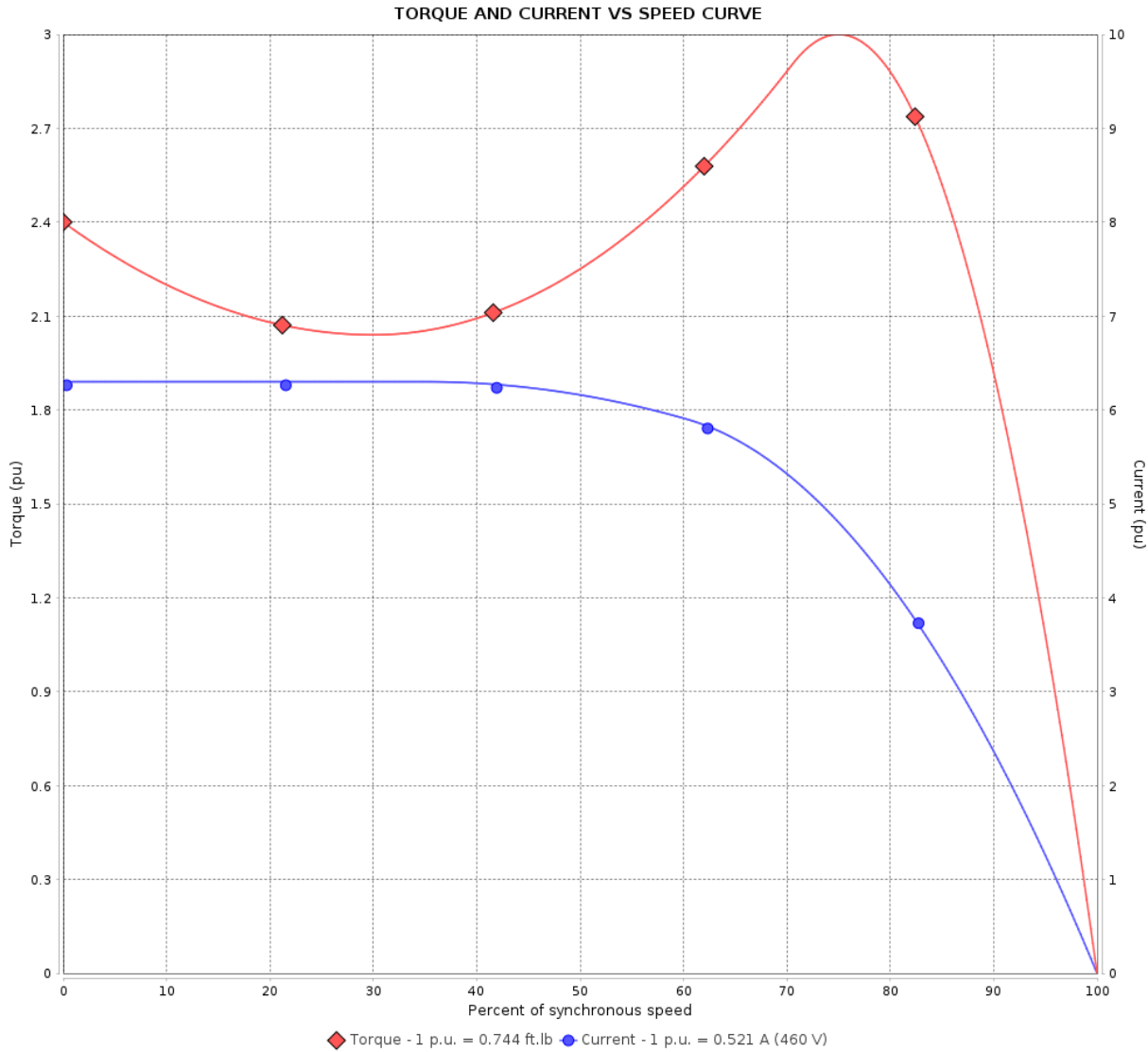
Product line : Standard Efficiency Three-Phase

Product code :

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Catalog # :

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Performance : 208-230/460 V 60 Hz 4P

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 LRC : 6.3
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 Breakdown torque : 300 %
 Rated speed : 1765 rpm

