

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: 00021 Premium Efficiency Three-Phase	Product code :	14590188	
		Catalog # :	.3318OT3ERB56-S	
Frame	: 56	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	: 21.8 lb	
		Moment of inertia (J)	: 0.0453 sq.ft.lb	
Output [HP]	0.33	0.33	0.33	
Poles	4	4	4	
Frequency [Hz]	60	50	50	
Rated voltage [V]	208-230/460	190/380	220/415	
Rated current [A]	1.48-1.34/0.668	1.44/0.718	1.37/0.727	
L. R. Amperes [A]	9.16-8.28/4.14	7.32/3.66	7.27/3.85	
LRC [A]	6.2x(Code L)	5.1x(Code J)	5.3x(Code K)	
No load current [A]	0.948-1.10/0.550	1.04/0.522	1.10/0.581	
Rated speed [RPM]	1765	1450	1455	
Slip [%]	1.94	3.33	3.00	
Rated torque [ft.lb]	0.982	1.20	1.19	
Locked rotor torque [%]	229	160	180	
Breakdown torque [%]	330	250	280	
Service factor		1.35	1.35	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	64s (cold) 36s (hot)	77s (cold) 43s (hot)	68s (cold) 38s (hot)	
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	
Efficiency (%)	25%	59.2	60.3	
	50%	62.0	62.7	
	75%	70.0	69.3	
	100%	73.4	71.9	
Power Factor	25%	0.24	0.25	
	50%	0.44	0.47	
	75%	0.55	0.59	
	100%	0.64	0.69	
Bearing type	: <u>Drive end</u> 6203 ZZ <u>Non drive end</u> 6202 ZZ	Foundation loads		
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 21 lb	
		Max. compression	: 43 lb	
Lubrication interval	: - -			
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V SF 1.00				
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

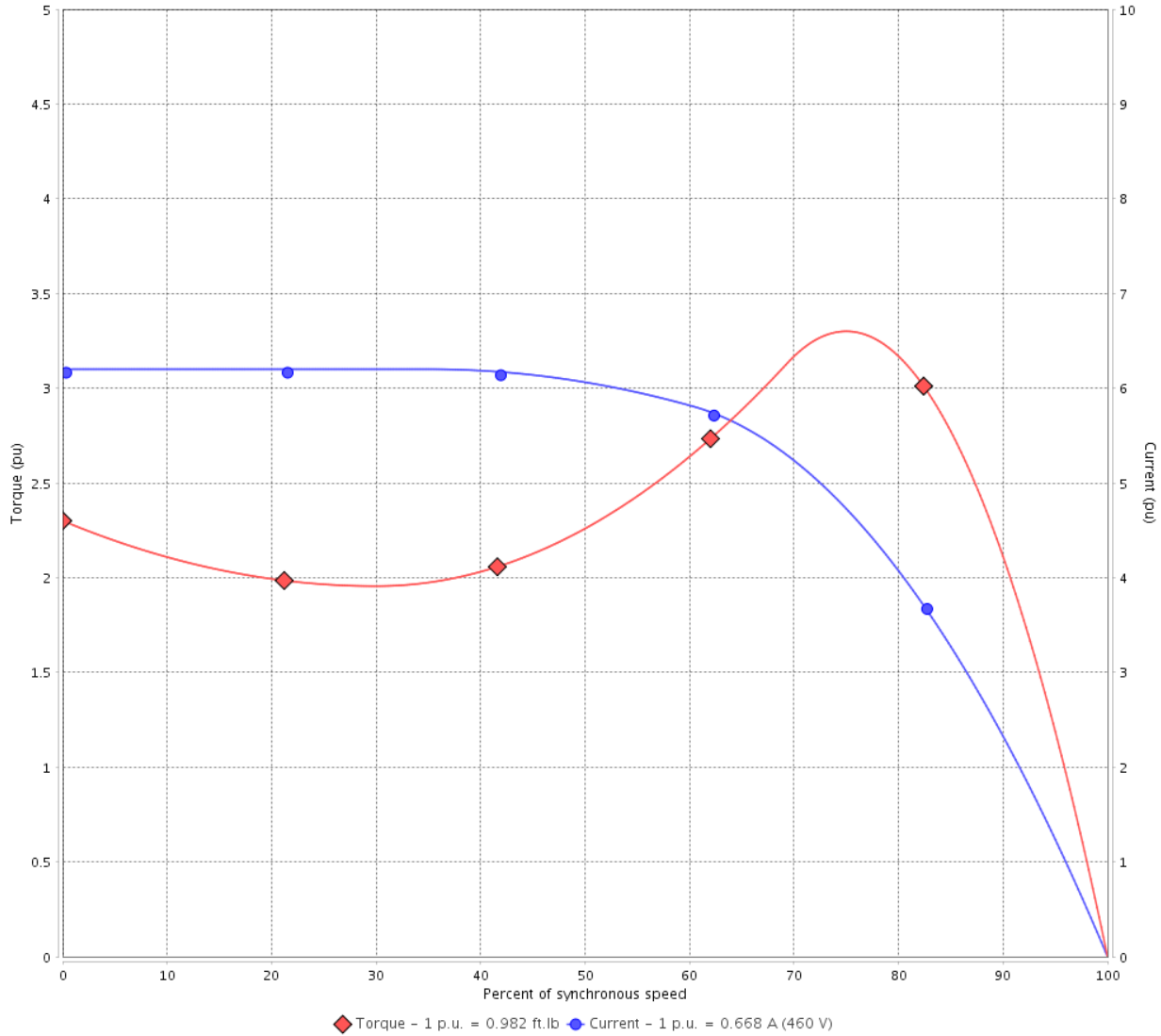
Customer :

Product line : 00021 Premium Efficiency Three-Phase

Product code : 14590188

Catalog # : .3318OT3ERB56-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 208-230/460 V 60 Hz 4P

Rated current	: 1.48-1.34/0.668 A	Moment of inertia (J)	: 0.0453 sq.ft.lb
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 0.982 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	:
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm		

Locked rotor time : 64s (cold) 36s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



