

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12677334	
		Catalog # :	00512ET3ER215TC-S	
Frame	: 213/5TC	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	: 154 lb	
Protection degree	: IP55	Moment of inertia (J)	: 1.26 sq.ft.lb	
Design	: B			
Output [HP]	5	5	5	
Poles	6	6	6	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	13.5/6.74	16.3/8.13	14.6/7.74	
L. R. Amperes [A]	80.9/40.4	74.8/37.4	75.9/40.2	
LRC [A]	6.0x(Code H)	4.6x(Code E)	5.2x(Code F)	
No load current [A]	6.84/3.42	6.75/3.38	6.86/3.64	
Rated speed [RPM]	1175	960	965	
Slip [%]	2.08	4.00	3.50	
Rated torque [ft.lb]	22.3	27.4	27.2	
Locked rotor torque [%]	220	160	190	
Breakdown torque [%]	250	190	210	
Service factor	1.15	1.00	1.00	
Temperature rise	80 K	105 K	105 K	
Locked rotor time	54s (cold) 30s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²	55.0 dB(A)	53.0 dB(A)	53.0 dB(A)	
Efficiency (%)	25%	86.4	89.4	88.7
	50%	87.5	87.8	87.6
	75%	88.5	87.4	87.8
	100%	89.5	85.4	86.3
Power Factor	25%	0.35	0.41	0.37
	50%	0.59	0.66	0.62
	75%	0.71	0.77	0.74
	100%	0.77	0.81	0.80
Bearing type	: <u>Drive end</u> 6208 ZZ <u>Non drive end</u> 6206 ZZ	Foundation loads		
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 245 lb	
		Max. compression	: 399 lb	
Lubrication interval	: -			
Lubricant amount	: -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 14.9A SF 1.00 SFA 14.9A				
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
Performed by				
Checked by			Page	Revision
Date	12/04/2022		1 / 16	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



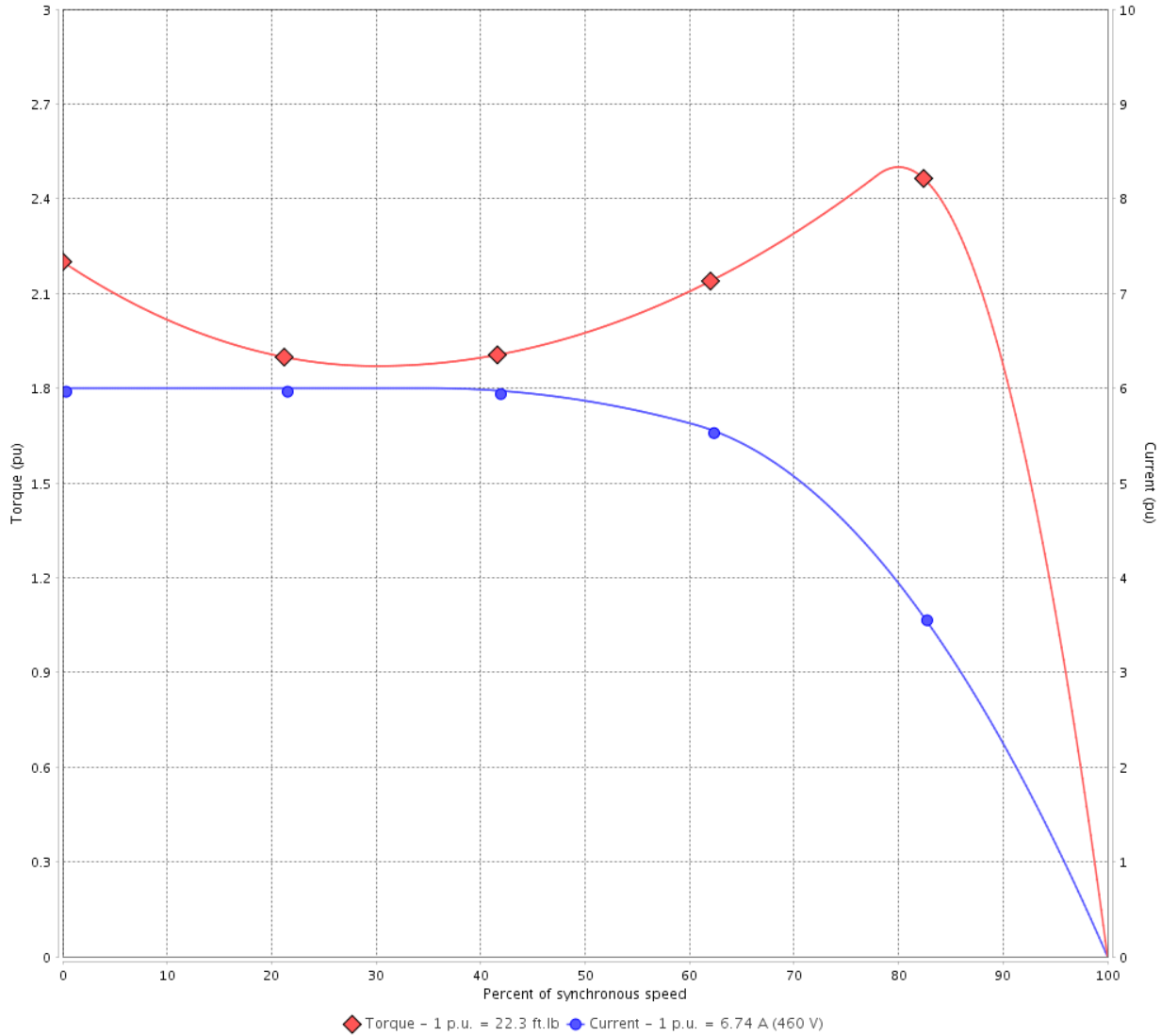
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12677334

Catalog # : 00512ET3ER215TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

Rated current	: 13.5/6.74 A	Moment of inertia (J)	: 1.26 sq.ft.lb
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 22.3 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1175 rpm	Design	: B

Locked rotor time : 54s (cold) 30s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 16	Revision
Checked by				
Date	12/04/2022			

