

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	:		
Product line	: Premium Efficiency Three-Phase	Product code :	14786571
		Catalog # :	00218ET3E56CFL-S
Frame	: 56C	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	: 41.1 lb
Protection degree	: IP55	Moment of inertia (J)	: 0.1296 sq.ft.lb
Design	: B		
Output [HP]	2	2	2
Poles	4	4	4
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	5.44/2.72	6.50/3.25	5.89/3.12
L. R. Amperes [A]	44.6/22.3	39.0/19.5	39.4/20.9
LRC [A]	8.2x(Code K)	6.0x(Code H)	6.7x(Code J)
No load current [A]	2.80/1.40	2.75/1.37	2.87/1.52
Rated speed [RPM]	1745	1415	1425
Slip [%]	3.06	5.67	5.00
Rated torque [ft.lb]	6.02	7.42	7.37
Locked rotor torque [%]	270	210	240
Breakdown torque [%]	300	240	270
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	27s (cold) 15s (hot)	25s (cold) 14s (hot)	23s (cold) 13s (hot)
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%	86.0	86.0
	50%	85.5	85.4
	75%	87.5	84.9
	100%	86.5	83.6
Power Factor	25%	0.35	0.38
	50%	0.60	0.64
	75%	0.73	0.76
	100%	0.80	0.83
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 : 175 lb
Lubrication interval	: -	-	Max. compression : 216 lb
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		
Notes			
USABLE @208V 6.02A SF 1.00 SFA 6.02A			
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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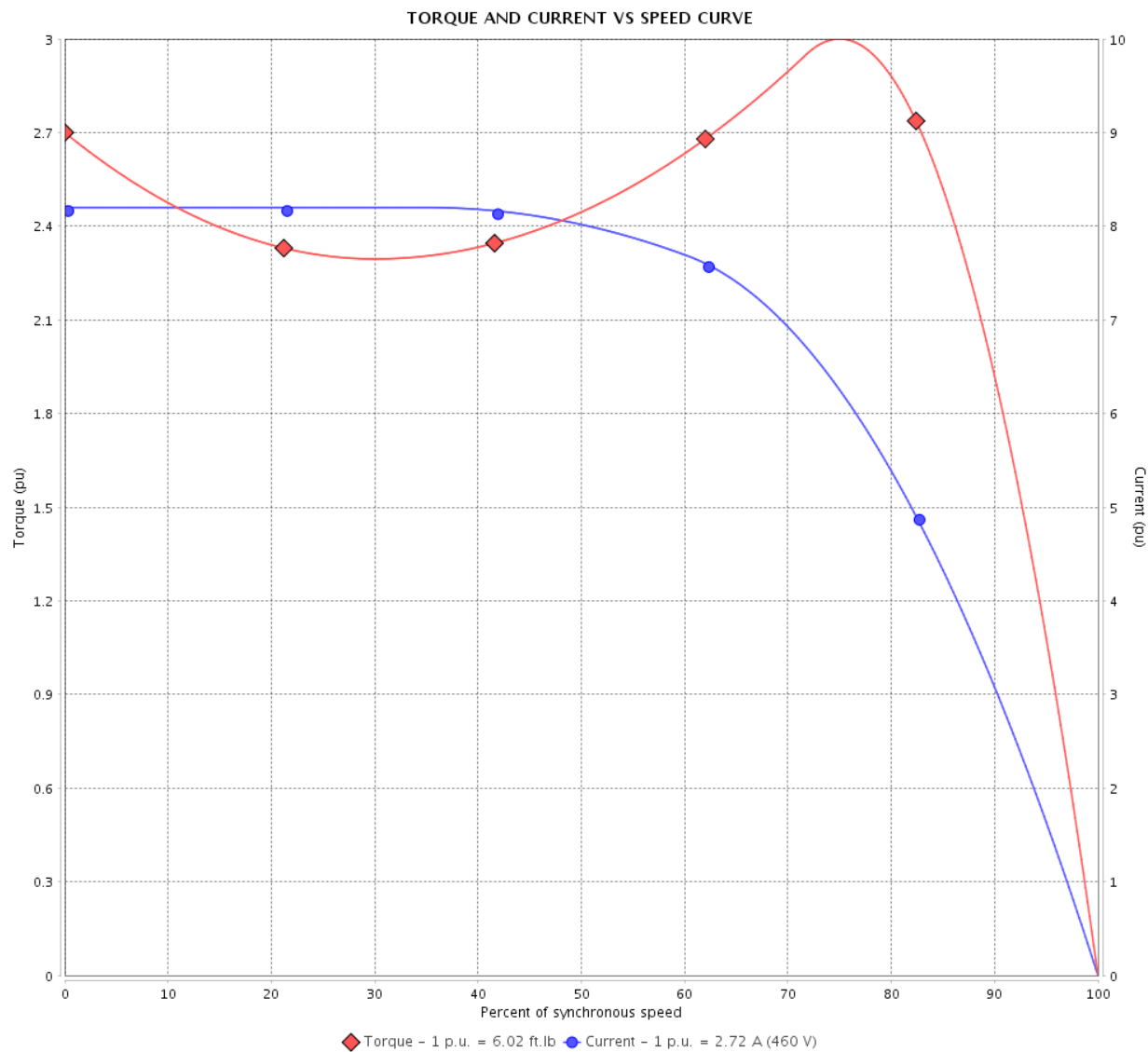
TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 14786571
 Catalog # : 00218ET3E56CFL-S



Performance : 230/460 V 60 Hz 4P

Rated current	: 5.44/2.72 A	Moment of inertia (J)	: 0.1296 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 6.02 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	:
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1745 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 : _____

