

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: JP Pump NEMA Premium Efficiency Three-Phase	Product code :	12682735	
		Catalog # :	00512OT3E215JP-S	
Frame	: 213/5JP	Cooling method	: IC01 - ODP	
Insulation class	: F	Mounting	: F-1	
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)	
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line	
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>2</sup>	: 140 lb	
Design	: B	Moment of inertia (J)	: 1.08 sq.ft.lb	
Output [HP]	5	5	5	
Poles	6	6	6	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	13.5/6.74	16.3/8.16	14.8/7.86	
L. R. Amperes [A]	79.5/39.8	73.4/36.7	74.1/39.3	
LRC [A]	5.9x(Code H)	4.5x(Code E)	5.0x(Code F)	
No load current [A]	7.10/3.55	7.00/3.50	7.21/3.82	
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	190	
Breakdown torque [%]	250	190	210	
Service factor	1.15	1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	52s (cold) 29s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level <sup>2</sup>	55.0 dB(A)	53.0 dB(A)	53.0 dB(A)	
Efficiency (%)	25%	88.3	88.0	
	50%	88.5	87.0	
	75%	89.5	87.4	
	100%	89.5	86.0	
Power Factor	25%	0.34	0.36	
	50%	0.58	0.61	
	75%	0.70	0.73	
	100%	0.77	0.79	
Bearing type	: <u>Drive end</u> 6209 ZZ <u>Non drive end</u> 6206 ZZ	Foundation loads		
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 252 lb	
		Max. compression	: 392 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



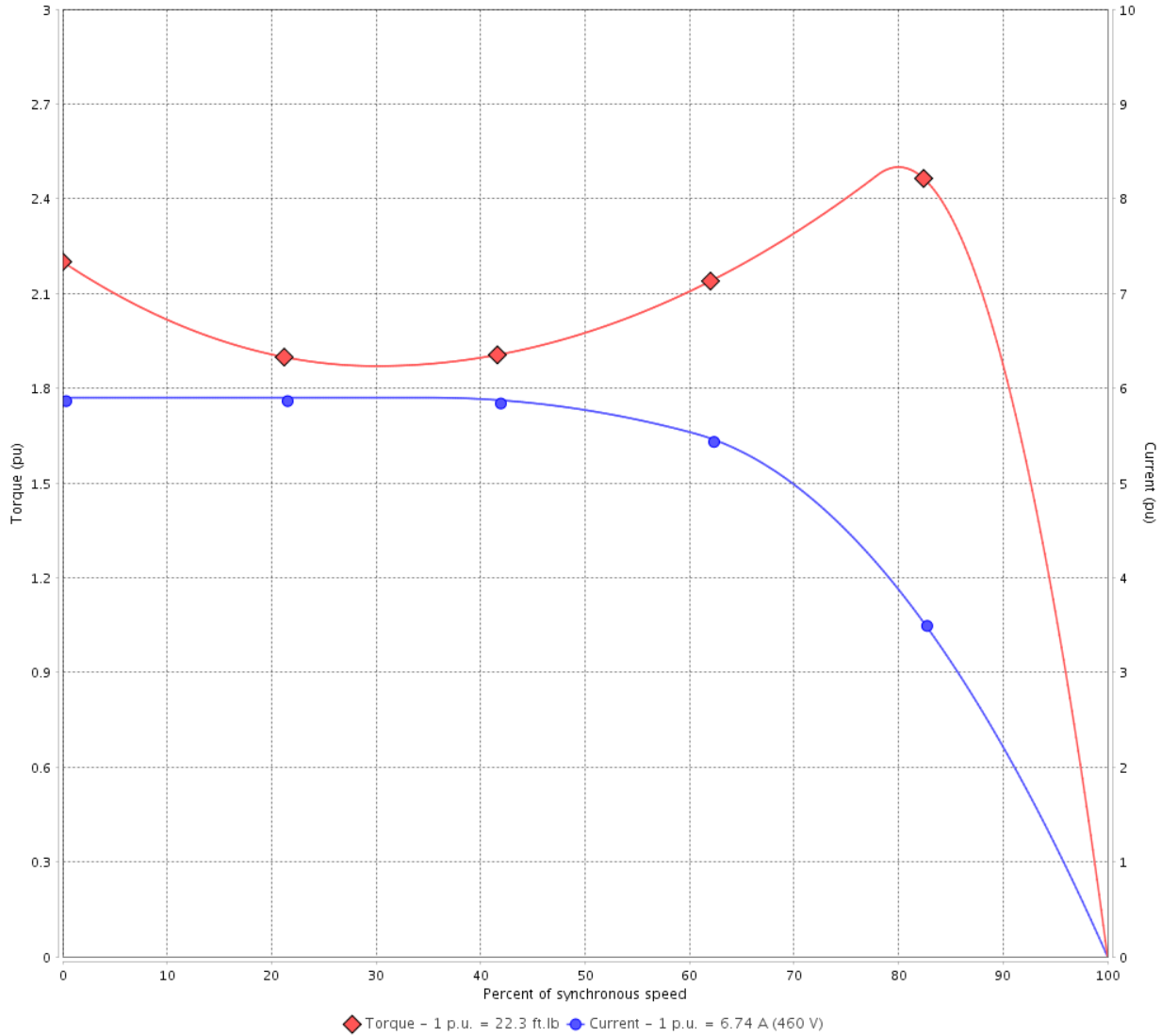
Customer :

Product line : JP Pump NEMA Premium  
Efficiency Three-Phase

Product code : 12682735

Catalog # : 005120T3E215JP-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)	: 1.08 sq.ft.lb
LRC	: 5.9	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 : 52s (cold) 29s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE



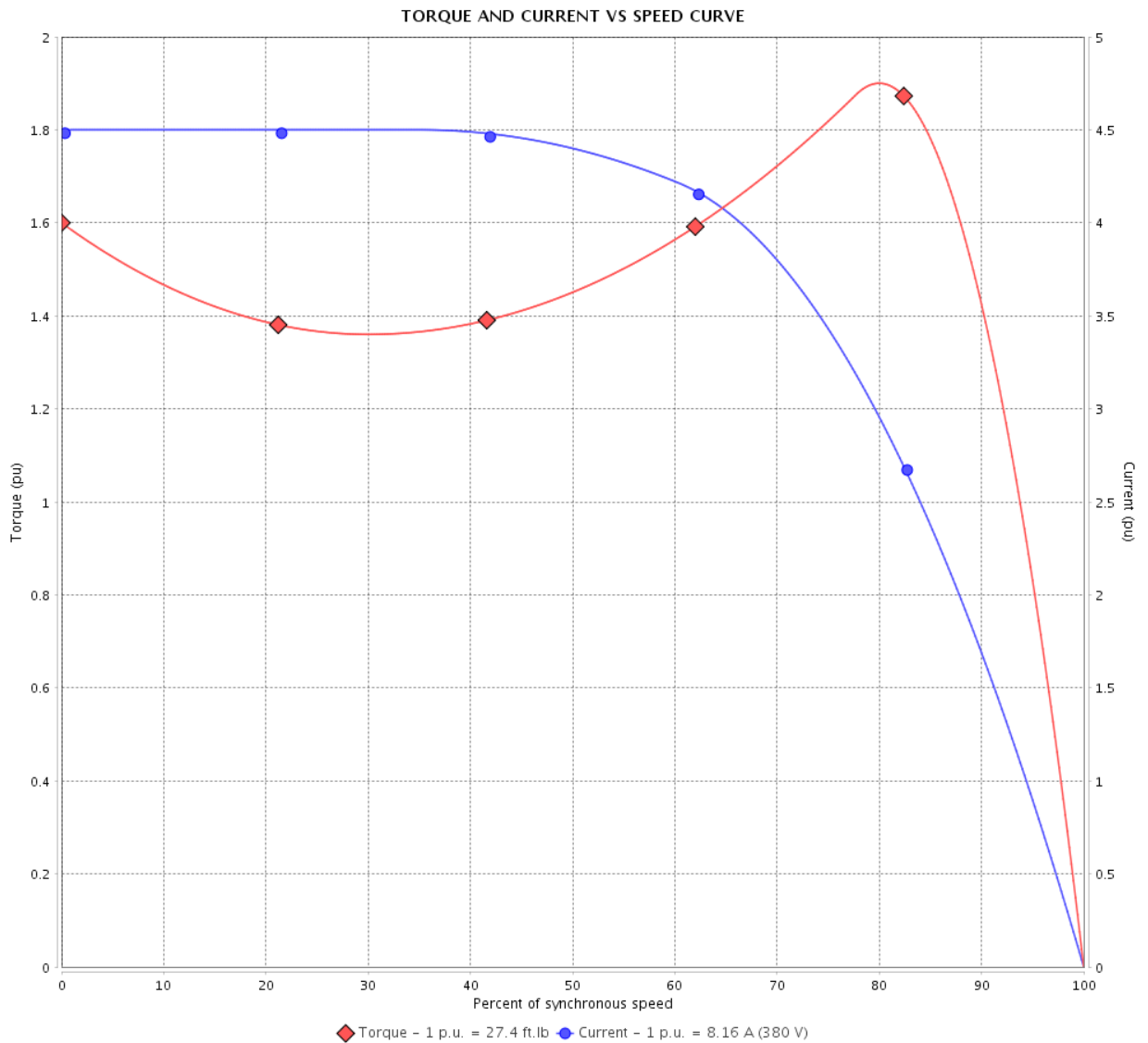
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 12682735

Catalog # : 00512OT3E215JP-S



Performance : 190/380 V 50 Hz 6P

Rated current	: 16.3/8.16 A	Moment of inertia (J)	: 1.08 sq.ft.lb
LRC	: 4.5	Duty cycle	: Cont.(S1)
Rated torque	: 27.4 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.15
Breakdown torque	: 190 %	Temperature rise	: 80 K
Rated speed	: 960 rpm	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



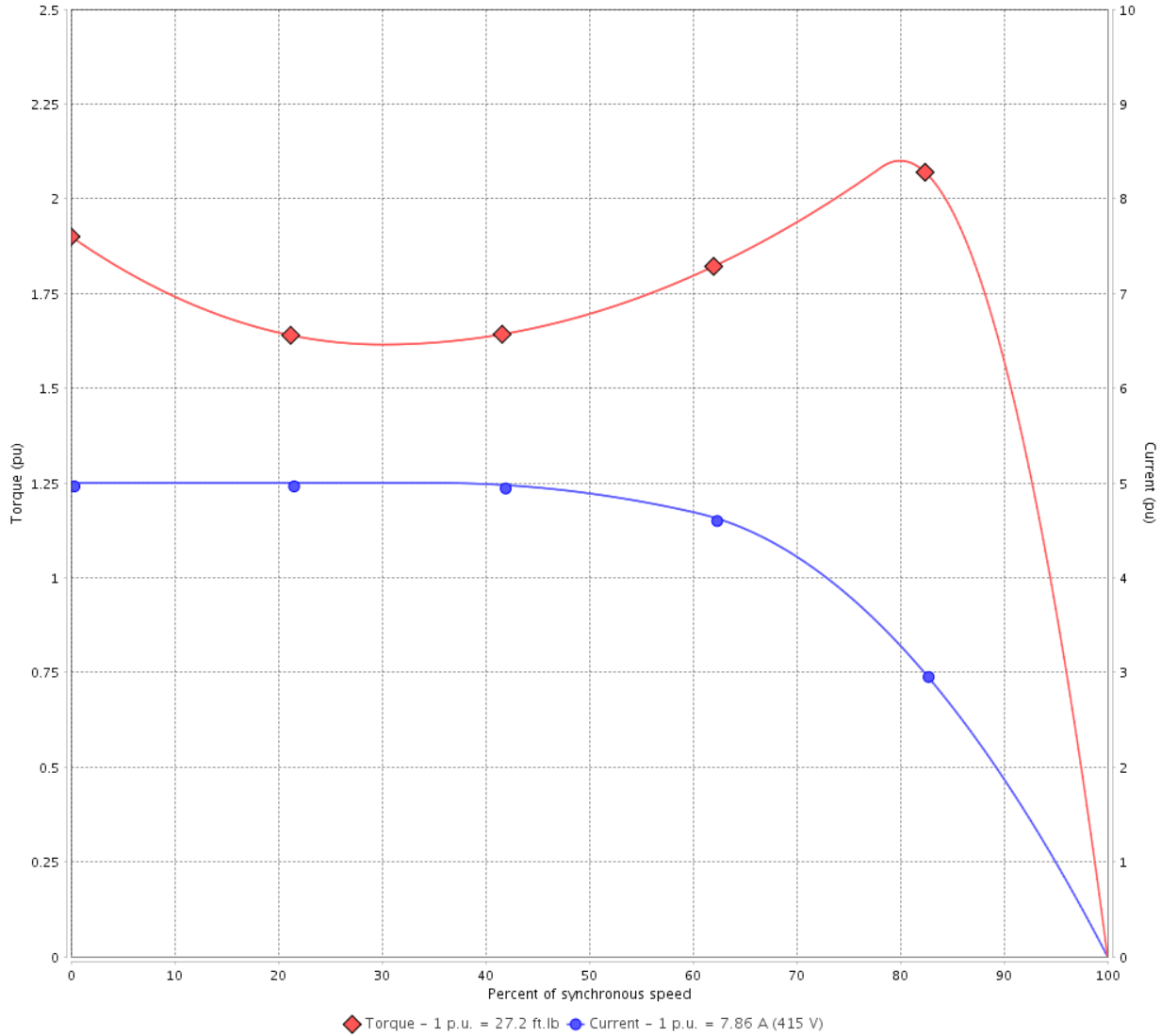
Customer :

Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 12682735

Catalog # : 005120T3E215JP-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 6P

