

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	14122310	
		Catalog # :	01018ET3E215TC-S	
Frame	: 213/5TC	Cooling method	: IC411 - TEFC	
Insulation class	: F	Mounting	: W-6	
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	: 141 lb	
Protection degree	: IP55	Moment of inertia (J)	: 1.07 sq.ft.lb	
Design	: B			
Output [HP]	10	7.5	7.5	
Poles	4	4	4	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	24.4/12.2	22.4/11.2	20.8/11.0	
L. R. Amperes [A]	171/85.4	170/85.1	172/91.3	
LRC [A]	7.0x(Code H)	7.6x(Code J)	8.3x(Code K)	
No load current [A]	11.1/5.54	10.9/5.46	11.3/5.97	
Rated speed [RPM]	1760	1465	1470	
Slip [%]	2.22	2.33	2.00	
Rated torque [ft.lb]	29.8	26.9	26.8	
Locked rotor torque [%]	250	250	290	
Breakdown torque [%]	300	320	360	
Service factor	1.15	1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	27s (cold) 15s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²	60.0 dB(A)	57.0 dB(A)	57.0 dB(A)	
Efficiency (%)	25%	90.2	89.3	
	50%	91.0	89.4	
	75%	91.0	90.5	
	100%	91.7	90.3	
Power Factor	25%	0.41	0.34	
	50%	0.67	0.59	
	75%	0.78	0.73	
	100%	0.84	0.80	
Bearing type	: <u>Drive end</u> 6208 ZZ <u>Non drive end</u> 6206 ZZ	Foundation loads		
Sealing	: V'Ring V'Ring	Max. traction	: 474 lb	
Lubrication interval	: - -	Max. compression	: 614 lb	
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 27.0A SF 1.00 SFA 27.0A				
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



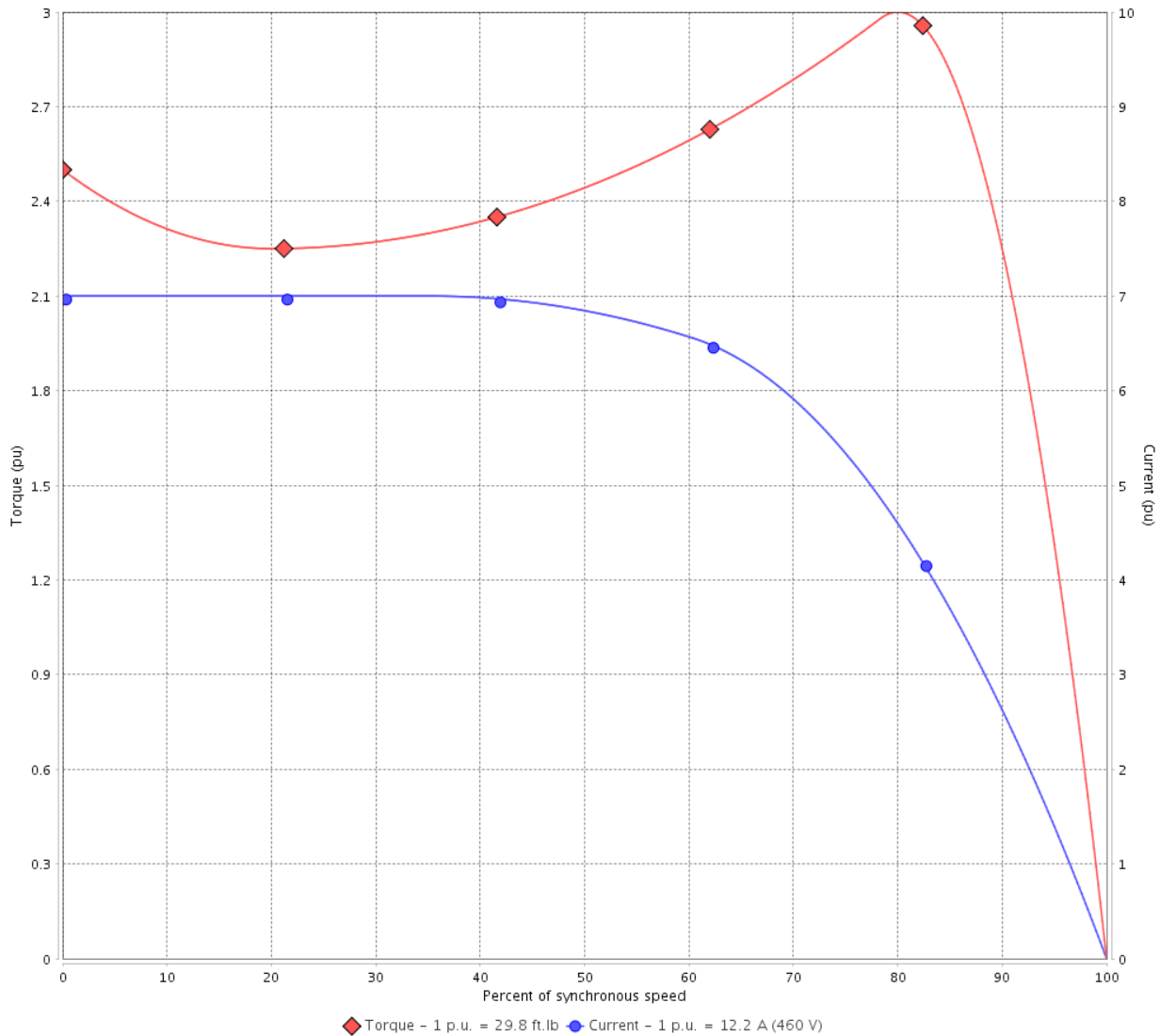
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14122310

Catalog # : 01018ET3E215TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current	: 24.4/12.2 A	Moment of inertia (J)	: 1.07 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 29.8 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE



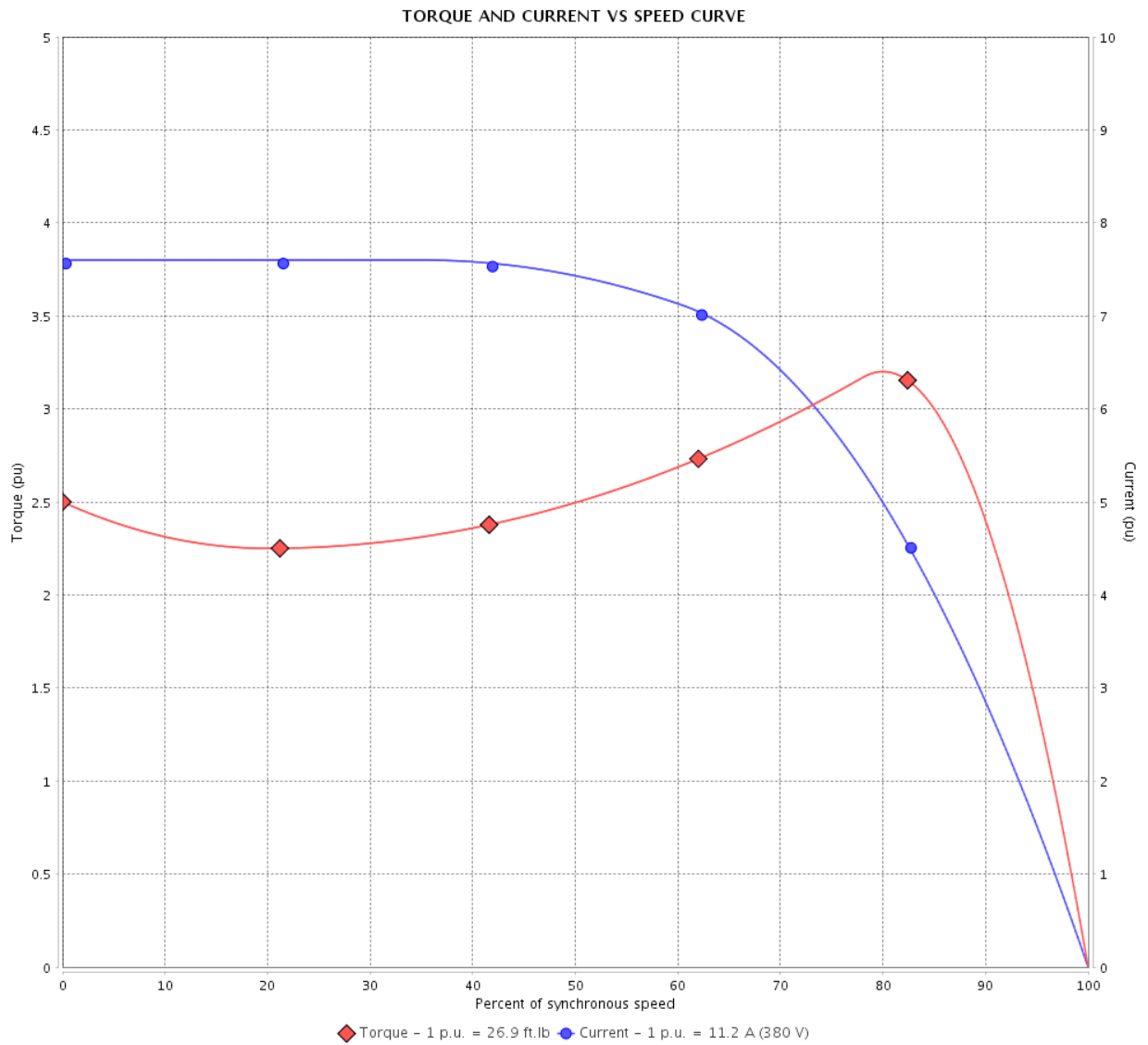
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14122310

Catalog # : 01018ET3E215TC-S



Performance : 190/380 V 50 Hz 4P

Rated current : 22.4/11.2 A
 LRC : 7.6
 Rated torque : 26.9 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 320 %
 Rated speed : 1465 rpm

Moment of inertia (J) : 1.07 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



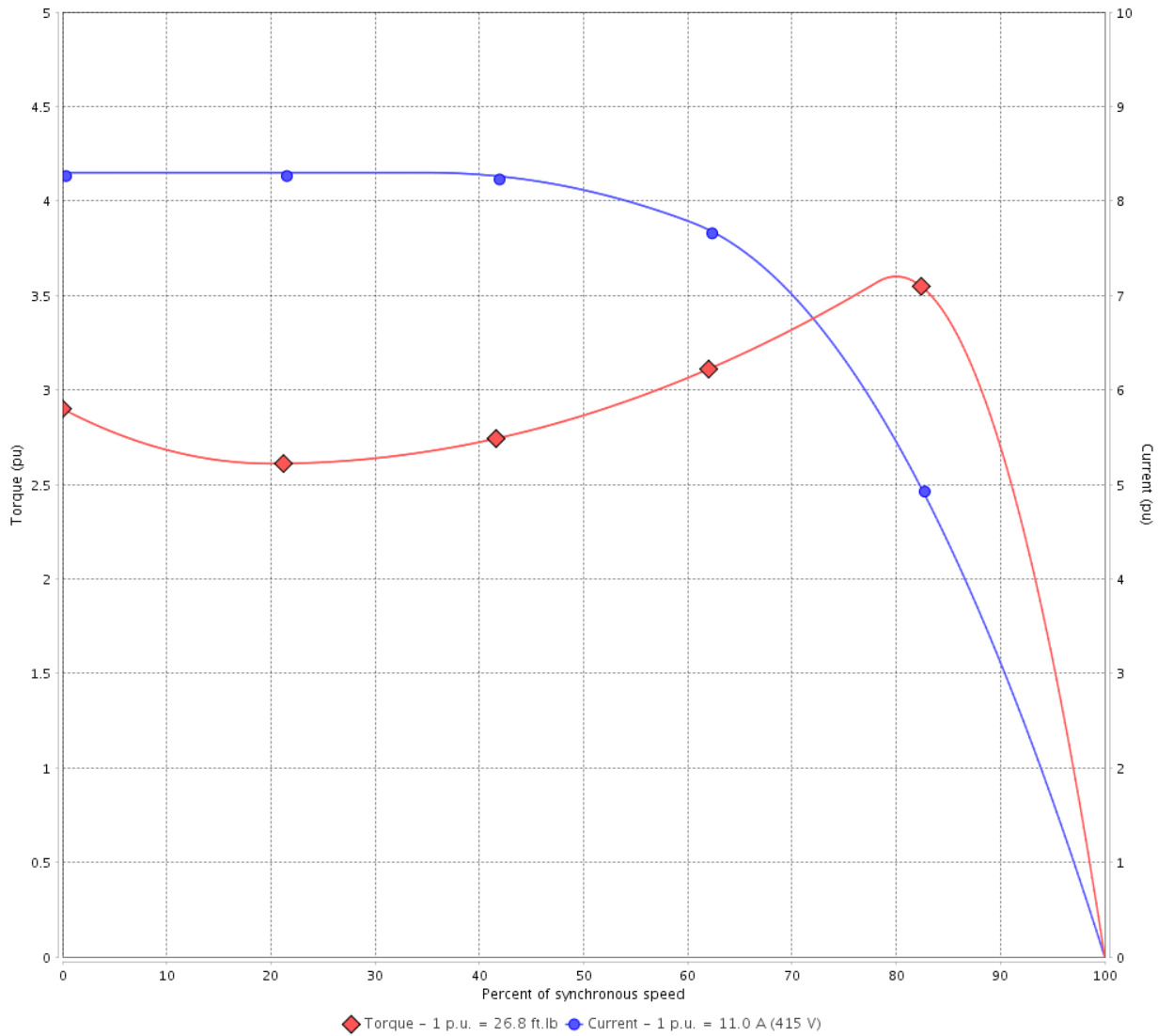
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Product code : 14122310