TORQUE AND CURRENT VS SPEED CURVE



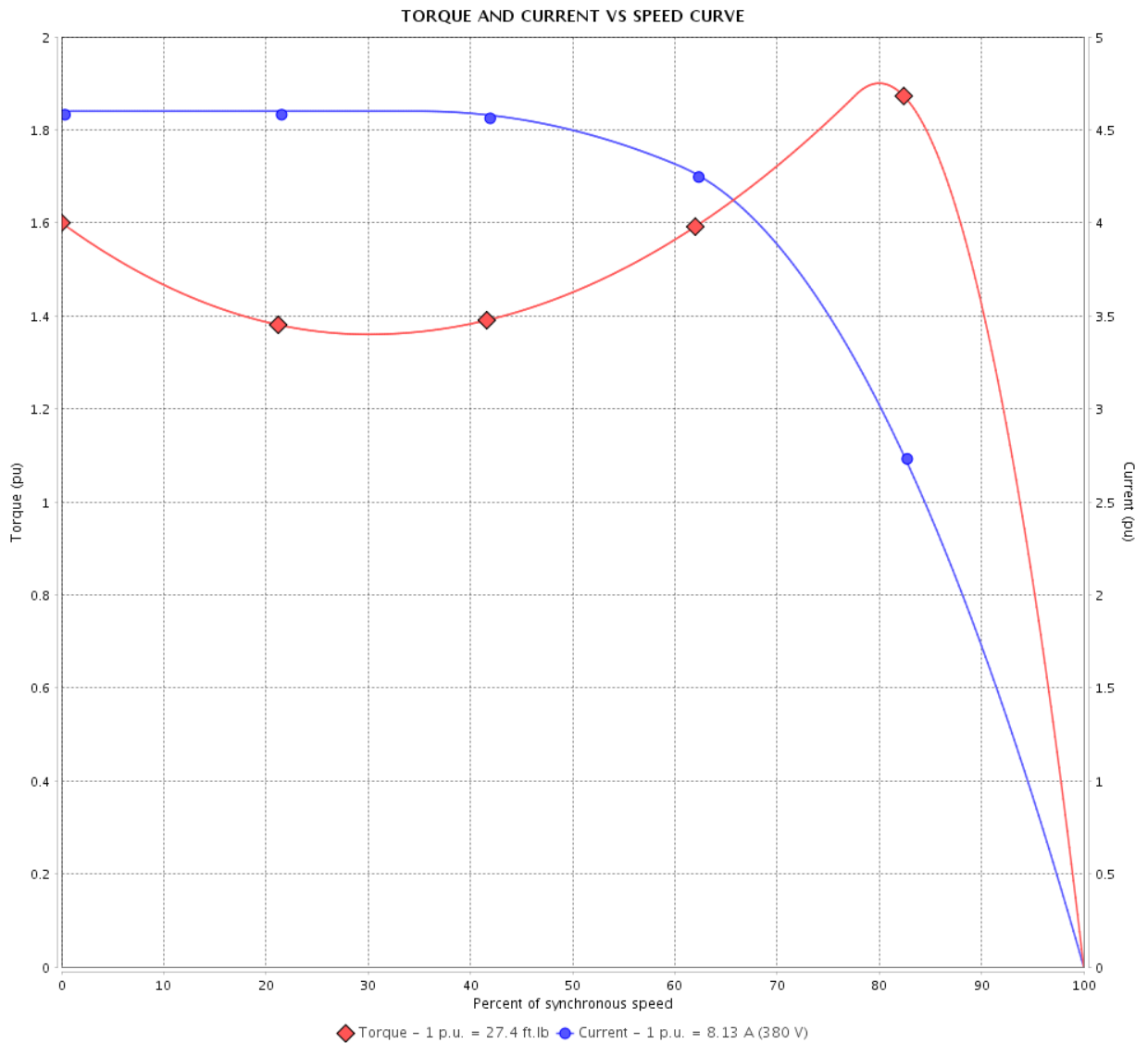
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12677334

Catalog # : 00512ET3ER215TC-S



Performance : 190/380 V 50 Hz 6P

Rated current	: 16.3/8.13 A	Moment of inertia (J)	: 1.26 sq.ft.lb
LRC	: 4.6	Duty cycle	: Cont.(S1)
Rated torque	: 27.4 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 190 %	Temperature rise	: 105 K
Rated speed	: 960 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 16	Revision
Checked by				
Date	12/04/2022			

TORQUE AND CURRENT VS SPEED CURVE

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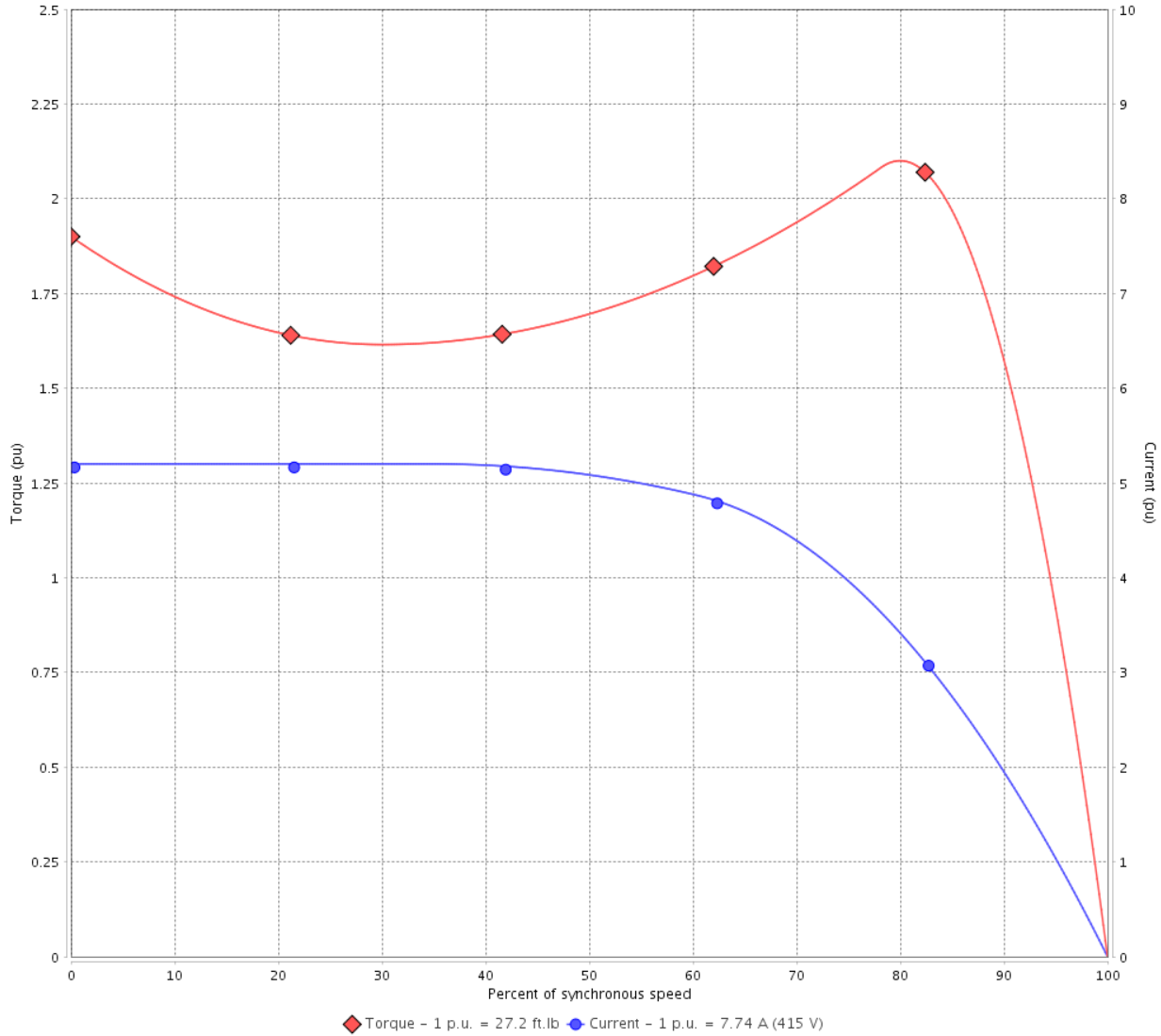
Customer :

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Product code : 12677334

Catalog # : 00512ET3ER215TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 6P

Rated current	: 14.6/7.74 A	Moment of inertia (J)	: 1.26 sq.ft.lb
LRC	: 5.2	Duty cycle	: Cont.(S1)
Rated torque	: 27.2 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 965 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 16	Revision
Checked by				
Date	12/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

