

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	:			
Product line	: Standard Efficiency Three-Phase	Product code :	14786500	
		Catalog # :	.7536ES3E56CFL-S	
Frame	: 56C	Cooling method	: IC411 - TEFC	
Insulation class	: F	Mounting	: F-1	
Duty cycle	: Cont.(S1)	Rotation ¹	: Both (CW and CCW)	
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line	
Altitude	: 1000 m.a.s.l.	Approx. weight ²	: 20.6 lb	
Protection degree	: IP55	Moment of inertia (J)	: 0.0517 sq.ft.lb	
Output [HP]	0.75	0.75	0.75	
Poles	2	2	2	
Frequency [Hz]	60	50	50	
Rated voltage [V]	208-230/460	190/380	220/415	
Rated current [A]	2.50-2.26/1.13	2.52/1.26	2.28/1.21	
L. R. Amperes [A]	17.5-15.8/7.91	13.9/6.93	13.7/7.26	
LRC [A]	7.0x(Code K)	5.5x(Code G)	6.0x(Code H)	
No load current [A]	0.948-1.10/0.550	1.05/0.526	1.14/0.602	
Rated speed [RPM]	3475	2825	2845	
Slip [%]	3.47	5.83	5.17	
Rated torque [ft.lb]	1.13	1.39	1.38	
Locked rotor torque [%]	250	180	210	
Breakdown torque [%]	290	220	250	
Service factor		1.00	1.00	
Temperature rise	80 K	105 K	80 K	
Locked rotor time	41s (cold) 23s (hot)	52s (cold) 29s (hot)	46s (cold) 26s (hot)	
Noise level ²	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)	
Efficiency (%)	25%	58.8	70.1	68.3
	50%	62.0	70.3	69.2
	75%	68.0	73.4	73.3
	100%	72.0	73.0	73.7
Power Factor	25%	0.45	0.49	0.44
	50%	0.70	0.77	0.72
	75%	0.79	0.86	0.83
	100%	0.85	0.91	0.89
Bearing type	: Drive end 6203 ZZ Non drive end 6202 ZZ	Foundation loads		
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 23 lb	
		Max. compression	: 44 lb	
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

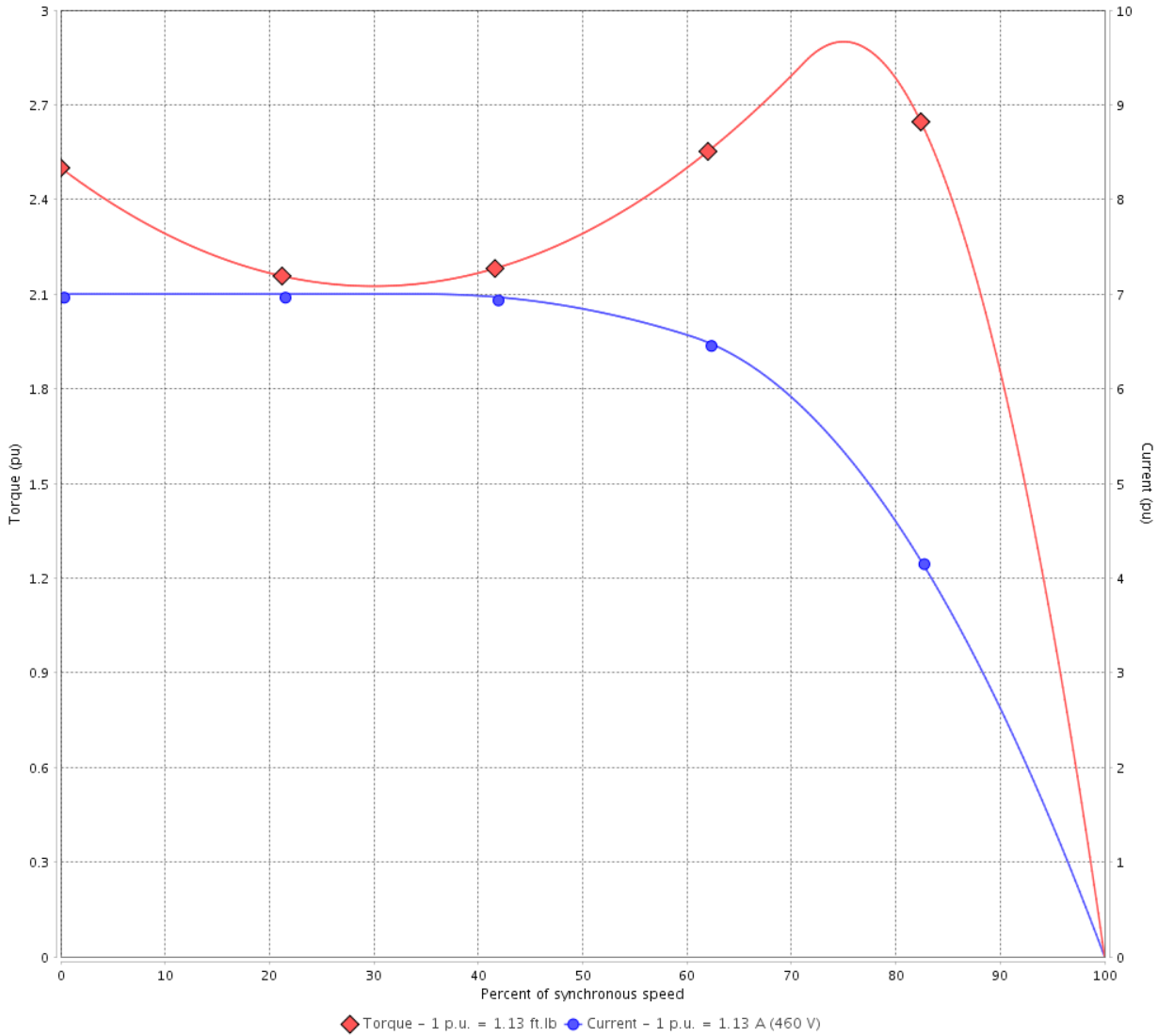
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 14786500
 Catalog # : .7536ES3E56CFL-S

TORQUE AND CURRENT VS SPEED CURVE



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

Rated current	: 2.50-2.26/1.13 A	Moment of inertia (J)	: 0.0517 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 1.13 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	:
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 3475 rpm		

Locked rotor time : 41s (cold) 23s (hot)