Catalog # : 01018ET3E215TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current	: 20.8/11.0 A	Moment of inertia (J)	: 1.07 sq.ft.lb
LRC	: 8.3	Duty cycle	: Cont.(S1)
Rated torque	: 26.8 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.15
Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 1470 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

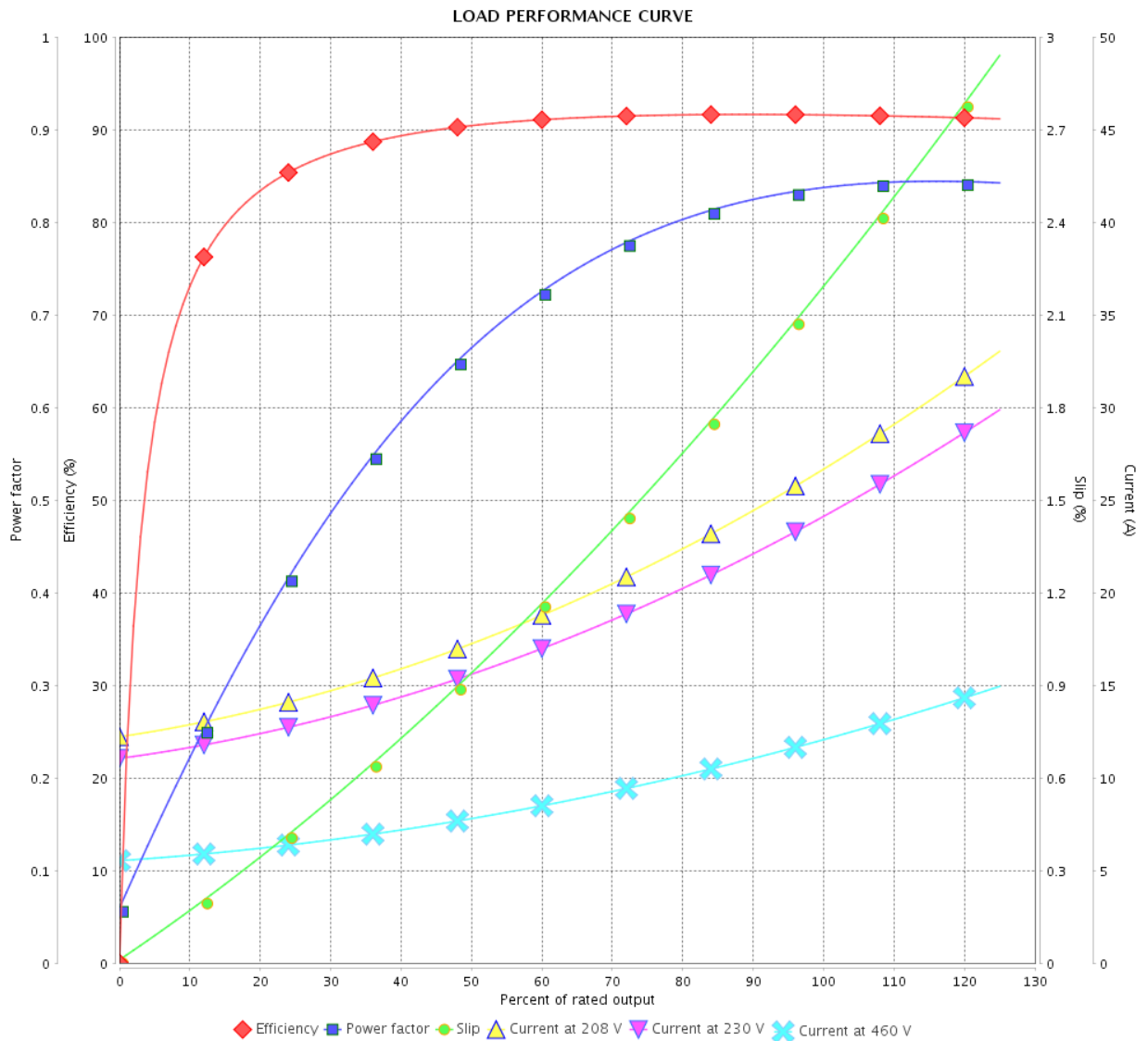


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 Breakdown torque : 300 %
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Moment of inertia (J) : 1.07 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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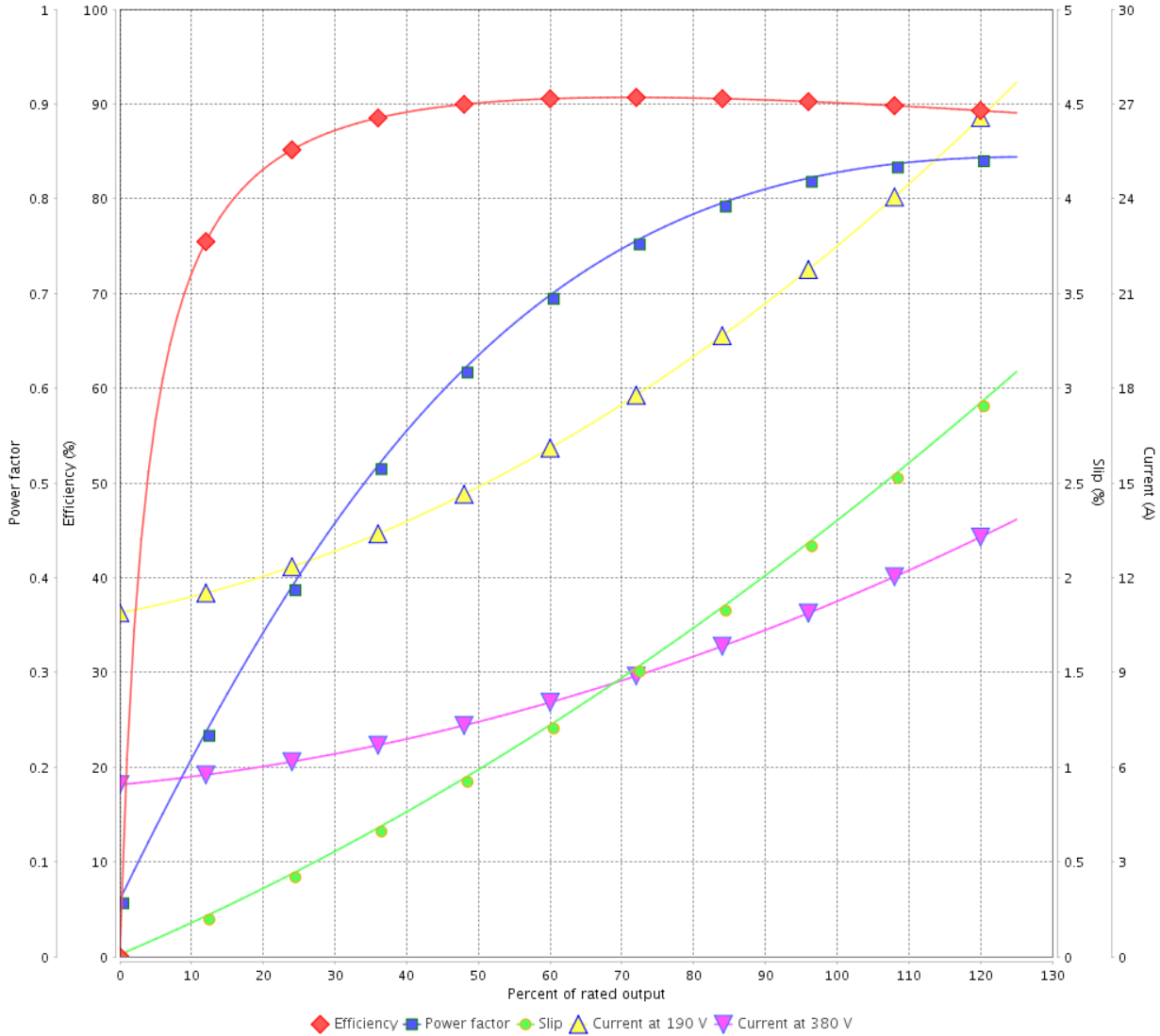
