

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: Rolled Steel NEMA Premium Efficiency Three-Phase		Product code : 12677332	
			Catalog # :	00318ET3ER182TC-S	
Frame	:	182/4TC	Cooling method	: IC411 - TEFC	
Insulation class	:	F	Mounting	: W-6	
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	: 86.3 lb	
Protection degree	:	IP55	Moment of inertia (J)	: 0.4017 sq.ft.lb	
Design	:	B			
Output [HP]		3	3	3	
Poles		4	4	4	
Frequency [Hz]		60	50	50	
Rated voltage [V]		230/460	190-220/380	415	
Rated current [A]		7.62/3.81	9.08-7.84/4.54	4.32	
L. R. Amperes [A]		67.1/33.5	60.8-52.5/30.4	34.6	
LRC [A]		8.8x(Code K)	6.7x(Code H)	8.0x(Code K)	
No load current [A]		4.00/2.00	3.95-3.41/1.97	2.23	
Rated speed [RPM]		1765	1455	1465	
Slip [%]		1.94	3.00	2.33	
Rated torque [ft.lb]		8.93	10.8	10.8	
Locked rotor torque [%]		220	170	220	
Breakdown torque [%]		300	260	320	
Service factor		1.15	1.15	1.15	
Temperature rise		80 K	80 K	80 K	
Locked rotor time		32s (cold) 18s (hot)	45s (cold) 25s (hot)	37s (cold) 21s (hot)	
Noise level ²		56.0 dB(A)	53.0 dB(A)	53.0 dB(A)	
Efficiency (%)	25%	86.4	88.2	87.2	
	50%	87.5	87.5	86.9	
	75%	88.5	87.7	88.0	
	100%	89.5	86.7	87.4	
Power Factor	25%	0.36	0.42	0.36	
	50%	0.61	0.68	0.62	
	75%	0.74	0.79	0.74	
	100%	0.81	0.85	0.81	
Bearing type	:	<u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6205 ZZ	Foundation loads		
Sealing	:	V'Ring Without Bearing Seal	Max. traction	: 177 lb	
			Max. compression	: 263 lb	
Lubrication interval	:	-			
Lubricant amount	:	-			
Lubricant type	:	Mobil Polyrex EM			
Notes USABLE @208V 8.43A SF 1.00 SFA 8.43A					
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



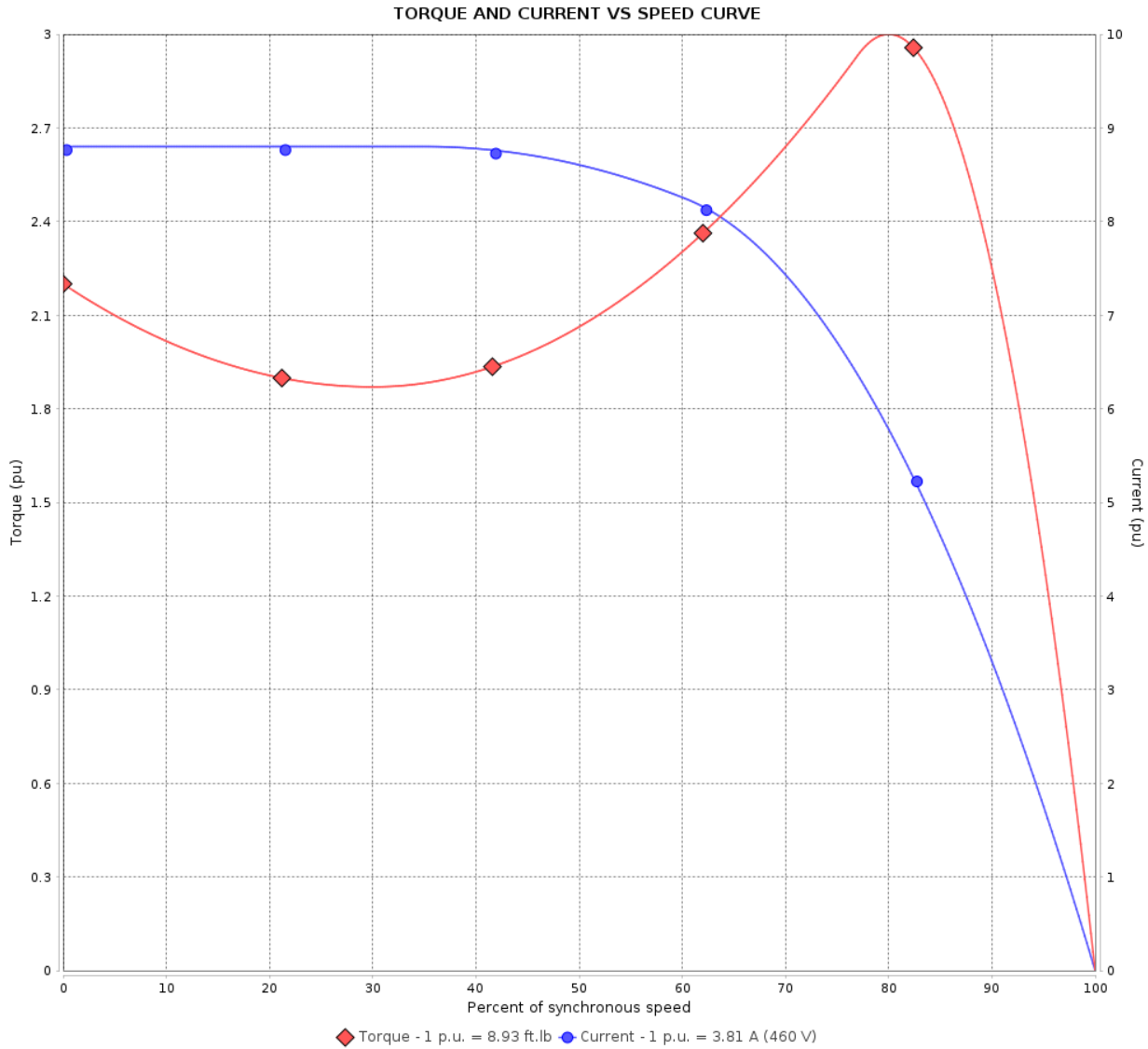
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : Rolled Steel NEMA Premium Efficiency
Three-Phase

Product code : 12677332

Catalog # : 00318ET3ER182TC-S



Performance : 230/460 V 60 Hz 4P

Rated current	: 7.62/3.81 A	Moment of inertia (J)	: 0.4017 sq.ft.lb
LRC	: 8.8	Duty cycle	: Cont.(S1)
Rated torque	: 8.93 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE



