

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: Rolled Steel NEMA Premium Efficiency Three-Phase	Product code :	13187814	
		Catalog # :	00152ET3E182TC-S	
Frame	: 182/4TC	Cooling method	: IC411 - TEFC	
Insulation class	: F	Mounting	: F-1	
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)	
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line	
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>2</sup>	: 78.0 lb	
Protection degree	: IP55	Moment of inertia (J)	: 0.2800 sq.ft.lb	
Design	: B			
Output [HP]	1.5	1.5	1.5	
Poles	6	6	6	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190-220/380	415	
Rated current [A]	4.44/2.22	5.18-4.47/2.59	2.49	
L. R. Amperes [A]	30.6/15.3	29.5-25.5/14.8	16.4	
LRC [A]	6.9x(Code K)	5.7x(Code H)	6.6x(Code J)	
No load current [A]	2.73/1.36	2.69-2.32/1.34	1.54	
Rated speed [RPM]	1170	955	965	
Slip [%]	2.50	4.50	3.50	
Rated torque [ft.lb]	6.73	8.25	8.16	
Locked rotor torque [%]	240	190	250	
Breakdown torque [%]	340	260	330	
Service factor	1.15	1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	99s (cold) 55s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level <sup>2</sup>	52.0 dB(A)	50.0 dB(A)	50.0 dB(A)	
Efficiency (%)	25%	82.8	84.4	82.3
	50%	84.0	84.2	82.9
	75%	86.5	85.6	85.3
	100%	87.5	84.9	85.5
Power Factor	25%	0.29	0.34	0.29
	50%	0.50	0.58	0.51
	75%	0.63	0.70	0.63
	100%	0.71	0.76	0.72
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	: 133 lb	
		Max. compression	: 211 lb	
Lubrication interval	: -			
Lubricant amount	: -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 4.91A SF 1.00 SFA 4.91A				
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

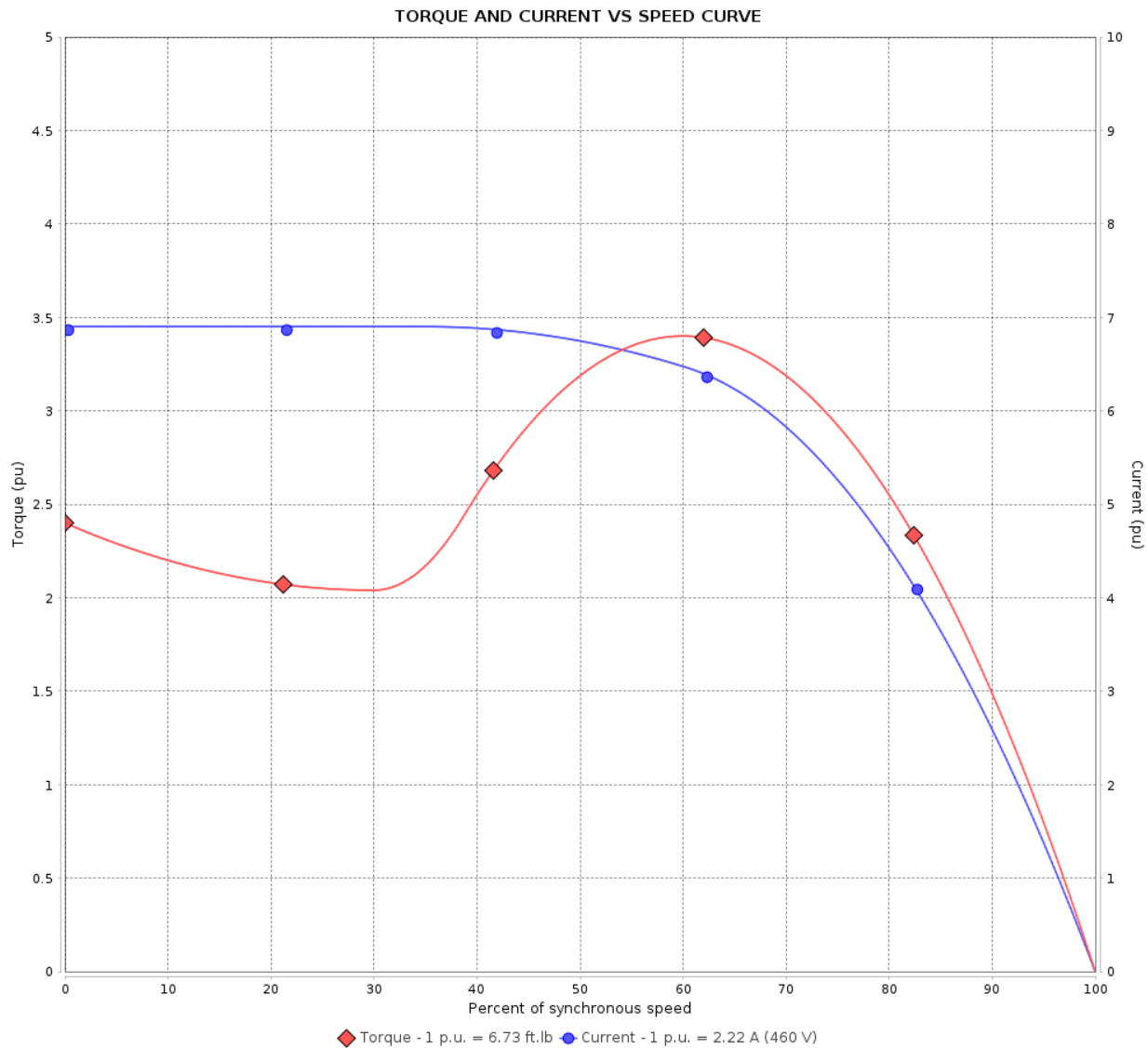


Customer :

Product line : Rolled Steel NEMA Premium Efficiency  
Three-Phase

Product code : 13187814

Catalog # : 00152ET3E182TC-S



Performance : 230/460 V 60 Hz 6P

Rated current	: 4.44/2.22 A	Moment of inertia (J)	: 0.2800 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 6.73 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 1170 rpm	Design	: B

Locked rotor time : 99s (cold) 55s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE