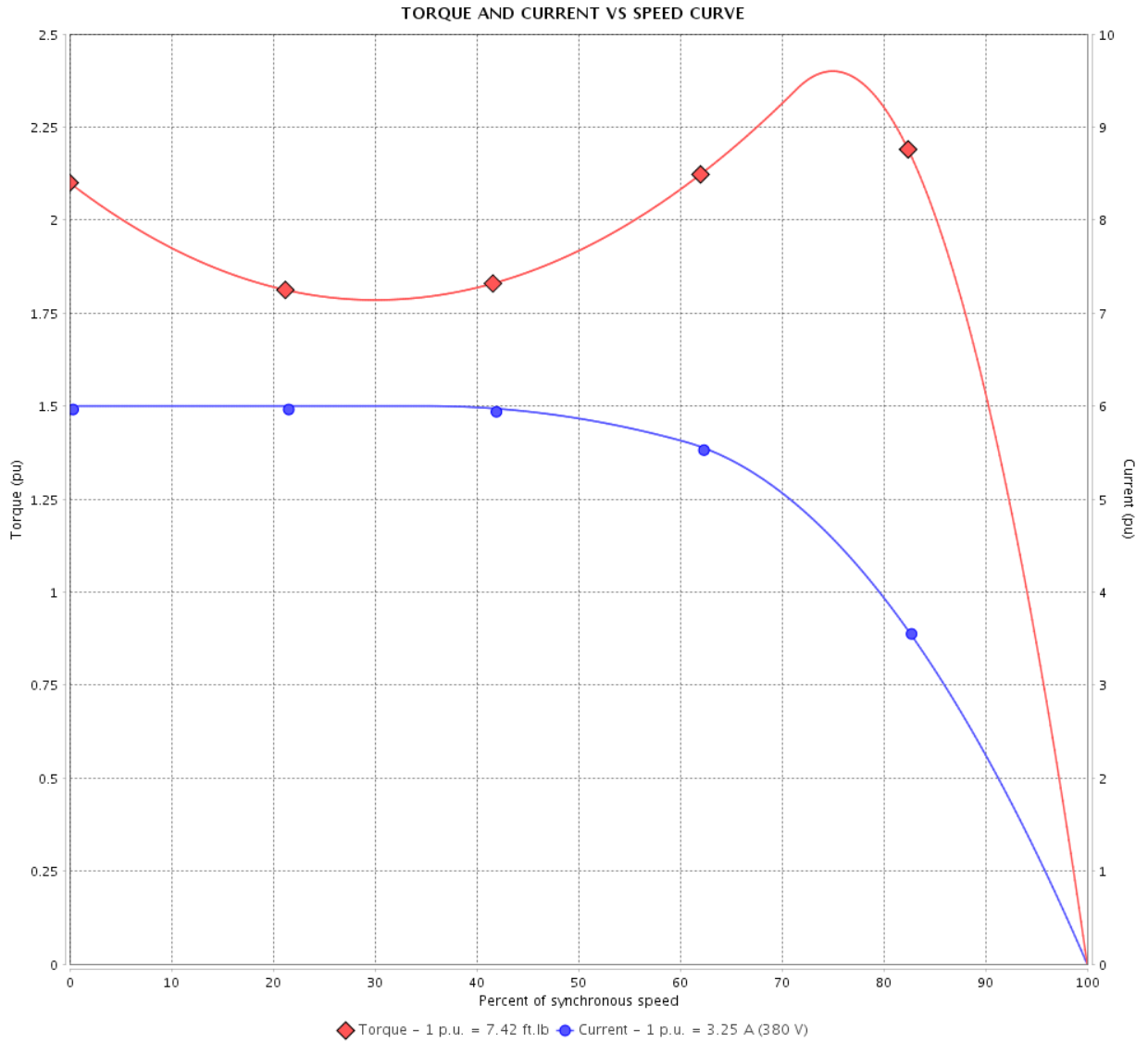
Product line : Premium Efficiency Three-Phase

Product code :

14786571

Catalog # :

00218ET3E56CFL-S



Performance : 190/380 V 50 Hz 4P

Rated current : 6.50/3.25 A
 LRC : 6.0
 Rated torque : 7.42 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 240 %
 Rated speed : 1415 rpm

Moment of inertia (J) : 0.1296 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 25s (cold) 14s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

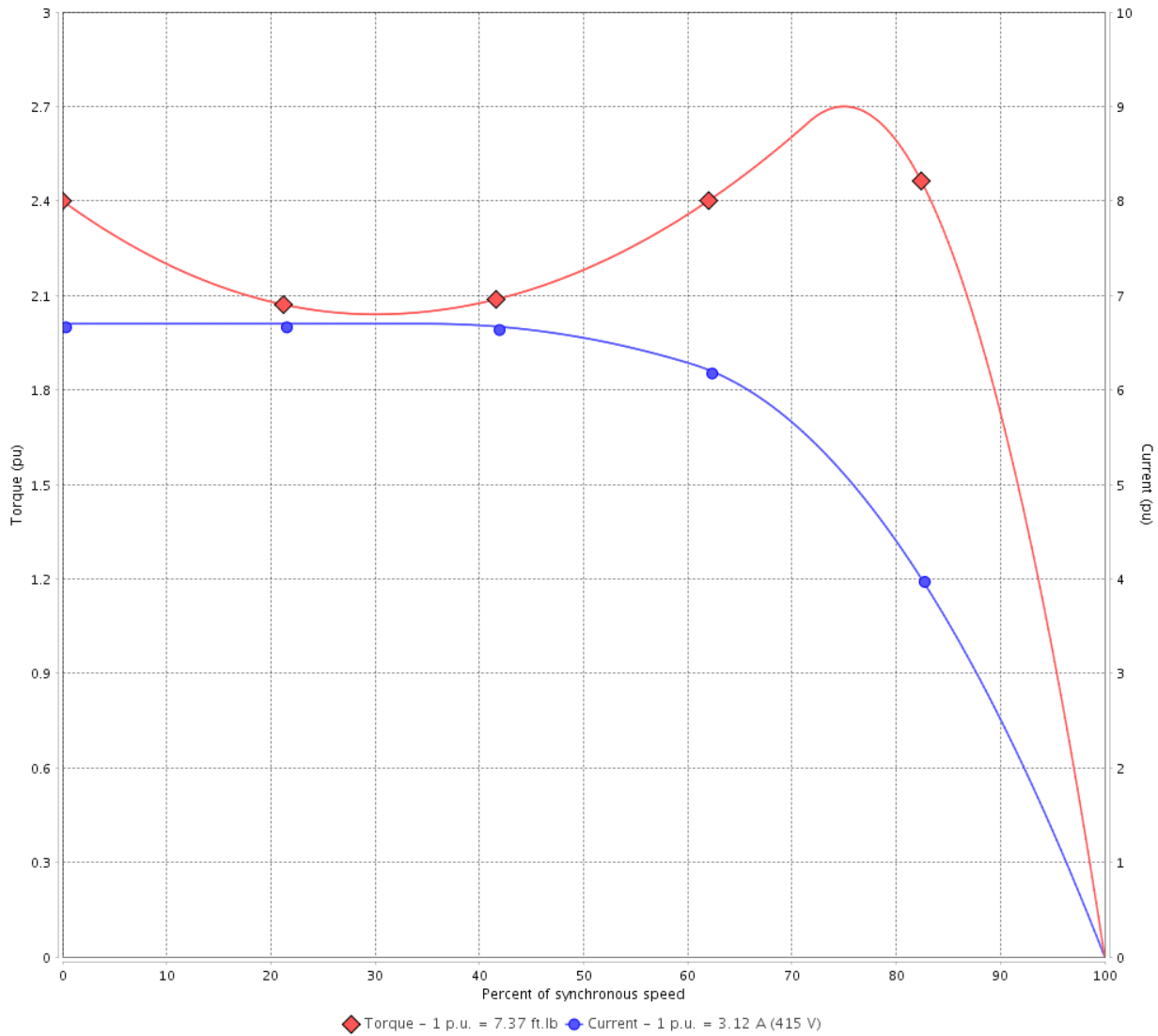
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 14786571
 Catalog # : 00218ET3E56CFL-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current	: 5.89/3.12 A	Moment of inertia (J)	: 0.1296 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 7.37 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1425 rpm	Design	: B

Locked rotor time : 23s (cold) 13s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

