

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12675405	
		Catalog # :	00718ET3E213T-S	
Frame	: 213/5T	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	: 120 lb	
Protection degree	: IP55	Moment of inertia (J)	: 0.9380 sq.ft.lb	
Design	: B			
Output [HP]	7.5	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]	18.1/9.07	22.0/11.0	20.0/10.6	
L. R. Amperes [A]	132/66.2	136/68.2	136/72.1	
LRC [A]	7.3x(Code H)	6.2x(Code G)	6.8x(Code H)	
No load current [A]	8.81/4.41	8.65/4.33	8.93/4.73	
Rated speed [RPM]	1770	1455	1460	
Slip [%]	1.67	3.00	2.67	
Rated torque [ft.lb]	22.3	27.1	27.0	
Locked rotor torque [%]	260	190	220	
Breakdown torque [%]	300	250	280	
Service factor	1.15	1.00	1.00	
Temperature rise	80 K	105 K	80 K	
Locked rotor time	39s (cold) 22s (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%	89.4	91.3	90.4
	50%	90.2	90.2	89.8
	75%	91.0	90.0	90.1
	100%	91.7	88.6	89.2
Power Factor	25%	0.39	0.45	0.41
	50%	0.64	0.71	0.67
	75%	0.76	0.82	0.79
	100%	0.82	0.86	0.84
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	: 366 lb	
		Max. compression	: 486 lb	
Lubrication interval	: -			
Lubricant amount	: -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 20.1A SF 1.00 SFA 20.1A				
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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Performed by				
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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



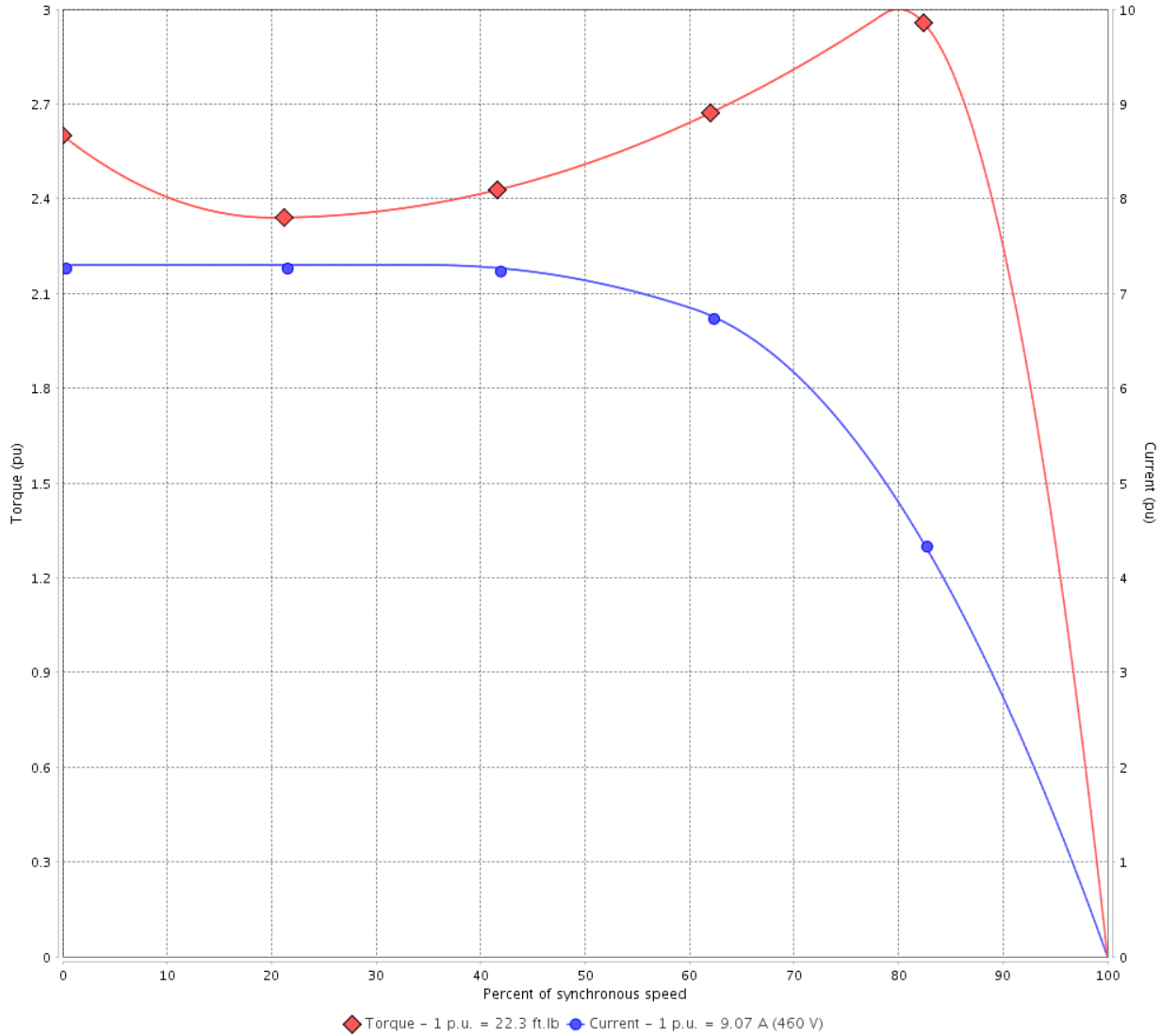
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12675405

Catalog # : 00718ET3E213T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current	: 18.1/9.07 A	Moment of inertia (J)	: 0.9380 sq.ft.lb
LRC	: 7.3	Duty cycle	: Cont.(S1)
Rated torque	: 22.3 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

Locked rotor time : 39s (cold) 22s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