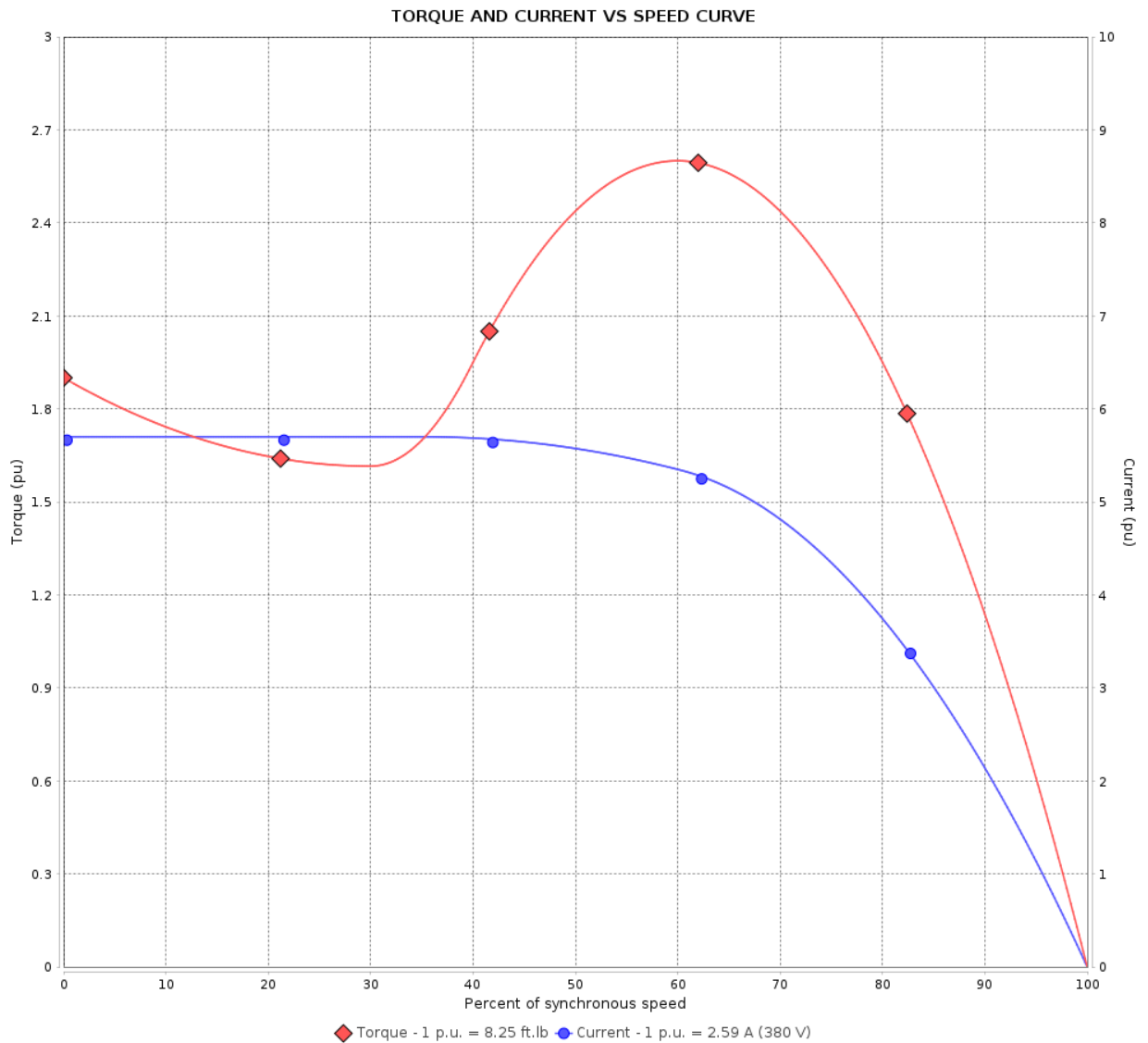
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : Rolled Steel NEMA Premium Efficiency  
Three-Phase

Product code : 13187814

Catalog # : 00152ET3E182TC-S



Performance : 190-220/380 V 50 Hz 6P

Rated current	: 5.18-4.47/2.59 A	Moment of inertia (J)	: 0.2800 sq.ft.lb
LRC	: 5.7	Duty cycle	: Cont.(S1)
Rated torque	: 8.25 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 955 rpm	Design	: B

Locked rotor time : 0s (cold) 0s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE

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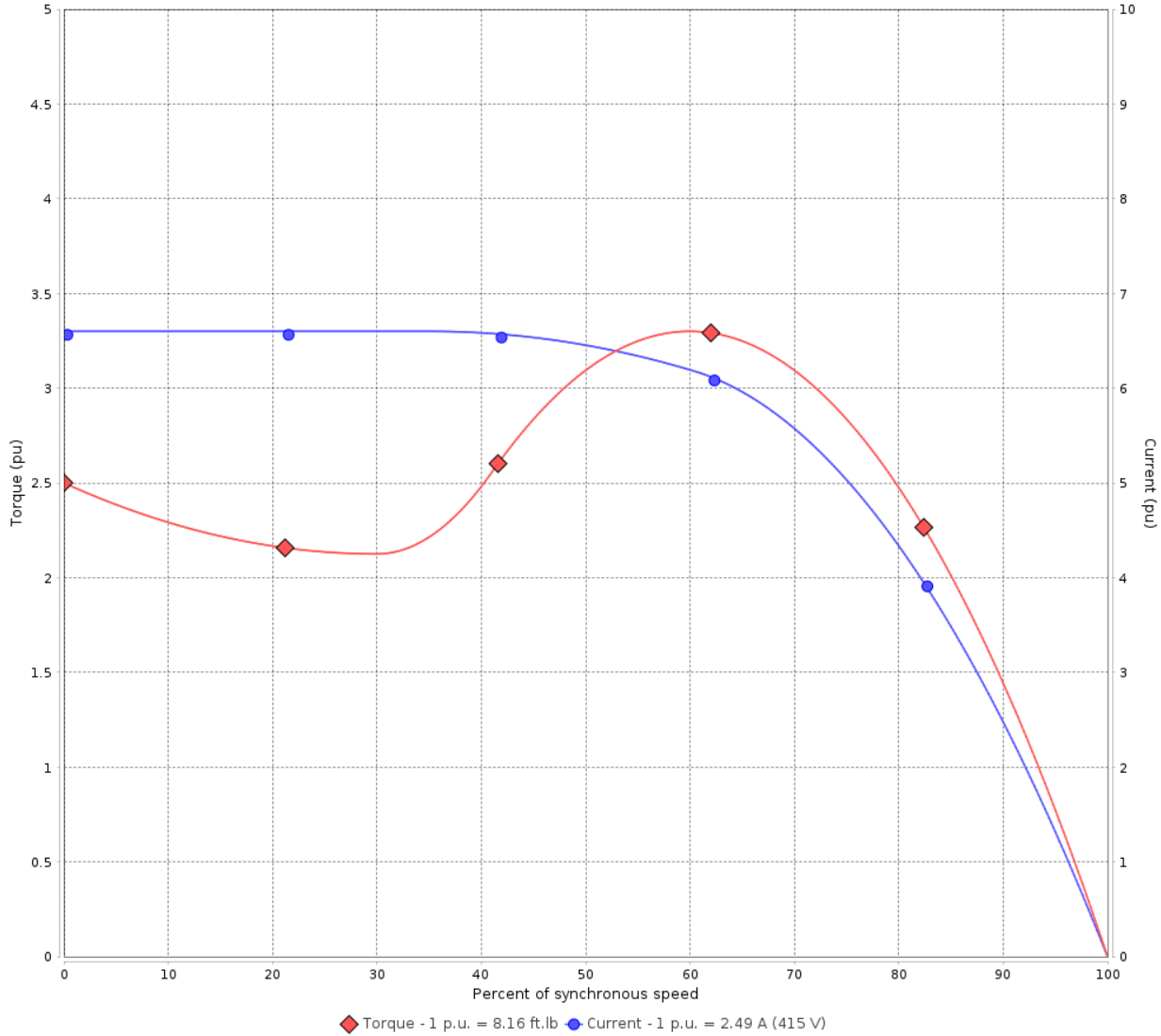
Customer :