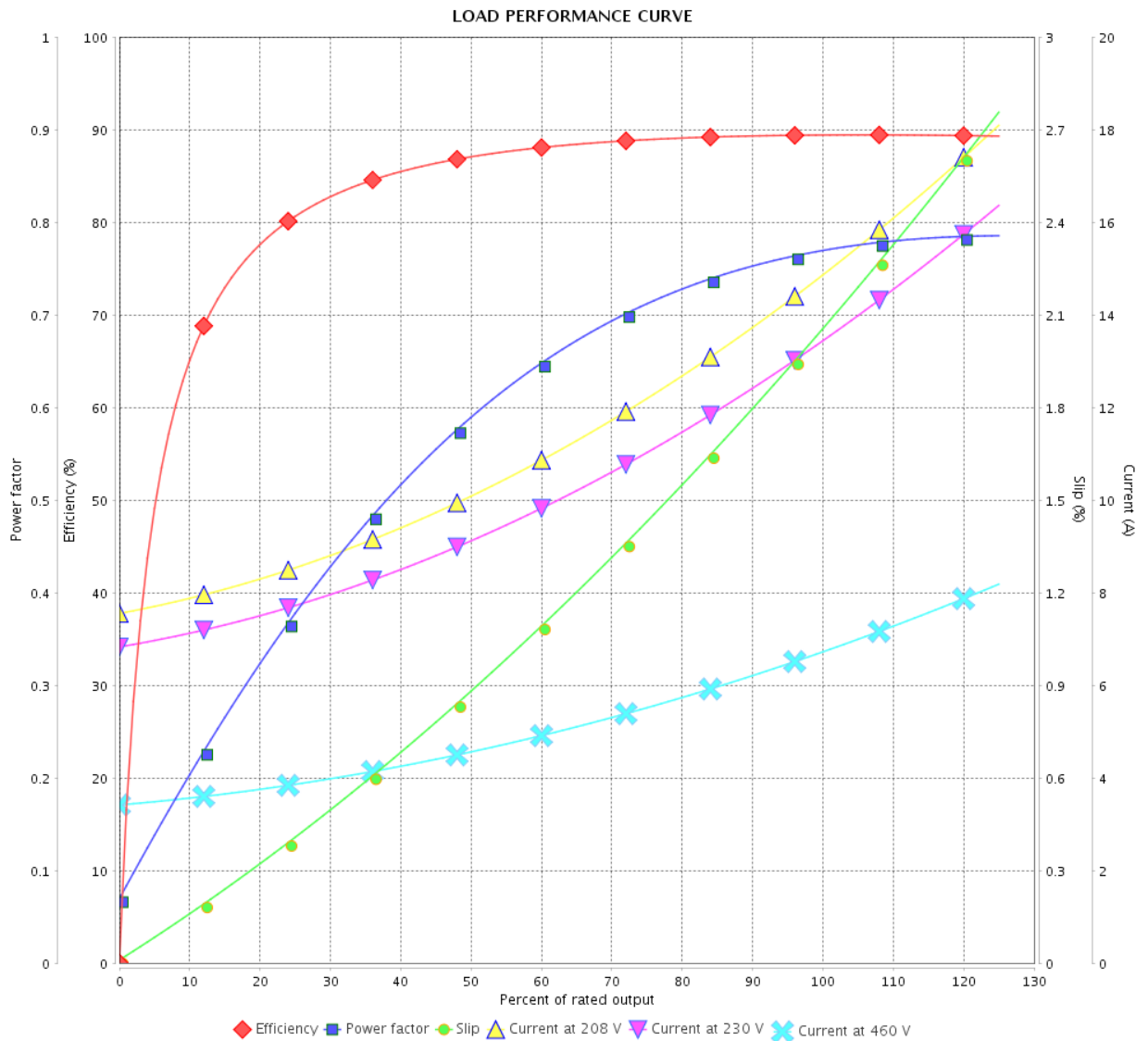


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12677334

Catalog # : 00512ET3ER215TC-S



Performance : 230/460 V 60 Hz 6P

Rated current : 13.5/6.74 A
 LRC : 6.0
 Rated torque : 22.3 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 250 %
 Rated speed : 1175 rpm

Moment of inertia (J) : 1.26 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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Performed by			Page	Revision
Checked by				
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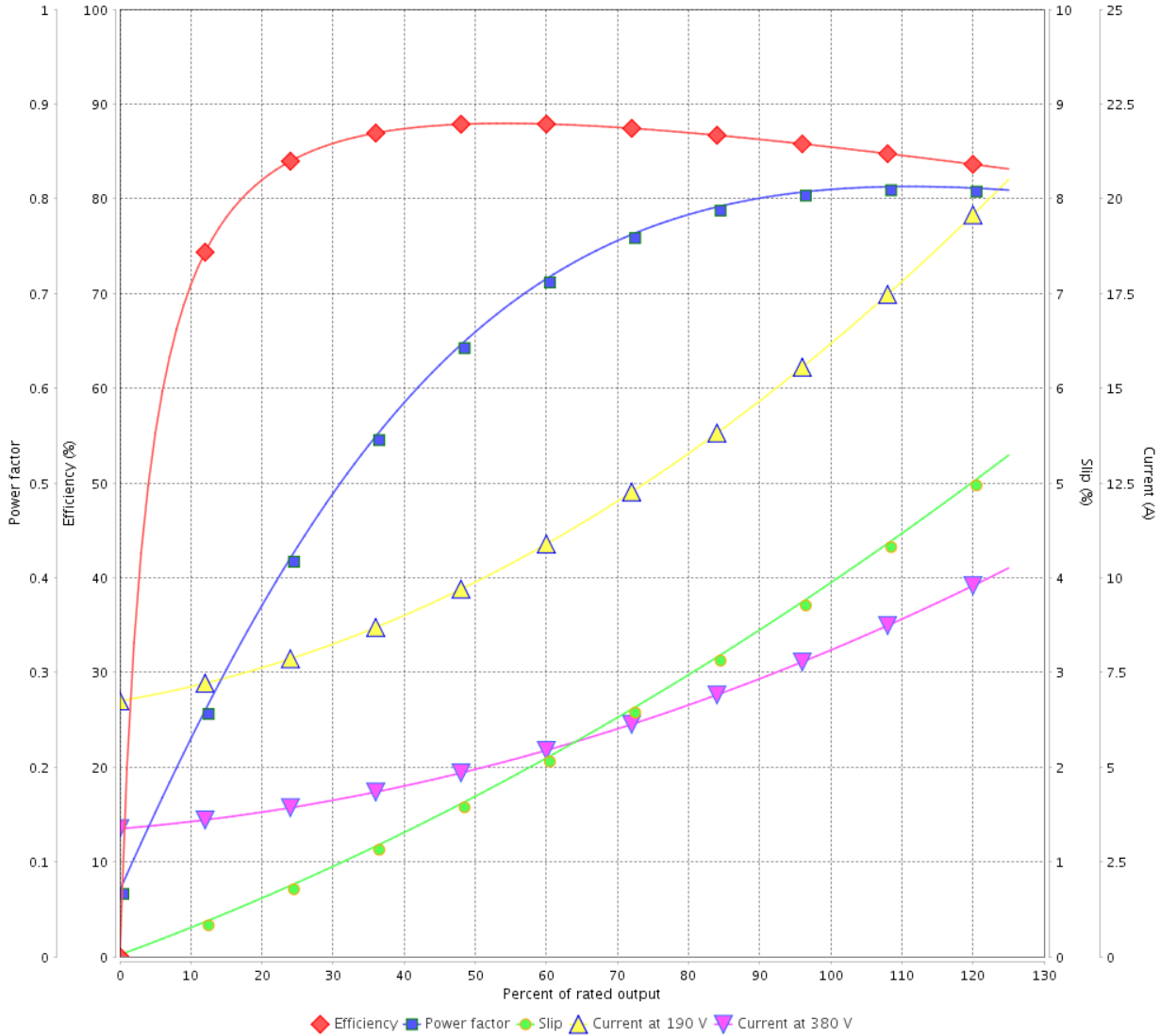
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Product code : 12677334

