

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	:		
Product line	: Premium Efficiency Three-Phase	Product code :	14786559
		Catalog # :	00118ET3E56CFL-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	: 36.5 lb
Protection degree	: IP55	Moment of inertia (J)	: 0.1232 sq.ft.lb
Design	: B		
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]	2.94/1.47	3.40/1.70	3.09/1.64
L. R. Amperes [A]	25.3/12.6	22.1/11.0	22.0/11.6
LRC [A]	8.6x(Code M)	6.5x(Code J)	7.1x(Code K)
No load current [A]	1.78/0.890	1.76/0.879	1.77/0.938
Rated speed [RPM]	1765	1450	1455
Slip [%]	1.94	3.33	3.00
Rated torque [ft.lb]	2.98	3.62	3.61
Locked rotor torque [%]	280	200	220
Breakdown torque [%]	300	270	300
Service factor		1.00	1.00
Temperature rise	80 K	80 K	80 K
Locked rotor time	34s (cold) 19s (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%	81.0	81.2
	50%	82.5	81.5
	75%	84.0	83.6
	100%	85.5	83.5
Power Factor	25%	0.30	0.33
	50%	0.52	0.58
	75%	0.66	0.71
	100%	0.75	0.79
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 : 88 lb
Lubrication interval	: -	-	Max. compression : 124 lb
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		
Notes			
USABLE @208V 3.25A SF 1.00 SFA 3.25A			
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

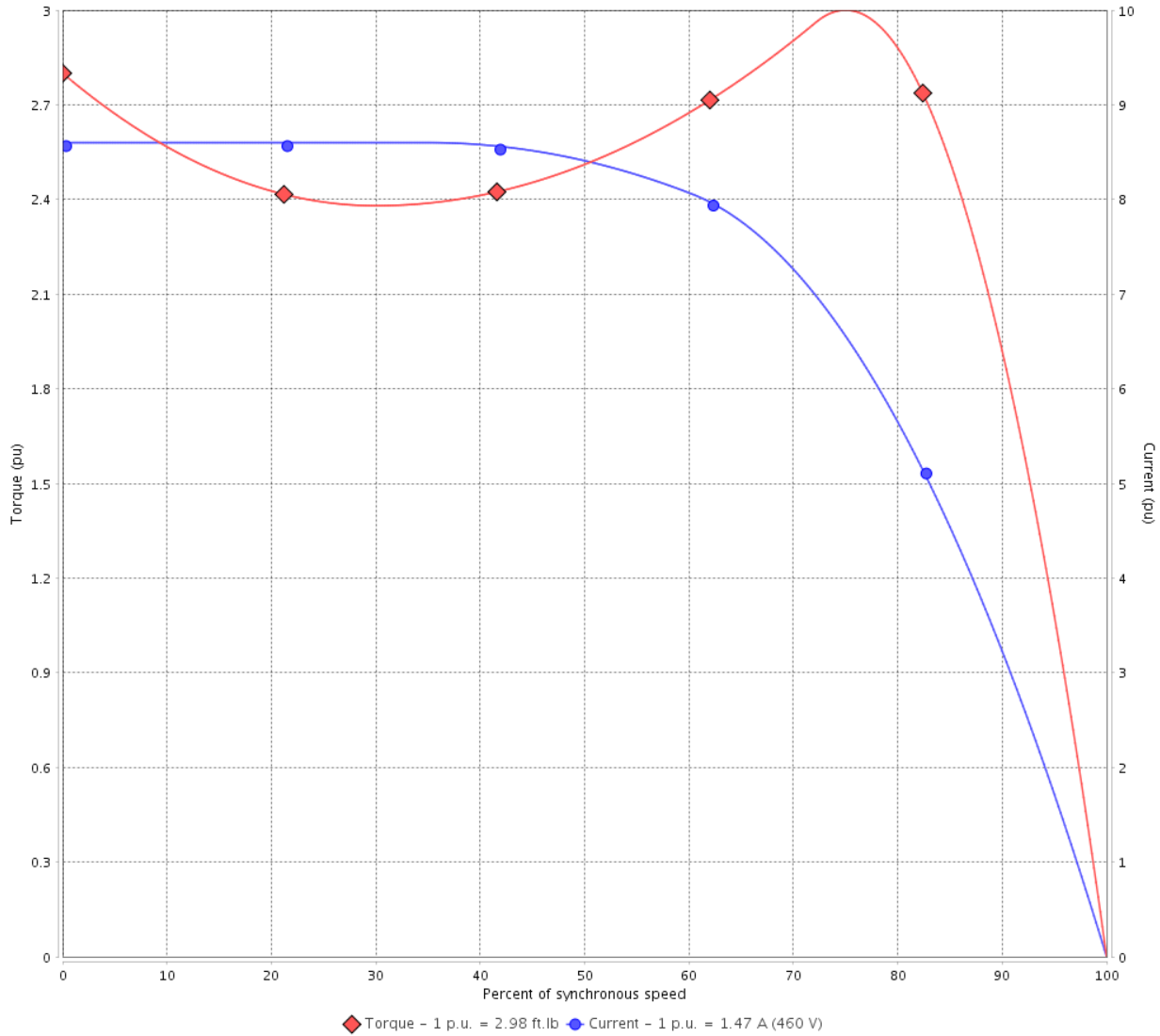
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 14786559
 Catalog # : 00118ET3E56CFL-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current	: 2.94/1.47 A	Moment of inertia (J)	: 0.1232 sq.ft.lb
LRC	: 8.6	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	:
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

Locked rotor time : 34s (cold) 19s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