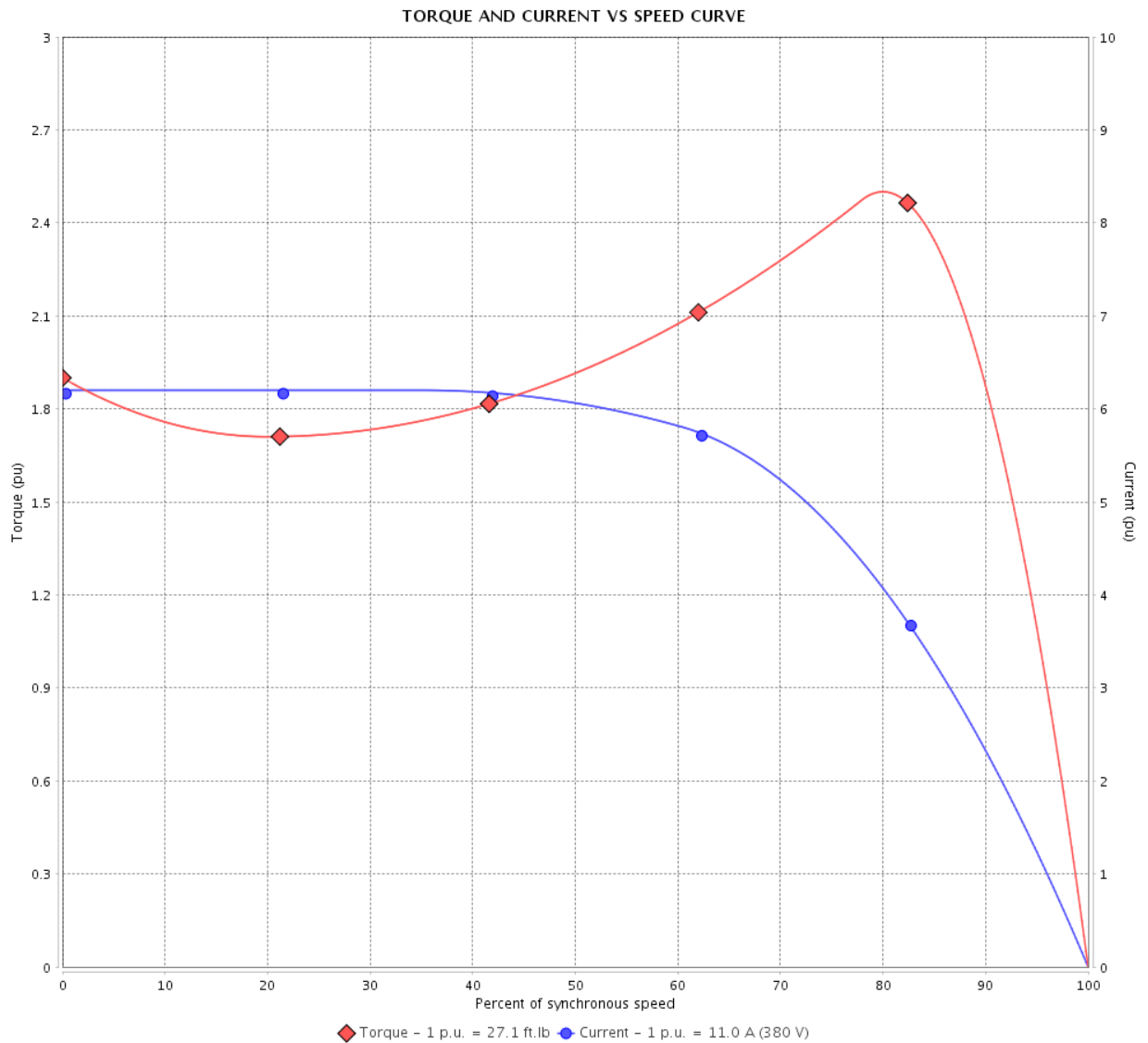
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12675405

Catalog # : 00718ET3E213T-S



Performance : 190/380 V 50 Hz 4P

Rated current : 22.0/11.0 A
 LRC : 6.2
 Rated torque : 27.1 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 250 %
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.9380 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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

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TORQUE AND CURRENT VS SPEED CURVE

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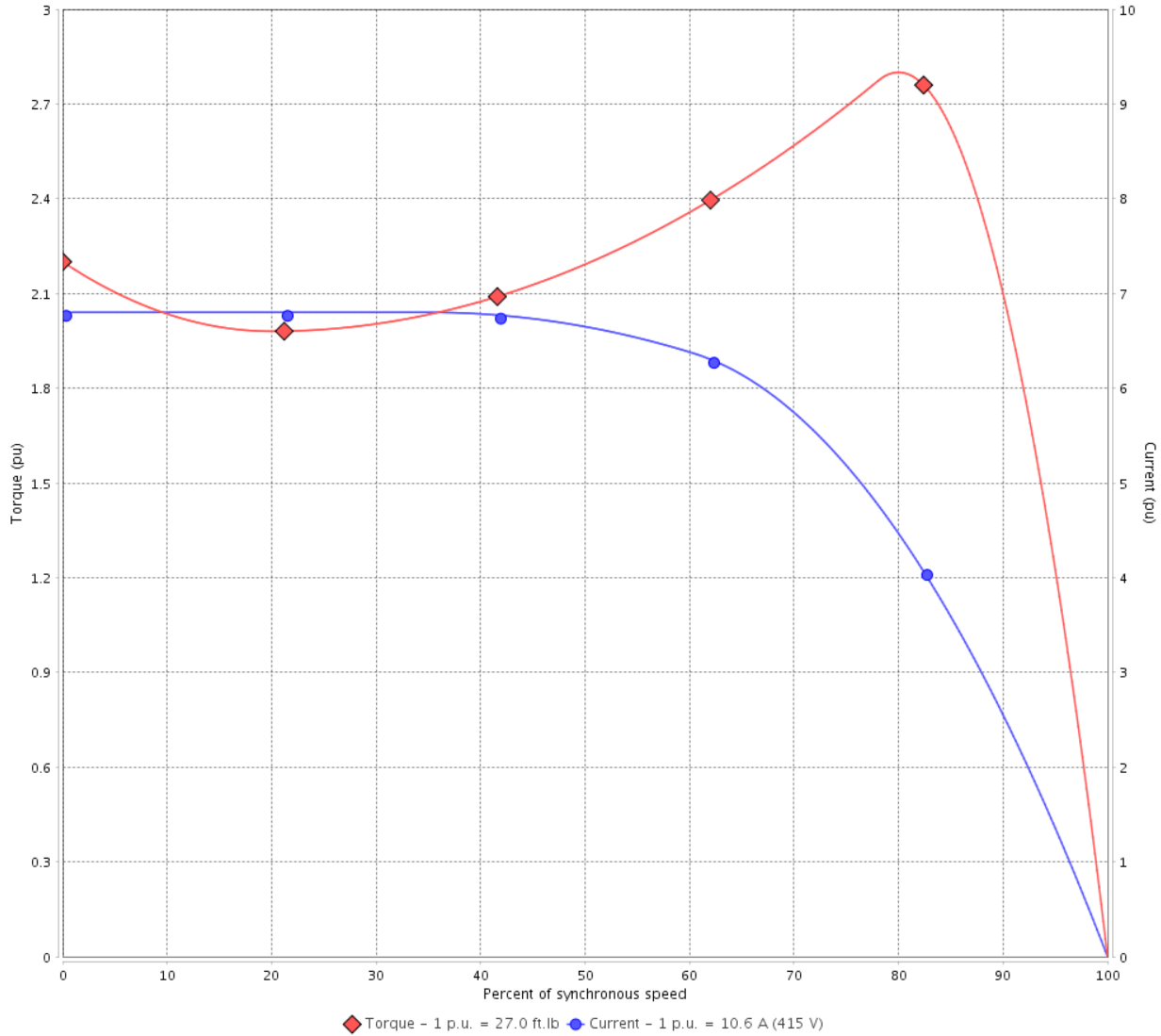
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Product line : NEMA Premium Efficiency Three-Phase

Product code : 12675405

Catalog # : 00718ET3E213T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current	: 20.0/10.6 A	Moment of inertia (J)	: 0.9380 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 27.0 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1460 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