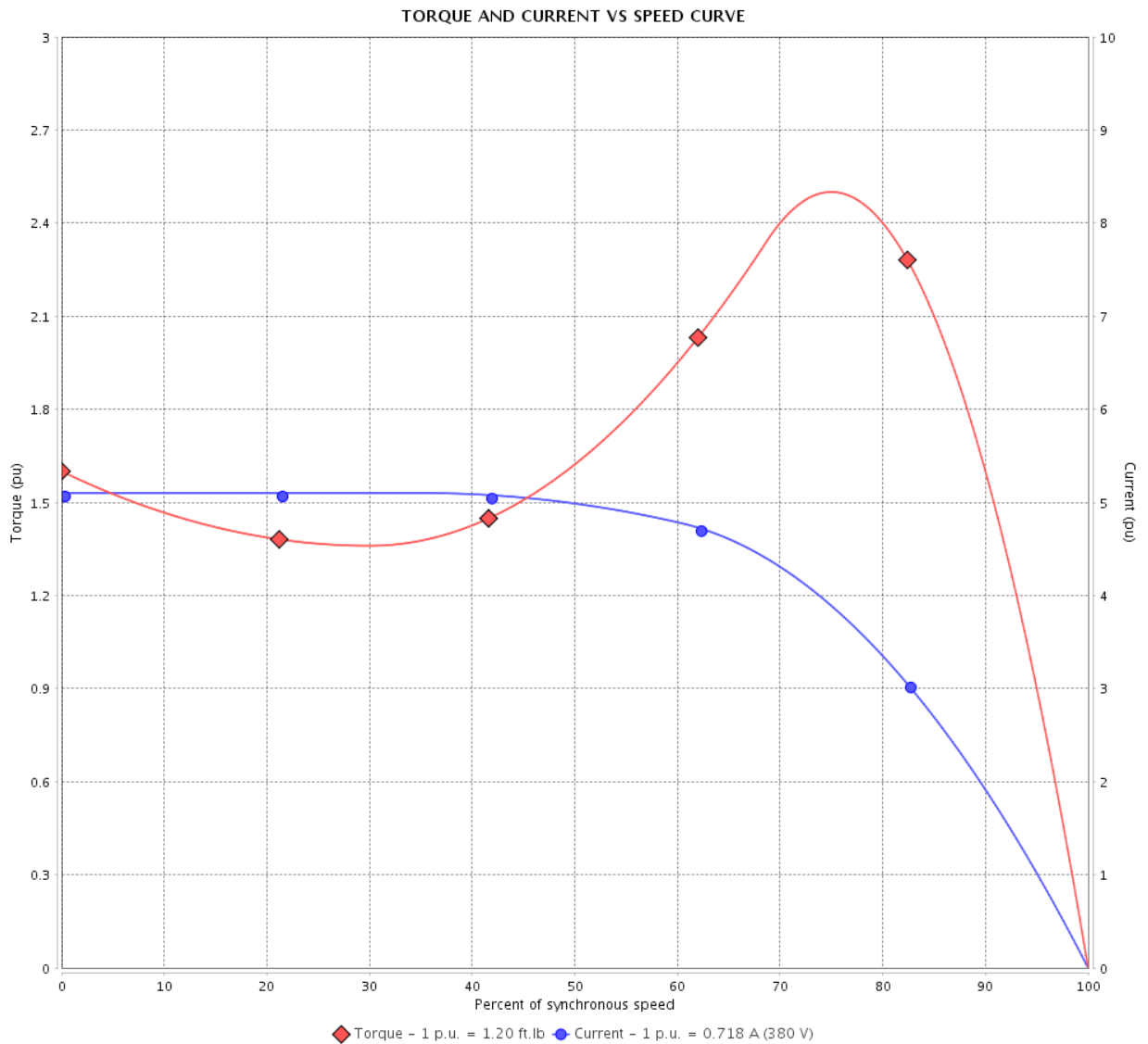
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : 00021 Premium Efficiency Three-Phase

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Catalog # : .3318OT3ERB56-S



Performance : 190/380 V 50 Hz 4P

Rated current : 1.44/0.718 A
 LRC : 5.1
 Rated torque : 1.20 ft.lb
 Locked rotor torque : 160 %
 Breakdown torque : 250 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0453 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.35
 Temperature rise : 80 K

Locked rotor time : 77s (cold) 43s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



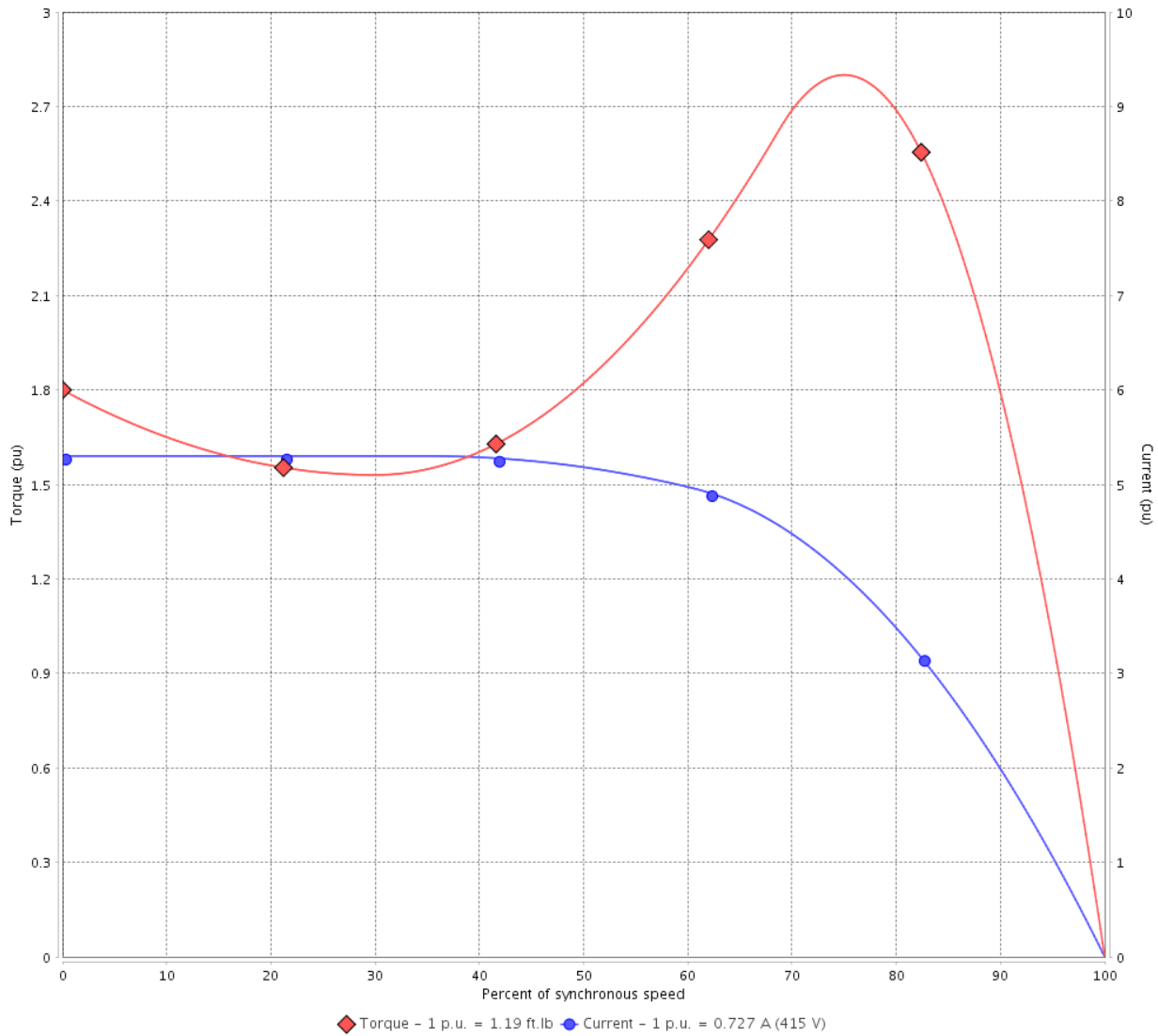
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current : 1.37/0.727 A
 LRC : 5.3
 Rated torque : 1.19 ft.lb
 Locked rotor torque : 180 %
 Breakdown torque : 280 %
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0453 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.35
 Temperature rise : 80 K

Locked rotor time : 68s (cold) 38s (hot)