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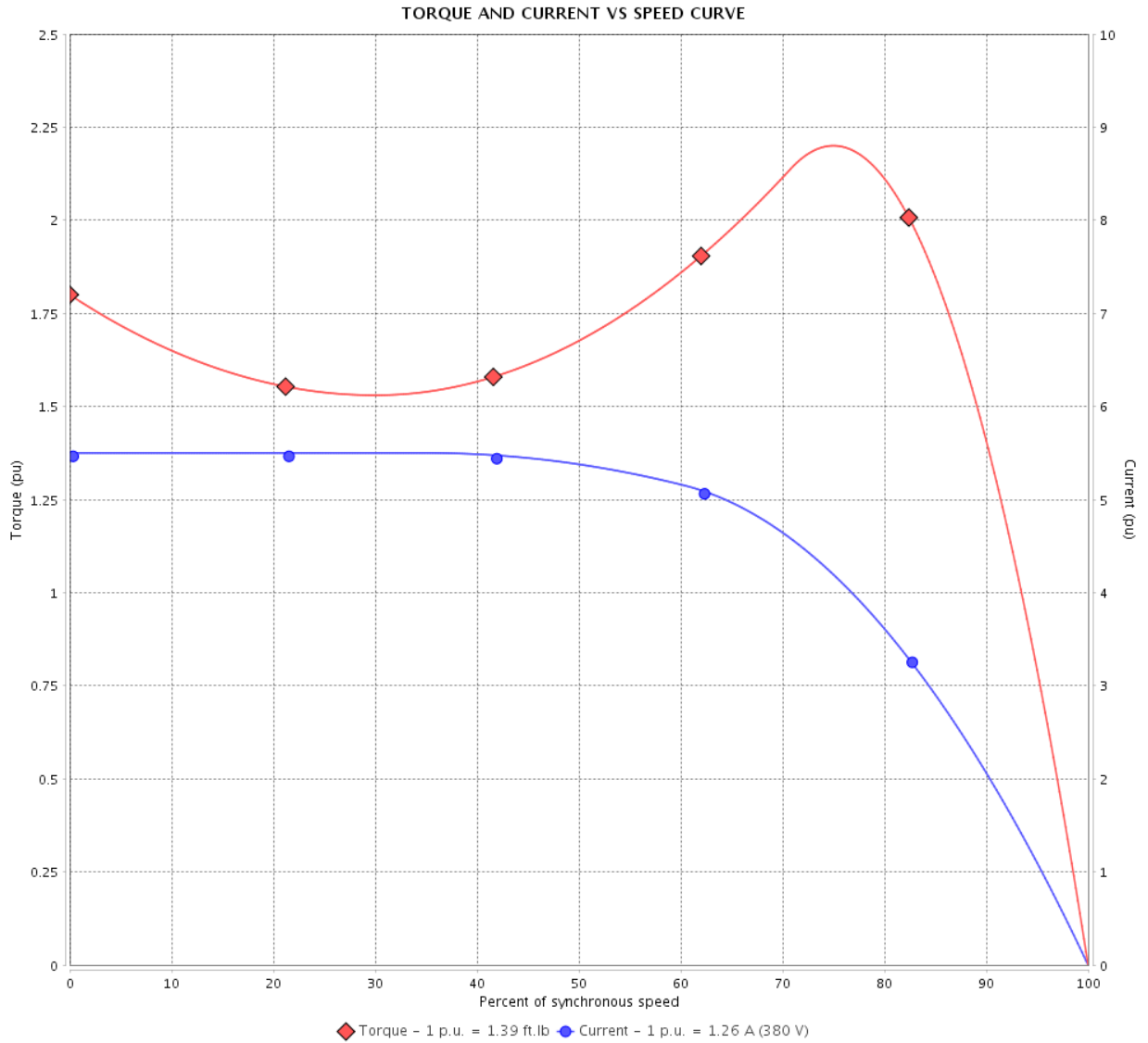
TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer : _____

Product line : Standard Efficiency Three-Phase Product code : 14786500
 Catalog # : .7536ES3E56CFL-S



Performance : 190/380 V 50 Hz 2P

Rated current	: 2.52/1.26 A	Moment of inertia (J)	: 0.0517 sq.ft.lb
LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 1.39 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 105 K
Rated speed	: 2825 rpm		

Locked rotor time : 52s (cold) 29s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

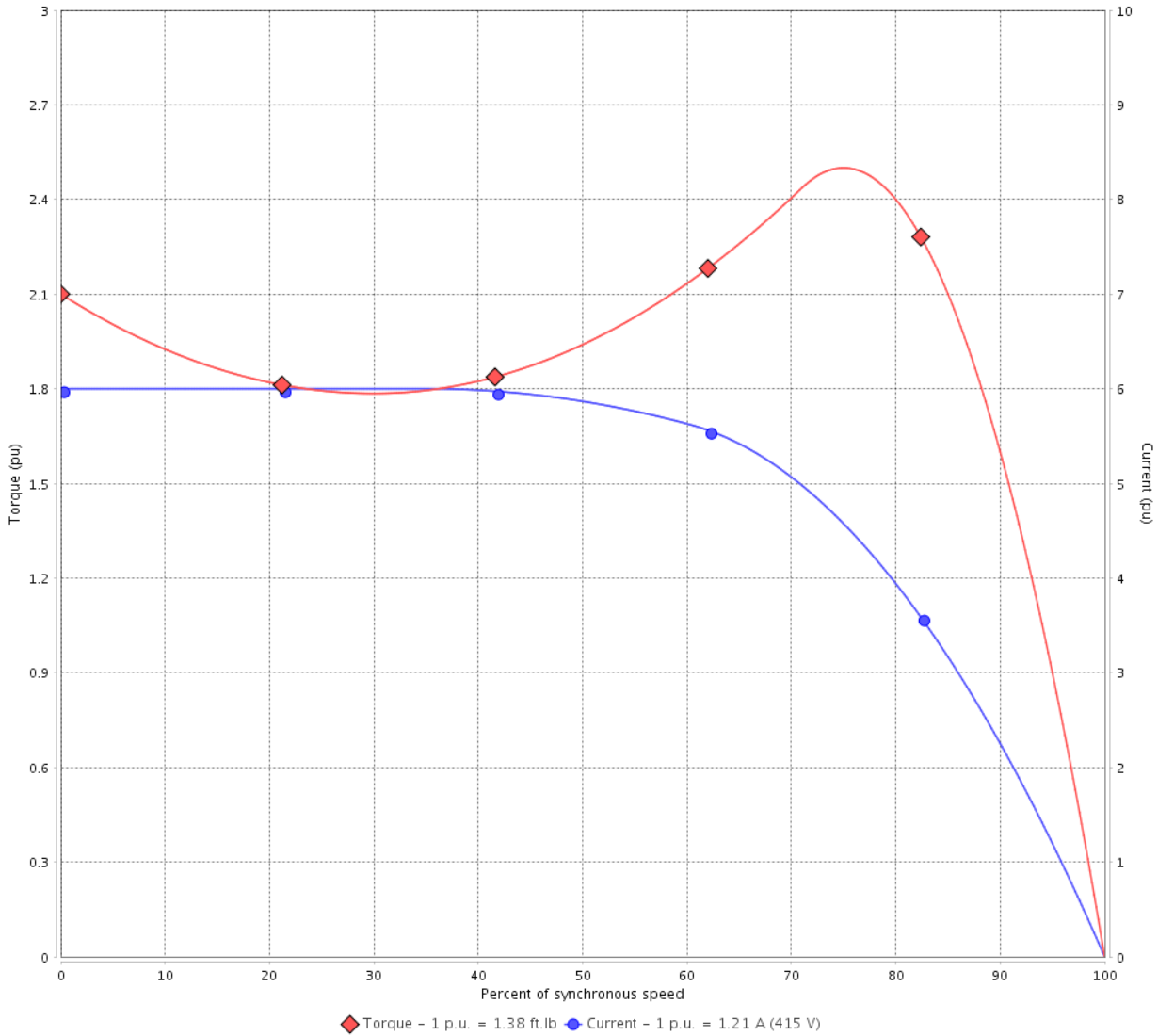
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 14786500
 Catalog # : .7536ES3E56CFL-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 2.28/1.21 A	Moment of inertia (J)	: 0.0517 sq.ft.lb
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 1.38 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 2845 rpm		

