

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :			
Product line	: Rolled Steel NEMA Premium Efficiency Three-Phase	Product code :	12675389
		Catalog # :	00512ET3E215TC-S
Frame	: 213/5TC	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	: 153 lb
Protection degree	: IP55	Moment of inertia (J)	: 1.26 sq.ft.lb
Design	: B		
Output [HP]	5	5	5
Poles	6	6	6
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190-220/380	415
Rated current [A]	13.5/6.74	16.3-14.0/8.13	7.60
L. R. Amperes [A]	80.9/40.4	74.8-64.6/37.4	42.6
LRC [A]	6.0x(Code H)	4.6x(Code E)	5.6x(Code G)
No load current [A]	6.84/3.42	6.75-5.83/3.38	3.86
Rated speed [RPM]	1175	960	965
Slip [%]	2.08	4.00	3.50
Rated torque [ft.lb]	22.3	27.4	27.2
Locked rotor torque [%]	220	160	210
Breakdown torque [%]	250	190	229
Service factor	1.15	1.00	1.00
Temperature rise	80 K	105 K	105 K
Locked rotor time	54s (cold) 30s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²	55.0 dB(A)	53.0 dB(A)	53.0 dB(A)
Efficiency (%)	25%	86.4	88.0
	50%	87.5	87.3
	75%	88.5	87.9
	100%	89.5	86.8
Power Factor	25%	0.35	0.35
	50%	0.59	0.59
	75%	0.71	0.72
	100%	0.77	0.78
Bearing type	: <u>Drive end</u> 6208 ZZ <u>Non drive end</u> 6206 ZZ	Foundation loads	
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 276 lb
		Max. compression	: 430 lb
Lubrication interval	: -		
Lubricant amount	: -		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 14.9A SF 1.00 SFA 14.9A			
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



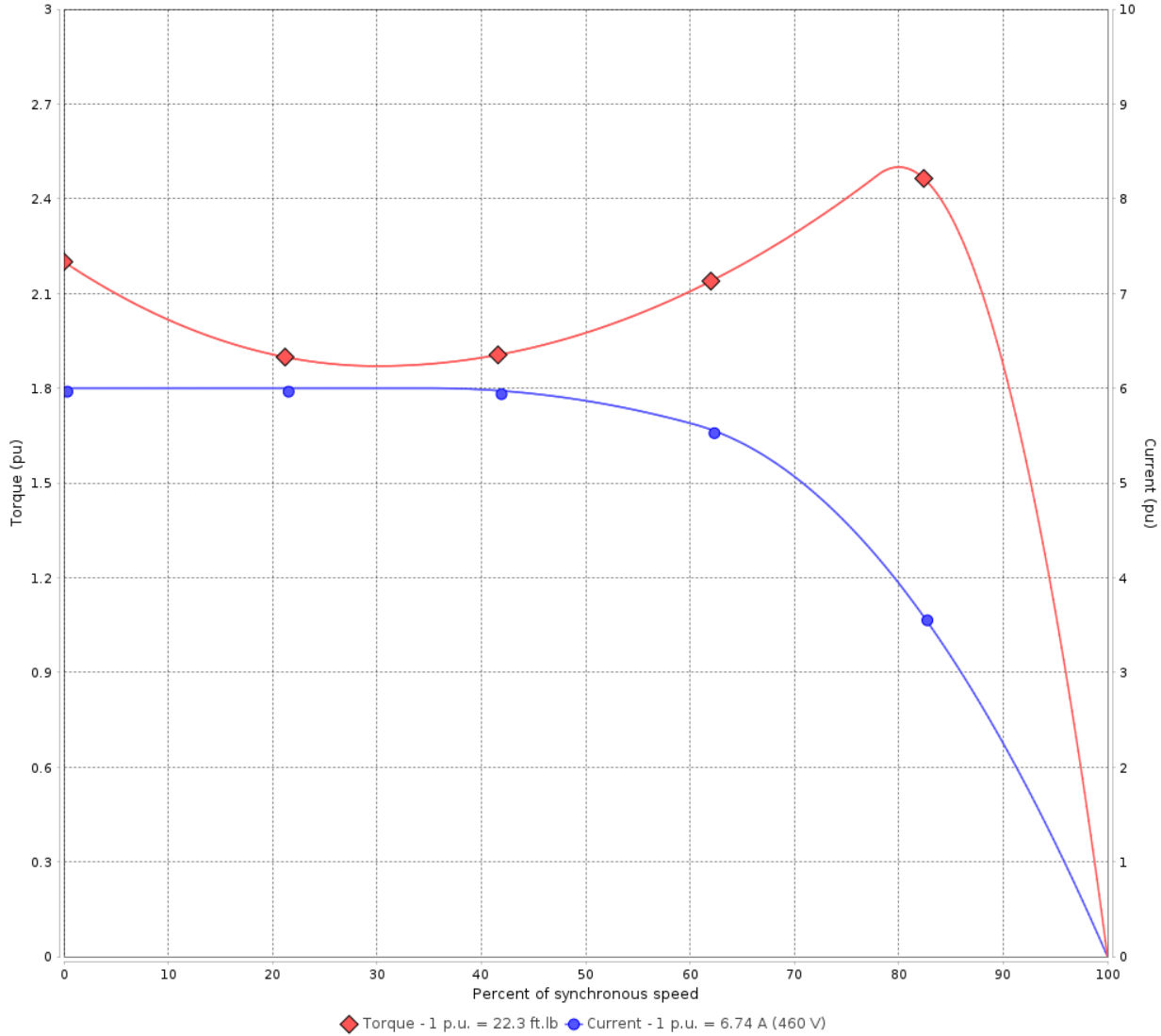
Customer :

Product line : Rolled Steel NEMA Premium Efficiency
Three-Phase

Product code : 12675389

Catalog # : 00512ET3E215TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

Rated current	: 13.5/6.74 A	Moment of inertia (J)	: 1.26 sq.ft.lb
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 22.3 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1175 rpm	Design	: B

Locked rotor time : 54s (cold) 30s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