Rated current	: 14.8/7.86 A	Moment of inertia (J)	: 1.08 sq.ft.lb
LRC	: 5.0	Duty cycle	: Cont.(S1)
Rated torque	: 27.2 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.15
Breakdown torque	: 210 %	Temperature rise	: 80 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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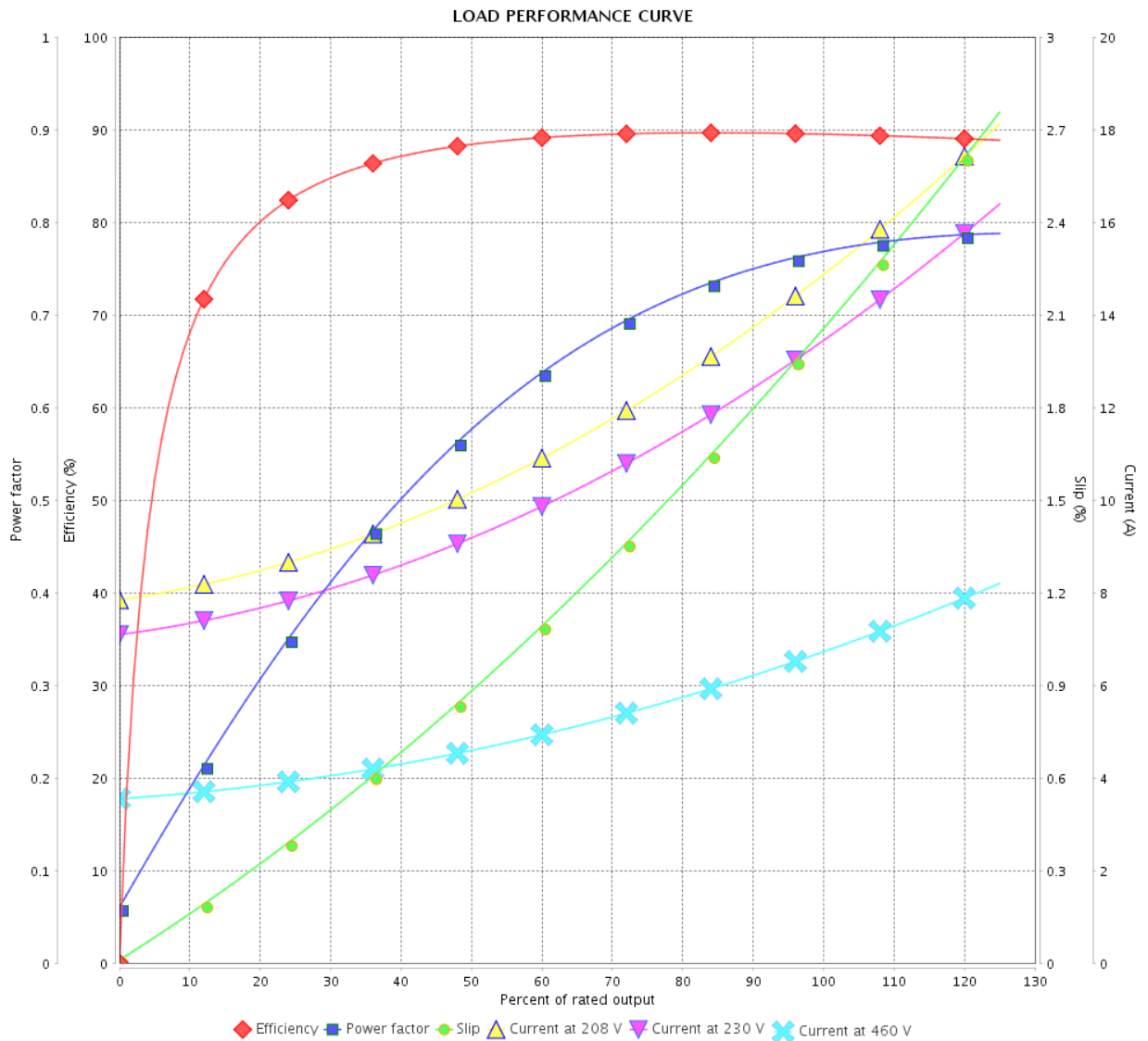


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Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 12682735

Catalog # : 005120T3E215JP-S



Performance : 230/460 V 60 Hz 6P

Rated current : 13.5/6.74 A  
 LRC : 5.9  
 Rated torque : 22.3 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 250 %  
 Rated speed : 1175 rpm

Moment of inertia (J) : 1.08 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



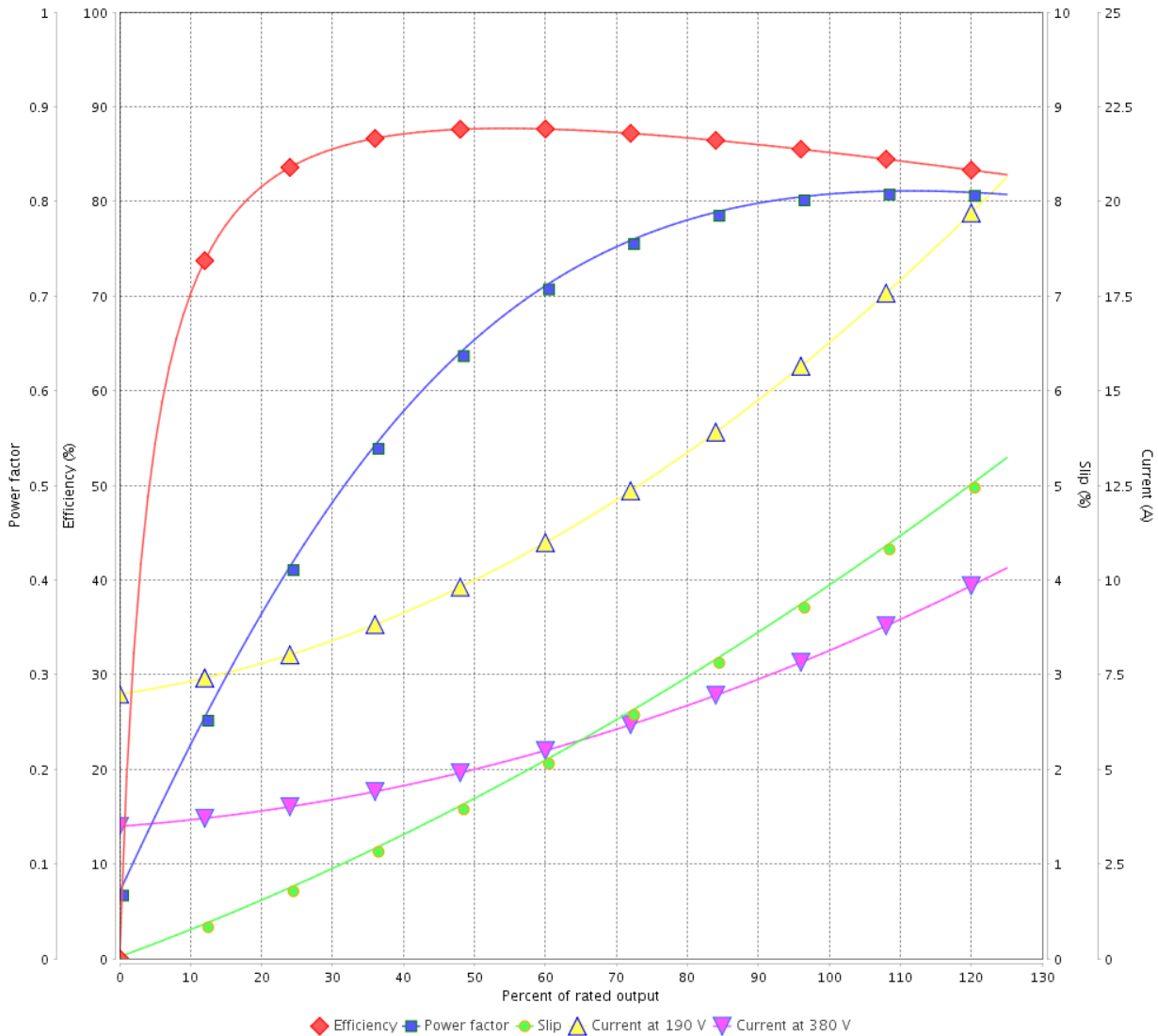
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Product line : JP Pump NEMA Premium Efficiency Three-Phase

