

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	:		
Product line	: Premium Efficiency Three-Phase	Product code :	14786574
		Catalog # :	00336ET3E56CFL-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	: 48.2 lb
Protection degree	: IP55	Moment of inertia (J)	: 0.1663 sq.ft.lb
Design	: B		
Output [HP]	3	3	3
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	7.02/3.51	8.50/4.25	7.62/4.04
L. R. Amperes [A]	66.7/33.3	62.9/31.5	63.3/33.5
LRC [A]	9.5x(Code L)	7.4x(Code J)	8.3x(Code K)
No load current [A]	2.56/1.28	2.52/1.26	2.57/1.36
Rated speed [RPM]	3500	2870	2885
Slip [%]	2.78	4.33	3.83
Rated torque [ft.lb]	4.49	5.49	5.46
Locked rotor torque [%]	300	229	270
Breakdown torque [%]	380	280	310
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	18s (cold) 10s (hot)	16s (cold) 9s (hot)	16s (cold) 9s (hot)
Noise level ²	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)
Efficiency (%)	25%	83.6	87.4
	50%	84.0	86.5
	75%	86.5	86.8
	100%	86.5	85.5
Power Factor	25%	0.51	0.53
	50%	0.78	0.80
	75%	0.87	0.89
	100%	0.91	0.92
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 : 142 lb
Lubrication interval	: -	-	Max. compression : 190 lb
Lubricant amount	: -	-	
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 7.76A SF 1.00 SFA 7.76A			
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

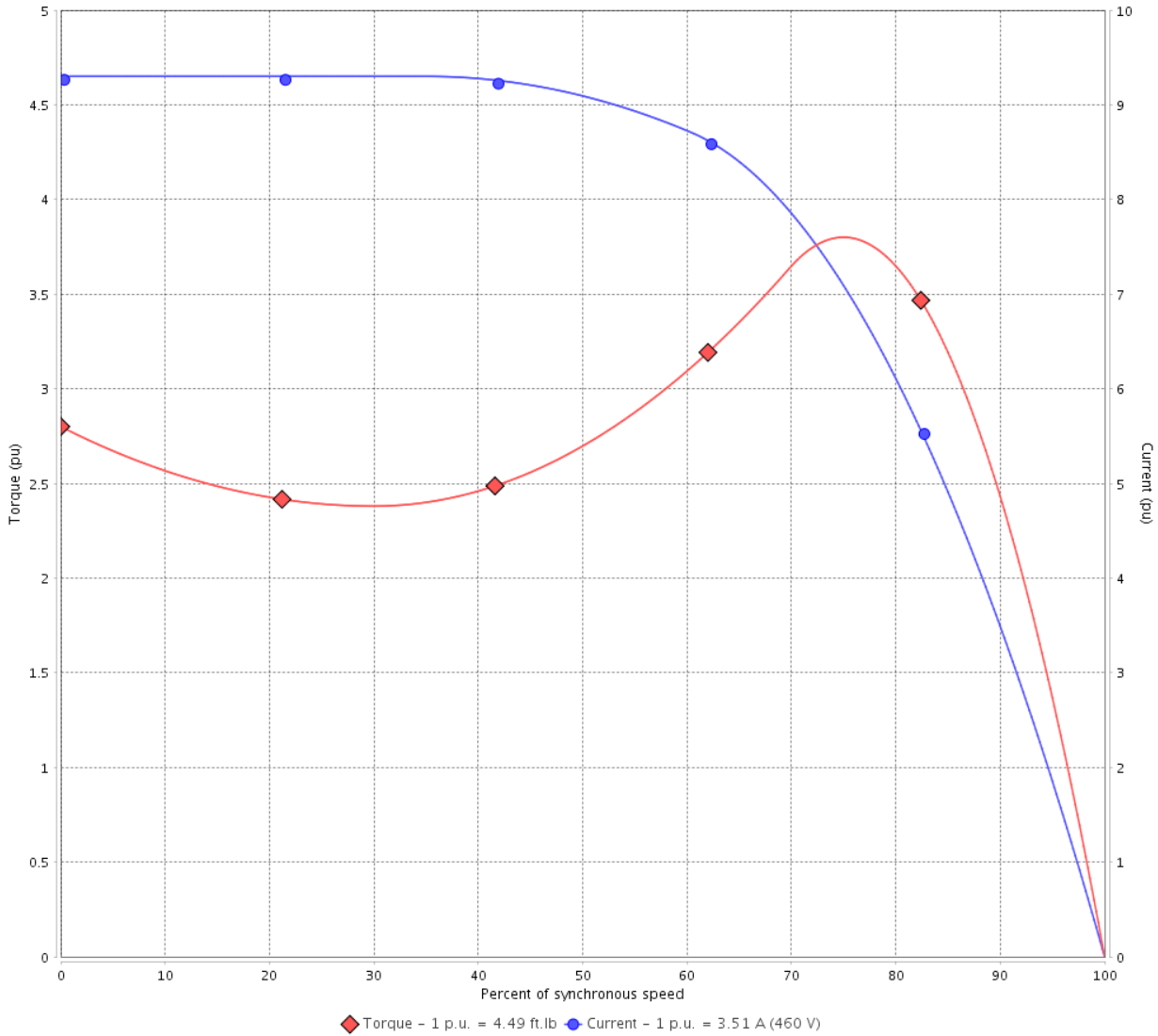
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 14786574
 Catalog # : 00336ET3E56CFL-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 7.02/3.51 A	Moment of inertia (J)	: 0.1663 sq.ft.lb
LRC	: 9.5	Duty cycle	: Cont.(S1)
Rated torque	: 4.49 ft.lb	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	:
Breakdown torque	: 380 %	Temperature rise	: 80 K
Rated speed	: 3500 rpm	Design	: B

Locked rotor time : 18s (cold) 10s (hot)