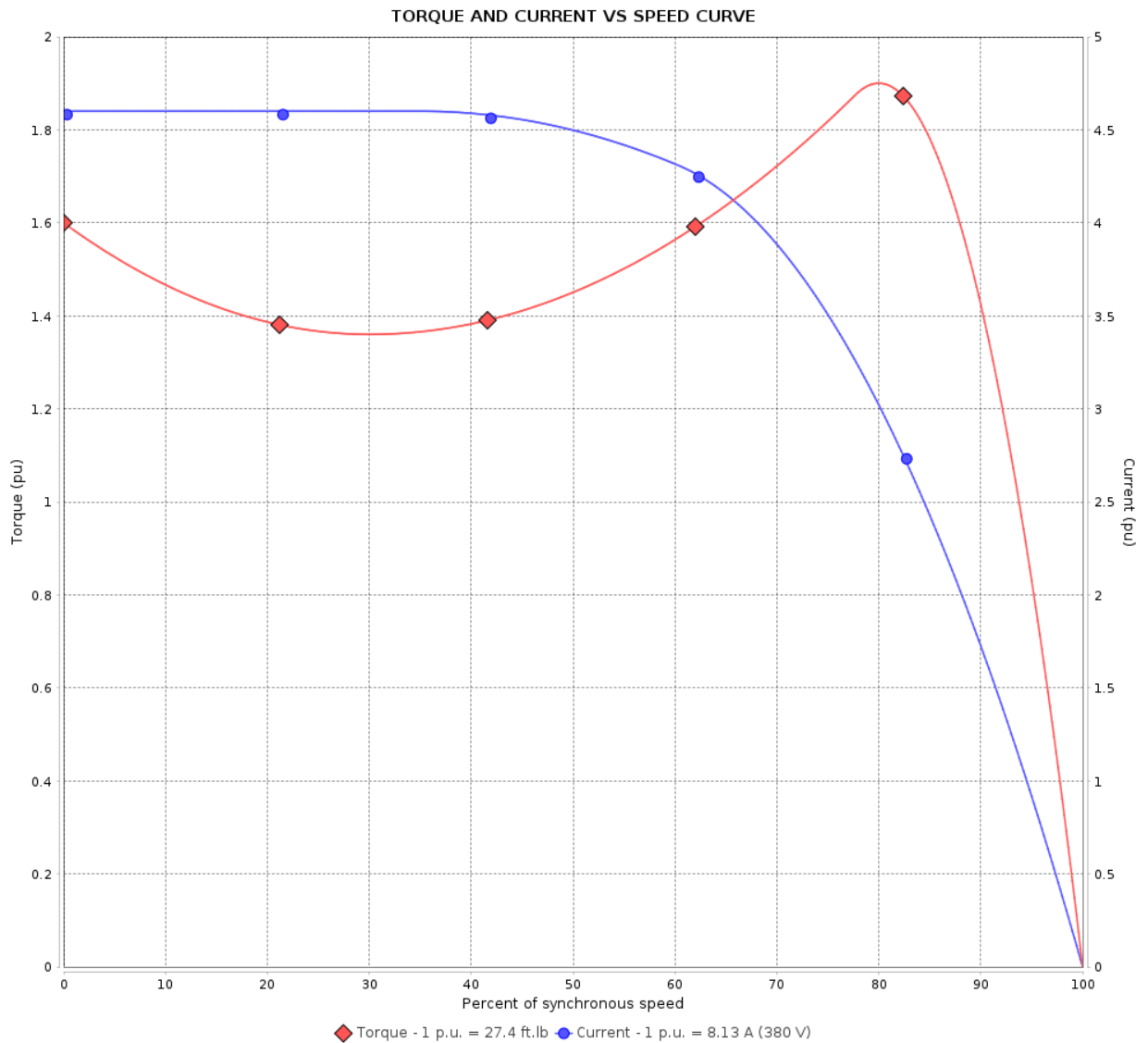
Three Phase Induction Motor - Squirrel Cage

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Performance : 190-220/380 V 50 Hz 6P

Rated current	: 16.3-14.0/8.13 A	Moment of inertia (J)	: 1.26 sq.ft.lb
LRC	: 4.6	Duty cycle	: Cont.(S1)
Rated torque	: 27.4 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 190 %	Temperature rise	: 105 K
Rated speed	: 960 rpm	Design	: B

Locked rotor time : 0s (cold) 0s (hot)

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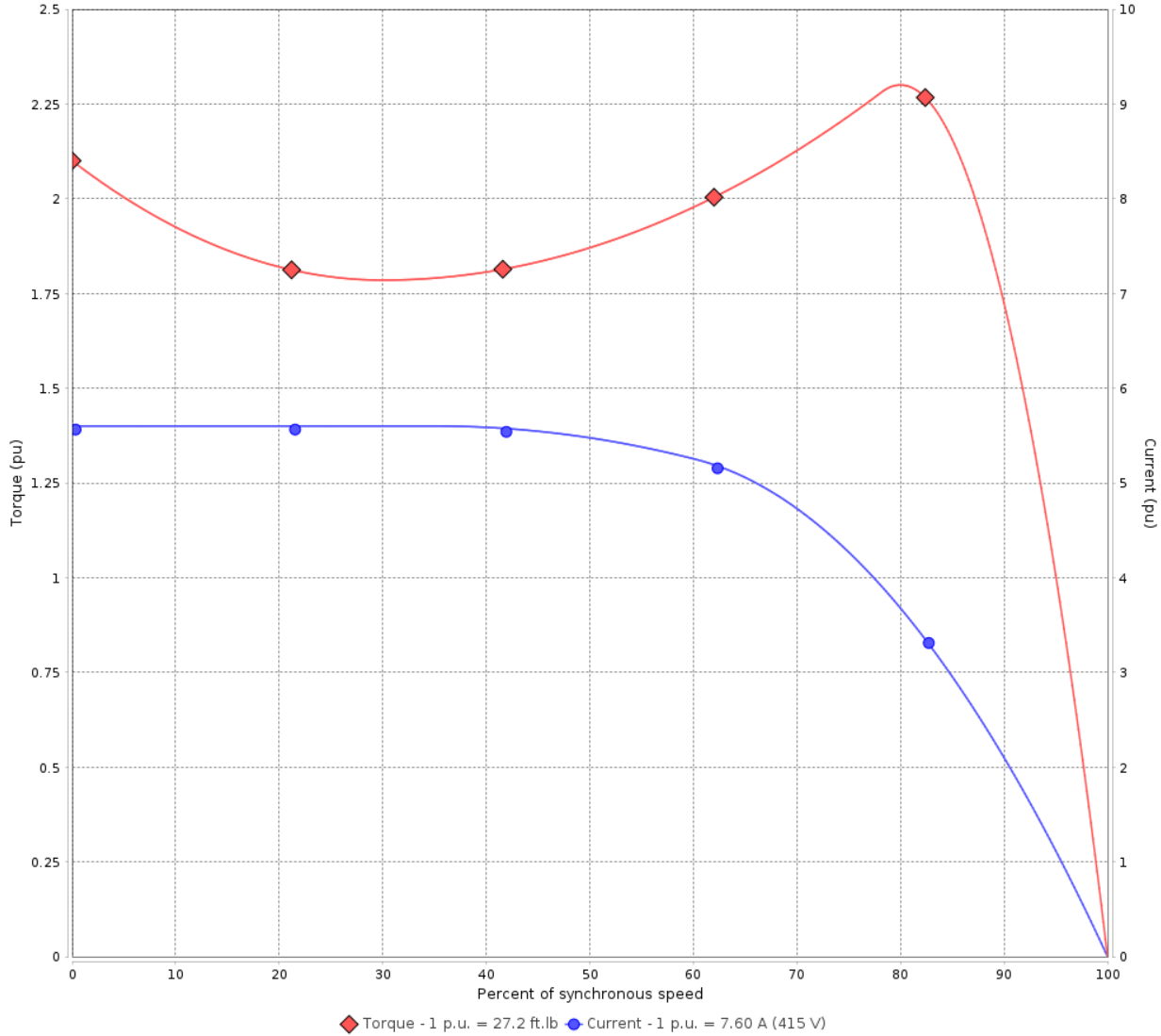
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 6P

Rated current	: 7.60 A	Moment of inertia (J)	: 1.26 sq.ft.lb
LRC	: 5.6	Duty cycle	: Cont.(S1)
Rated torque	: 27.2 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 105 K
Rated speed	: 965 rpm	Design	: B