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



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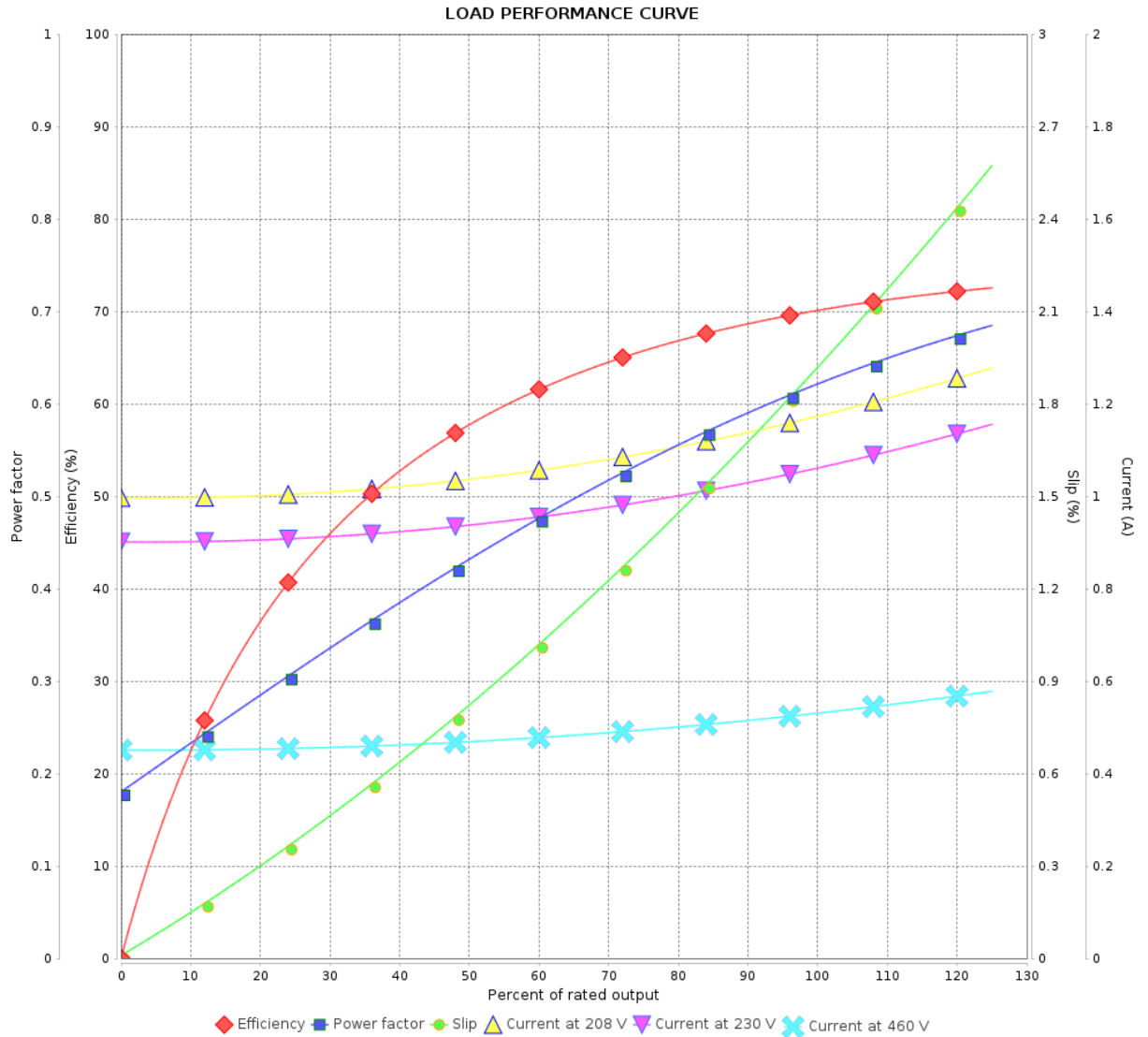
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THERMAL LIMIT CURVE