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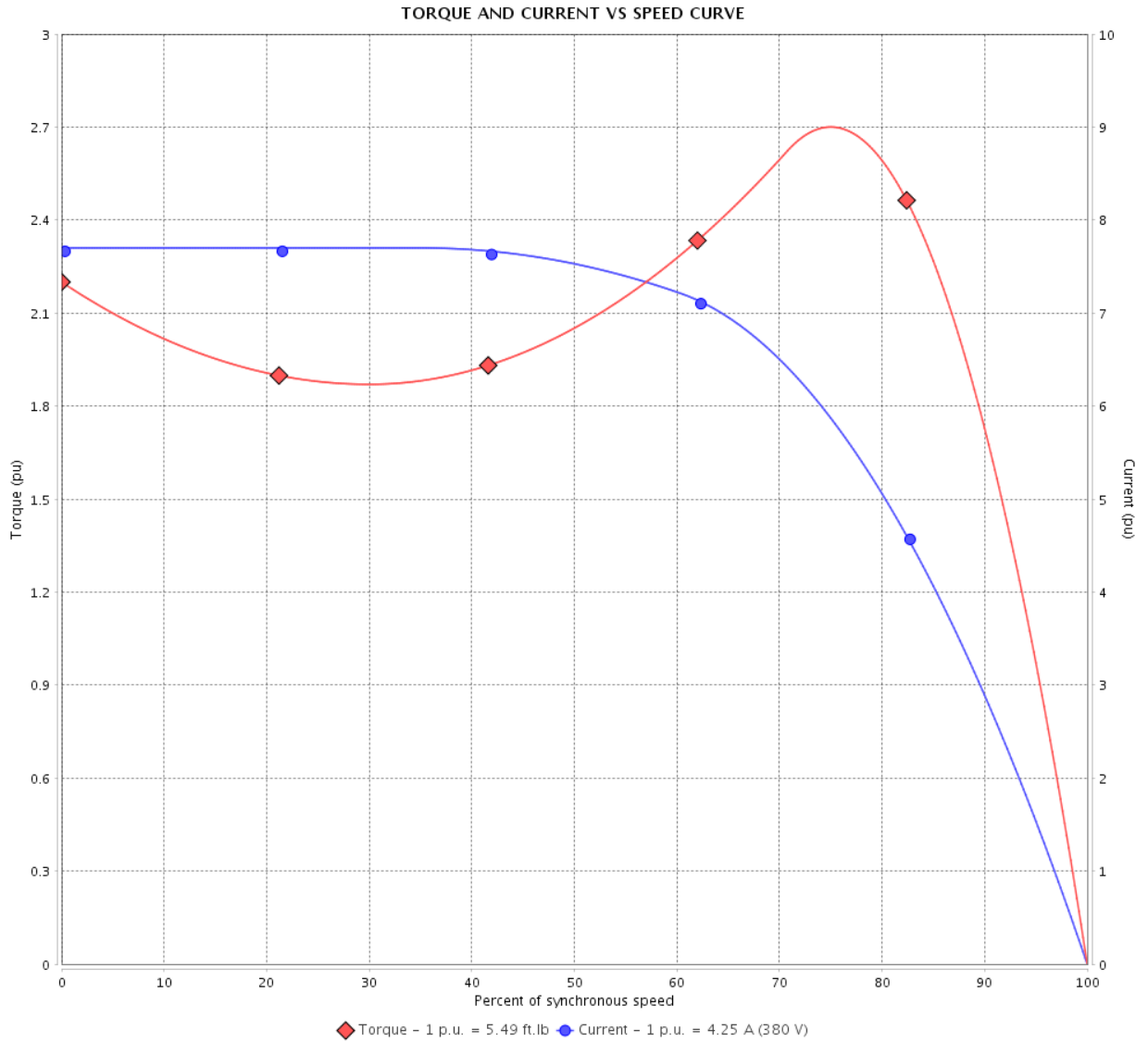
TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer : _____

Product line : Premium Efficiency Three-Phase Product code : 14786574
 Catalog # : 00336ET3E56CFL-S



Performance : 190/380 V 50 Hz 2P

Rated current	: 8.50/4.25 A	Moment of inertia (J)	: 0.1663 sq.ft.lb
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 5.49 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2870 rpm	Design	: B

Locked rotor time : 16s (cold) 9s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

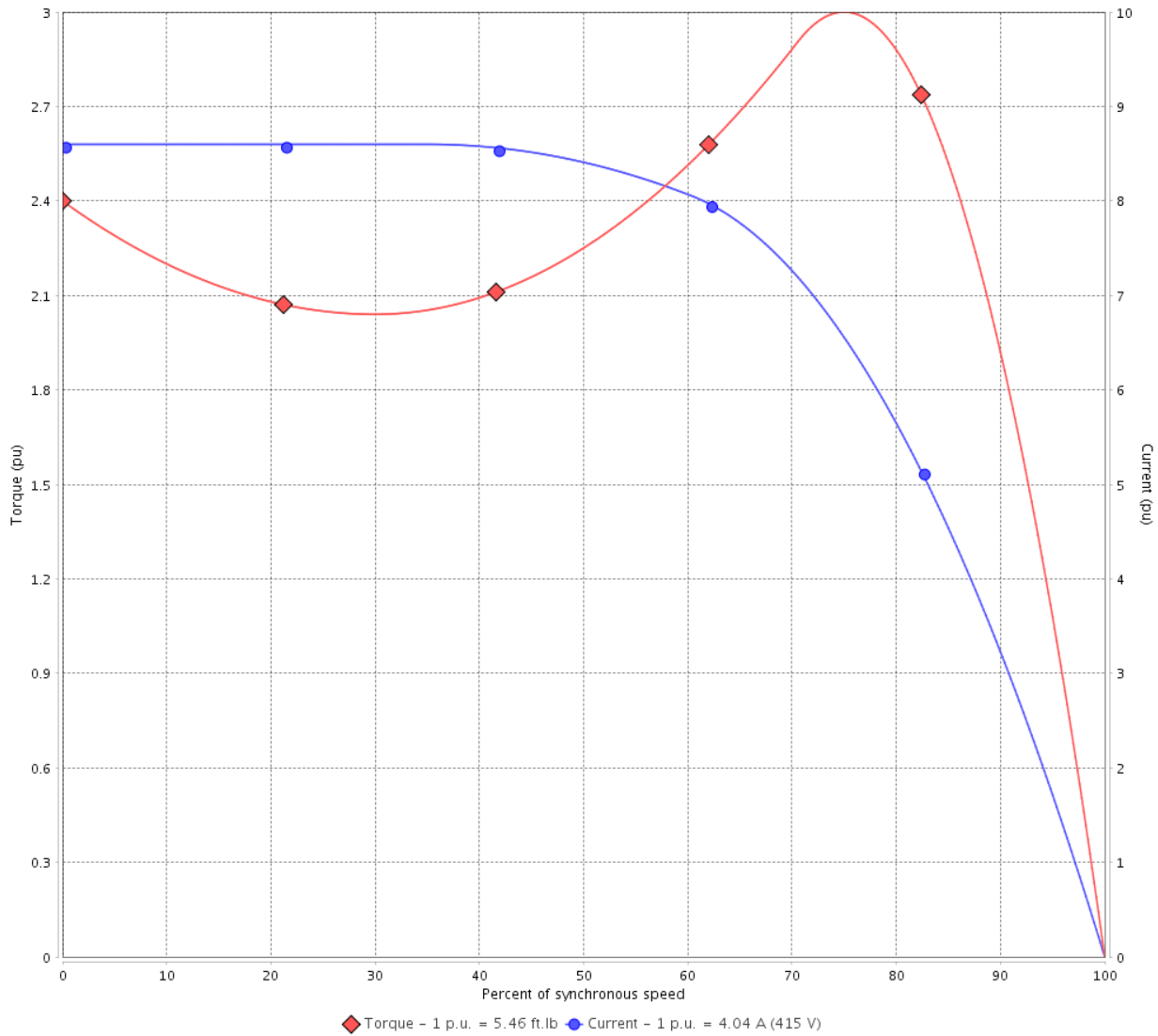
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Customer :

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 Catalog # : 00336ET3E56CFL-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 7.62/4.04 A	Moment of inertia (J)	: 0.1663 sq.ft.lb
LRC	: 8.3	Duty cycle	: Cont.(S1)
Rated torque	: 5.46 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 2885 rpm	Design	: B

Locked rotor time : 16s (cold) 9s (hot)

