

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :			
Product line	: Premium Efficiency Three-Phase	Product code :	14798675
		Catalog # :	00156ET3E56-S
Frame	: 56	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 ³	: 32.8 lb
Protection degree	: IP55	Moment of inertia (J)	: 0.1023 sq.ft.lb
Design	: B		
Output [HP]	1.5	1.5	1.5
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	3.74/1.87	4.44/2.22	4.02/2.13
L. R. Amperes [A]	34.0/17.0	32.0/16.0	32.1/17.0
LRC [A]	9.1x(Code L)	7.2x(Code H)	8.0x(Code J)
No load current [A]	1.72/0.859	1.69/0.845	1.72/0.914
Rated speed [RPM]	3520	2895	2905
Slip [%]	2.22	3.50	3.17
Rated torque [ft.lb]	2.24	2.72	2.71
Locked rotor torque [%]	229	190	220
Breakdown torque [%]	300	280	310
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	30s (cold) 17s (hot)	28s (cold) 16s (hot)	27s (cold) 15s (hot)
Noise level ²	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)
Efficiency (%)	25%	78.4	82.2
	50%	80.0	82.2
	75%	82.5	84.0
	100%	84.0	83.6
Power Factor	25%	0.44	0.46
	50%	0.71	0.73
	75%	0.82	0.84
	100%	0.88	0.89
Bearing type	: <u>Drive end</u> 6204 ZZ <u>Non drive end</u> 6202 ZZ	Foundation loads	
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 66 lb
		Max. compression	: 99 lb
Lubrication interval	: -		
Lubricant amount	: -		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 4.13A SF 1.00 SFA 4.13A			
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 : Premium Efficiency Three-Phase

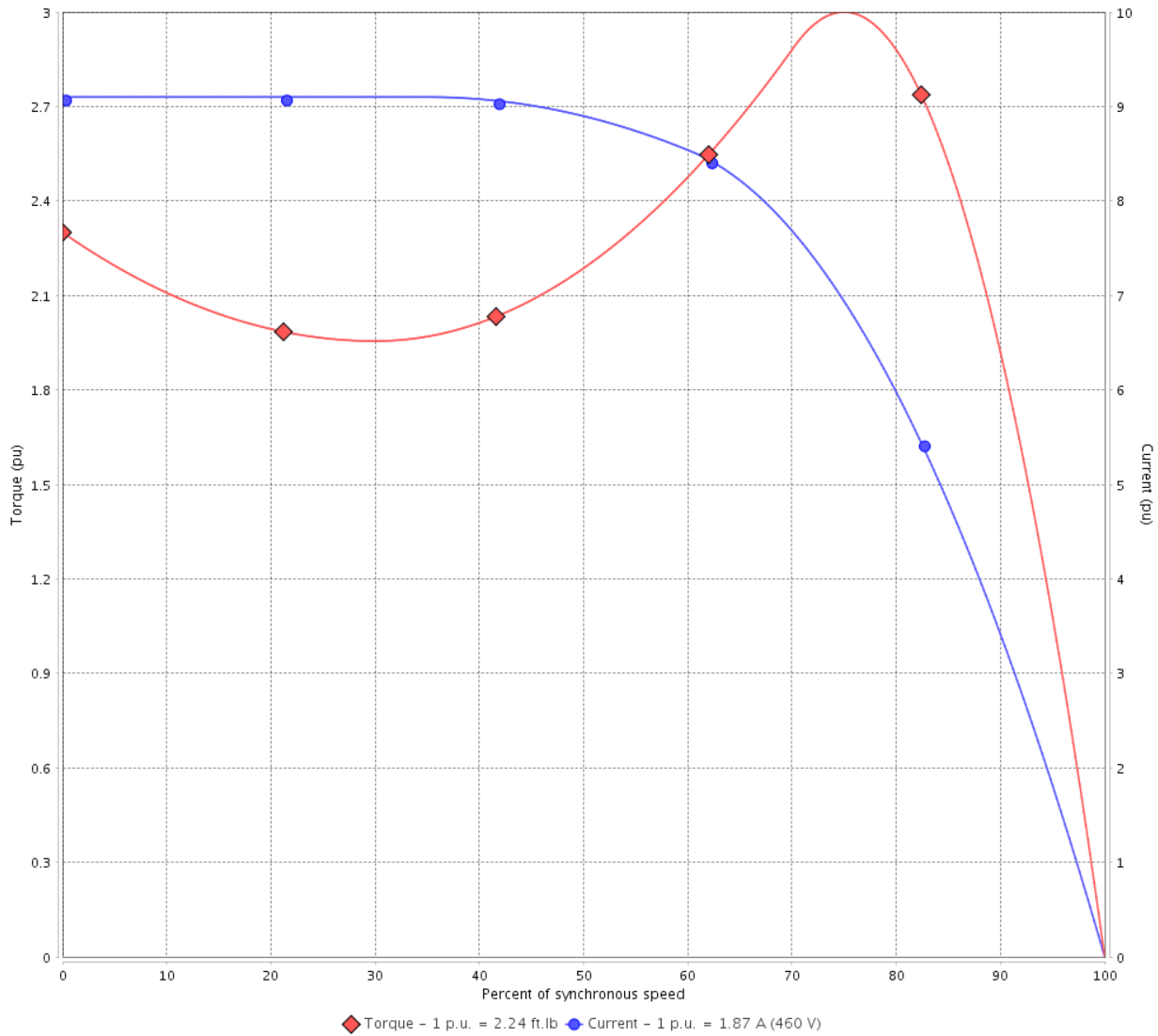
Product code :

14798675

Catalog # :

00156ET3E56-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current : 3.74/1.87 A
 LRC : 9.1
 Rated torque : 2.24 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 300 %
 Rated speed : 3520 rpm

Moment of inertia (J) : 0.1023 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

Locked rotor time : 30s (cold) 17s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



