

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: Premium Efficiency Three-Phase	Product code :	12809658	
		Catalog # :	00118OT3E56CFL-S	
Frame	: 56C	Cooling method	: IC01 - ODP	
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	: 26.3 lb	
Design	: A	Moment of inertia (J)	: 0.0842 sq.ft.lb	
Output [HP]	1	1	1	
Poles	4	4	4	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	3.14/1.57	3.54/1.77	3.32/1.76	
L. R. Amperes [A]	23.9/11.9	20.9/10.4	20.9/11.1	
LRC [A]	7.6x(Code L)	5.9x(Code H)	6.3x(Code J)	
No load current [A]	2.20/1.10	2.09/1.05	2.19/1.16	
Rated speed [RPM]	1760	1440	1445	
Slip [%]	2.22	4.00	3.67	
Rated torque [ft.lb]	2.98	3.65	3.63	
Locked rotor torque [%]	280	180	210	
Breakdown torque [%]	320	250	280	
Service factor		1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	30s (cold) 17s (hot)	32s (cold) 18s (hot)	30s (cold) 17s (hot)	
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	
Efficiency (%)	25%	77.3	79.9	77.3
	50%	78.5	79.6	77.8
	75%	82.5	81.4	80.7
	100%	83.5	80.6	80.8
Power Factor	25%	0.27	0.33	0.29
	50%	0.49	0.58	0.53
	75%	0.63	0.72	0.67
	100%	0.72	0.80	0.76
Bearing type	: Drive end 6204 ZZ Non drive end 6202 ZZ	Foundation loads		
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 87 lb	
		Max. compression	: 113 lb	
Lubrication interval	: - -			
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes				
USABLE @208V 3.47A SF 1.00 SFA 3.47A				
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.		
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
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TORQUE AND CURRENT VS SPEED CURVE

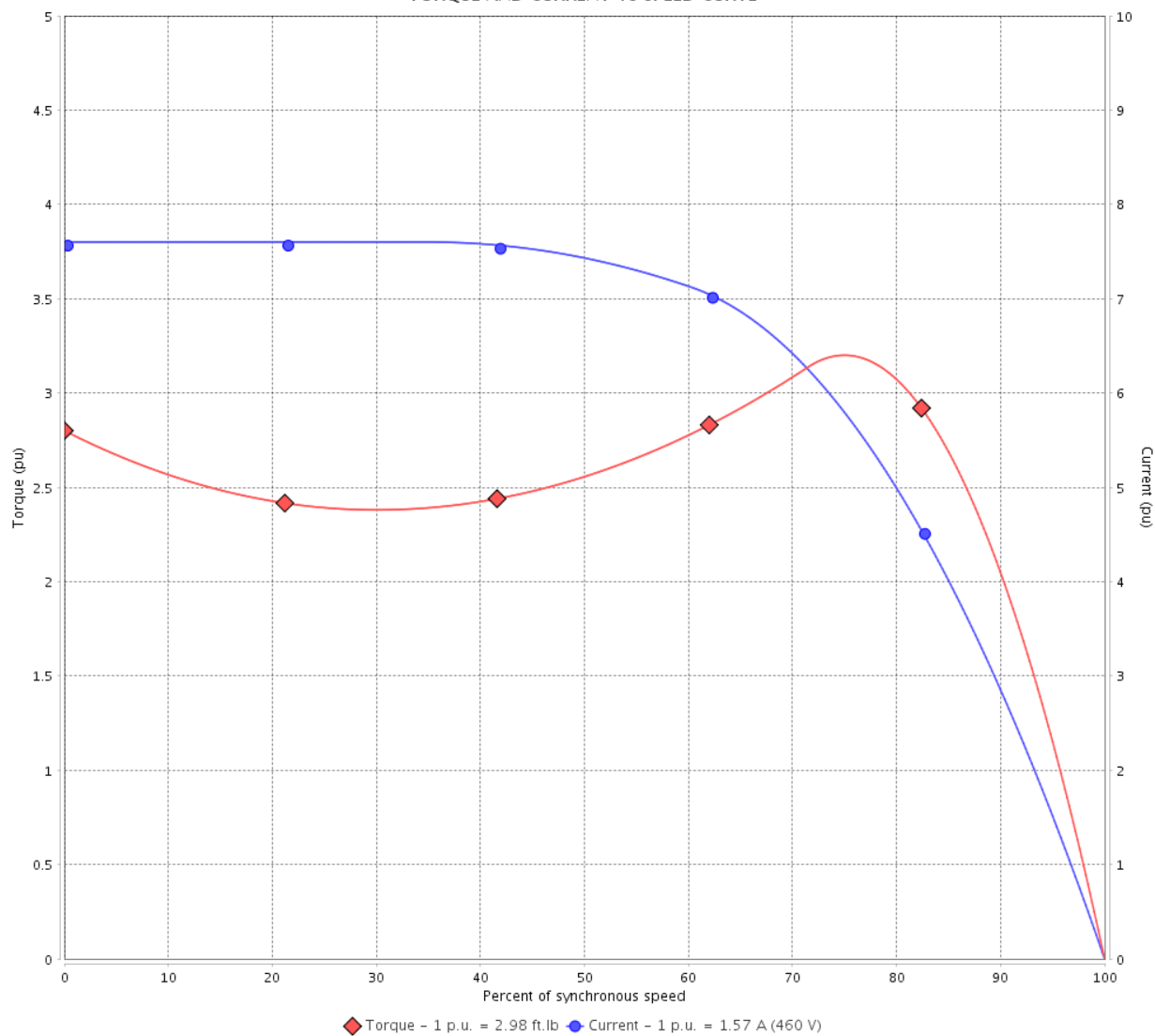
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 12809658
 Catalog # : 00118OT3E56CFL-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current	: 3.14/1.57 A	Moment of inertia (J)	: 0.0842 sq.ft.lb
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	:
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: A