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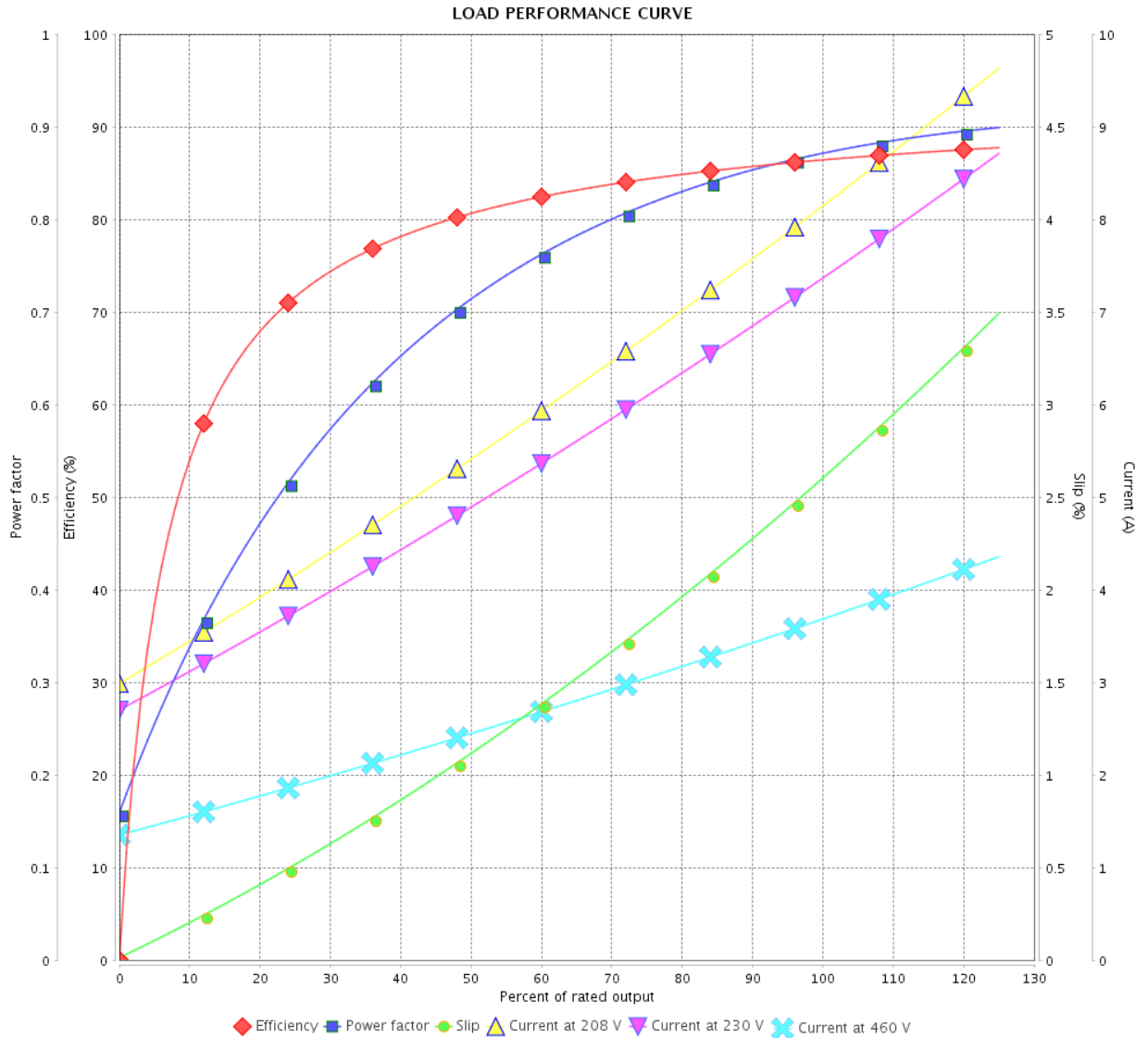
LOAD PERFORMANCE CURVE

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Performance : 230/460 V 60 Hz 2P

Rated current : 7.02/3.51 A
 LRC : 9.5
 Rated torque : 4.49 ft.lb
 Locked rotor torque : 300 %
 Breakdown torque : 380 %
 Rated speed : 3500 rpm

Moment of inertia (J) : 0.1663 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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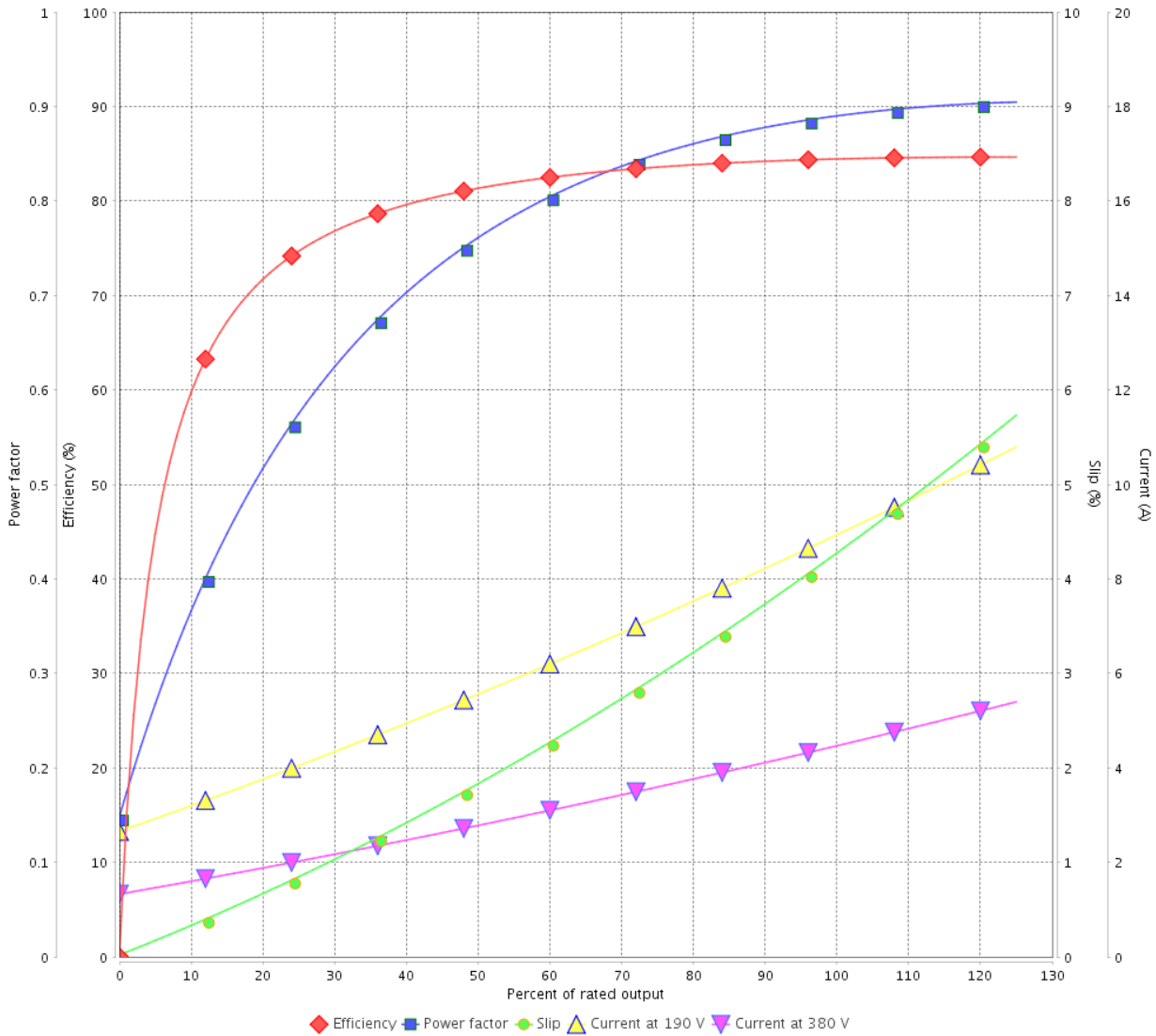
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LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 2P