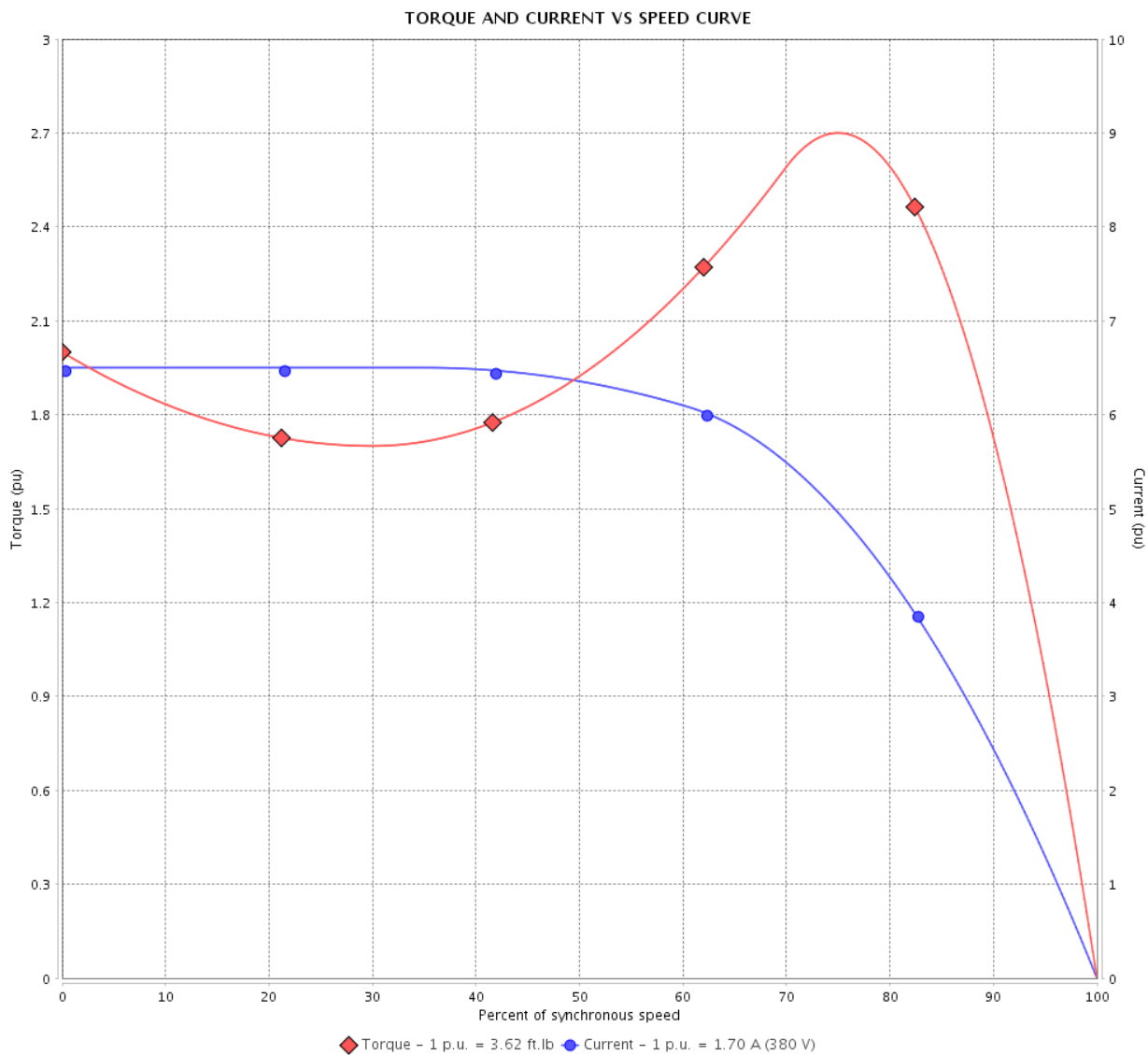
Product line : Premium Efficiency Three-Phase

Product code :

14786559

Catalog # :

00118ET3E56CFL-S



Performance : 190/380 V 50 Hz 4P

Rated current : 3.40/1.70 A
 LRC : 6.5
 Rated torque : 3.62 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 270 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.1232 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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

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TORQUE AND CURRENT VS SPEED CURVE

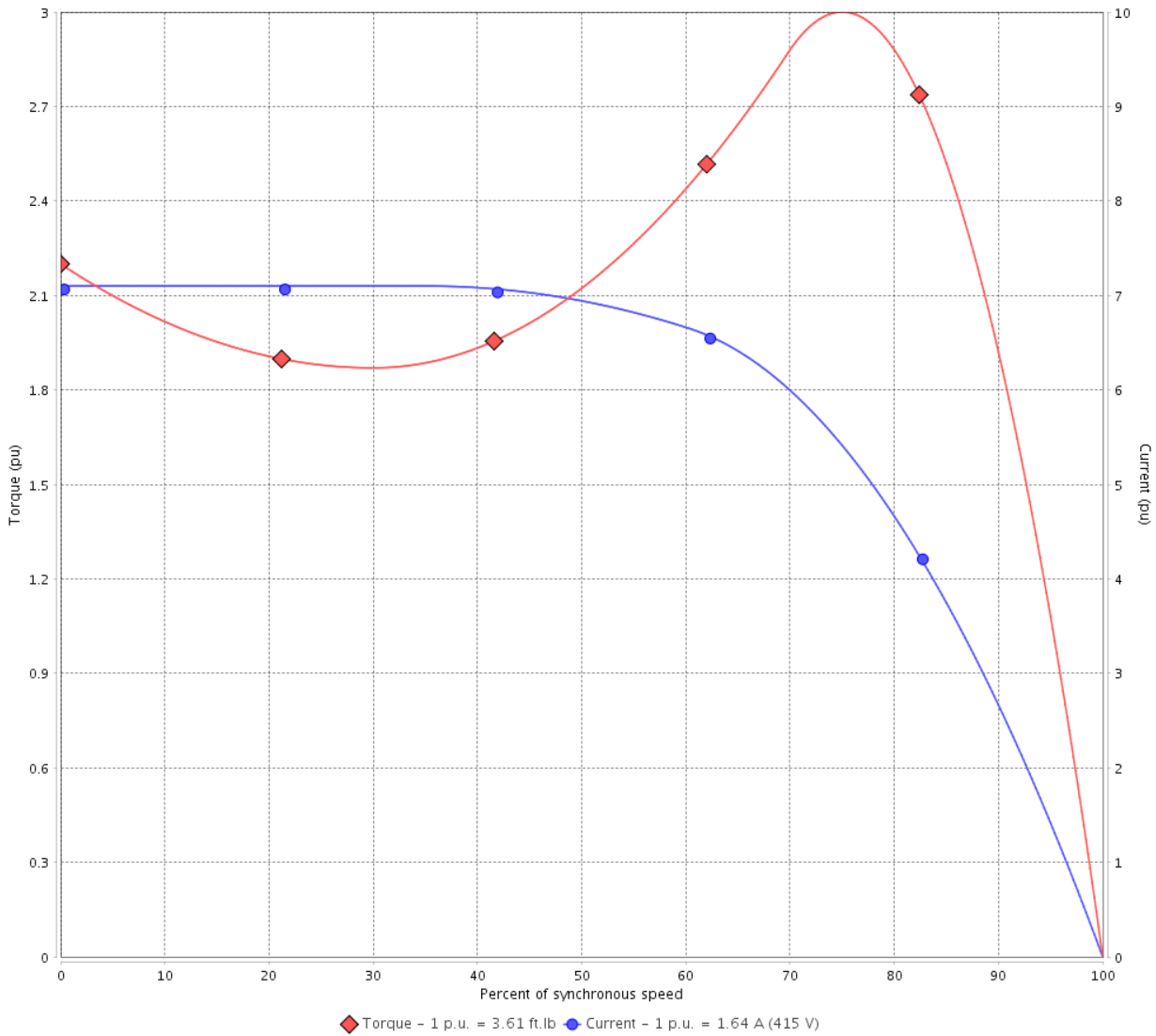
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 14786559
 Catalog # : 00118ET3E56CFL-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current	: 3.09/1.64 A	Moment of inertia (J)	: 0.1232 sq.ft.lb
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 3.61 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

