

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: Premium Efficiency Three-Phase	Product code :	13548244	
		Catalog # :	00136ET3EW56-S	
Frame	: W56	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	: 21.6 lb	
Protection degree	: IP55	Moment of inertia (J)	: 0.0254 sq.ft.lb	
Output [HP]	1	1	1	
Poles	2	2	2	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	3.00/1.50	3.40/1.70	3.13/1.66	
L. R. Amperes [A]	26.4/13.2	22.1/11.0	22.2/11.8	
LRC [A]	8.8x(Code M)	6.5x(Code J)	7.1x(Code K)	
No load current [A]	1.60/0.798	1.56/0.781	1.64/0.869	
Rated speed [RPM]	3435	2770	2800	
Slip [%]	4.58	7.67	6.67	
Rated torque [ft.lb]	1.53	1.90	1.88	
Locked rotor torque [%]	360	280	310	
Breakdown torque [%]	380	250	280	
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	65.0 dB(A)	64.0 dB(A)	64.0 dB(A)	
Efficiency (%)	25%	72.4	78.4	76.7
	50%	74.0	77.8	76.9
	75%	77.0	79.2	79.2
	100%	78.5	77.8	78.7
Power Factor	25%	0.38	0.43	0.39
	50%	0.63	0.70	0.65
	75%	0.75	0.81	0.78
	100%	0.80	0.86	0.83
Bearing type	: Drive end : 6203 ZZ Non drive end : 6202 ZZ	Foundation loads		
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 40 lb	
		Max. compression	: 62 lb	
Lubrication interval	: -			
Lubricant amount	: -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 3.32A SF 1.00 SFA 3.32A				
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
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Checked by			Page	Revision
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TORQUE AND CURRENT VS SPEED CURVE

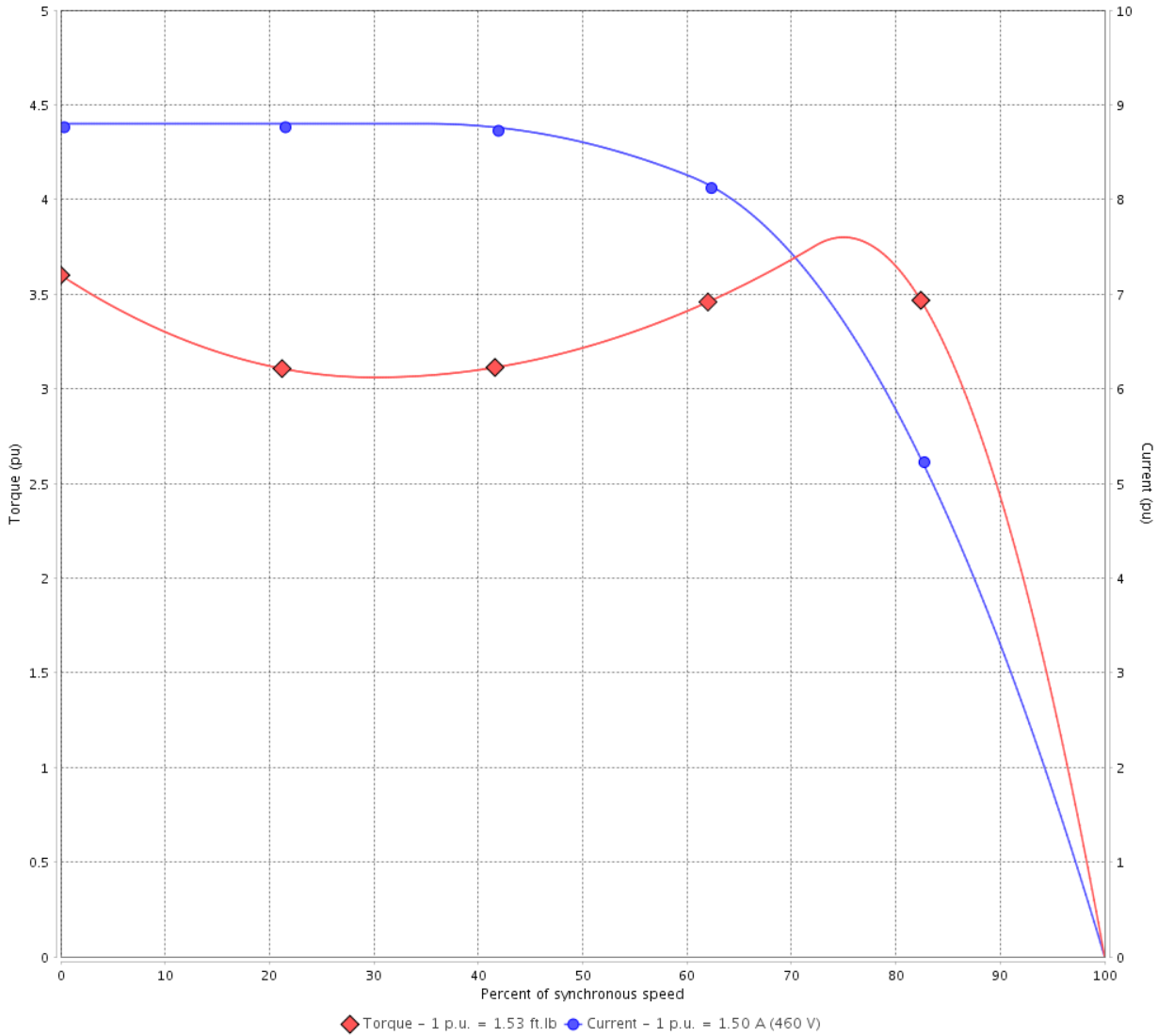
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 13548244
 Catalog # : 00136ET3EW56-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 3.00/1.50 A	Moment of inertia (J)	: 0.0254 sq.ft.lb
LRC	: 8.8	Duty cycle	: Cont.(S1)
Rated torque	: 1.53 ft.lb	Insulation class	: F
Locked rotor torque	: 360 %	Service factor	:
Breakdown torque	: 380 %	Temperature rise	: 80 K
Rated speed	: 3435 rpm		

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

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TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