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

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

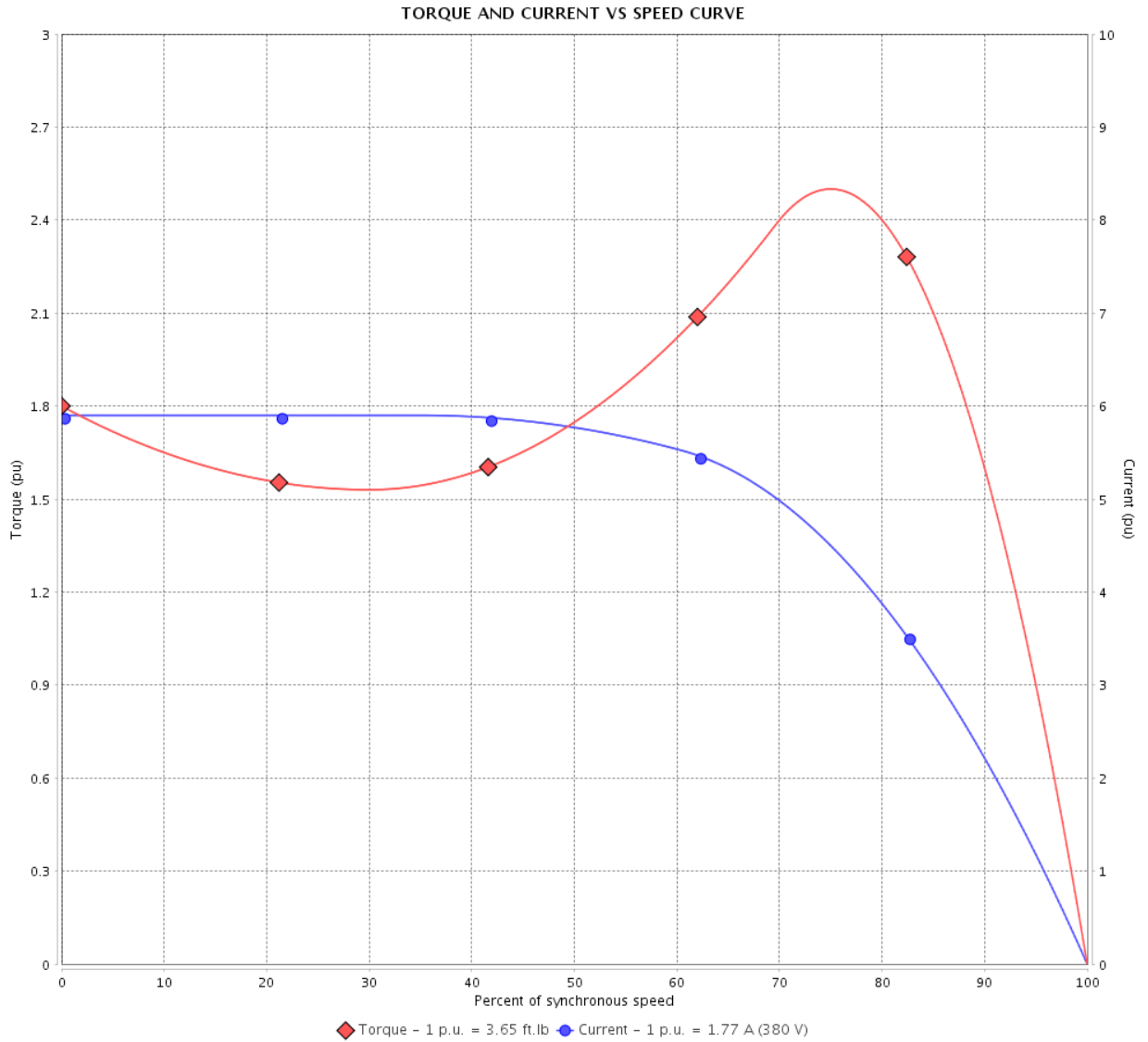
Product line : Premium Efficiency Three-Phase

Product code :

12809658

Catalog # :

00118OT3E56CFL-S



Performance : 190/380 V 50 Hz 4P

Rated current : 3.54/1.77 A
 LRC : 5.9
 Rated torque : 3.65 ft.lb
 Locked rotor torque : 180 %
 Breakdown torque : 250 %
 Rated speed : 1440 rpm

Moment of inertia (J) : 0.0842 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

Locked rotor time : 32s (cold) 18s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

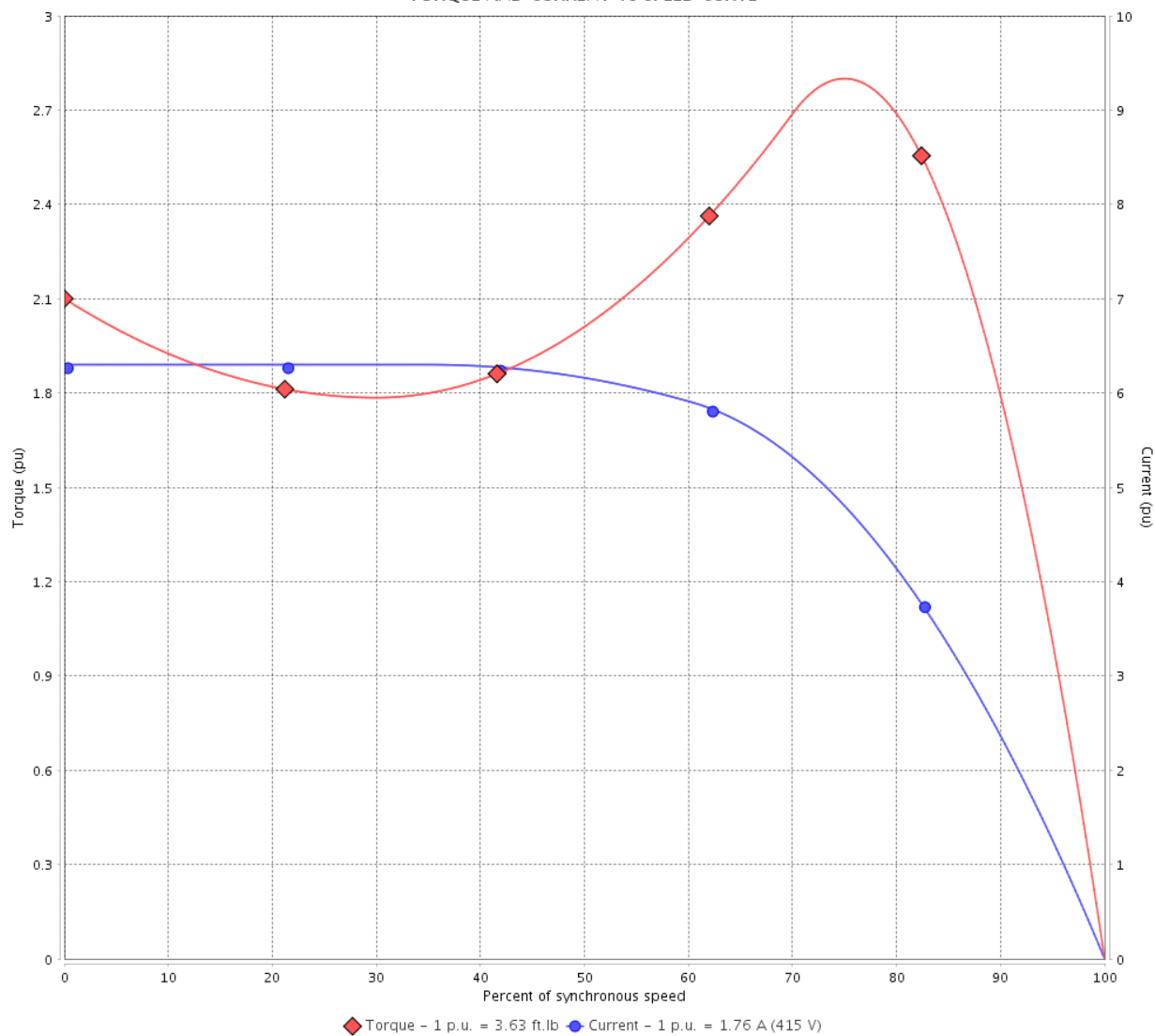
Three Phase Induction Motor - Squirrel Cage