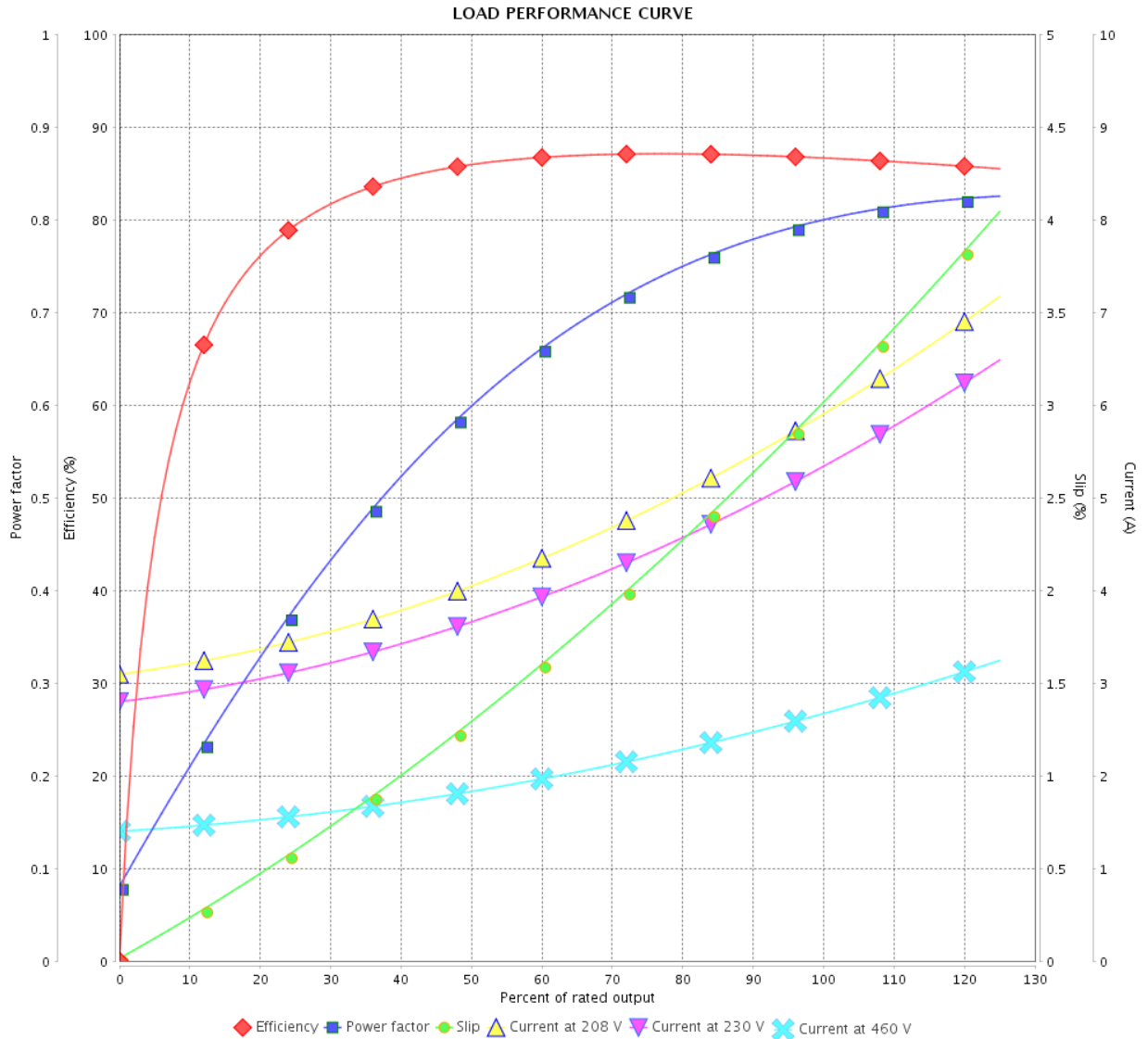
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Performance : 230/460 V 60 Hz 4P

Rated current : 5.44/2.72 A
 LRC : 8.2
 Rated torque : 6.02 ft.lb
 Locked rotor torque : 270 %
 Breakdown torque : 300 %
 Rated speed : 1745 rpm

Moment of inertia (J) : 0.1296 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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Date				

LOAD PERFORMANCE CURVE

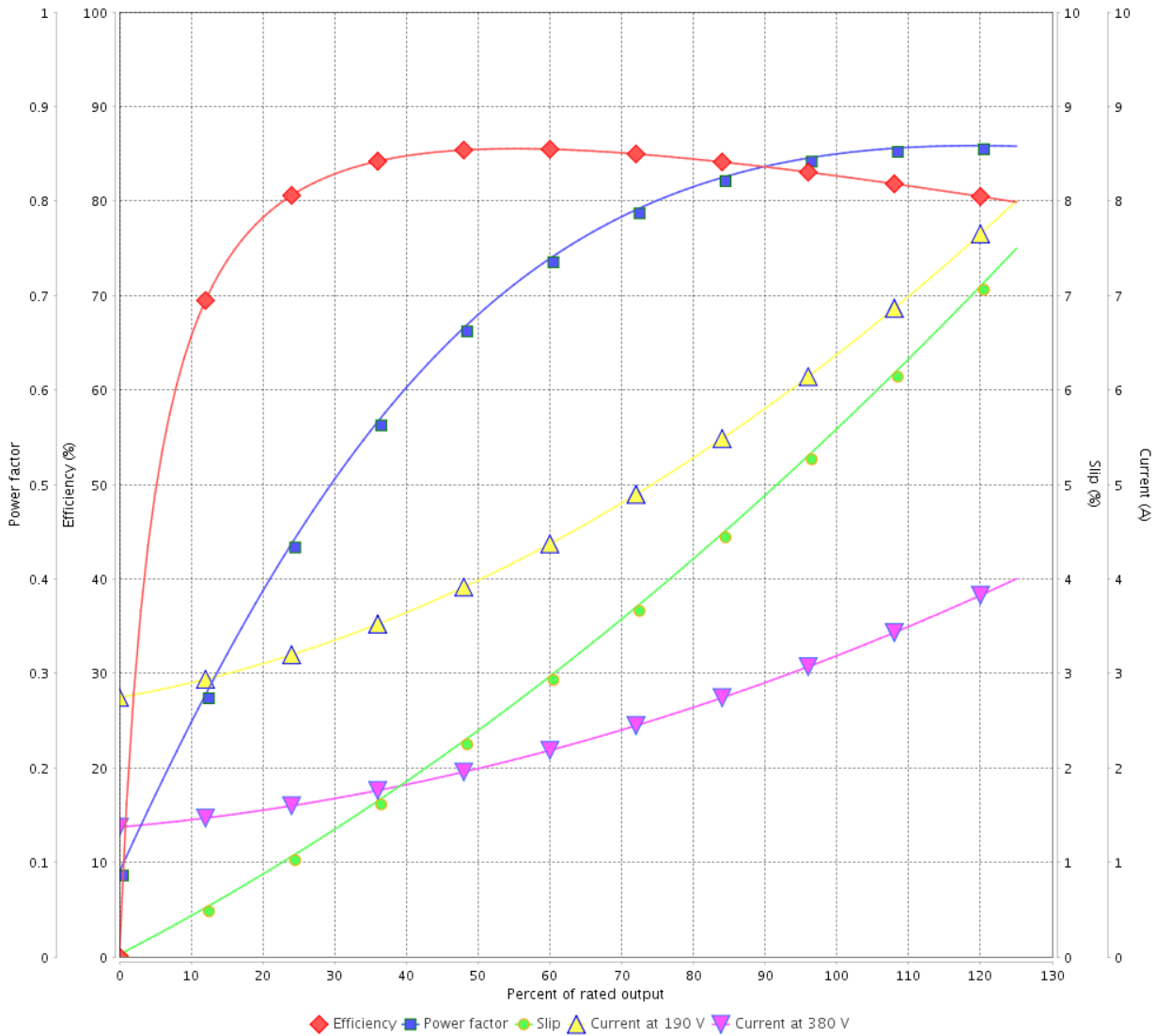
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Customer :