Catalog # : 00512ET3ER215TC-S

LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 6P

Rated current : 16.3/8.13 A
 LRC : 4.6
 Rated torque : 27.4 ft.lb
 Locked rotor torque : 160 %
 Breakdown torque : 190 %
 Rated speed : 960 rpm

Moment of inertia (J) : 1.26 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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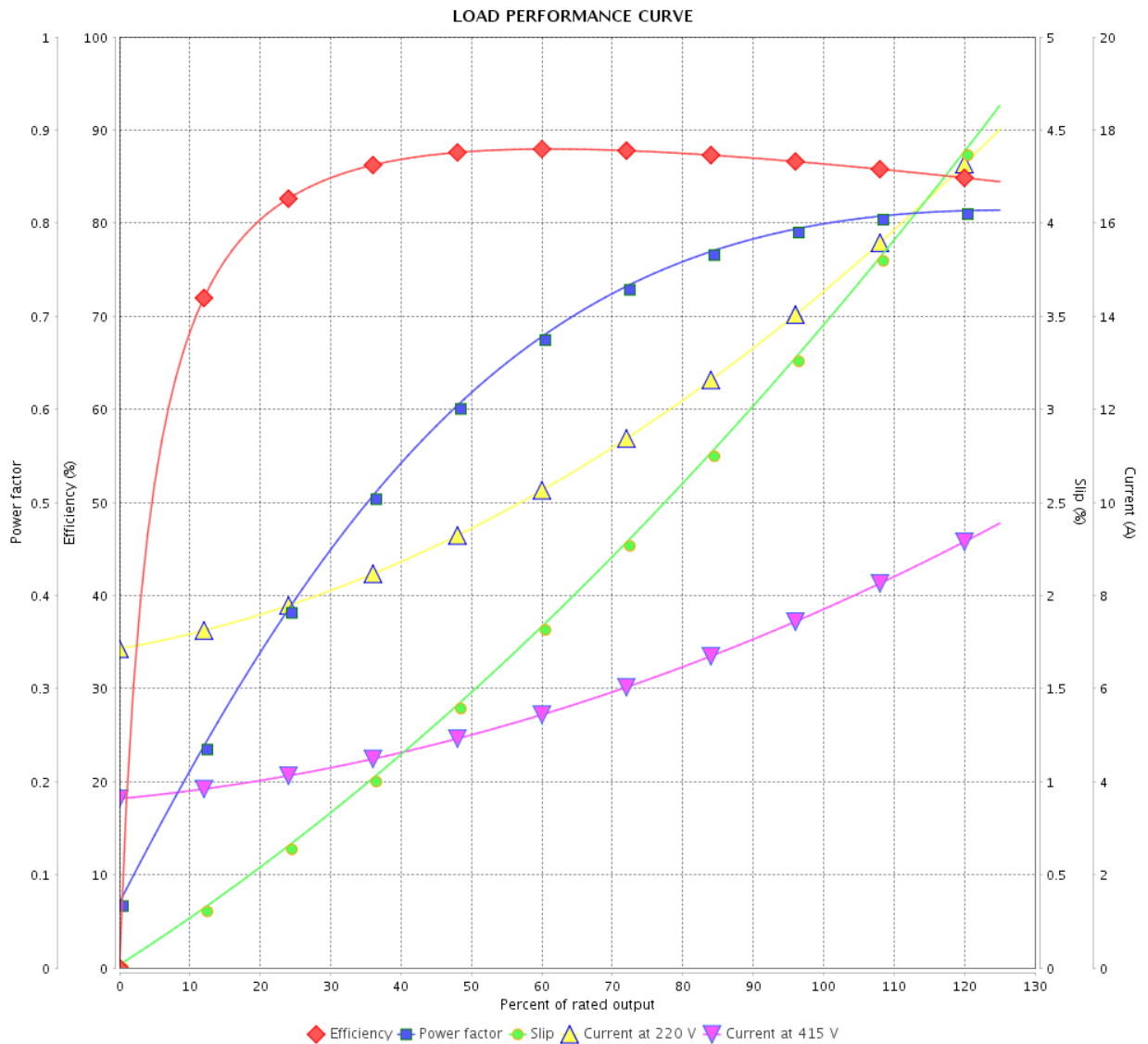


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12677334

Catalog # : 00512ET3ER215TC-S



Performance : 220/415 V 50 Hz 6P

Rated current : 14.6/7.74 A
 LRC : 5.2
 Rated torque : 27.2 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 210 %
 Rated speed : 965 rpm

Moment of inertia (J) : 1.26 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by			7 / 16	
Date	12/04/2022			

THERMAL LIMIT CURVE



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LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 22.3 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1175 rpm	Design	: B

Heating constant

Cooling constant

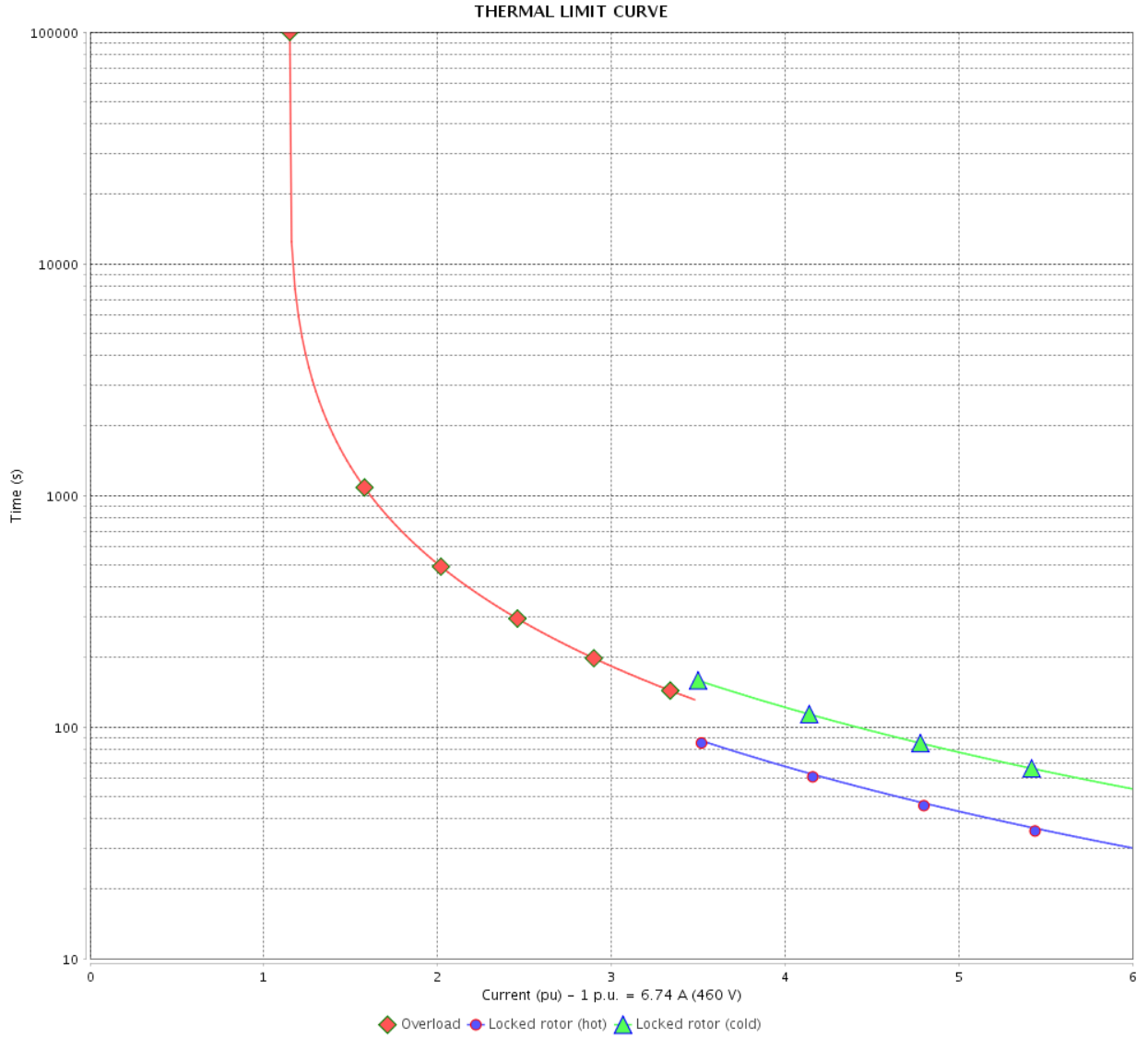
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	12/04/2022		8 / 16	