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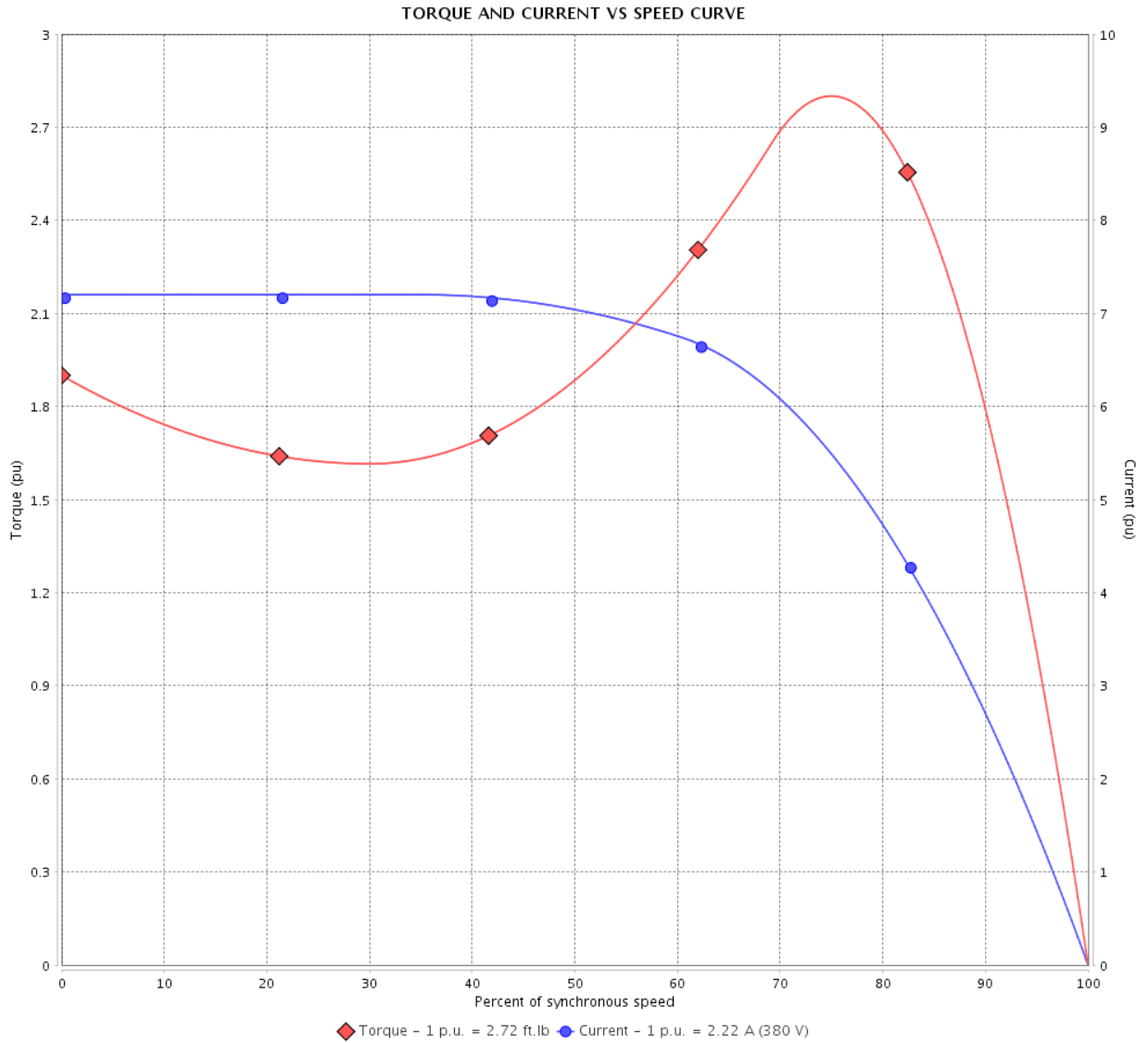
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Performance : 190/380 V 50 Hz 2P

Rated current : 4.44/2.22 A
 LRC : 7.2
 Rated torque : 2.72 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 280 %
 Rated speed : 2895 rpm

Moment of inertia (J) : 0.1023 sq.ft.lb
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 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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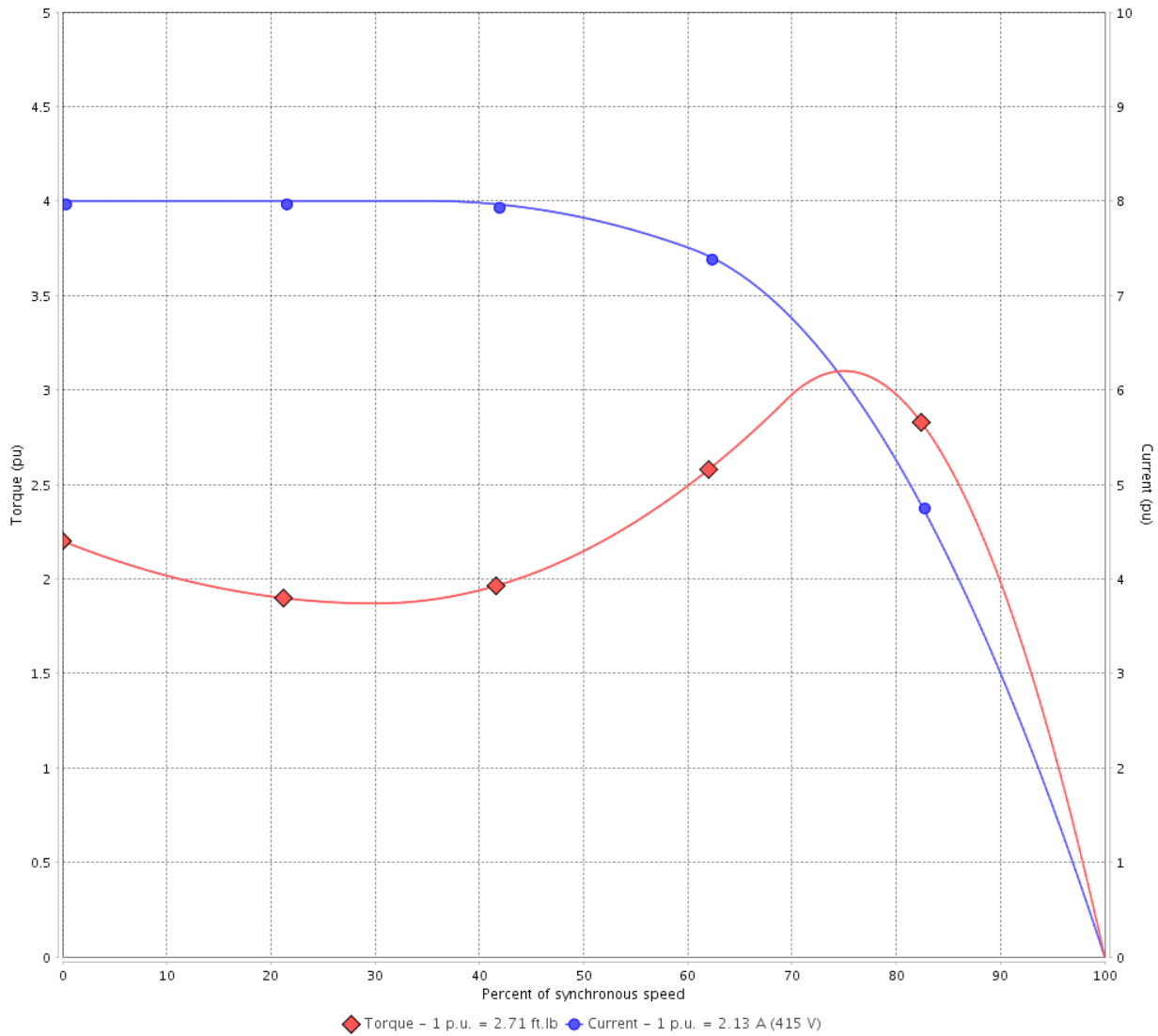
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current : 4.02/2.13 A
 LRC : 8.0
 Rated torque : 2.71 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 310 %
 Rated speed : 2905 rpm