Product code : 12682735

Catalog # : 005120T3E215JP-S

LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 6P

Rated current : 16.3/8.16 A  
 LRC : 4.5  
 Rated torque : 27.4 ft.lb  
 Locked rotor torque : 160 %  
 Breakdown torque : 190 %  
 Rated speed : 960 rpm

Moment of inertia (J) : 1.08 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

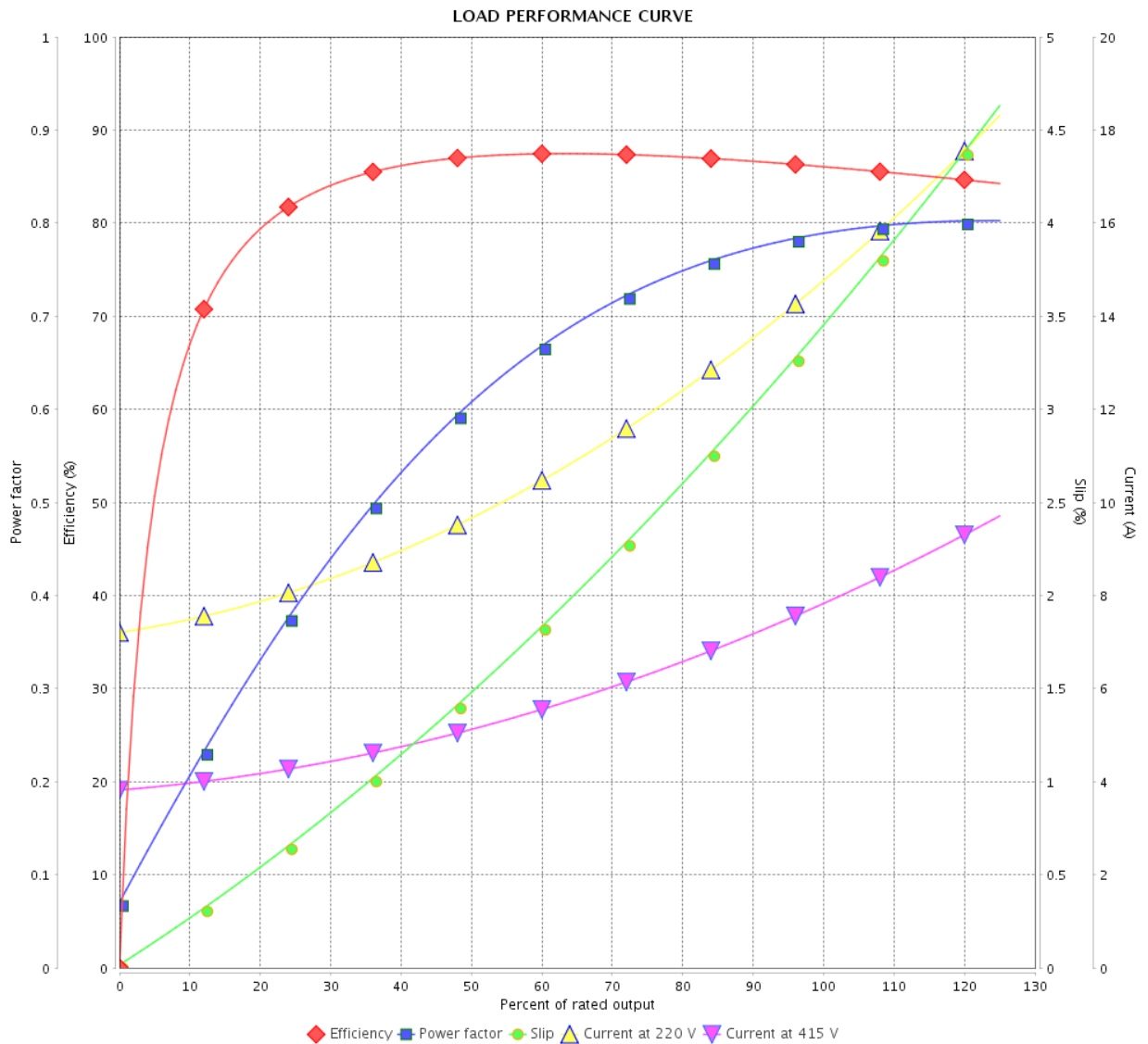


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Performance : 220/415 V 50 Hz 6P

Rated current : 14.8/7.86 A  
 LRC : 5.0  
 Rated torque : 27.2 ft.lb  
 Locked rotor torque : 190 %  
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 Rated speed : 965 rpm

Moment of inertia (J) : 1.08 sq.ft.lb  
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 Insulation class : F  
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 Design : B

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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

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Efficiency Three-Phase

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Performance : 230/460 V 60 Hz 6P

Rated current : 13.5/6.74 A  
LRC : 5.9  
Rated torque : 22.3 ft.lb  
Locked rotor torque : 220 %  
Breakdown torque : 250 %  
Rated speed : 1175 rpm

Moment of inertia (J) : 1.08 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