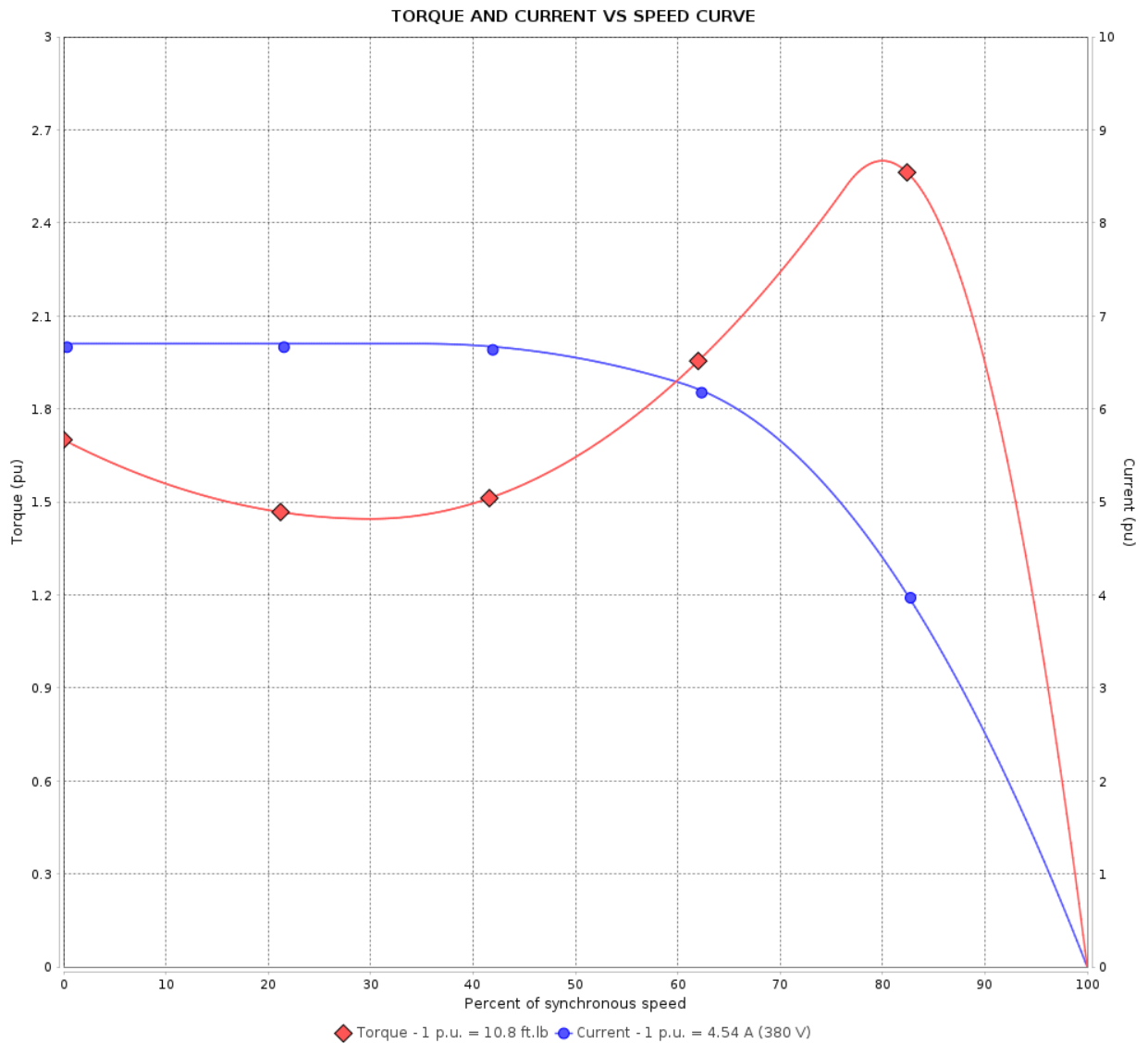
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : Rolled Steel NEMA Premium Efficiency
Three-Phase

Product code : 12677332

Catalog # : 00318ET3ER182TC-S



Performance : 190-220/380 V 50 Hz 4P

Rated current	: 9.08-7.84/4.54 A	Moment of inertia (J)	: 0.4017 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 10.8 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

Locked rotor time : 45s (cold) 25s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



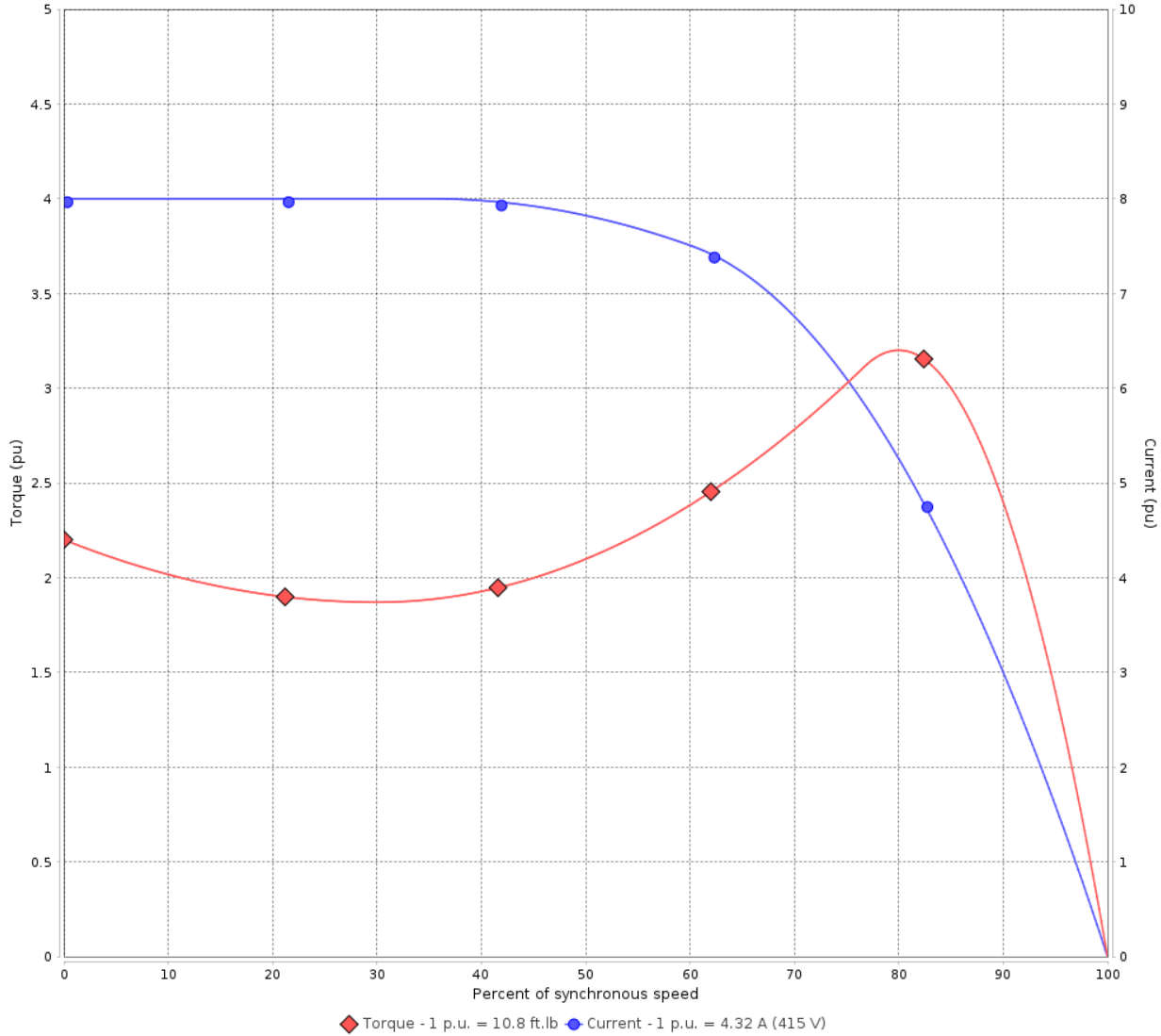
Customer :