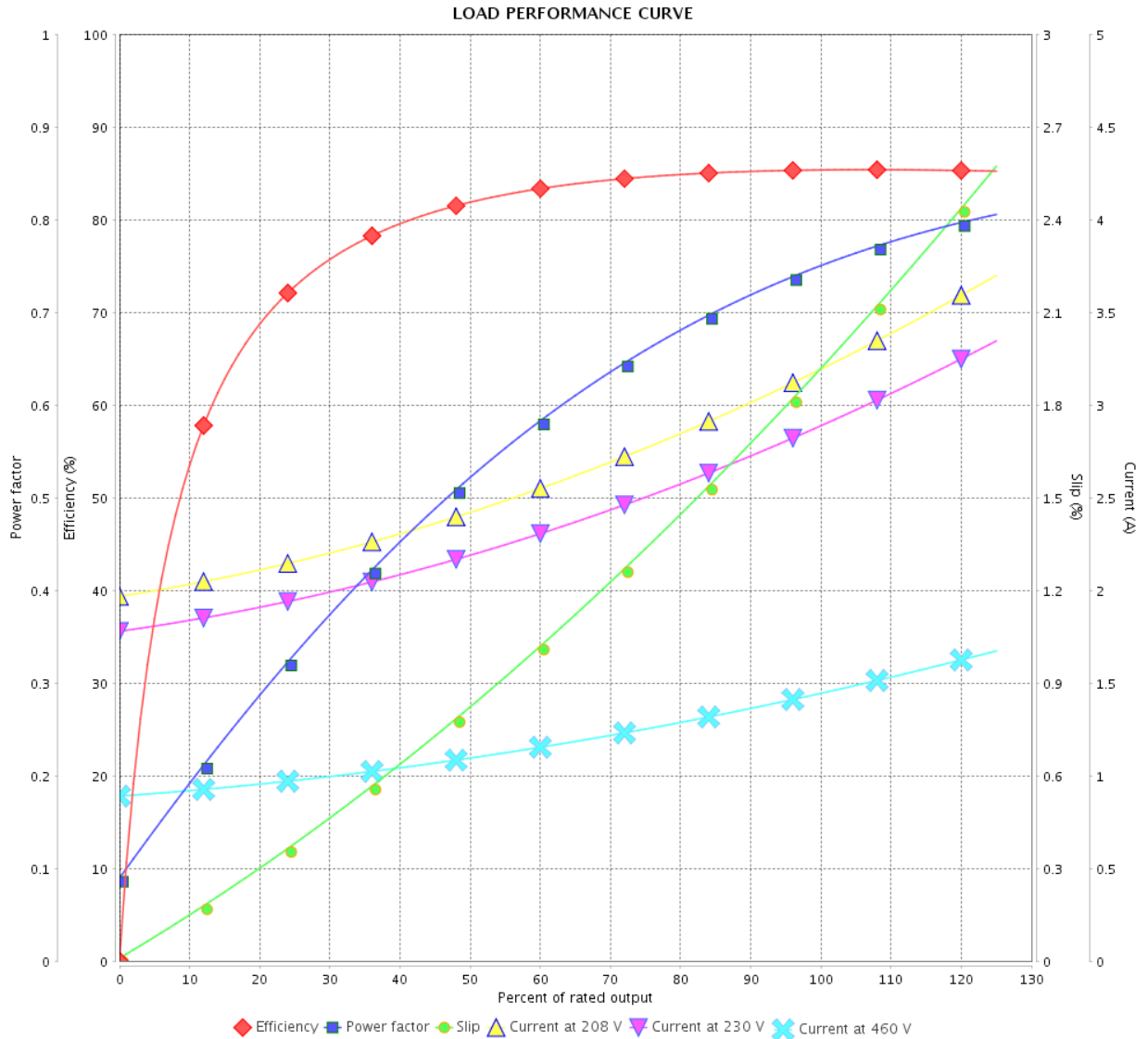
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Product code :

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Catalog # :

00118ET3E56CFL-S



Performance : 230/460 V 60 Hz 4P

Rated current : 2.94/1.47 A
 LRC : 8.6
 Rated torque : 2.98 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 300 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.1232 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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LOAD PERFORMANCE CURVE

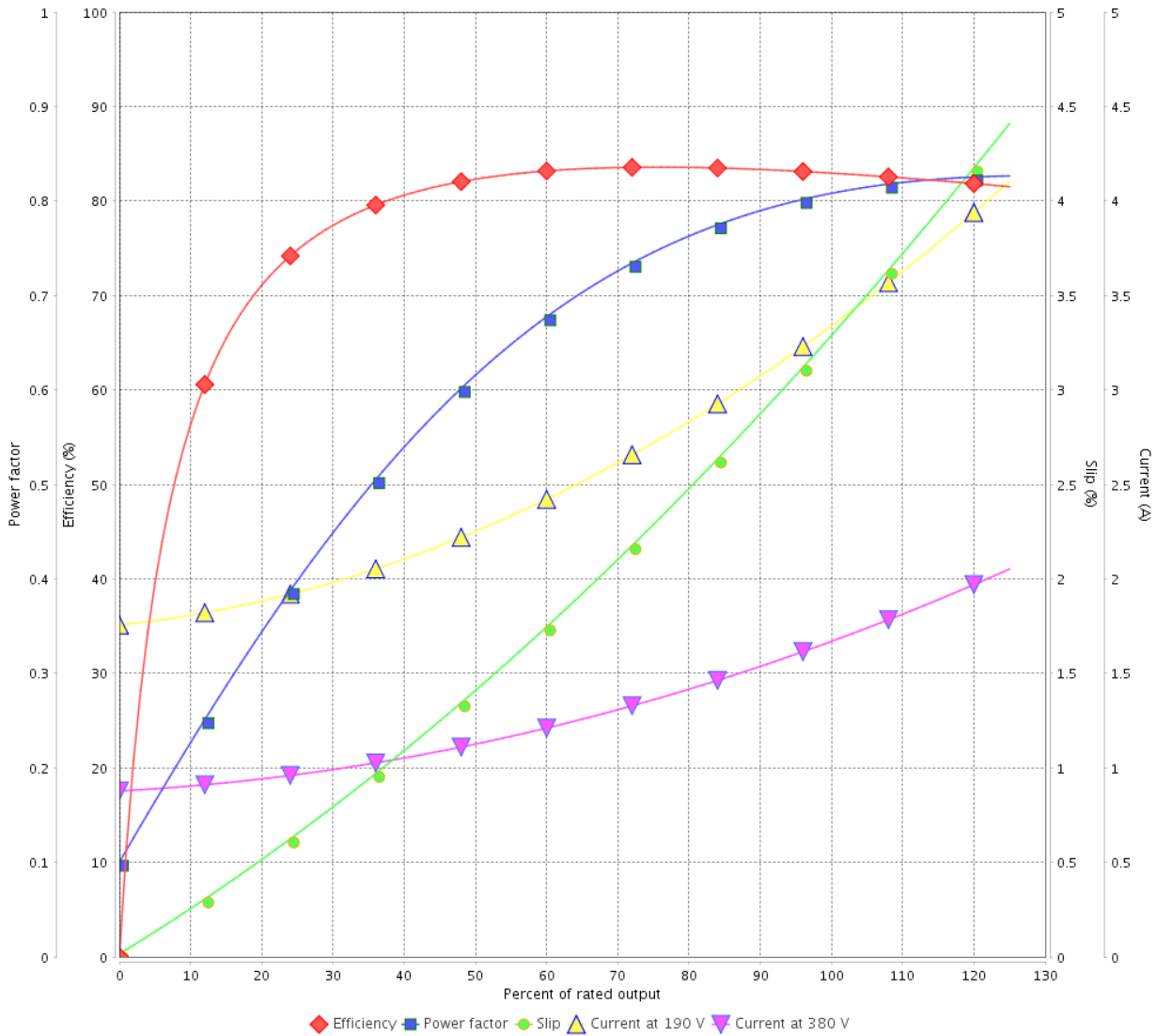
Three Phase Induction Motor - Squirrel Cage