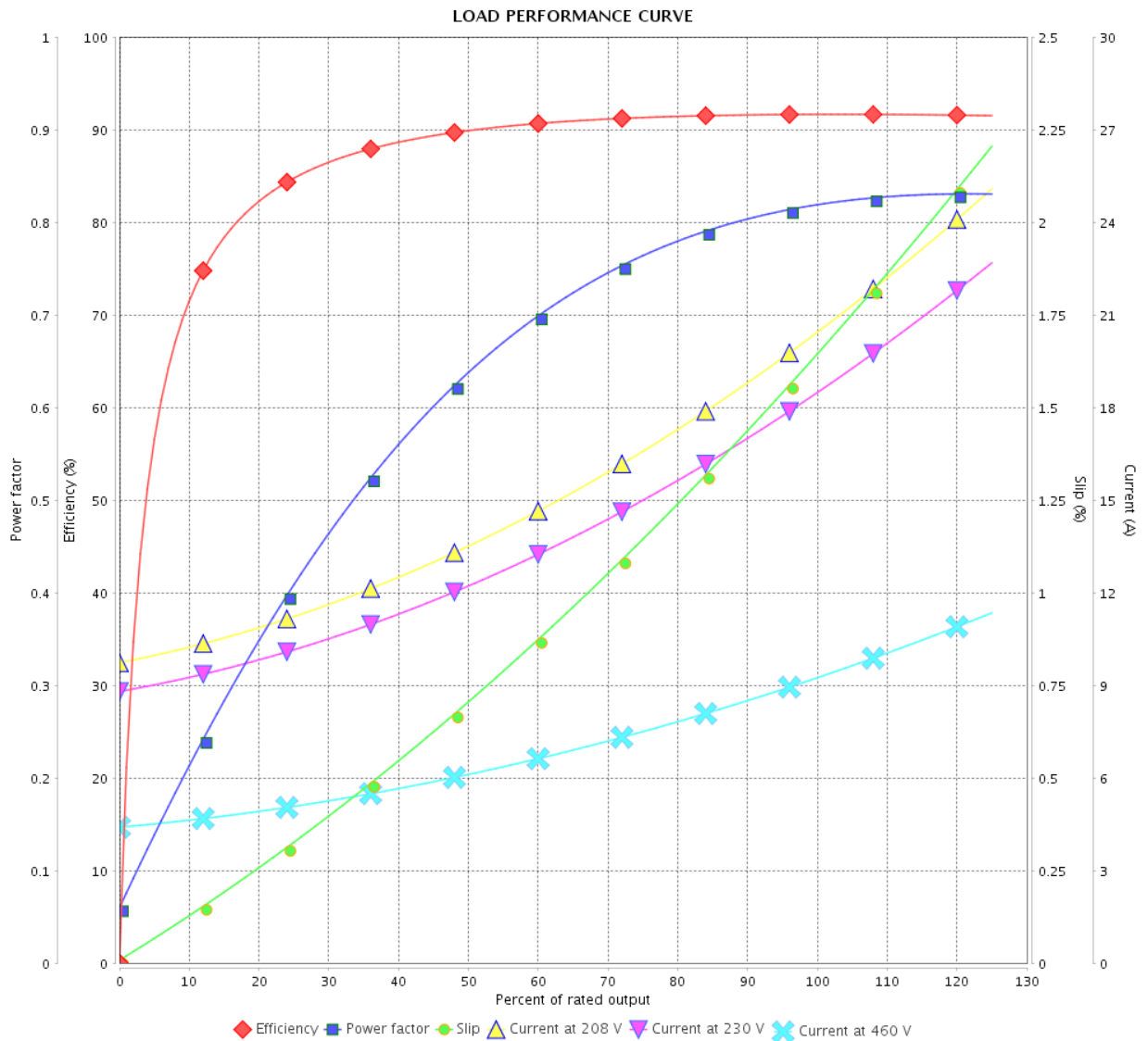


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 Insulation class : F
 Service factor : 1.15
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 Design : B