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Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date				
			Page	Revision
			9 / 16	

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Performance : 190/380 V 50 Hz 6P

Rated current : 16.3/8.13 A	Moment of inertia (J) : 1.26 sq.ft.lb
LRC : 4.6	Duty cycle : Cont.(S1)
Rated torque : 27.4 ft.lb	Insulation class : F
Locked rotor torque : 160 %	Service factor : 1.00
Breakdown torque : 190 %	Temperature rise : 105 K
Rated speed : 960 rpm	Design : B

Heating constant

Cooling constant

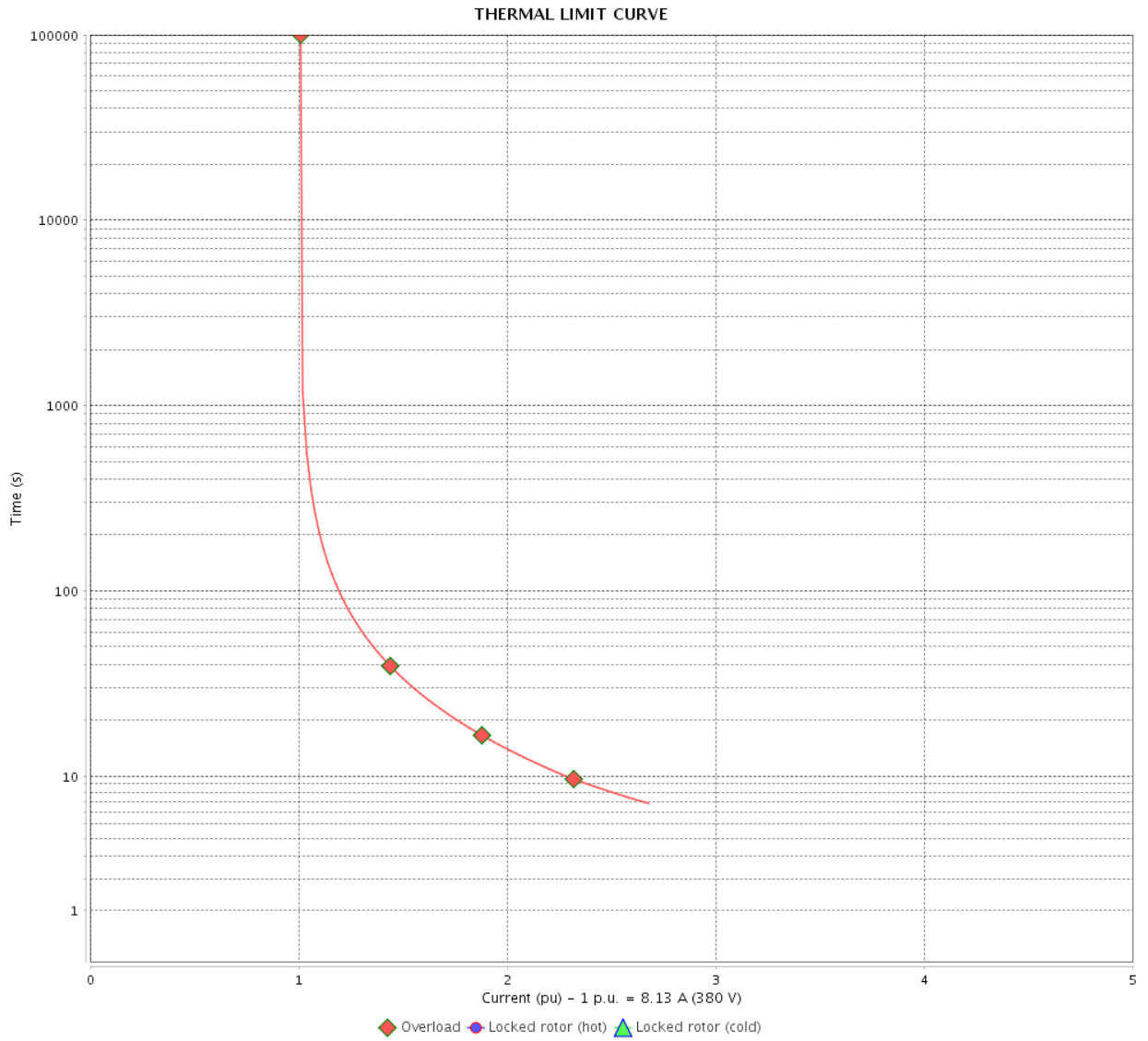
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 10 / 16	Revision
Checked by				
Date	12/04/2022			

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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		11 / 16		
Date		12/04/2022		

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Performance : 220/415 V 50 Hz 6P

Rated current : 14.6/7.74 A	Moment of inertia (J) : 1.26 sq.ft.lb
LRC : 5.2	Duty cycle : Cont.(S1)
Rated torque : 27.2 ft.lb	Insulation class : F
Locked rotor torque : 190 %	Service factor : 1.00
Breakdown torque : 210 %	Temperature rise : 105 K
Rated speed : 965 rpm	Design : B