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LOAD PERFORMANCE CURVE

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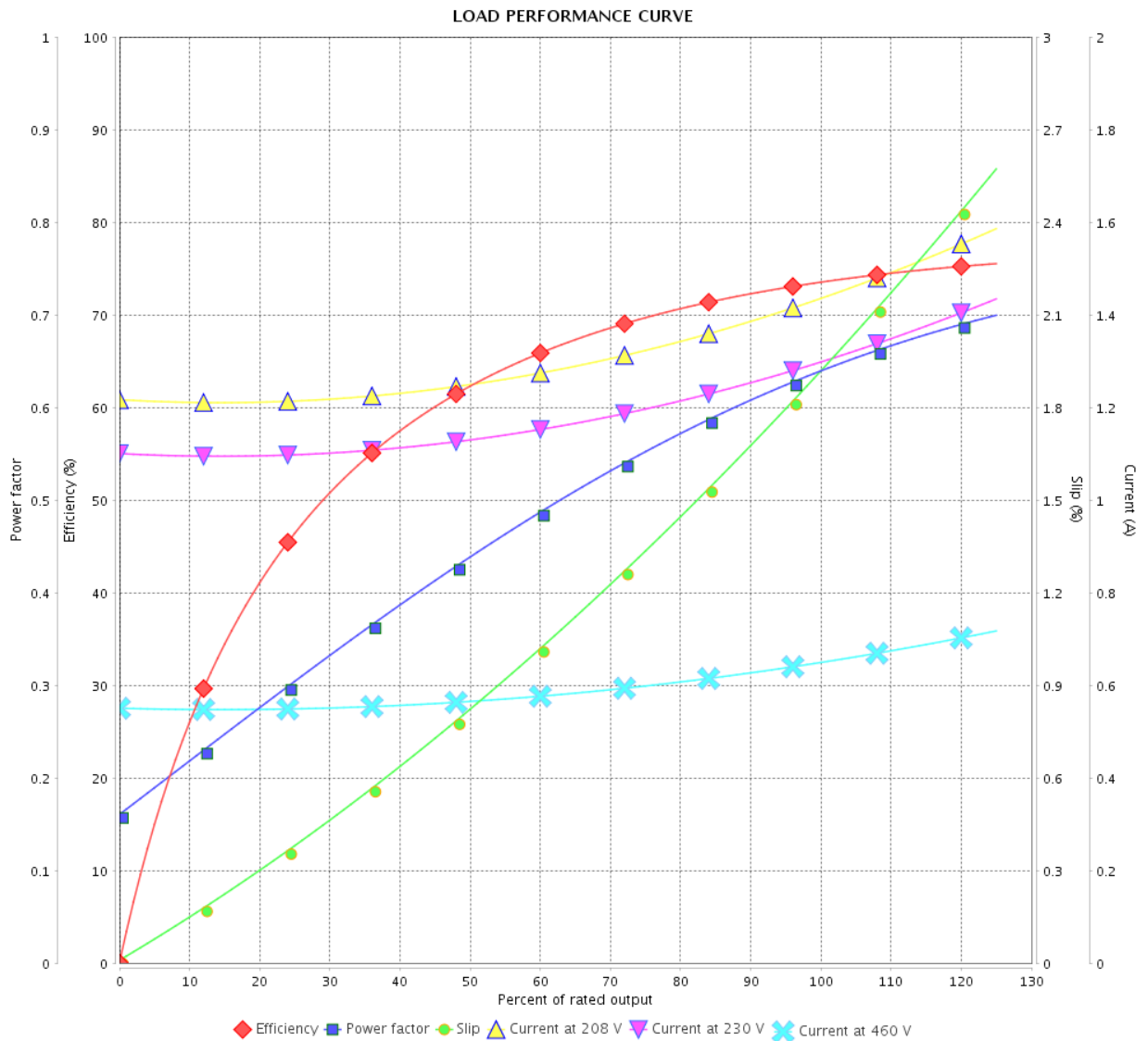


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Catalog # : .3318OT3ERB56-S



Performance : 208-230/460 V 60 Hz 4P

Rated current : 1.48-1.34/0.668 A
 LRC : 6.2
 Rated torque : 0.982 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 330 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.0453 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K

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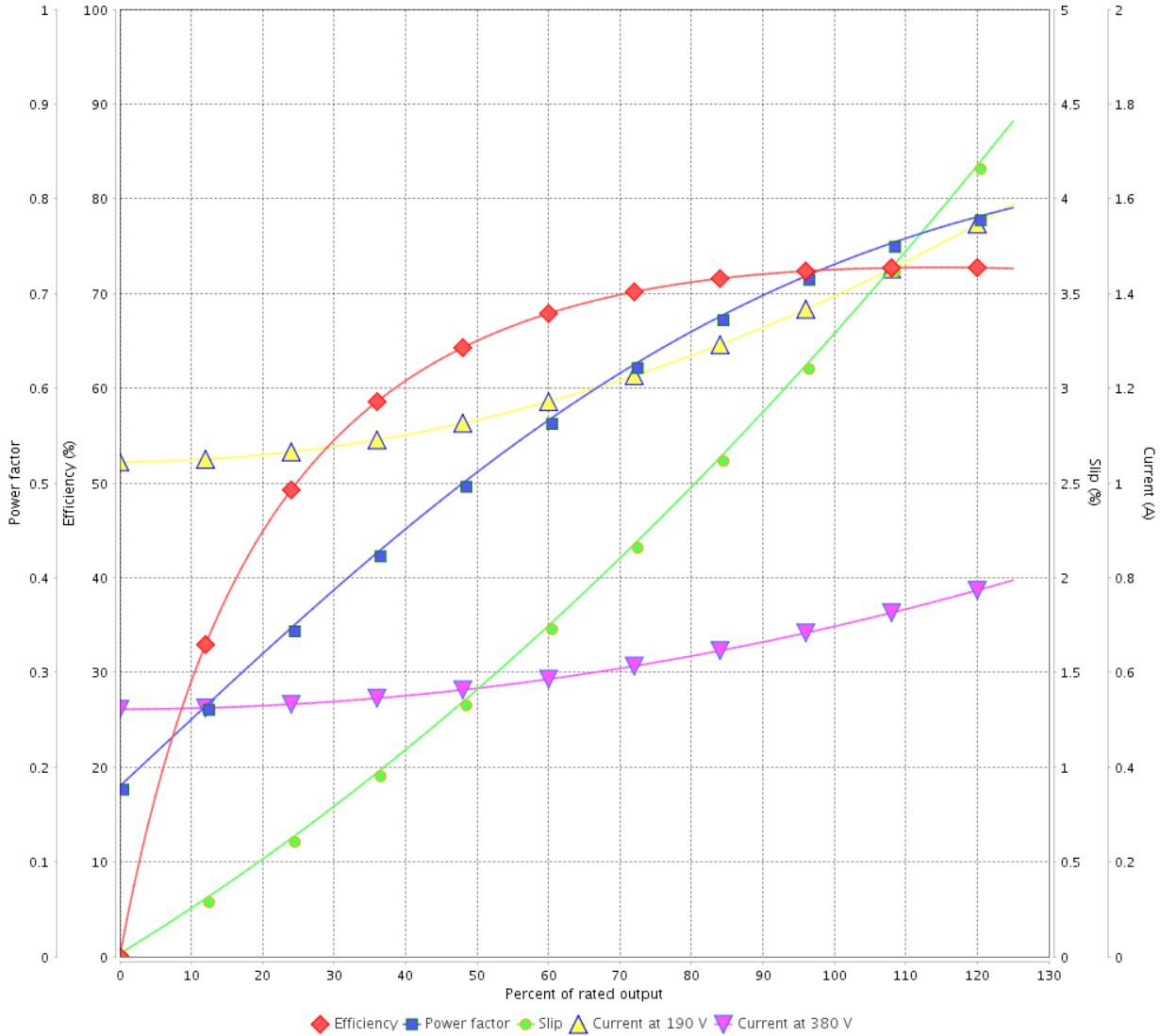
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Performance : 190/380 V 50 Hz 4P