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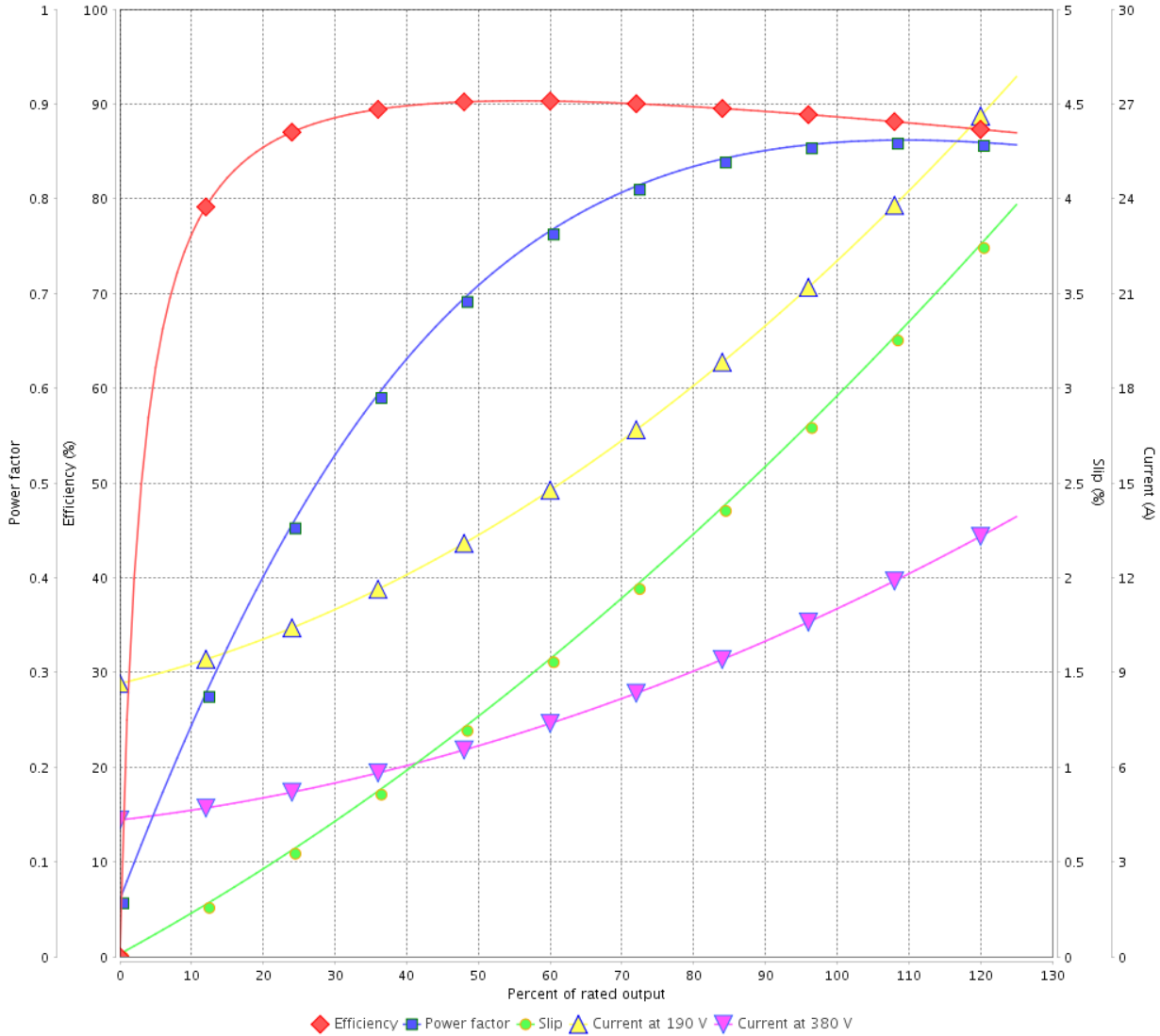
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 Locked rotor torque : 190 %
 Breakdown torque : 250 %
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.9380 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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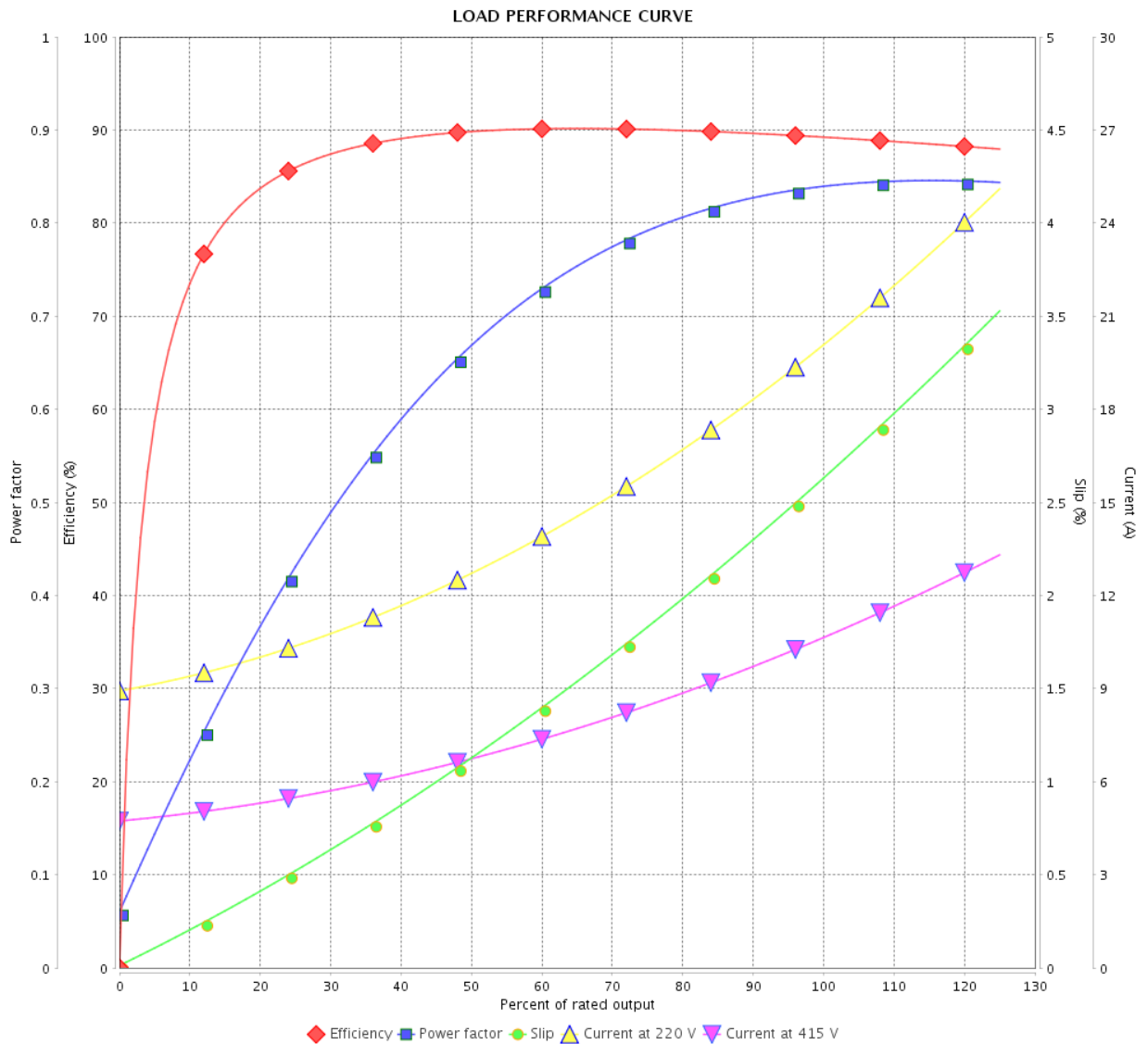