Product line : Rolled Steel NEMA Premium Efficiency
Three-Phase

Product code : 12677332

Catalog # : 00318ET3ER182TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 4P

Rated current	: 4.32 A	Moment of inertia (J)	: 0.4017 sq.ft.lb
LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 10.8 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1465 rpm	Design	: B

Locked rotor time : 37s (cold) 21s (hot)

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LOAD PERFORMANCE CURVE

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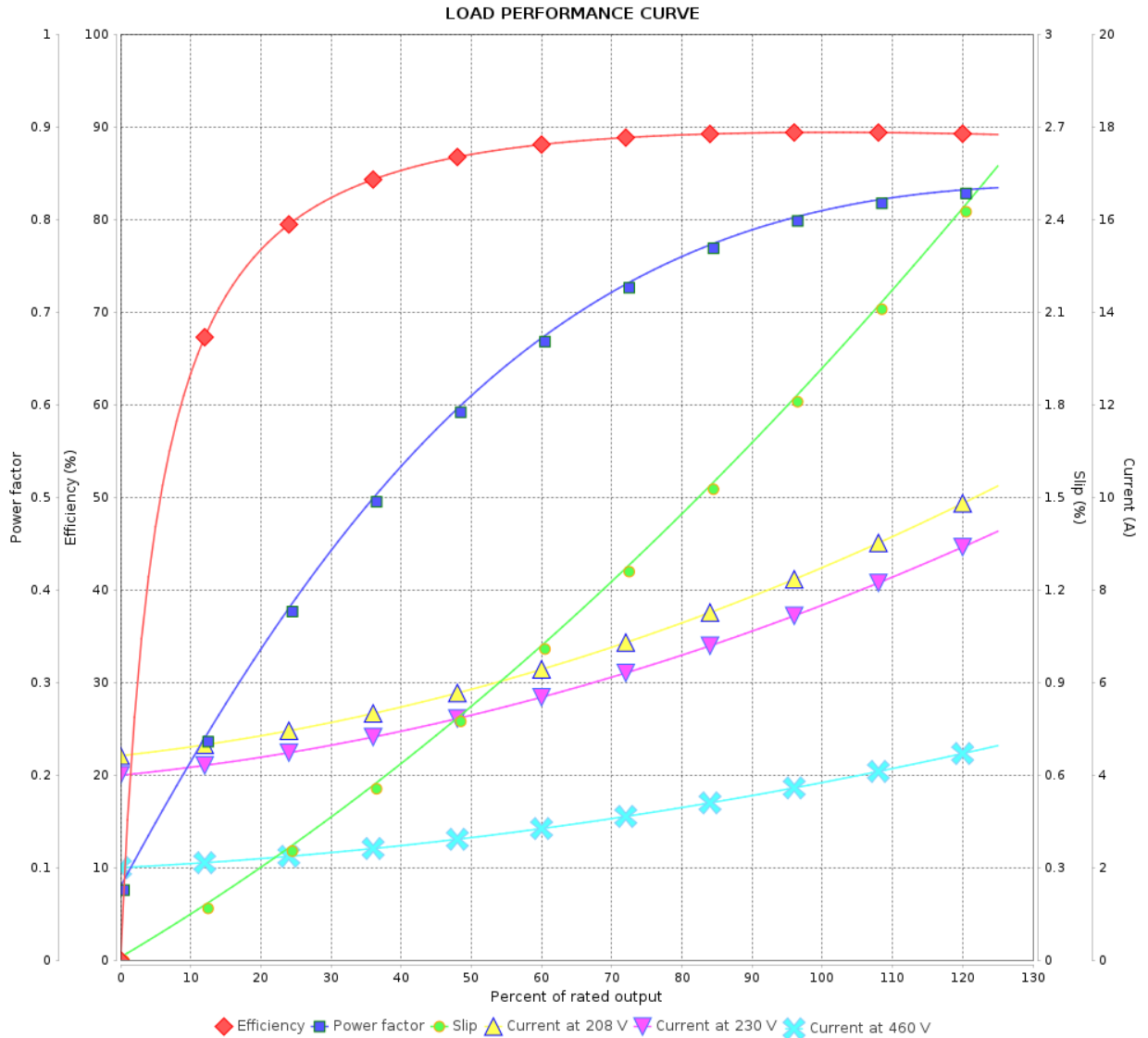


Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase

Product code : 12677332

Catalog # : 00318ET3ER182TC-S



Performance : 230/460 V 60 Hz 4P

Rated current : 7.62/3.81 A
 LRC : 8.8
 Rated torque : 8.93 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 300 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.4017 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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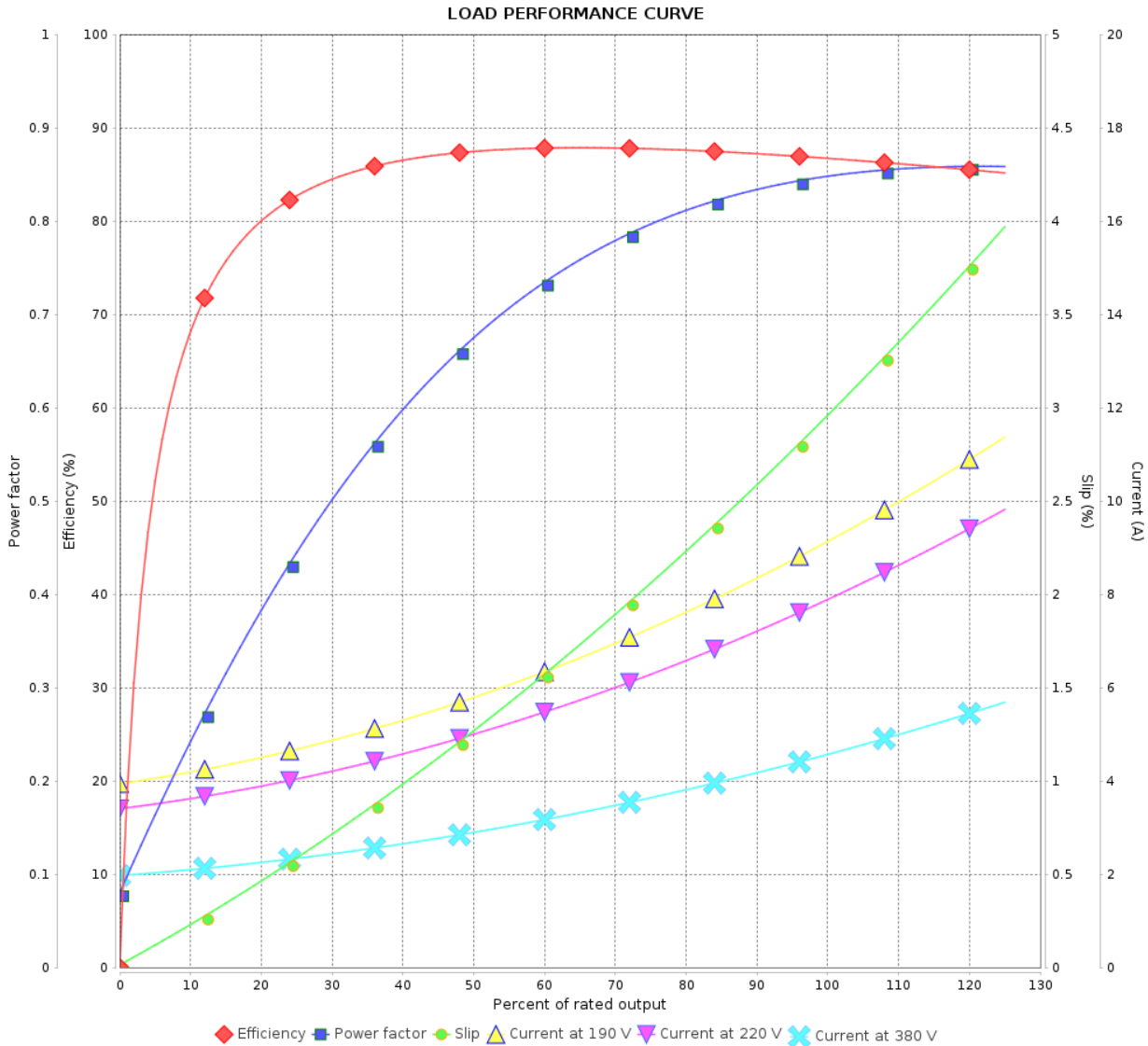


Customer :

Product line : Rolled Steel NEMA Premium Efficiency
Three-Phase

Product code : 12677332

Catalog # : 00318ET3ER182TC-S



Performance : 190-220/380 V 50 Hz 4P

Rated current : 9.08-7.84/4.54 A
LRC : 6.7
Rated torque : 10.8 ft.lb
Locked rotor torque : 170 %
Breakdown torque : 260 %
Rated speed : 1455 rpm

Moment of inertia (J) : 0.4017 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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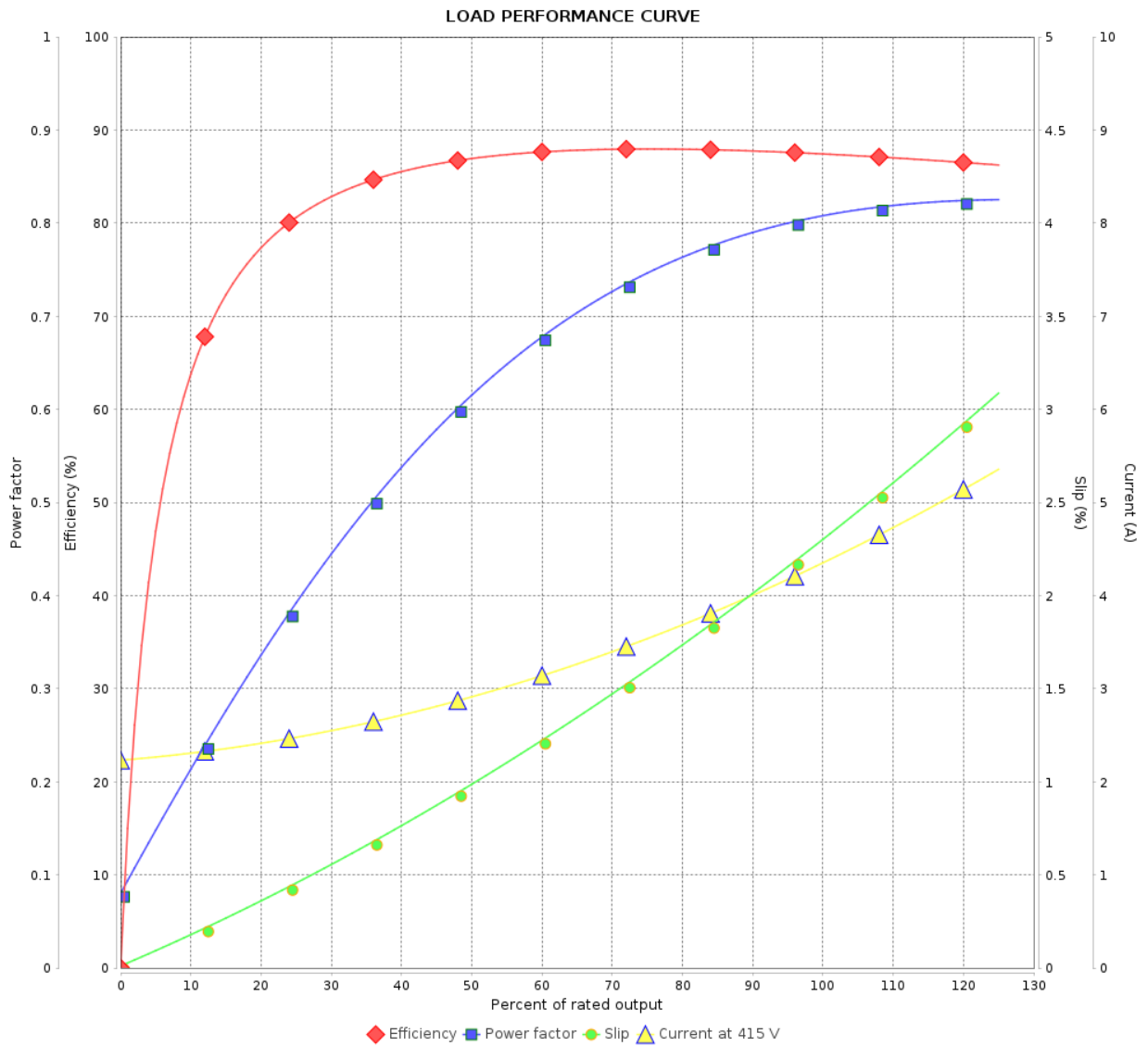