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Product line : Premium Efficiency Three-Phase Product code : 12809658
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current	: 3.32/1.76 A	Moment of inertia (J)	: 0.0842 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 3.63 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1445 rpm	Design	: A

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

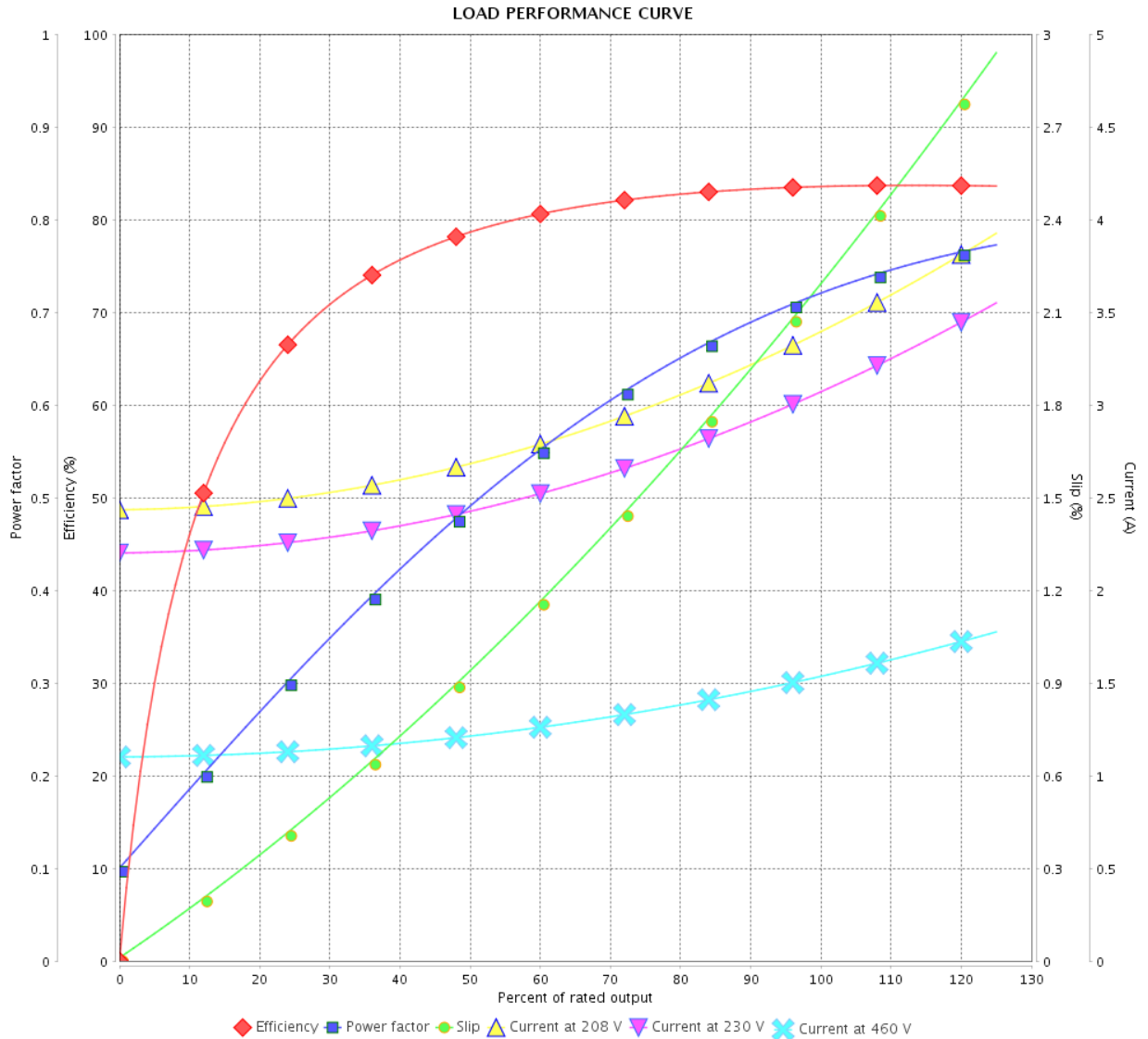
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 Locked rotor torque : 280 %
 Breakdown torque : 320 %
 Rated speed : 1760 rpm

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 Insulation class : F
 Service factor :
 Temperature rise : 80 K
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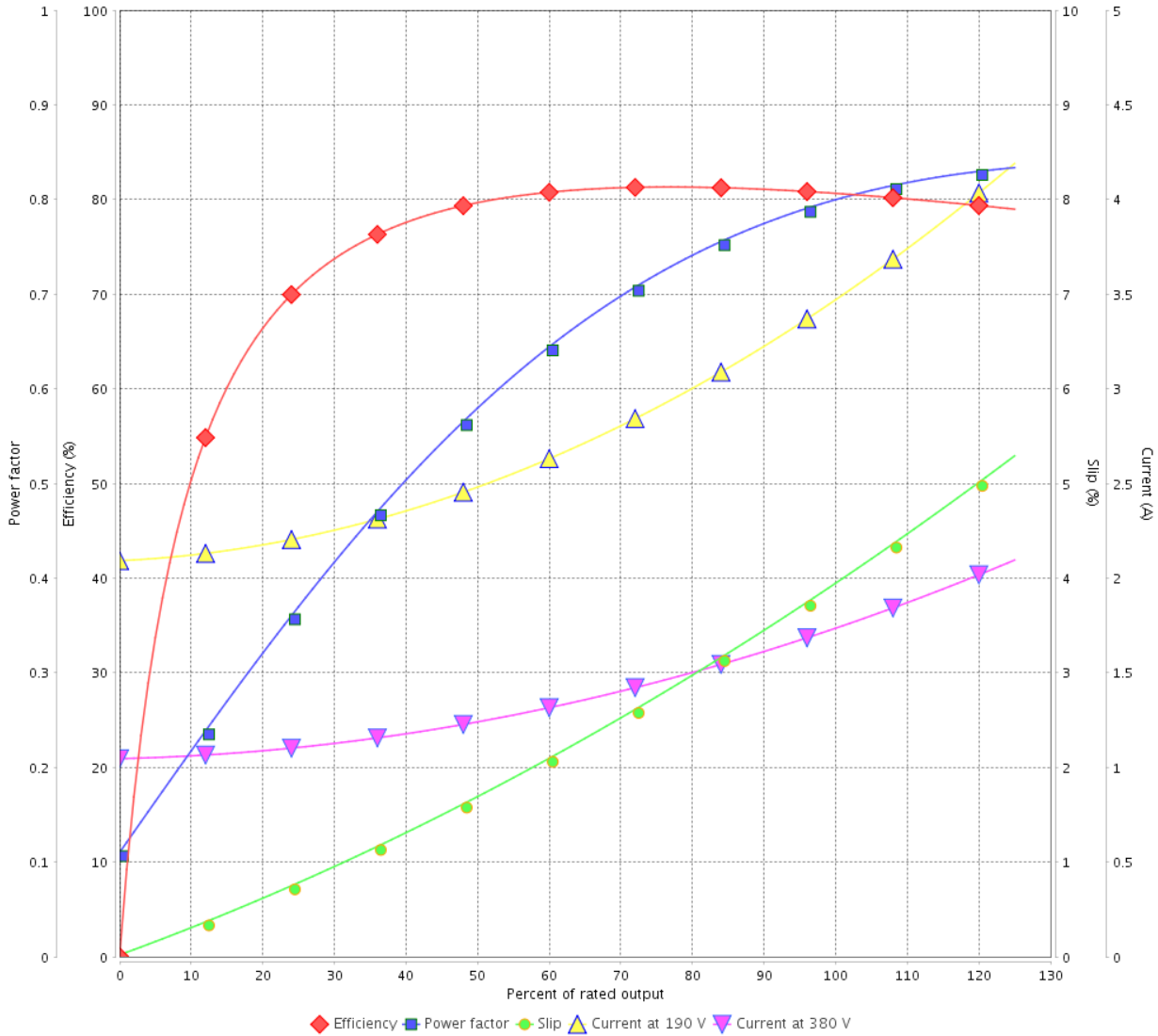
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LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 4P