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THERMAL LIMIT CURVE



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Rated speed	: 1770 rpm	Design	: B

Heating constant

Cooling constant

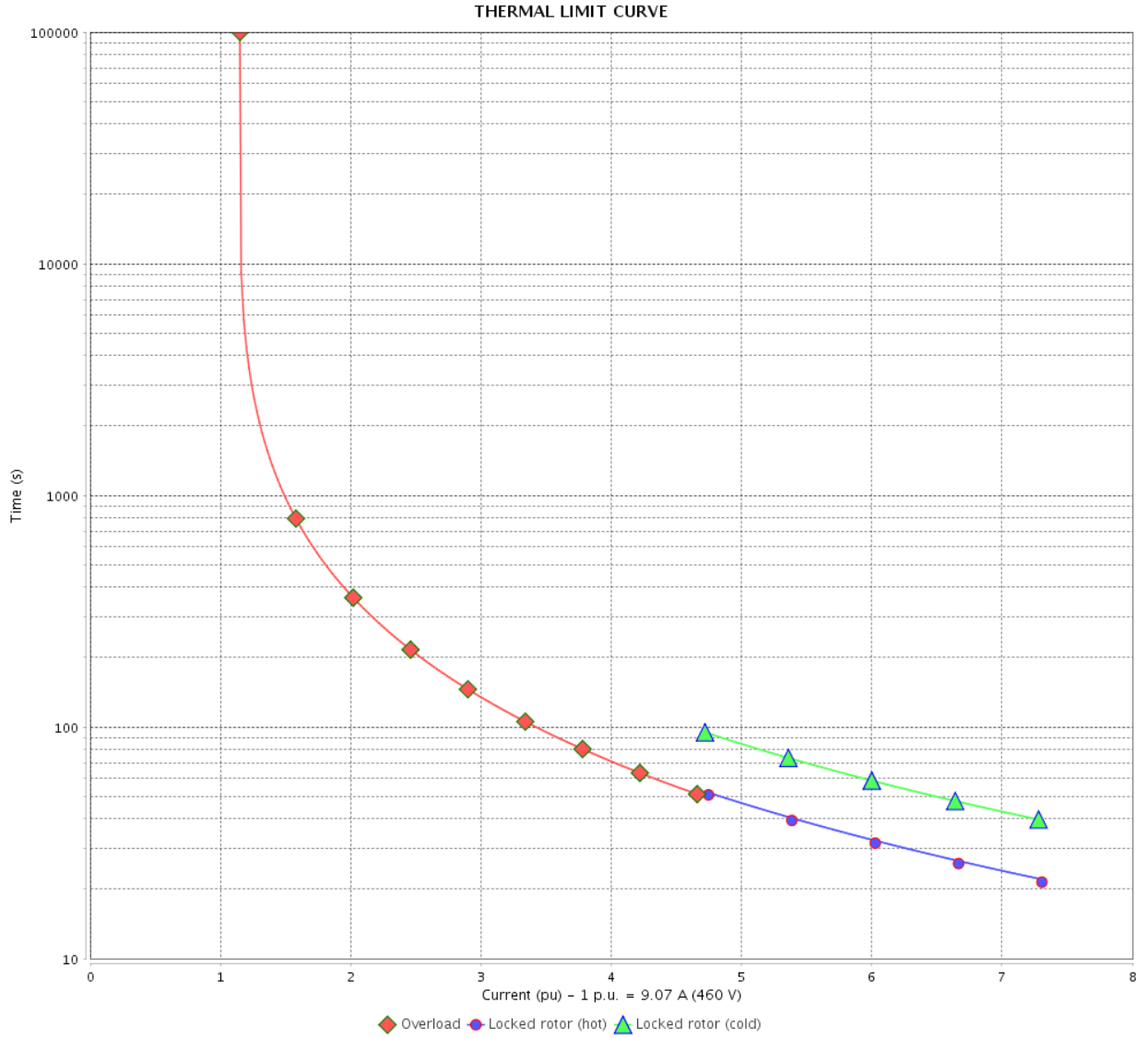
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Breakdown torque	: 250 %	Temperature rise	: 105 K
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Heating constant