Product line : Premium Efficiency Three-Phase Product code : 14786571
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LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 4P

Rated current	: 6.50/3.25 A	Moment of inertia (J)	: 0.1296 sq.ft.lb
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 7.42 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1415 rpm	Design	: B

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Three Phase Induction Motor - Squirrel Cage



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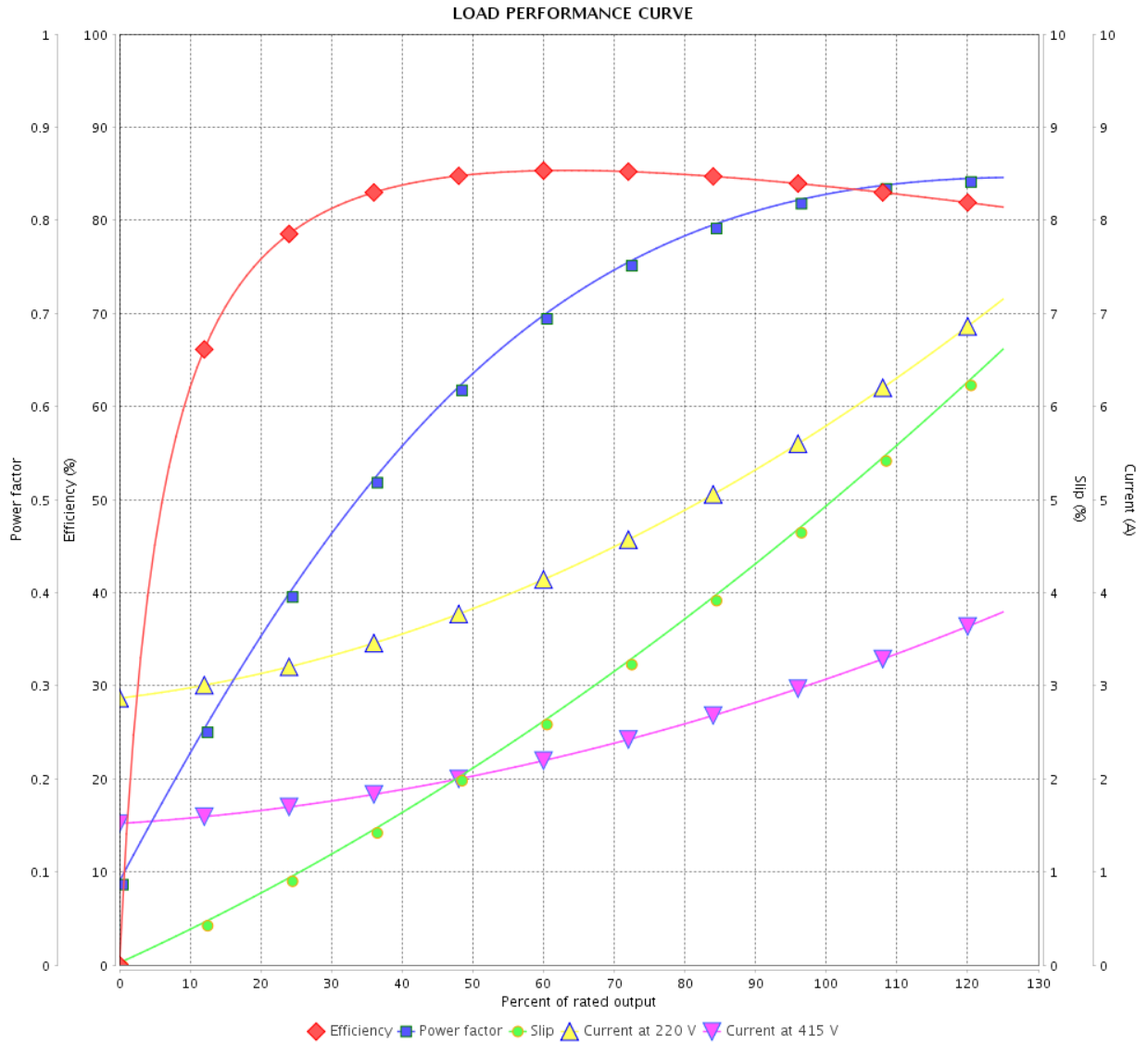
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Performance : 220/415 V 50 Hz 4P

Rated current : 5.89/3.12 A
 LRC : 6.7
 Rated torque : 7.37 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 270 %
 Rated speed : 1425 rpm

Moment of inertia (J) : 0.1296 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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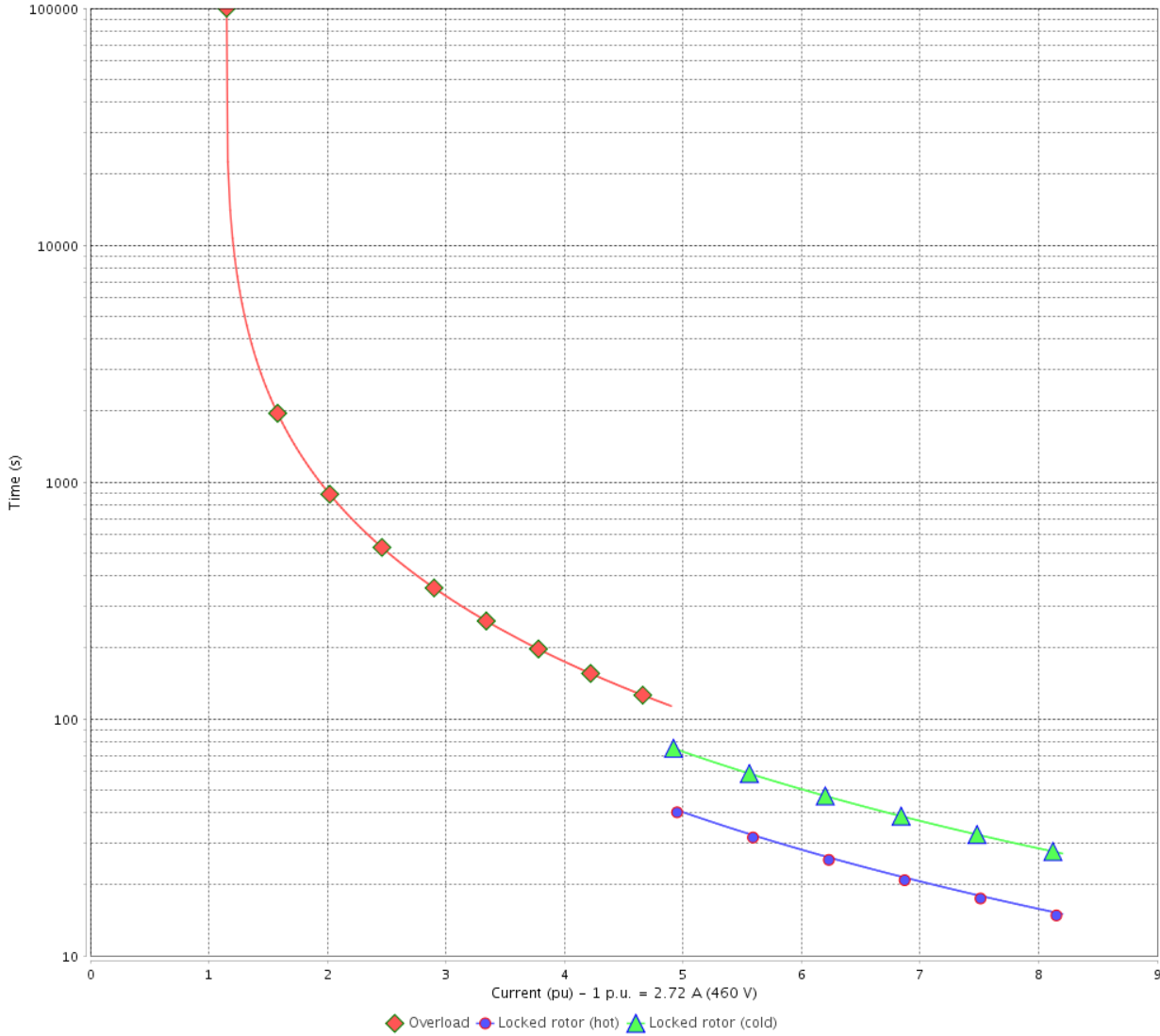
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THERMAL LIMIT CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 5.44/2.72 A
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 Rated torque : 6.02 ft.lb
 Locked rotor torque : 270 %
 Breakdown torque : 300 %
 Rated speed : 1745 rpm