Locked rotor time : 46s (cold) 26s (hot)

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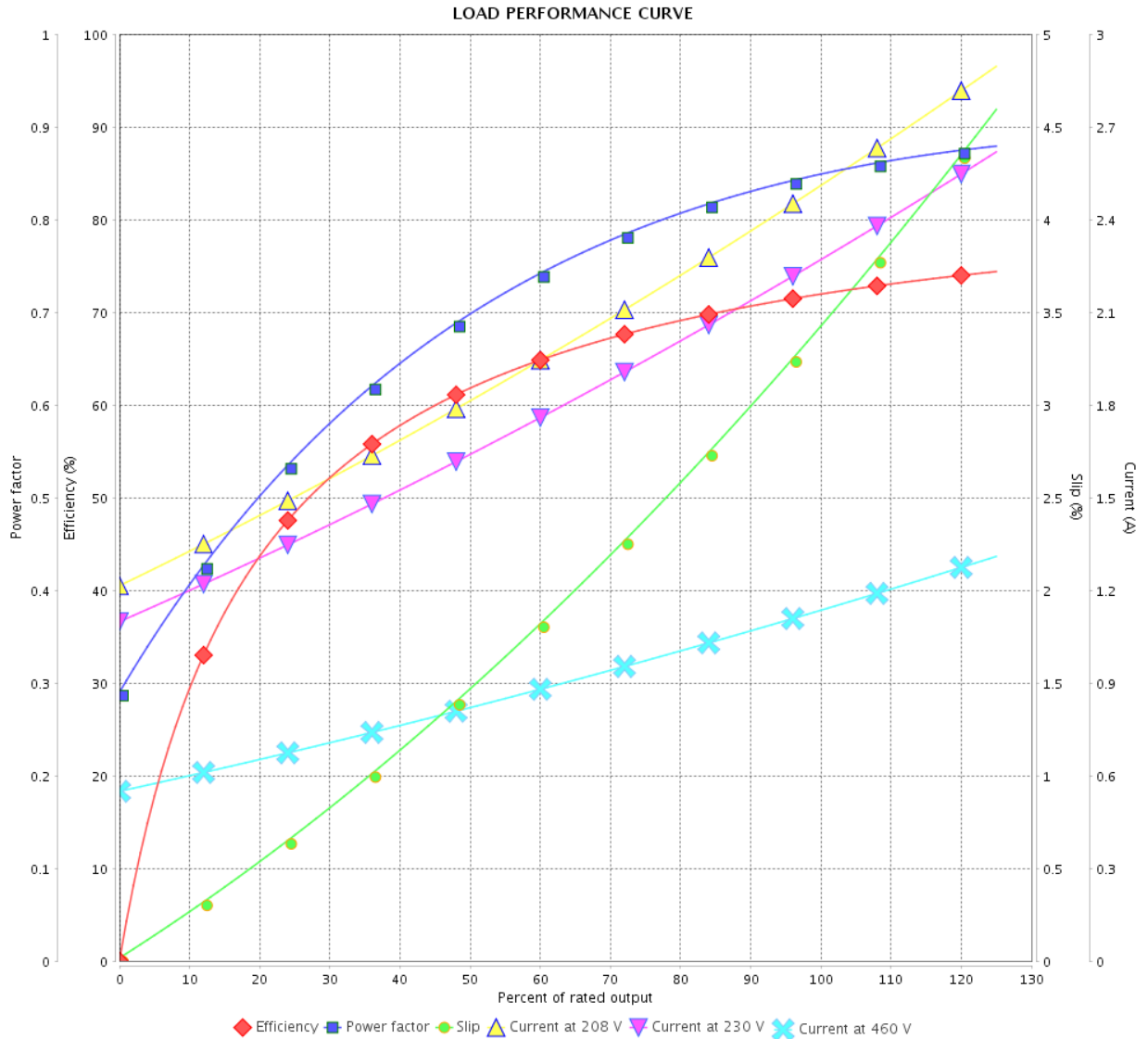
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



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

Rated current : 2.50-2.26/1.13 A
 LRC : 7.0
 Rated torque : 1.13 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 290 %
 Rated speed : 3475 rpm

Moment of inertia (J) : 0.0517 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K

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LOAD PERFORMANCE CURVE

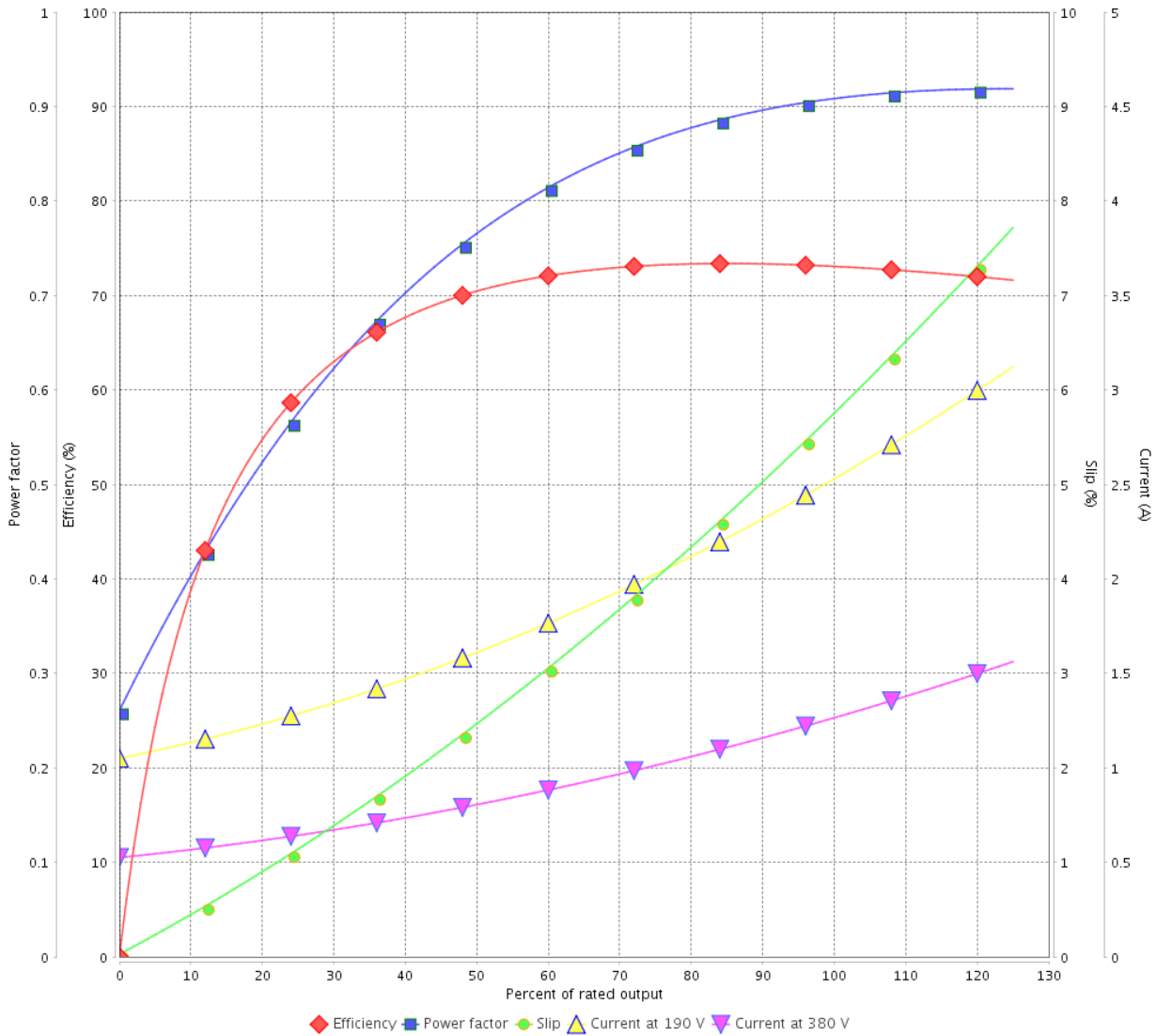
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 Catalog # : .7536ES3E56CFL-S

LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 2P

Rated current : 2.52/1.26 A
 LRC : 5.5
 Rated torque : 1.39 ft.lb
 Locked rotor torque : 180 %
 Breakdown torque : 220 %
 Rated speed : 2825 rpm

Moment of inertia (J) : 0.0517 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K

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Date				

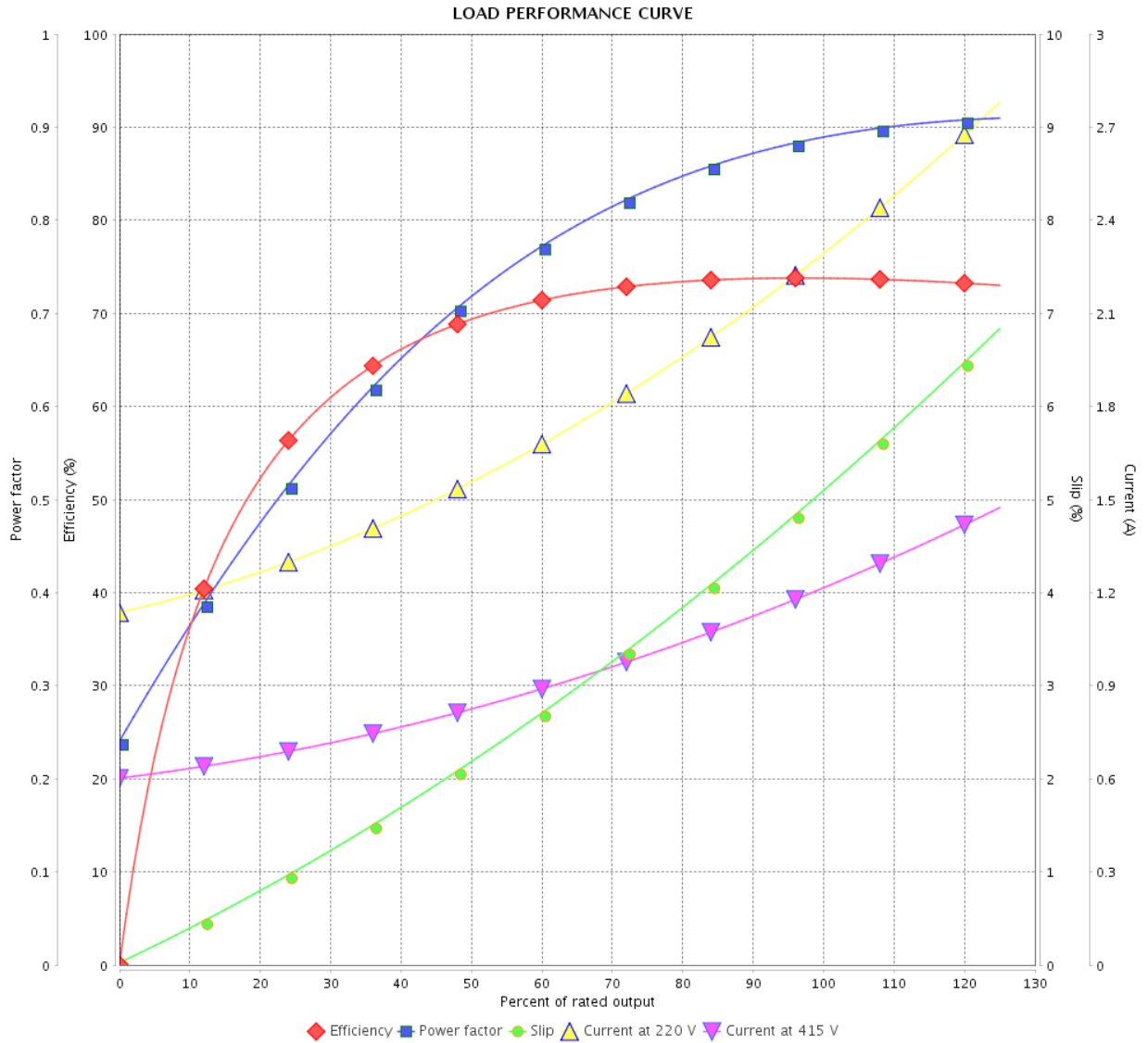
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Three Phase Induction Motor - Squirrel Cage



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Product line : Standard Efficiency Three-Phase Product code : 14786500
 Catalog # : .7536ES3E56CFL-S



Performance : 220/415 V 50 Hz 2P

Rated current : 2.28/1.21 A
 LRC : 6.0
 Rated torque : 1.38 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 250 %
 Rated speed : 2845 rpm