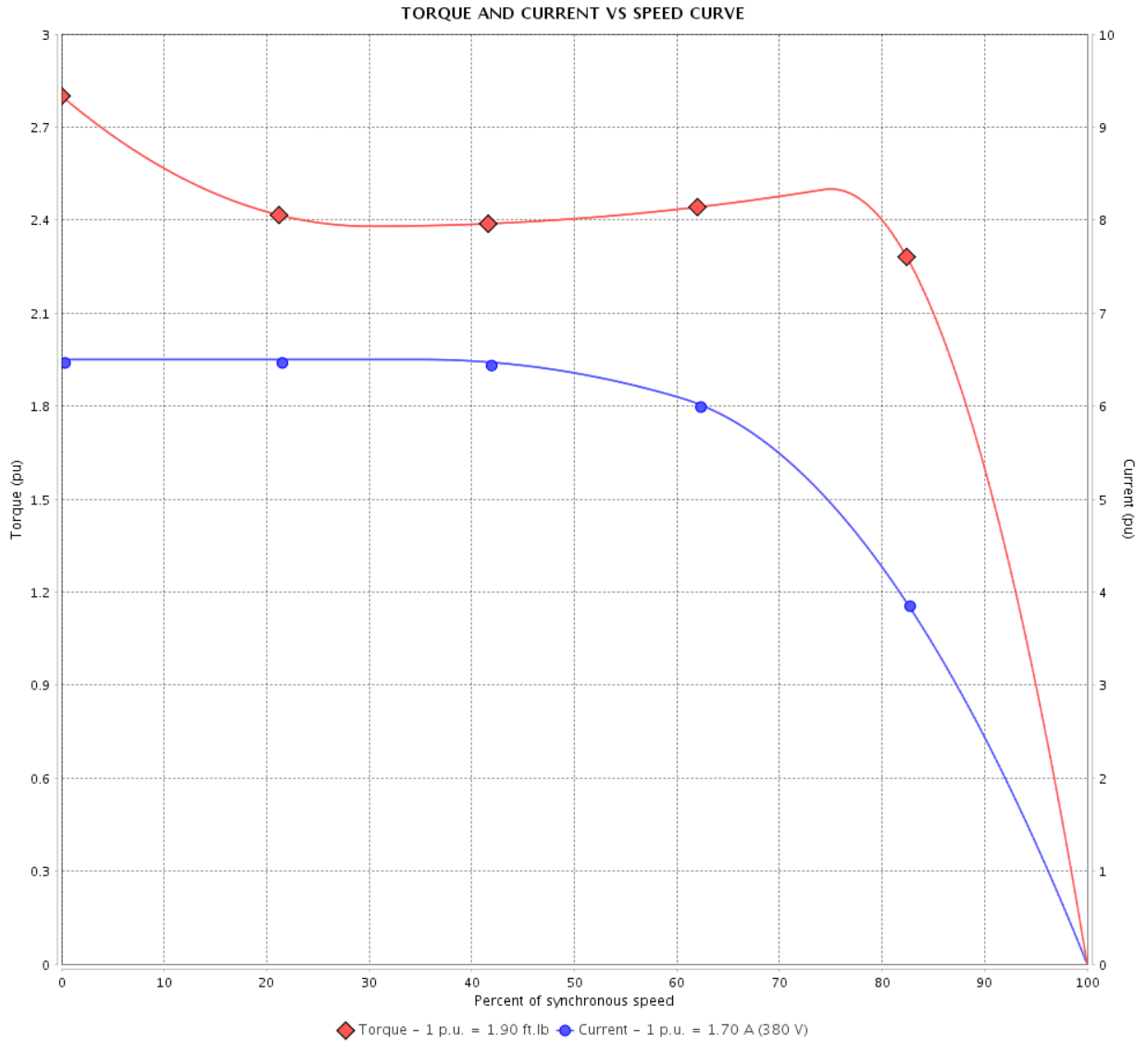
Product line : Premium Efficiency Three-Phase

Product code :

13548244

Catalog # :

00136ET3EW56-S



Performance : 190/380 V 50 Hz 2P

Rated current : 3.40/1.70 A
 LRC : 6.5
 Rated torque : 1.90 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 250 %
 Rated speed : 2770 rpm

Moment of inertia (J) : 0.0254 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K

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

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TORQUE AND CURRENT VS SPEED CURVE

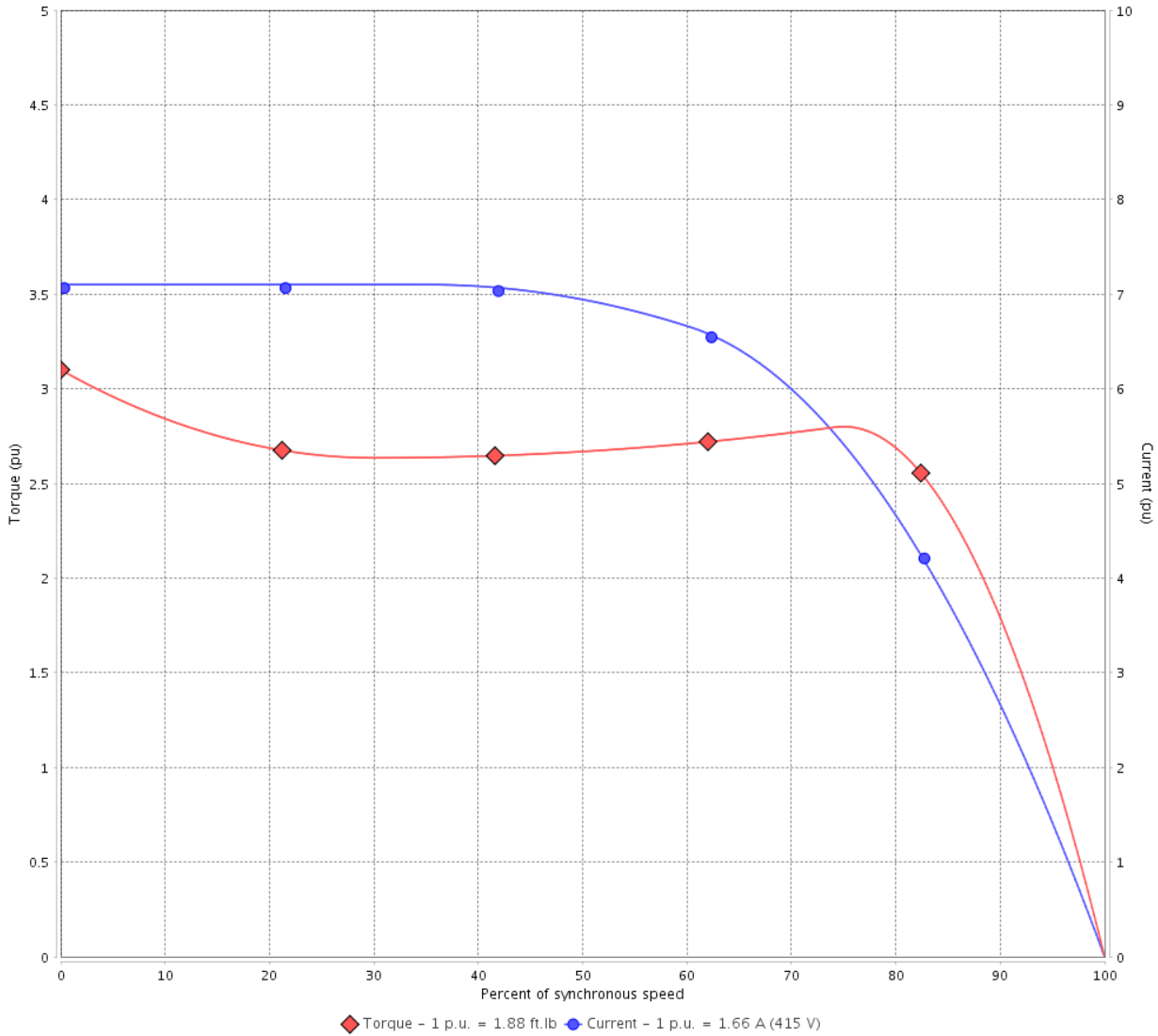
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 13548244
 Catalog # : 00136ET3EW56-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 3.13/1.66 A	Moment of inertia (J)	: 0.0254 sq.ft.lb
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 1.88 ft.lb	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2800 rpm		