Rated current : 1.44/0.718 A
 LRC : 5.1
 Rated torque : 1.20 ft.lb
 Locked rotor torque : 160 %
 Breakdown torque : 250 %
 Rated speed : 1450 rpm

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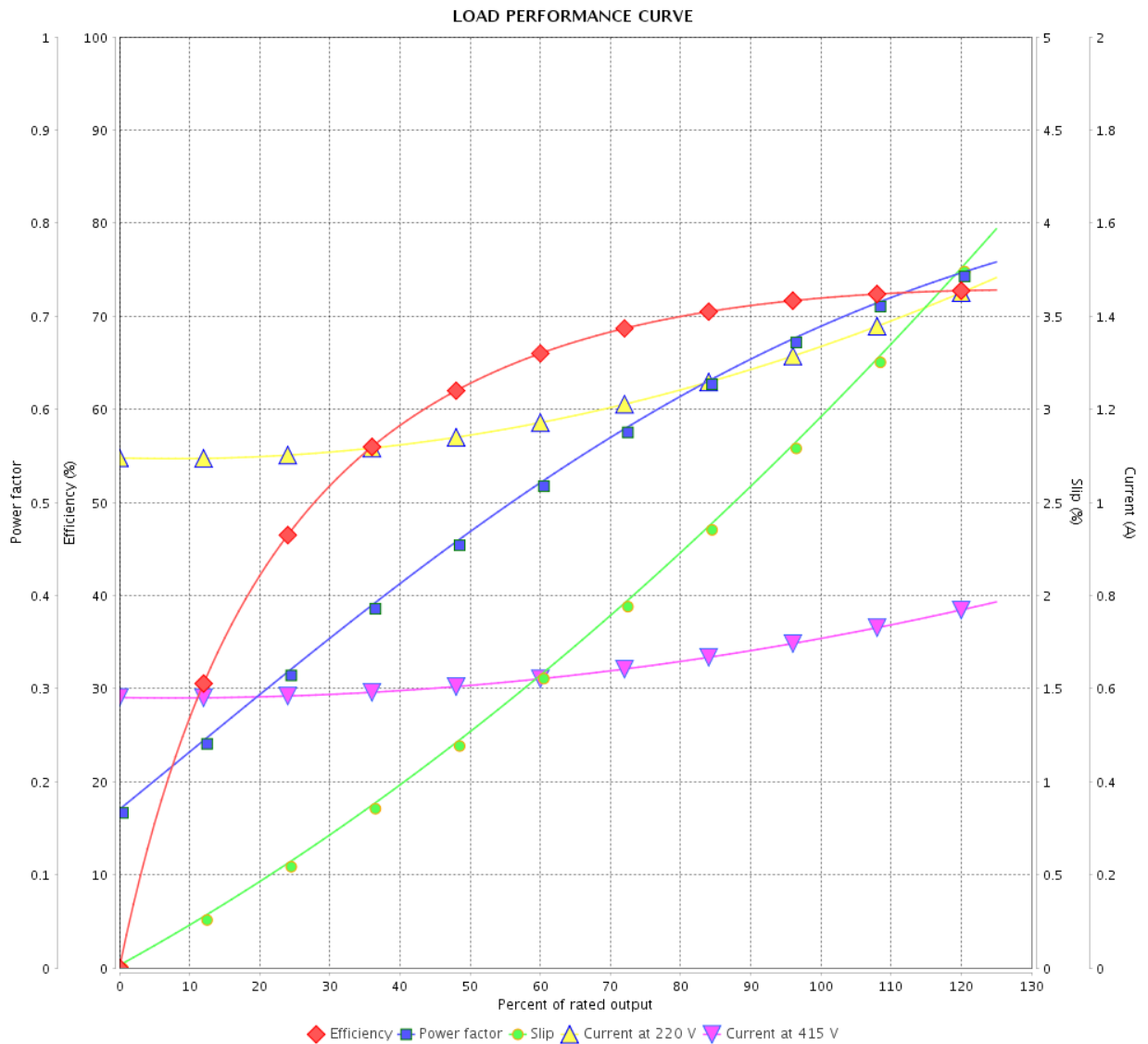


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THERMAL LIMIT CURVE



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Locked rotor torque : 229 %	Service factor :
Breakdown torque : 330 %	Temperature rise : 80 K
Rated speed : 1765 rpm	

Heating constant

Cooling constant

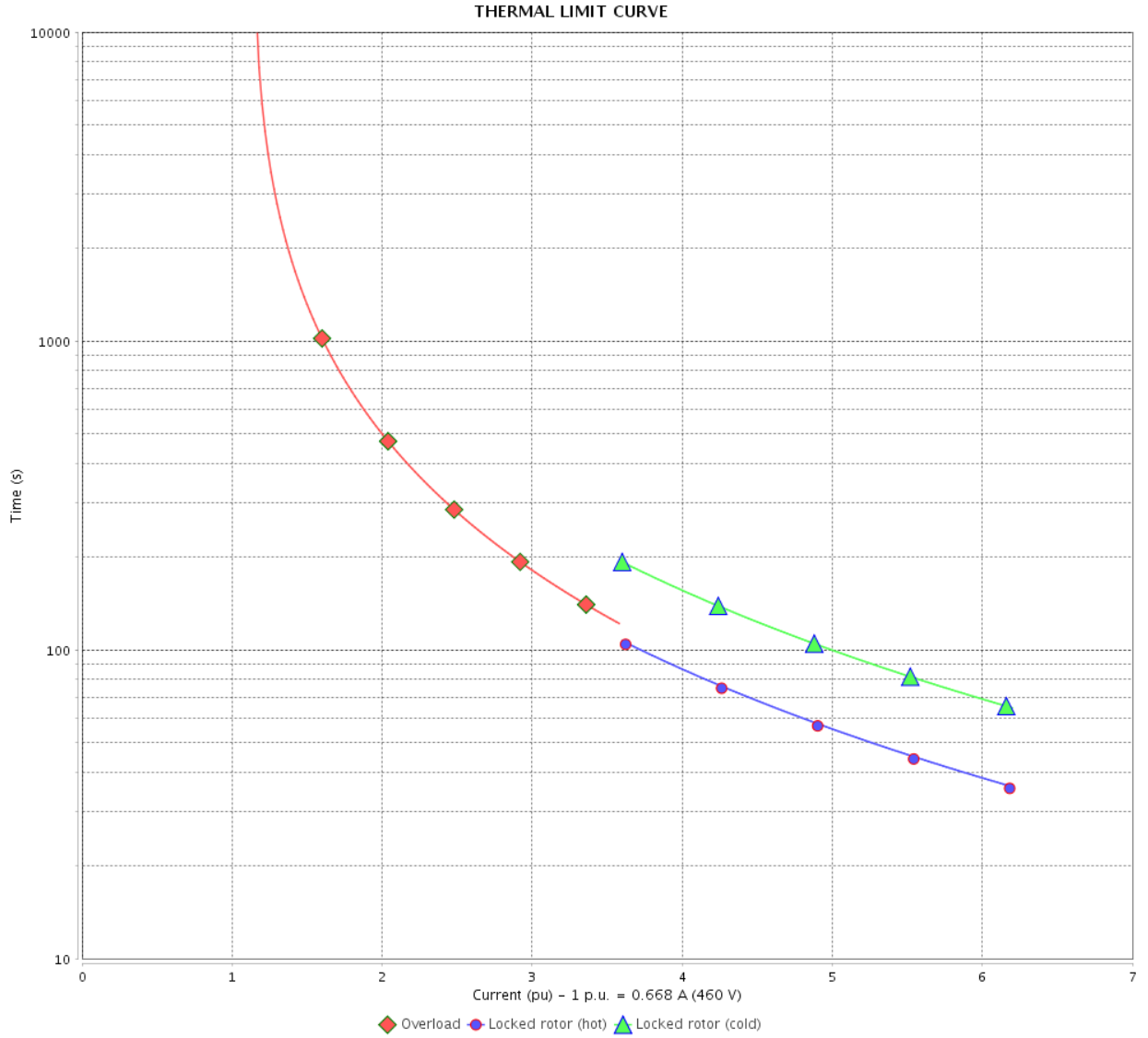
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LRC : 5.1	Duty cycle : Cont.(S1)
Rated torque : 1.20 ft.lb	Insulation class : F
Locked rotor torque : 160 %	Service factor : 1.35
Breakdown torque : 250 %	Temperature rise : 80 K
Rated speed : 1450 rpm	