Moment of inertia (J) : 0.0517 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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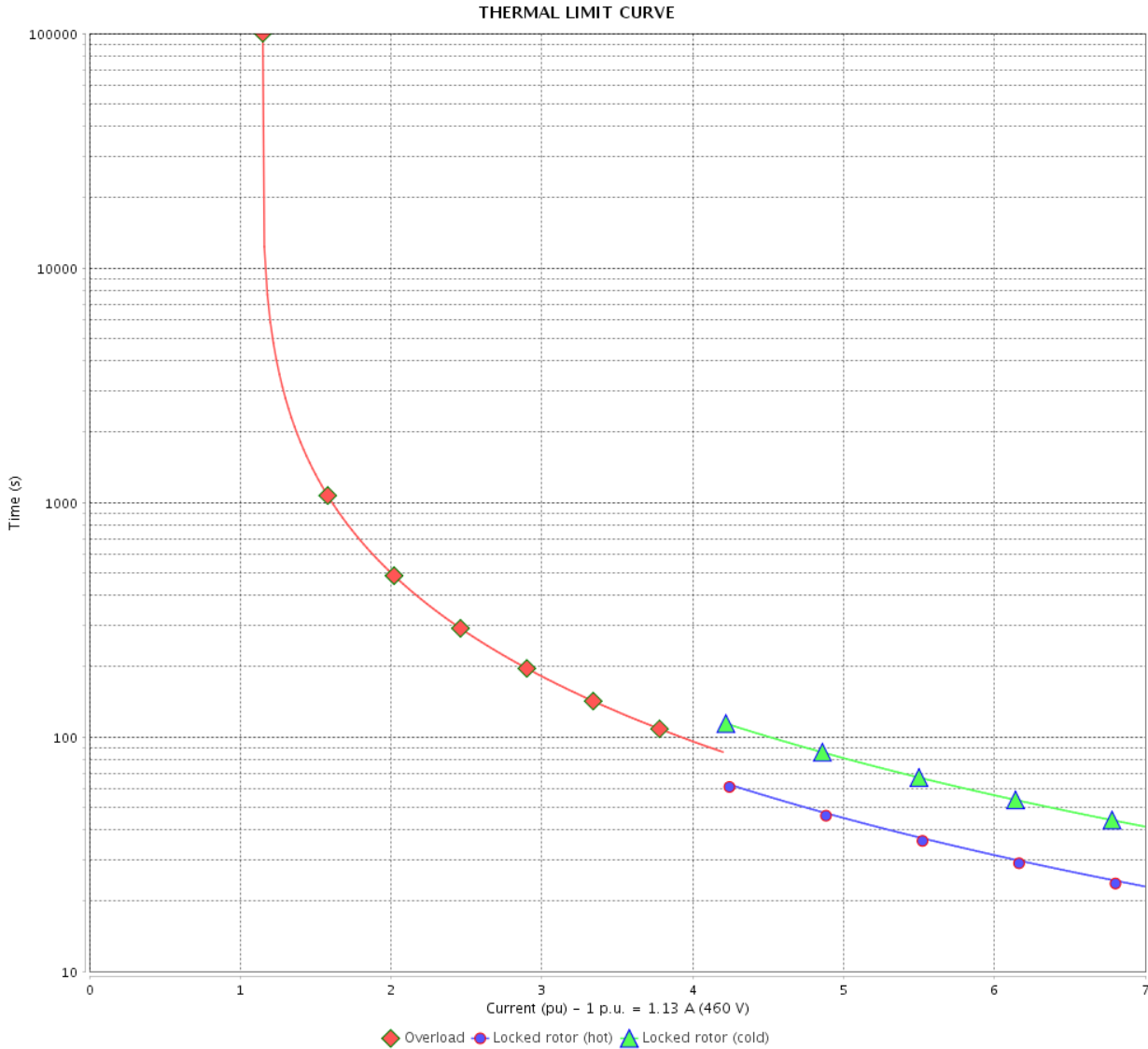
Product line : Standard Efficiency Three-Phase

Product code :

14786500

Catalog # :

.7536ES3E56CFL-S



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

Rated current : 2.50-2.26/1.13 A
 LRC : 7.0
 Rated torque : 1.13 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 290 %
 Rated speed : 3475 rpm

Moment of inertia (J) : 0.0517 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K

Heating constant

Cooling constant

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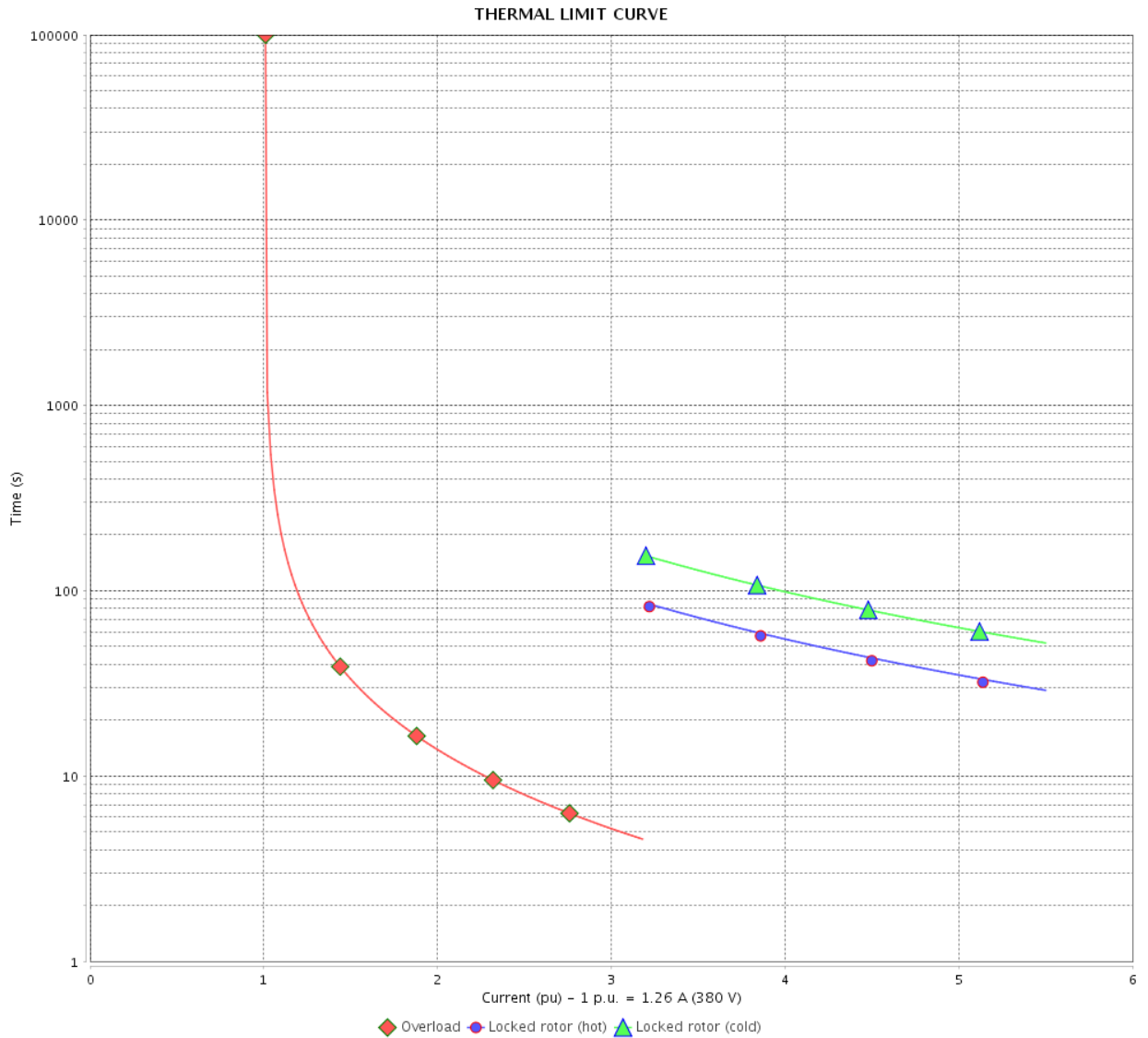
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Moment of inertia (J) : 0.0517 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K