Moment of inertia (J) : 0.1023 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 27s (cold) 15s (hot)

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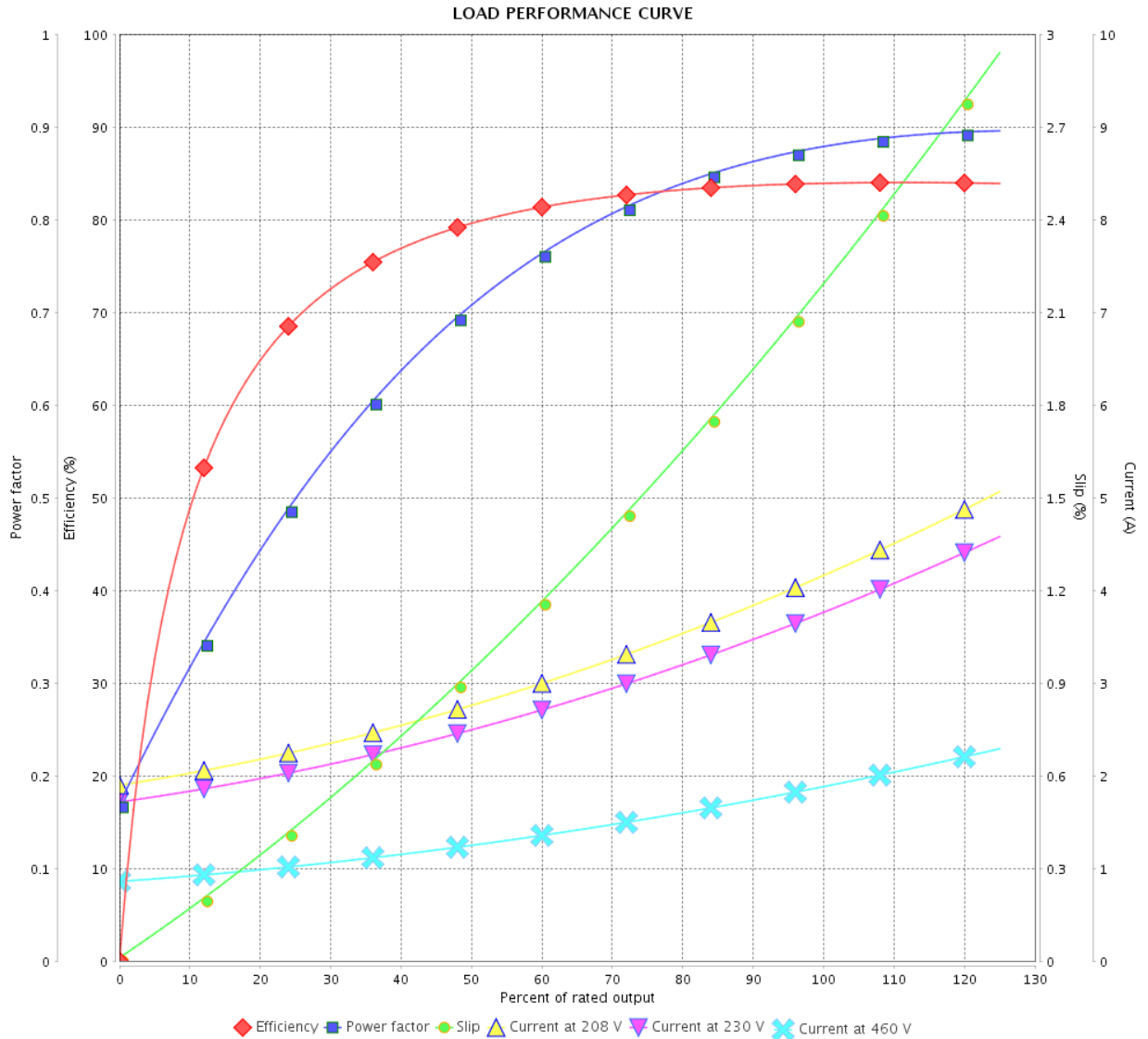
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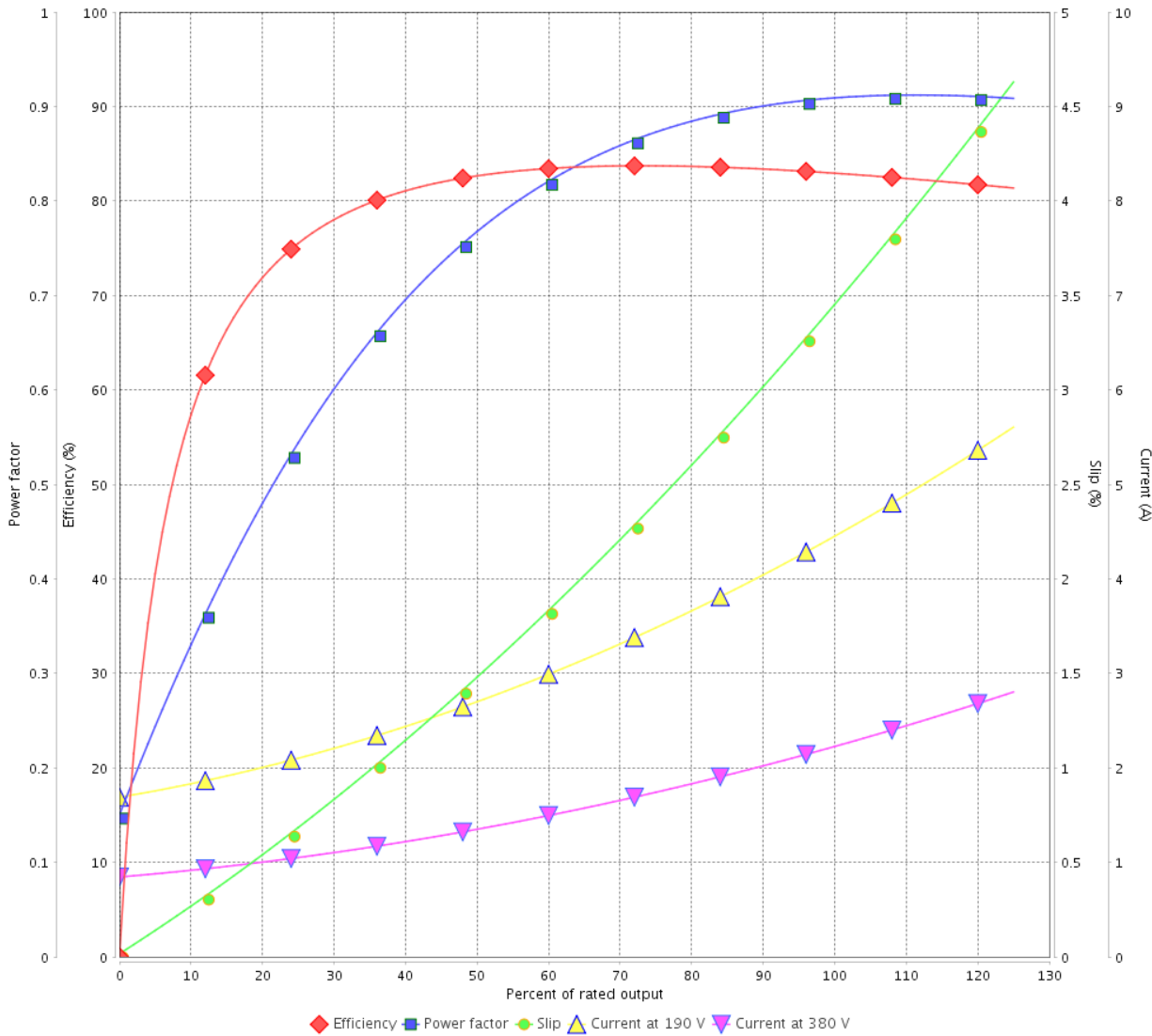
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Performance : 190/380 V 50 Hz 2P