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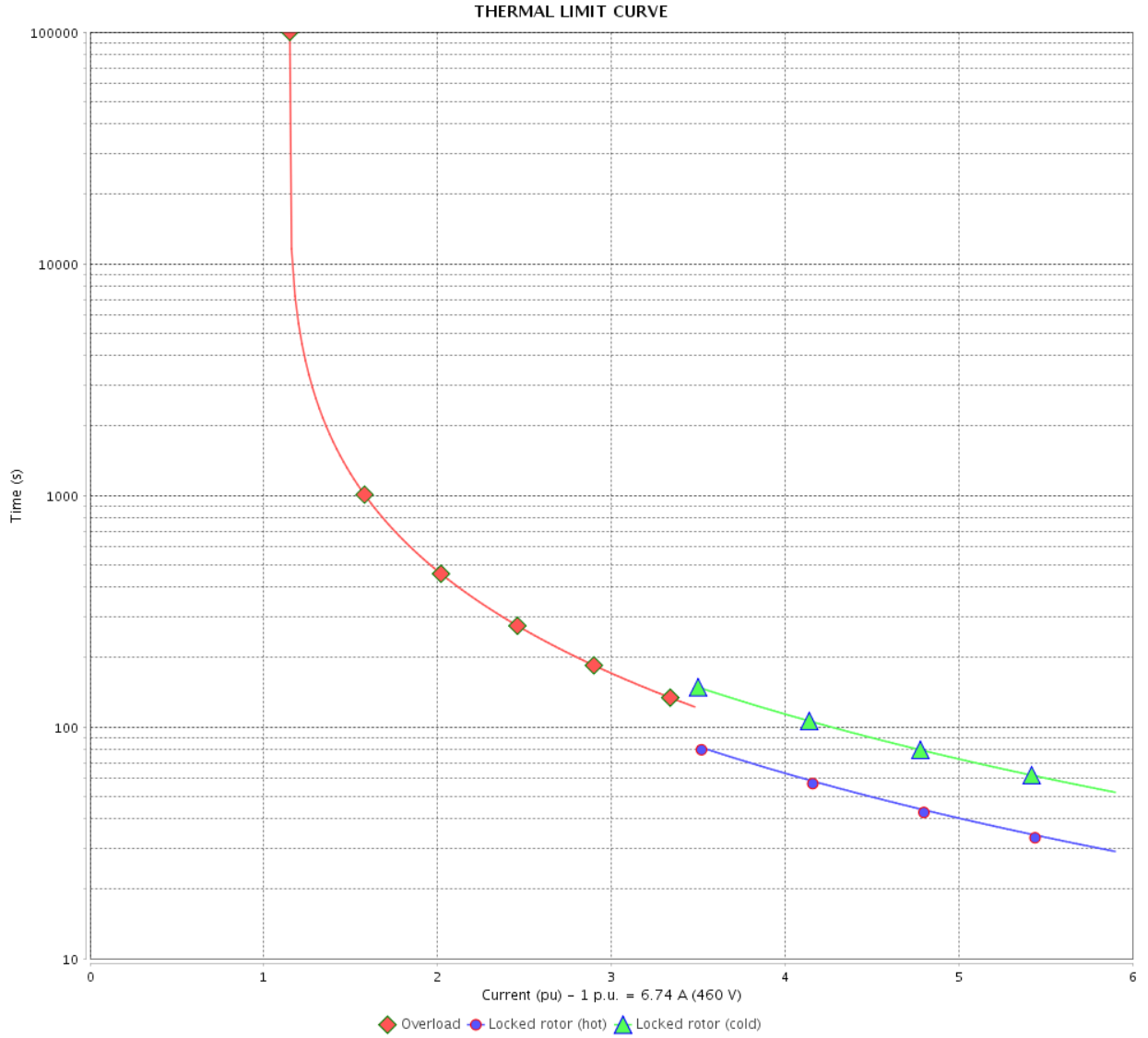


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Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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Performance : 190/380 V 50 Hz 6P

Rated current : 16.3/8.16 A  
LRC : 4.5  
Rated torque : 27.4 ft.lb  
Locked rotor torque : 160 %  
Breakdown torque : 190 %  
Rated speed : 960 rpm

Moment of inertia (J) : 1.08 sq.ft.lb  
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Cooling constant

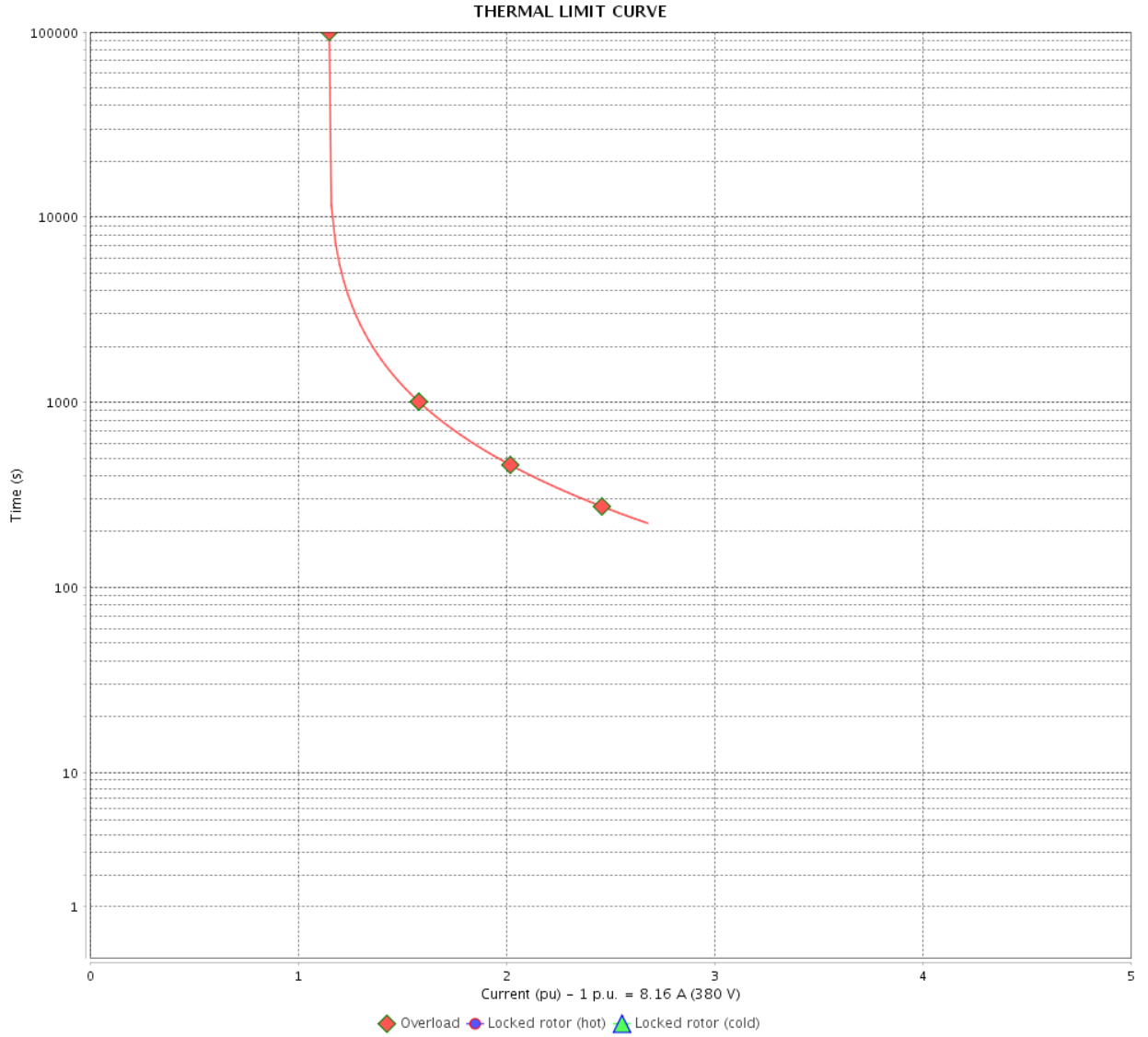
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Heating constant