Heating constant

Cooling constant

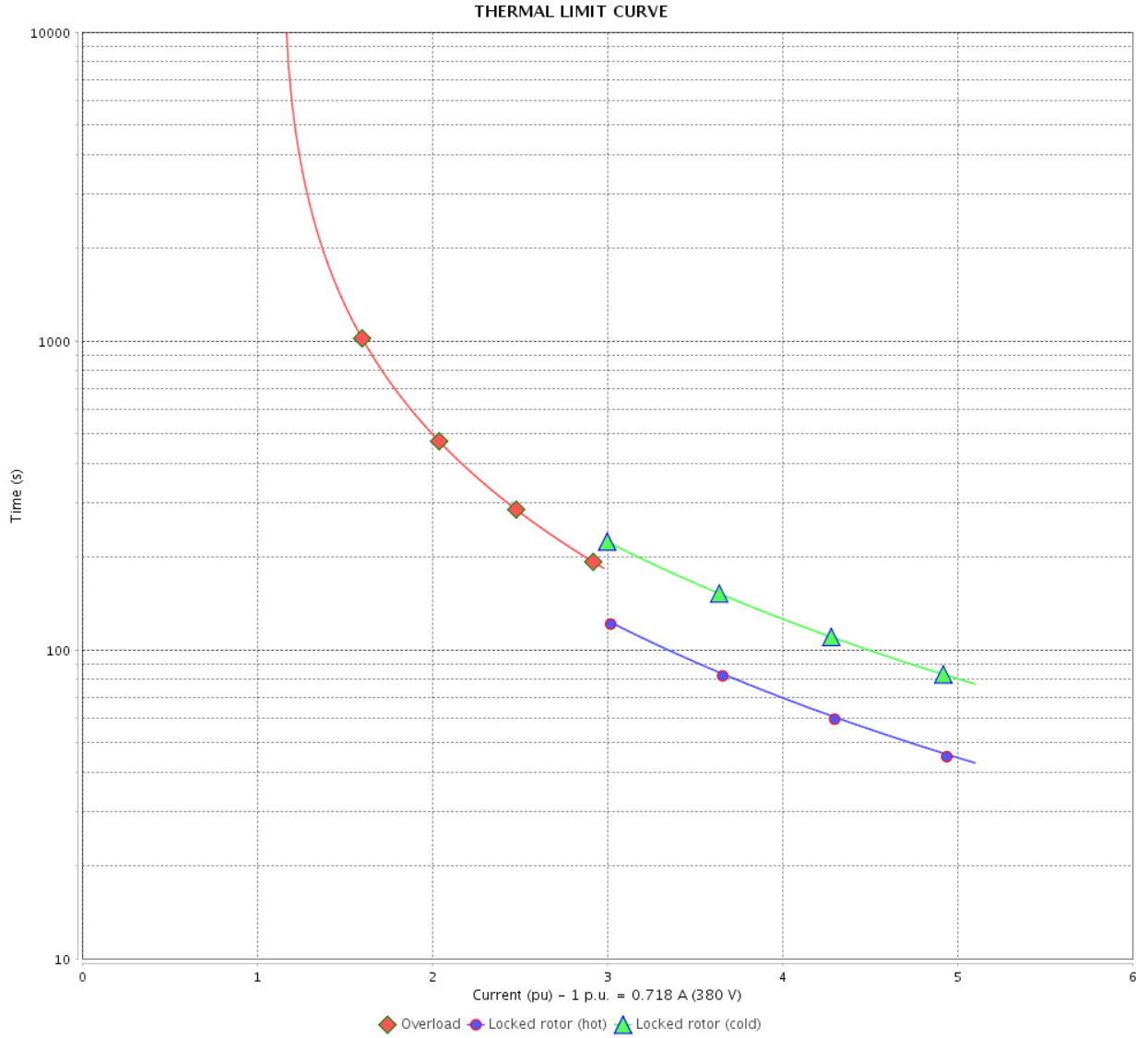
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Breakdown torque : 280 %	Temperature rise : 80 K
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Cooling constant