Customer :

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 Catalog # : 00118ET3E56CFL-S

LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 4P

Rated current	: 3.40/1.70 A	Moment of inertia (J)	: 0.1232 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 3.62 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1450 rpm	Design	: B

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Three Phase Induction Motor - Squirrel Cage



Customer : _____

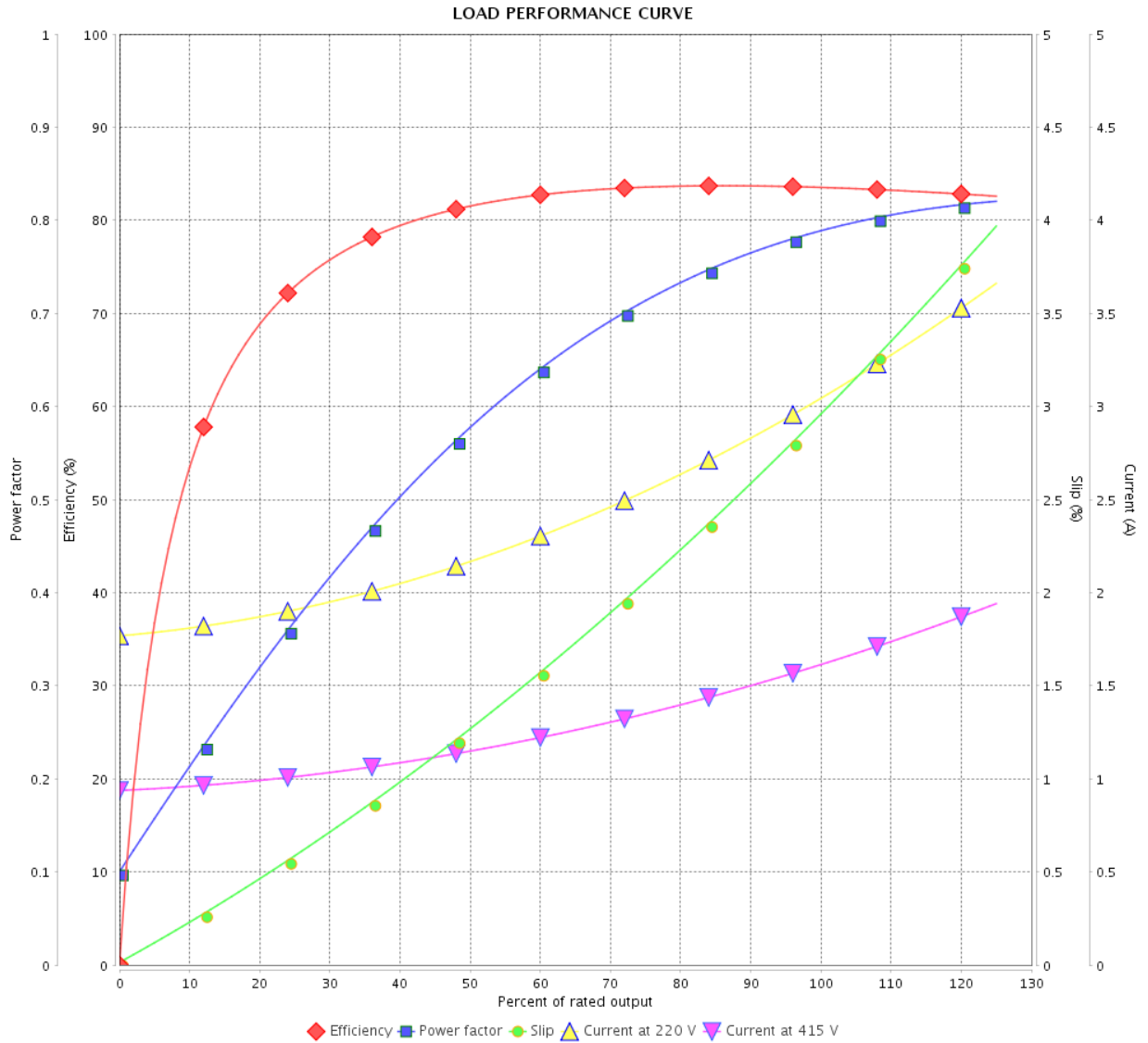
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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE

