

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	Product code :	13180570	
		Catalog # :	01018ET3E215JM-S	
Frame	: 213/5JM	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	: 141 lb	
Protection degree	: IP55	Moment of inertia (J)	: 1.07 sq.ft.lb	
Design	: B			
Output [HP]	10	7.5	7.5	
Poles	4	4	4	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	24.4/12.2	22.4/11.2	20.8/11.0	
L. R. Amperes [A]	171/85.4	170/85.1	172/91.3	
LRC [A]	7.0x(Code H)	7.6x(Code J)	8.3x(Code K)	
No load current [A]	11.1/5.54	10.9/5.46	11.3/5.97	
Rated speed [RPM]	1760	1465	1470	
Slip [%]	2.22	2.33	2.00	
Rated torque [ft.lb]	29.8	26.9	26.8	
Locked rotor torque [%]	250	250	290	
Breakdown torque [%]	300	320	360	
Service factor	1.15	1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	27s (cold) 15s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²	60.0 dB(A)	57.0 dB(A)	57.0 dB(A)	
Efficiency (%)	25%	90.2	89.3	
	50%	91.0	89.4	
	75%	91.0	90.5	
	100%	91.7	90.3	
Power Factor	25%	0.41	0.34	
	50%	0.67	0.59	
	75%	0.78	0.73	
	100%	0.84	0.80	
Bearing type	: <u>Drive end</u> 6209 ZZ <u>Non drive end</u> 6206 ZZ	Foundation loads		
Sealing	: V'Ring Without Bearing Seal	Max. traction	: 474 lb	
		Max. compression	: 615 lb	
Lubrication interval	: -			
Lubricant amount	: -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 27.0A SF 1.00 SFA 27.0A				
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



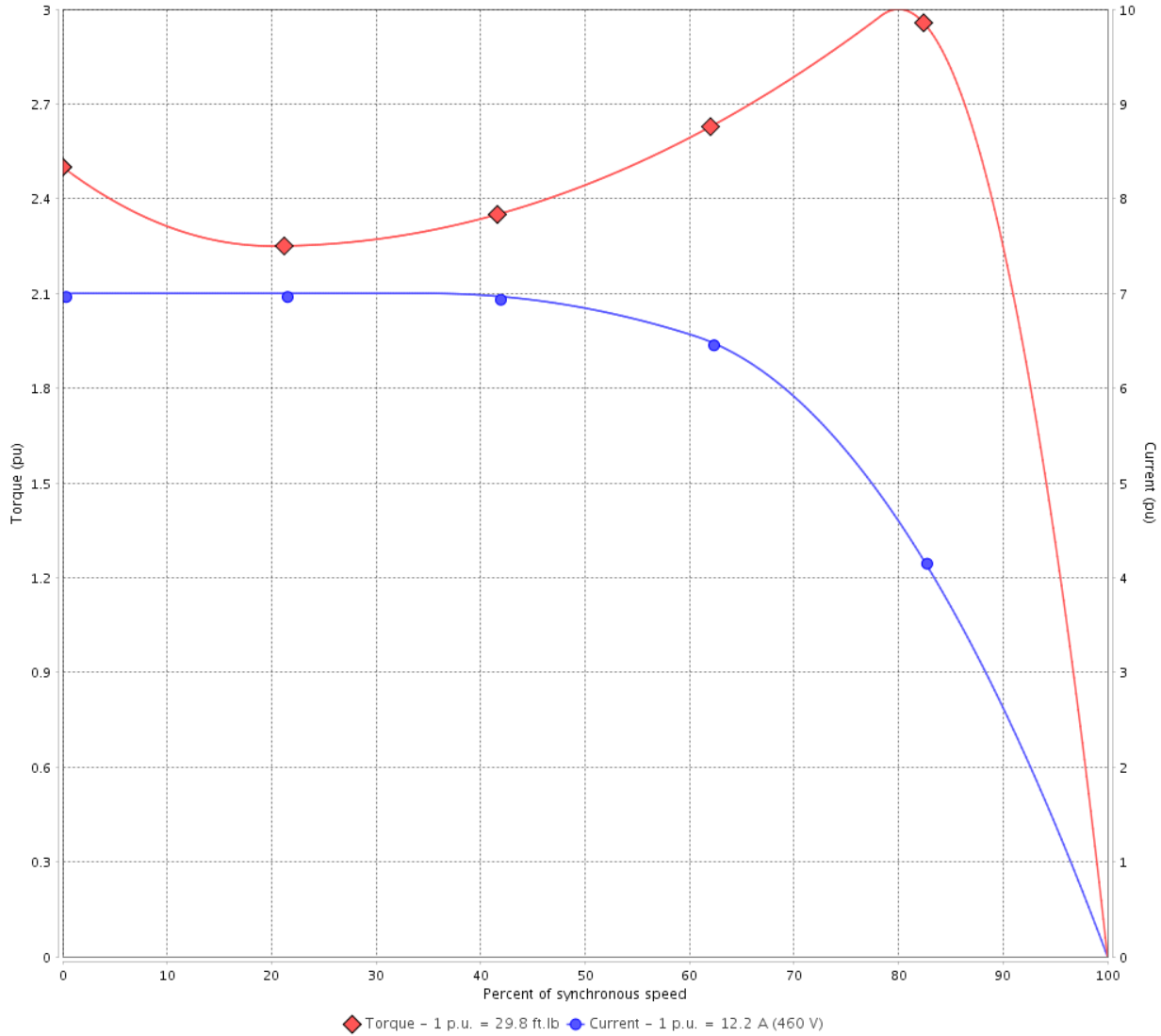
Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 13180570