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Three-Phase

Product code : 13187814

Catalog # : 00152ET3E182TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 6P

Rated current	: 2.49 A	Moment of inertia (J)	: 0.2800 sq.ft.lb
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 8.16 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.15
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 965 rpm	Design	: B

Locked rotor time : 0s (cold) 0s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

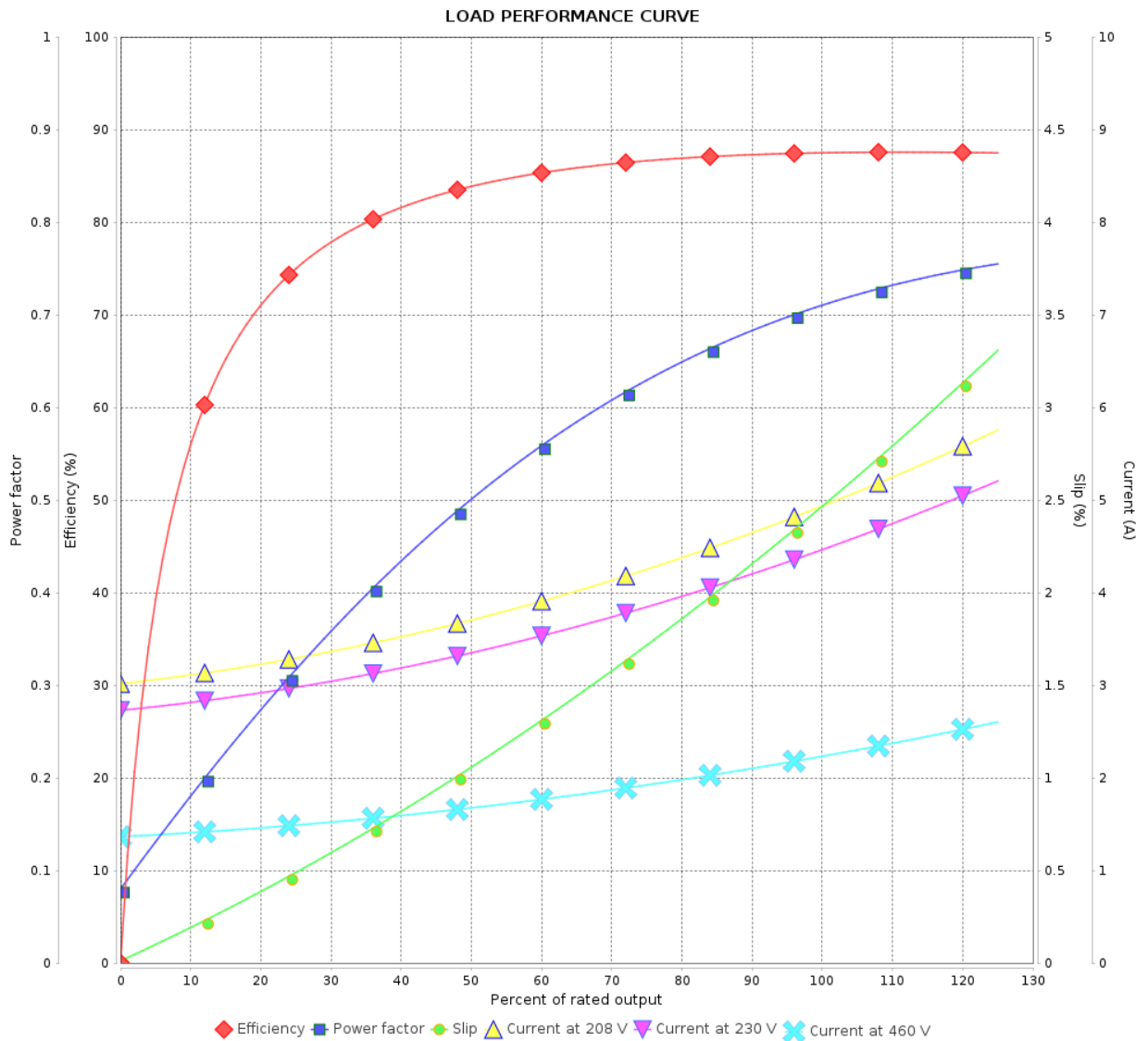


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Product line : Rolled Steel NEMA Premium Efficiency Three-Phase

Product code : 13187814

Catalog # : 00152ET3E182TC-S



Performance : 230/460 V 60 Hz 6P

Rated current : 4.44/2.22 A  
 LRC : 6.9  
 Rated torque : 6.73 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 340 %  
 Rated speed : 1170 rpm

Moment of inertia (J) : 0.2800 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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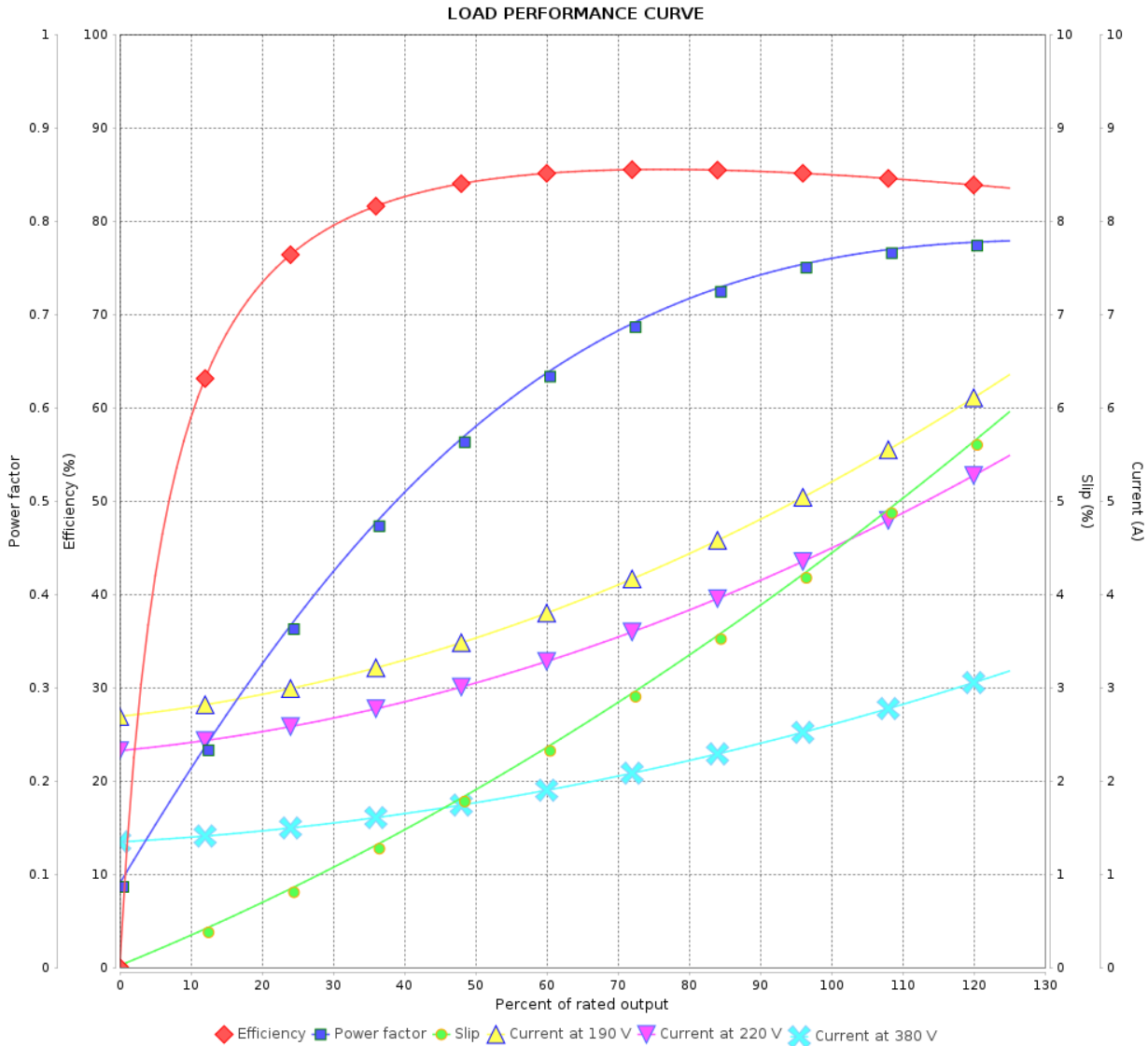