Heating constant

Cooling constant

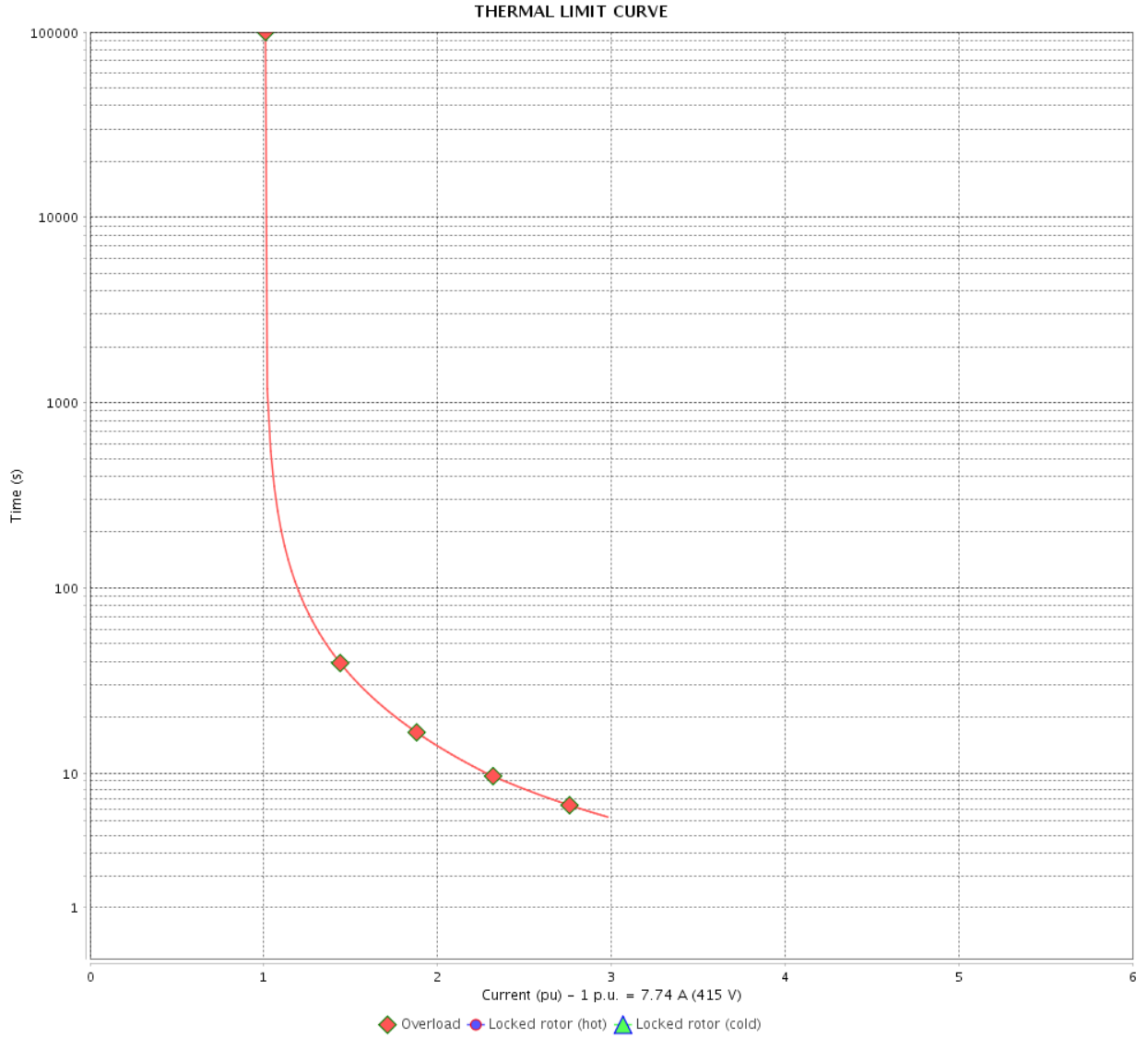
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 12 / 16	Revision
Checked by				
Date	12/04/2022			

THERMAL LIMIT CURVE

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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		13 / 16		
Date		12/04/2022		

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



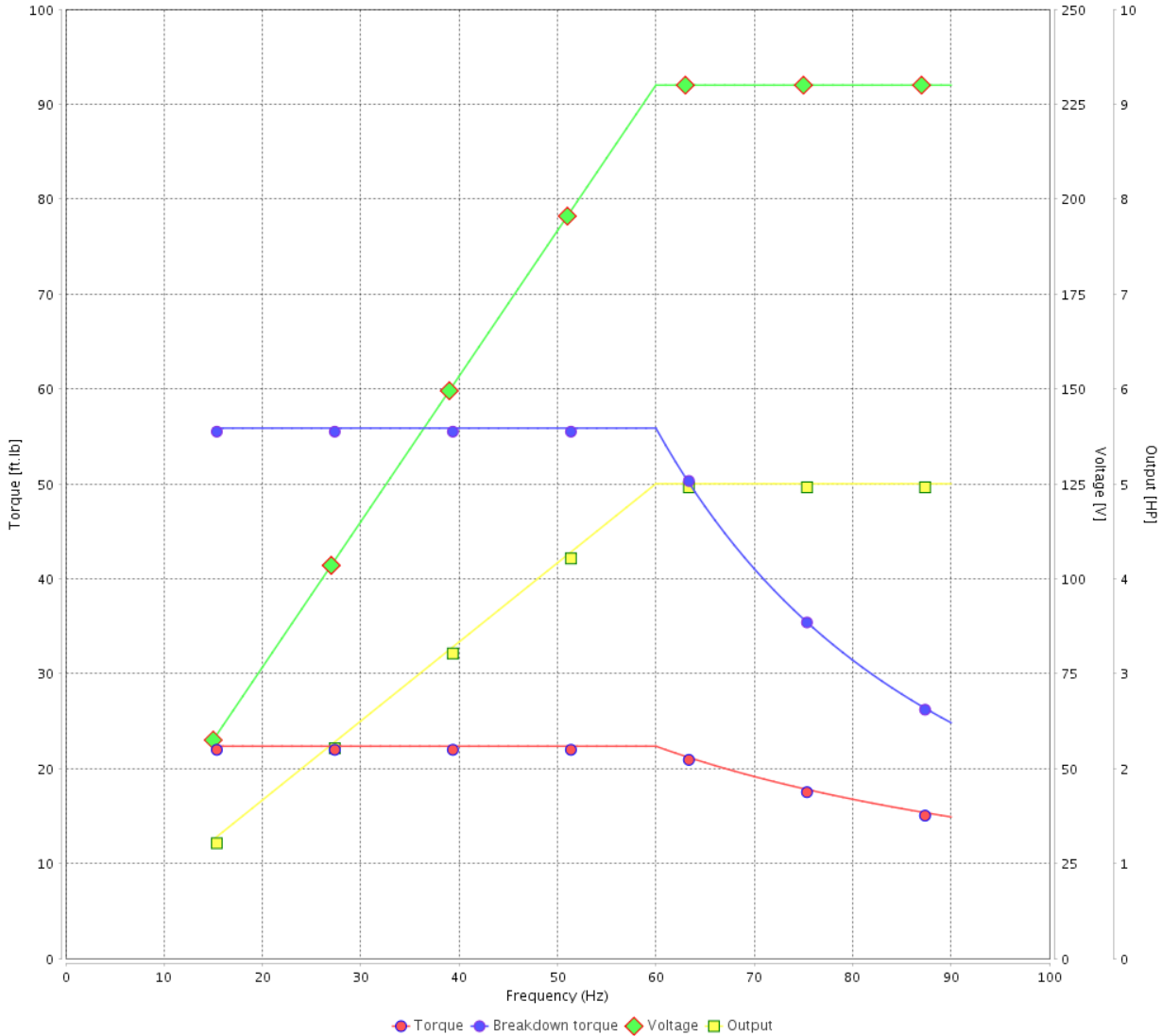
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VFD OPERATION CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 13.5/6.74 A
 LRC : 6.0
 Rated torque : 22.3 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 250 %
 Rated speed : 1175 rpm

Moment of inertia (J) : 1.26 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 14 / 16	Revision
Checked by				
Date	12/04/2022			