Heating constant

Cooling constant

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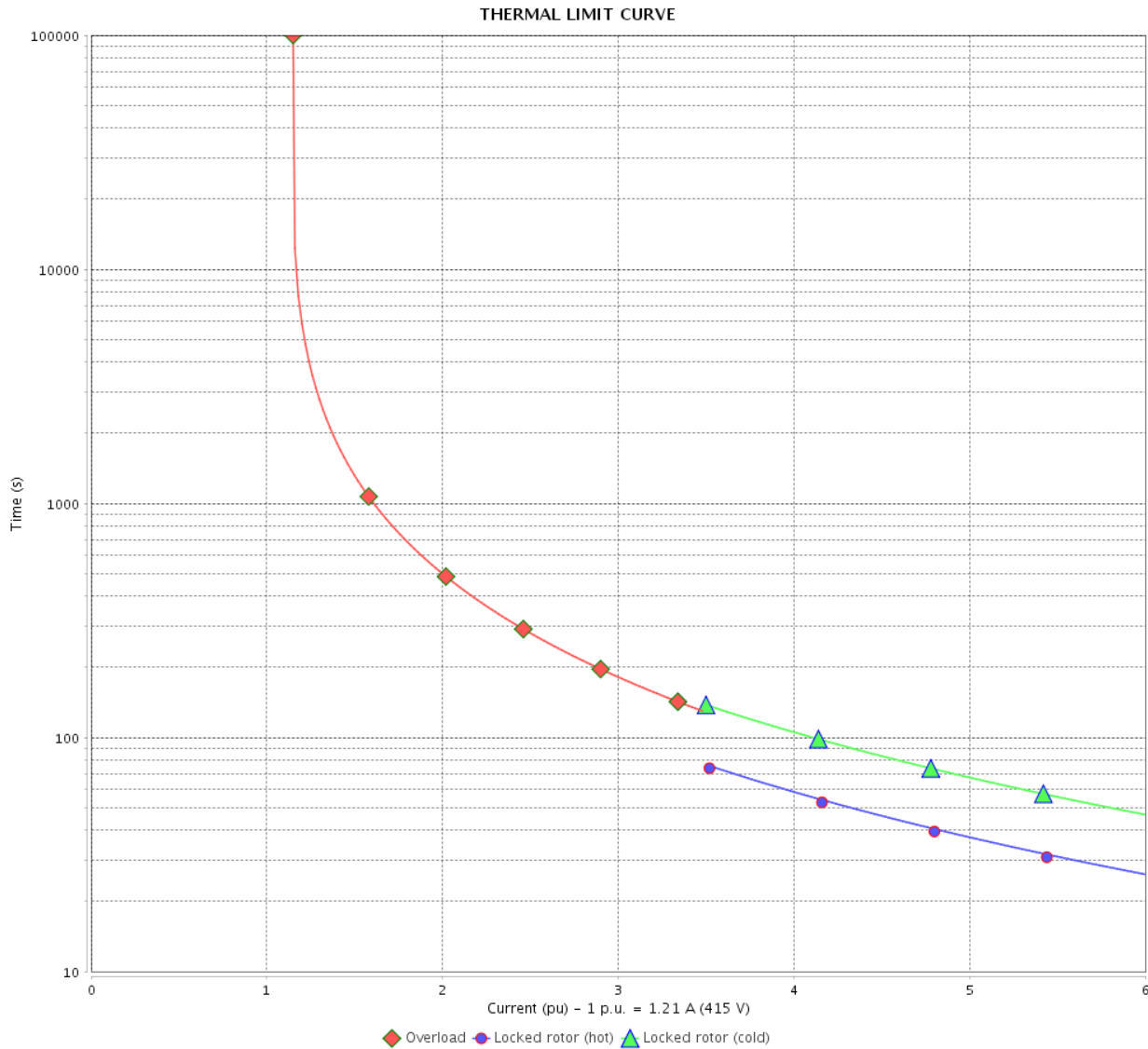
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LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 1.38 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 2845 rpm		

Heating constant

Cooling constant

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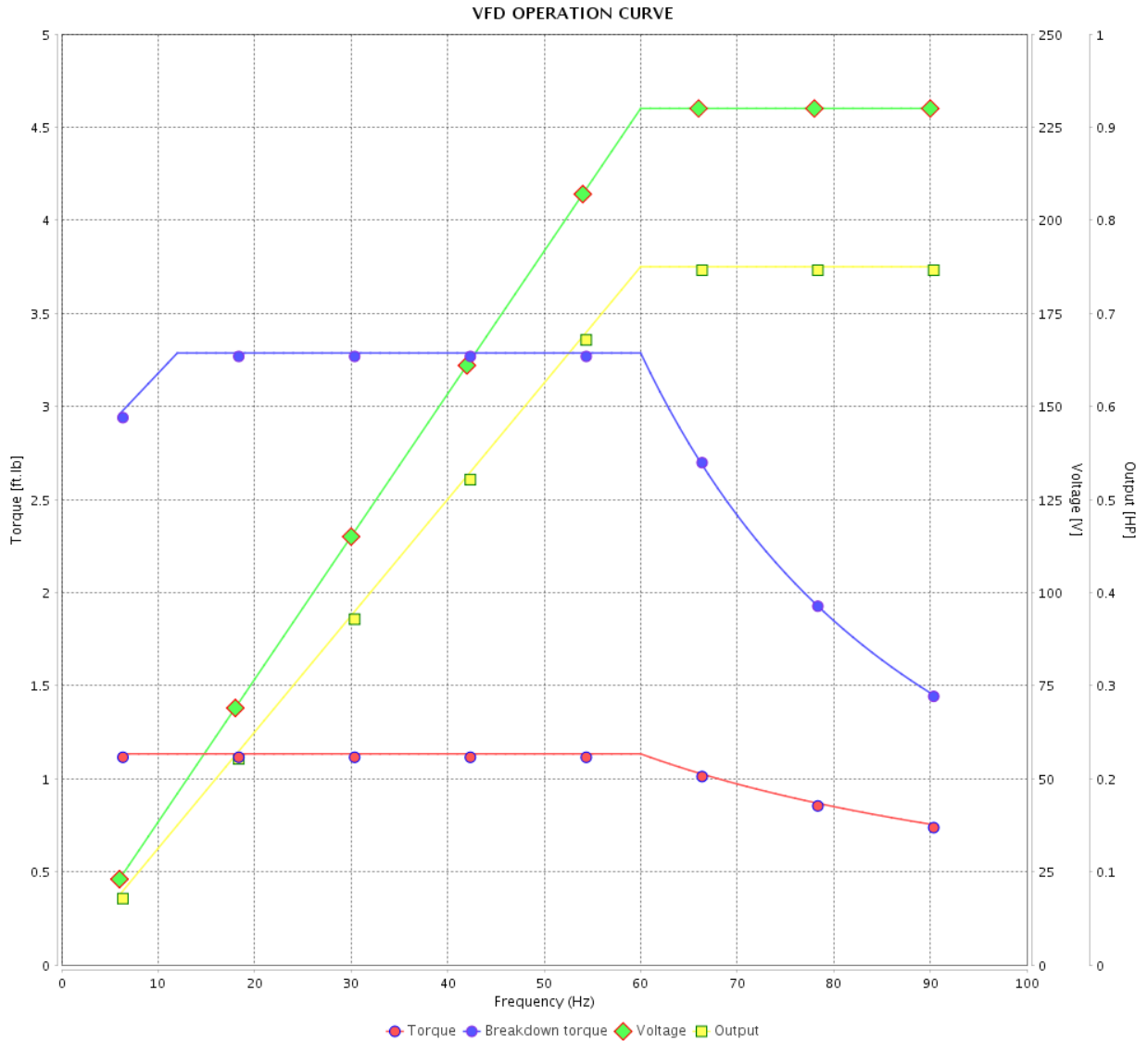
VFD OPERATION CURVE