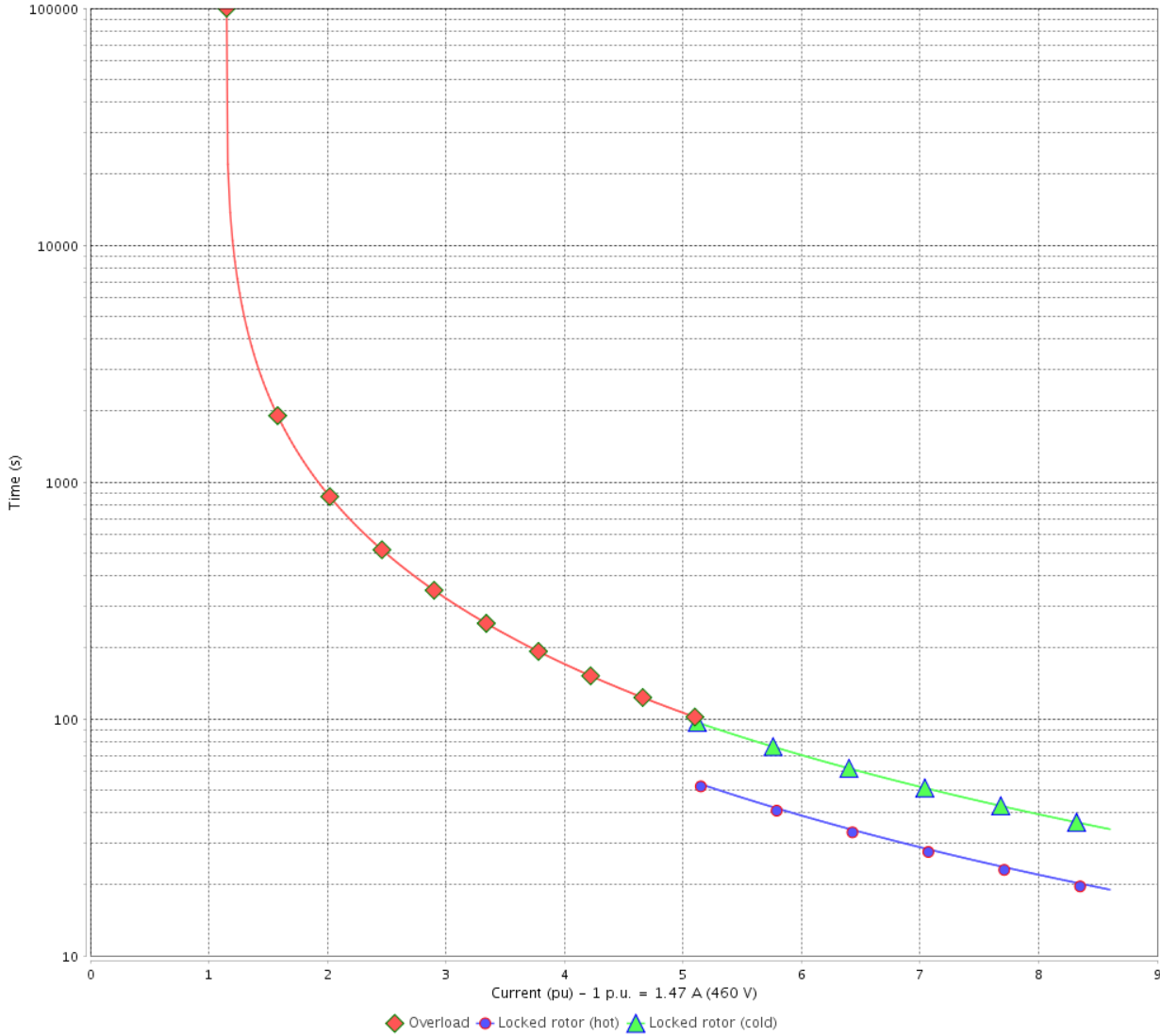
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Rated current : 2.94/1.47 A
 LRC : 8.6
 Rated torque : 2.98 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 300 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.1232 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



Customer : _____

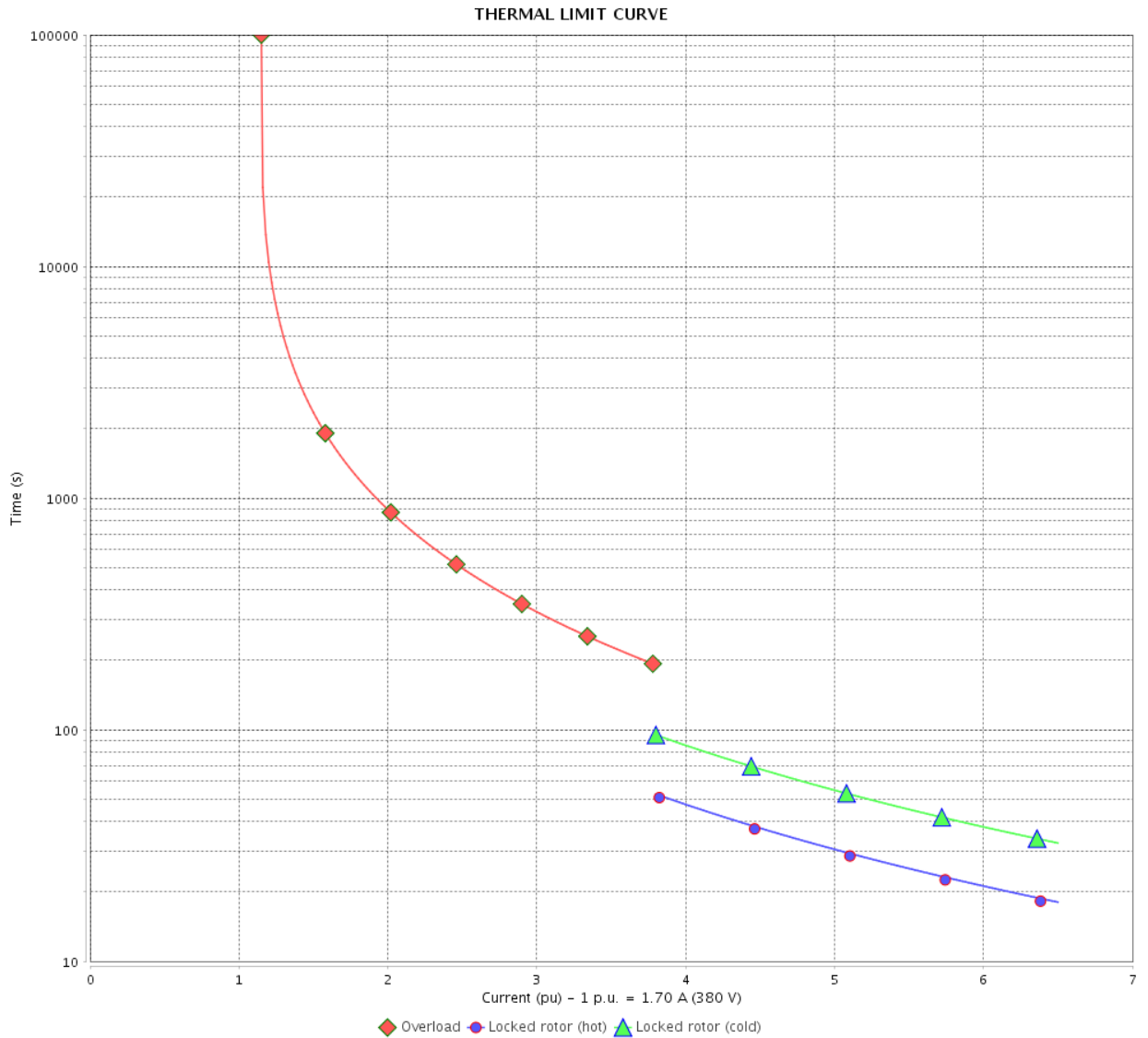
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Performance : 190/380 V 50 Hz 4P

Rated current : 3.40/1.70 A
 LRC : 6.5
 Rated torque : 3.62 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 270 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.1232 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Heating constant