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

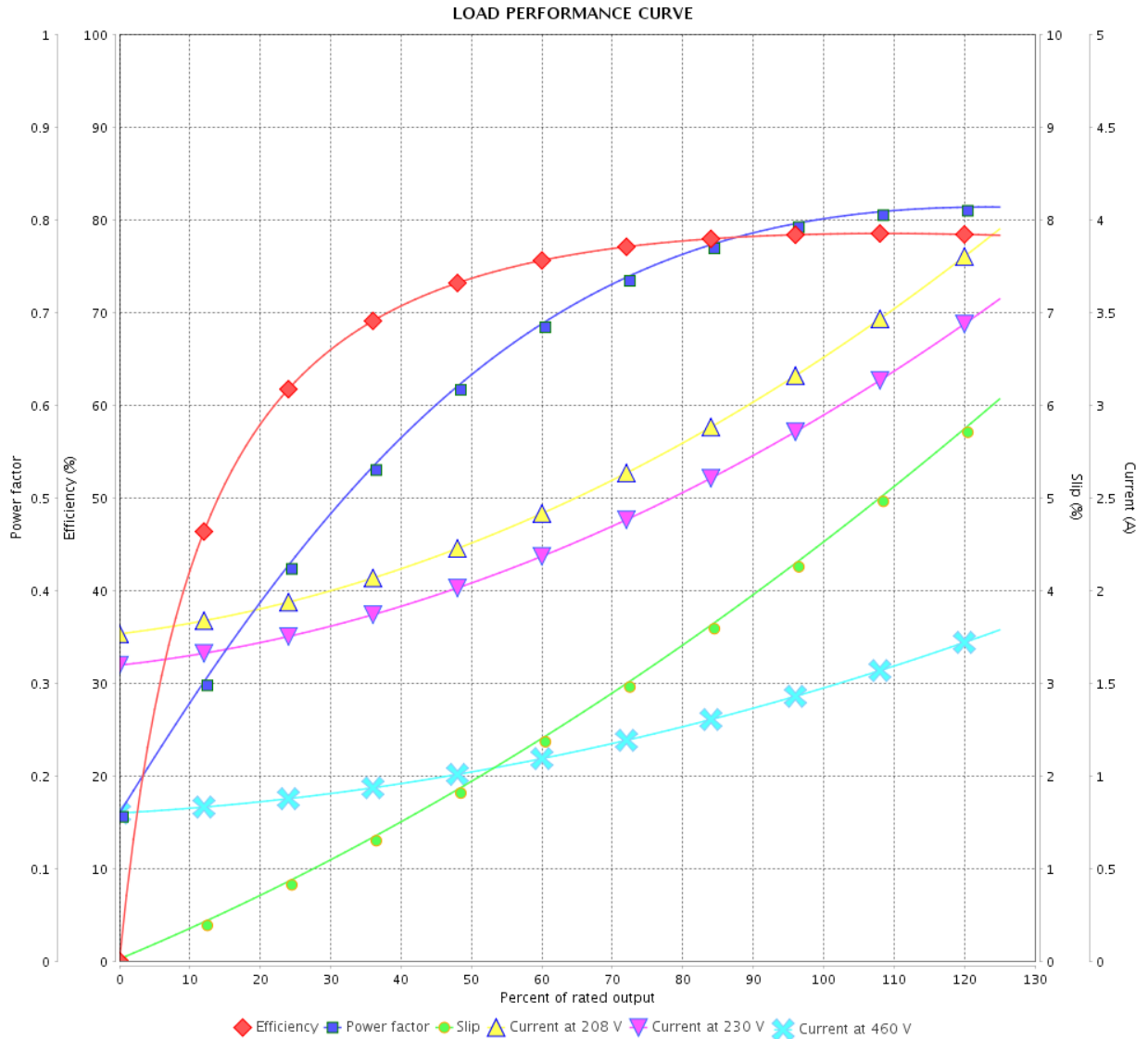
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Rated current : 3.00/1.50 A
 LRC : 8.8
 Rated torque : 1.53 ft.lb
 Locked rotor torque : 360 %
 Breakdown torque : 380 %
 Rated speed : 3435 rpm

Moment of inertia (J) : 0.0254 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K

Rev.	Changes Summary	Performed	Checked	Date
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LOAD PERFORMANCE CURVE

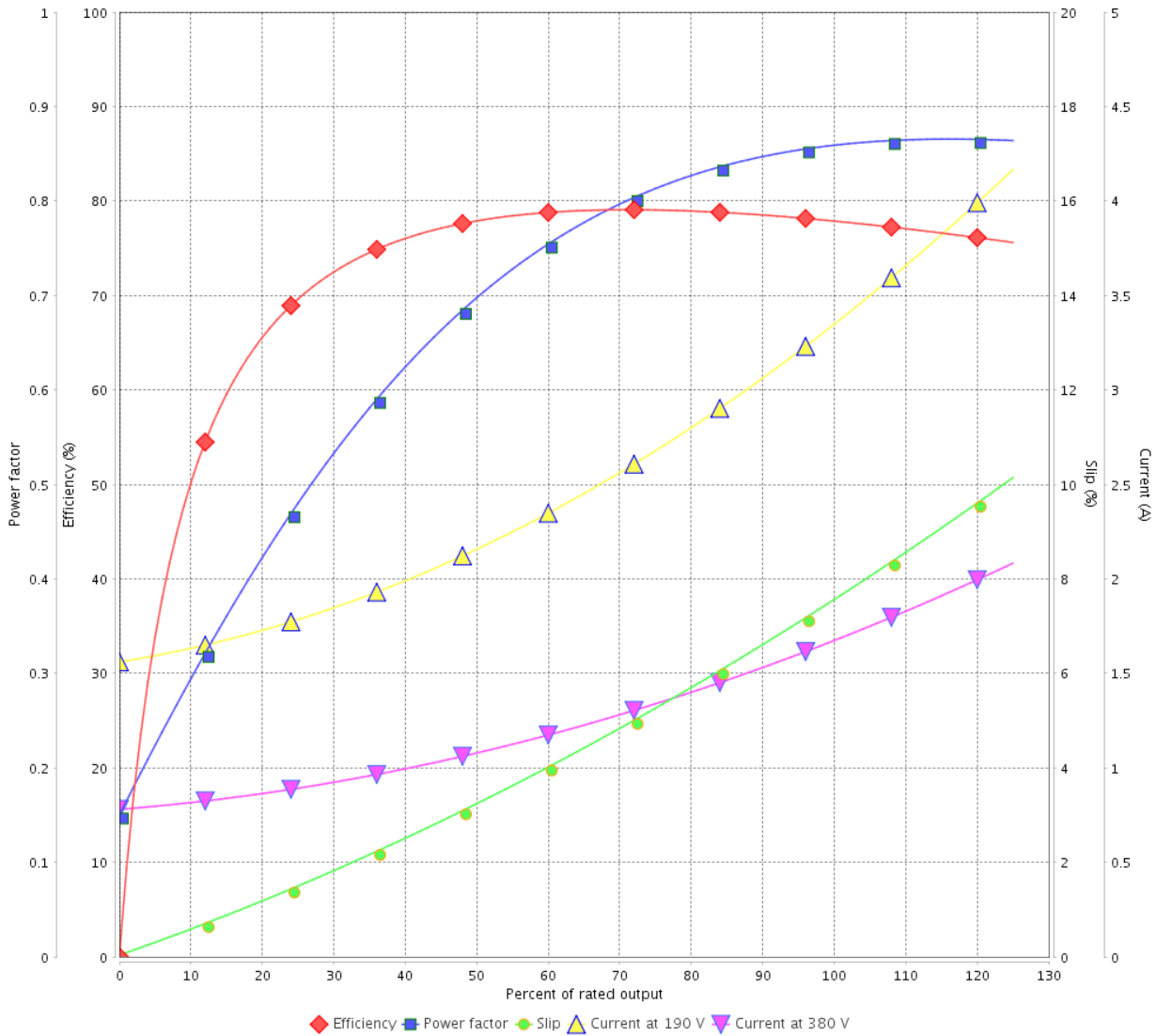
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 Rated torque : 1.90 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 250 %
 Rated speed : 2770 rpm