Catalog # : 01018ET3E215JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current	: 24.4/12.2 A	Moment of inertia (J)	: 1.07 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 29.8 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Locked rotor time : 27s (cold) 15s (hot)

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

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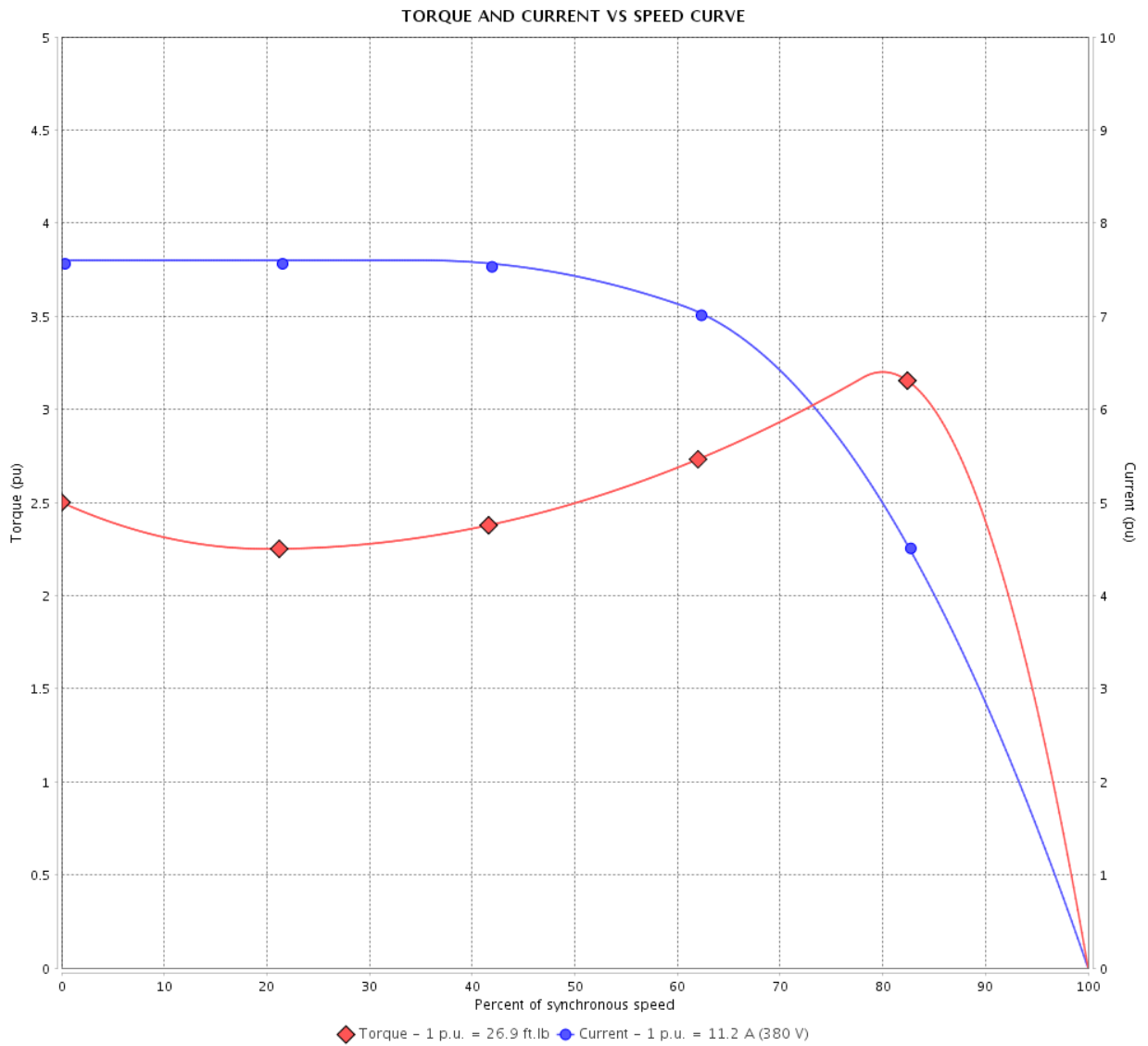
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 13180570