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 Locked rotor torque : 190 %
 Breakdown torque : 280 %
 Rated speed : 2895 rpm

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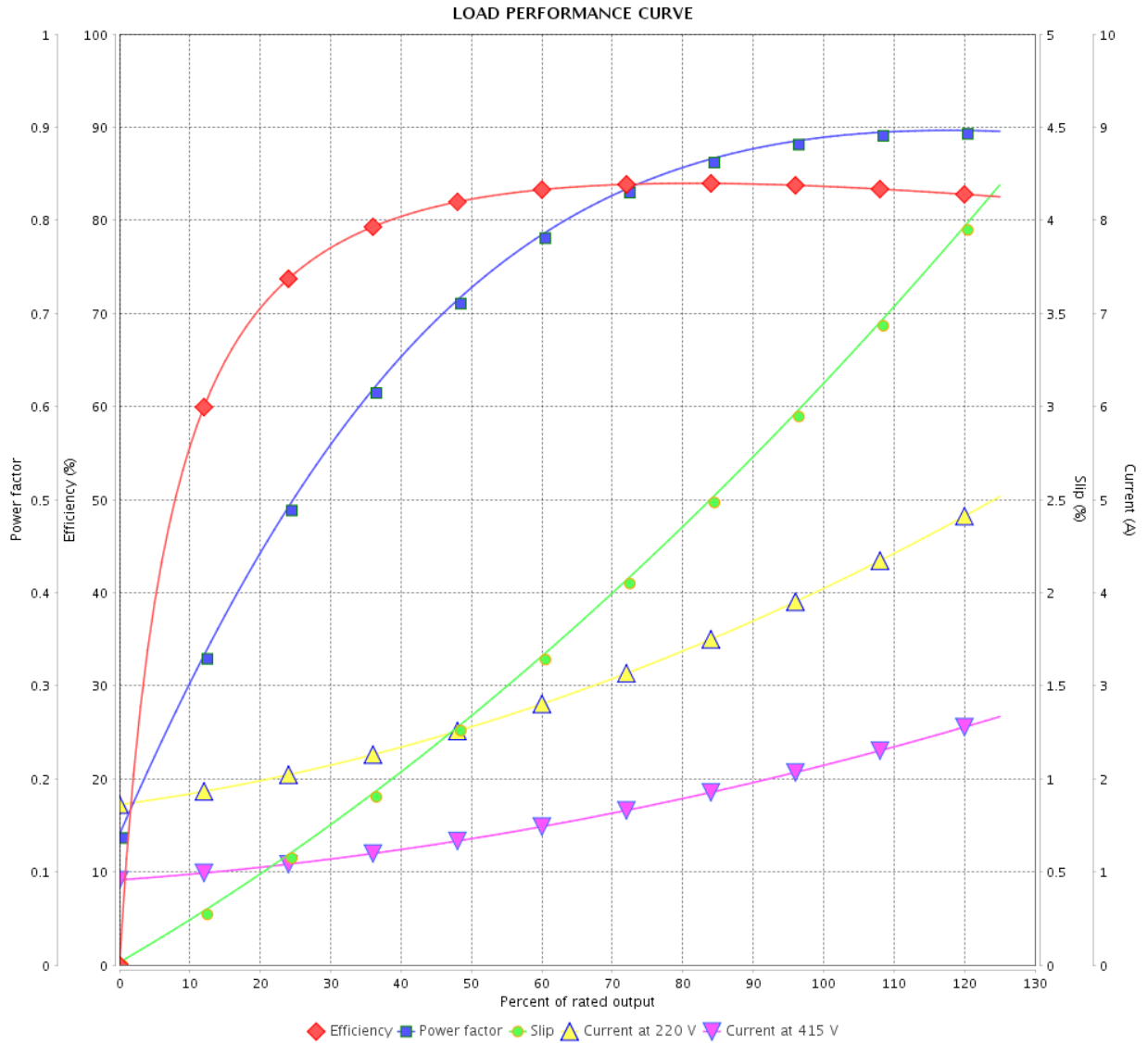
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THERMAL LIMIT CURVE