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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K

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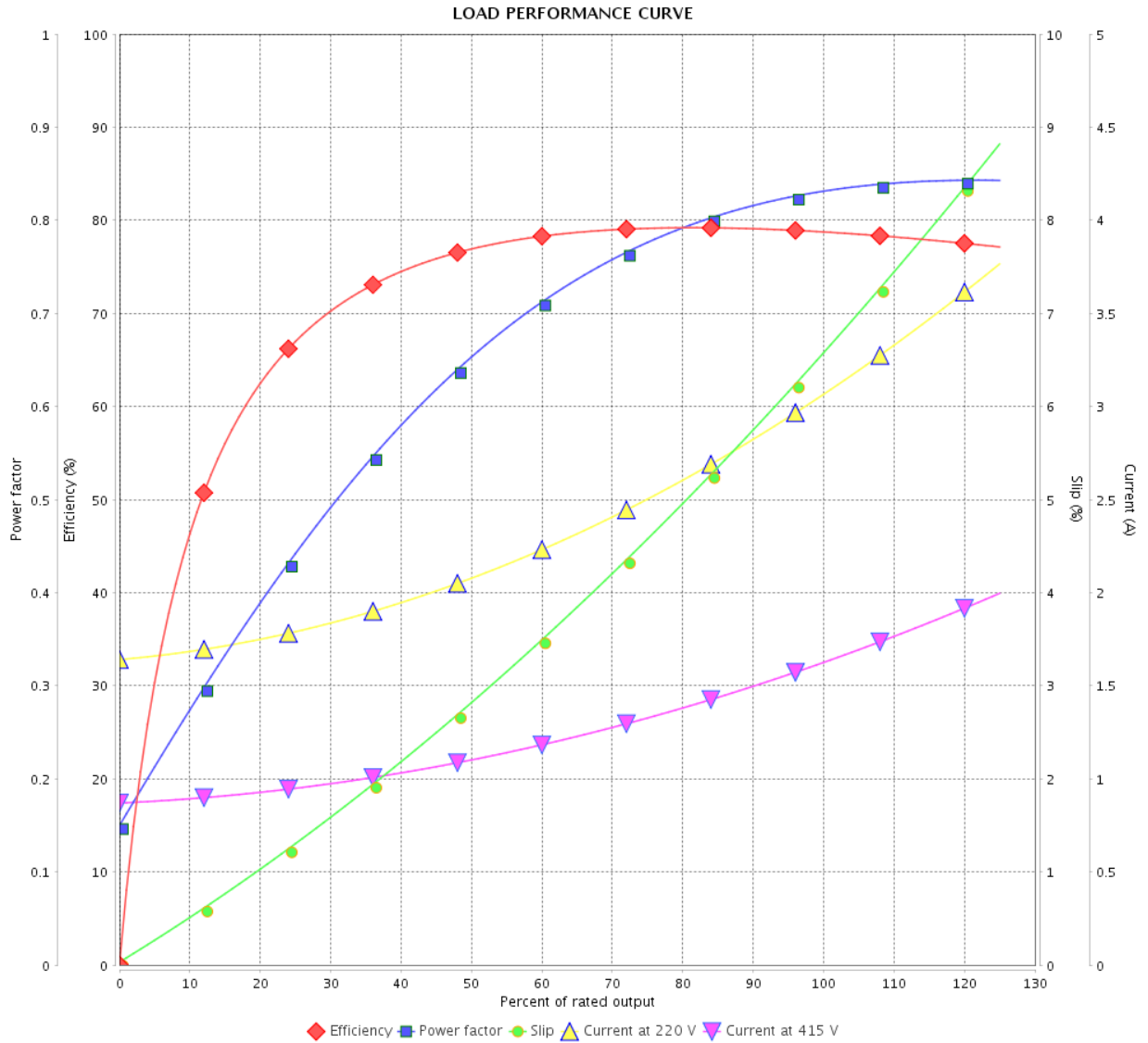
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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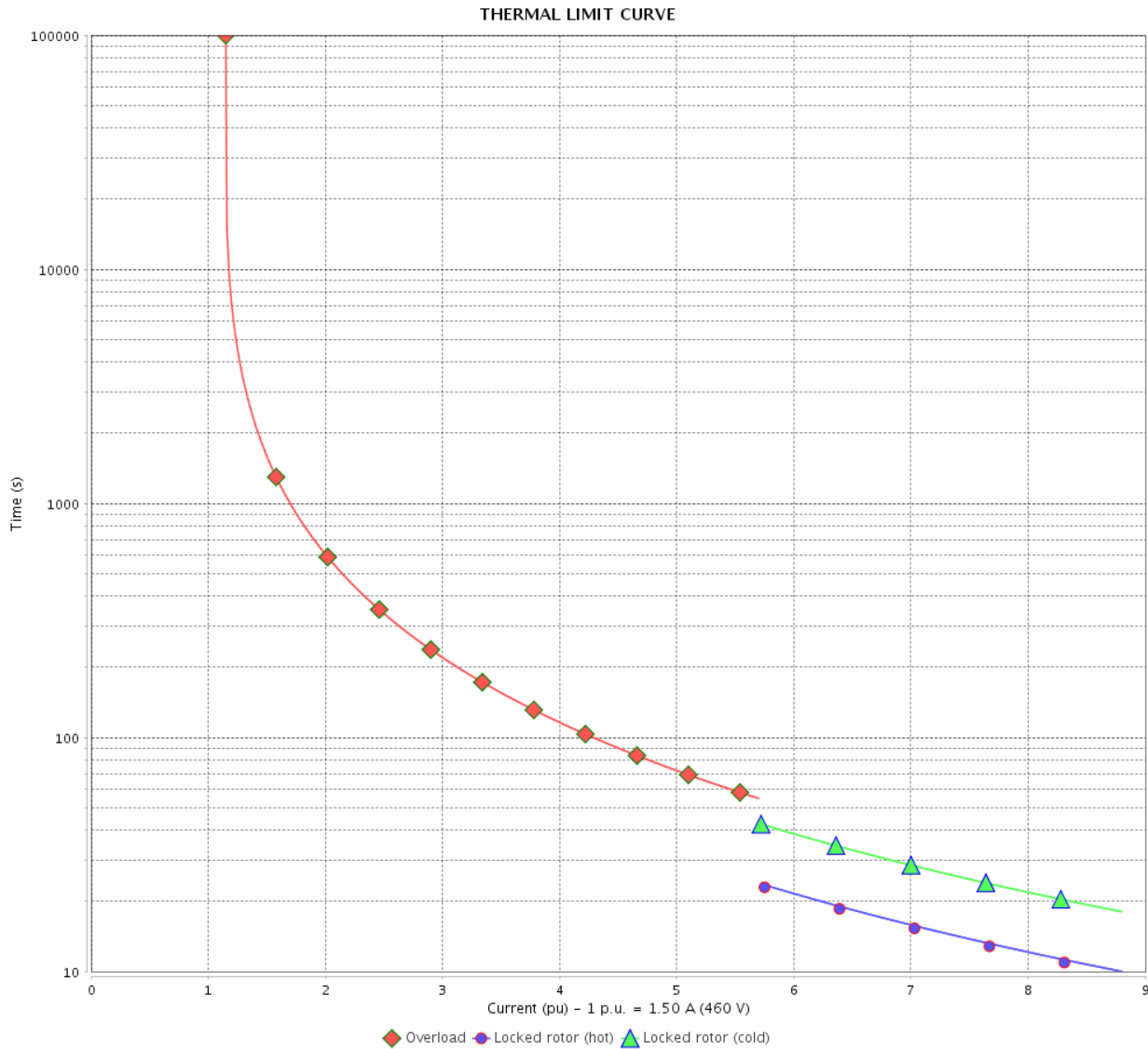
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 Rated speed : 3435 rpm