Moment of inertia (J) : 0.1296 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

Heating constant

Cooling constant

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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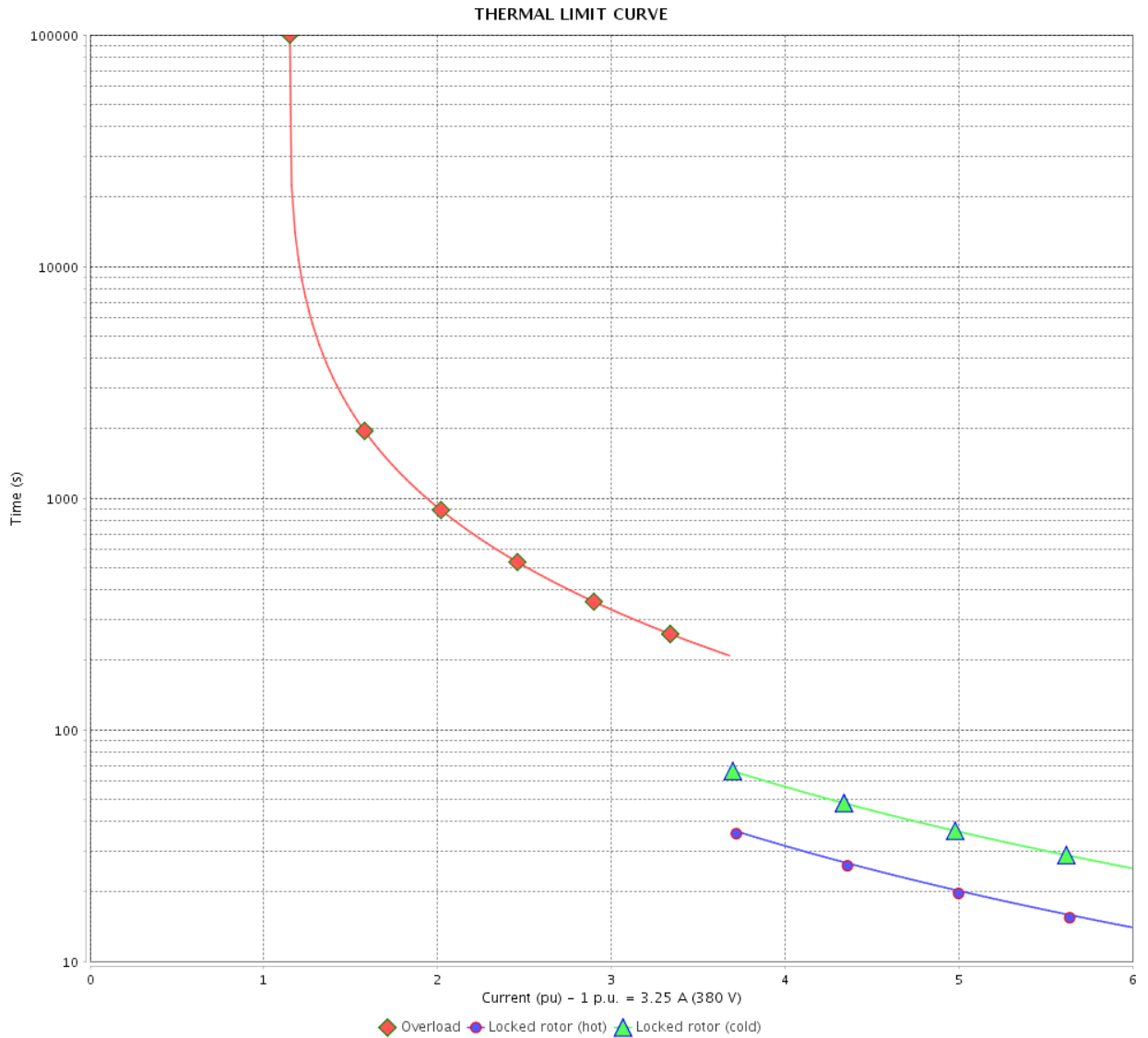
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Performance : 190/380 V 50 Hz 4P

Rated current : 6.50/3.25 A
 LRC : 6.0
 Rated torque : 7.42 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 240 %
 Rated speed : 1415 rpm

Moment of inertia (J) : 0.1296 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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THERMAL LIMIT CURVE