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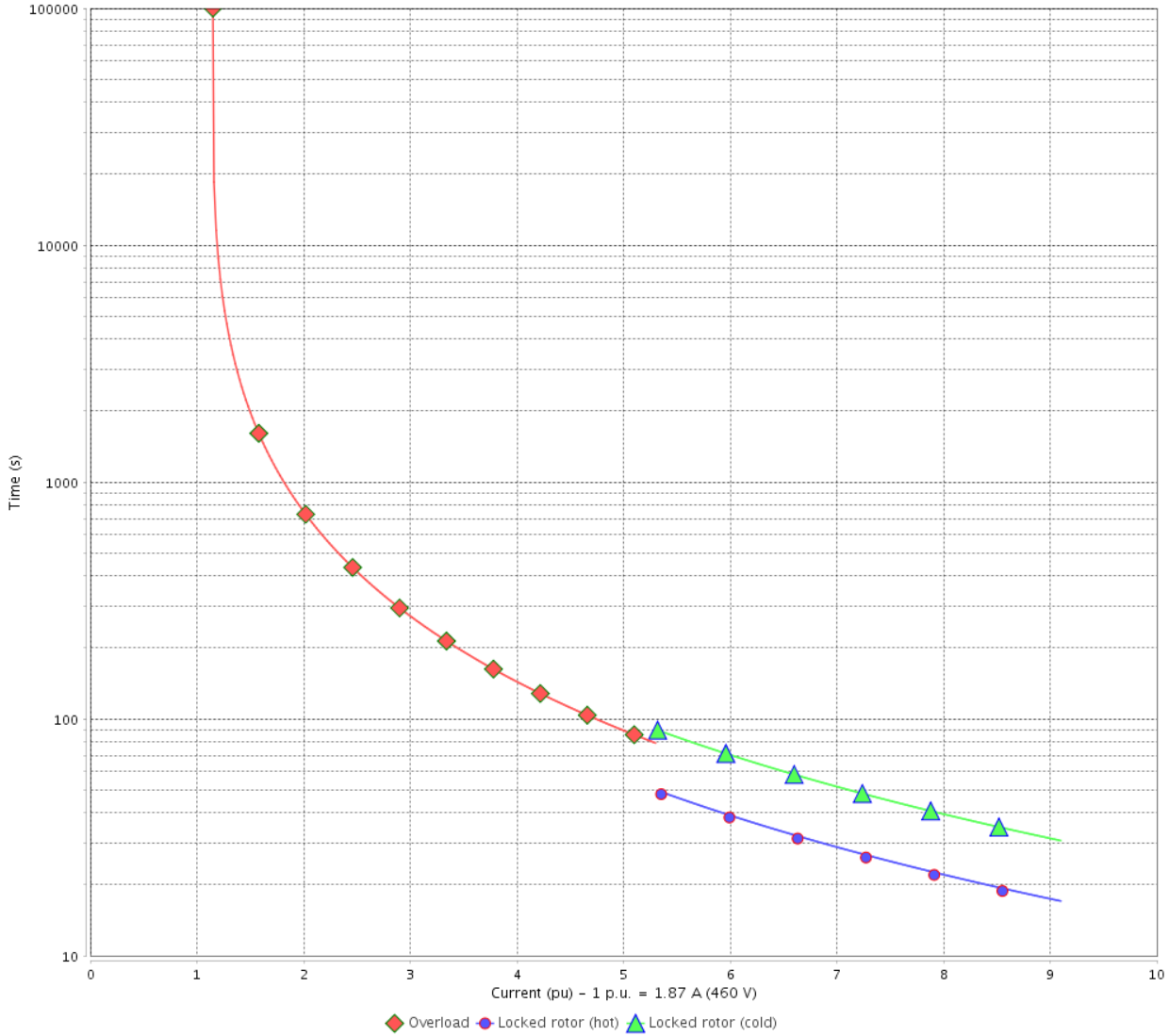
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Heating constant