Cooling constant

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THERMAL LIMIT CURVE

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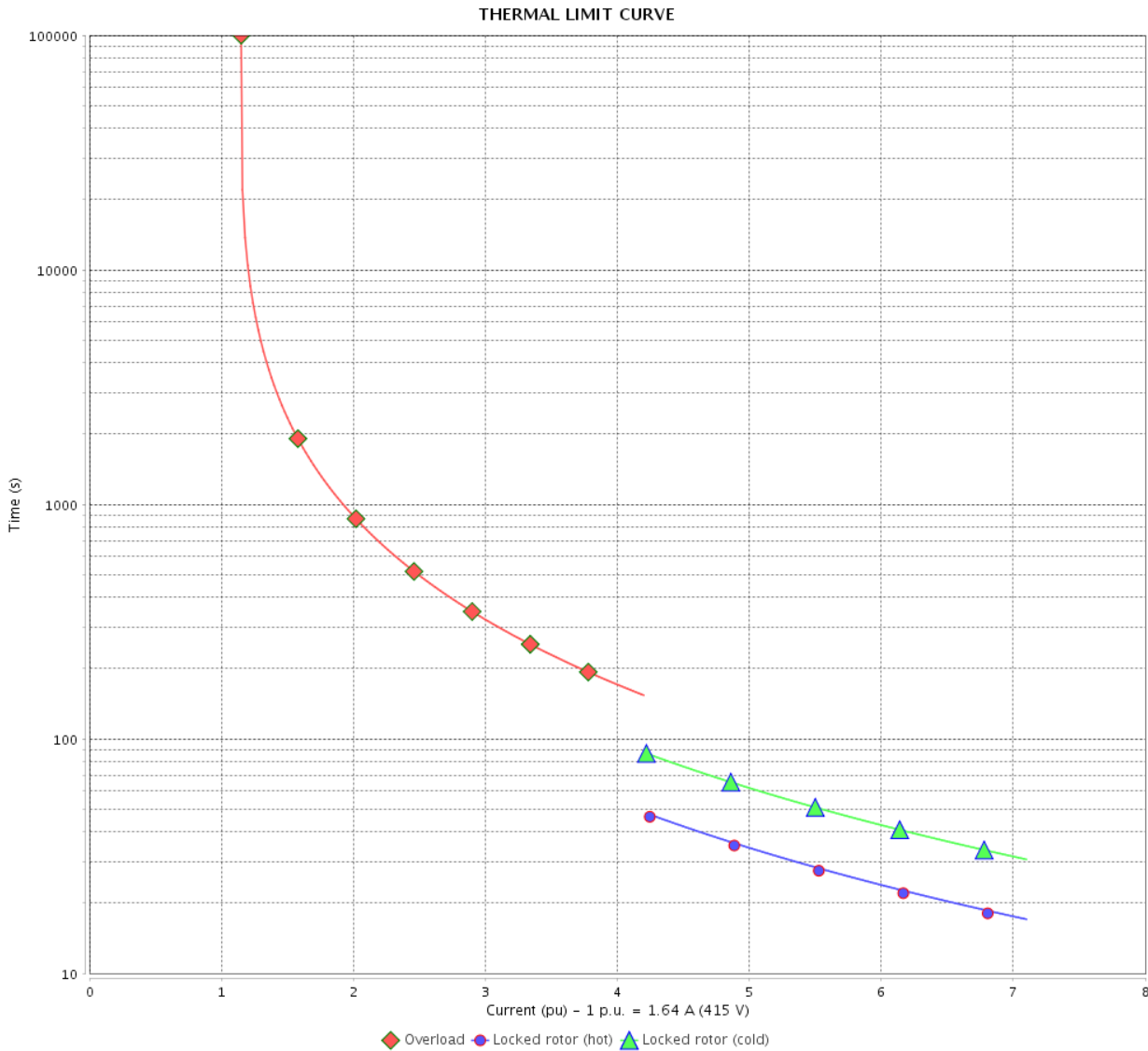
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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Heating constant

Cooling constant

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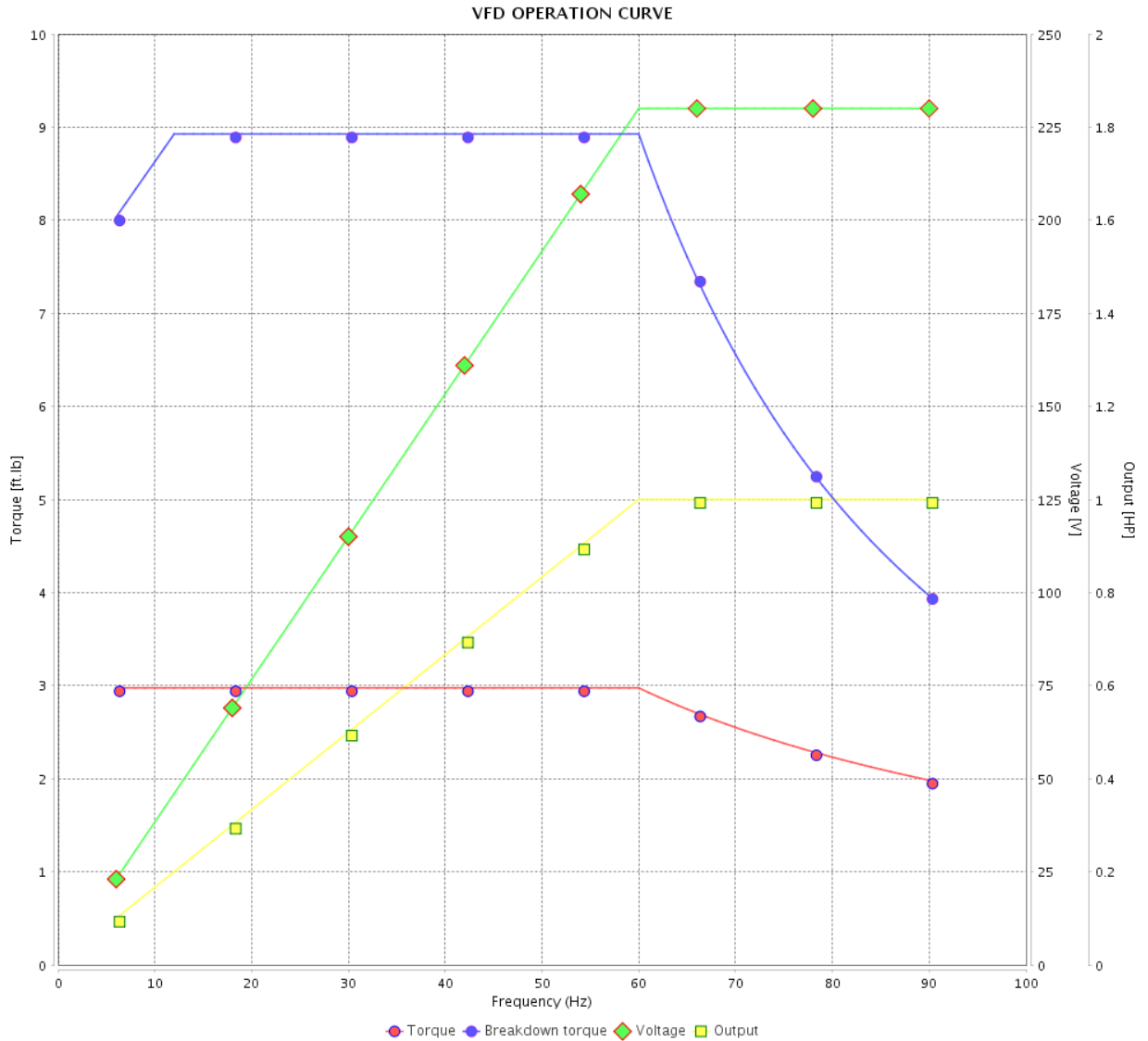
VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