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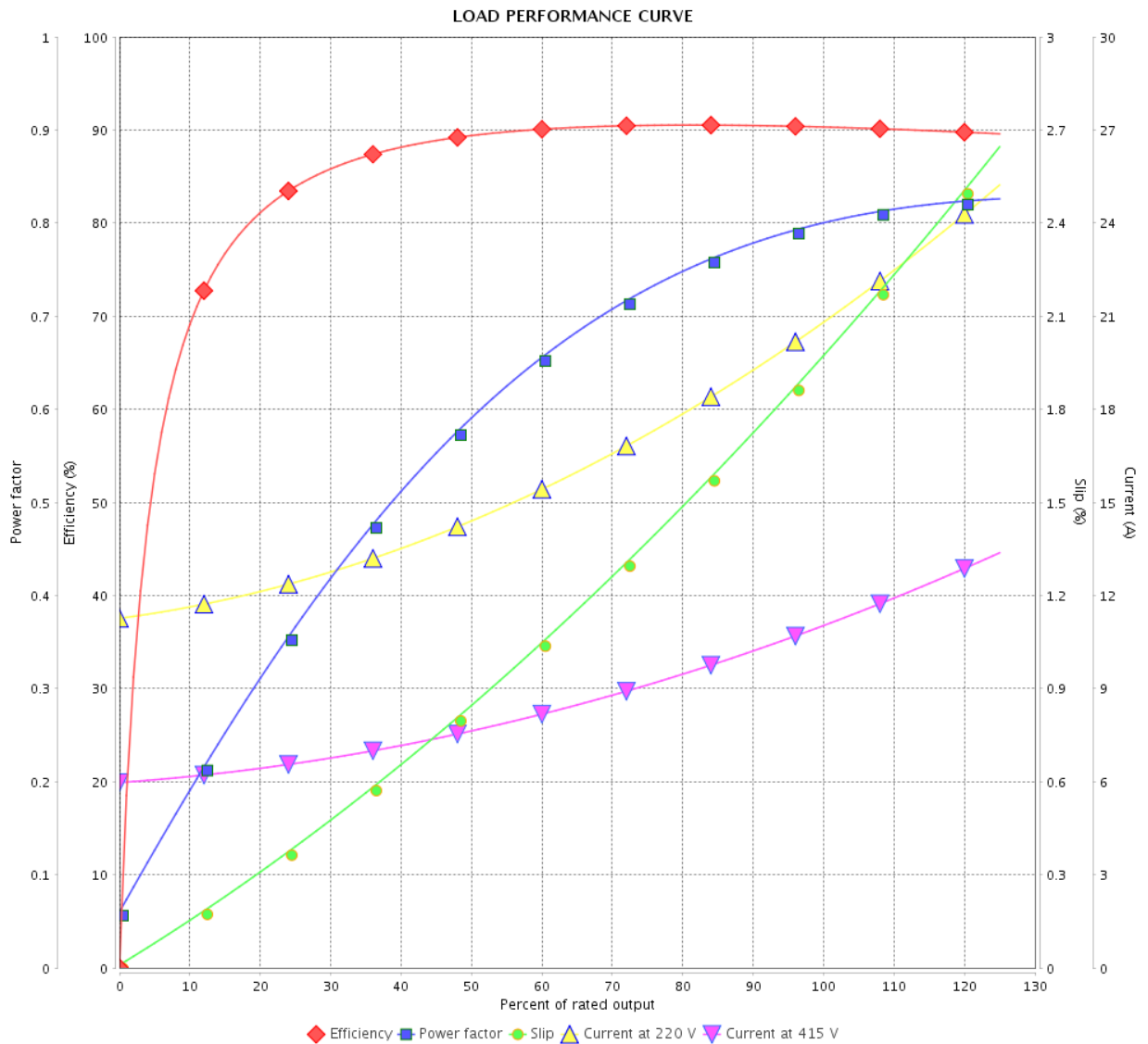


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Rated current : 20.8/11.0 A
 LRC : 8.3
 Rated torque : 26.8 ft.lb
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 Breakdown torque : 360 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 1.07 sq.ft.lb
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 Insulation class : F
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THERMAL LIMIT CURVE



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Rated speed : 1760 rpm	Design : B