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Performance : 415 V 50 Hz 4P

Rated current : 4.32 A
 LRC : 8.0
 Rated torque : 10.8 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 320 %
 Rated speed : 1465 rpm

Moment of inertia (J) : 0.4017 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



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LRC : 8.8
Rated torque : 8.93 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 300 %
Rated speed : 1765 rpm

Moment of inertia (J) : 0.4017 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

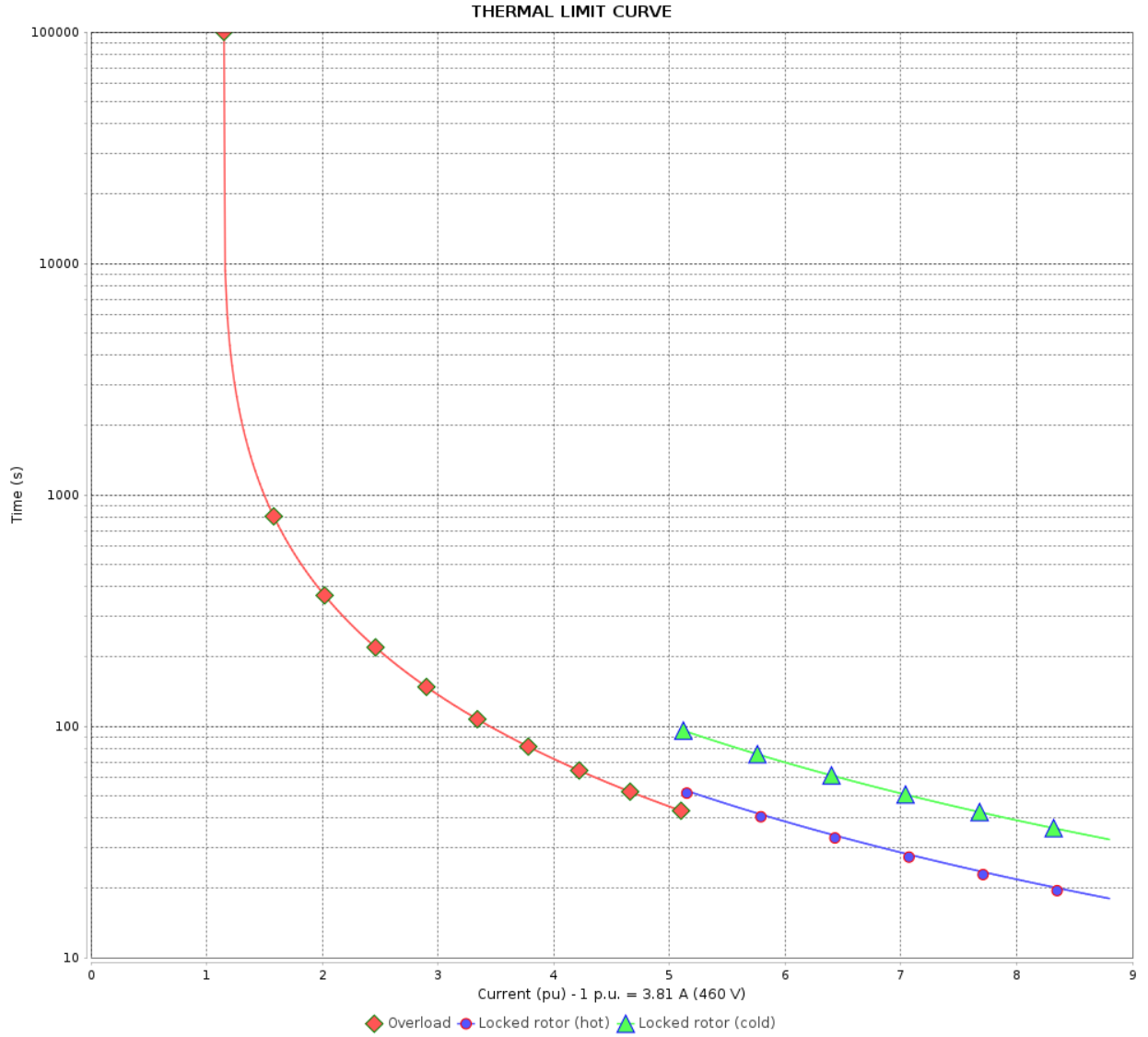
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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THERMAL LIMIT CURVE



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Three-Phase

Product code : 12677332

Catalog # : 00318ET3ER182TC-S

Performance : 190-220/380 V 50 Hz 4P

Rated current : 9.08-7.84/4.54 A

LRC : 6.7

Rated torque : 10.8 ft.lb

Locked rotor torque : 170 %

Breakdown torque : 260 %

Rated speed : 1455 rpm

Moment of inertia (J) : 0.4017 sq.ft.lb

Duty cycle : Cont.(S1)