Moment of inertia (J) : 0.0254 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
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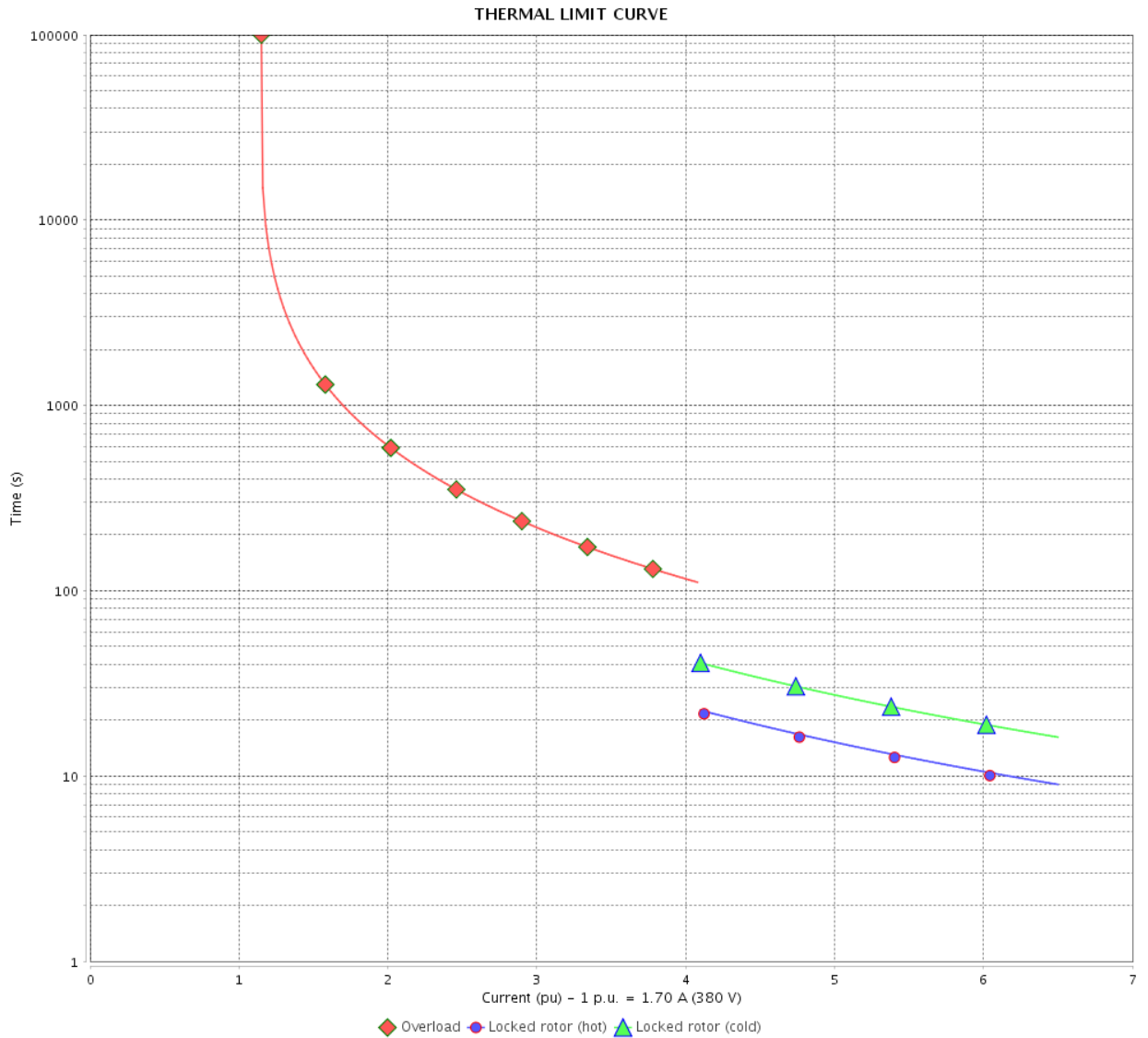
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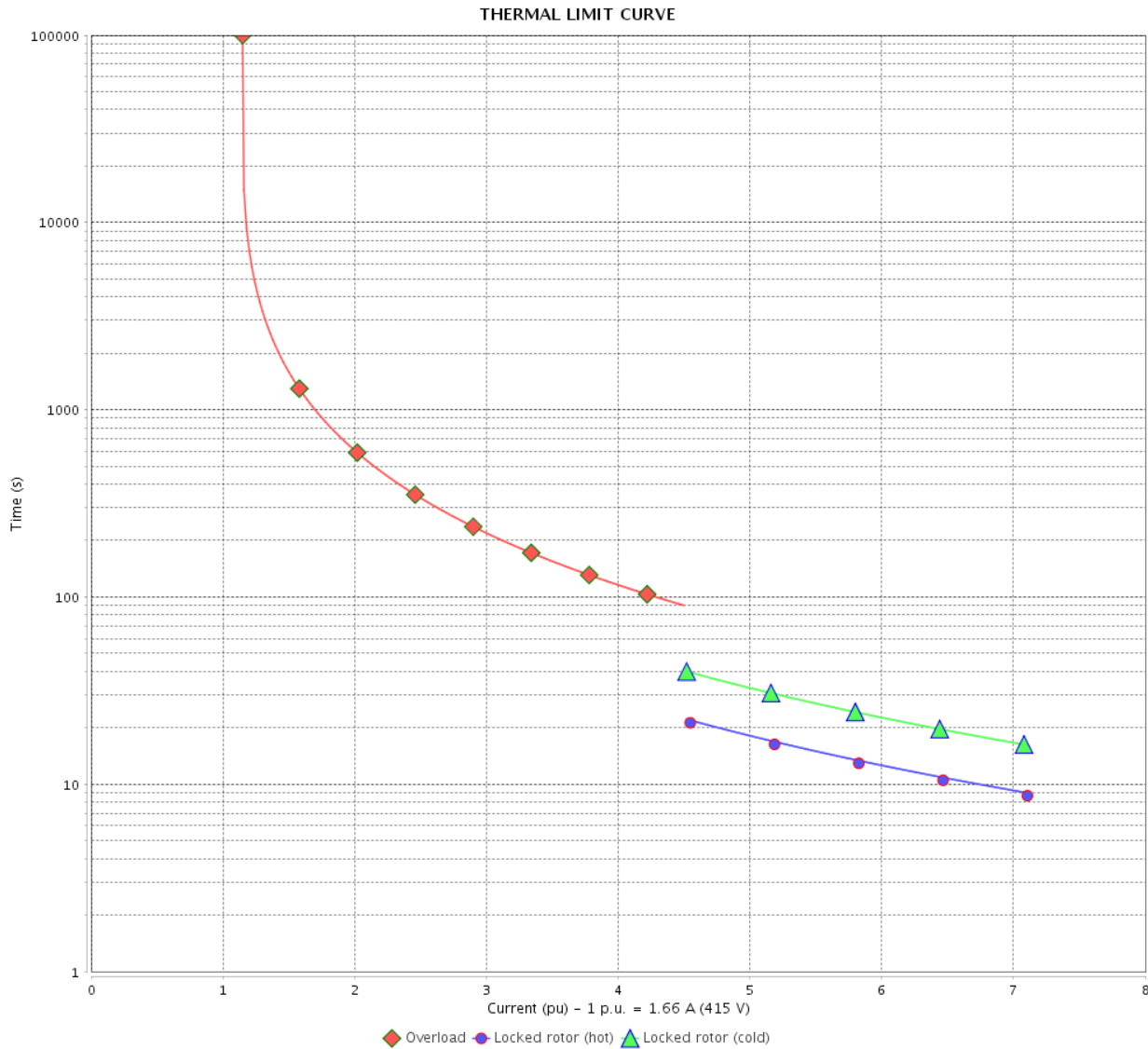
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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