Heating constant

Cooling constant

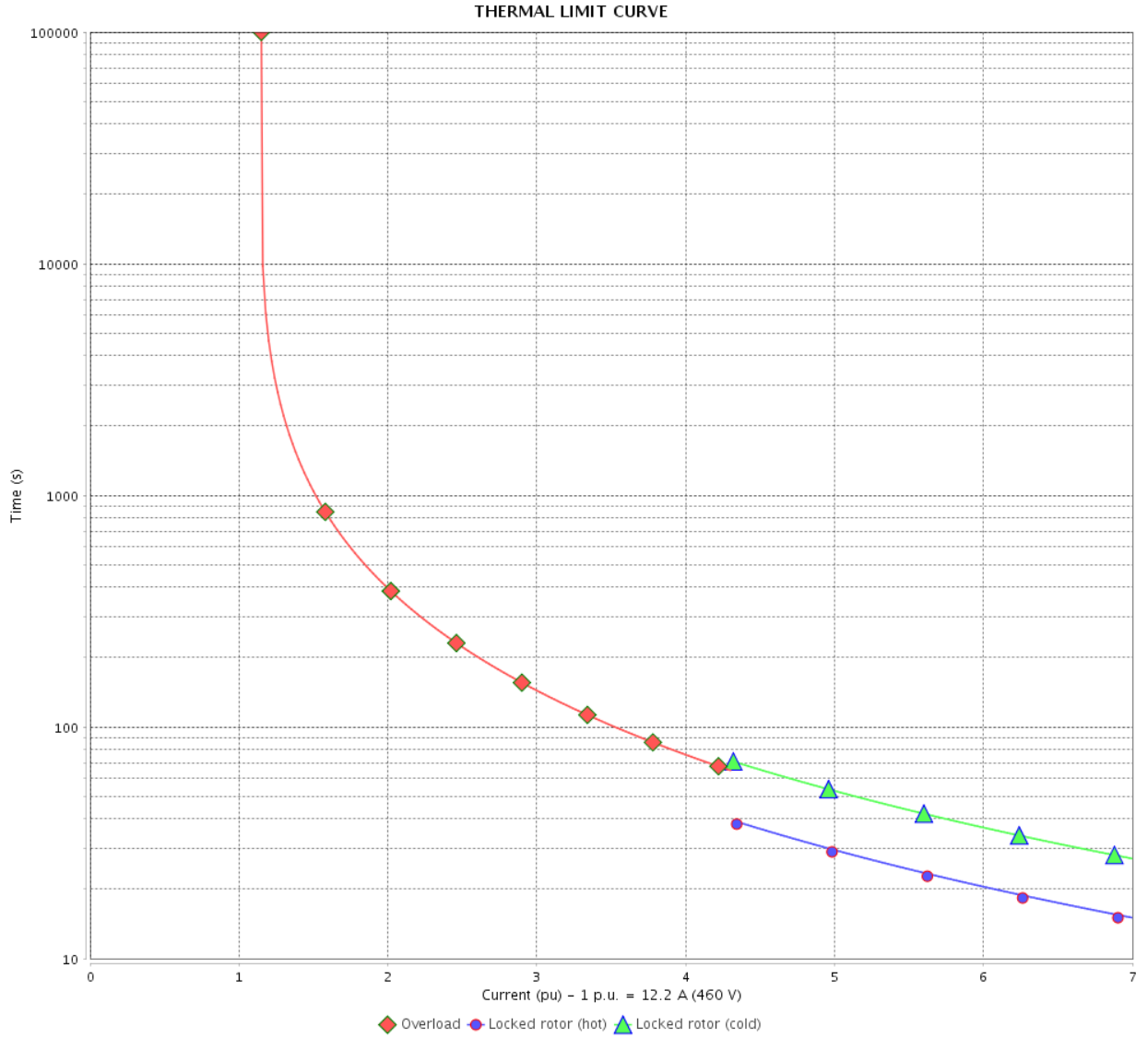
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Cooling constant

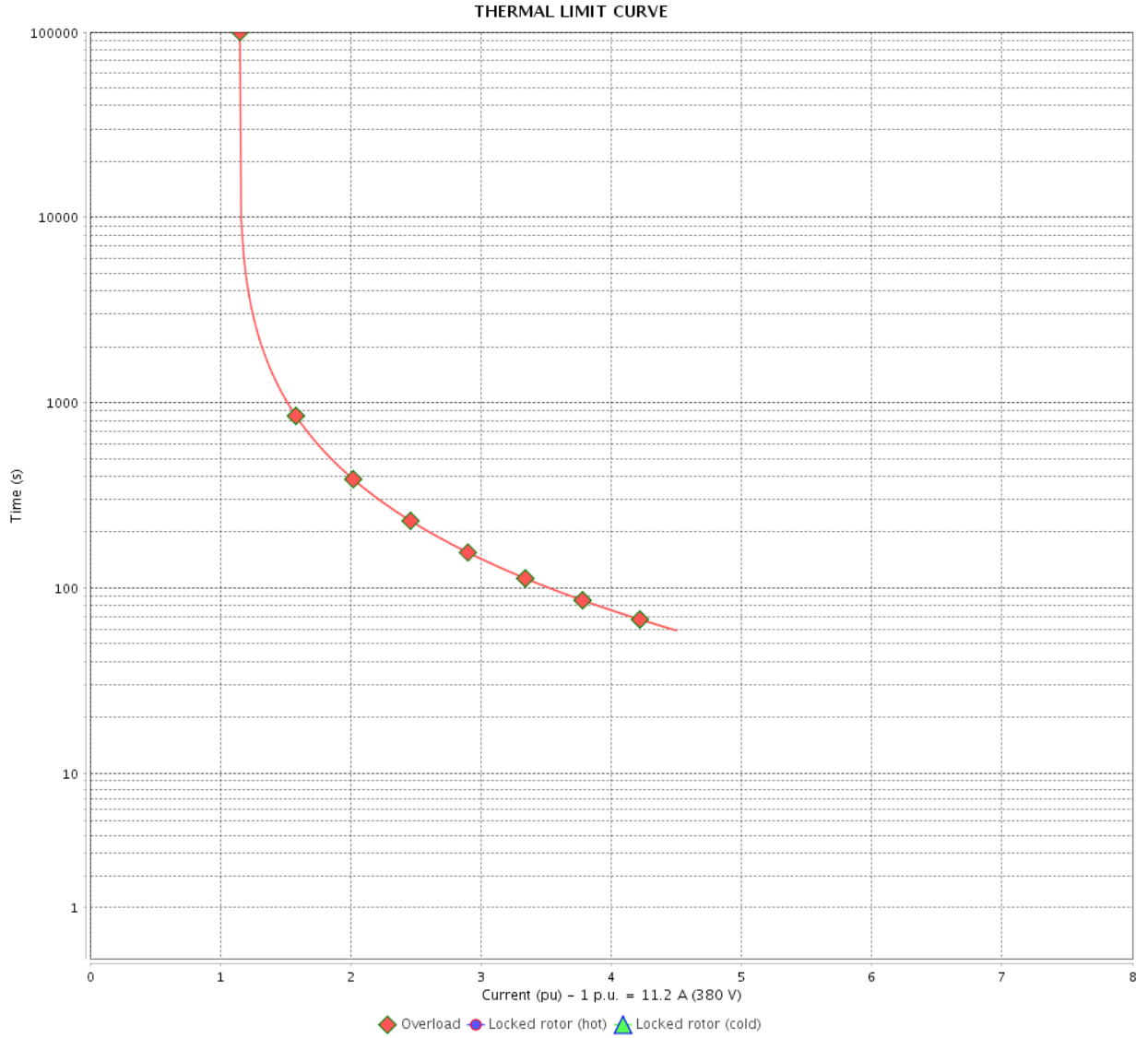
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Rated torque : 26.8 ft.lb	Insulation class : F
Locked rotor torque : 290 %	Service factor : 1.15
Breakdown torque : 360 %	Temperature rise : 80 K
Rated speed : 1470 rpm	Design : B