Rated current	: 3.54/1.77 A	Moment of inertia (J)	: 0.0842 sq.ft.lb
LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 3.65 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1440 rpm	Design	: A

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Three Phase Induction Motor - Squirrel Cage



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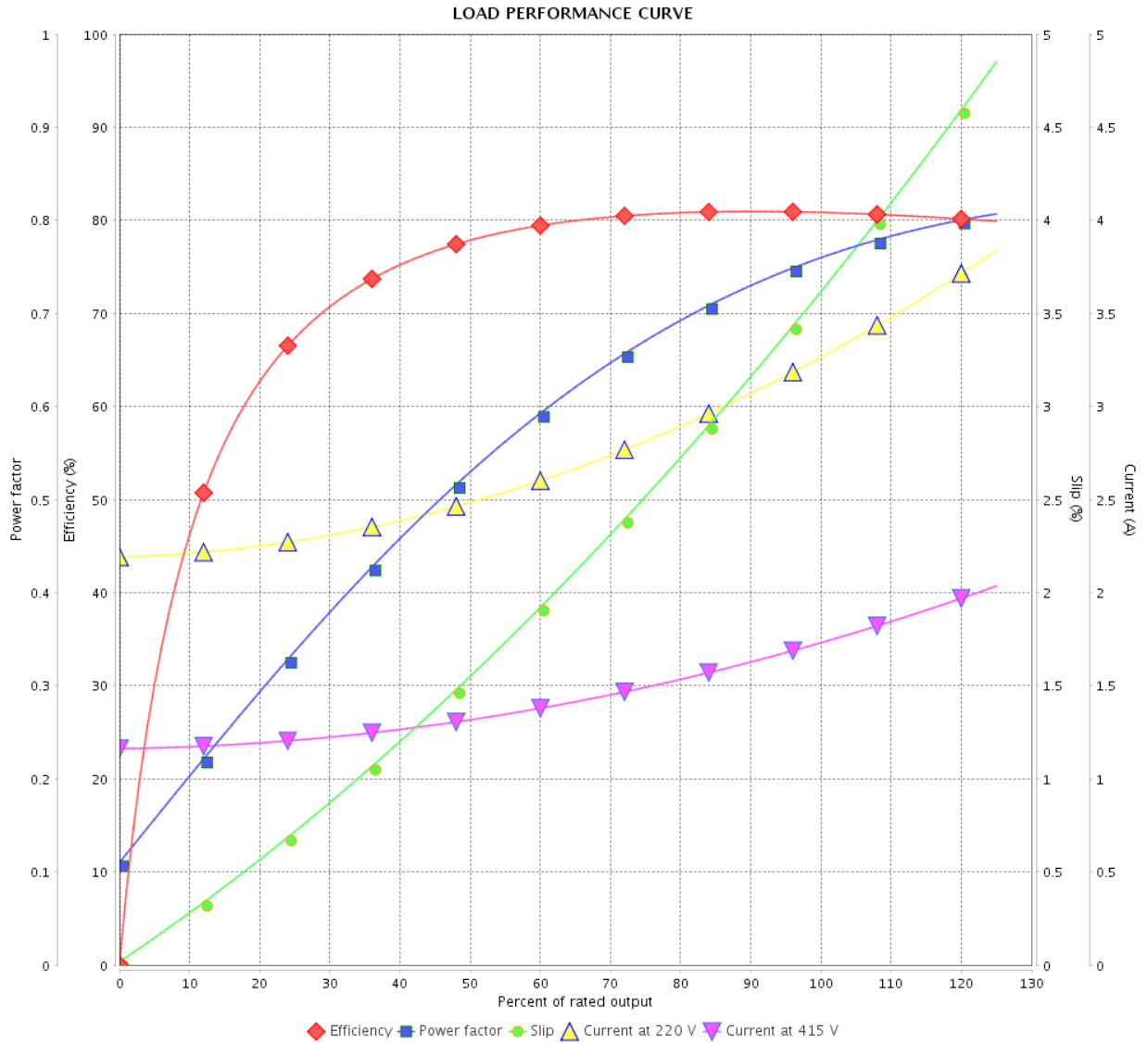
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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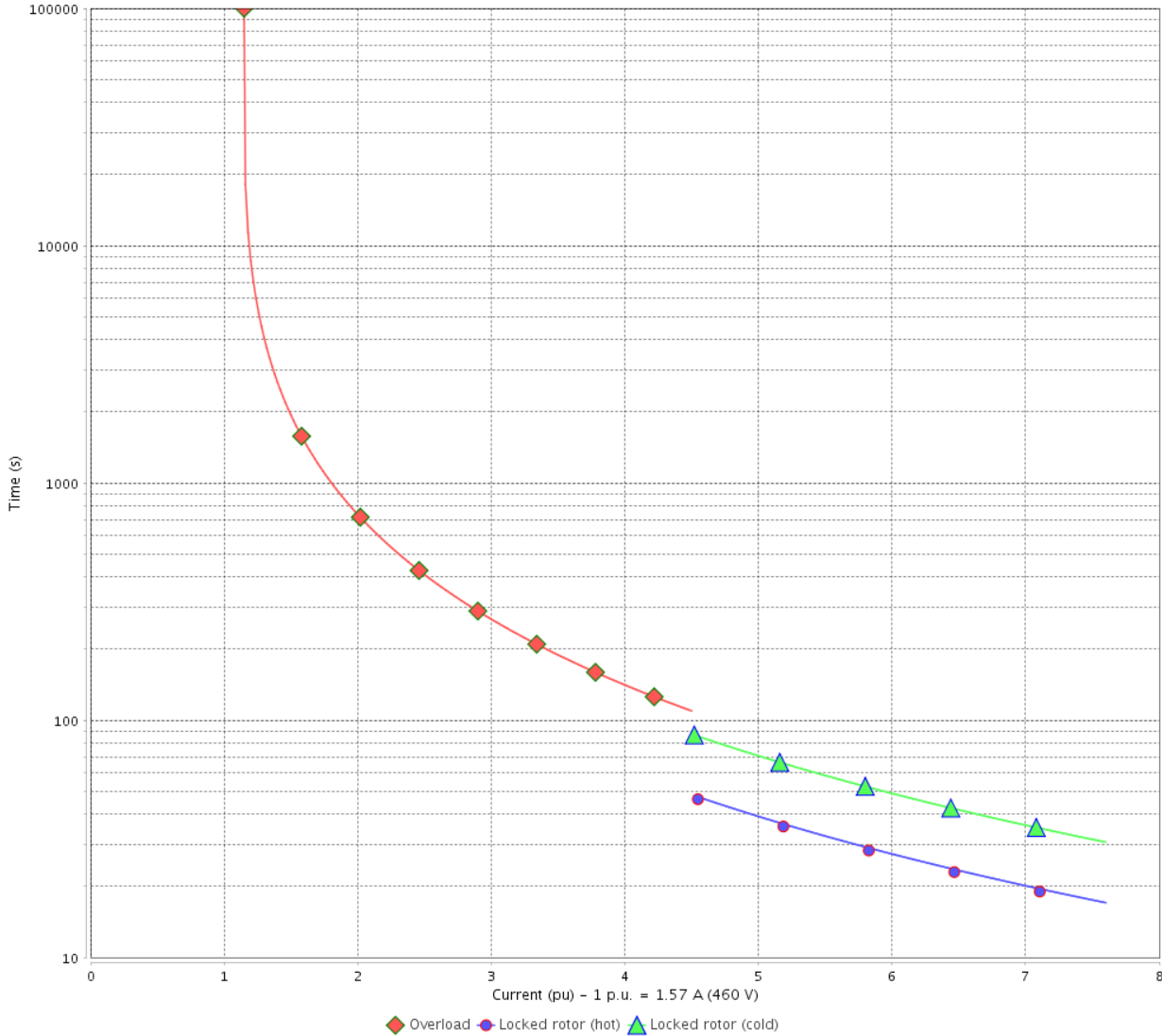
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 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : A