Locked rotor time : 0s (cold) 0s (hot)

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LOAD PERFORMANCE CURVE

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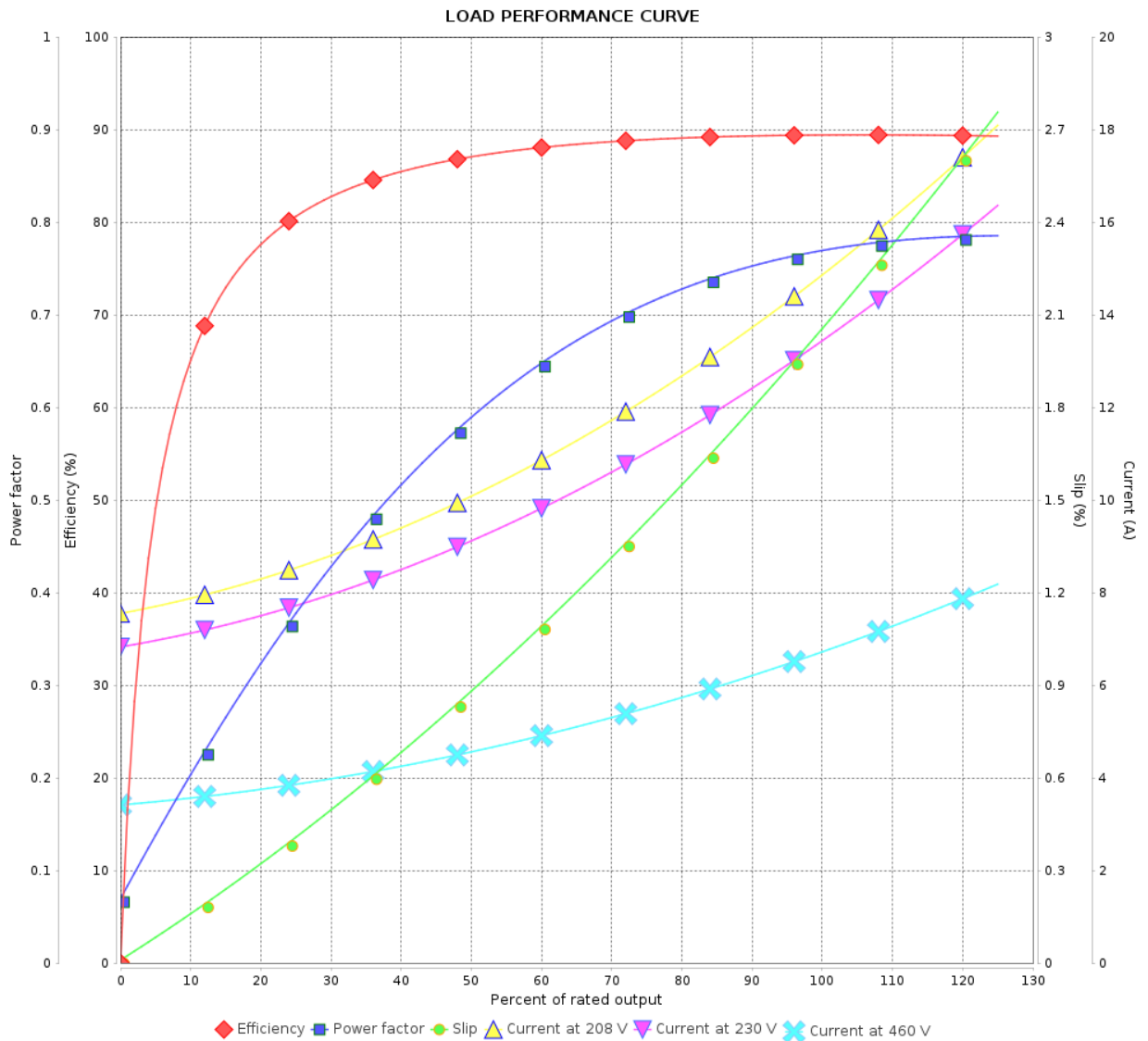


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 Locked rotor torque : 220 %
 Breakdown torque : 250 %
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Moment of inertia (J) : 1.26 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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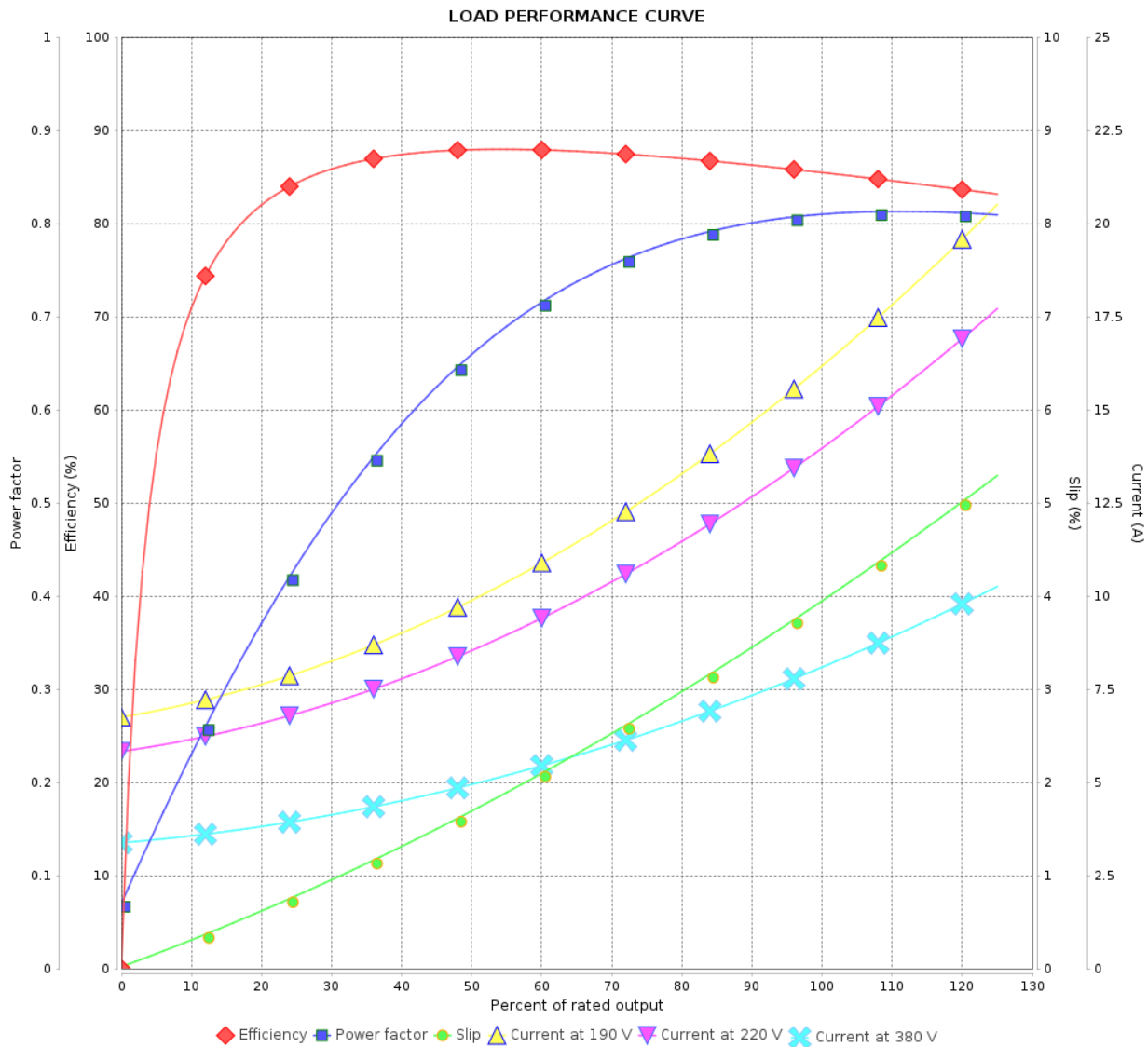