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Cooling constant

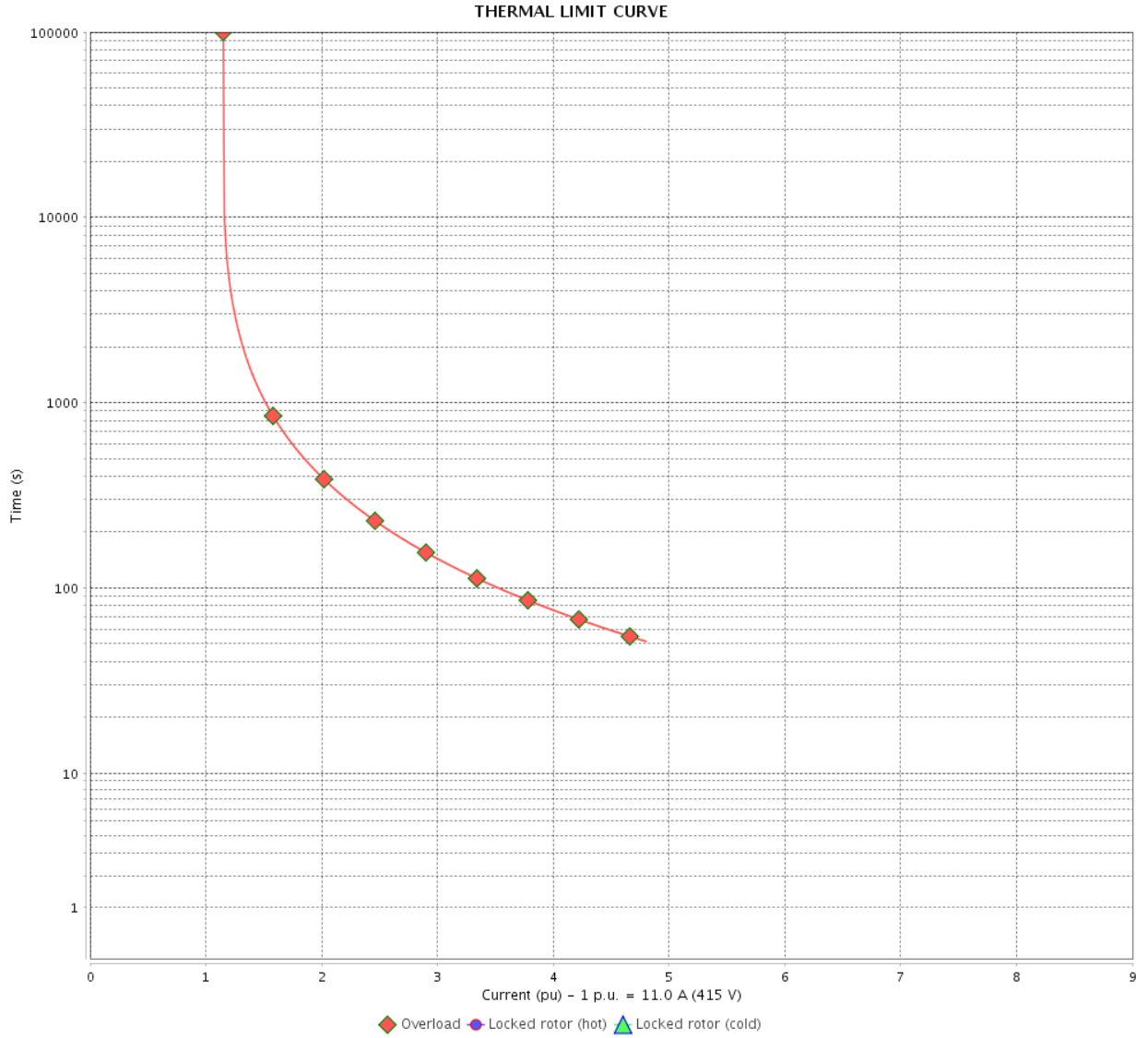
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