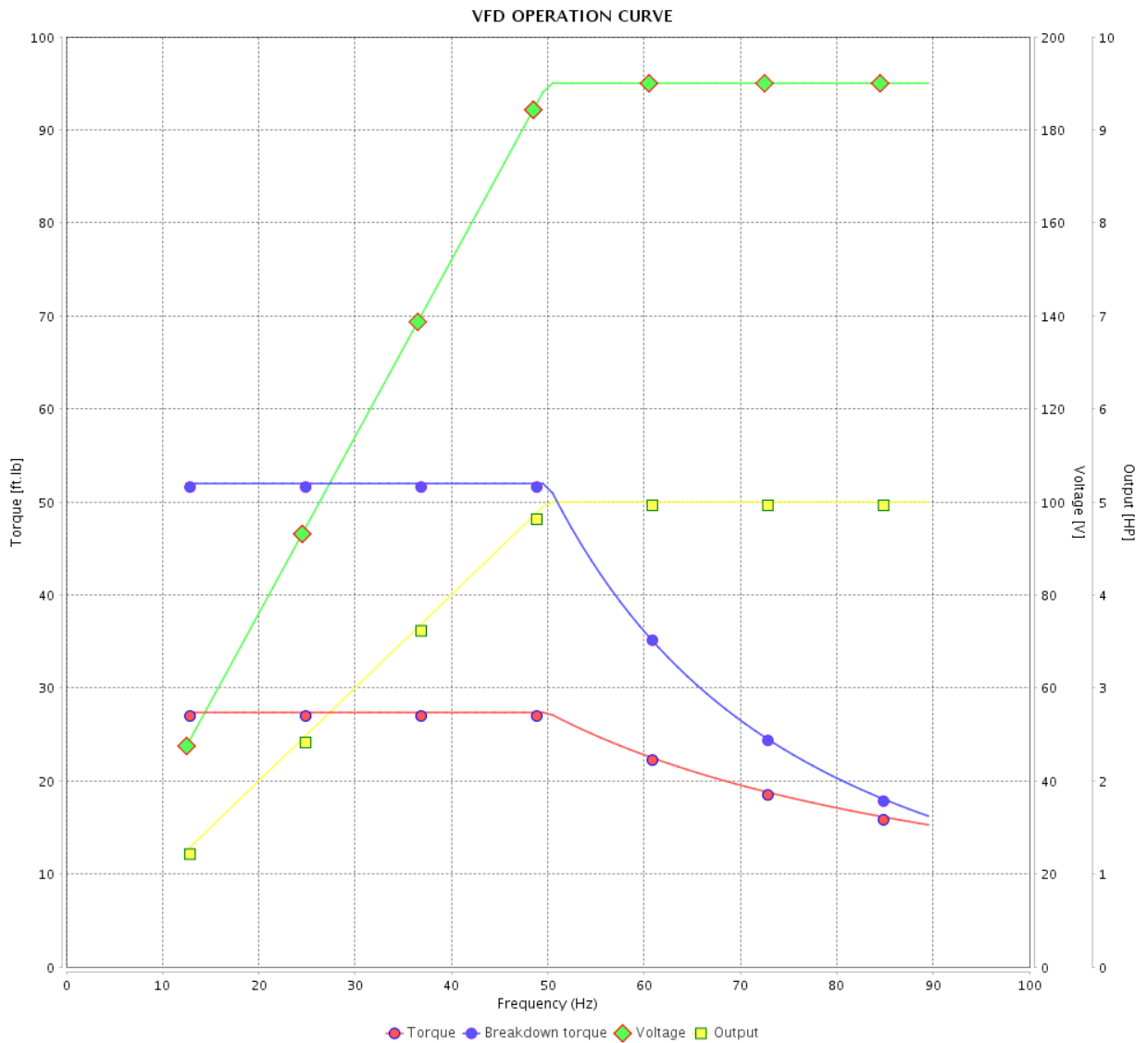
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LRC : 4.6	Duty cycle : Cont.(S1)
Rated torque : 27.4 ft.lb	Insulation class : F
Locked rotor torque : 160 %	Service factor : 1.00
Breakdown torque : 190 %	Temperature rise : 105 K
Rated speed : 960 rpm	Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by				Page 15 / 16
Checked by				
Date	12/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



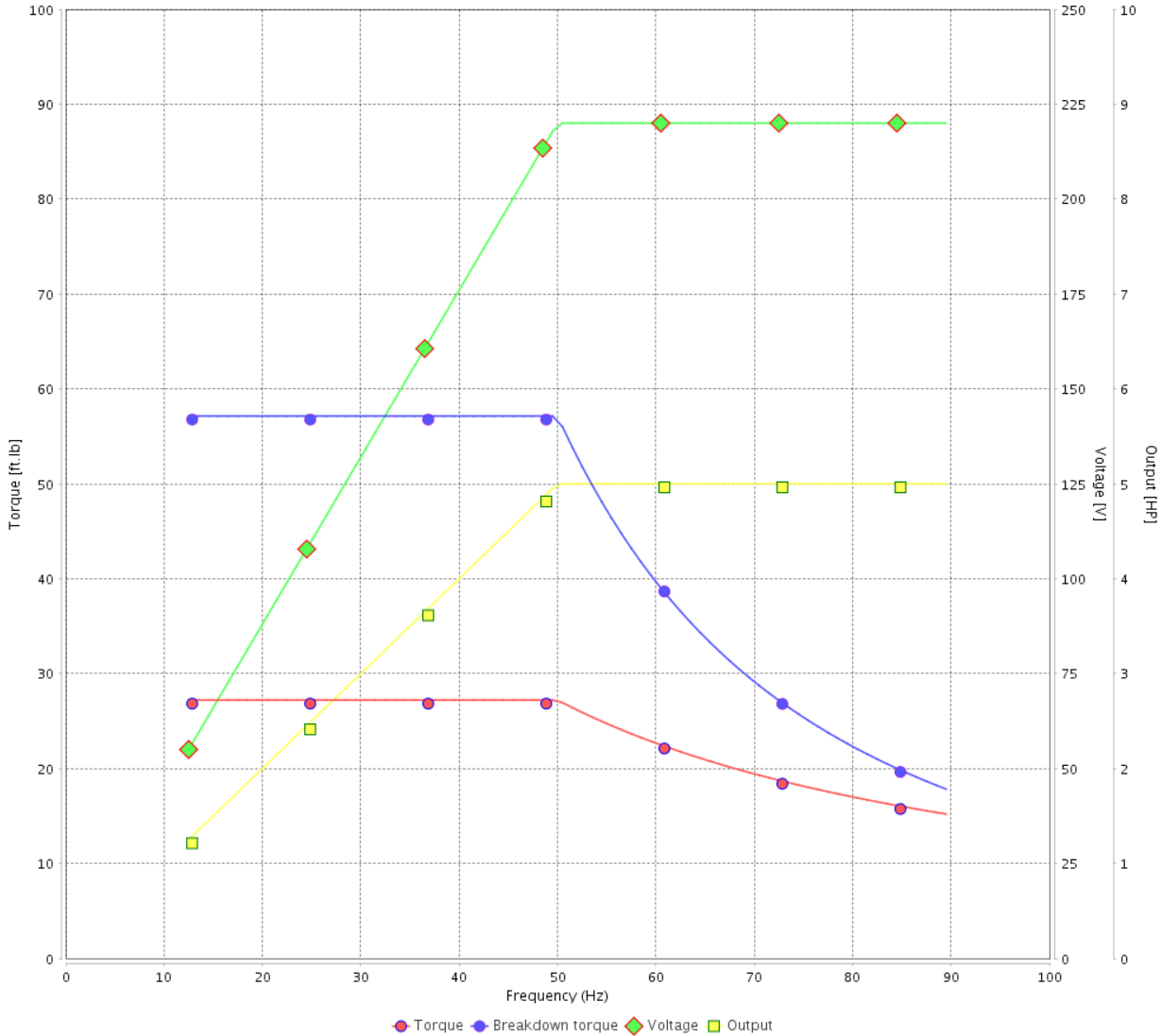
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Performance : 220/415 V 50 Hz 6P