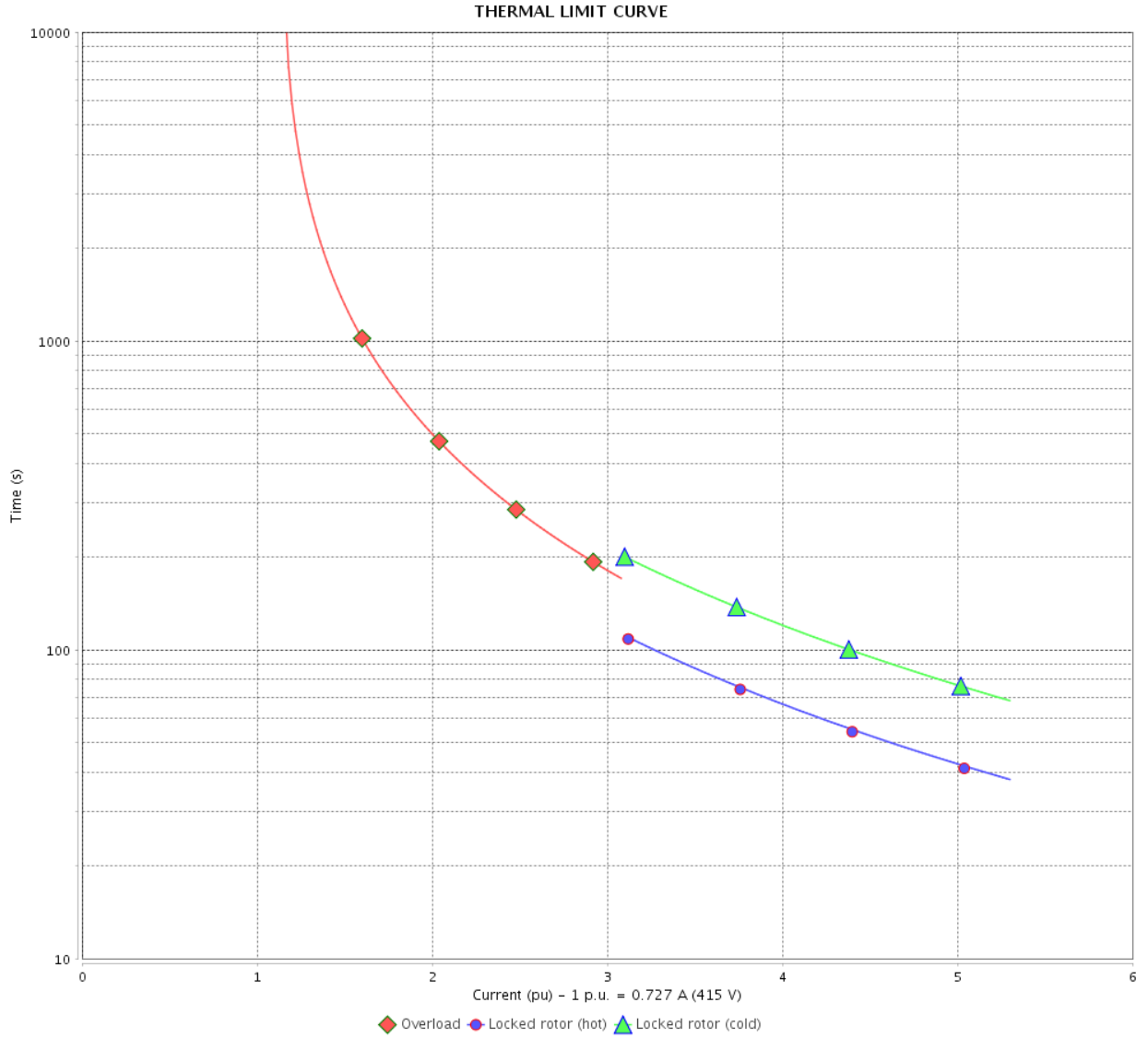
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



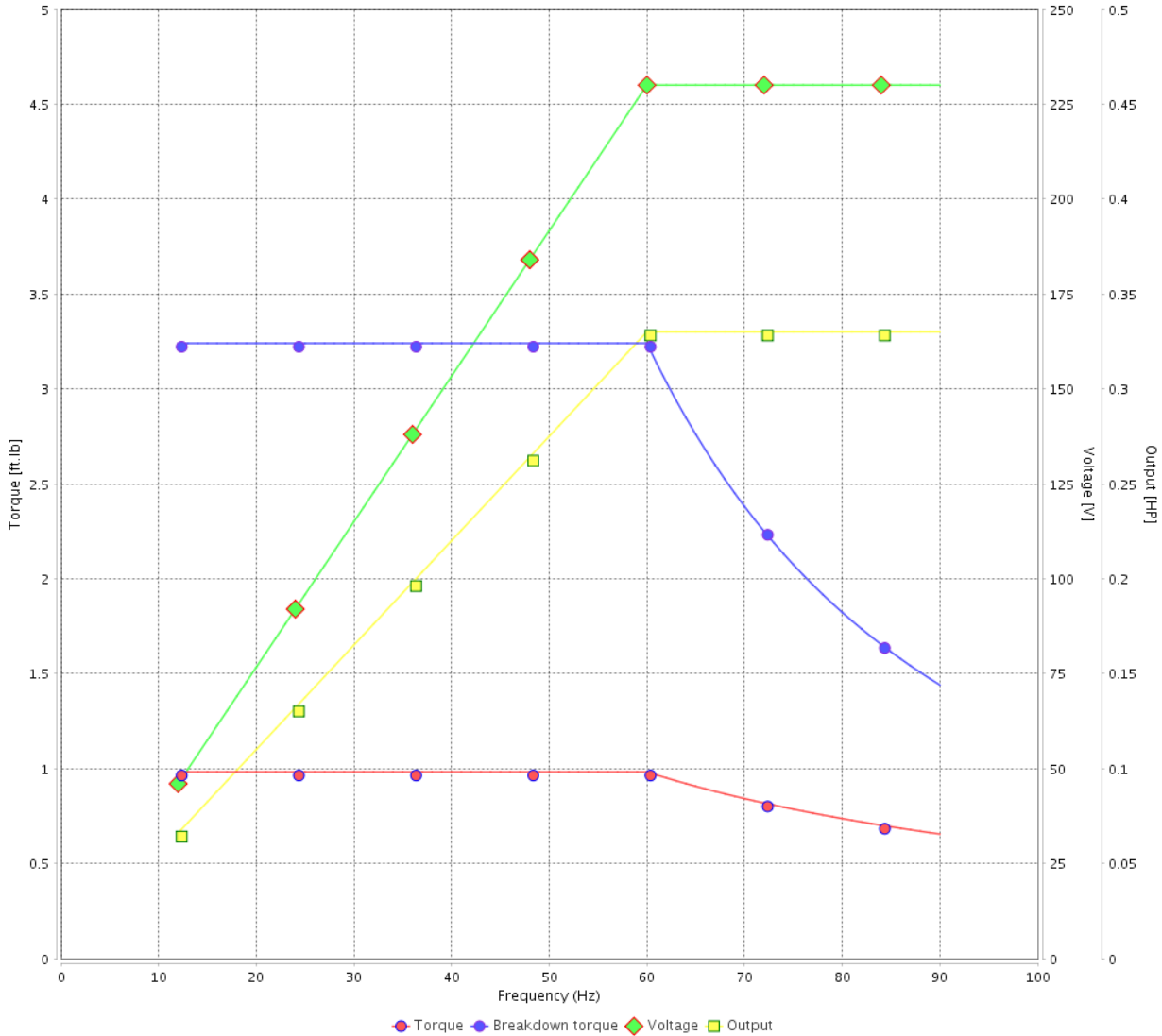
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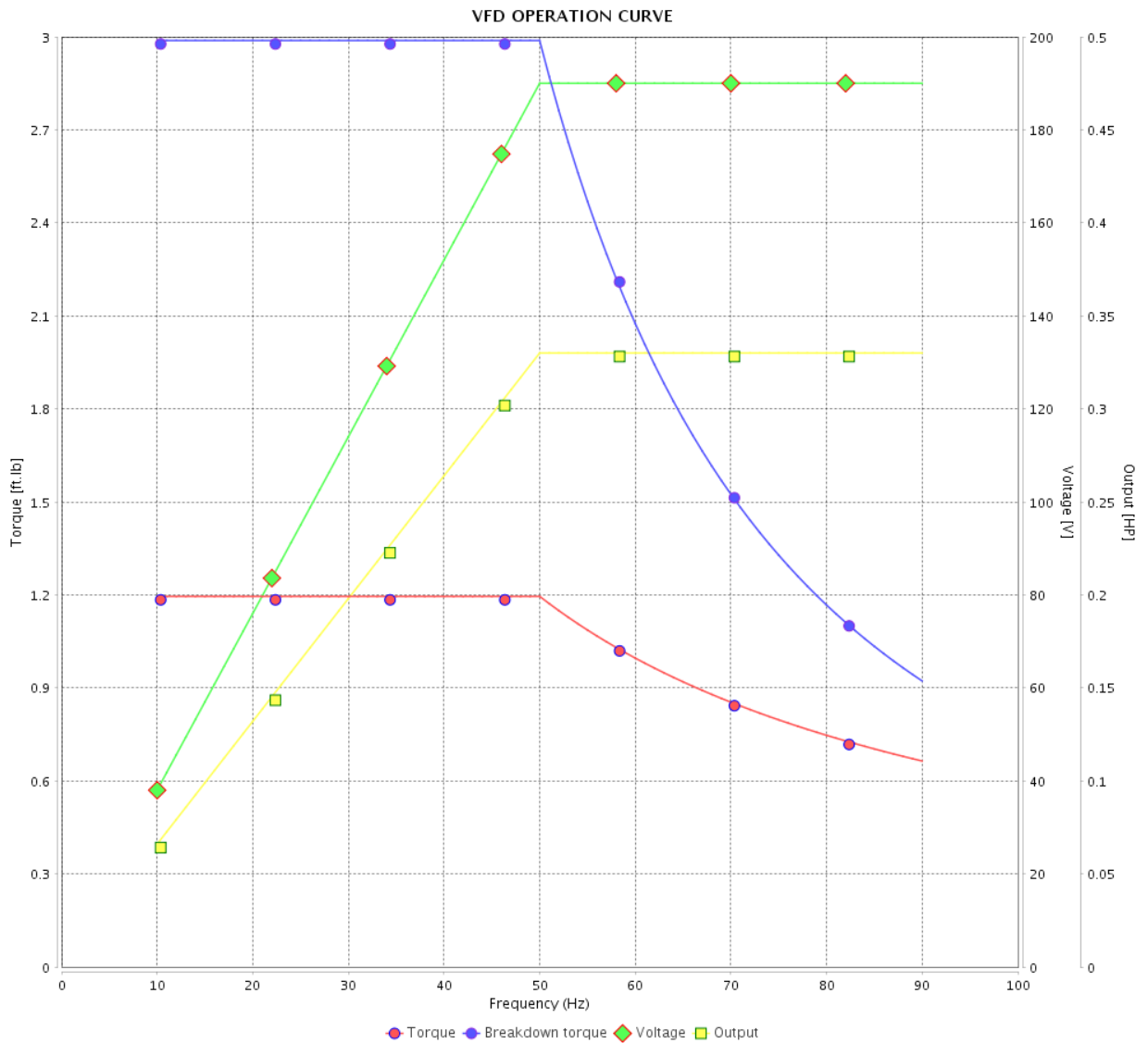