Heating constant

Cooling constant

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Three Phase Induction Motor - Squirrel Cage



Customer : _____

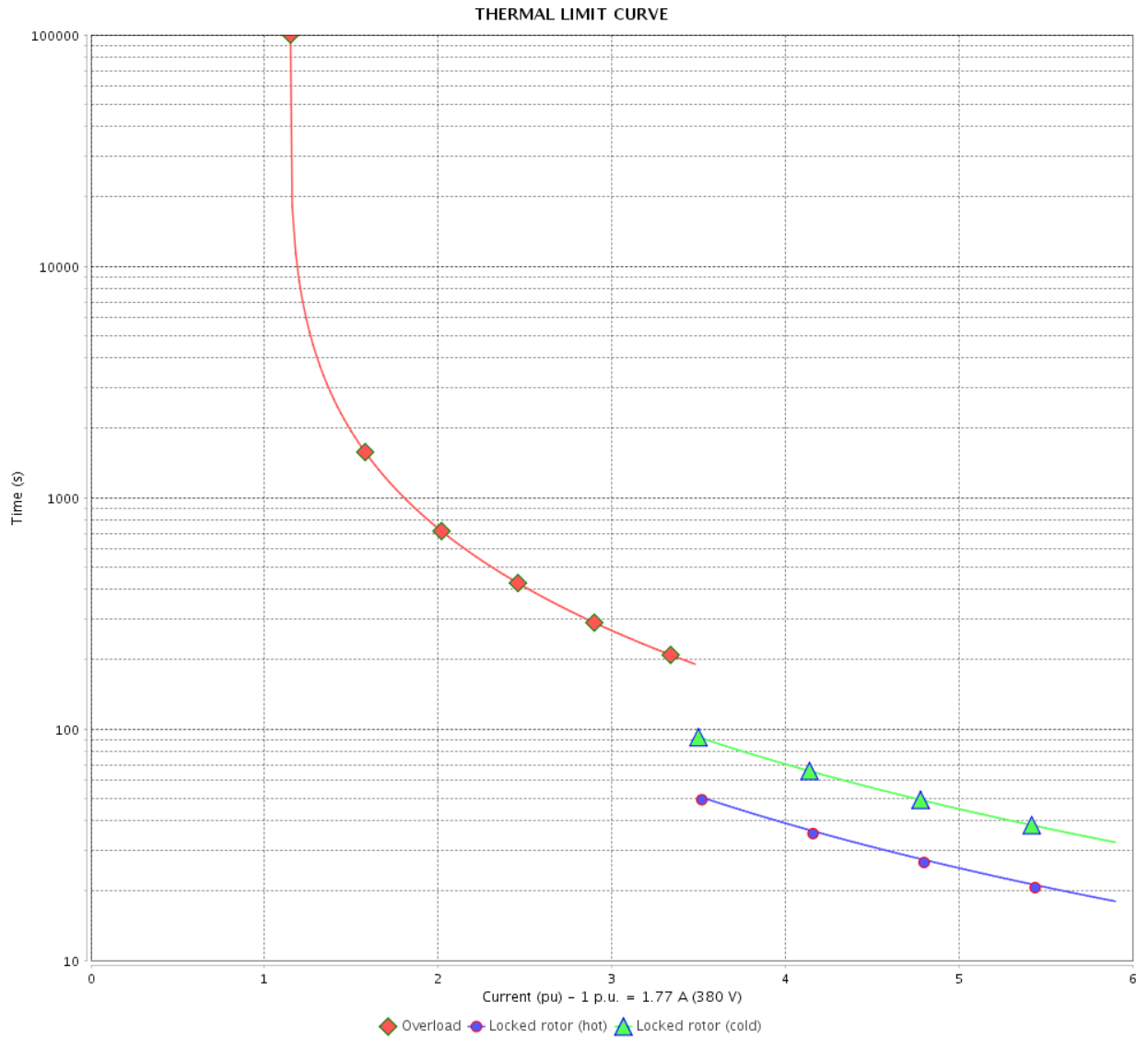
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 Rated speed : 1440 rpm

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 Service factor : 1.15
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Cooling constant