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 Locked rotor torque : 280 %
 Breakdown torque : 300 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.1232 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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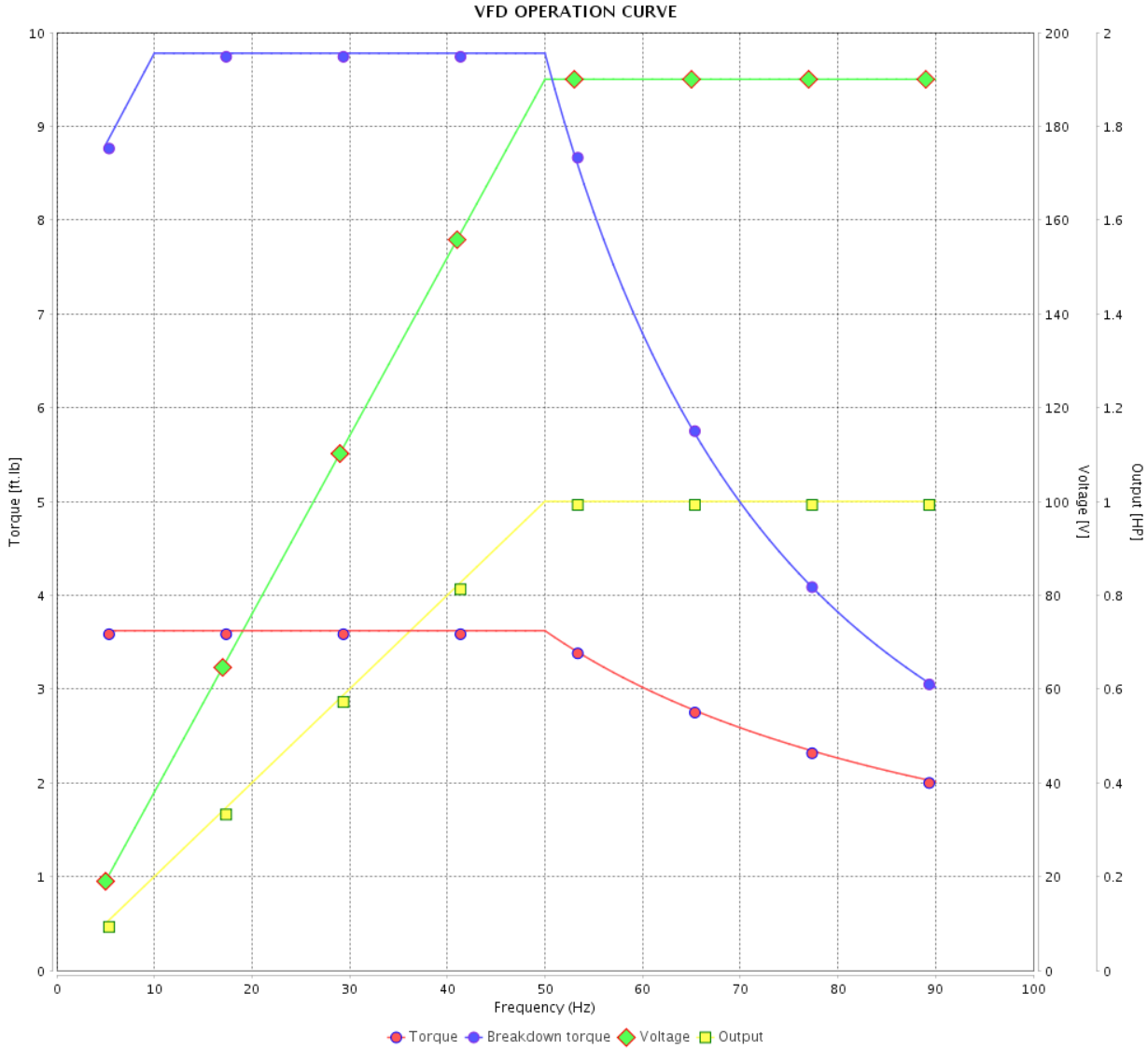
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LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 3.62 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1450 rpm	Design	: B