Rated current	: 8.50/4.25 A	Moment of inertia (J)	: 0.1663 sq.ft.lb
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 5.49 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2870 rpm	Design	: B

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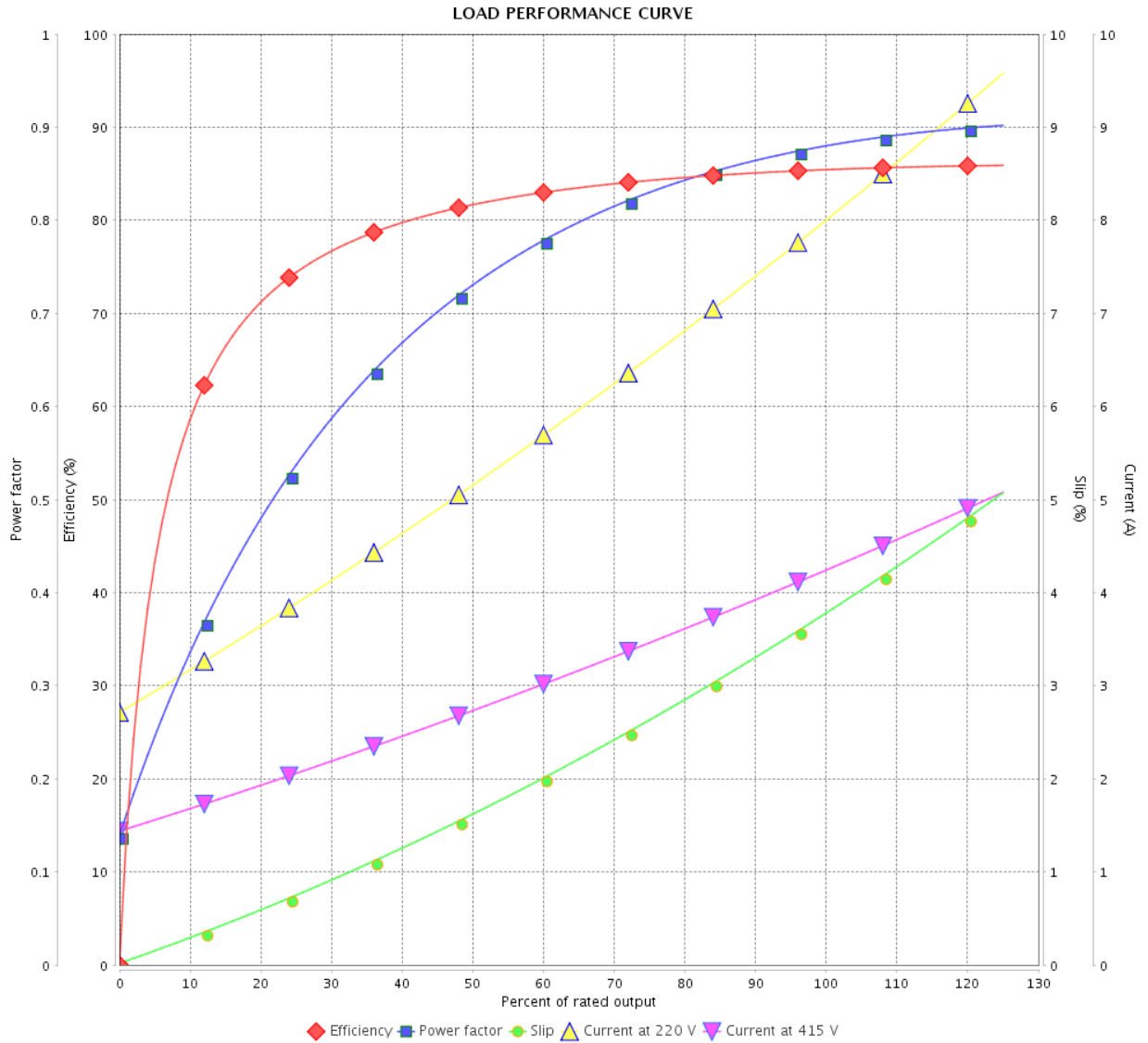
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00336ET3E56CFL-S



Performance : 220/415 V 50 Hz 2P

Rated current : 7.62/4.04 A
 LRC : 8.3
 Rated torque : 5.46 ft.lb
 Locked rotor torque : 270 %
 Breakdown torque : 310 %
 Rated speed : 2885 rpm

Moment of inertia (J) : 0.1663 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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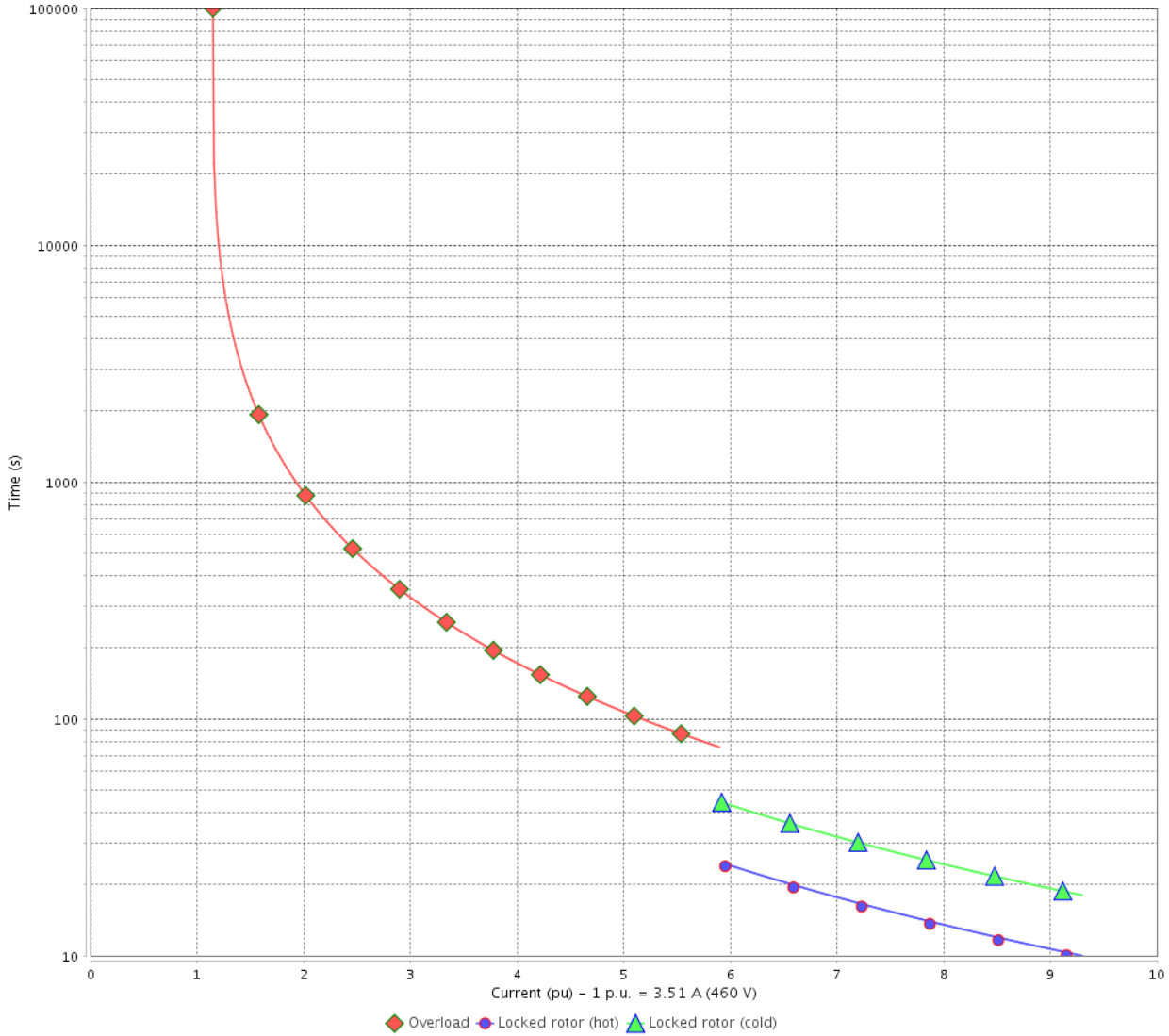
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 Rated speed : 3500 rpm