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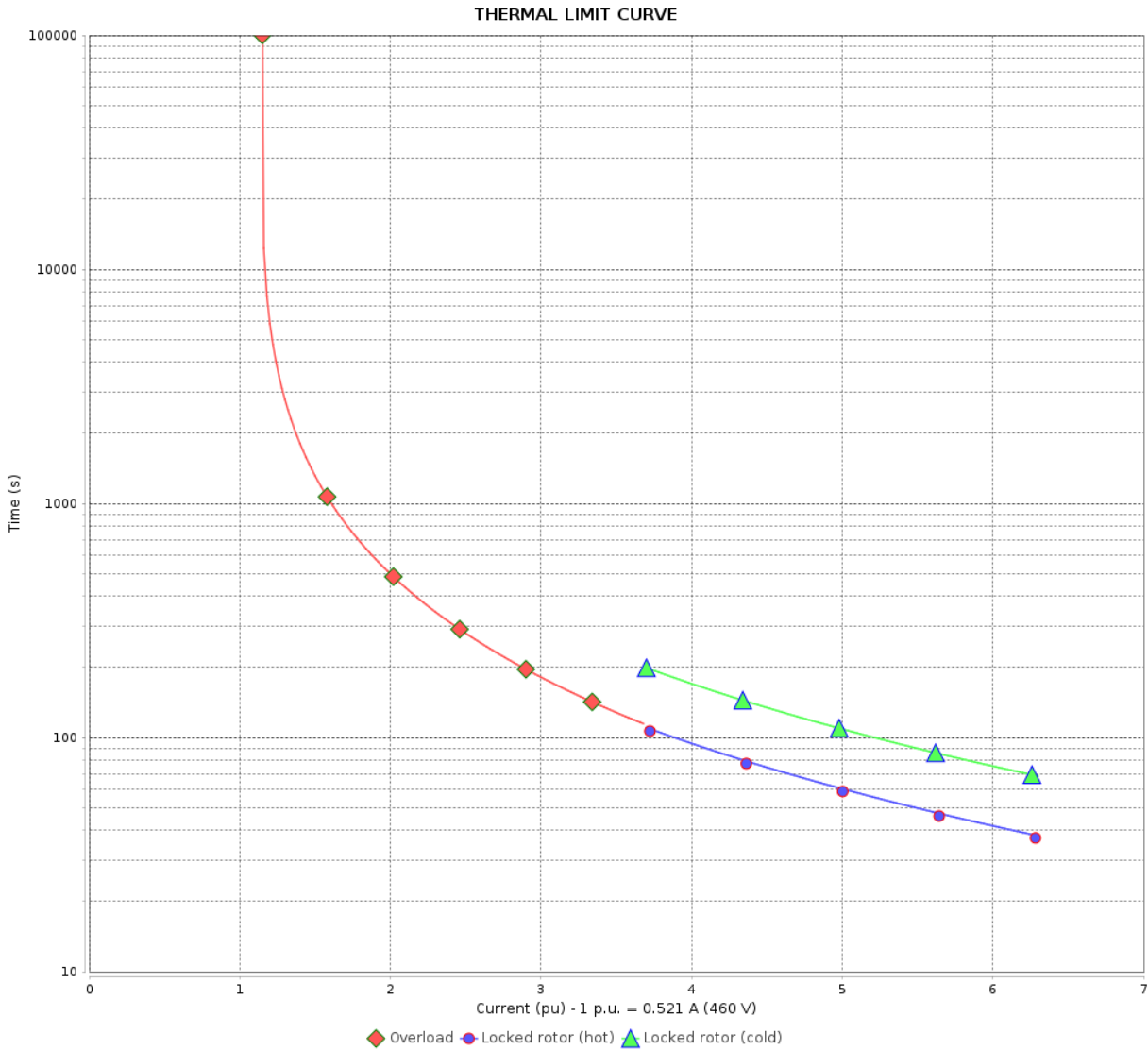
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Heating constant