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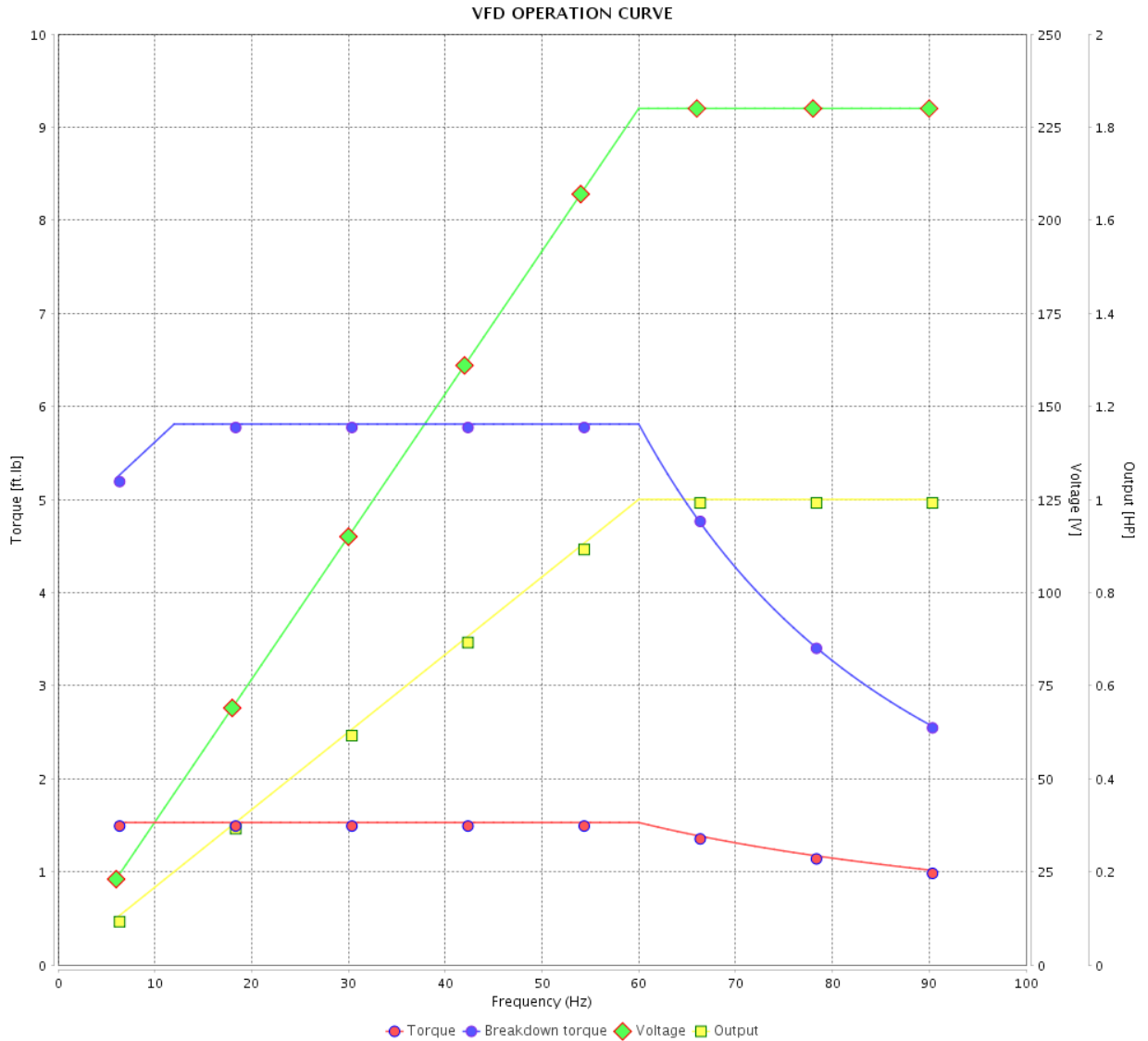
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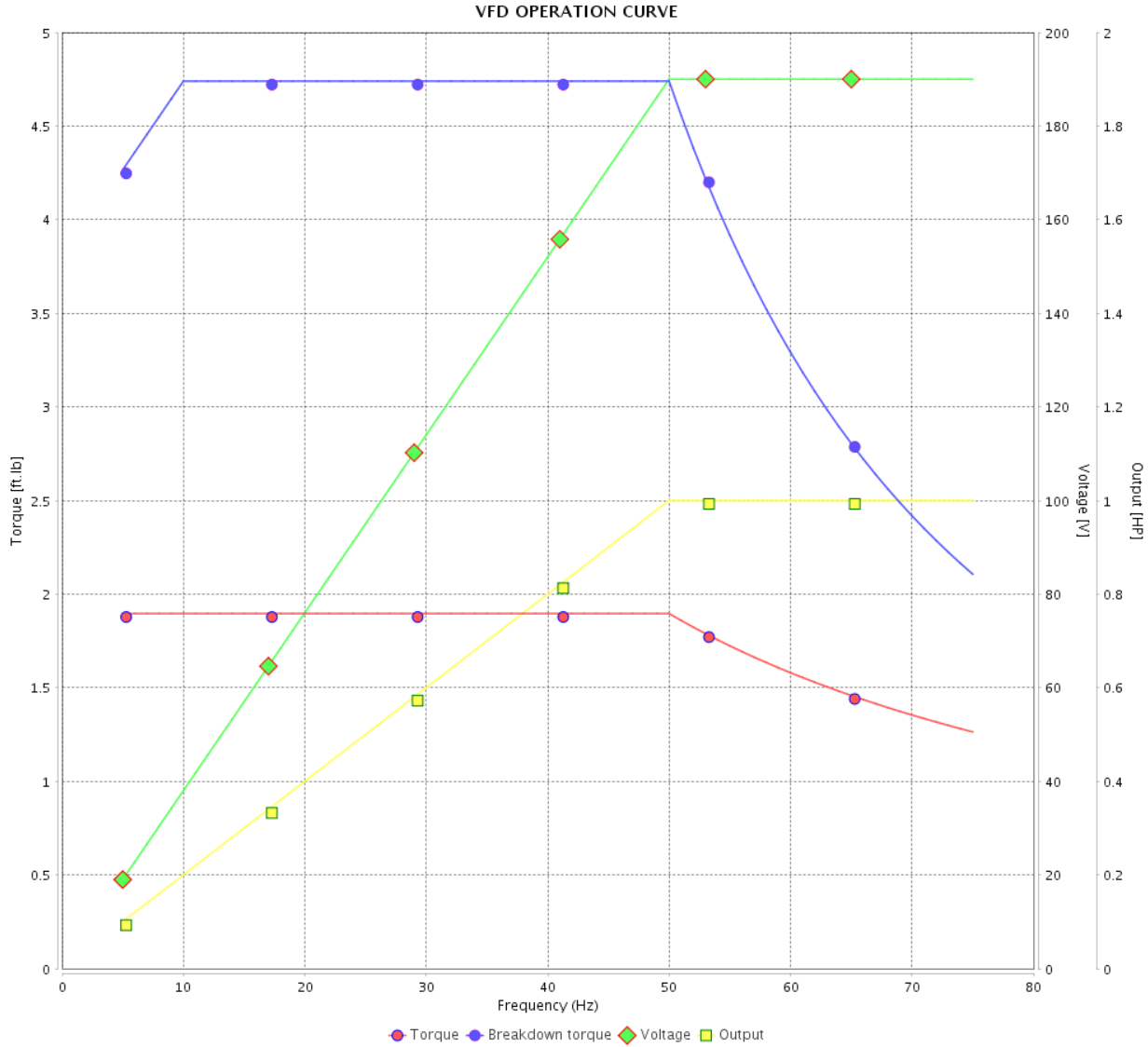
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Locked rotor torque	: 280 %	Service factor	: 1.15