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Performance : 190-220/380 V 50 Hz 6P

Rated current : 16.3-14.0/8.13 A
 LRC : 4.6
 Rated torque : 27.4 ft.lb
 Locked rotor torque : 160 %
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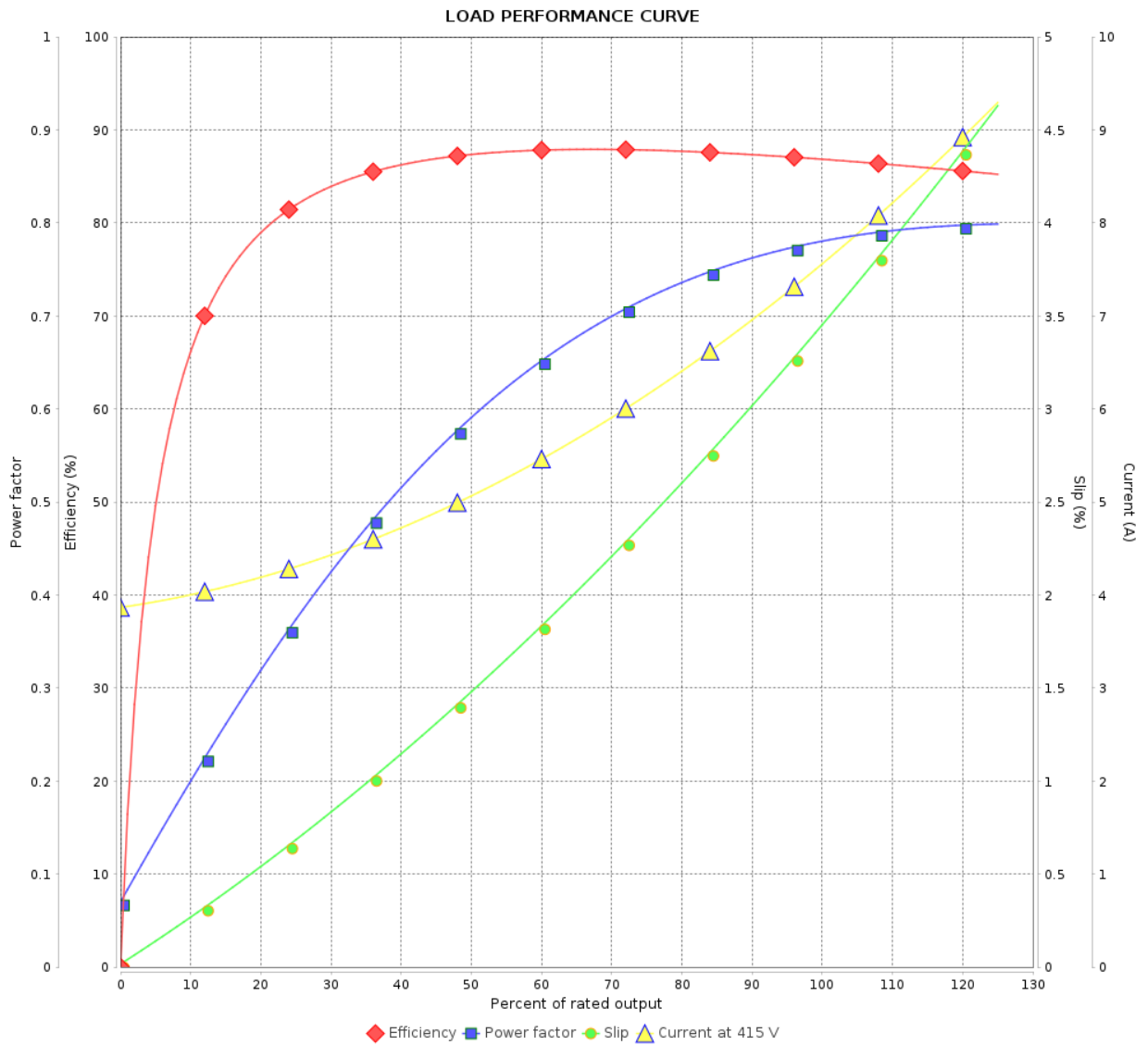