Moment of inertia (J) : 0.1663 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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Customer : _____

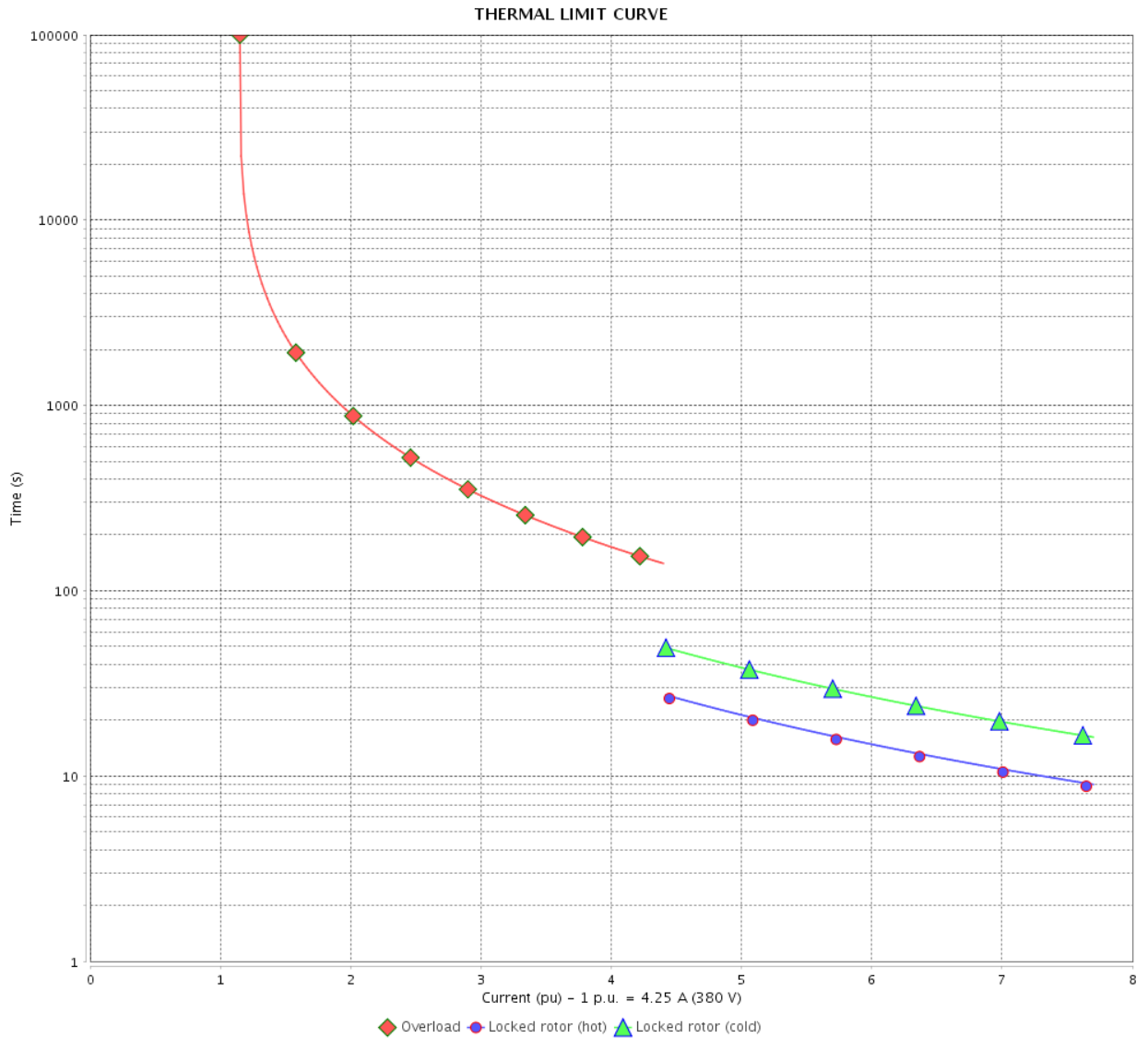
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Performance : 190/380 V 50 Hz 2P

Rated current : 8.50/4.25 A
 LRC : 7.4
 Rated torque : 5.49 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 280 %
 Rated speed : 2870 rpm