Cooling constant

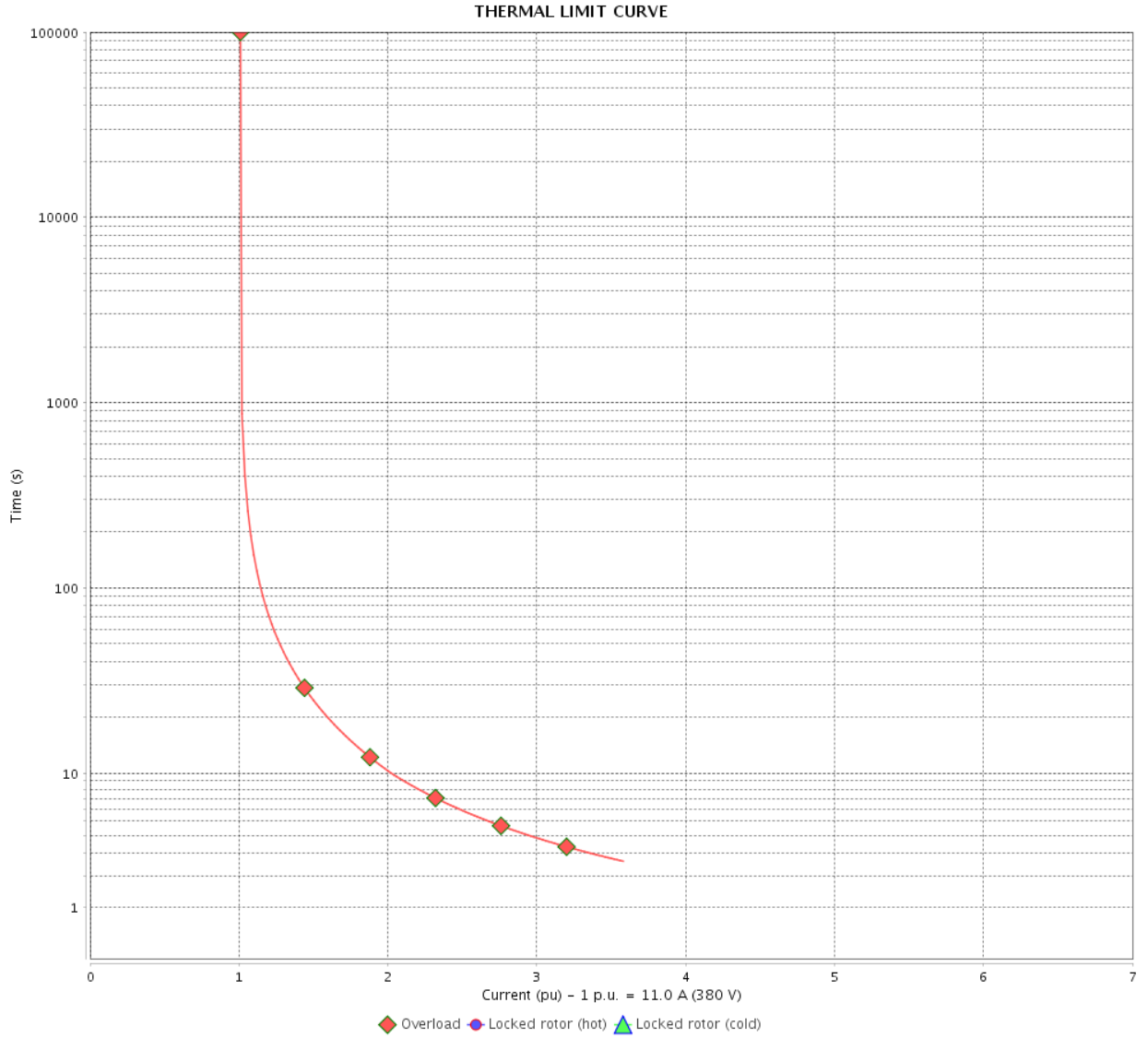
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Cooling constant