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THERMAL LIMIT CURVE

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Design : B

Heating constant

Cooling constant

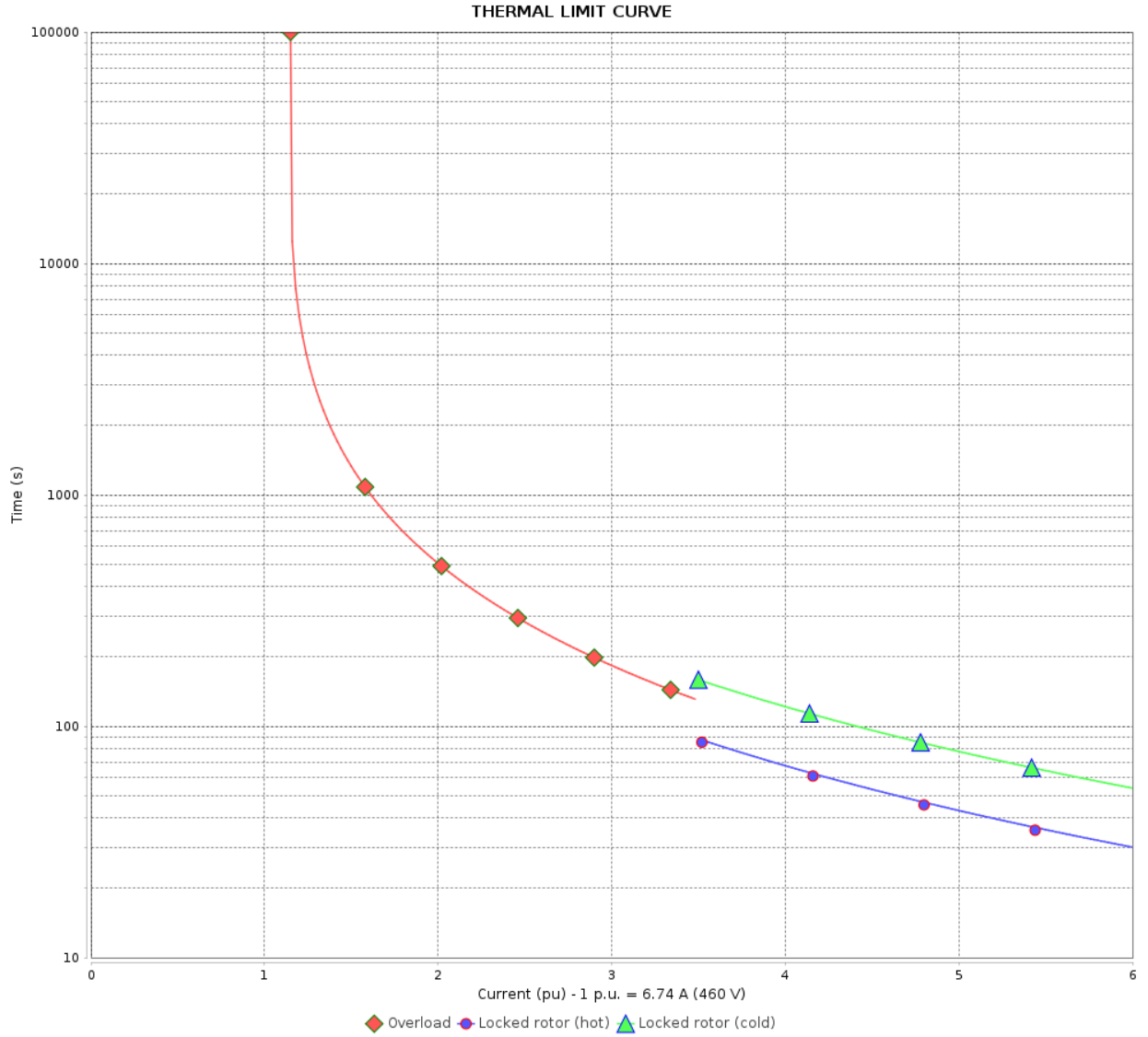
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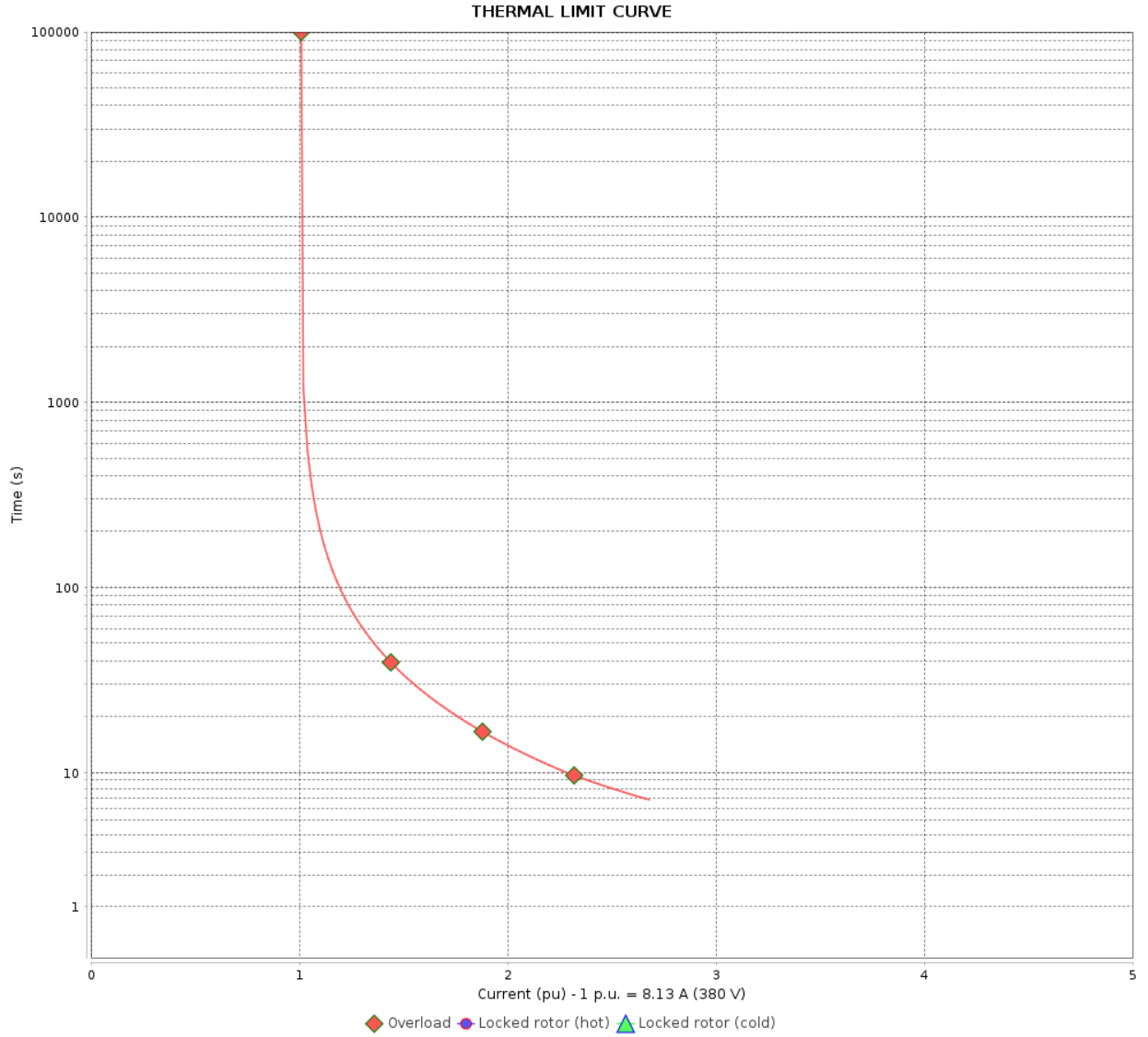
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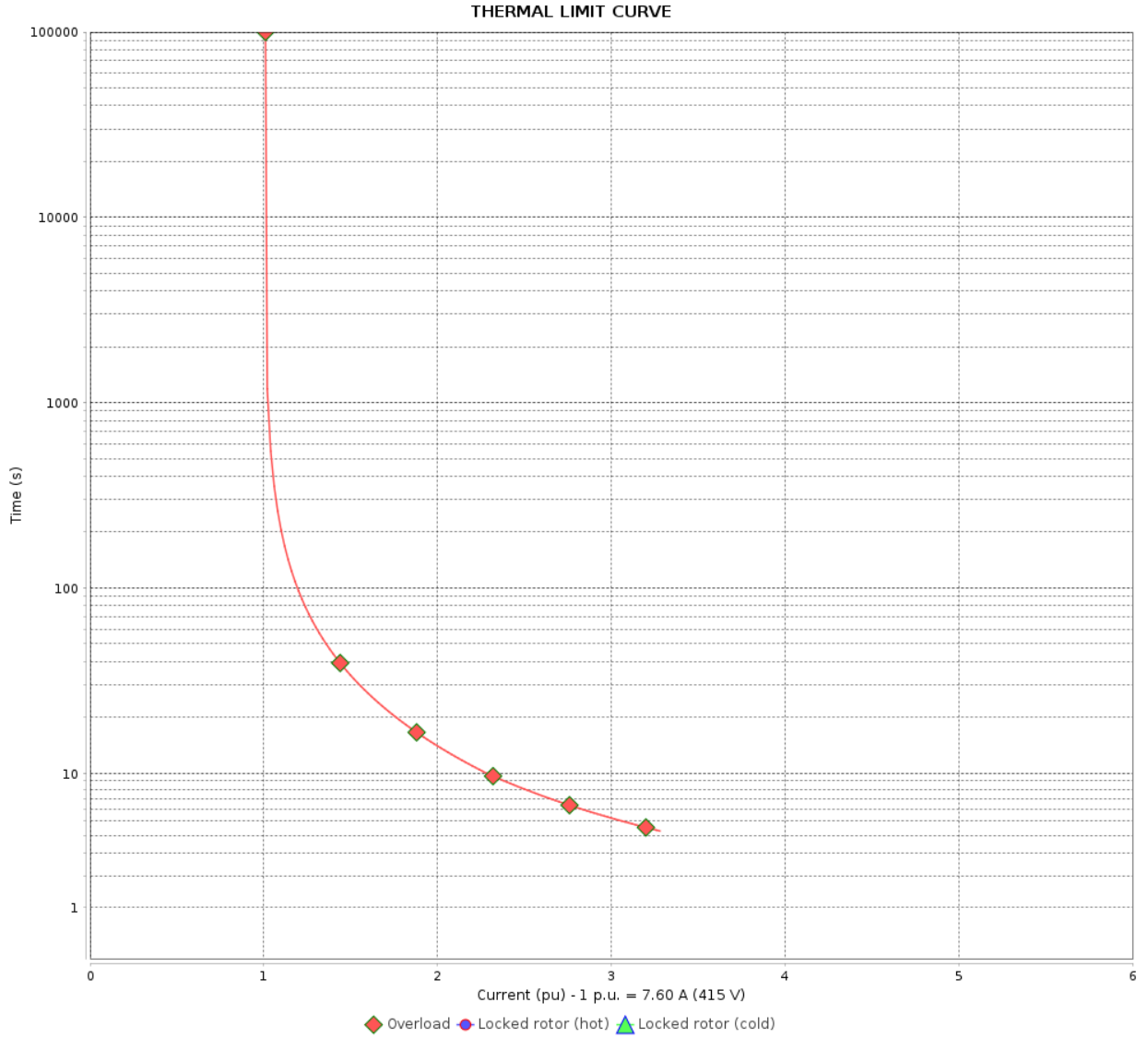
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Date				