Catalog # : 01018ET3E215JM-S



Performance : 190/380 V 50 Hz 4P

Rated current : 22.4/11.2 A
 LRC : 7.6
 Rated torque : 26.9 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 320 %
 Rated speed : 1465 rpm

Moment of inertia (J) : 1.07 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 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			

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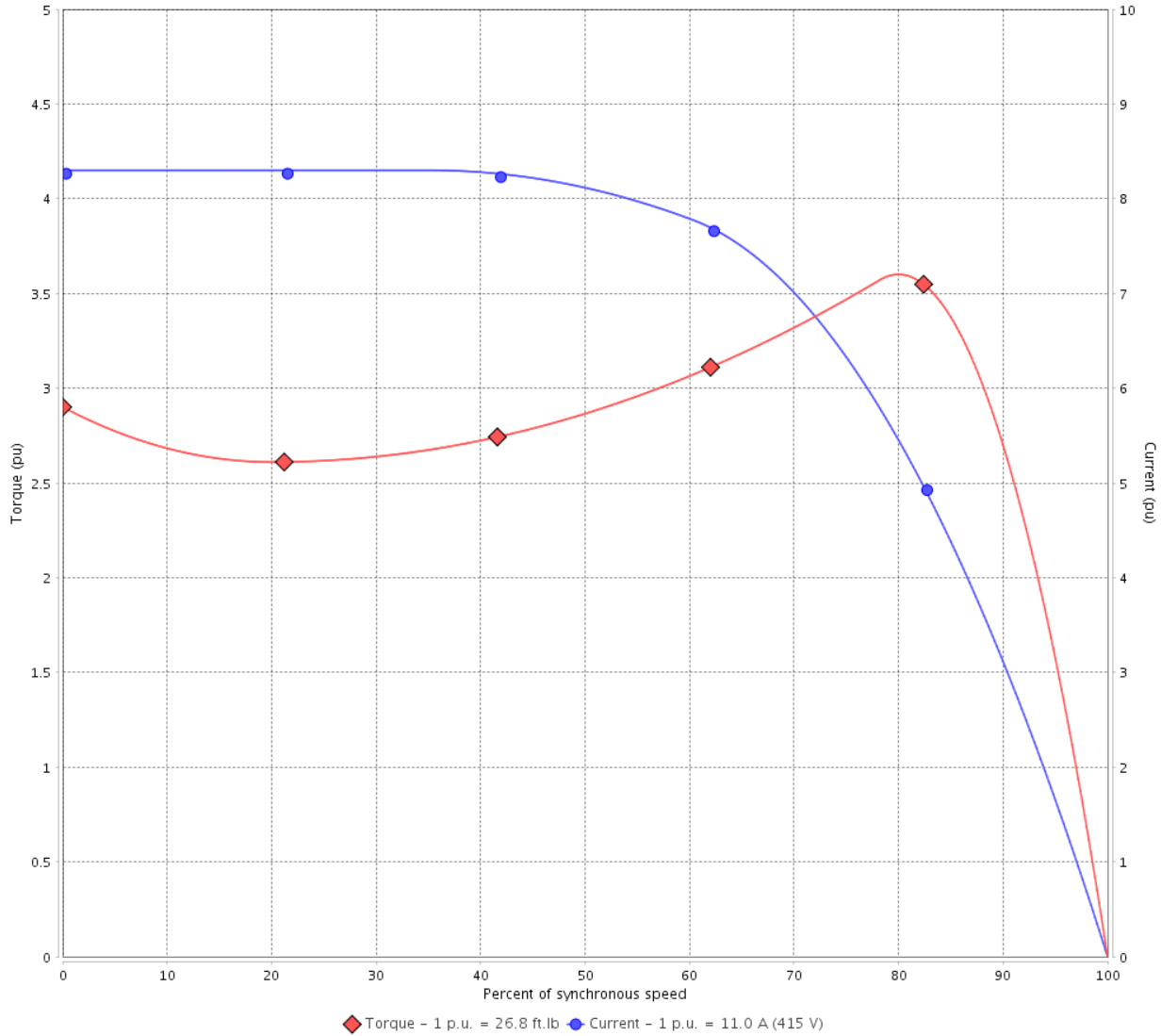
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current	: 20.8/11.0 A	Moment of inertia (J)	: 1.07 sq.ft.lb
LRC	: 8.3	Duty cycle	: Cont.(S1)
Rated torque	: 26.8 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.15
Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 1470 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