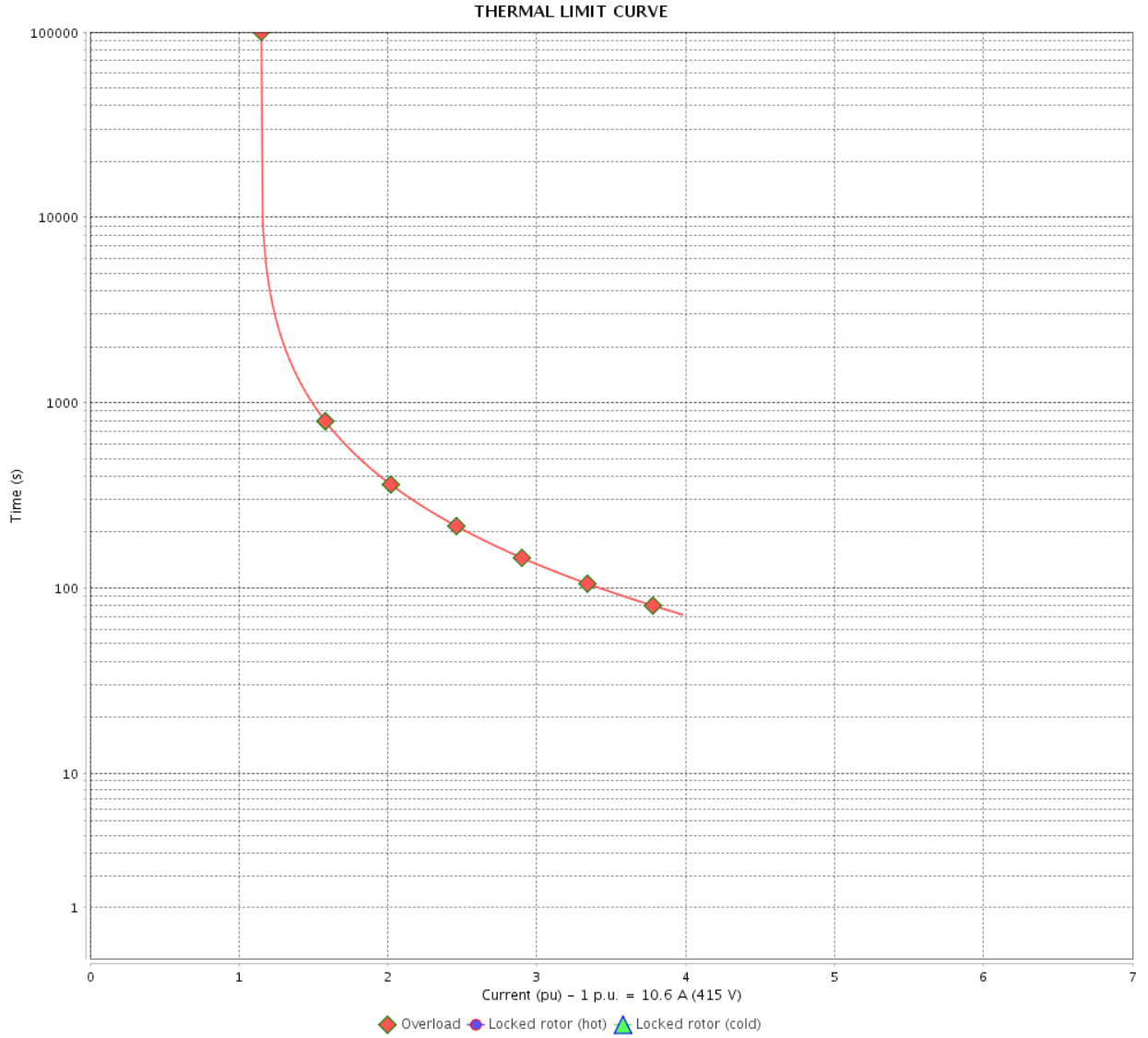
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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



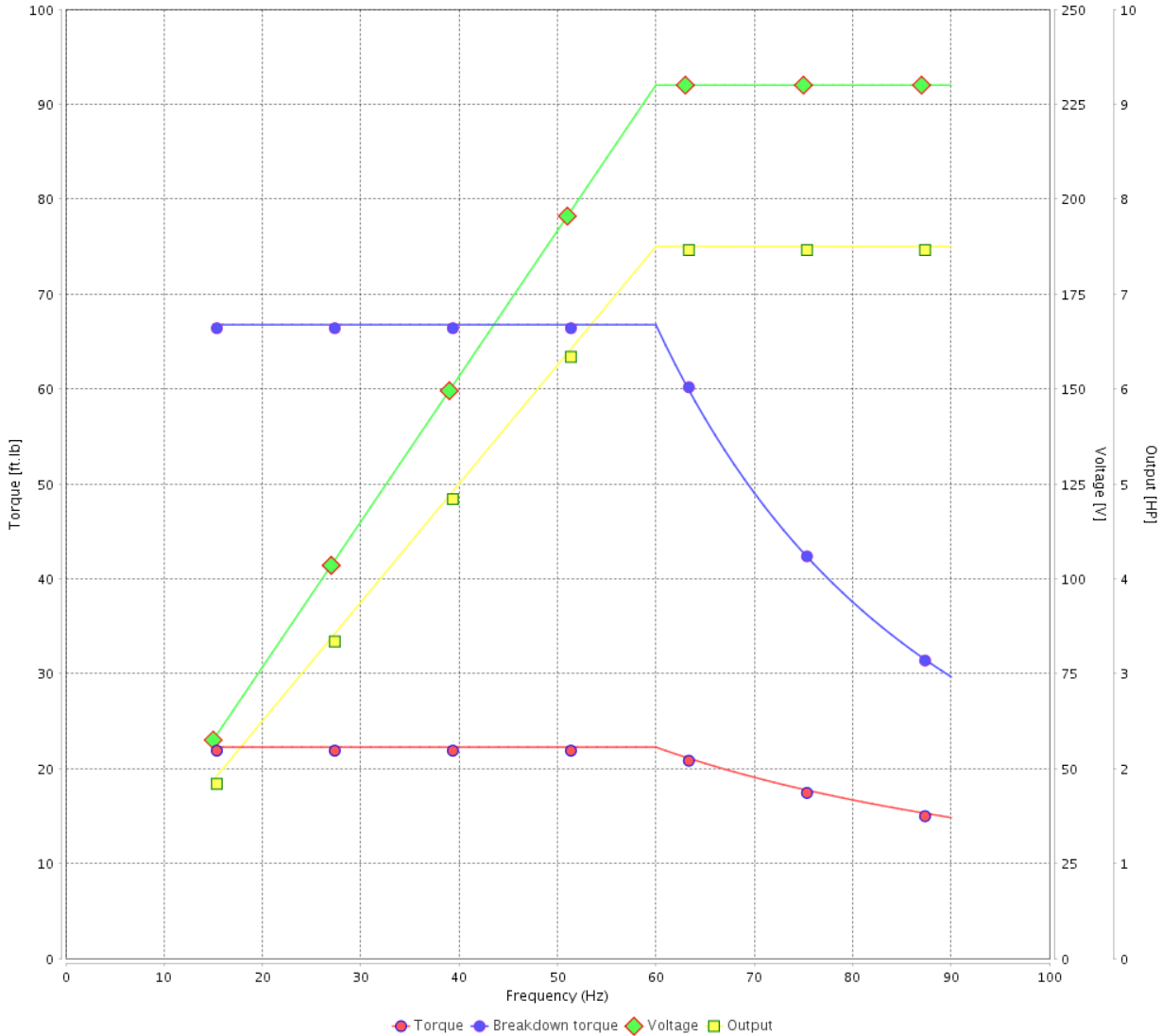
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 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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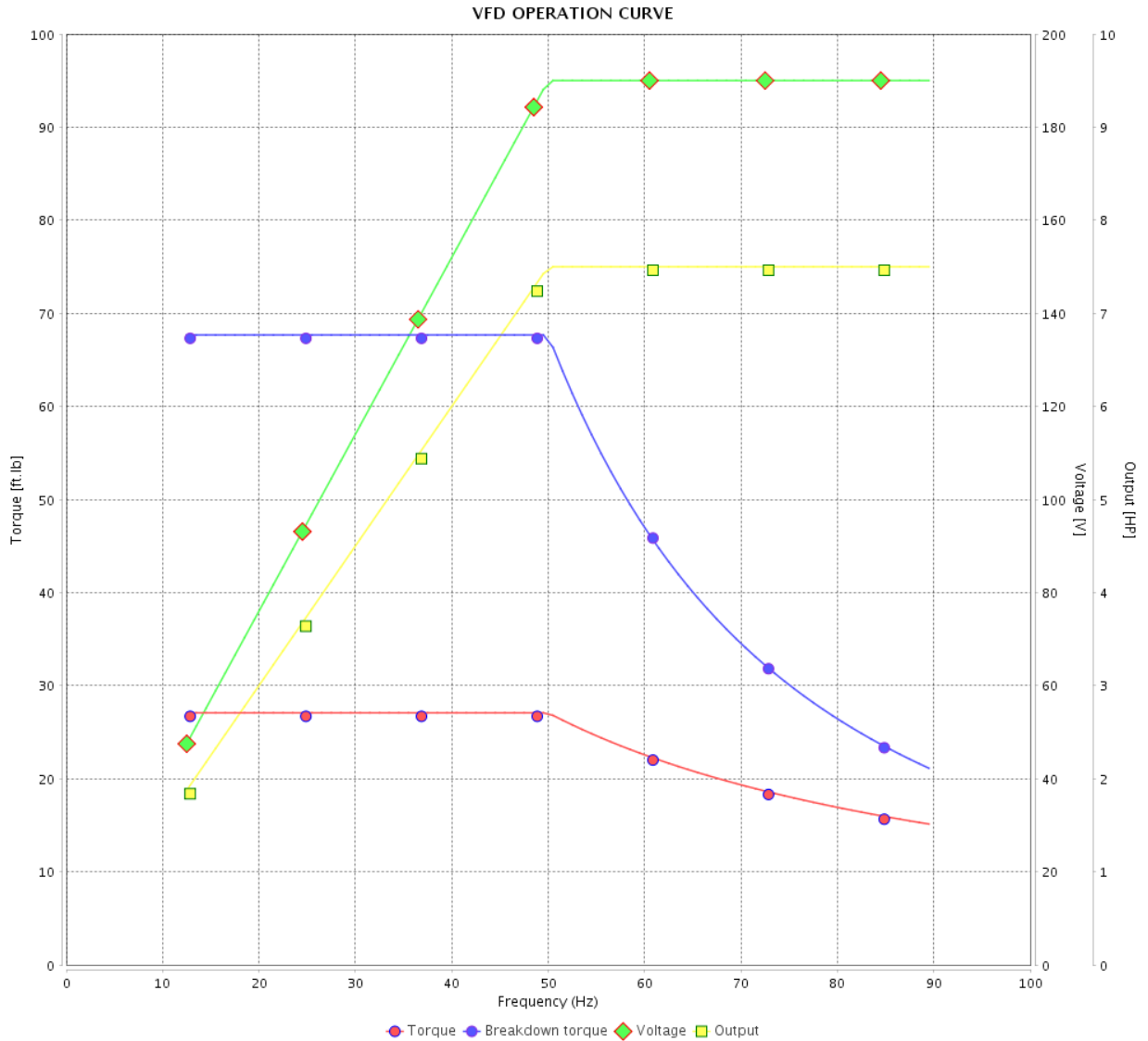