Rated current : 14.6/7.74 A
 LRC : 5.2
 Rated torque : 27.2 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 210 %
 Rated speed : 965 rpm

Moment of inertia (J) : 1.26 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 16 / 16	Revision
Checked by				
Date	12/04/2022			

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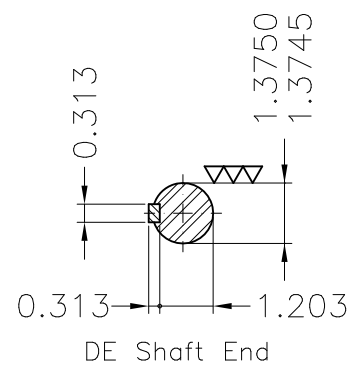
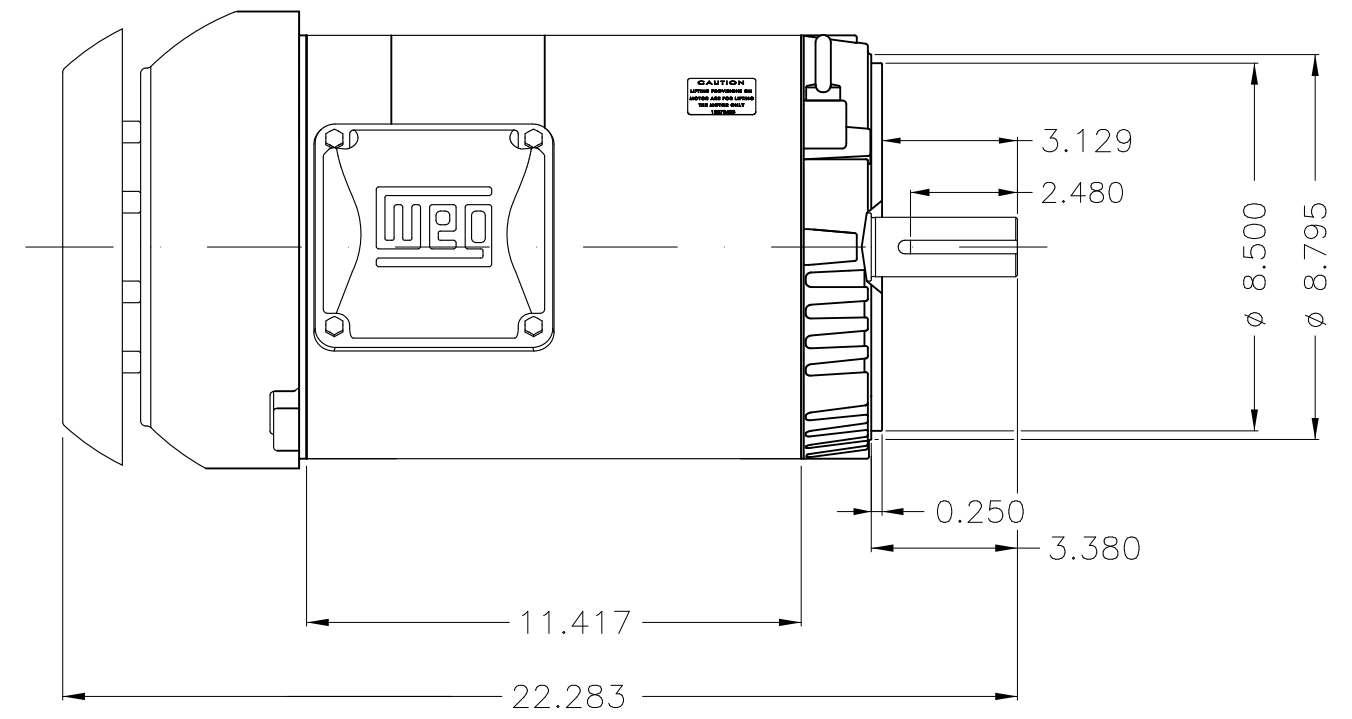
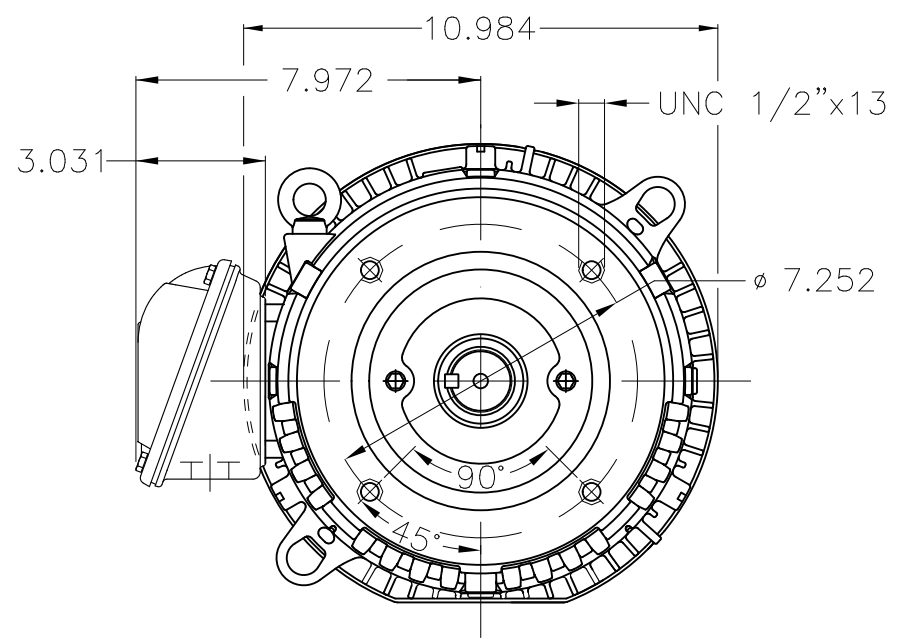
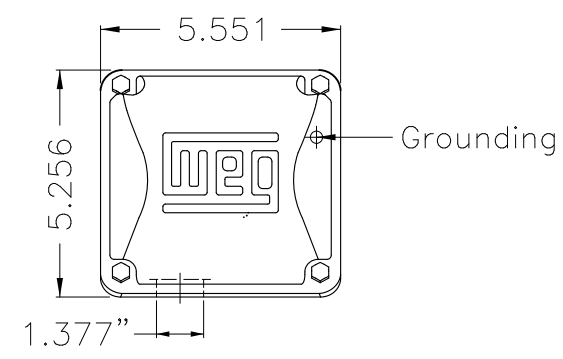
A

B

C

D

E



Dimensions in inches

Color Munsell N 1 matte black										
Painting plan 207N										
Mounting W-6/V18R(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 213/5TC IP55 TEFC								
RELEASED										
REL DT.		WMO	Jaragua do Sul	Product Engineering						

5 HP 06 Poles 60 Hz

XME A3



NEMA
Premium



MADE IN MEXICO

MAT: 12677334 CC029A

W01.TE0IC0X0N

MODEL 00512ET3ER215TC-S

26NOV2021 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 5.0
FR 213/5TC		KW 3.7
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 13.5/6.74
INS CL F AT 80K	IP55	SFA 15.5/7.75
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE H	PF 0.77
USABLE @ 208V 14.9A		RPM 1175
SF1.00		NEMA NOM. EFF 89.5%

ALTERNATE RATING: 5.0HP	50Hz	190-220/380-415V	SF1.00
18.3-14.3/8.13-7.60A	960RPM	EFF 85.4%	(IE2) IEC 60034-1

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

DE 6208-ZZ	ODE 6206-ZZ	MOBIL POLYREX EM
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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.