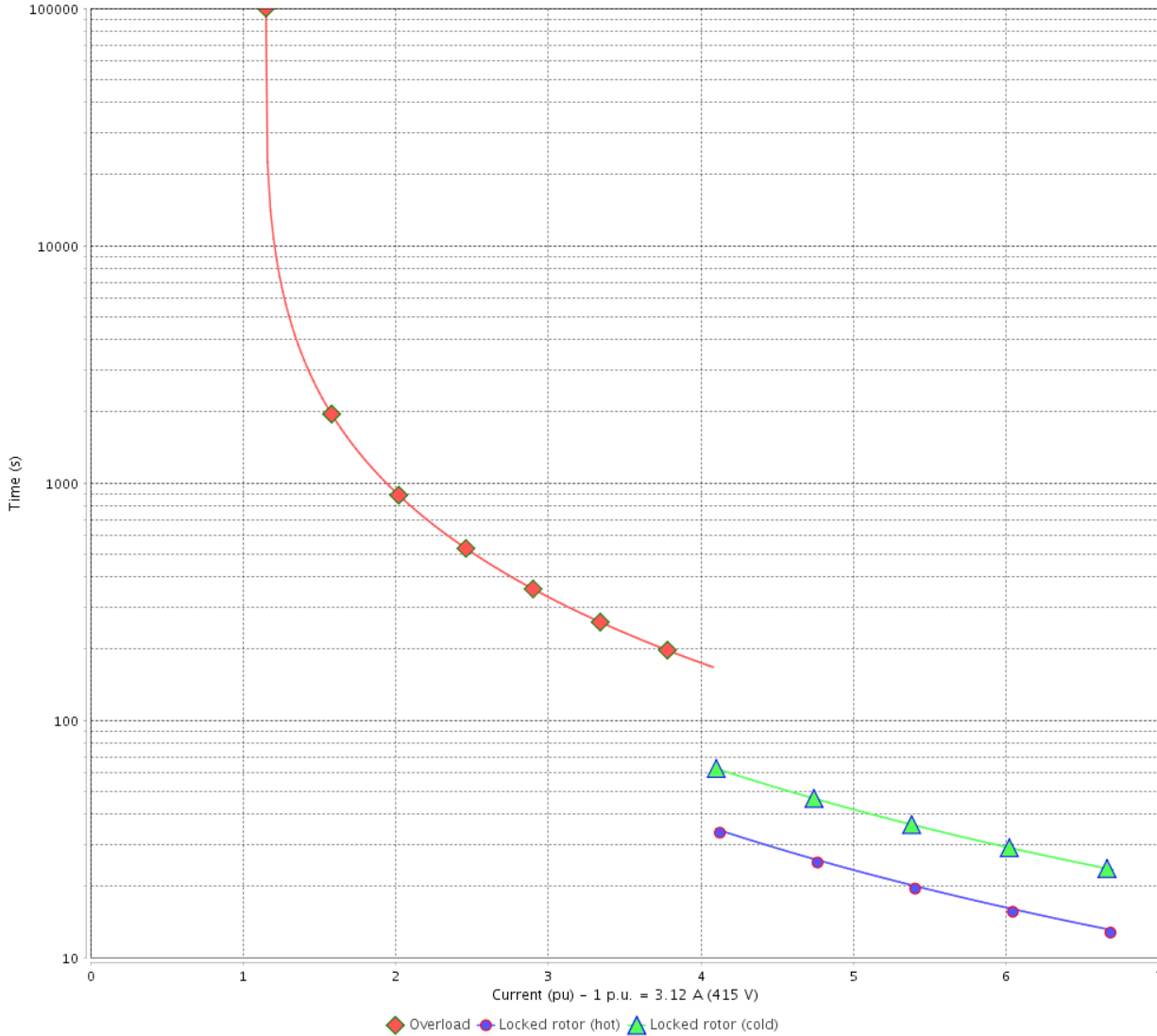
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LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 7.37 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1425 rpm	Design	: B

Heating constant

Cooling constant

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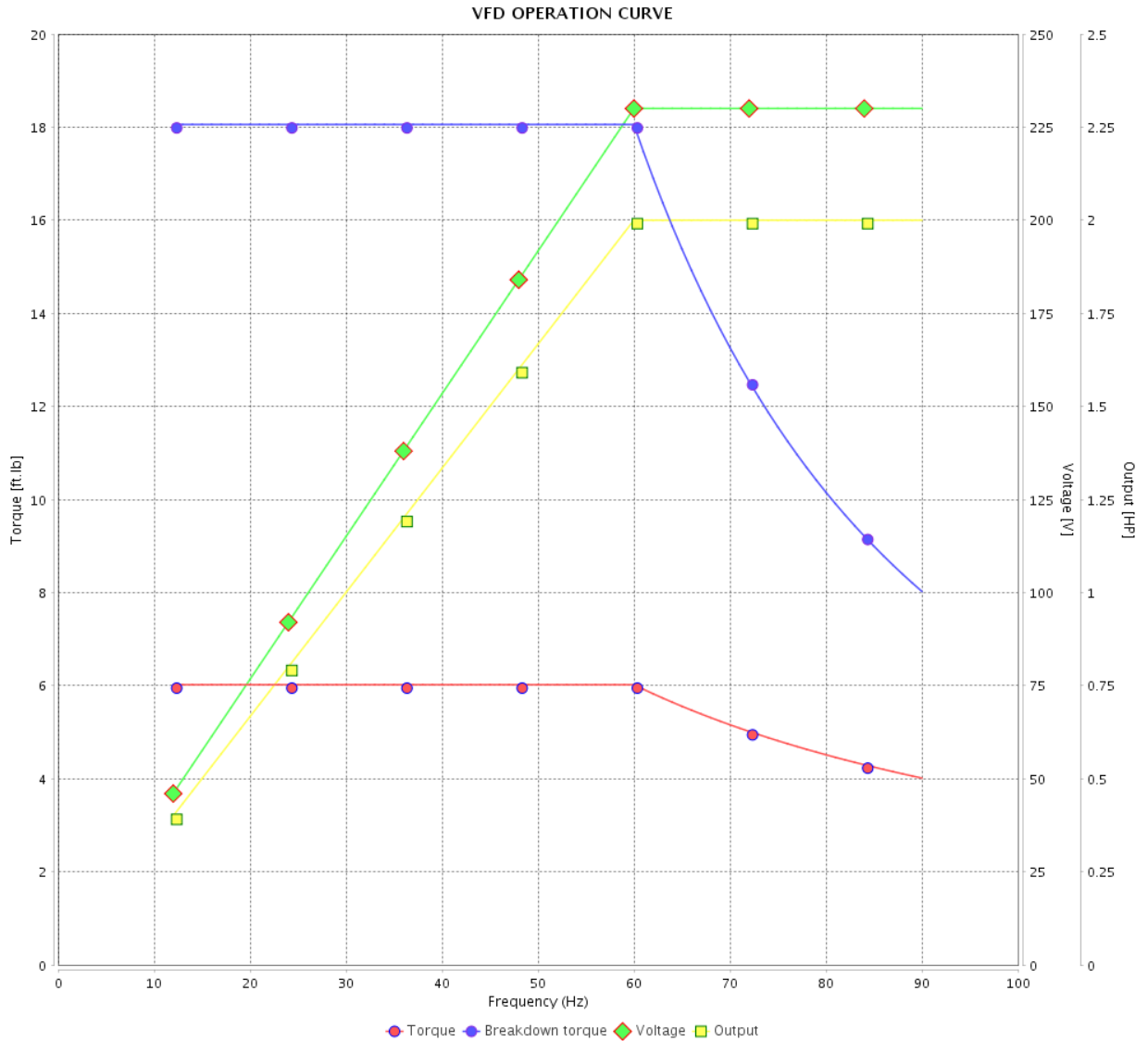
VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : Premium Efficiency Three-Phase Product code : 14786571
 Catalog # : 00218ET3E56CFL-S



Performance : 230/460 V 60 Hz 4P

Rated current : 5.44/2.72 A
 LRC : 8.2
 Rated torque : 6.02 ft.lb
 Locked rotor torque : 270 %
 Breakdown torque : 300 %
 Rated speed : 1745 rpm

Moment of inertia (J) : 0.1296 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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Date				