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 Insulation class : F
 Service factor : 1.00
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 Design : B

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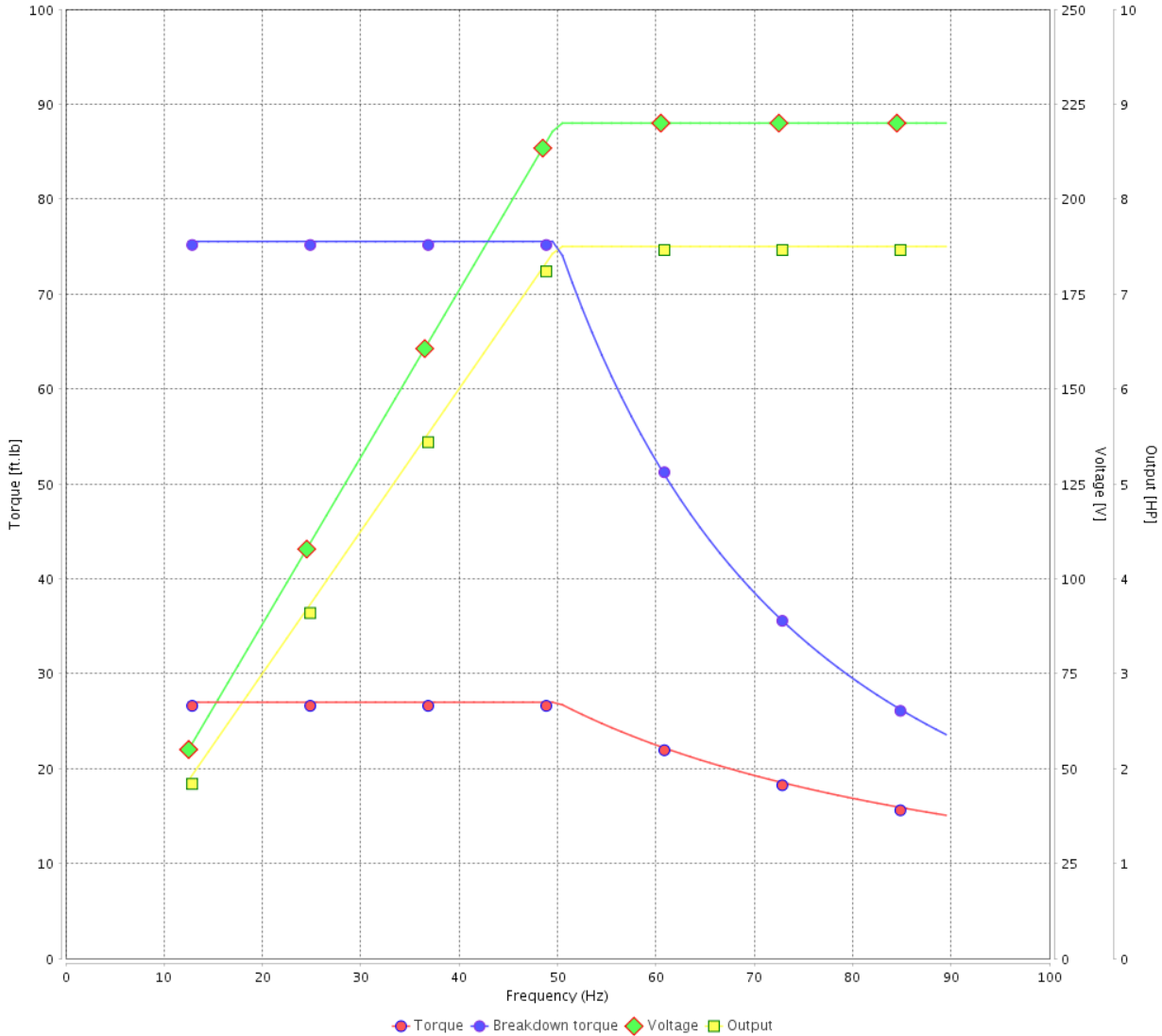
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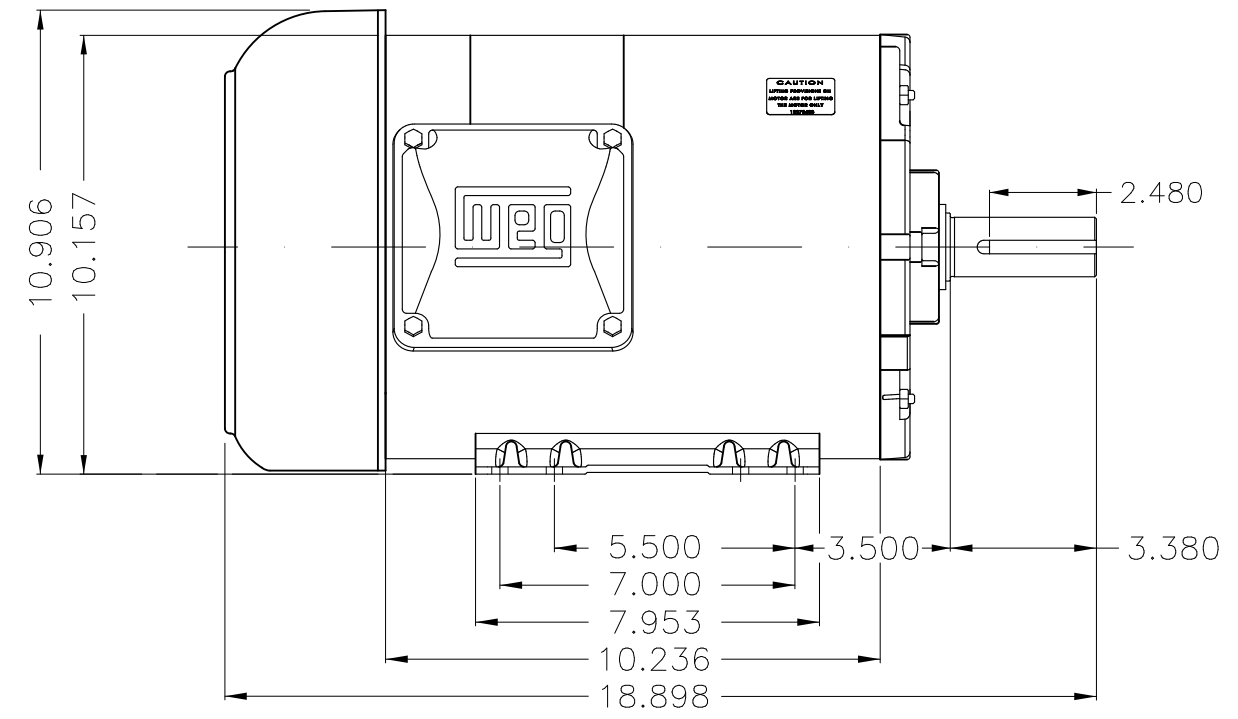
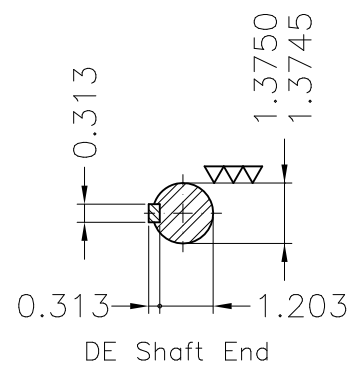
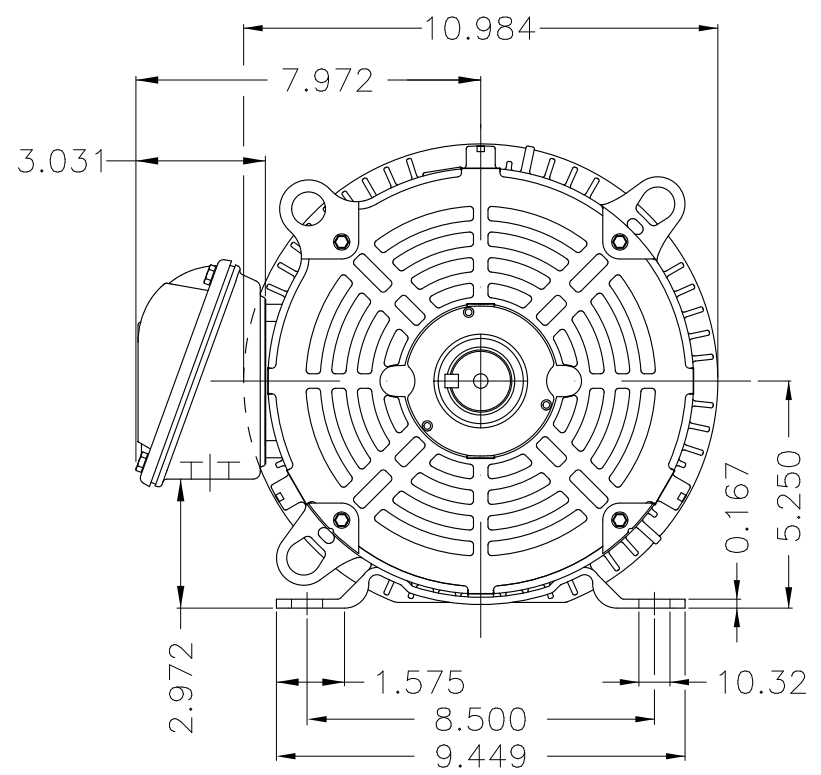
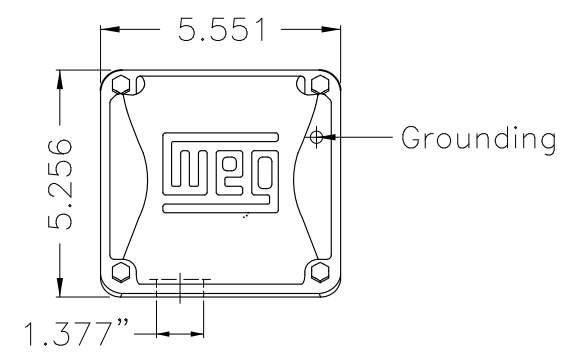
A

B

C

D

E



Color Munsell N 1 matte black
 Painting plan 207N
 Mounting F-1/B3R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 213/5T IP55 TEFC					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET		1 / 1	

7.5 HP 04 Poles 60 Hz

A

PREVIEW
WDD





NEMA
Premium



MADE IN MEXICO

MAT: 12675405 CC029A

W01.TE0IC0X0N

HT007404NPW01

22MAR2022 S/N:

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

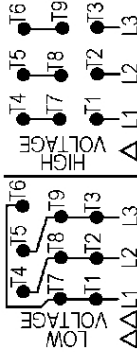
CT 2:1/VT 1000:1

PH 3	Hz 60	HP 7.5
FR 213/5T		KW 5.5
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 18.1/9.07
INS CL F AT 80K	IP55	SFA 20.8/10.4
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE H	PF 0.82
USABLE @ 208V 20.1A		RPM 1770
SF1.00		NEMA NOM. EFF 91.7%

ALTERNATE RATING: 7.5HP 50Hz 190-220/380-415V SF1.00
22.0-19.4/11.0-10.3A 1455RPM EFF 88.6% (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-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.