Insulation class : F

Service factor : 1.15

Temperature rise : 80 K

Design : B

Heating constant

Cooling constant

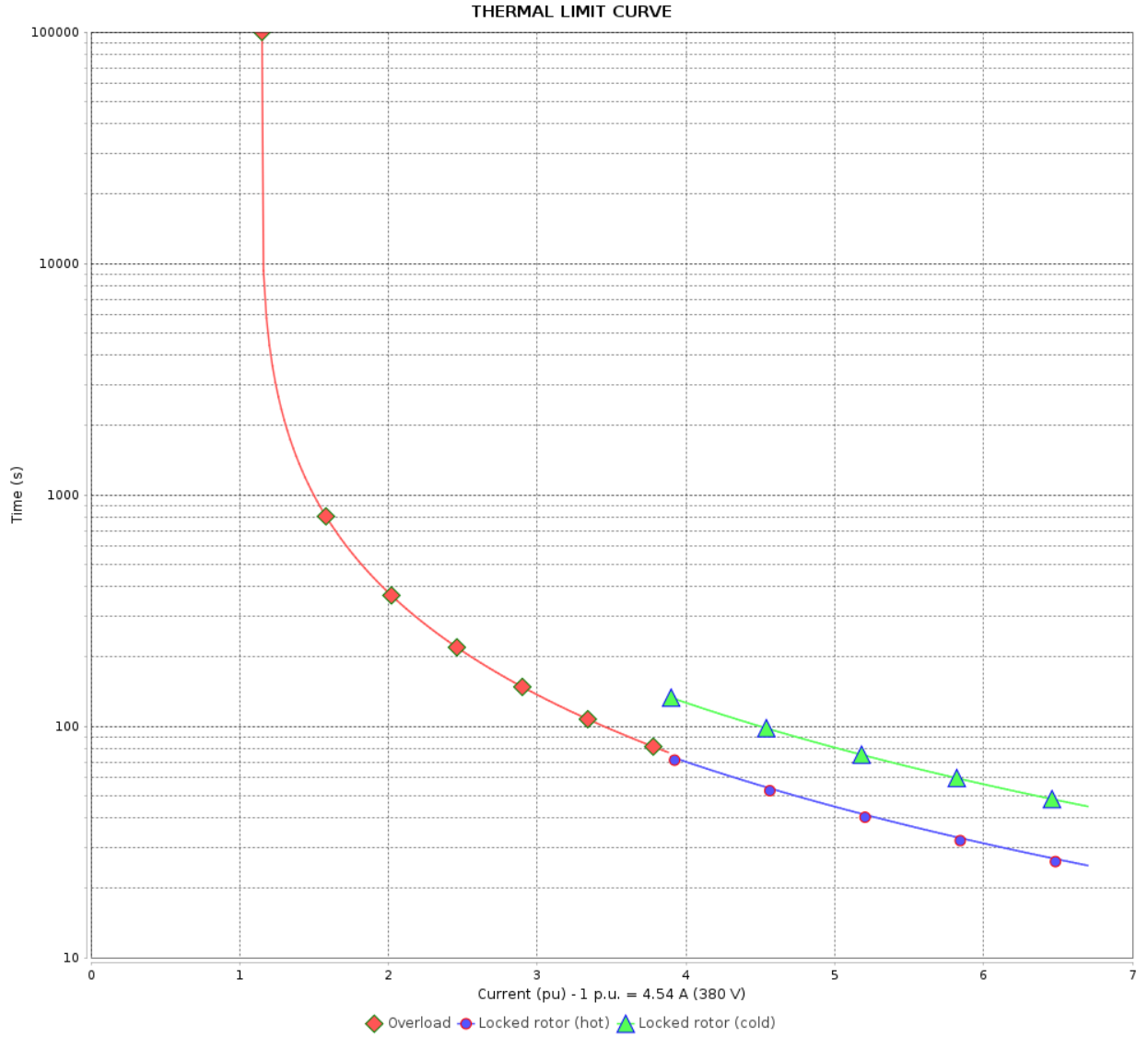
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THERMAL LIMIT CURVE



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Performance : 415 V 50 Hz 4P

Rated current : 4.32 A	Moment of inertia (J) : 0.4017 sq.ft.lb
LRC : 8.0	Duty cycle : Cont.(S1)
Rated torque : 10.8 ft.lb	Insulation class : F
Locked rotor torque : 220 %	Service factor : 1.15
Breakdown torque : 320 %	Temperature rise : 80 K
Rated speed : 1465 rpm	Design : B

Heating constant

Cooling constant

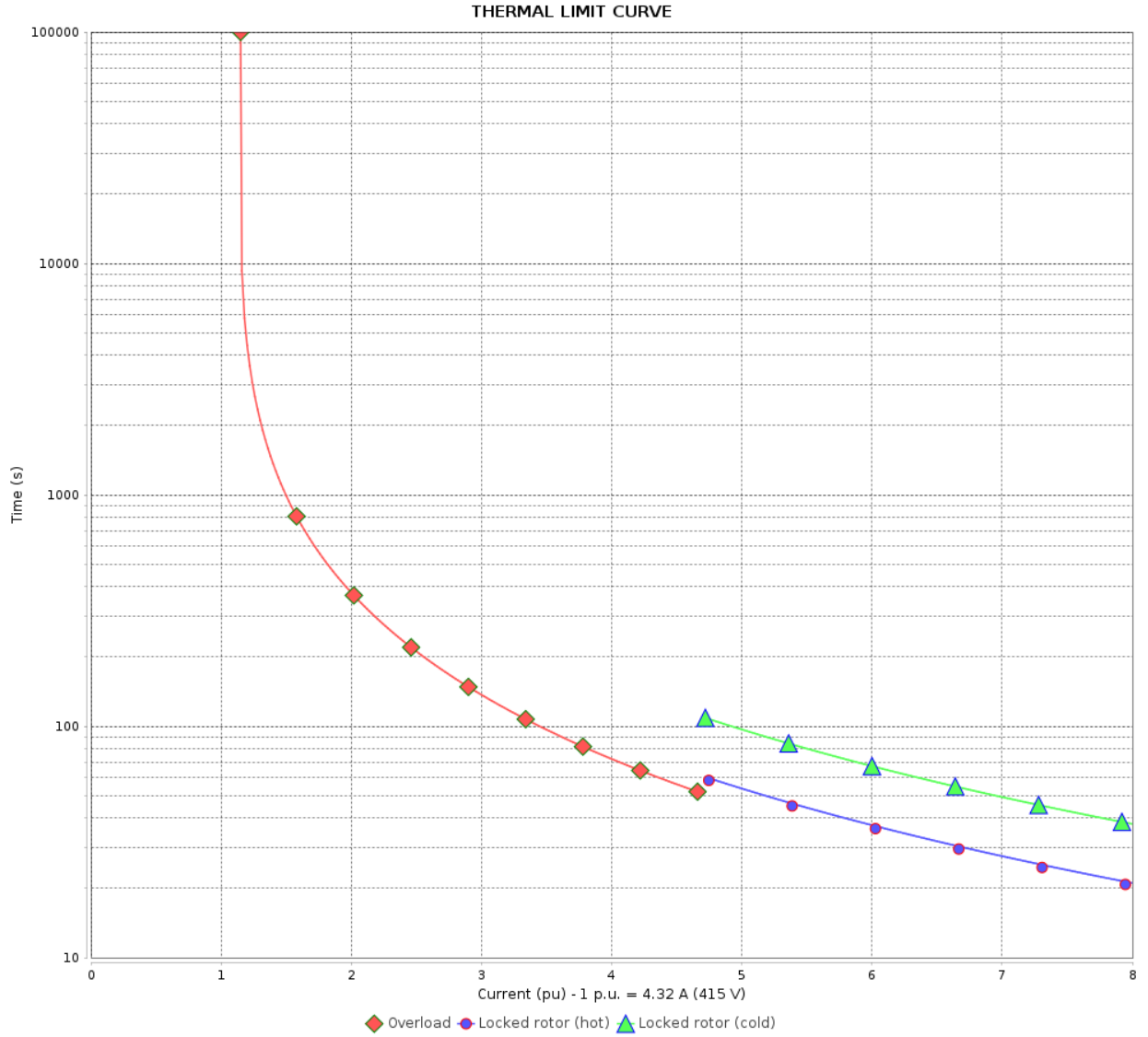
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