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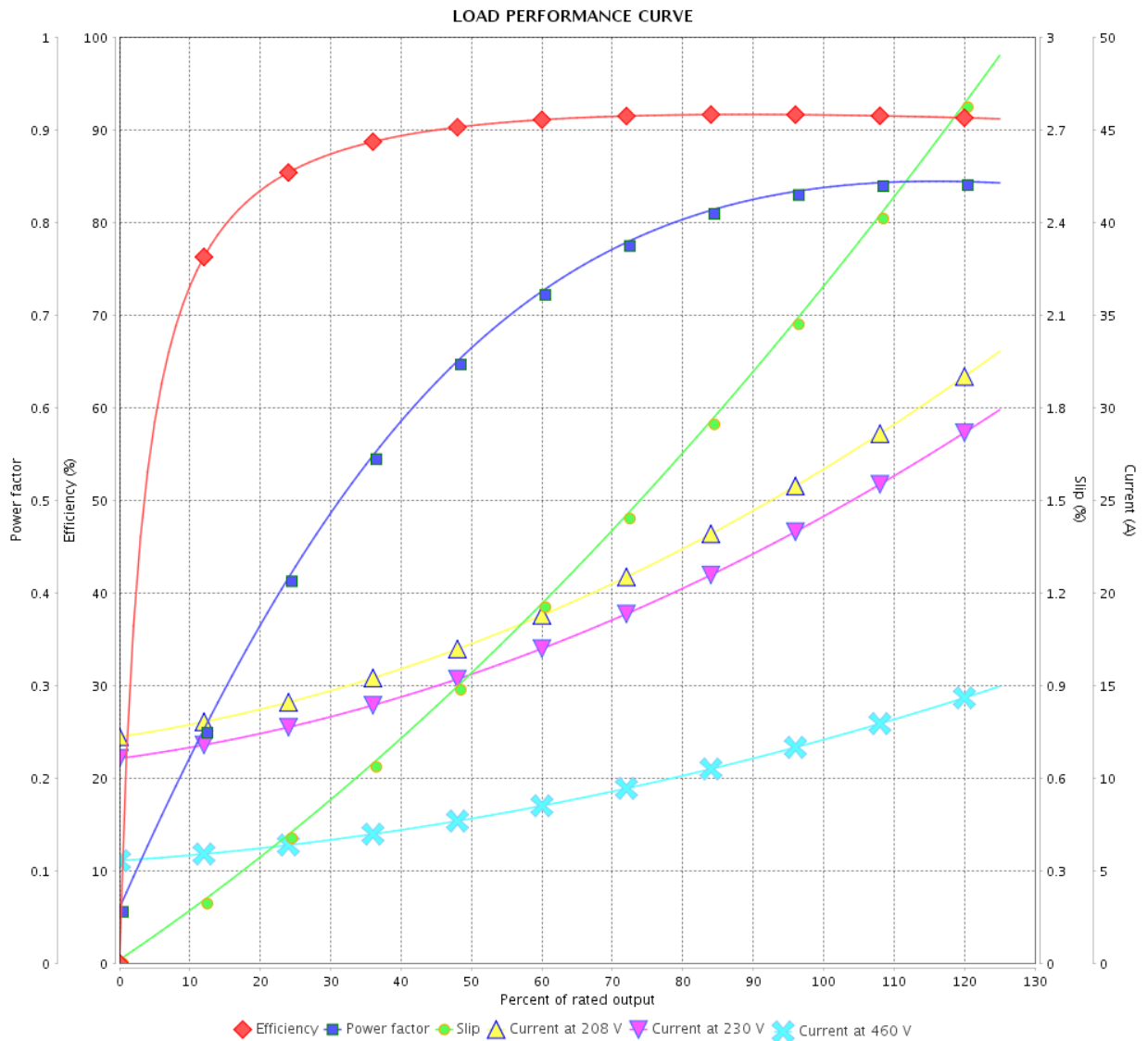