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THERMAL LIMIT CURVE

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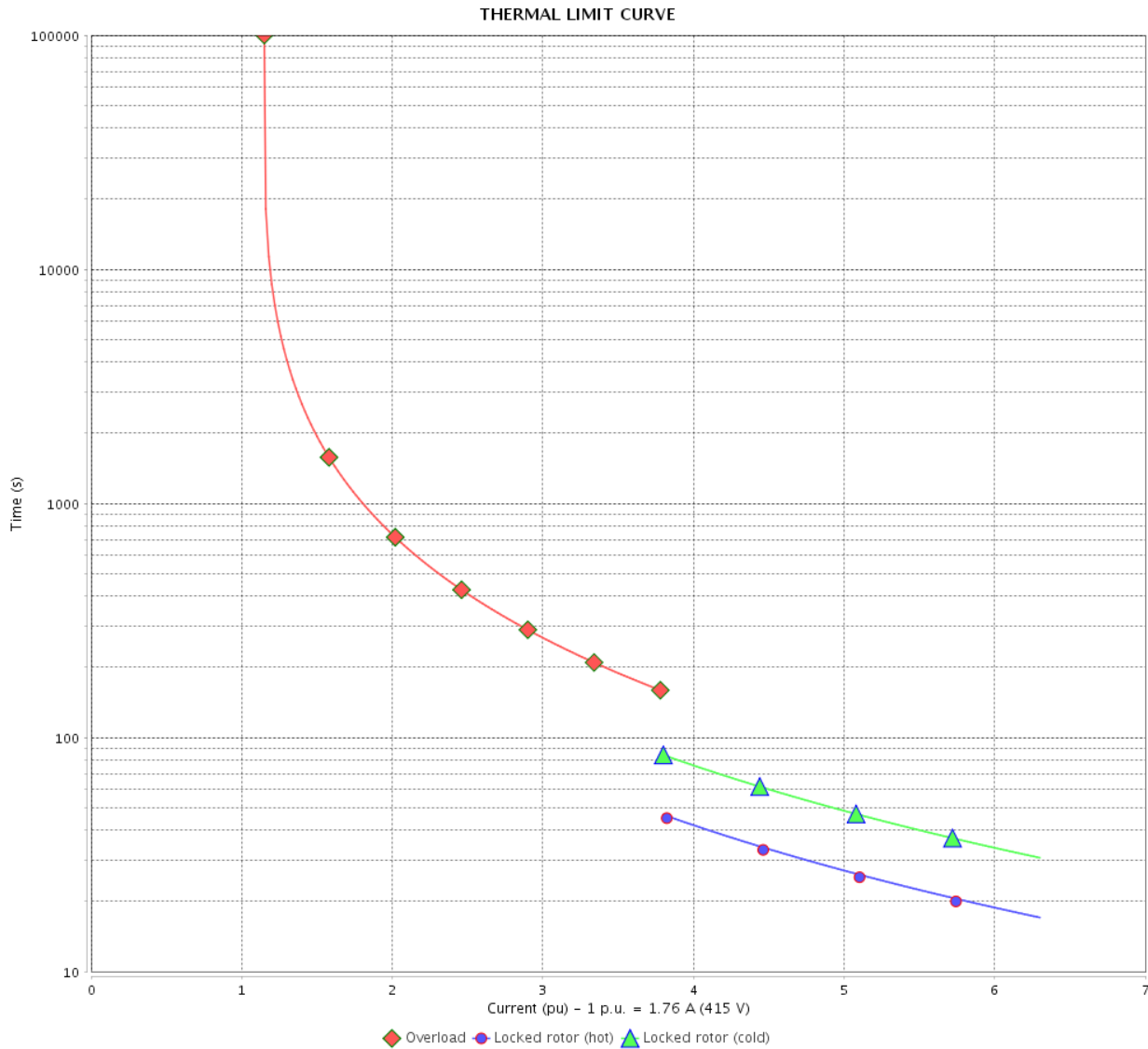
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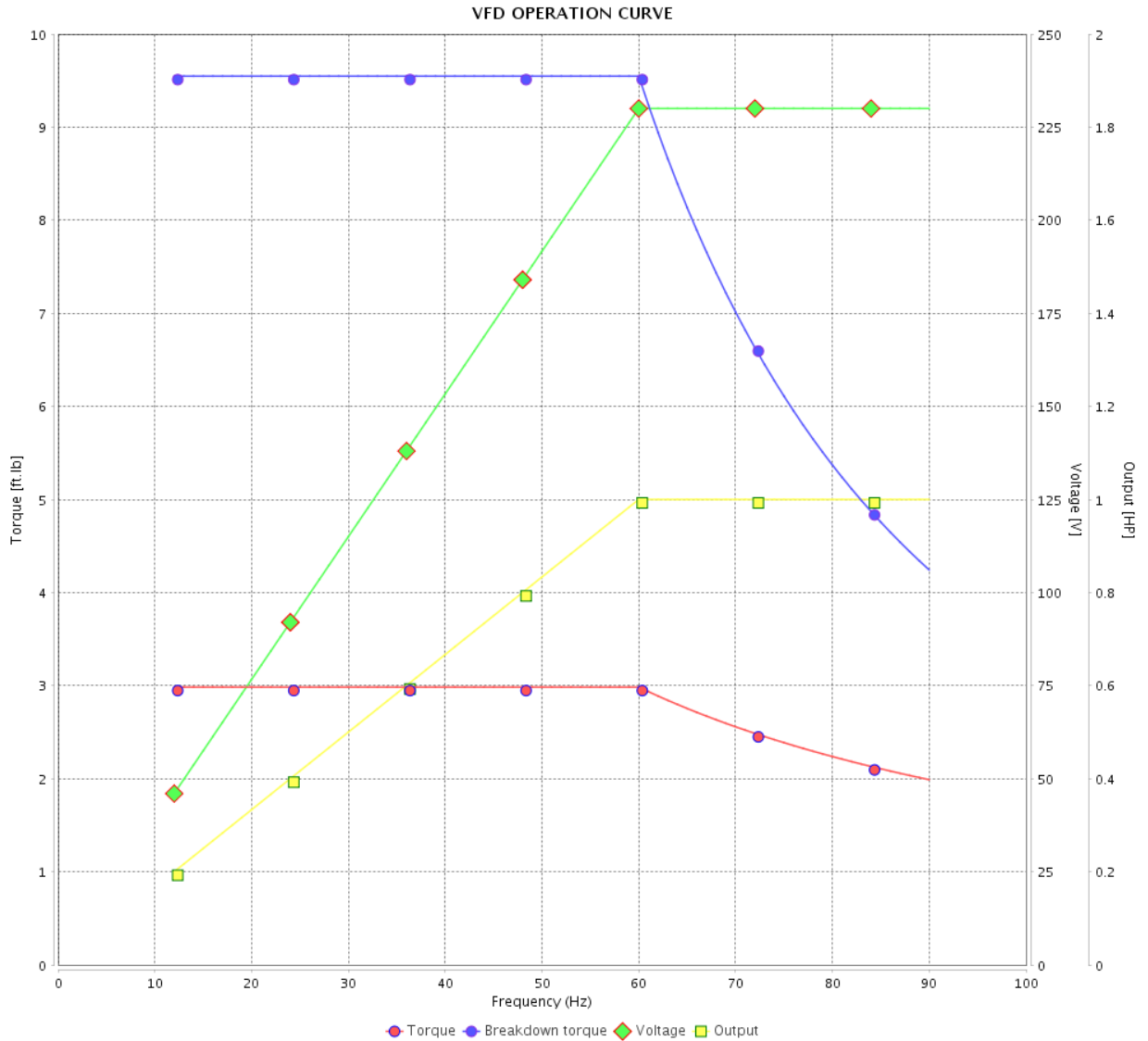
VFD OPERATION CURVE