Cooling constant

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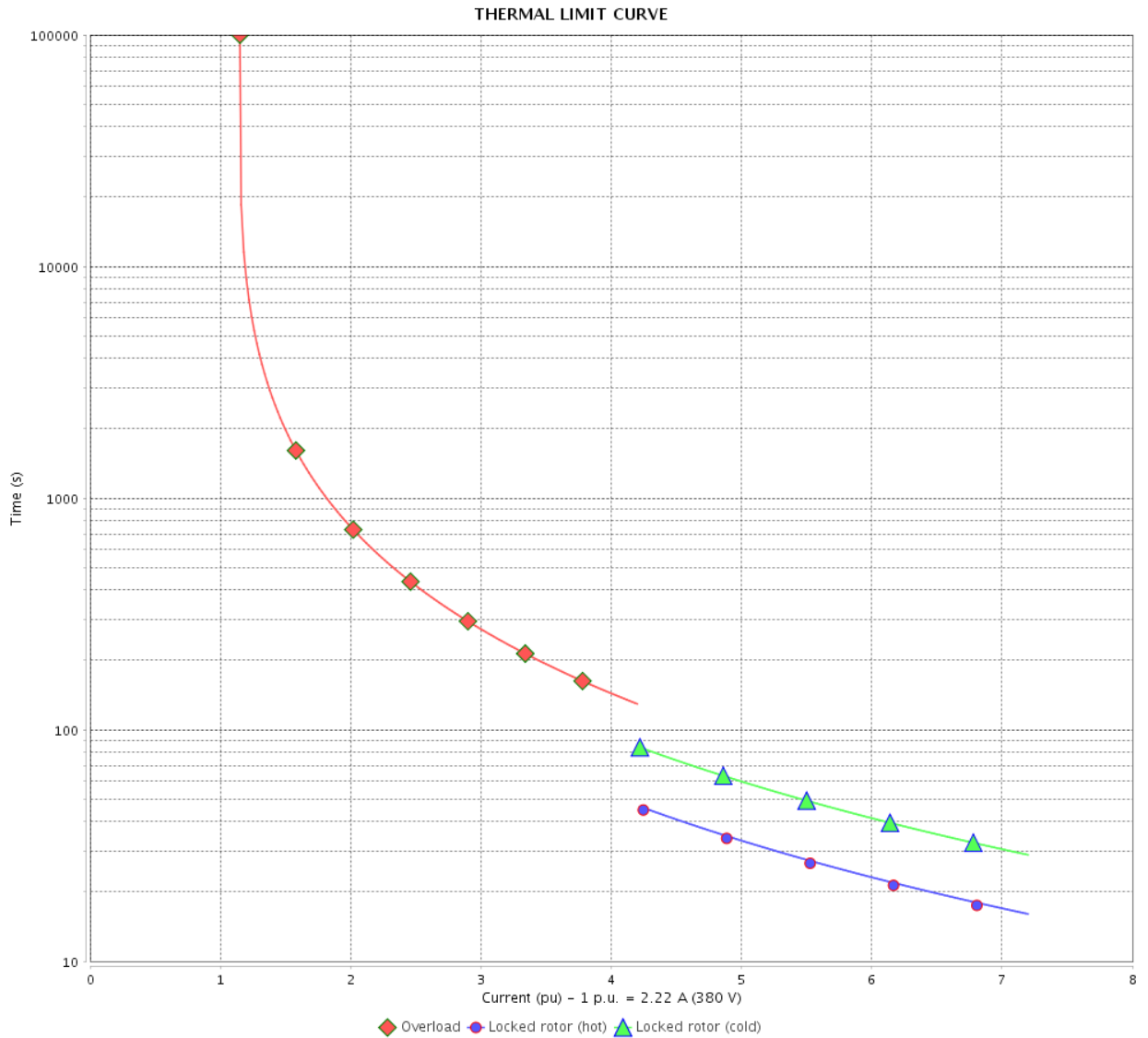
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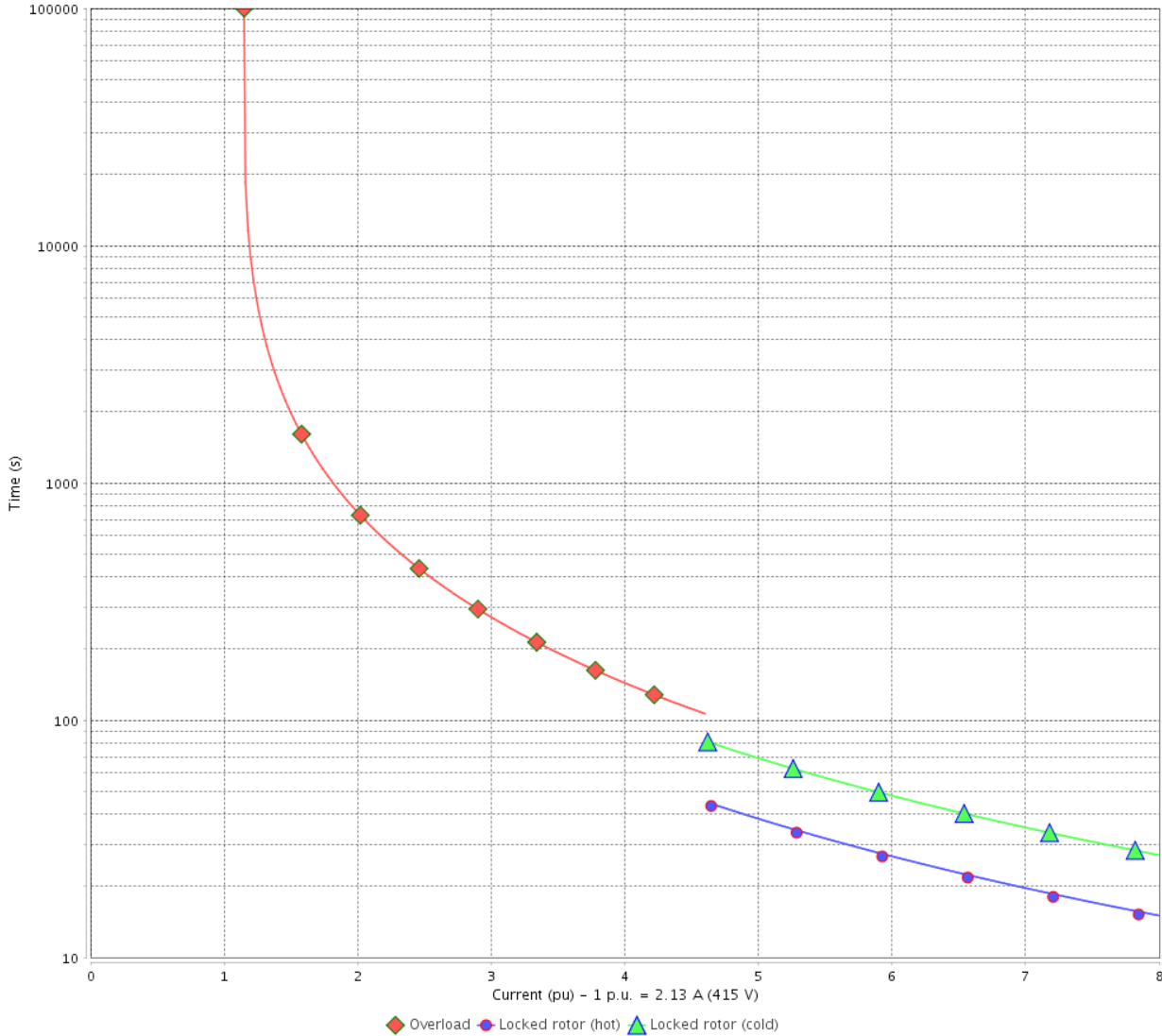
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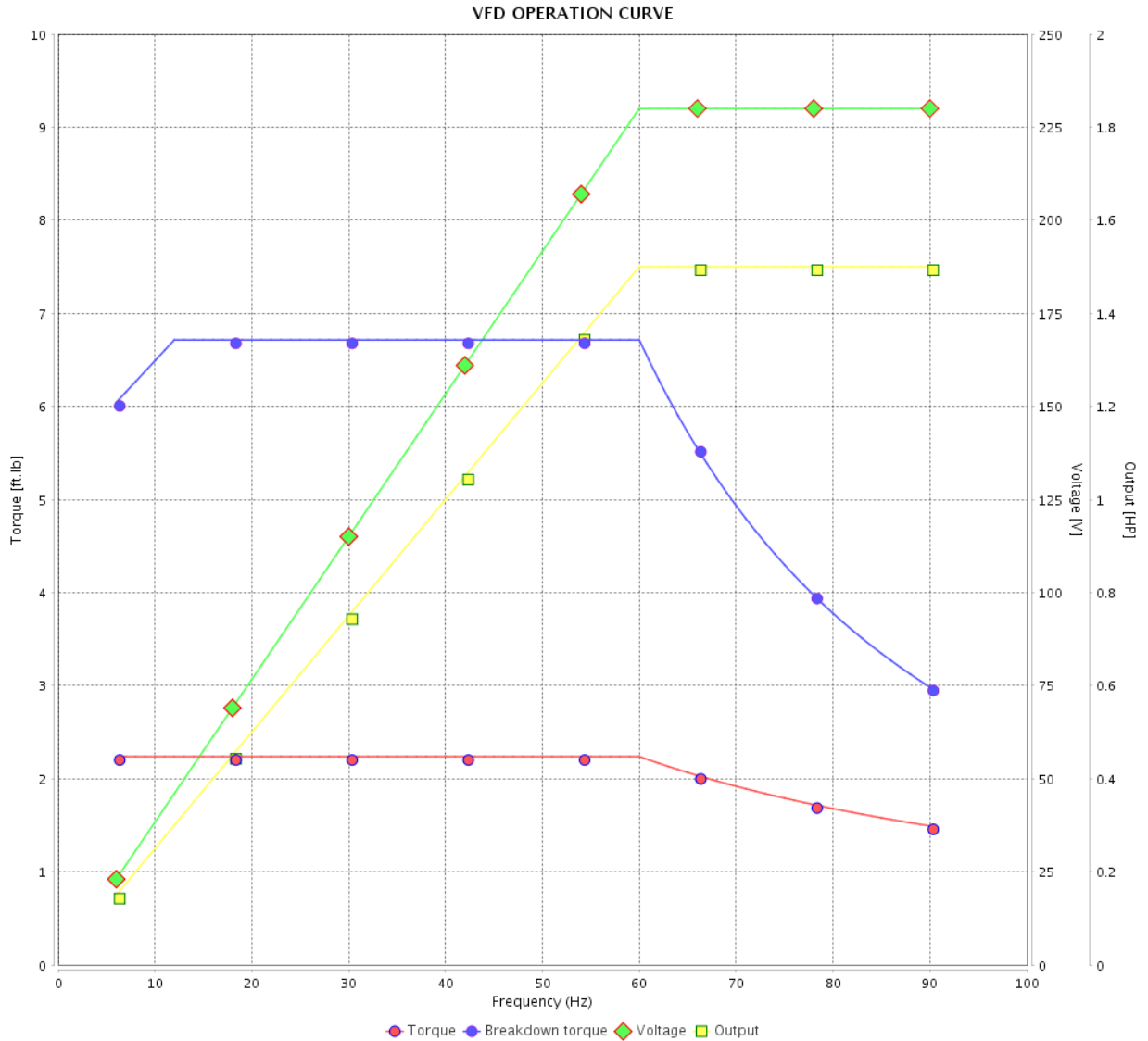