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 Breakdown torque : 300 %
 Rated speed : 1760 rpm

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 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
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Performed by			Page	Revision
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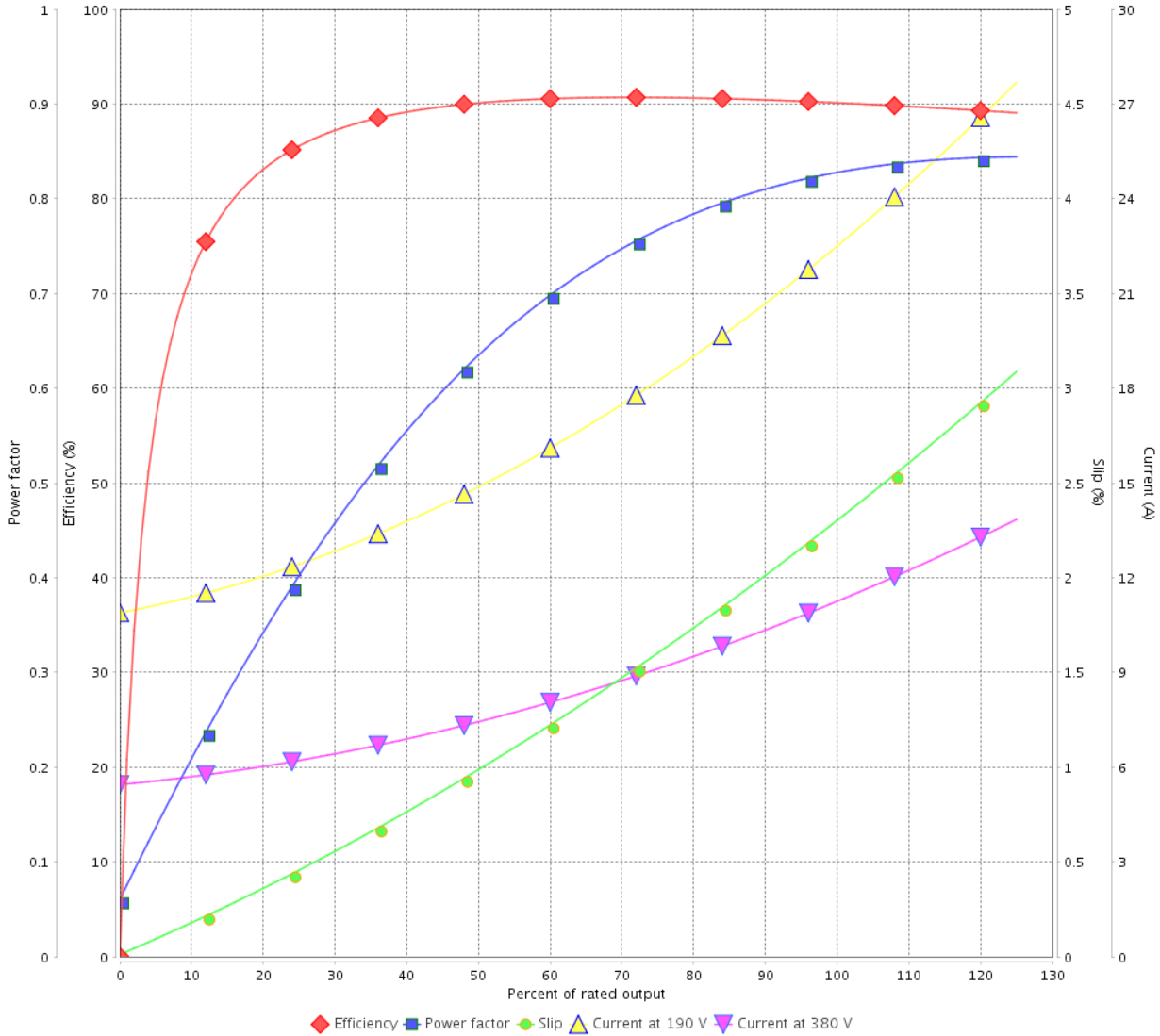
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by			6 / 16	
Date	12/04/2022			