Customer :

Product line : Rolled Steel NEMA Premium Efficiency  
Three-Phase

Product code : 13187814

Catalog # : 00152ET3E182TC-S



Performance : 190-220/380 V 50 Hz 6P

Rated current : 5.18-4.47/2.59 A  
LRC : 5.7  
Rated torque : 8.25 ft.lb  
Locked rotor torque : 190 %  
Breakdown torque : 260 %  
Rated speed : 955 rpm

Moment of inertia (J) : 0.2800 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

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# LOAD PERFORMANCE CURVE

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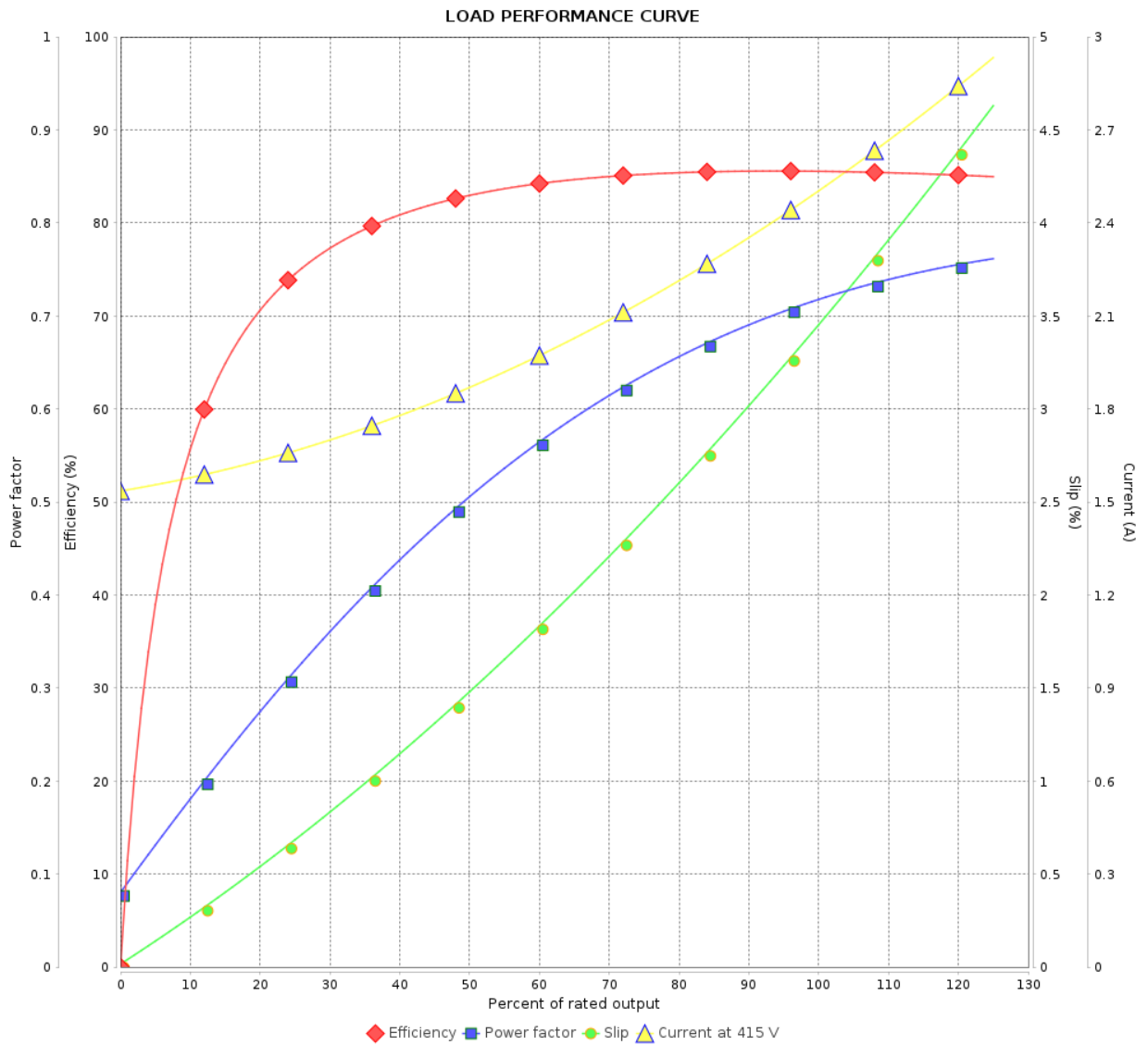


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Catalog # : 00152ET3E182TC-S



Performance : 415 V 50 Hz 6P

Rated current : 2.49 A  
 LRC : 6.6  
 Rated torque : 8.16 ft.lb  
 Locked rotor torque : 250 %  
 Breakdown torque : 330 %  
 Rated speed : 965 rpm

Moment of inertia (J) : 0.2800 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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Performance : 230/460 V 60 Hz 6P

Rated current : 4.44/2.22 A  
LRC : 6.9  
Rated torque : 6.73 ft.lb  
Locked rotor torque : 240 %  
Breakdown torque : 340 %  
Rated speed : 1170 rpm