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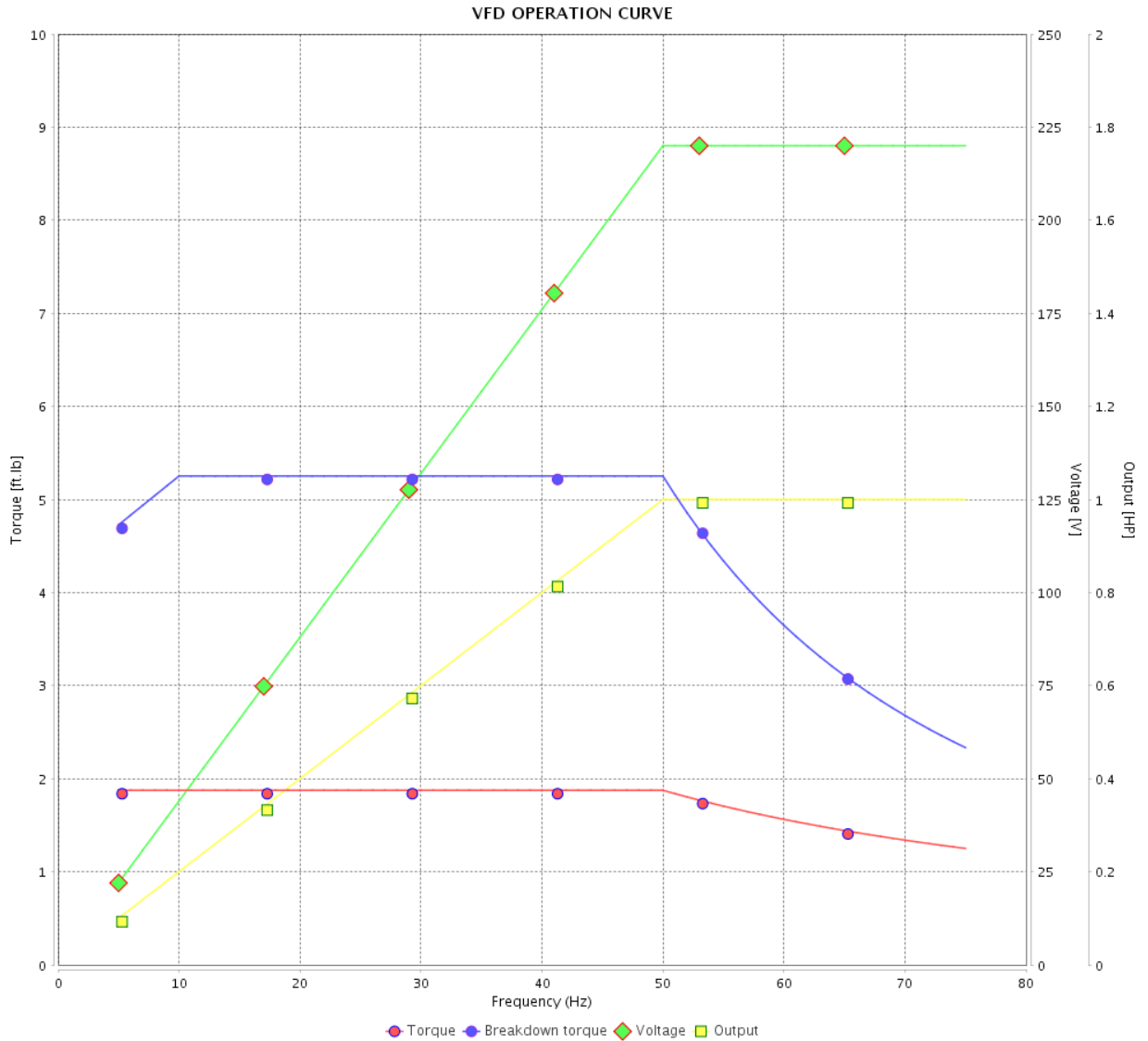
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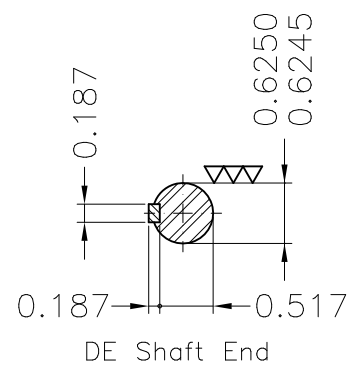
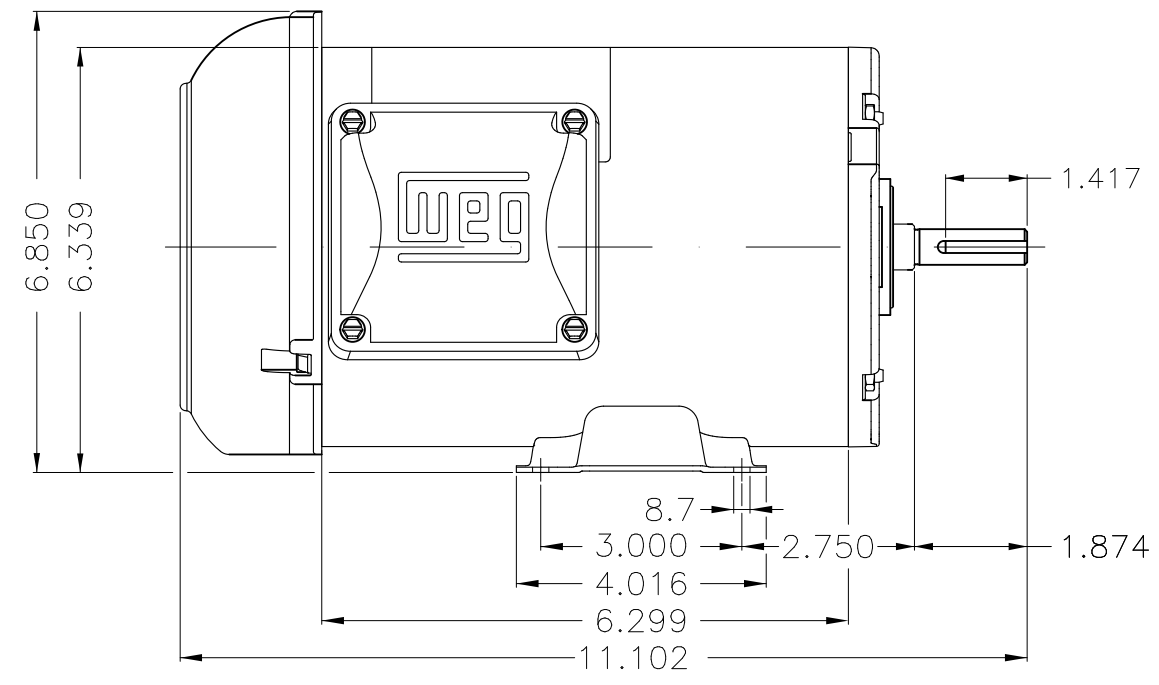
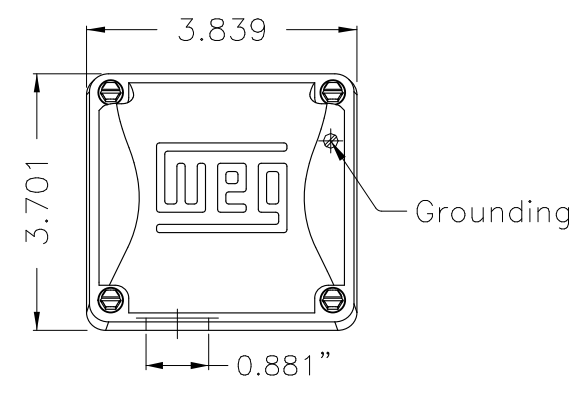
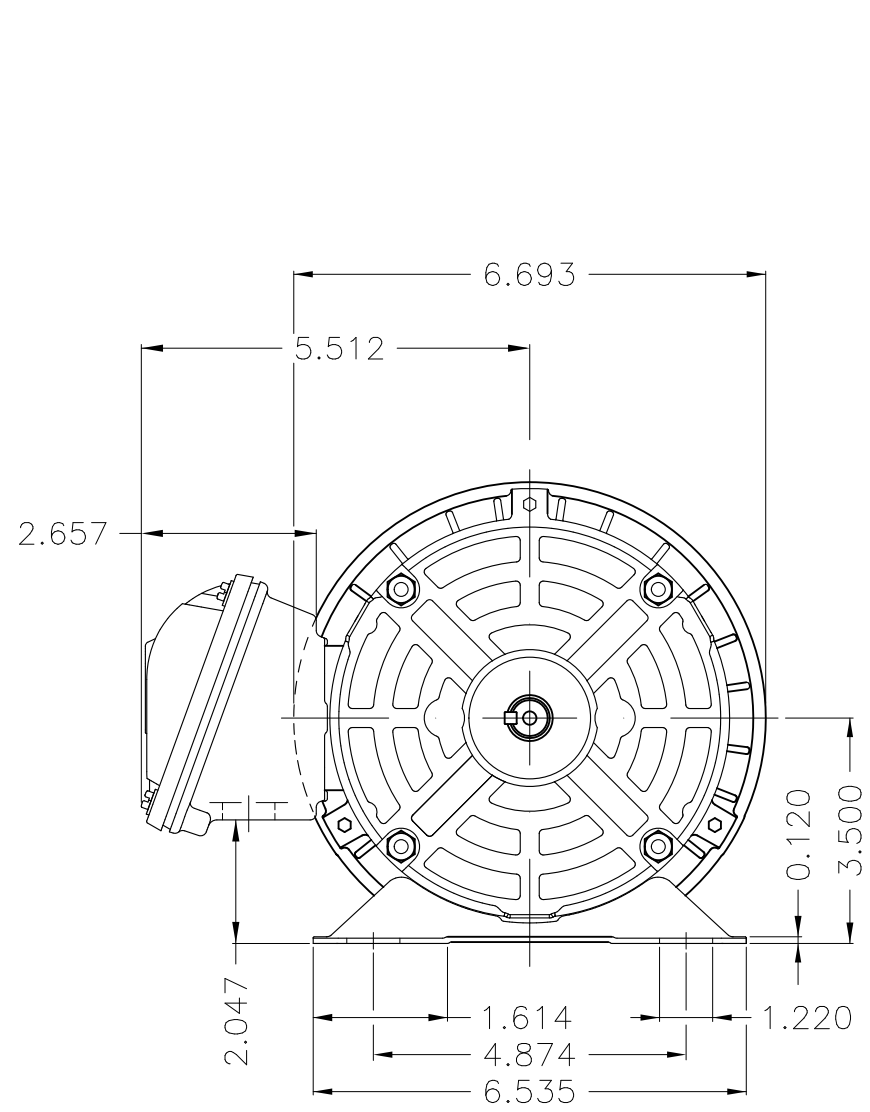
A