Cooling constant

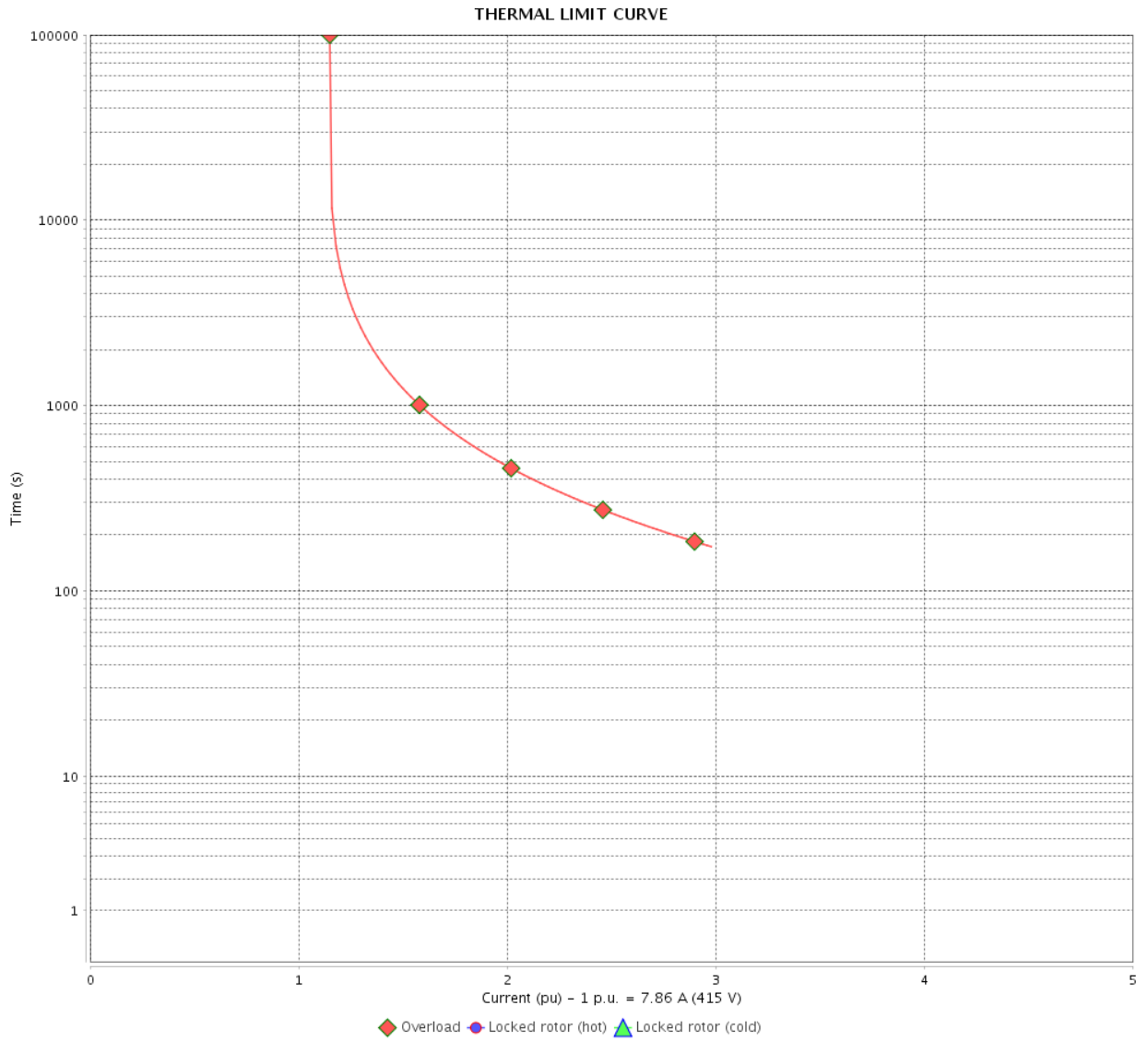
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# VFD OPERATION CURVE

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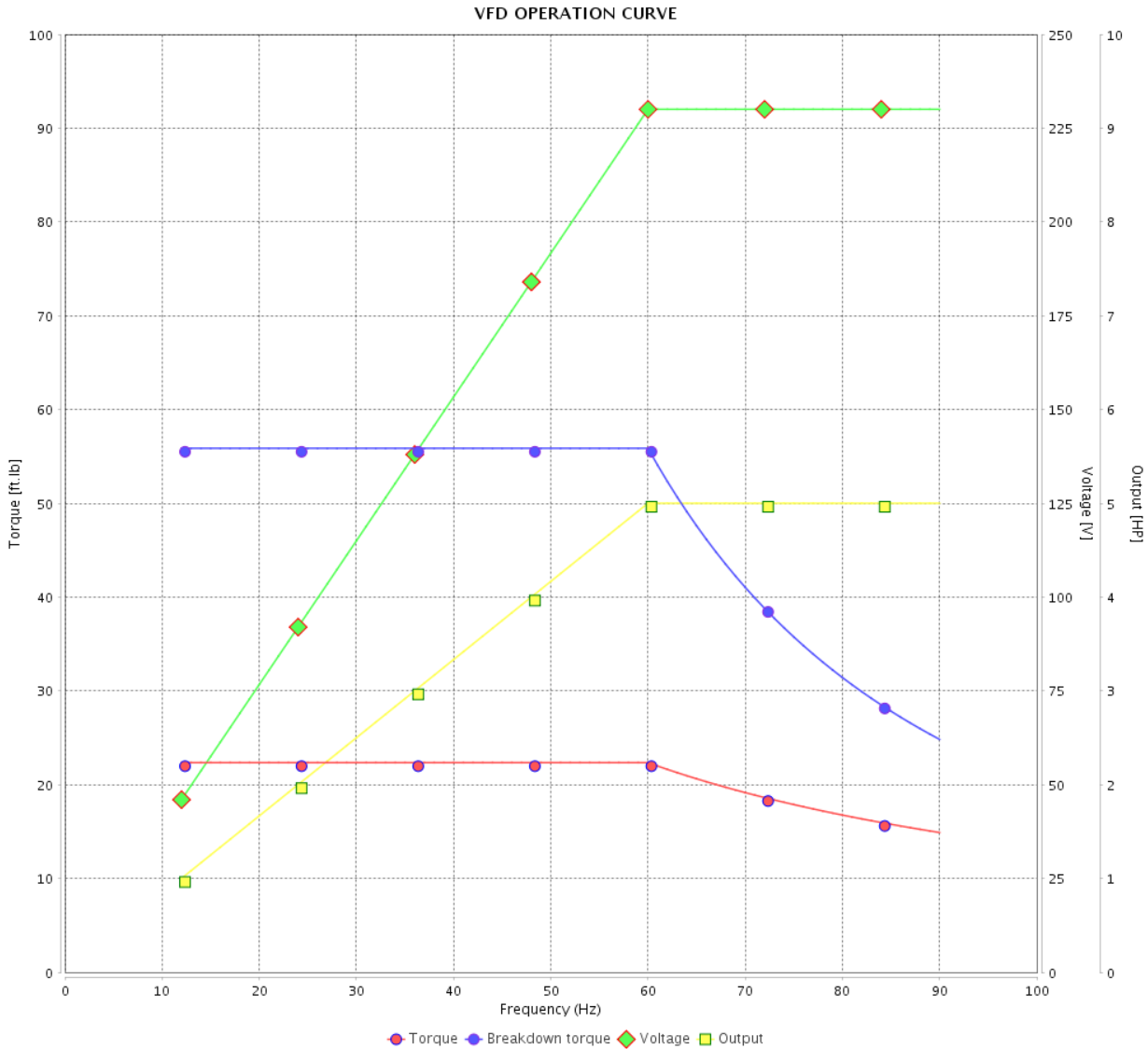