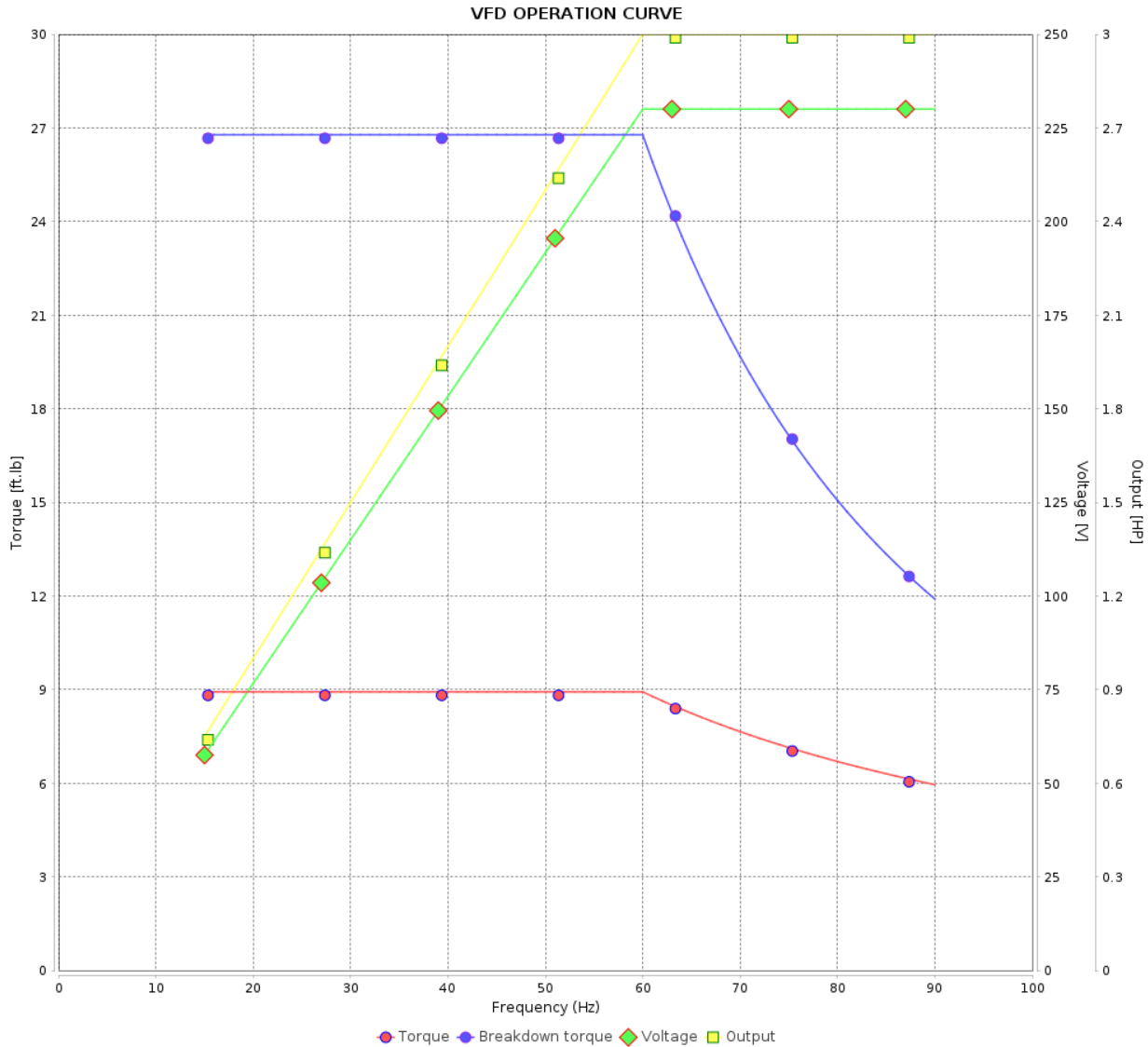


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Performance : 230/460 V 60 Hz 4P

Rated current : 7.62/3.81 A
 LRC : 8.8
 Rated torque : 8.93 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 300 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.4017 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