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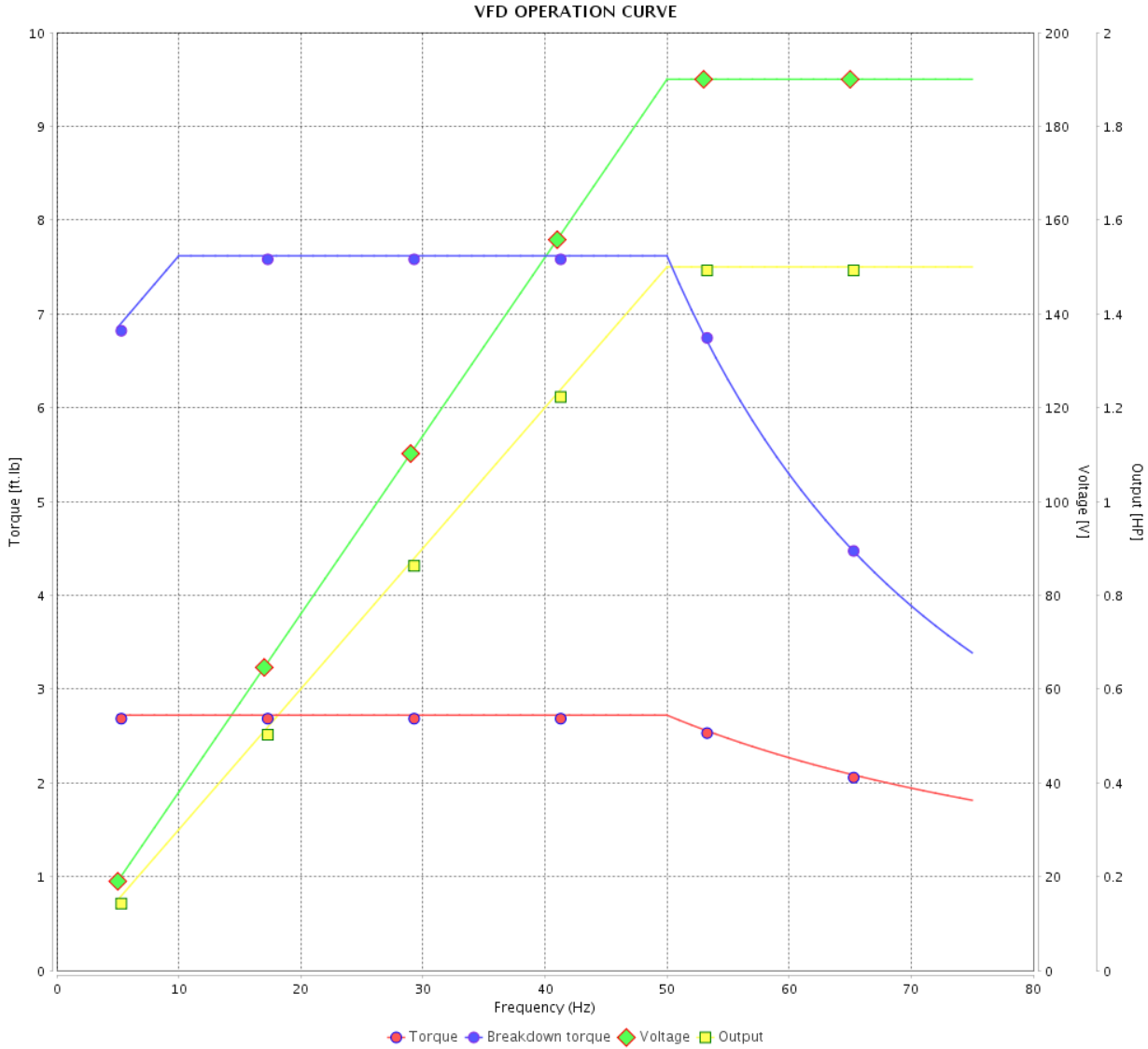
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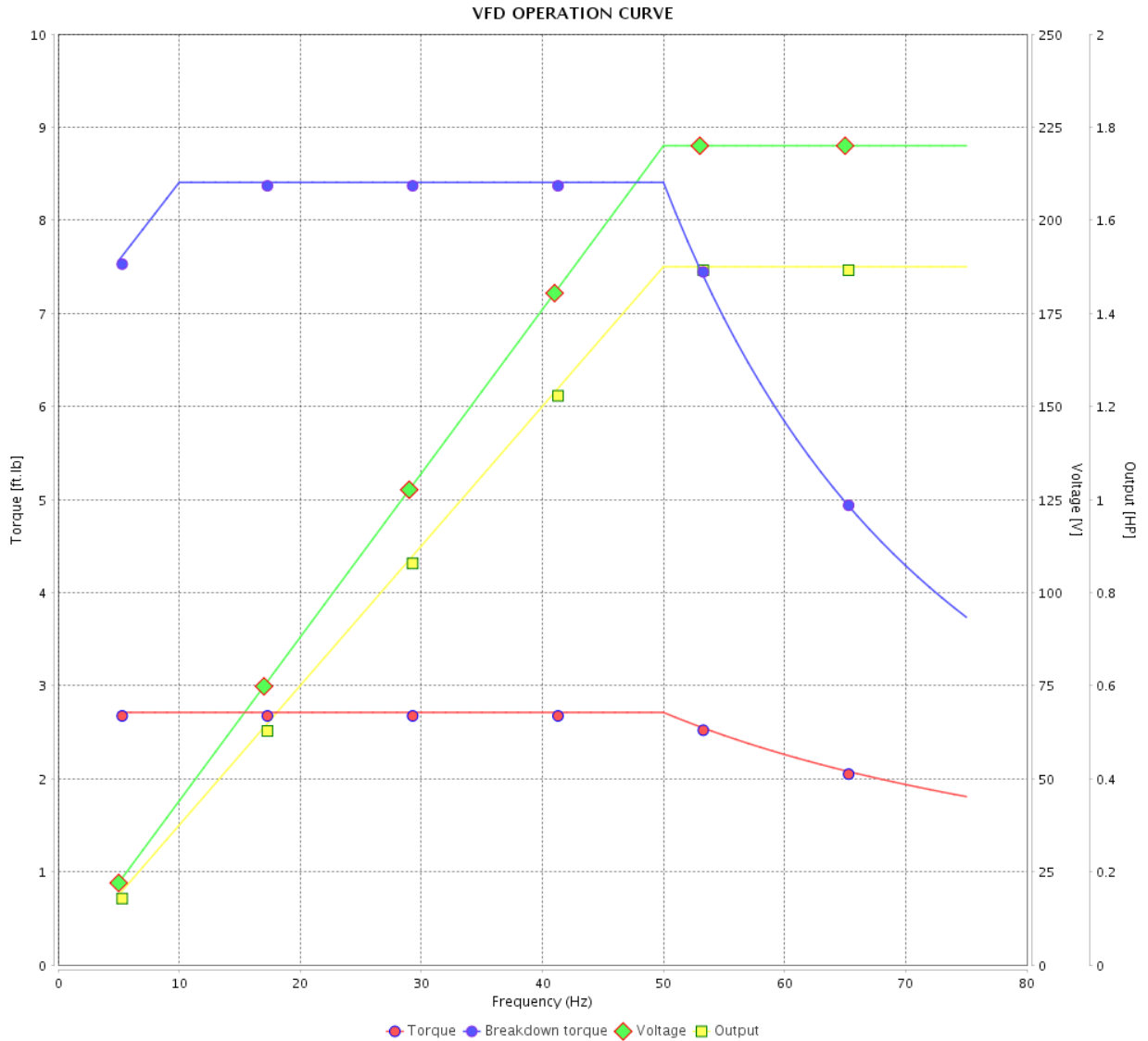
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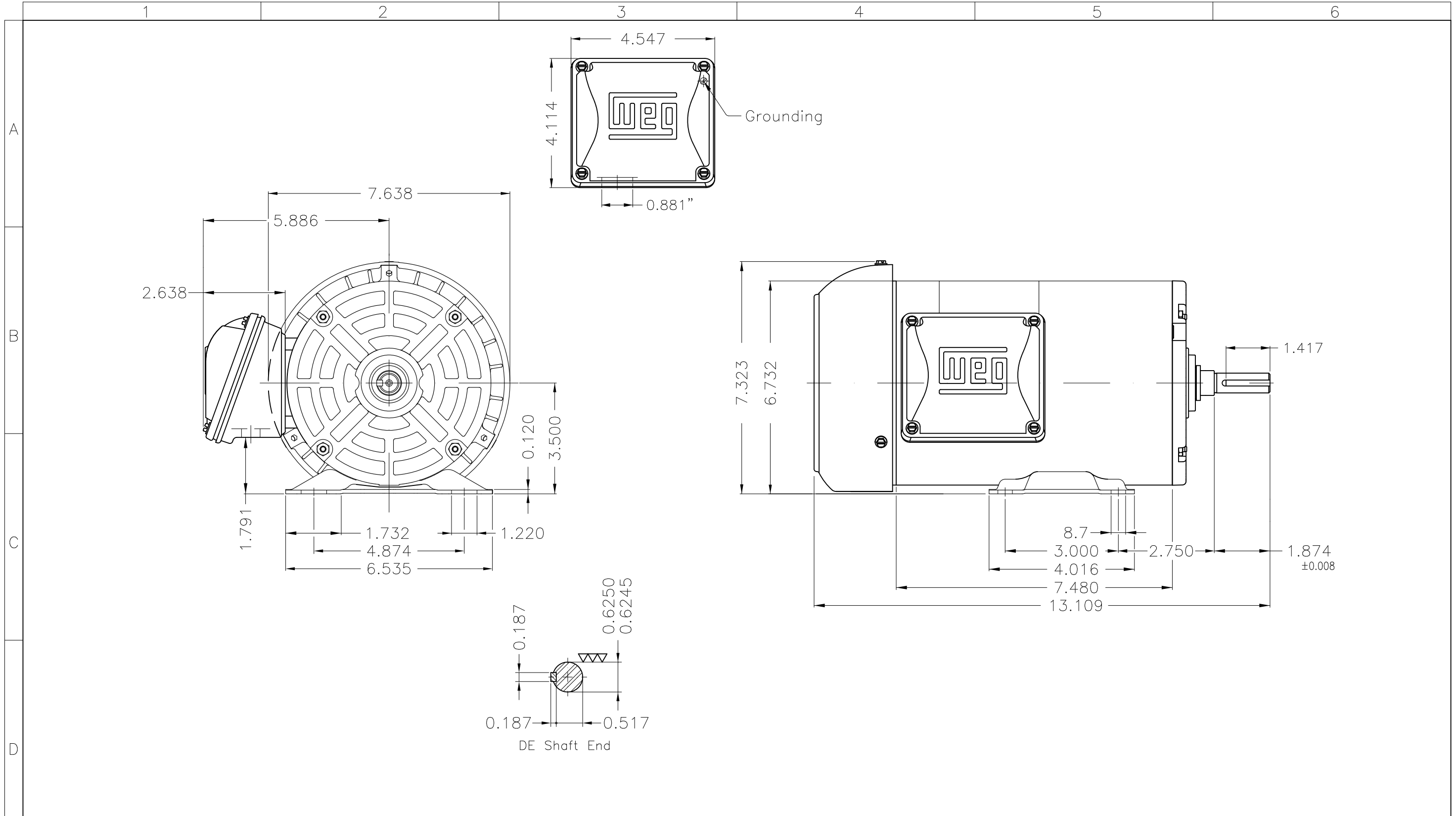