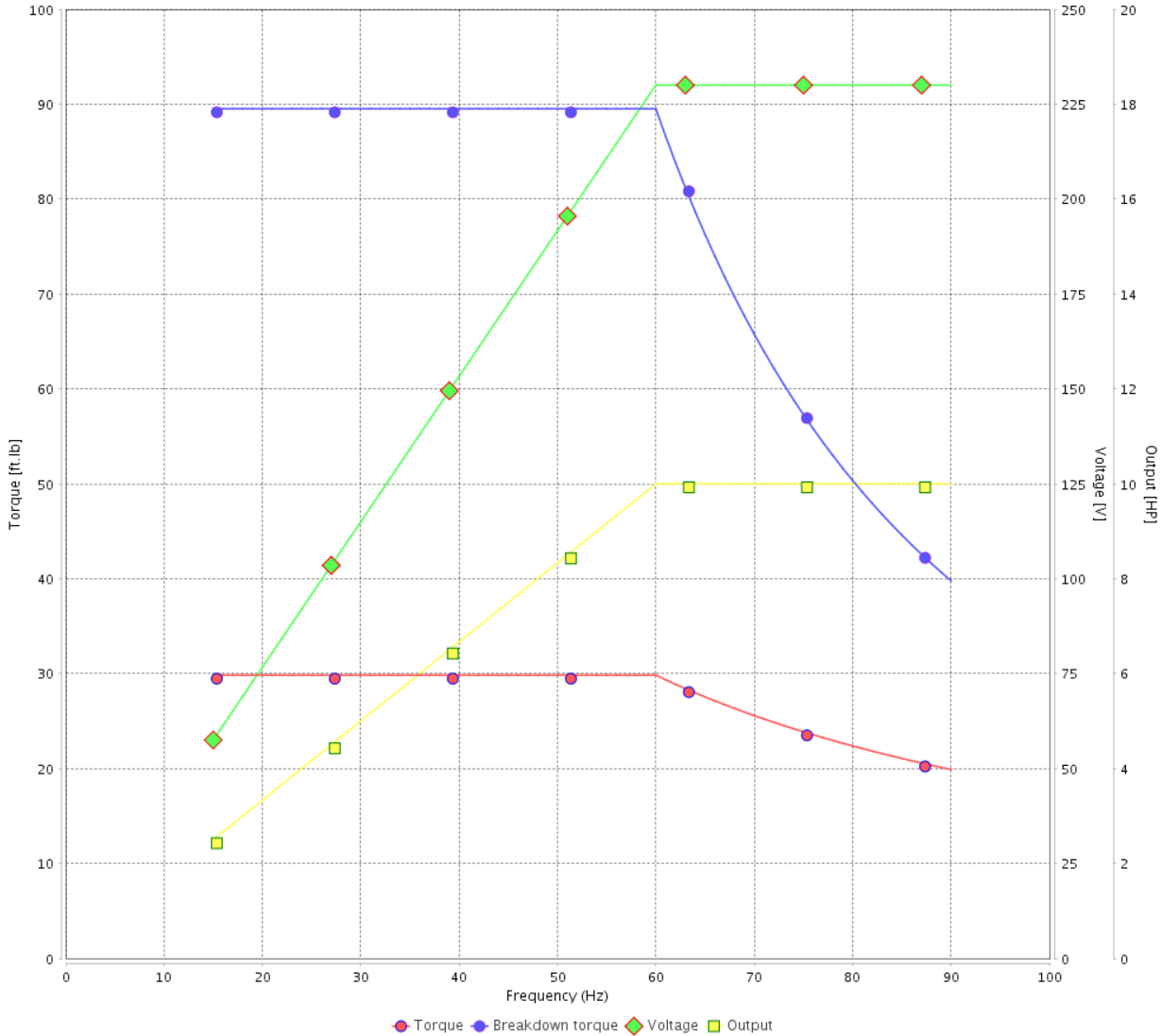
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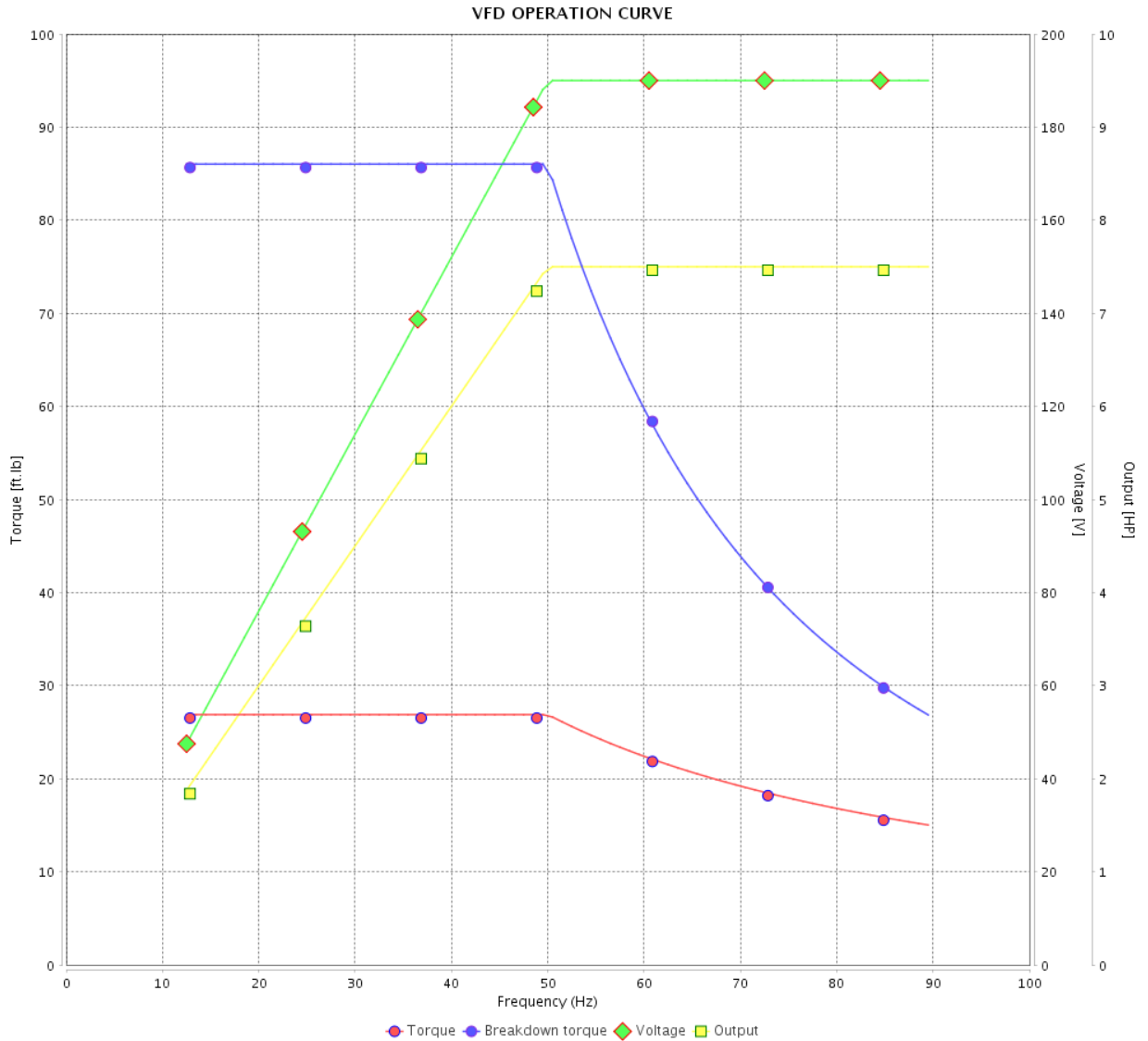