Moment of inertia (J) : 0.2800 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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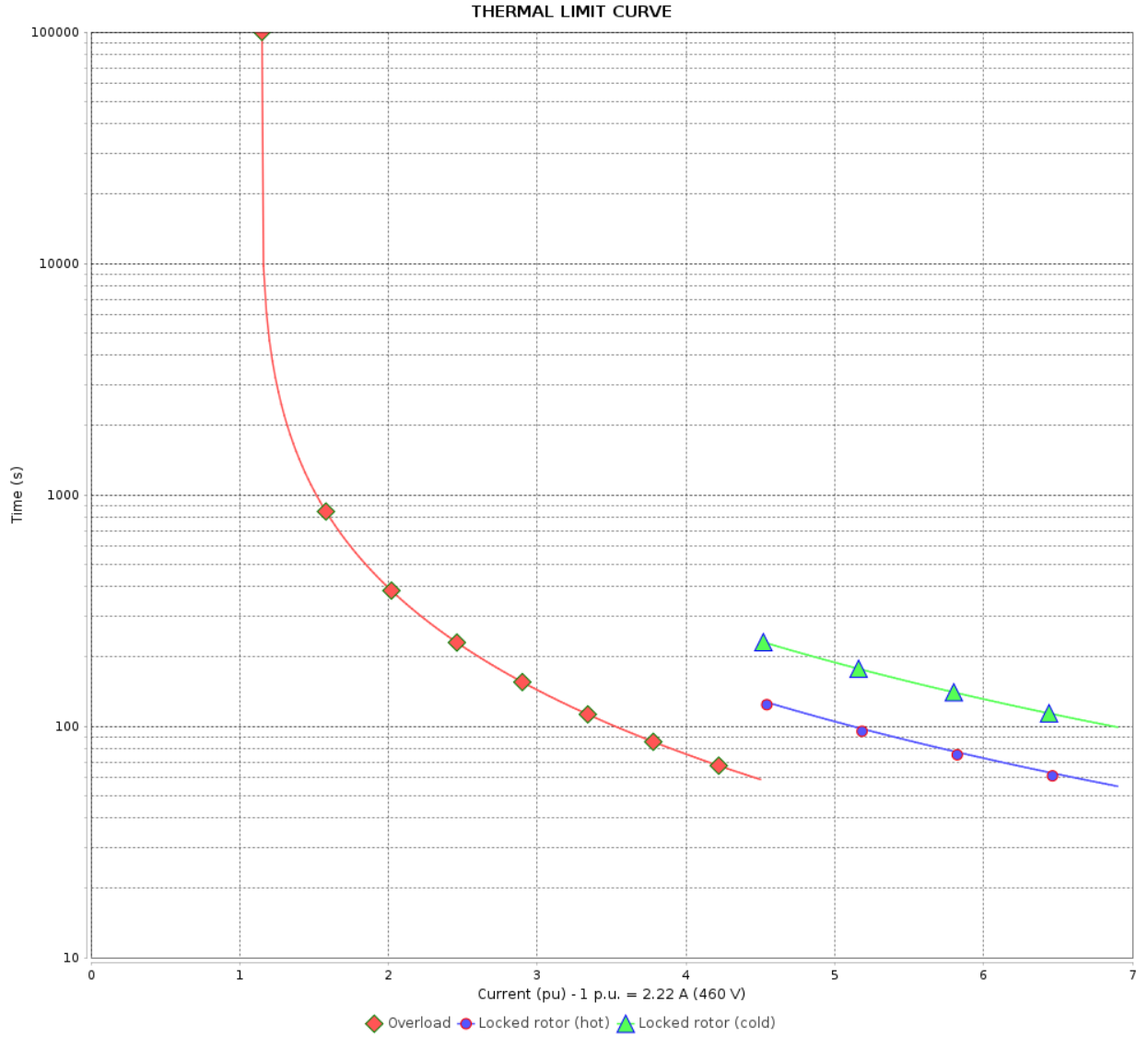


# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

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Performance : 190-220/380 V 50 Hz 6P

Rated current : 5.18-4.47/2.59 A  
LRC : 5.7  
Rated torque : 8.25 ft.lb  
Locked rotor torque : 190 %  
Breakdown torque : 260 %  
Rated speed : 955 rpm

Moment of inertia (J) : 0.2800 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

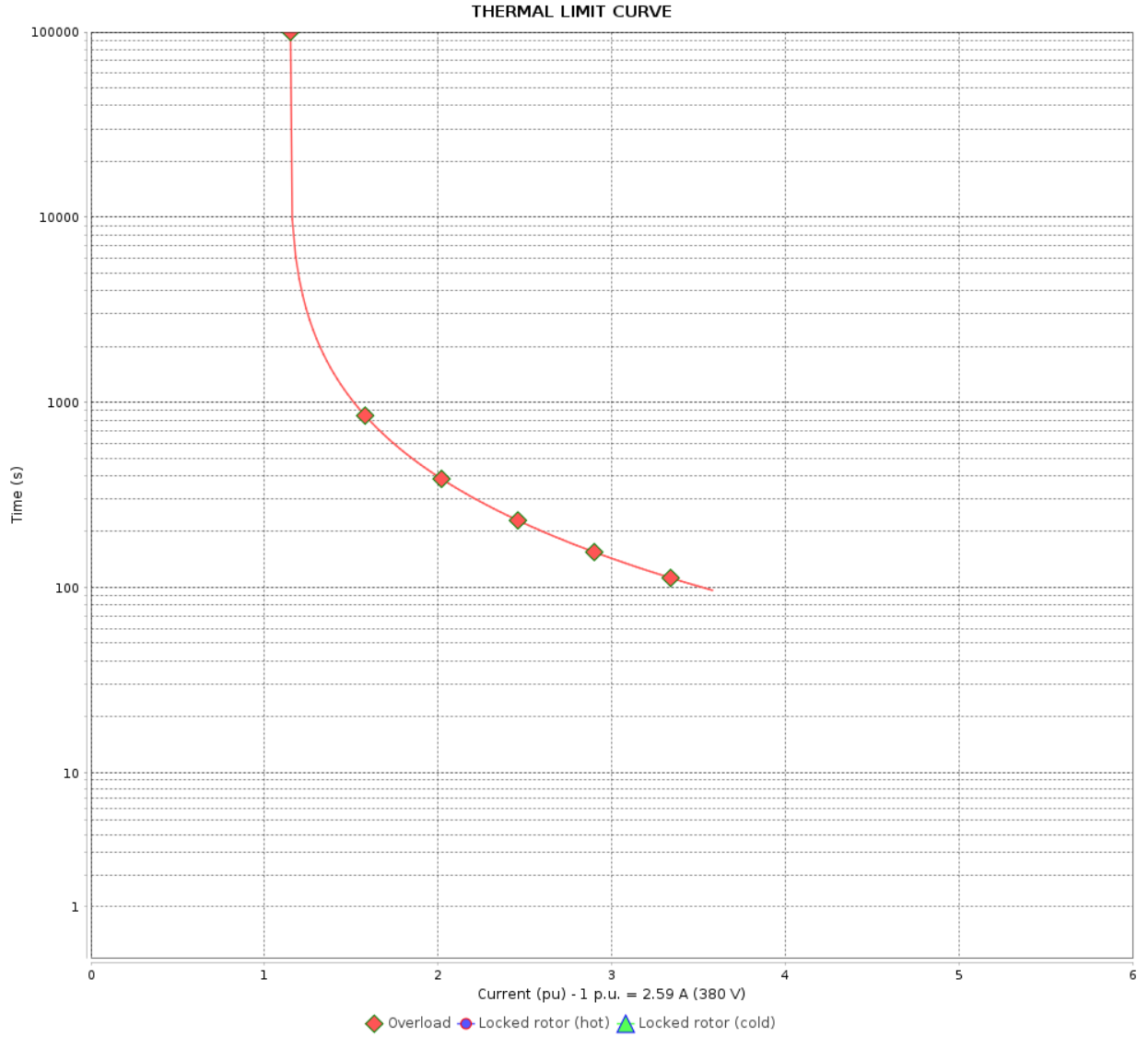
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Design : B