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Performance : 230/460 V 60 Hz 6P

Rated current : 13.5/6.74 A  
 LRC : 5.9  
 Rated torque : 22.3 ft.lb  
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 Breakdown torque : 250 %  
 Rated speed : 1175 rpm

Moment of inertia (J) : 1.08 sq.ft.lb  
 Duty cycle : Cont.(S1)  
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 Service factor : 1.15  
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 Design : B

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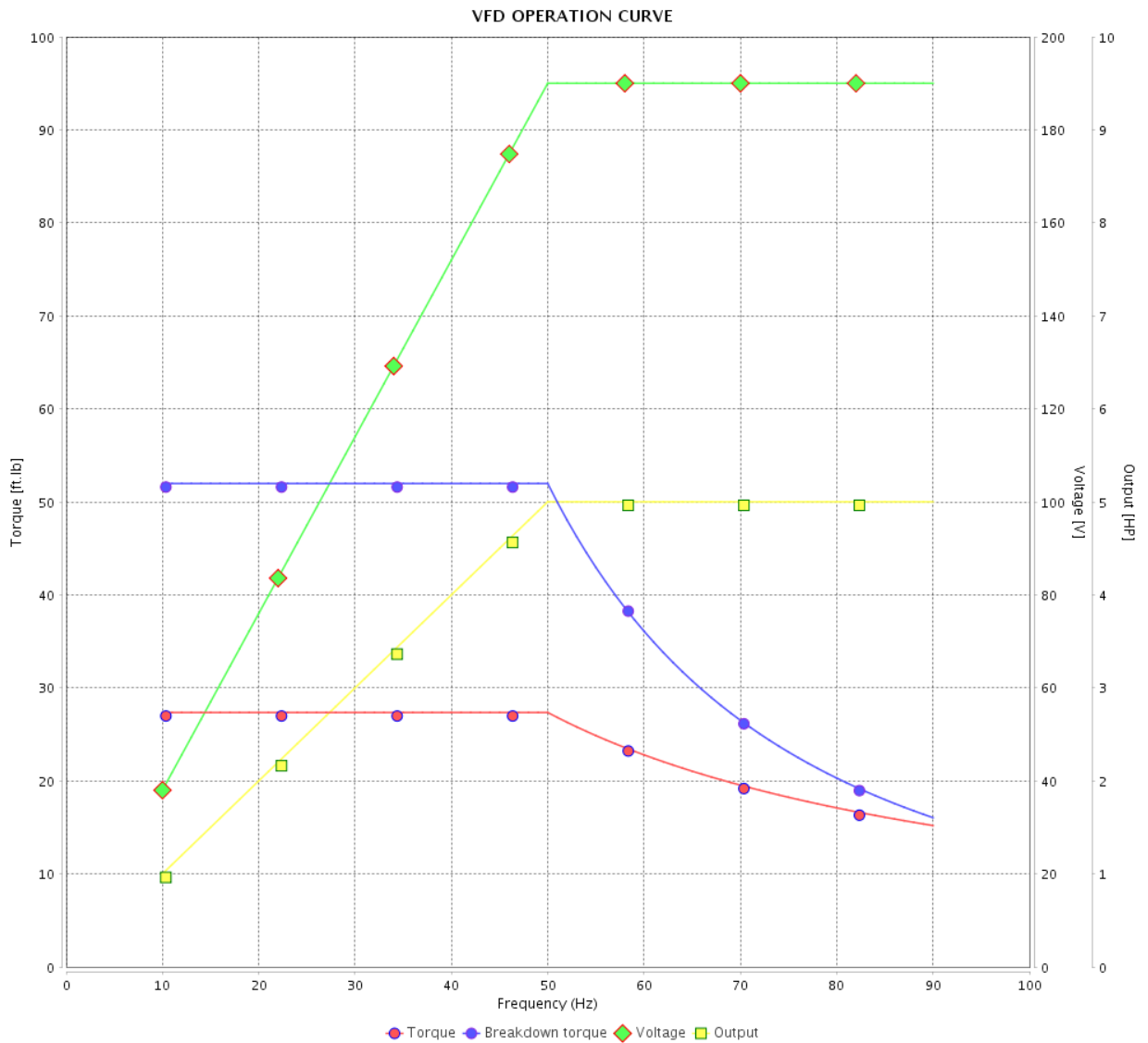


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Three Phase Induction Motor - Squirrel Cage