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Fan cover - steel plate											
Without coating											
Mounting F-1/B3R(D)											
ECM	LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.						PREVIEW WDD			
CHECKED		FRAME 56 IP55 TEFC									
RELEASED											
REL DT.		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1					

1.5 HP 02 Poles 60 Hz

**NEMA
Premium**

®



3PT9

C_{UL} US LISTED
FOR SAFE AREA

Energy Verified

MADE IN BRAZIL

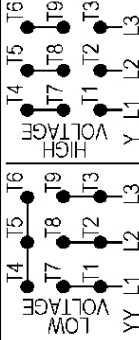
MAT: 14798675 CC029A**W01.TE0IC0X0X****MODEL 00156ET3E56-S****06DEC2021 B/N:****For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3
Div 2 Inverter Duty (SF1.00)****CT 2:1/VT 1000:1**

PH 3	Hz 60	HP 1.5
FR 56		KW 1.1
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 3.74/1.87
INS CL F AT 80K	IP55	SFA 4.30/2.15
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE L	PF 0.88
USABLE @ 208V 4.14A		RPM 3520
SF1.00		NEMA NOM. EFF 84.0%

ALTERNATE RATING: 1.5HP 50Hz 190-220/380-415V SF1.15
4.44-3.90/2.22-2.07A 2895RPM EFF 82.9% (IE3) 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.