B


C

D

E



Dimensions in inches

Without coating										
Mounting F-1/B3R(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 W56 IP55 TEFC								
RELEASED										
REL DT.		WMO	Jaragua do Sul	Product Engineering						

1 HP 02 Poles 60 Hz

A

XME A3



NEMA
Premium



3PT9
UL US LISTED
FOR SAFE AREA



MADE IN BRAZIL

MAT: 13548244

W01.TE0IC0X0X

MODEL 00136ET3EW56-S

06APR2022 B/N:

For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3

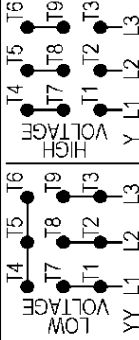
Div 2 Inverter Duty (SF1.00)
CT 2:1/VT 1000:1

PH 3	Hz 60	HP 1.0
FR W56		KW 0.75
DUTY CONT.		V 208-230/460
ALT 1000 m.a.s.l.		A 3.32-3.00/1.50
INS CL F AT 80K	IP55	SFA 3.32-3.45/1.72
AMB 40°C	DES -	SF 1.15
ENCL TEFC	CODE M	PF 0.80
USABLE @ 208V SF1.00		RPM 3435
		NEMA NOM. EFF 78.5%

ALTERNATE RATING: 1.0HP 50Hz 190-220/380-415V SF1.15
3.40-3.11/1.70-1.85A 2770RPM EFF 77.8% (IE2) IEC 60034-1

For safe area-inverter duty motor For 60Hz use on VPWM 1000:1 VT, 5:1 CT

DE 6203-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.