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Rated current : 2.50-2.26/1.13 A
 LRC : 7.0
 Rated torque : 1.13 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 290 %
 Rated speed : 3475 rpm

Moment of inertia (J) : 0.0517 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K

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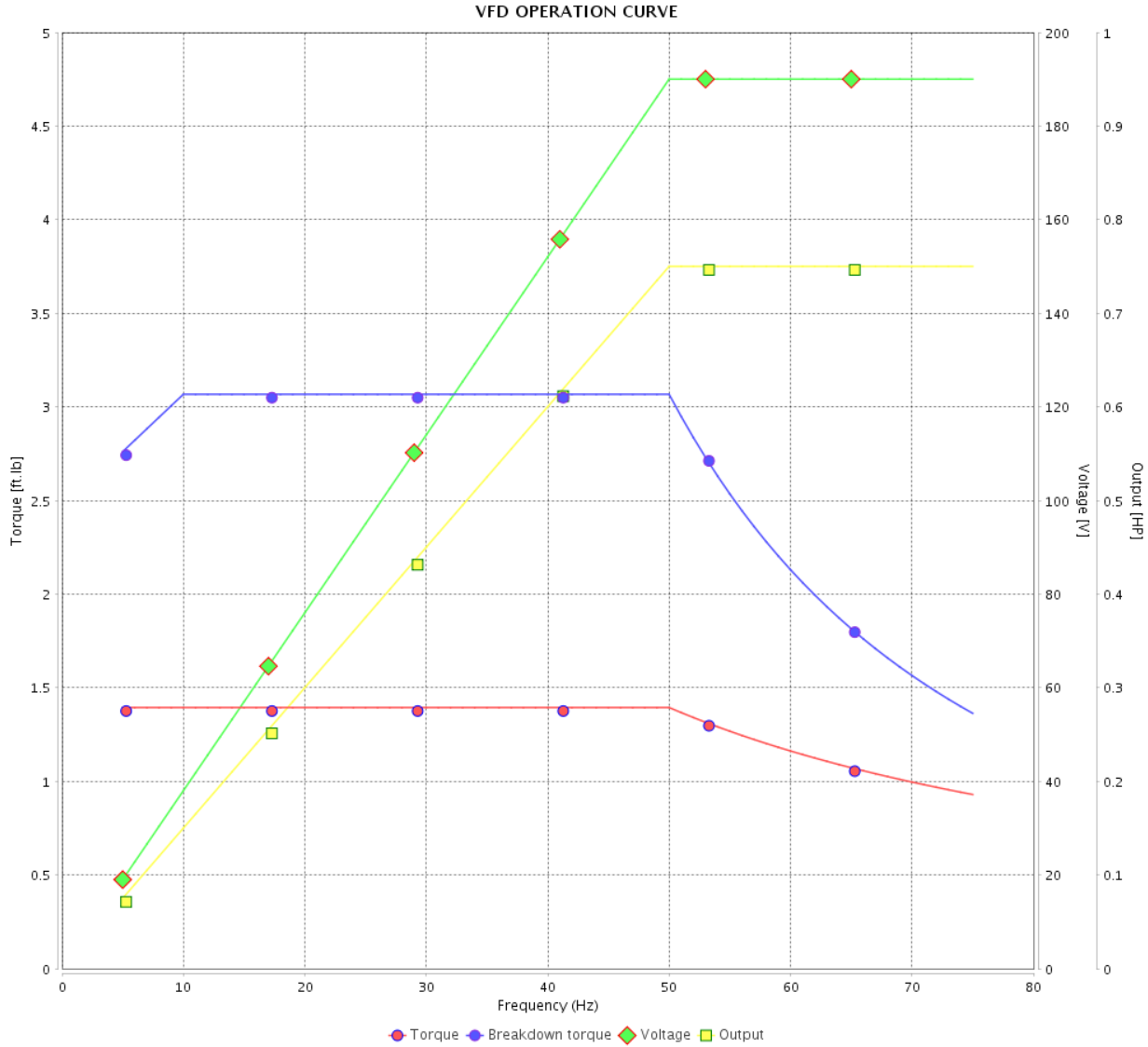
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LRC	: 5.5	Duty cycle	: Cont.(S1)
Rated torque	: 1.39 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 105 K
Rated speed	: 2825 rpm		