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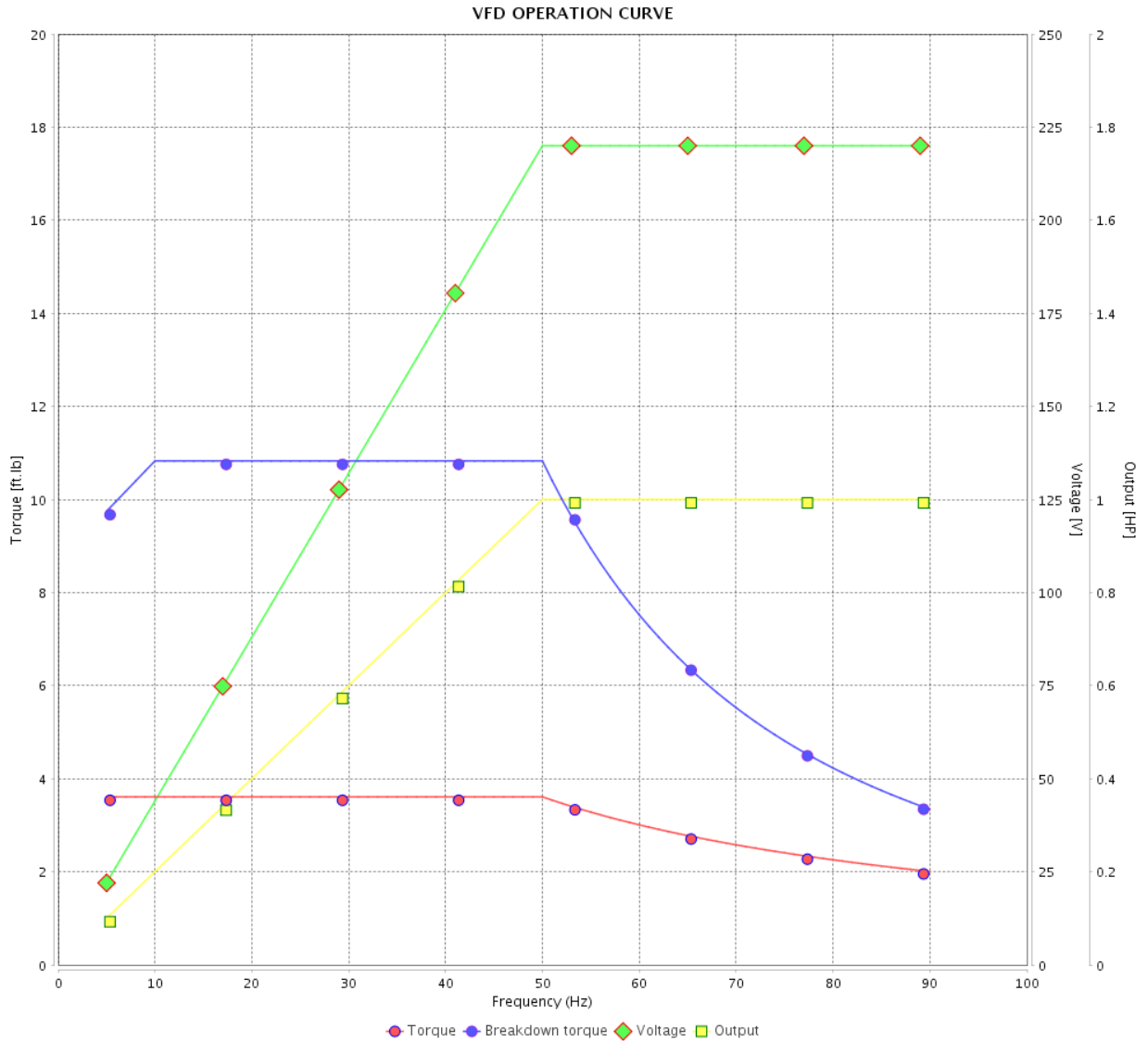
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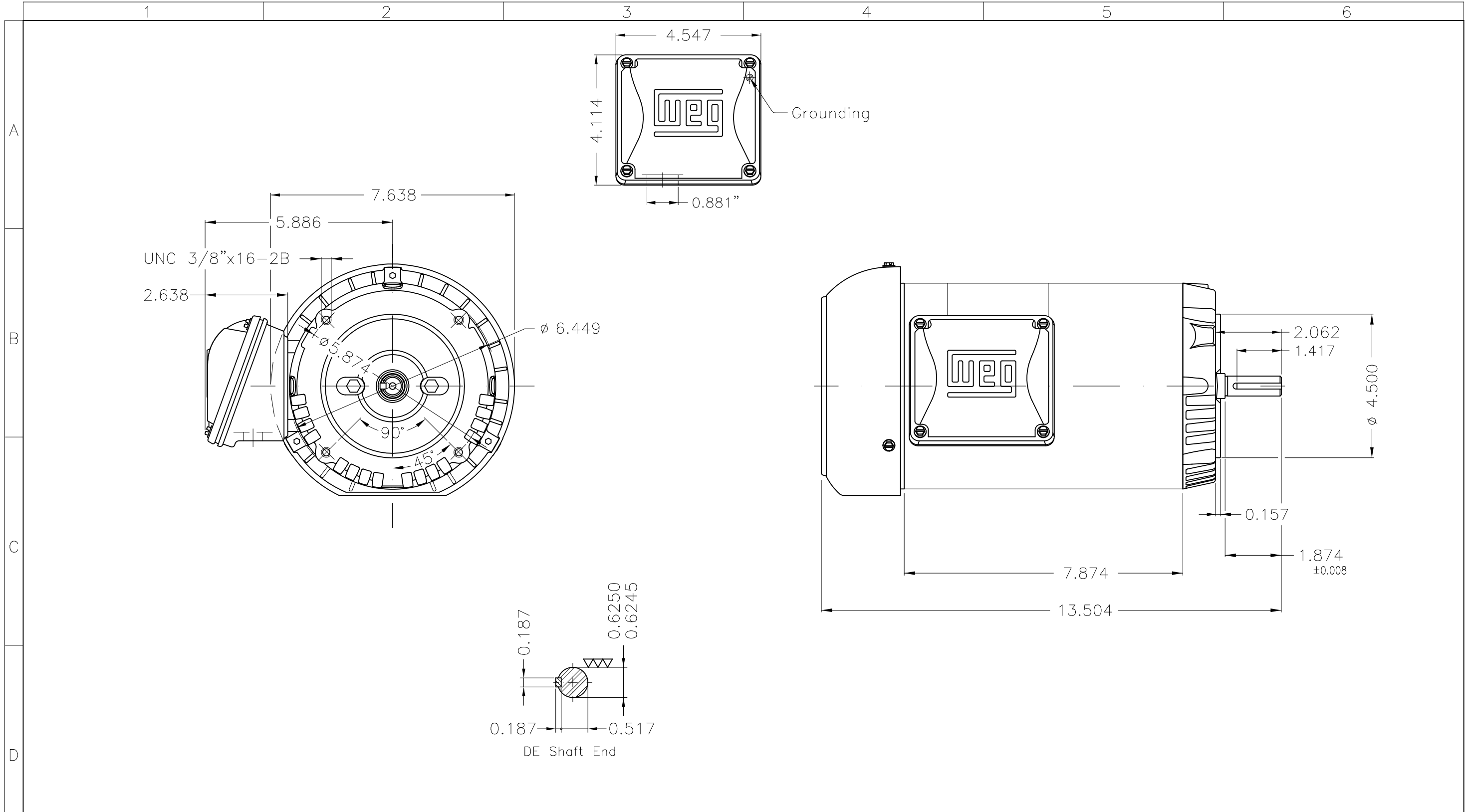


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 LRC : 7.1
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 Locked rotor torque : 220 %
 Breakdown torque : 300 %
 Rated speed : 1455 rpm

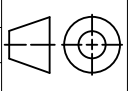
Moment of inertia (J) : 0.1232 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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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	SHEET	1 / 1
CHECKED			FRAME 56C IP55 TEFC						
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

1 HP 04 Poles 60 Hz



NEMA
Premium



MADE IN BRAZIL

MAT: 14786559 CC029A

W01.TE0IC0X0X

MODEL 00118ET3E56CFL-S

12APR2022 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 1.0
FR 56C		KW 0.75
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 2.94/1.47
INS CL F AT 80K	IP55	SFA 3.38/1.69
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE M	PF 0.75
USABLE @ 208V 3.25A SF1.00		RPM 1765
		NEMA NOM. EFF 85.5%

ALTERNATE RATING: 1.0HP 50Hz 190-220/380-415V SF1.00
3.40-3.06/1.70-1.62A 1450RPM EFF 82.9% (IE3) 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.