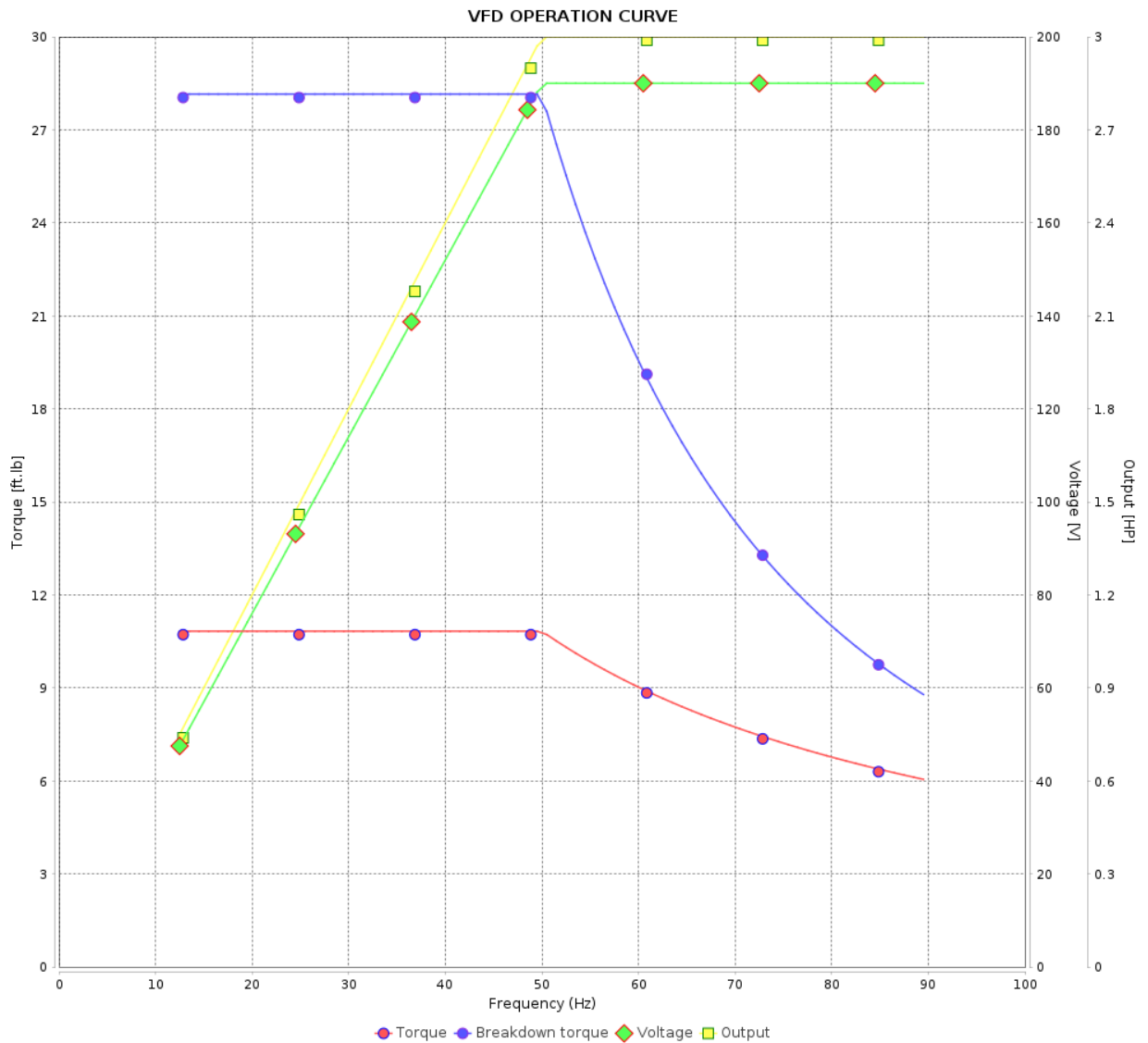


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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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VFD OPERATION CURVE

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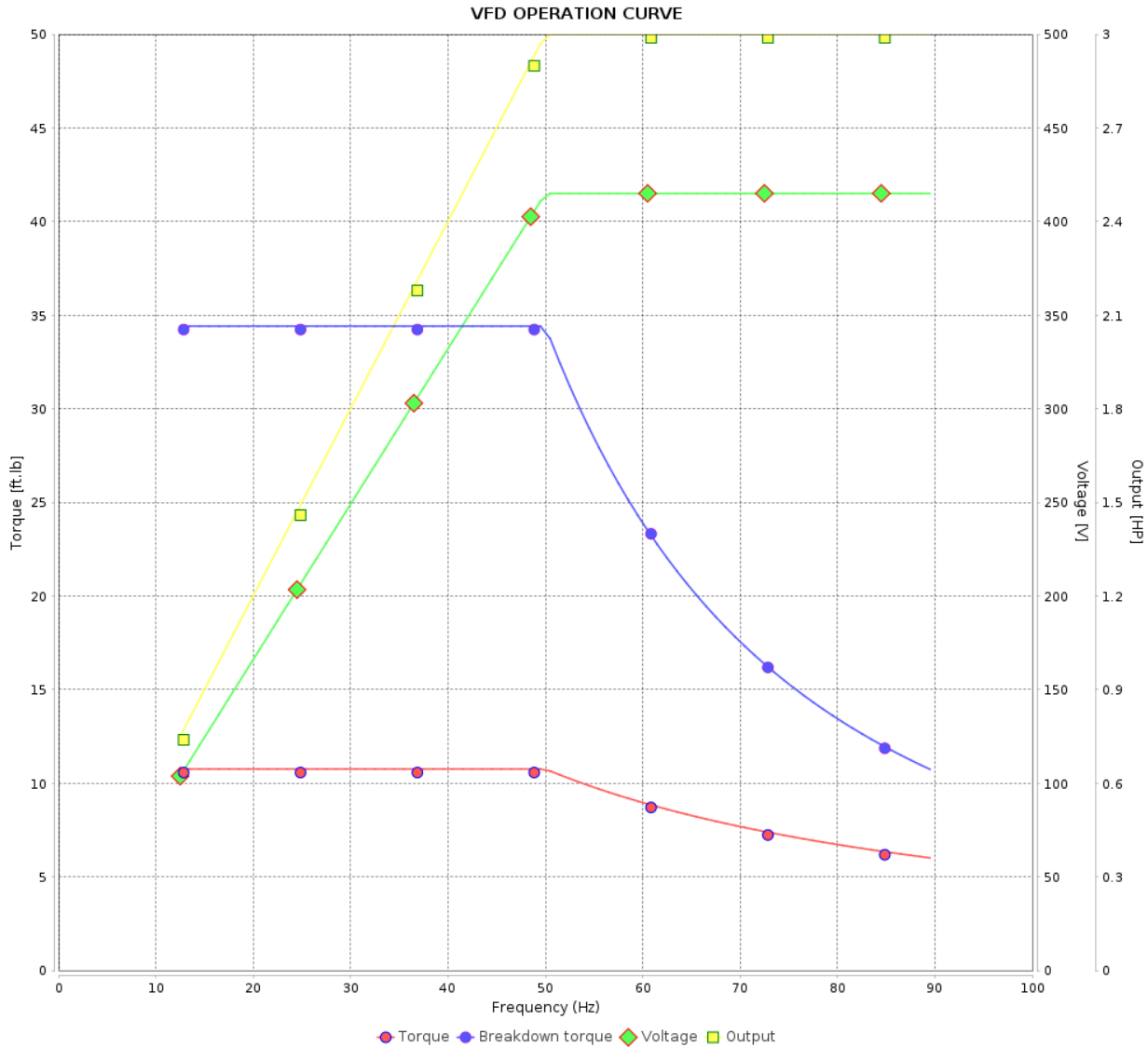


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NEMA
Premium



3PT9



Energy Verified

MADE IN MEXICO

MAT: 12677332 CC029A

W01.TE0IC0X0N

MODEL 00318ET3ER182TC-S

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 3.0
FR 182/4TC		KW 2.2
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 7.62/3.81
INS CL F AT 80K	IP55	SFA 8.76/4.38
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE K	PF 0.81
		RPM 1765
		NEMA NOM. EFF 89.5%

ALTERNATE RATING: 3.0HP	50Hz	190-220/380-415V	SF1.15
9.08-8.15/4.54-4.32A	1455RPM	EFF 88.7%	(IE3) IEC 60034-1

For safe area-inverter duty motor For 60Hz use on VPWM 1000:1 VT, 4:1 CT

DE 6206-ZZ ODE 6205-ZZ MOBIL POLYREX EM



T1-BLU T2-WHT
 T3-ORG T4-YEL
 T5-BLK T6-GRY
 T7-PNK T8-RED
 T9-RED BRK

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.