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 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : A

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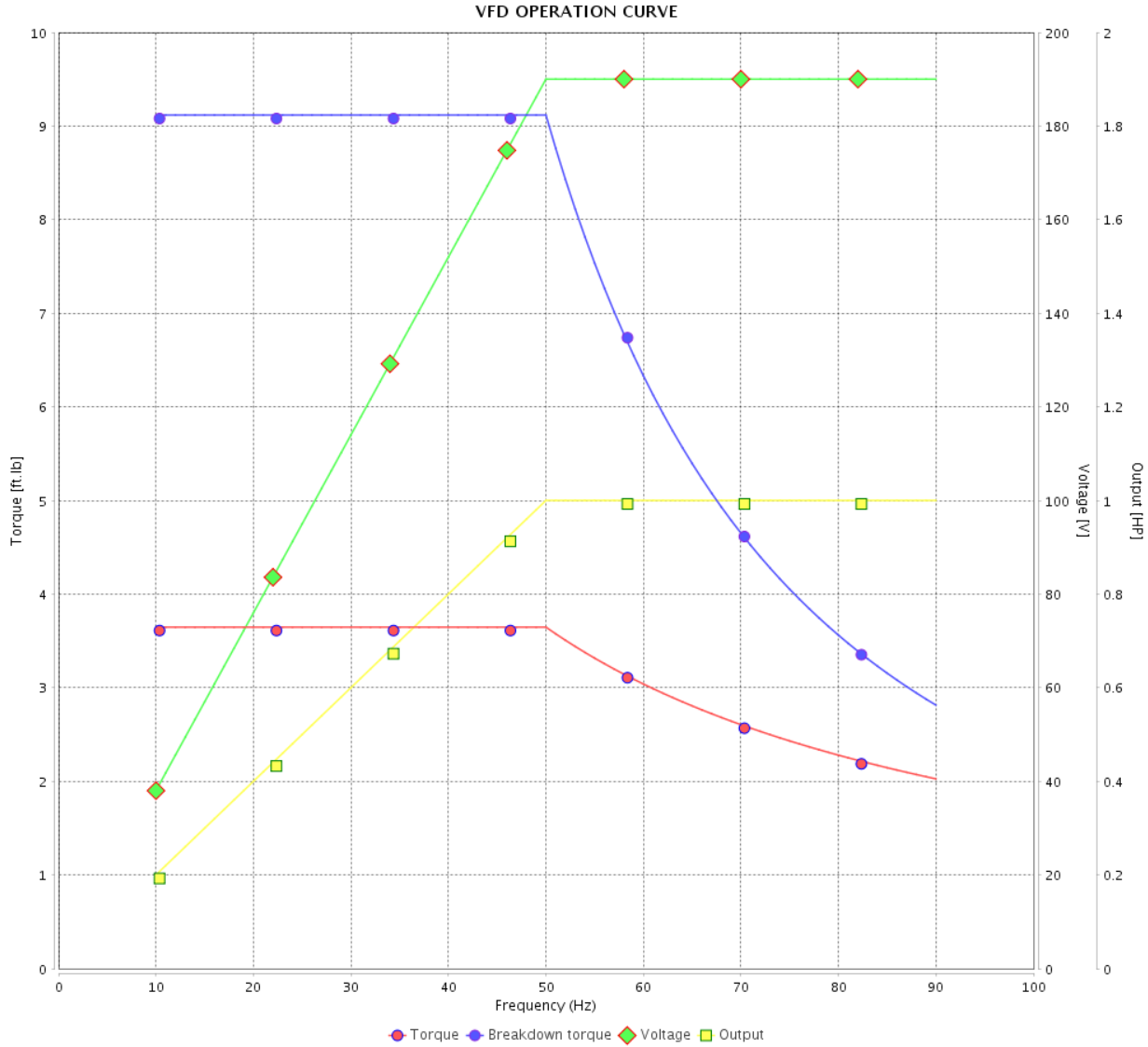
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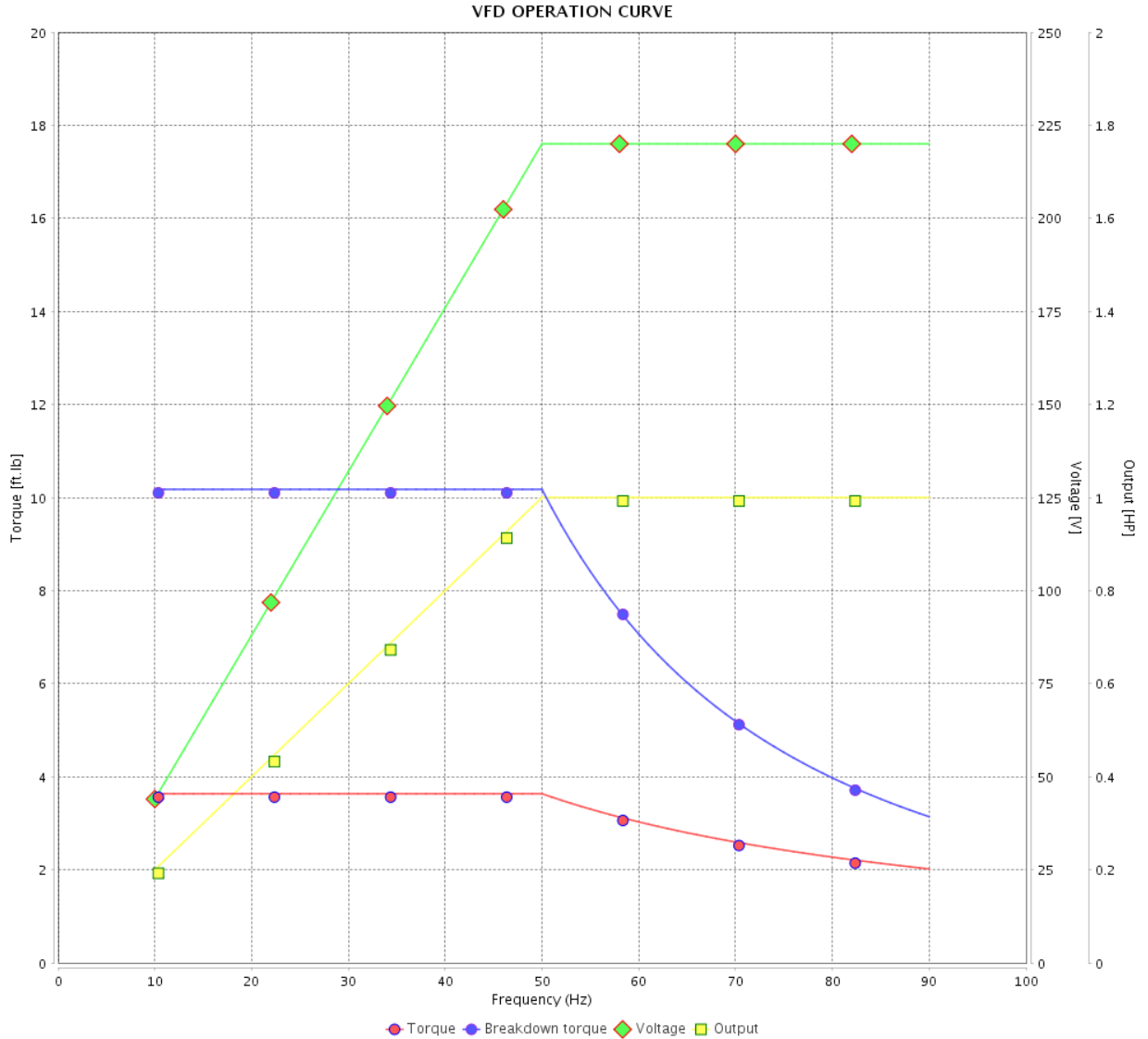
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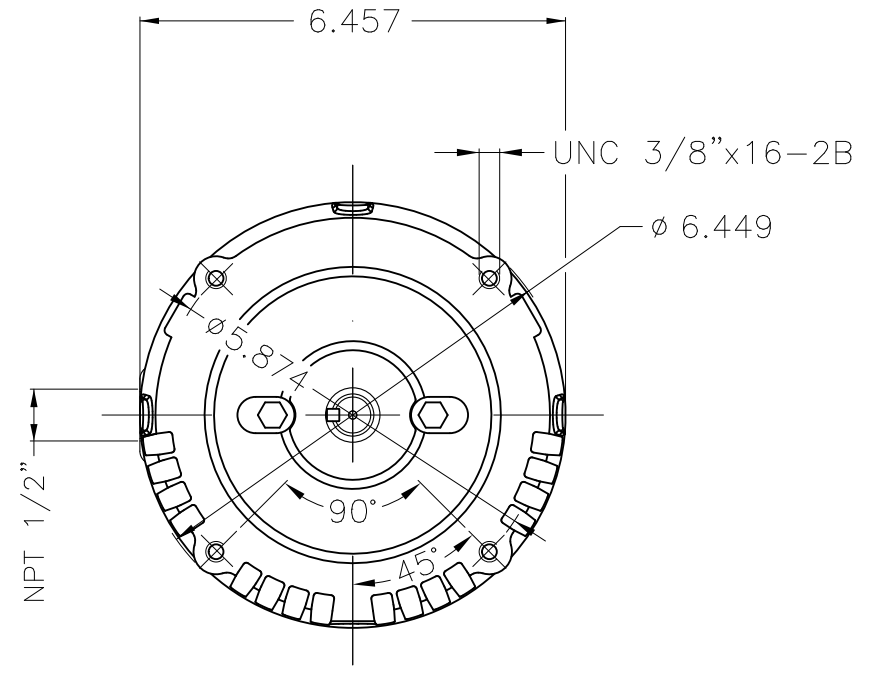
A