Heating constant

Cooling constant

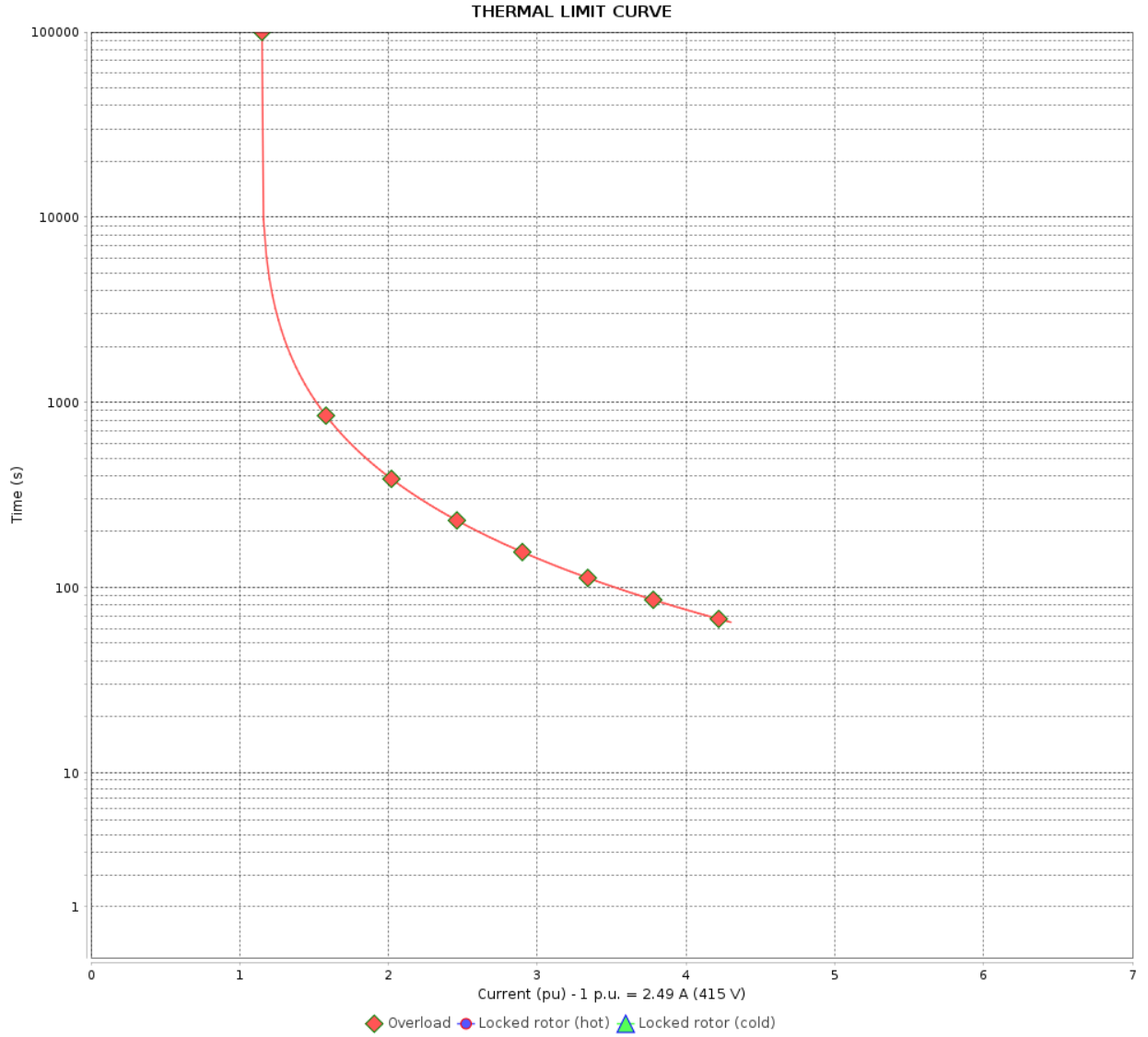
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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

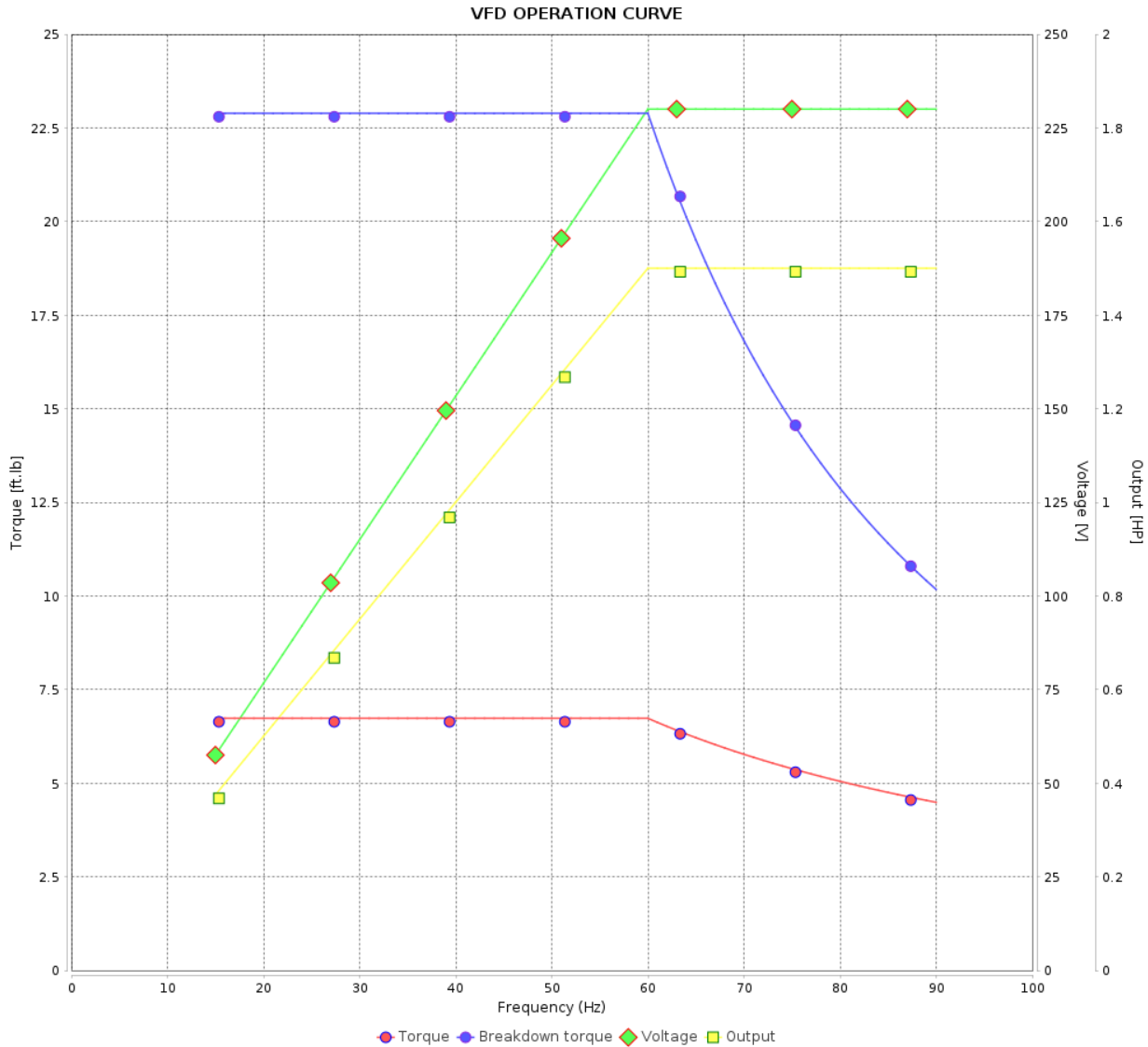


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Performance : 230/460 V 60 Hz 6P