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VFD OPERATION CURVE

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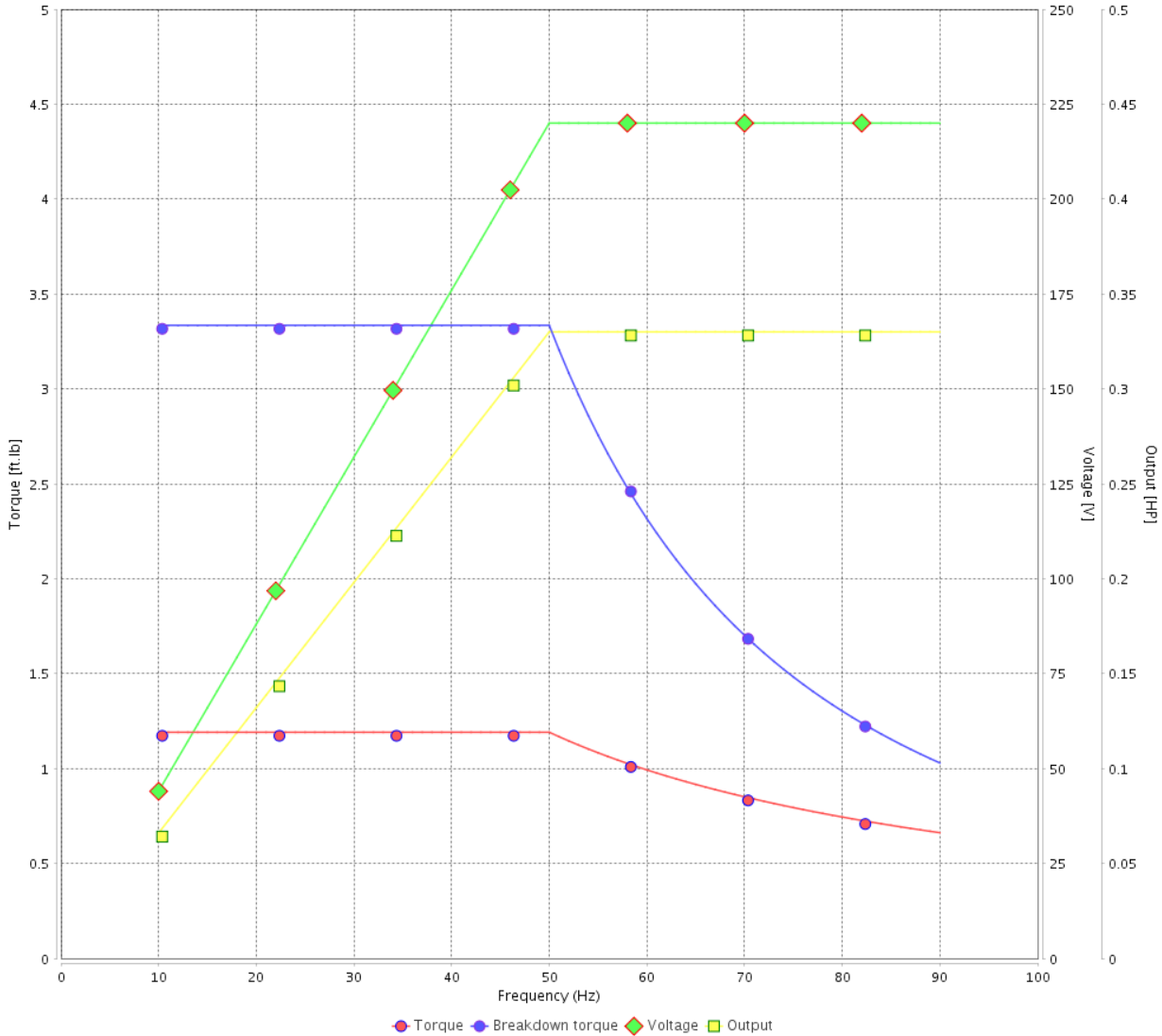
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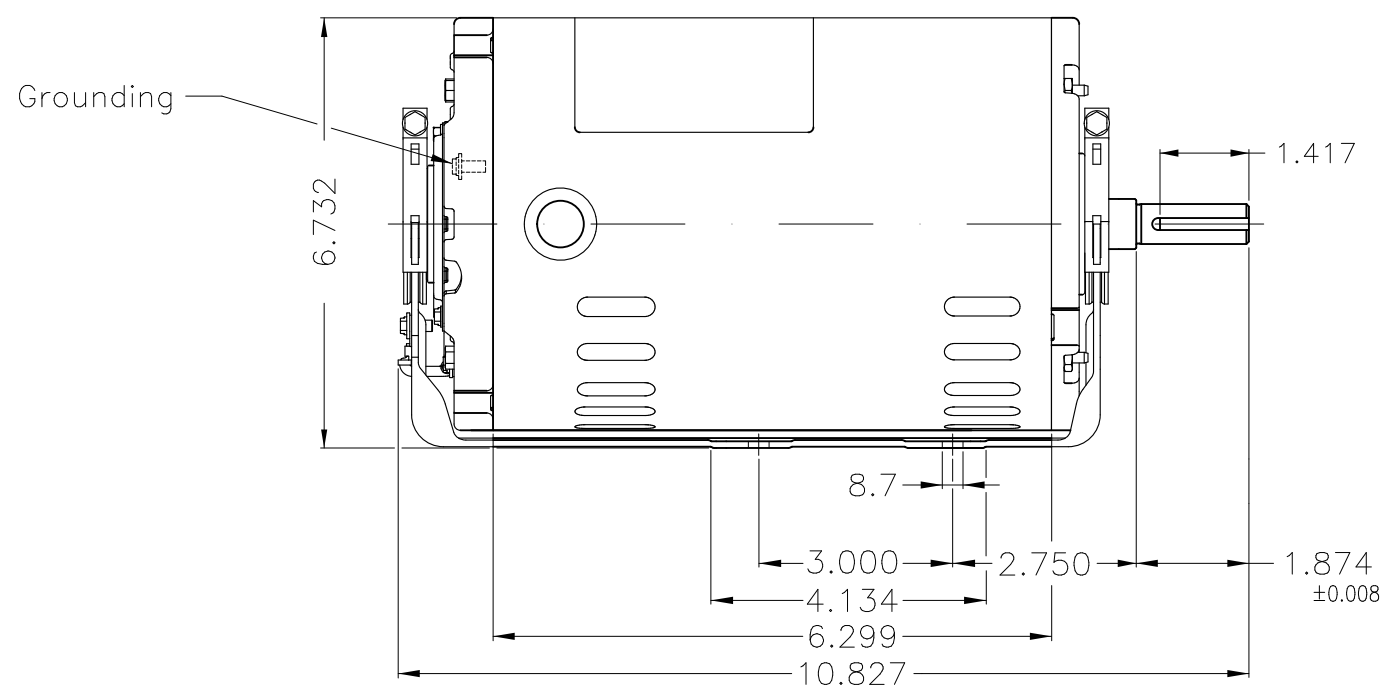
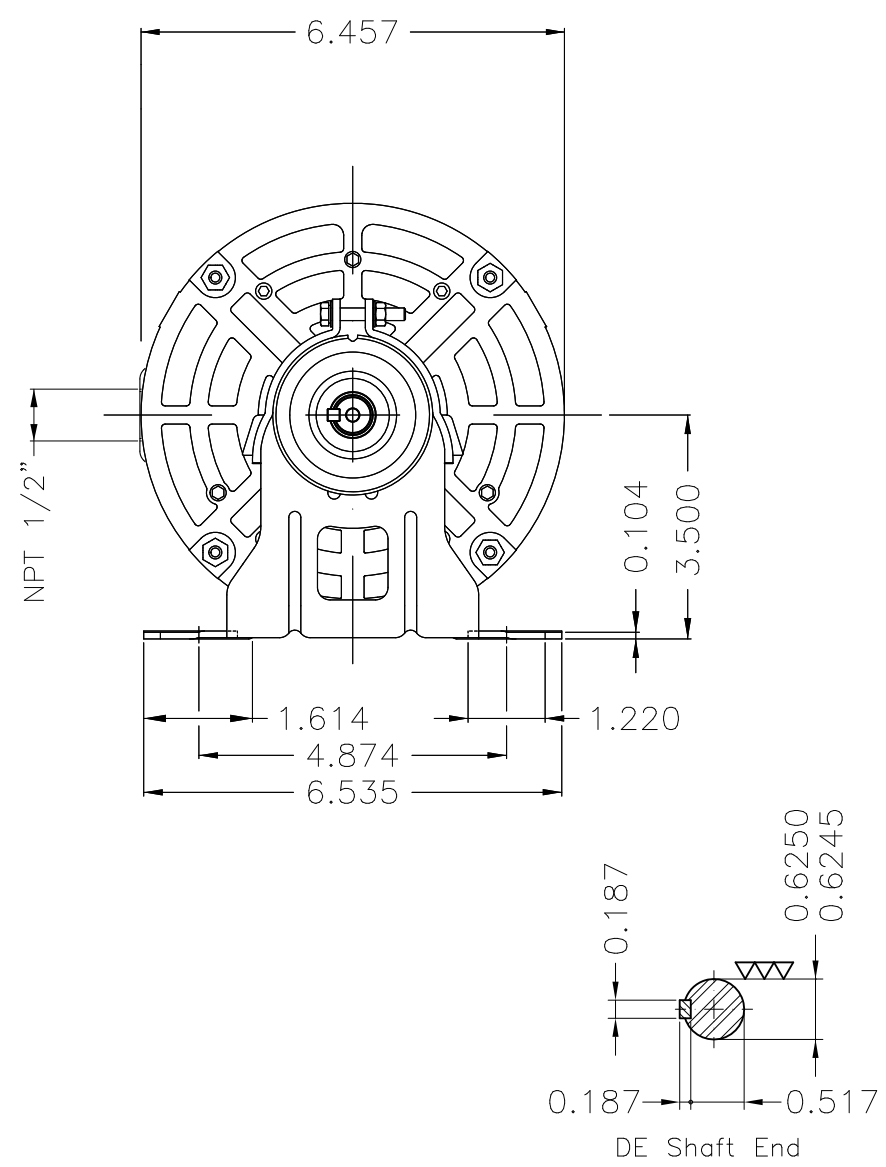
A

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 FAN AND EXHAUST PREM. STP								
CHECKED		FRAME 56 IP21 ODP								
RELEASED										
REL DT.		WMO	Jaragua do Sul	Product Engineering						

0.33 HP 04 Poles 60 Hz

A

PREVIEW
WDD



WEG
NEMA
Premium3PT9
C US LISTED

MADE IN MEXICO

MAT: 14590188

W01.T00IC0X0X

MODEL .3318OT3ERB56-S

24MAR2020



PH 3	FR	56	HP(KW)	0.33(0.25)	Hz	60
V	230/460		RPM	1765		
A	1.34/0.668		DUTY CONT.			
SFA	1.81/0.902		CODE M	DES	-	
SF	1.35	INS CL F	ΔT	80K	AMB	40°C
PF	0.64		AVG. F.L. EFF.	73.4%		
ALT	1000	m.a.s.l.	USABLE @	208V	1.48A	SF1.00
ALTERNATE RATING:	0.33HP	50Hz	190-220/380-415V	SF1.35		
1.44-1.40/0.718-0.740A	1450RPM	EFF 71.2%	(IE2)	IEC 60034-1		
LOW VOLTAGE		HIGH VOLTAGE				
T4	T5	T6	T4	T5	T6	T1-BLU T2-WHT
T7	T8	T9	T7	T8	T9	T3-ORG T4-YEL
T1	T2	T3	T1	T2	T3	T5-BLK T6-GRY
Y Y	L1	L2	L3	Y L1	L2 L3	T7-PNK T8-RED
						T9-RED BRK

INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

Inverter duty motor For 60Hz use on VPWM 1000:1 VT, 5:1 CT

DE: 6203-ZZ ODE: 6202-ZZ MOBIL POLYREX EM

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.