B

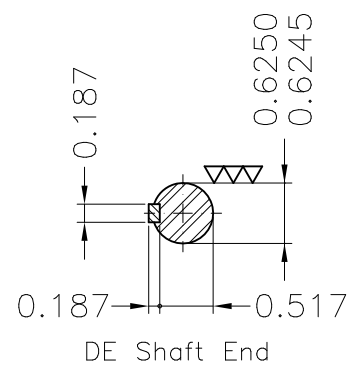
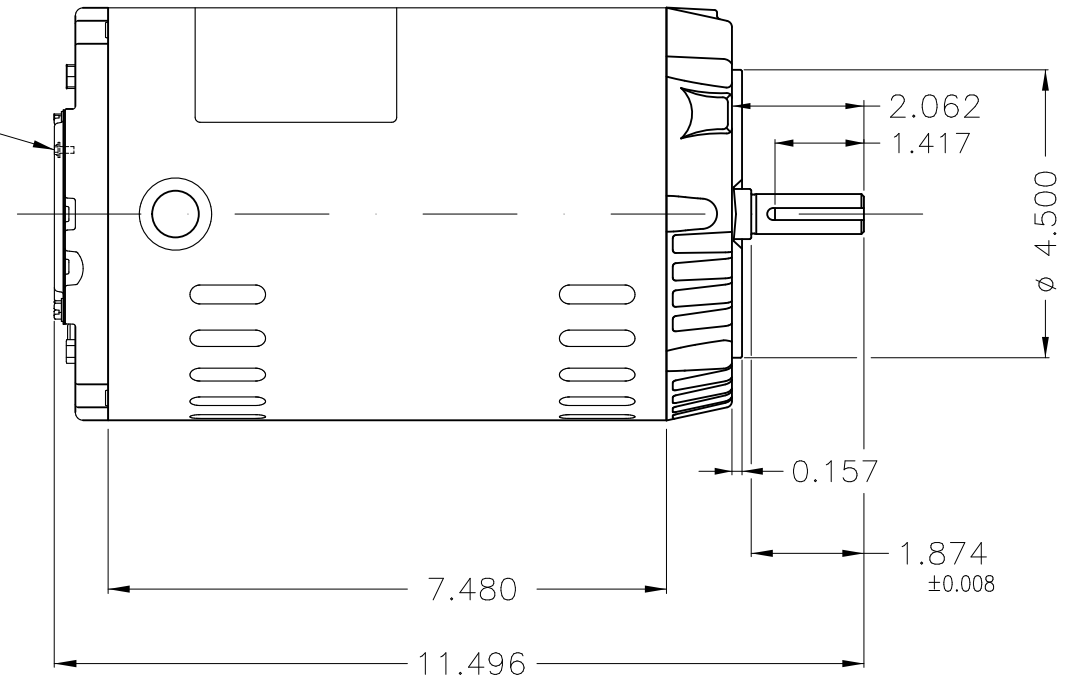
C

D

E



Grounding



Dimensions in inches

Without coating										
Mounting F-1/B14R(D)										
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.				PREVIEW	WDD	SHEET	1 / 1	
CHECKED		FRAME 56C IP21 ODP								
RELEASED										
REL DT.		WMO	Jaragua do Sul	Product Engineering						

1 HP 04 Poles 60 Hz

A

XME A3



NEMA
Premium



MADE IN MEXICO

MAT: 12809658

W01.T00IC0X0X

MODEL 001180T3E56CFL-S

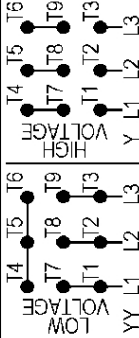
01FEB2022 B/N:

PH 3	Hz 60	HP 1.0
FR 56C		KW 0.75
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 3.14/1.57
INS CL F AT 80K		SFA 3.61/1.81
AMB 40°C	DES A	SF 1.15
ENCL ODP	CODE L	PF 0.72
USABLE @ 208V 3.47A		RPM 1760
SF1.00		AVG.F.L. 83.5%

ALTERNATE RATING: 1.0HP 50Hz 190-220/380-415V SF1.15
3.54-3.34/1.77-1.77A 1440RPM EFF 80.6% (IE2) IEC 60034-1

Inverter duty motor For 80Hz 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.