Rated current : 4.44/2.22 A  
LRC : 6.9  
Rated torque : 6.73 ft.lb  
Locked rotor torque : 240 %  
Breakdown torque : 340 %  
Rated speed : 1170 rpm

Moment of inertia (J) : 0.2800 sq.ft.lb  
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Insulation class : F  
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Temperature rise : 80 K  
Design : B

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Three Phase Induction Motor - Squirrel Cage

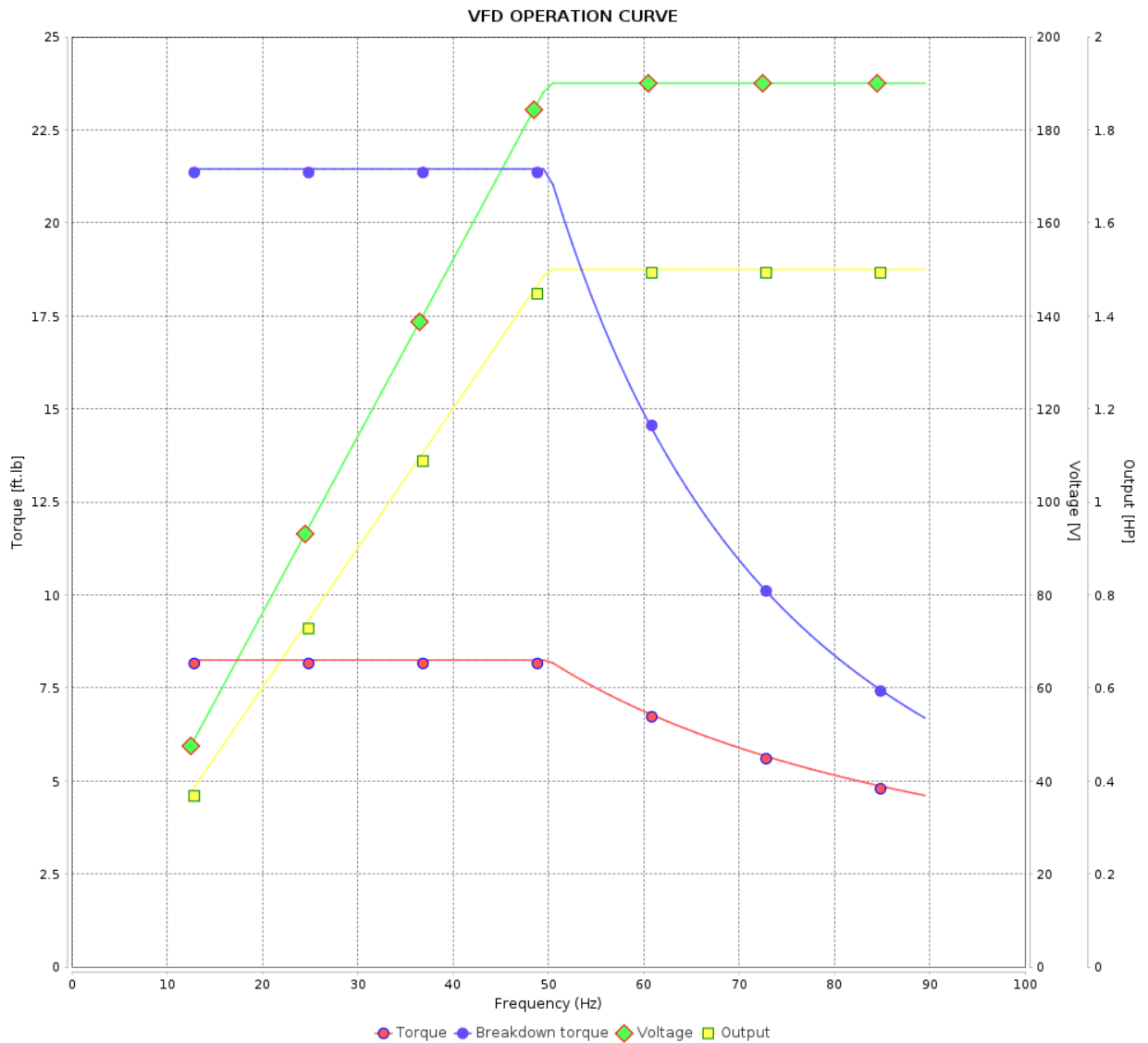


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 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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Three Phase Induction Motor - Squirrel Cage