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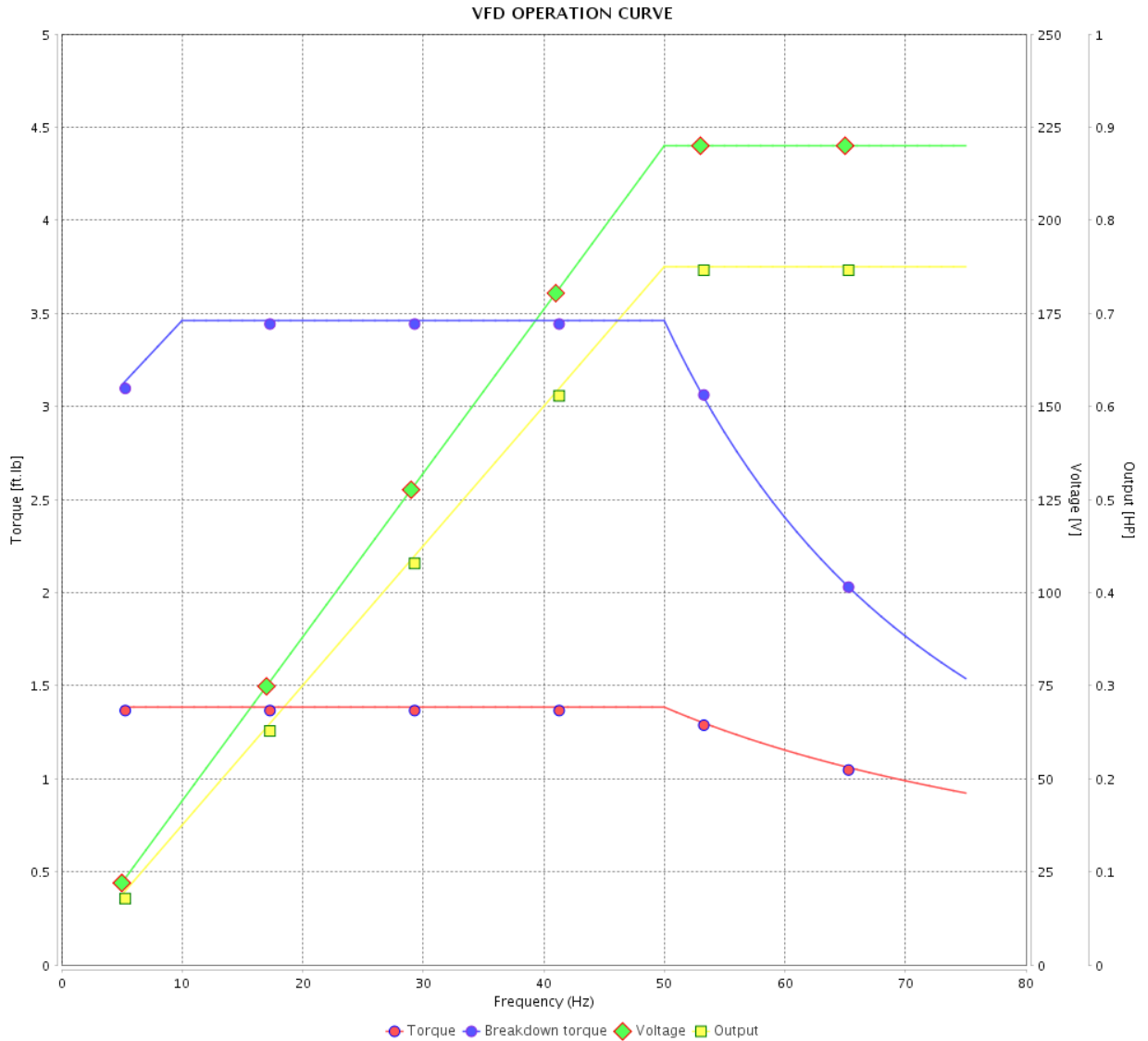
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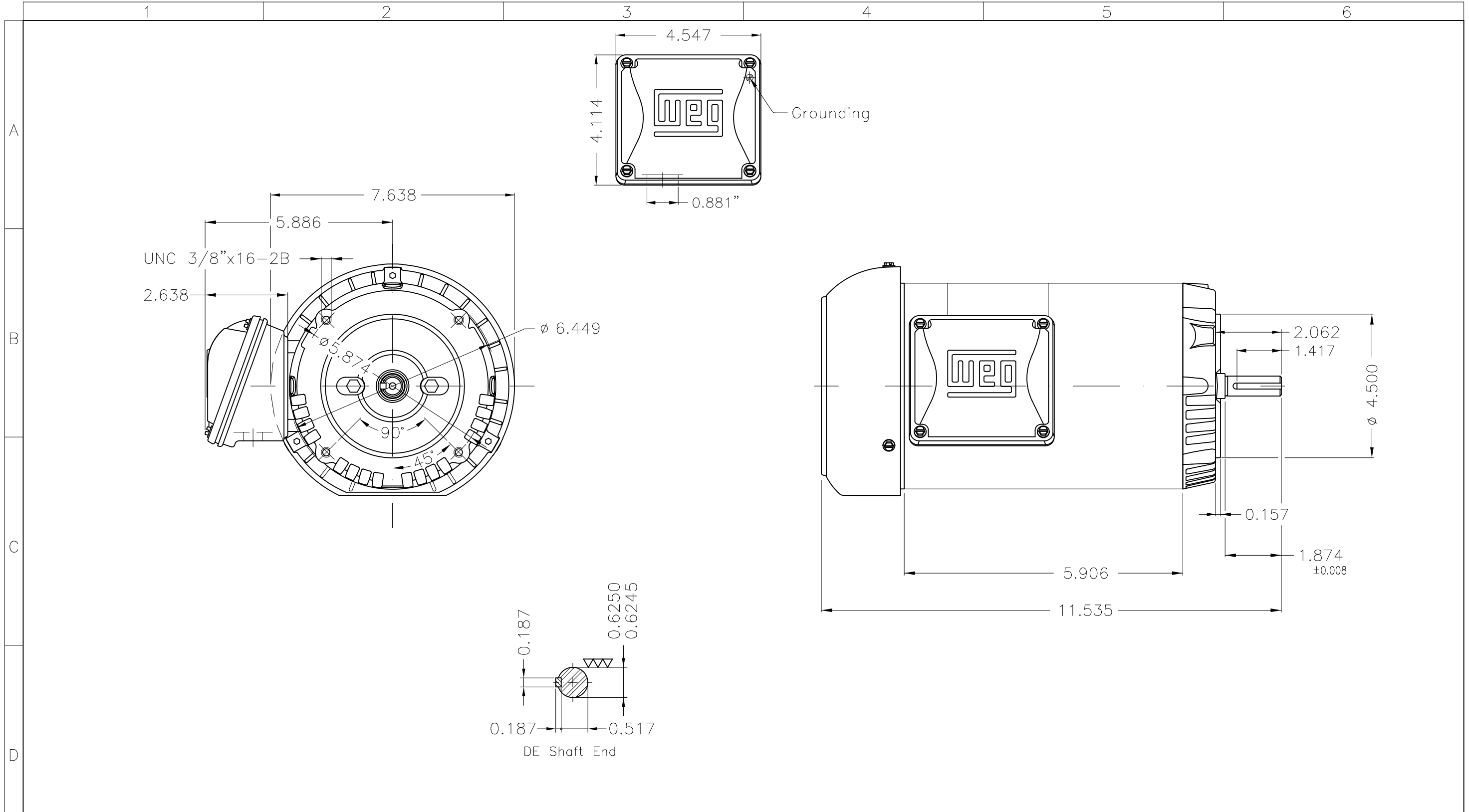


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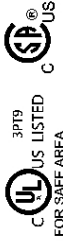
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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K

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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	PIRWBUSER	THREE PH. MOTOR ROLLED STEEL			PREVIEW	WDD	SHEET	1 / 1	
CHECKED		FRAME 56C IP55 TEFC							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

0.75 HP 02 Poles 60 Hz



MADE IN BRAZIL

MAT: 147866500

W01.TE0IC0X0X

MODEL 7536ES3E56CFL-S
25MAR2022 B/N:

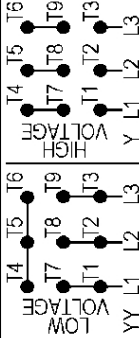
For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3
Div 2 Inverter Duty (SF1.00)
CT 2:1/VT 1000:1

PH 3	Hz 60	HP 0.75
FR 56C		KW 0.55
DUTY CONT.		V 208-230/460
ALT 1000 m.a.s.l.		A 2.50-2.26/1.13
INS CL F AT 80K	IP55	SFA 2.50-2.60/1.30
AMB 40°C	DES -	SF 1.15
ENCL TEFC	CODE K	PF 0.85
USABLE @ 208V SF1.00		RPM 3475
		NEMA NOM. EFF 72.0%

ALTERNATE RATING: 0.75HP 50Hz 190-220/380-415V SF1.00
2.52-2.26/1.28-1.20A 2825RPM EFF 73.0% (IE1) 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.