VFD OPERATION CURVE



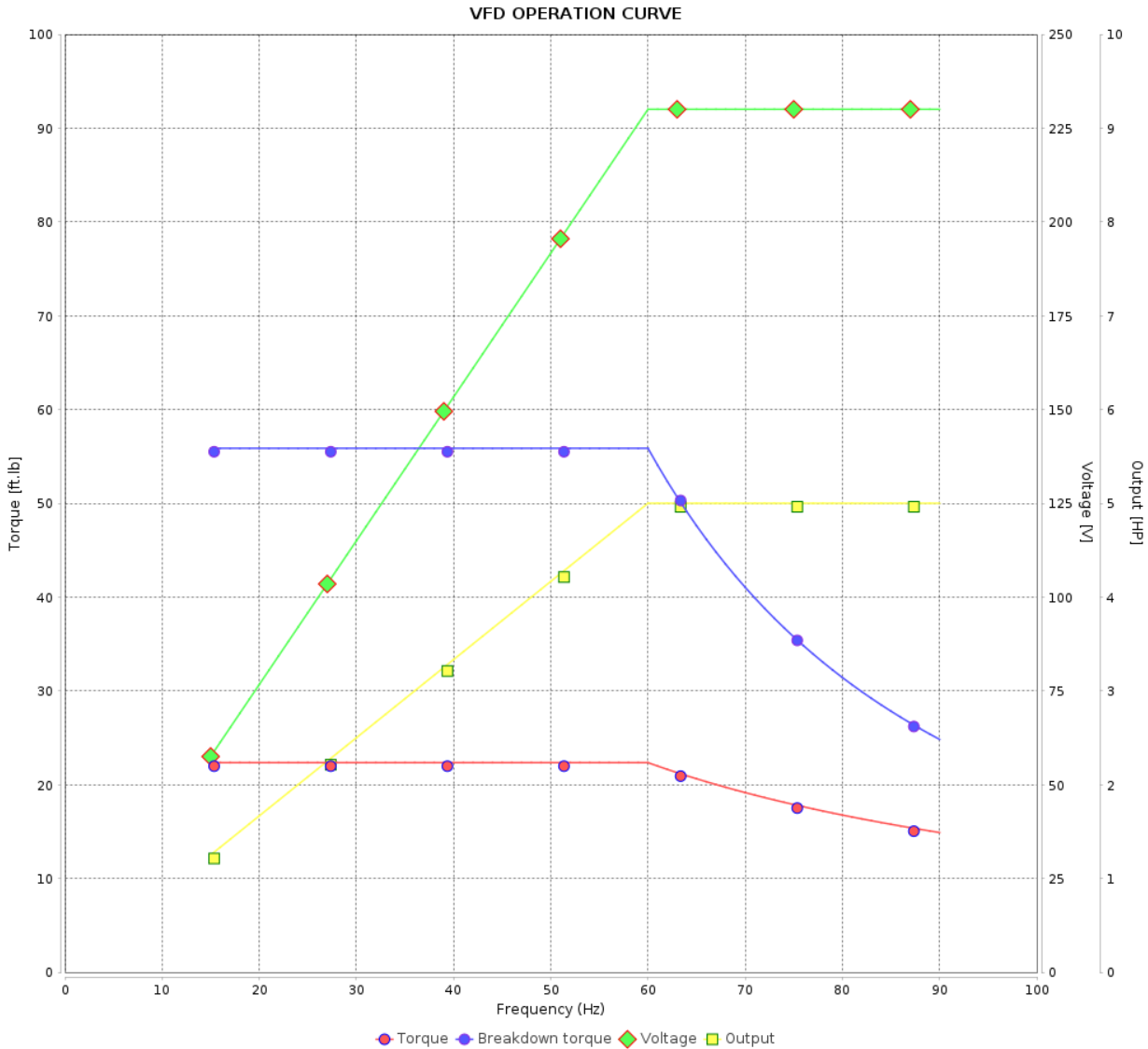
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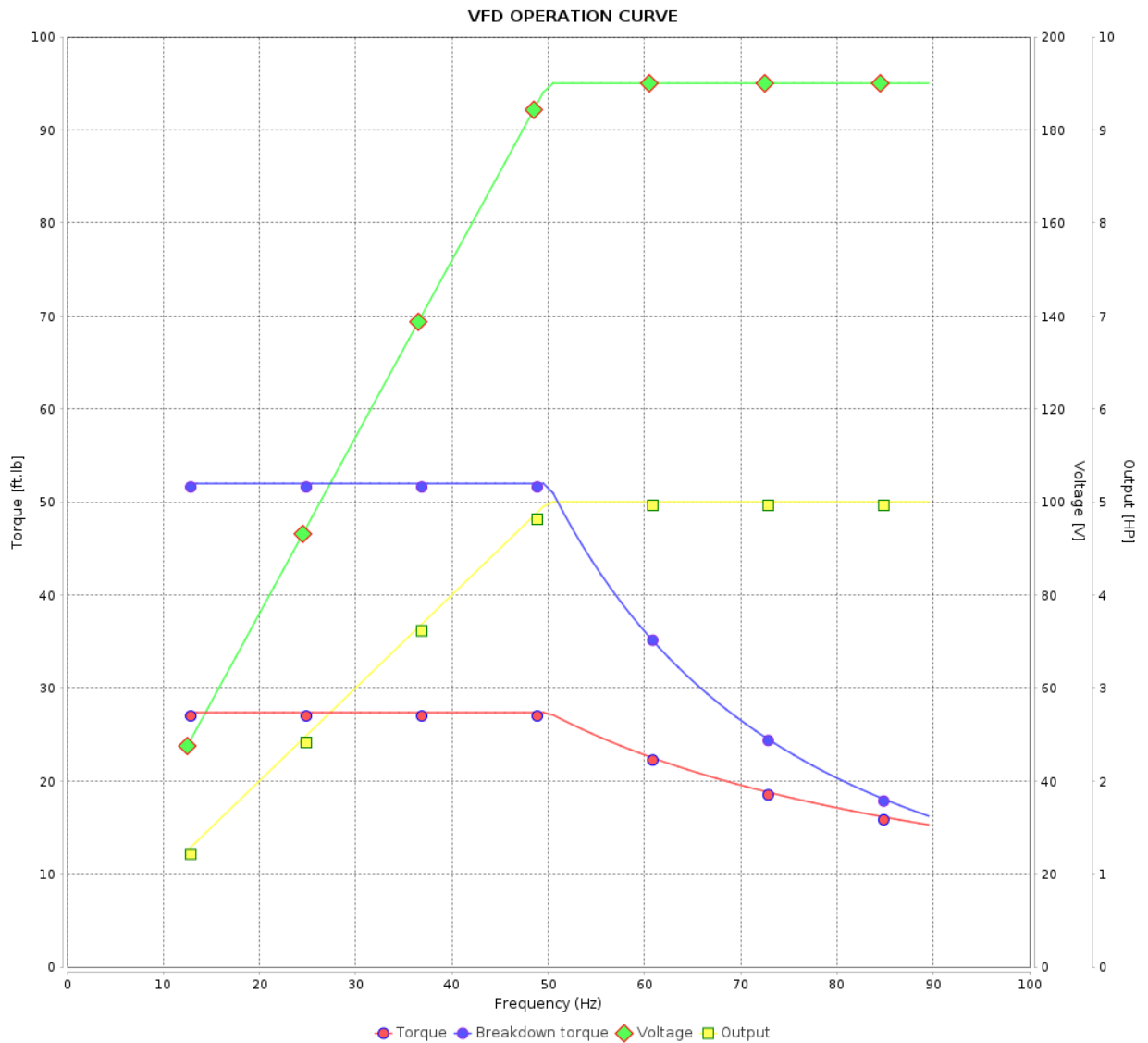