Cooling constant

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VFD OPERATION CURVE

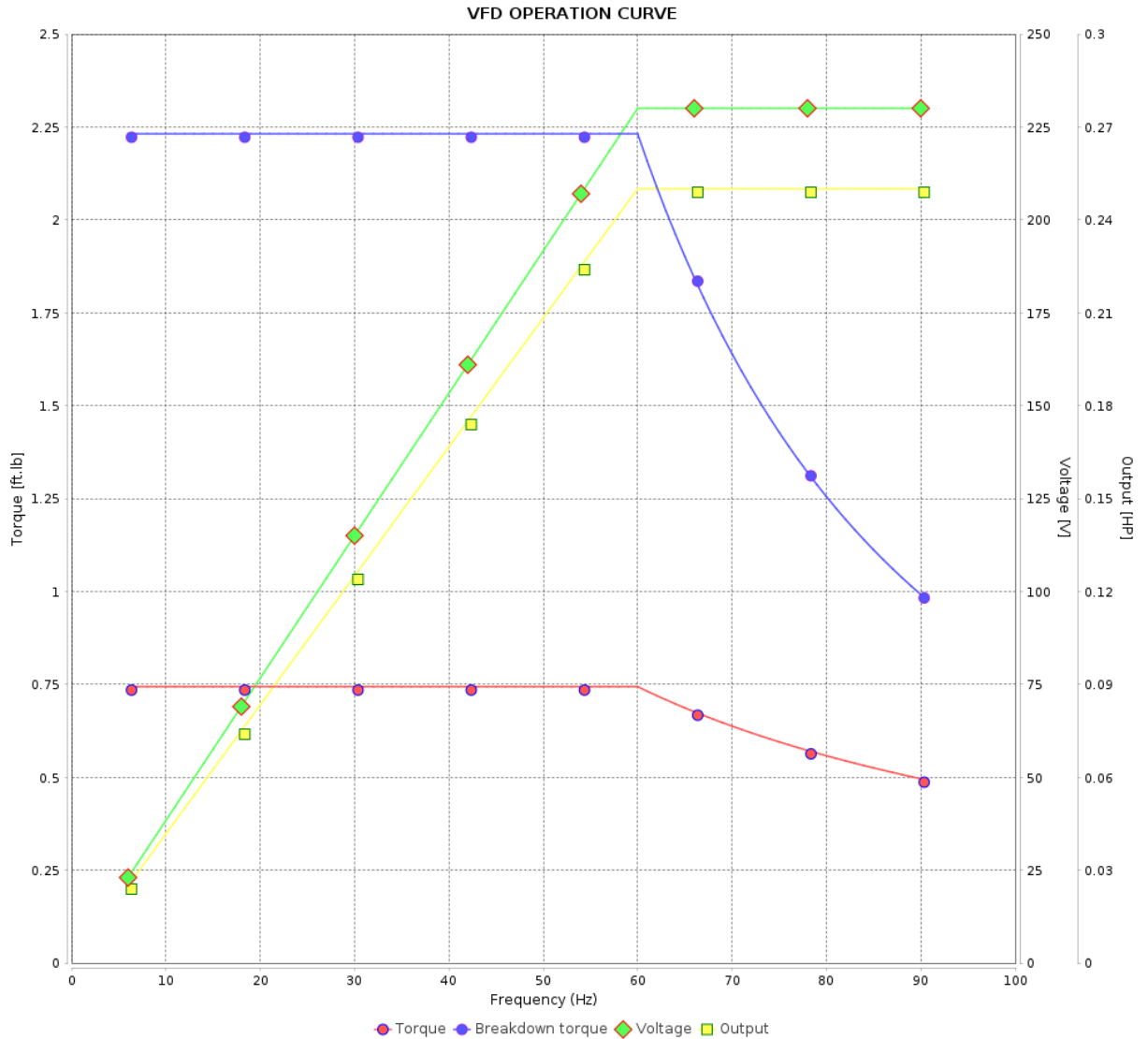
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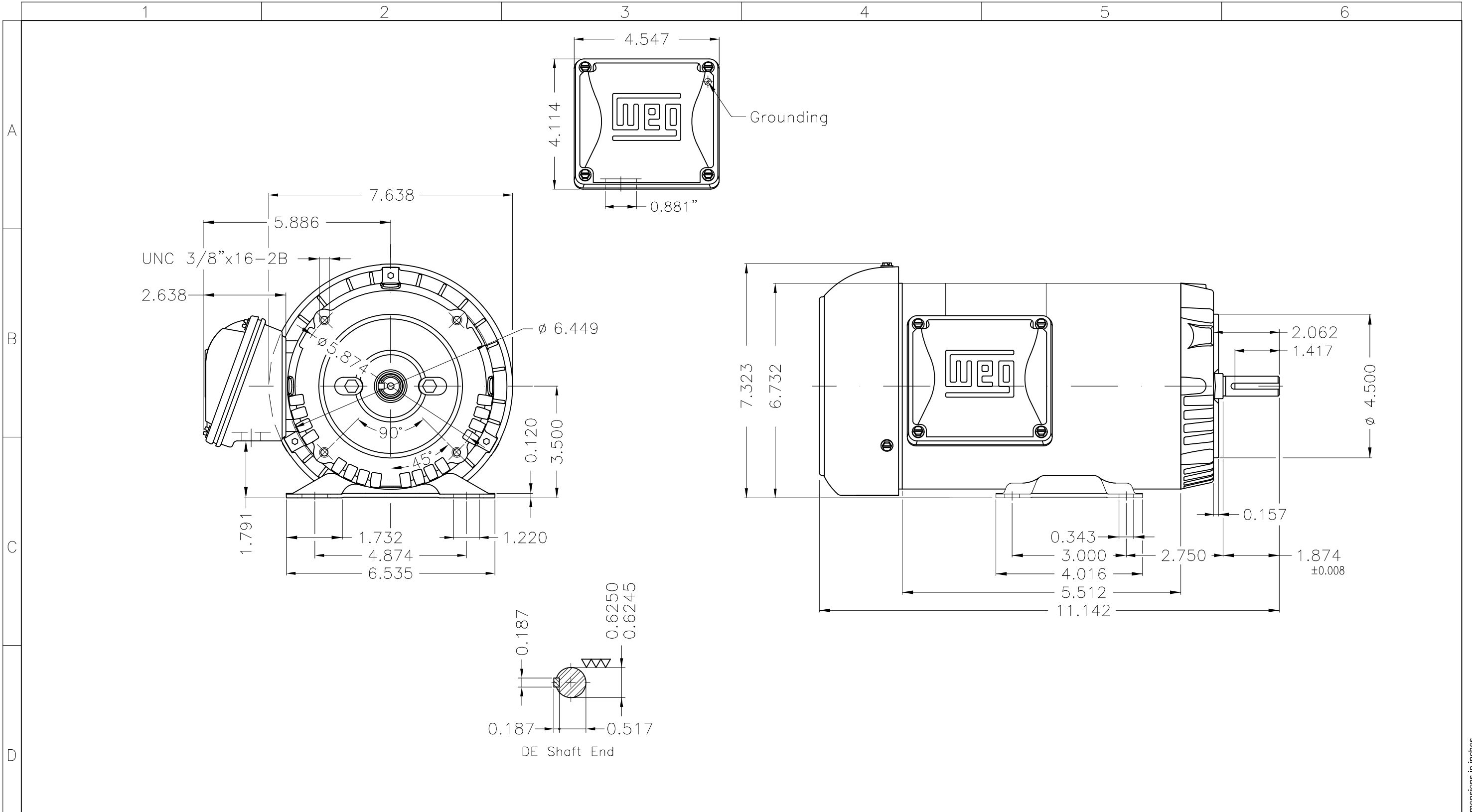