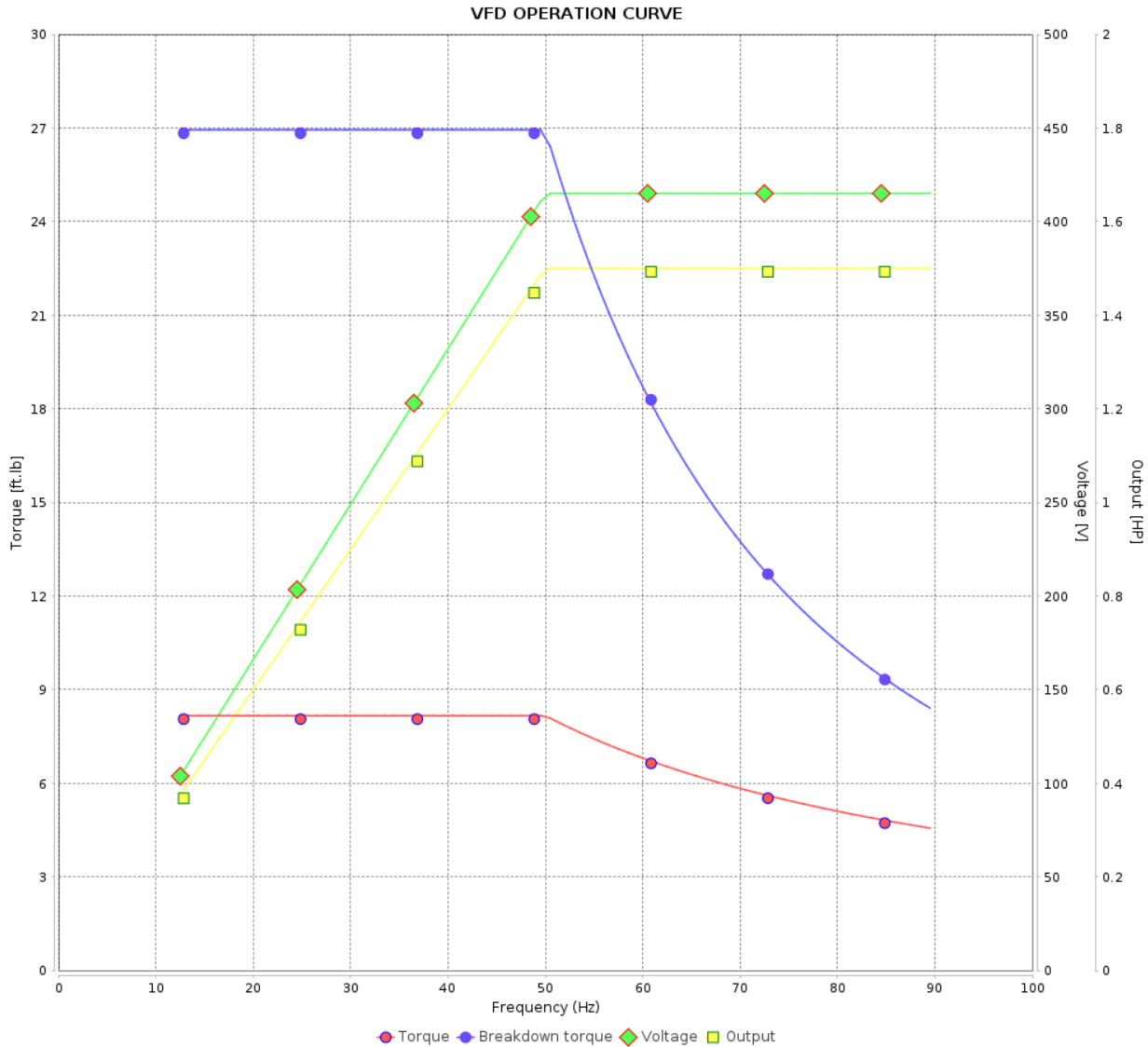


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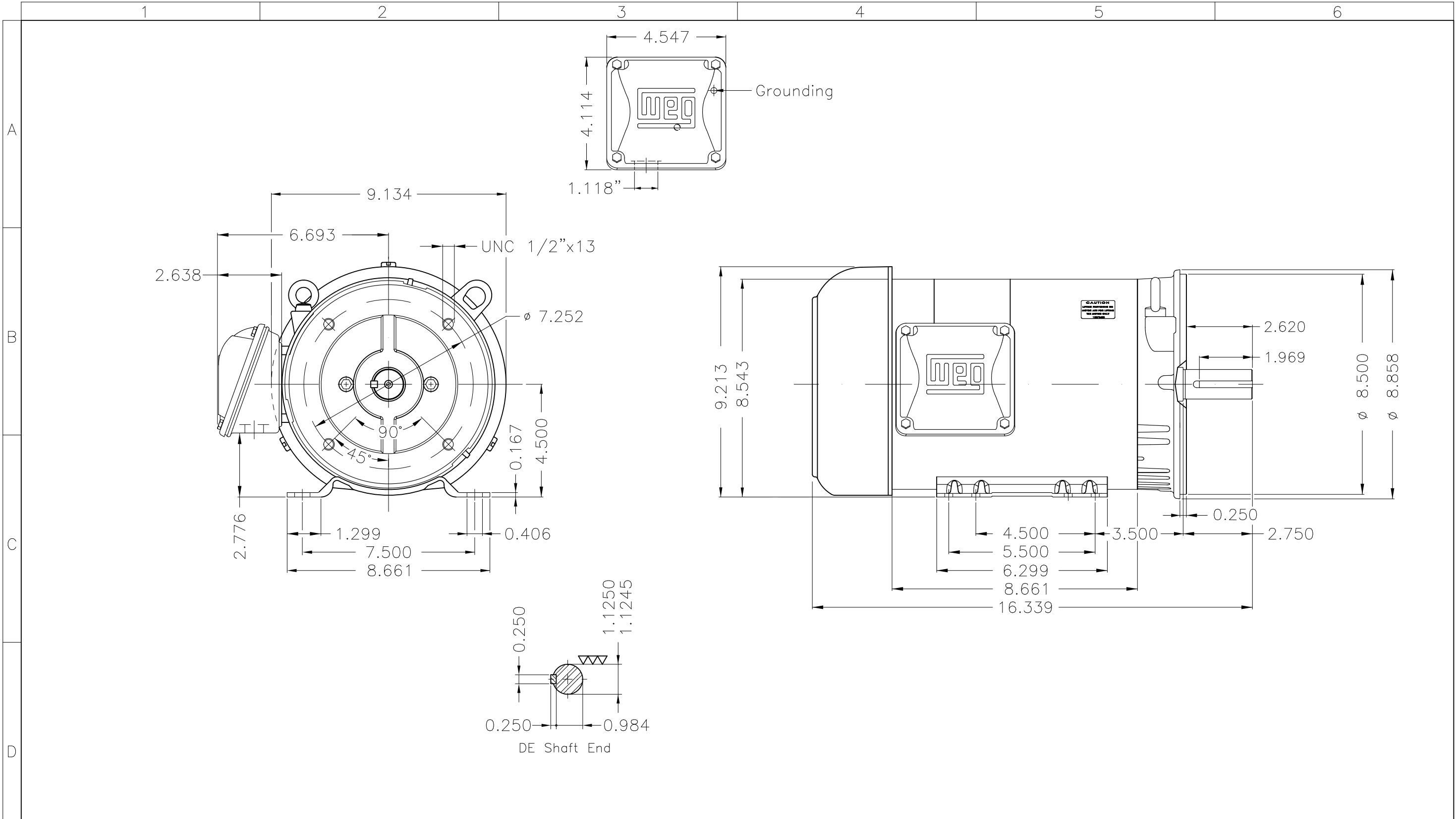


Performance : 415 V 50 Hz 6P

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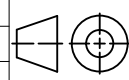

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A  
B  
C  
D  
E

Dimensions in inches XME A3

Color Munsell N 1 matte black									
Painting plan 207N									
Mounting F-1/B34R(D)									
					USERADMIN	00			
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	USERADMIN	 THREE PH. MOTOR ROLLED STEEL NEMA PREM. EFF. FRAME 182/4TC IP55 TEFC			<b>PREVIEW</b> WDD   00				
CHECKED					SHEET				1 / 1
RELEASED									
REL. DATE		WMO	Jaragua do Sul	Product Engineering					

1.5 HP 06 Poles 60 Hz

A



**NEMA**  
**Premium**



3PT9

US LISTED



FOR SAFE AREA

Energy Verified

MADE IN MEXICO

**MAT: 13187814 CC029A**

**W01.TE0IC0X0N**

**MODEL 00152ET3E182TC-S**

**12OCT2023 S/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 1.5
FR 182/4TC		KW 1.1
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 4.44/2.22
INS CL F AT 80K	IP55	SFA 5.11/2.55
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE K	PF 0.71
		RPM 1170
		NEMA NOM. EFF 87.5%

ALTERNATE RATING: 1.5HP	50Hz	190-220/380-415V	SF1.15
5.18-4.70/2.59-2.49A	955RPM	EFF 84.9%	(IE4) 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
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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.