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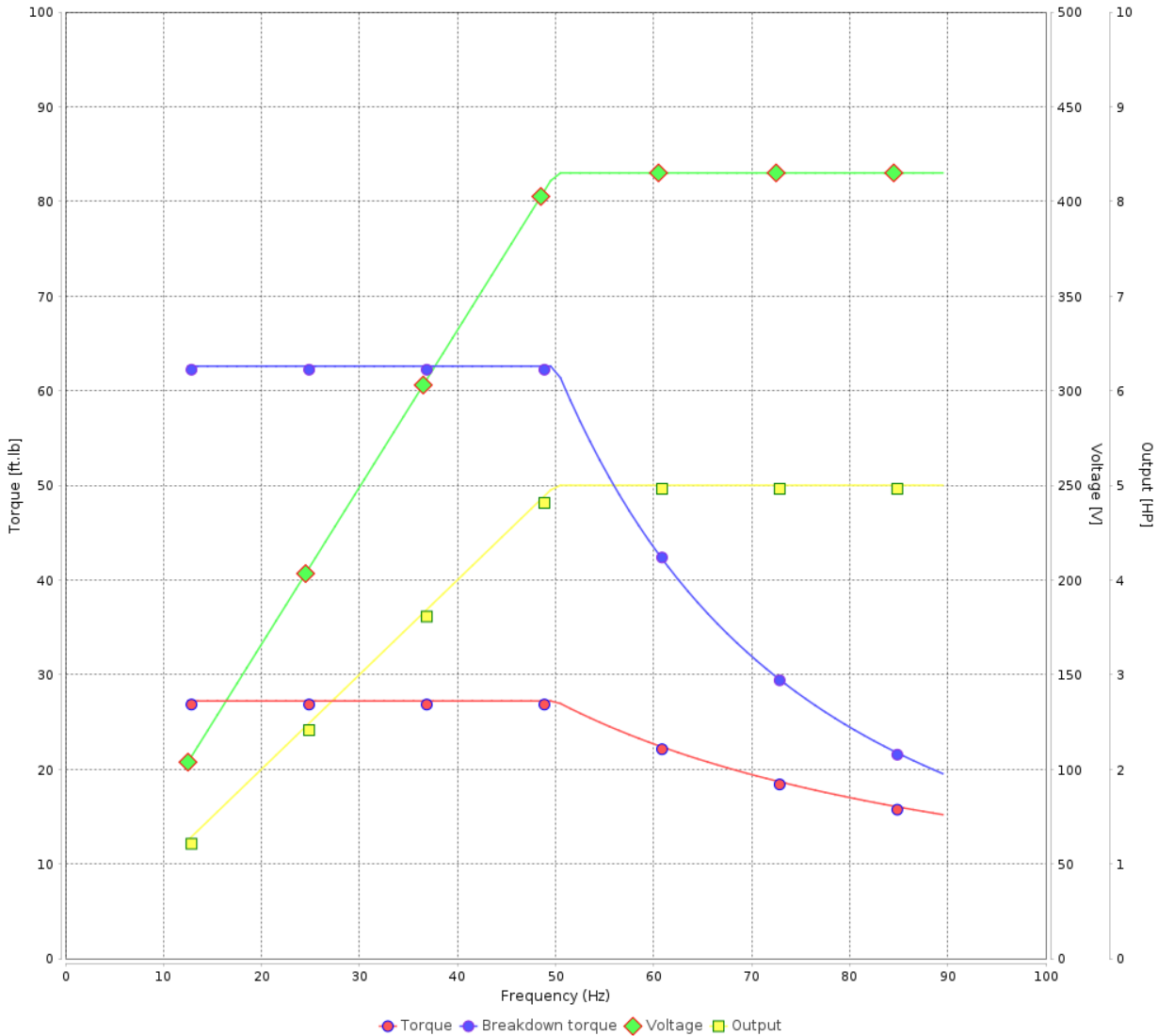
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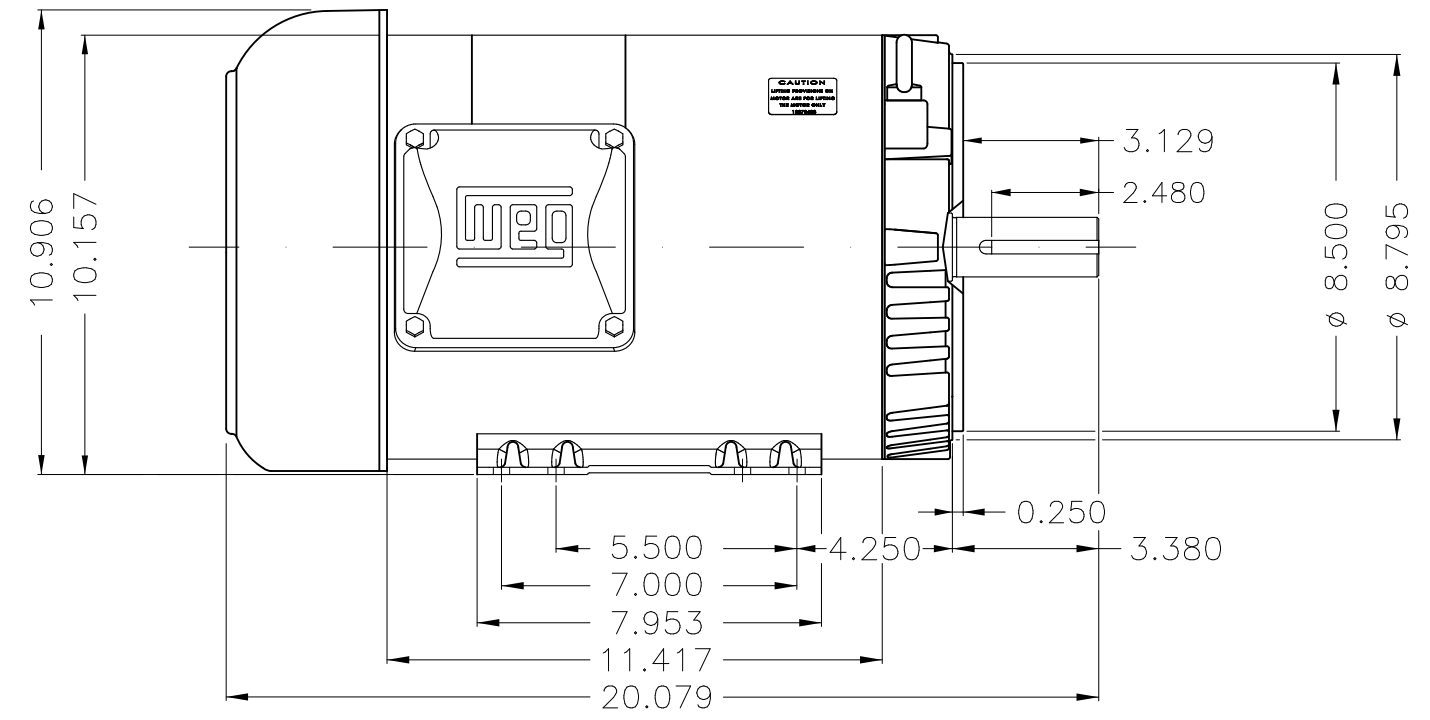
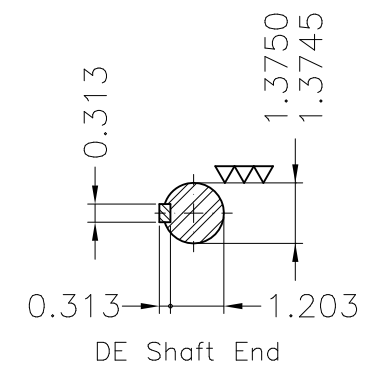
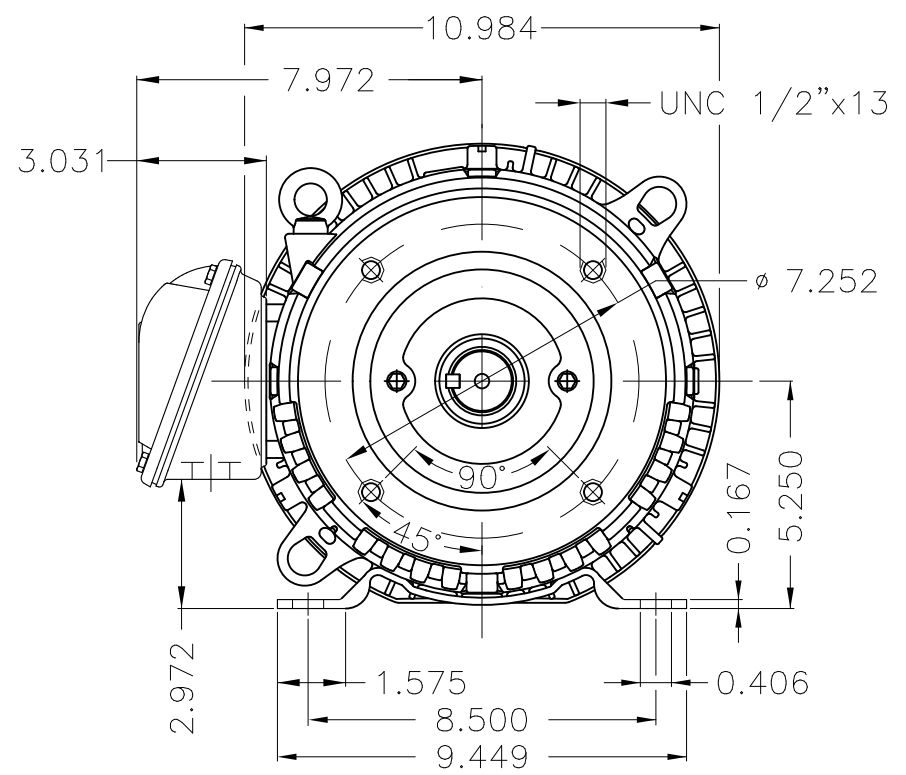
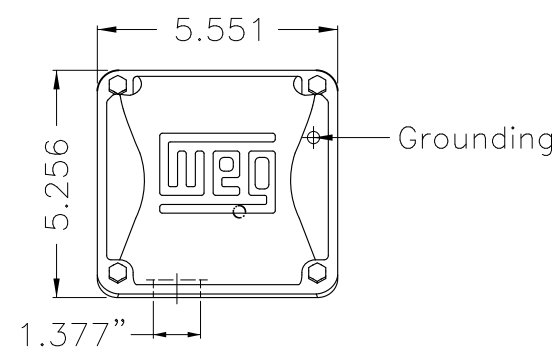
A