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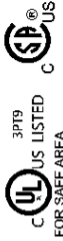
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Fan cover - steel plate											
Color Munsell N 1 matte black											
Painting plan 207N											
Mounting F-1/B34R(D)											
ECM	LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR ROLLED STEEL					PREVIEW	WDD	SHEET	1 / 1	
CHECKED		FRAME 56C IP55 TEFC									
RELEASED											
REL DT.		WMO	Jaragua do Sul	Product Engineering							

0.25 HP 04 Poles 60 Hz

A REL DT. WMO Jaragua do Sul Product Engineering SHEET 1 / 1



MADE IN BRAZIL

MAT: 14796862

W01.TE0IC0X0X

MODEL 2518ES3E56C-S

16AUG2022 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 0.25
FR 56C		KW 0.18
DUTY CONT.		V 208-230/460
ALT 1000 m.a.s.l.		A 1.15-1.04/0.521
INS CL F AT 80K	IP55	SFA 1.15-1.20/0.599
AMB 40°C	DES -	SF 1.15
ENCL TEFC	CODE M	PF 0.62
USABLE @ 208V SF1.00		RPM 1765
		NEMA NOM. EFF 70.0%

ALTERNATE RATING: 0.25HP 50Hz 190-220/380-415V SF1.15
1.13-1.10/0.564-0.585A 1455RPM EFF 67.9% (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.