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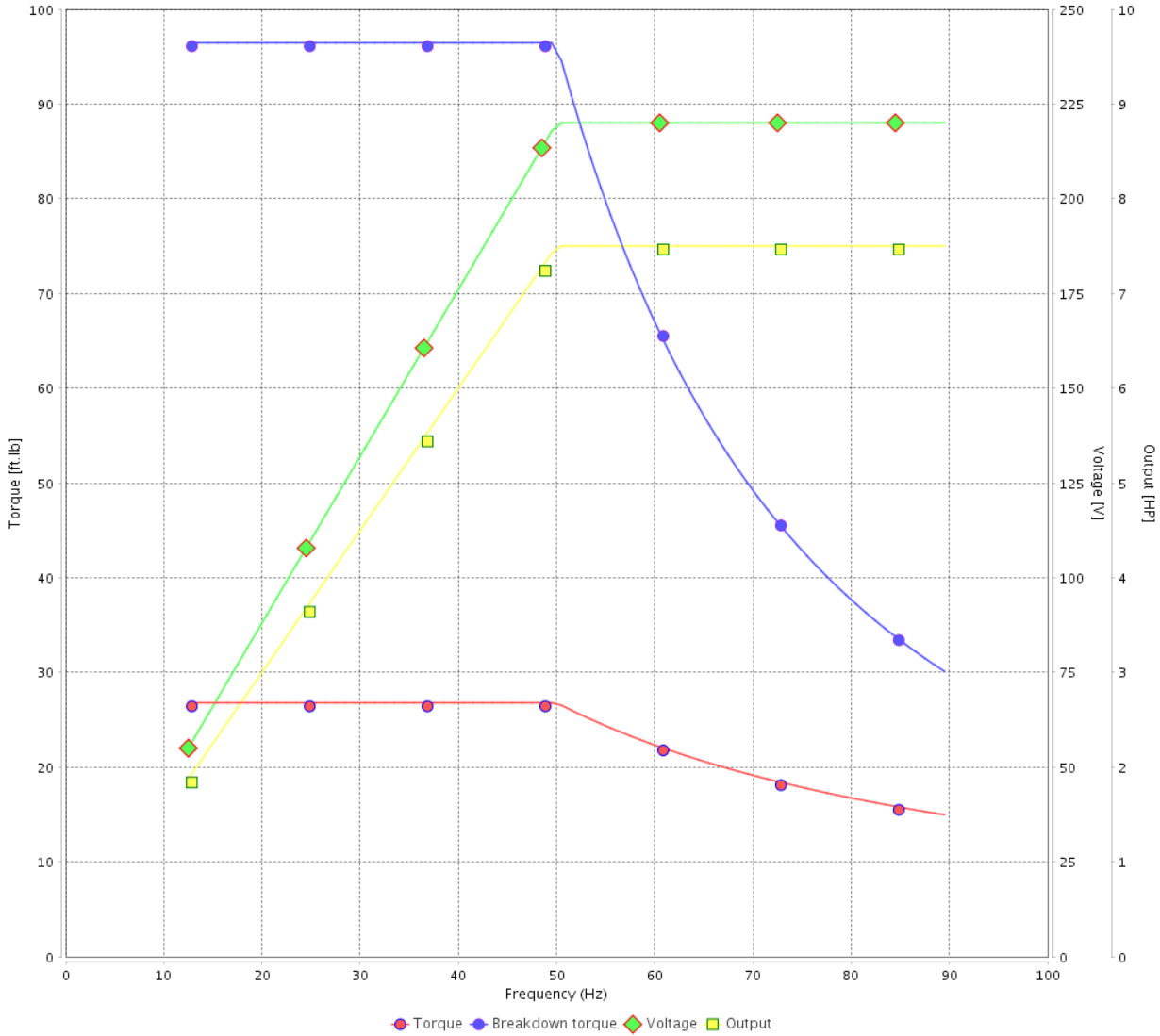
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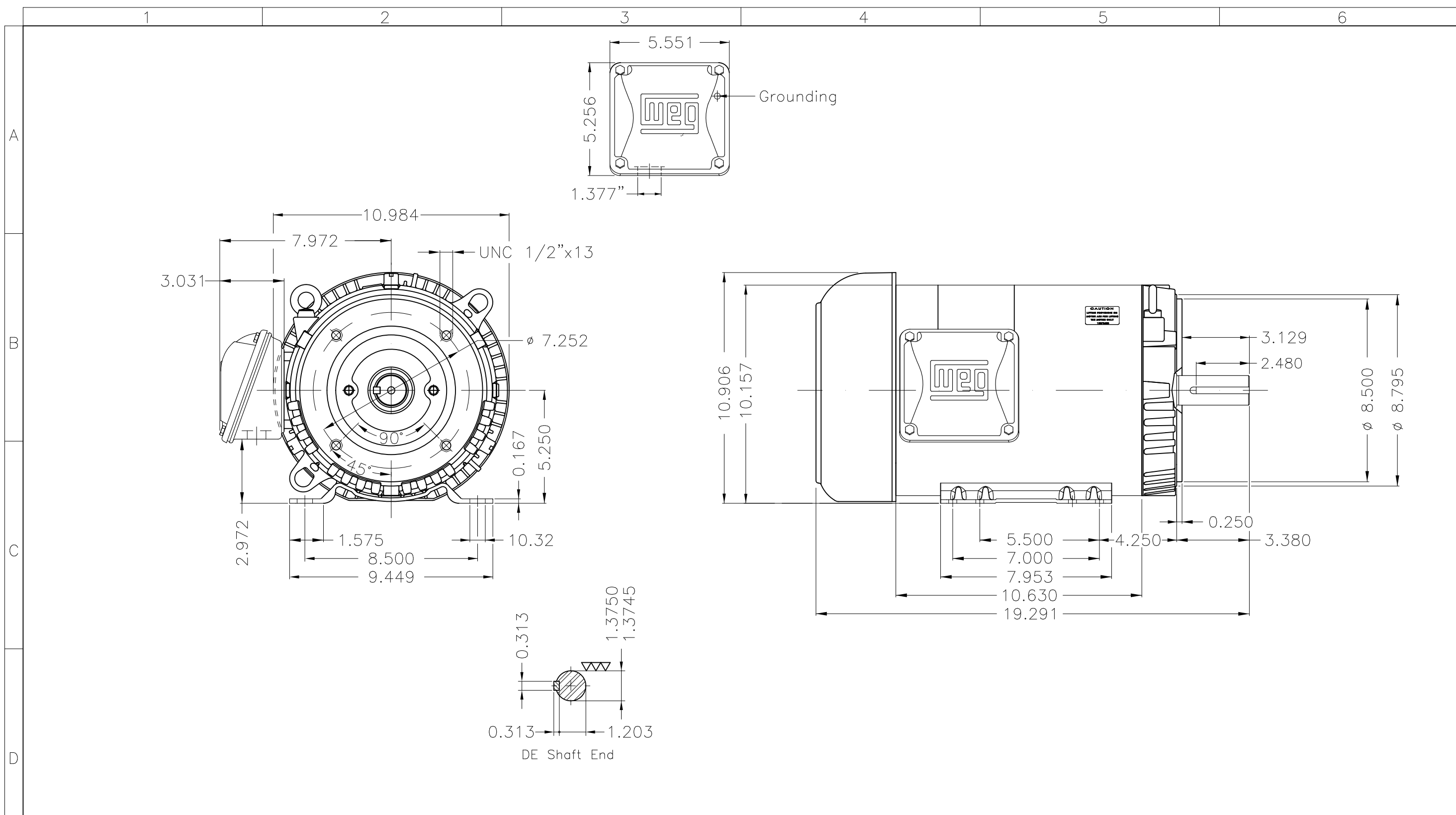


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NDE sealing - V ring
 Color Munsell N 1 matte black
 Painting plan 207N
 Mounting W-6/V17R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.					
CHECKED		FRAME 213/5TC IP55 TEFC					
RELEASED							

10 HP 04 Poles 60 Hz

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

PREVIEW
 WDD





NEMA
Premium



3PT9



Energy Verified

MADE IN MEXICO

MAT: 14122310 CC029A

W01.TE0IC0X0N

MODEL 01018ET3E215TC-S

18MAR2022 S/N:

**For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3**

Class II, Div.2, Gr. F,G - T4

Div 2 Inverter Duty (SF1.00)

CT 2:1/VT 1000:1

PH 3	Hz 60	HP 10
FR 213/5TC		KW 7.5
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 24.4/12.2
INS CL F AT 80K	IP55	SFA 28.1/14.0
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE H	PF 0.84
USABLE @ 208V 27.0A		RPM 1760
SF1.00		NEMA NOM. EFF 91.7%

ALTERNATE RATING: 7.5HP 50Hz 190-220/380-415V SF1.15
22.4-20.6/11.2-10.9A 1465RPM EFF 90.1% (IE3) 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-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.