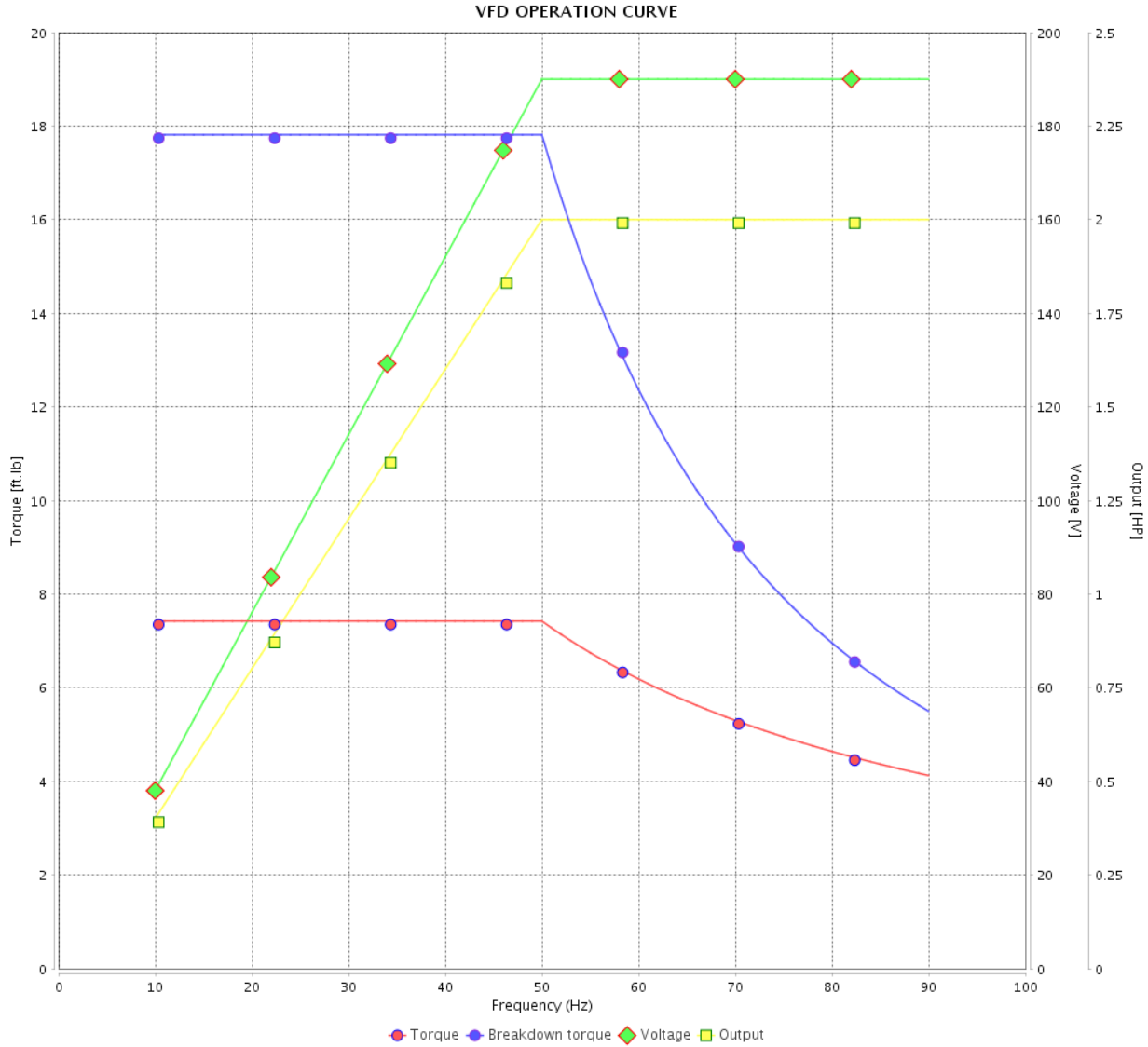
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LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 7.42 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1415 rpm	Design	: B

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

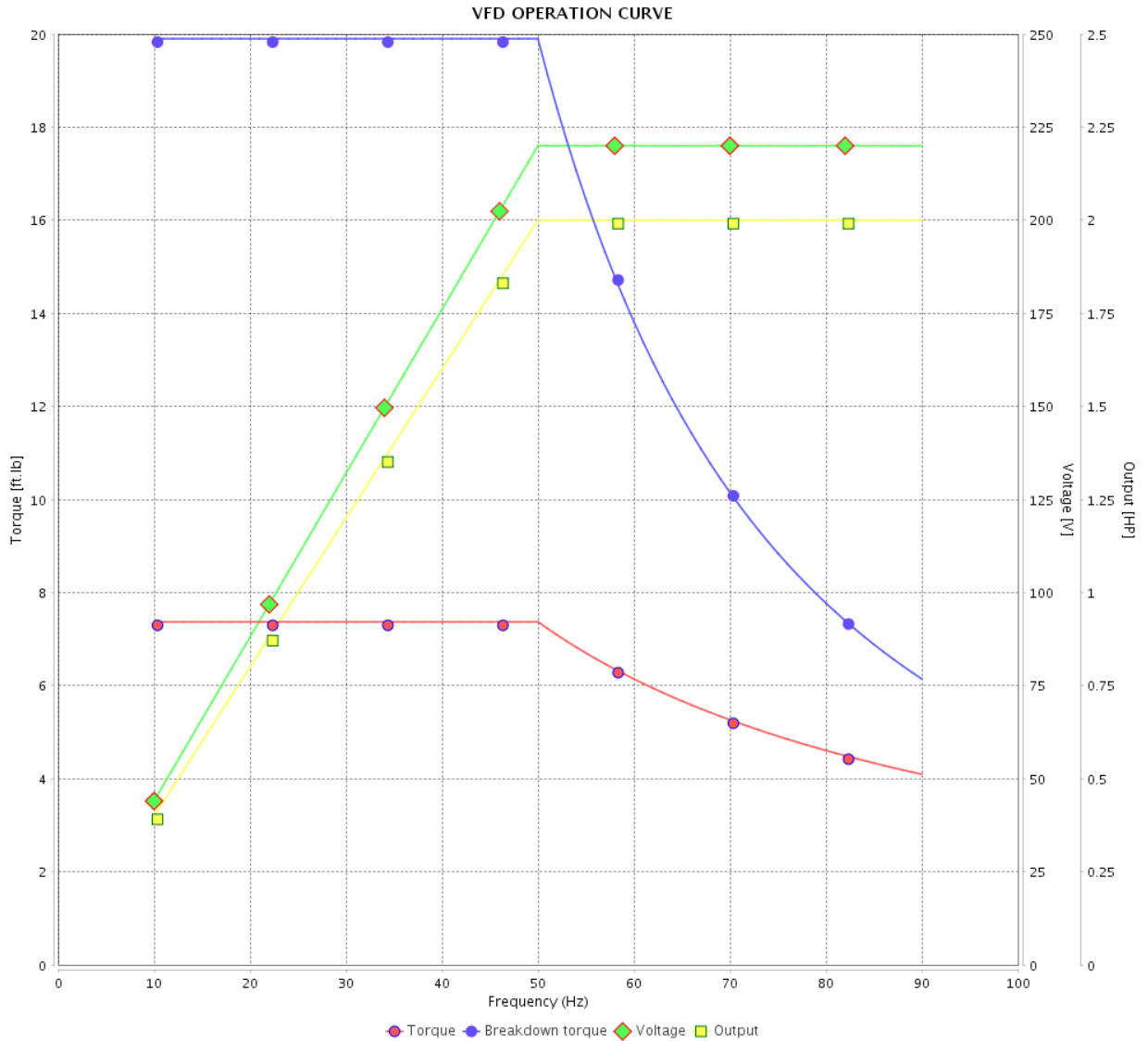
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Performance : 220/415 V 50 Hz 4P

Rated current : 5.89/3.12 A
 LRC : 6.7
 Rated torque : 7.37 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 270 %
 Rated speed : 1425 rpm