Moment of inertia (J) : 0.1663 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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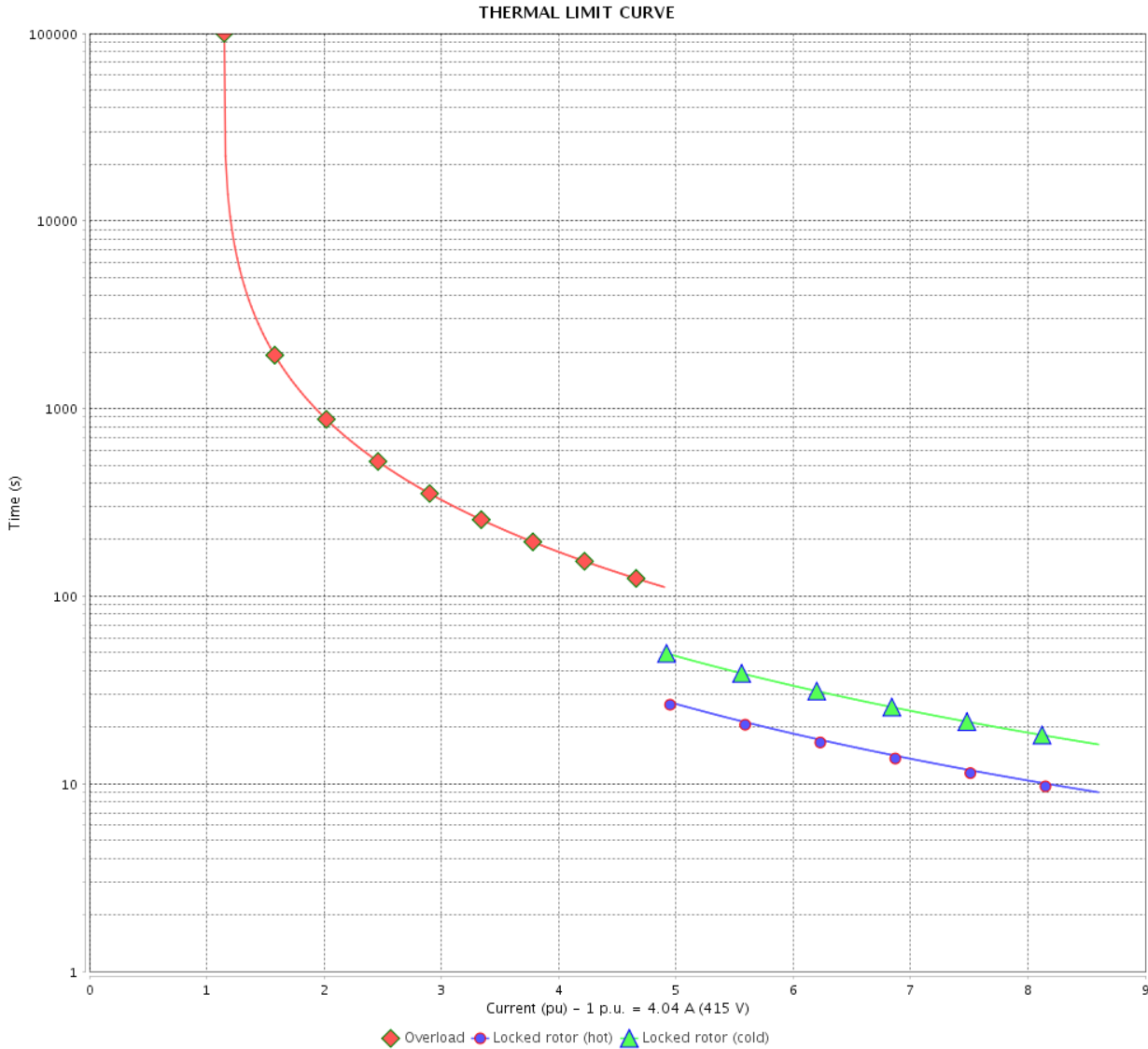
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 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Heating constant

Cooling constant

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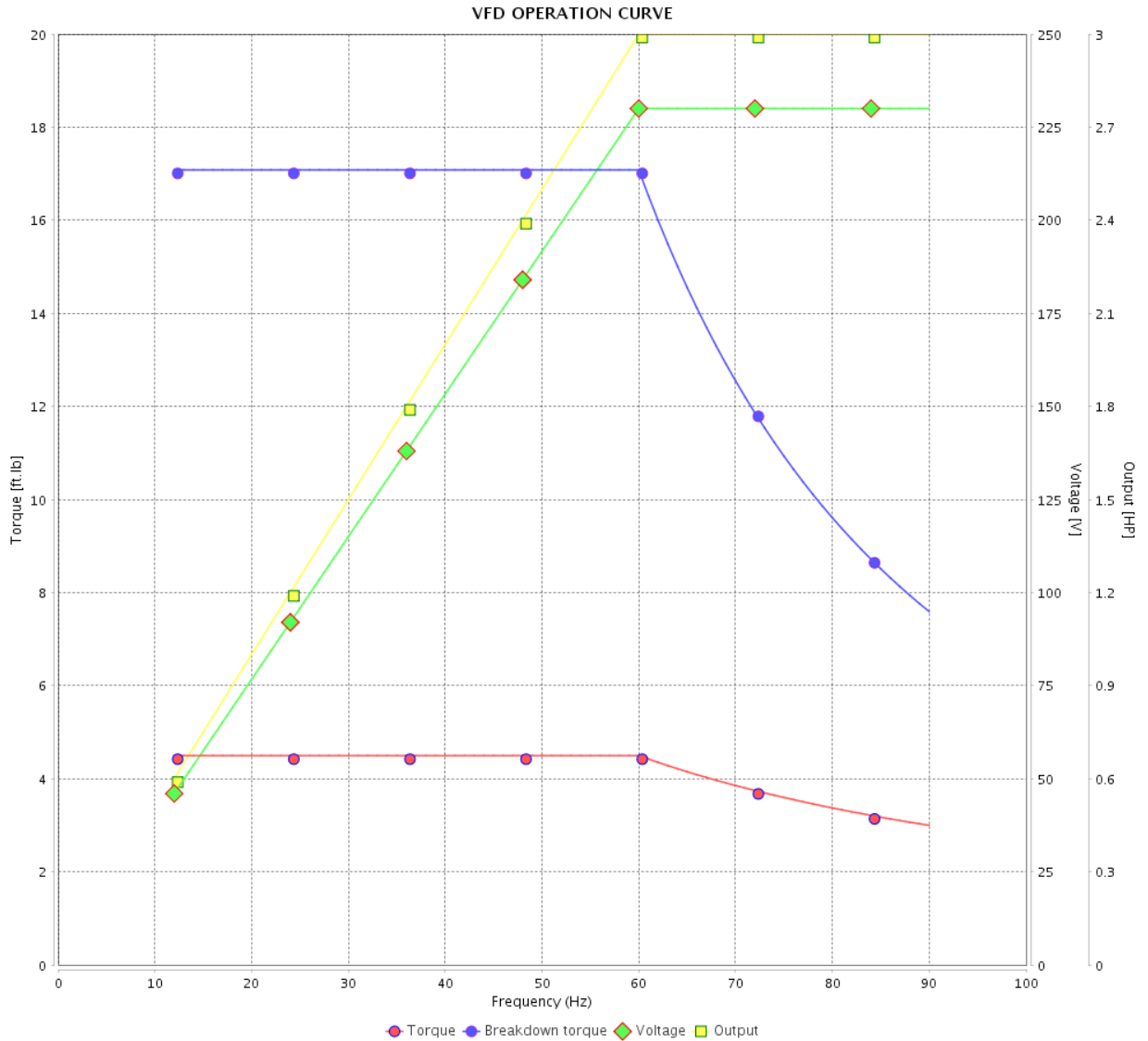
VFD OPERATION CURVE