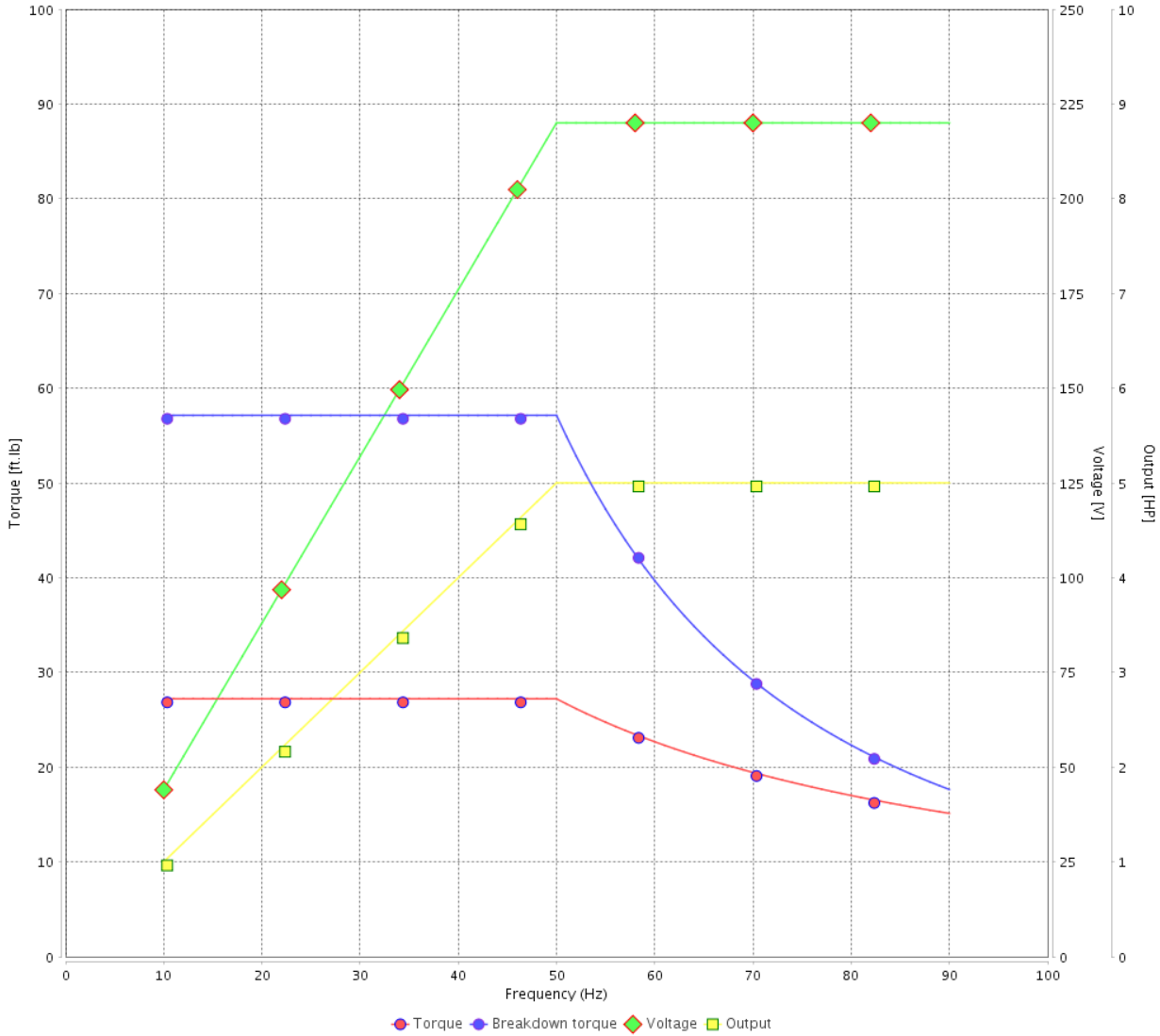
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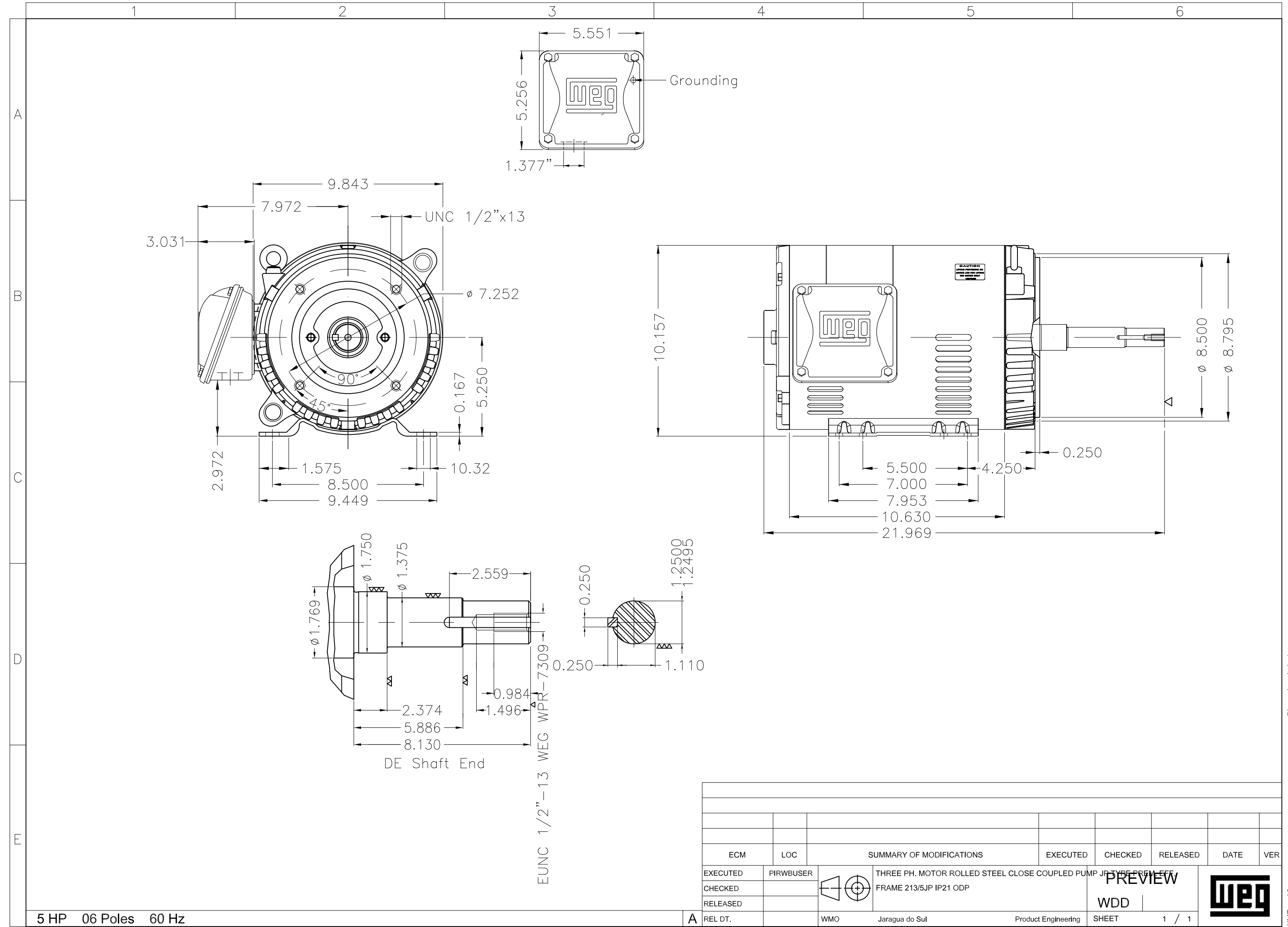
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Color Munsell N 1 matte black  
 Painting plan 207N  
 Mounting F-1/B34R(D)



**NEMA  
Premium**

MADE IN MEXICO

MAT: 12682735 CC029A

W01.T00IC0X0N

MODEL 005120T3E215JP-S

28JUN2021 S/N:

PH 3	Hz 60	HP 5.0
FR 213/5.JP		KW 3.7
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 13.5/6.74
INS CL F AT 80K		SFA 15.5/7.75
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE H	PF 0.77
USABLE @ 208V 14.9A		RPM 1175
SF1.00		NEMA NOM. EFF 89.5%

ALTERNATE RATING: 5.0HP	50Hz	190-220/380-415V	SF1.15
18.3-14.6/8.18-7.74A	960RPM	EFF 85.1% (IE2)	IEC 60034-1

Inverter duty motor For 80Hz use on VPWM 1000:1 VT, 5:1 CT

DE 6209-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.