Moment of inertia (J) : 0.1296 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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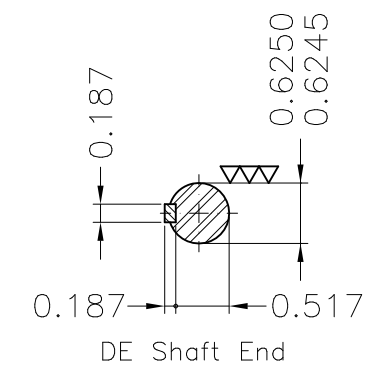
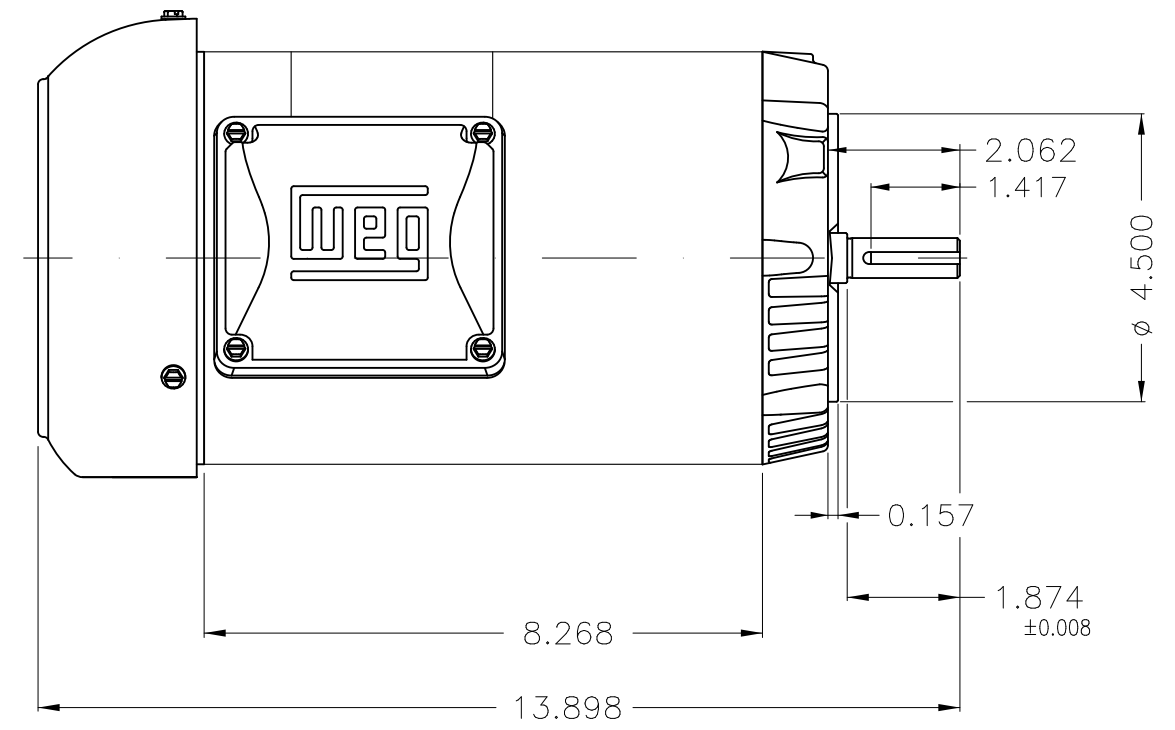
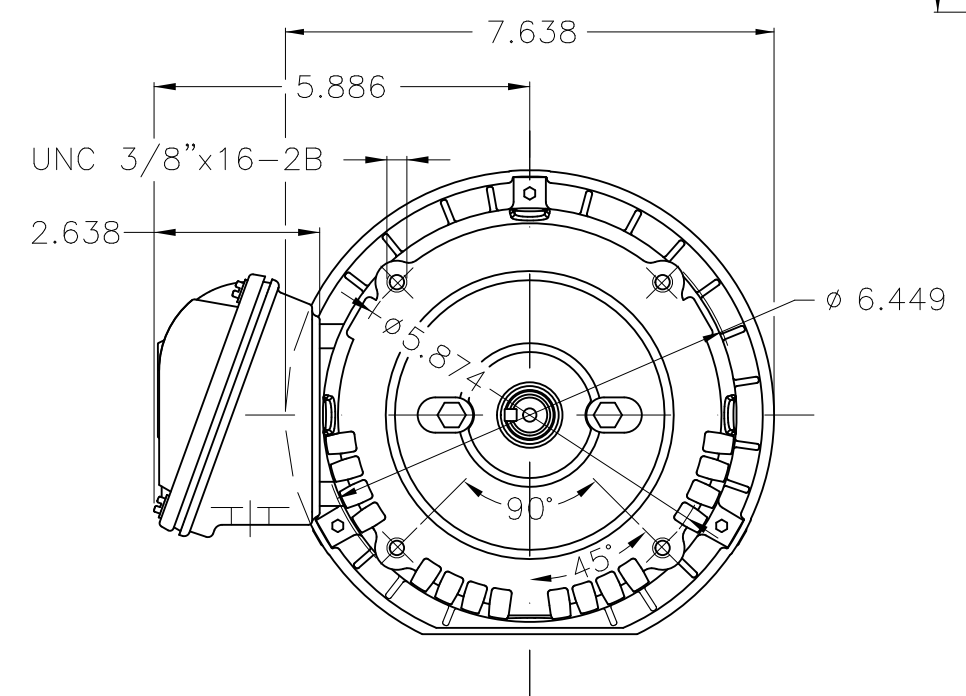
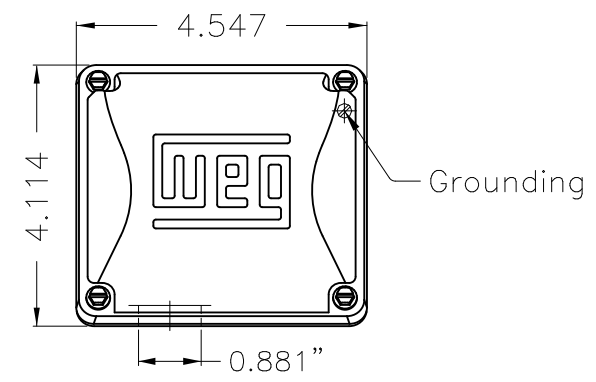
A

B


C

D

E



Dimensions in inches

Fan cover - steel plate										
Color Munsell N 1 matte black										
Painting plan 207N										
Mounting F-1/B14R(D)										
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.					PREVIEW WDD			
CHECKED		FRAME 56C IP55 TEFC								
RELEASED										
REL DT.		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1				

2 HP 04 Poles 60 Hz

XME A3



NEMA
Premium



MADE IN BRAZIL

MAT: 14786571 CC029A

W01.TE0IC0X0X

MODEL 00218ET3E56CFL-S

08APR2022 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)**

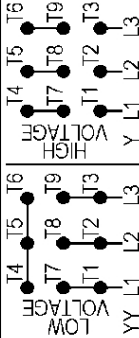
CT 2:1/VT 1000:1

PH 3	Hz 60	HP 2.0
FR 56C		KW 1.5
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 5.44/2.72
INS CL F AT 80K	IP55	SFA 6.26/3.13
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE K	PF 0.80
USABLE @ 208V 6.02A		RPM 1745
SF1.00		NEMA NOM. EFF 86.5%

ALTERNATE RATING: 2.0HP 50Hz 190-220/380-415V SF1.15
6.50-5.79/3.25-3.07A 1415RPM EFF 82.6% (IE1) 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.