B

C

D

E



Color Munsell N 1 matte black									
Painting plan 207N									
Mounting F-1/B34R(D)									
					USERADMIN	00			
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	USERADMIN	THREE PH. MOTOR ROLLED STEEL NEMA PREM. EFF.				PREVIEW			
CHECKED		FRAME 213/5TC IP55 TEFC				WDD	00		
RELEASED						SHEET	1 / 1		
REL. DATE		WMO	Jaragua do Sul	Product Engineering					

5 HP 06 Poles 60 Hz

A



NEMA
Premium



MADE IN MEXICO

MAT: 12675389 CC029A

W01.TE0IC0X0N

MODEL 00512ET3E215TC-S

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 5.0
FR 213/5TC		KW 3.7
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 13.5/6.74
INS CL F AT 80K	IP55	SFA 15.5/7.75
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE H	PF 0.77
		RPM 1175
		NEMA NOM. EFF 89.5%

ALTERNATE RATING: 5.0HP	50Hz	190-220/380-415V	SF1.00
18.3-14.3/8.13-7.60A	960RPM	EFF 85.4%	(IE2) IEC 60034-1

For safe area-inverter duty motor For 60Hz use on VPWM 1000:1 VT, 4:1 CT

DE 6208-ZZ	ODE 6206-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-RED BRK

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.