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 Rated speed : 3500 rpm

Moment of inertia (J) : 0.1663 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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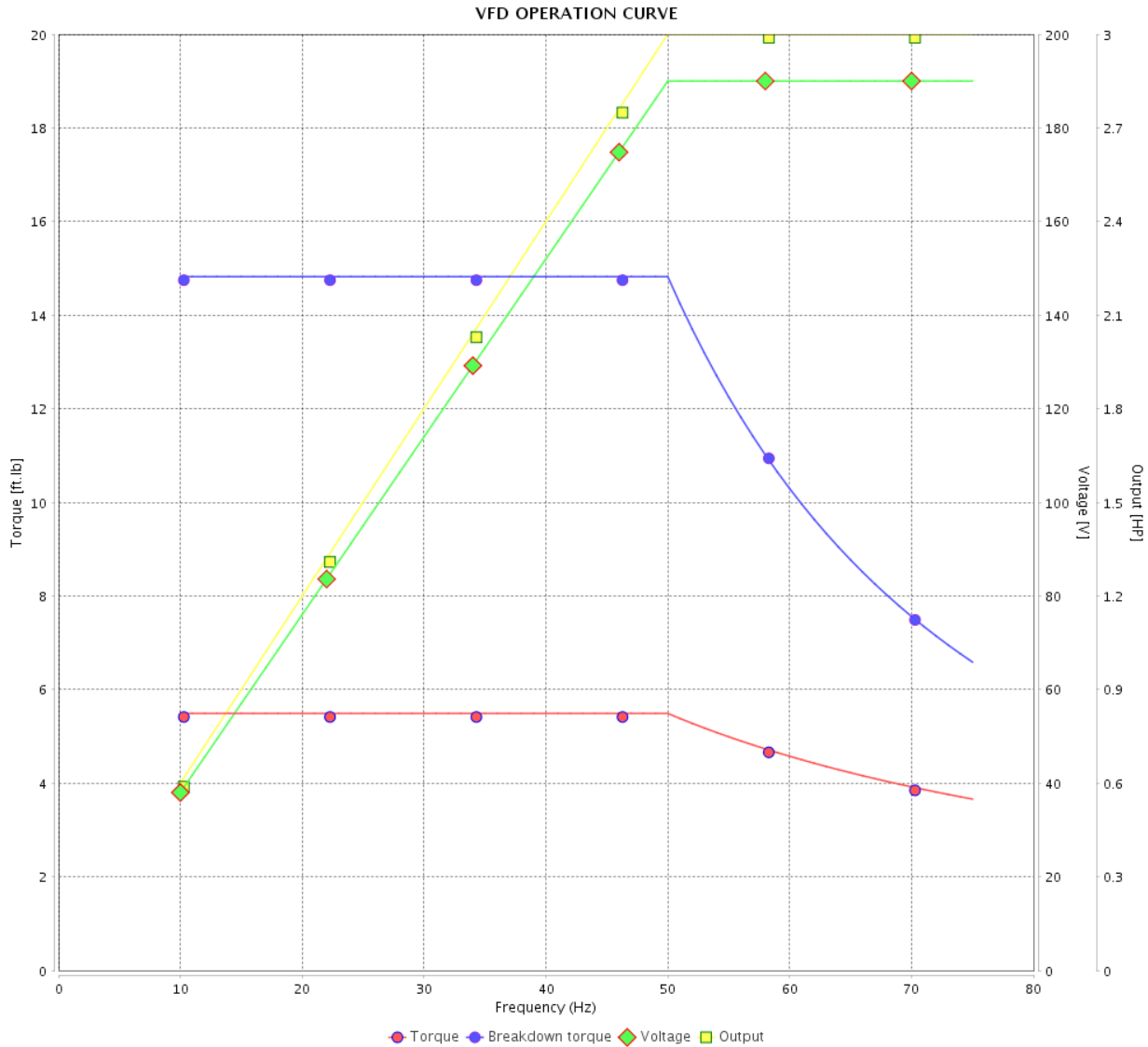
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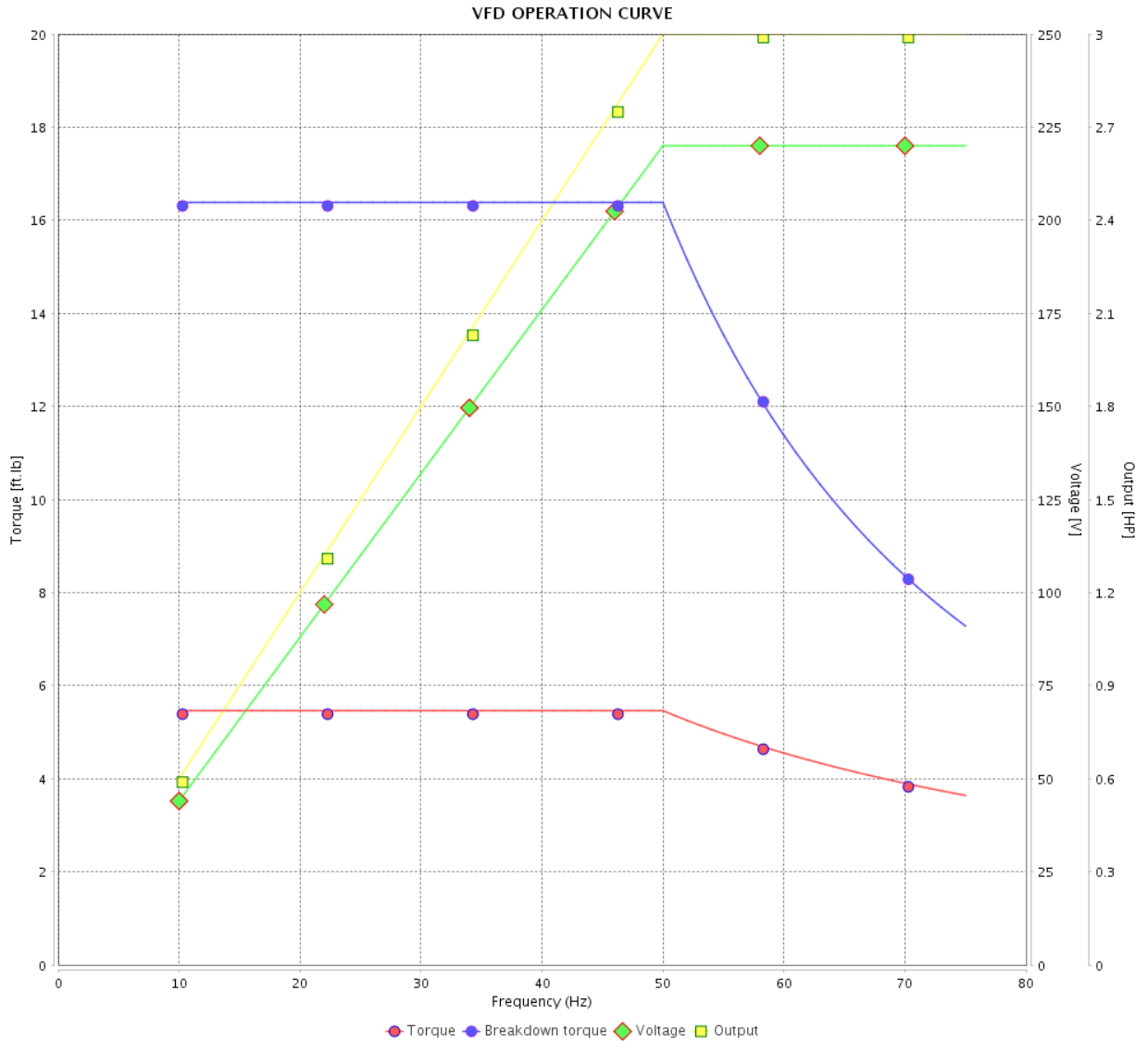
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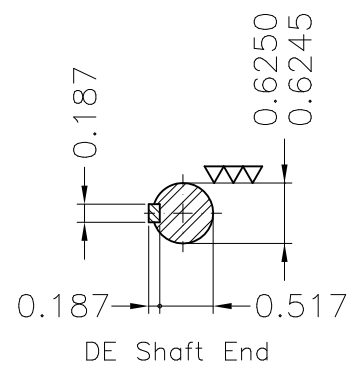
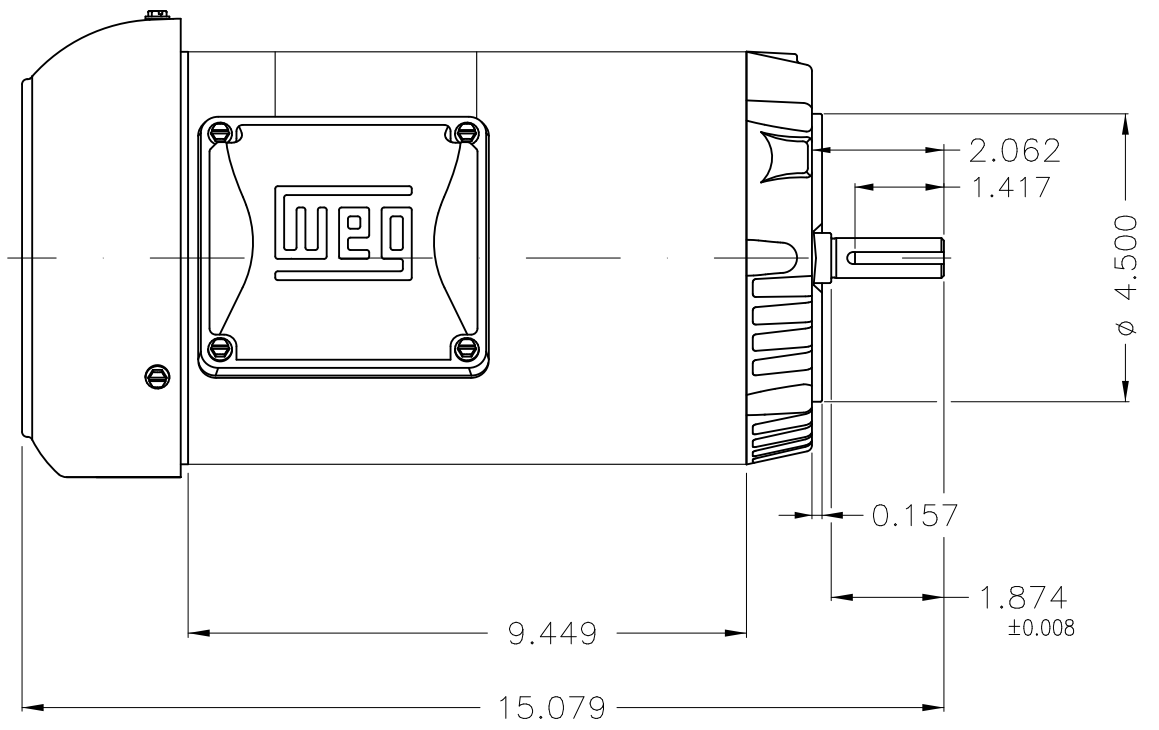
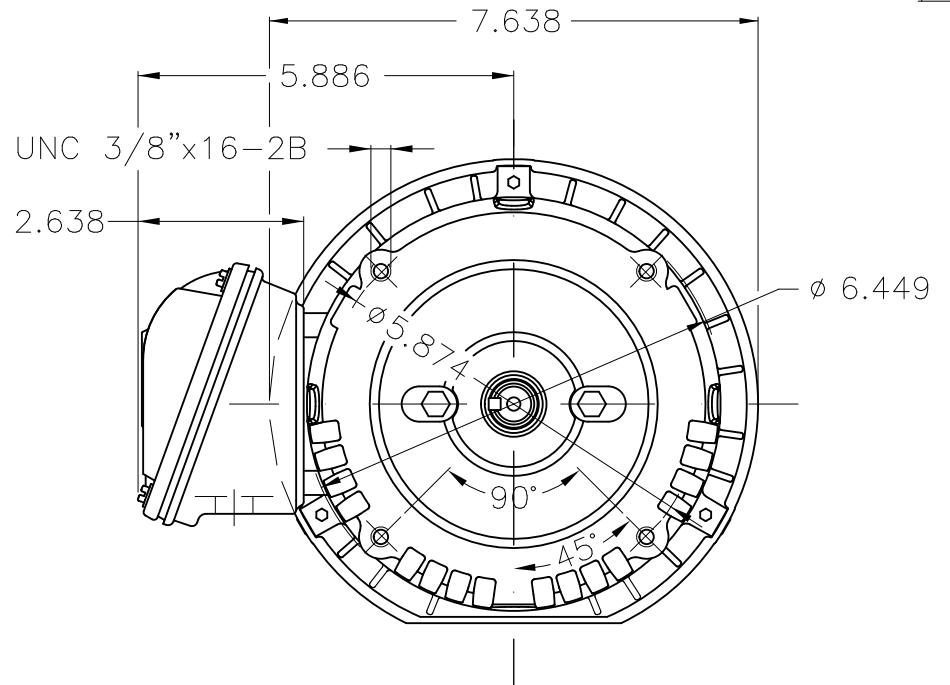
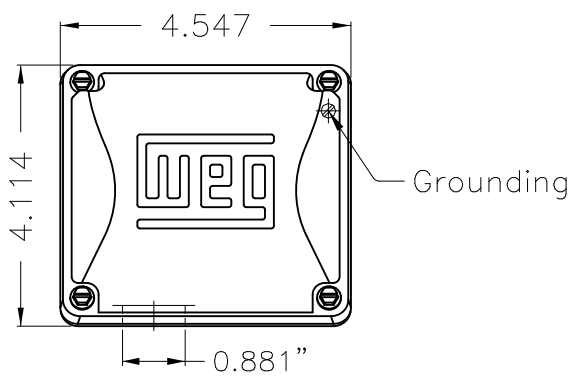
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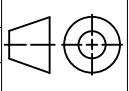

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1 2 3 4 5 6

A
B
C
D
E



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

3 HP 02 Poles 60 Hz

Dimensions in inches XME A3



NEMA
Premium



MADE IN MEXICO

MAT: 14786574 CC029A
W01.TE0IC0X0X

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

21APR2022 B/N:

PH 3	Hz 60	HP 3.0
FR 56C		KW 2.2
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 7.34/3.67
INS CL F AT 80K	IP55	SFA 8.44/4.22
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE L	PF 0.87
USABLE @ 208V 7.76A		RPM 3505
SF1.00		NEMA
		NOM. EFF 86.5%

ALTERNATE RATING: 3.0HP 50Hz 190-220/380-415V SF1.15
8.88-7.72/4.44-4.09A 2870RPM EFF 84.6% (IE2) 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.