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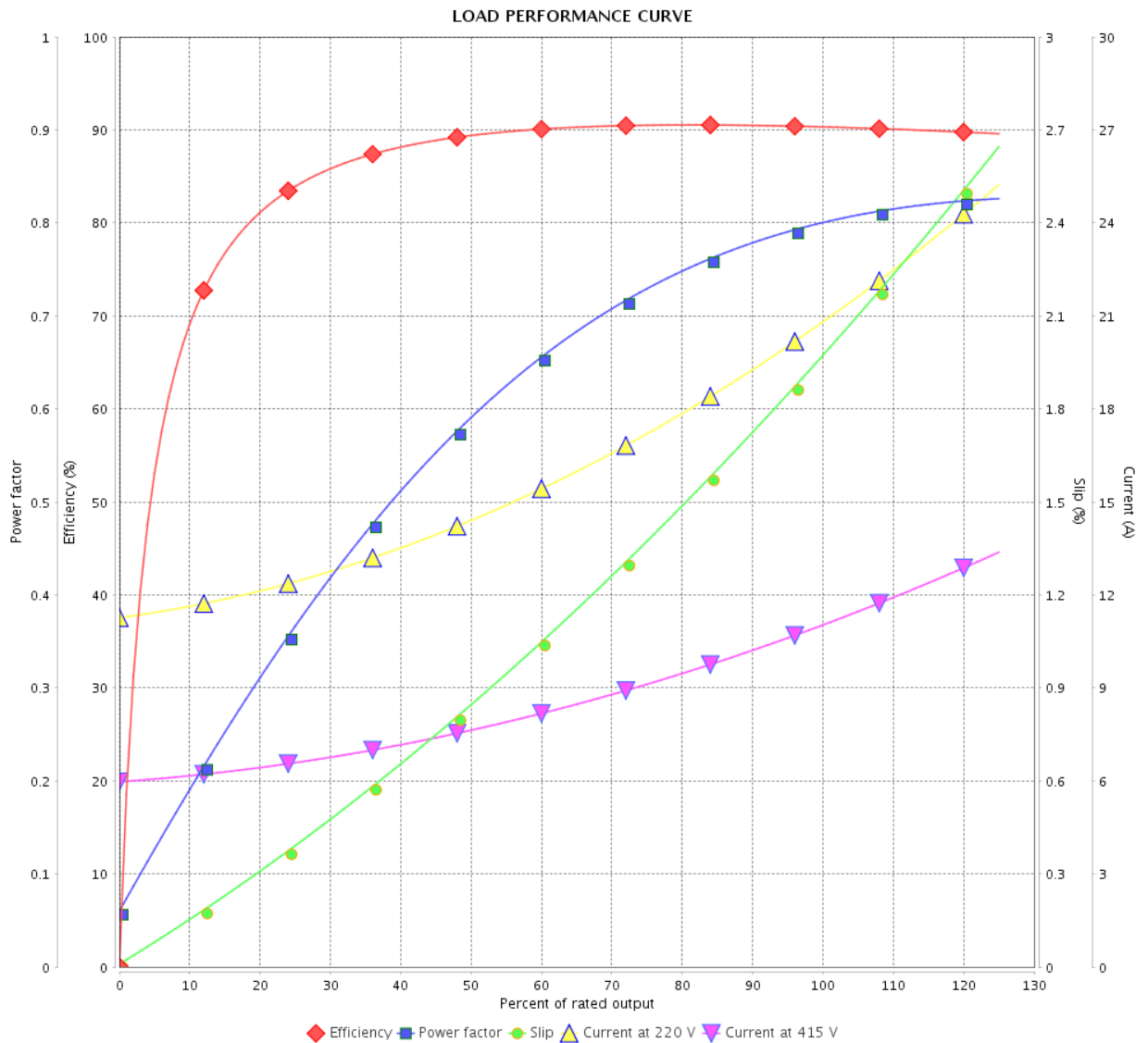


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 Rated speed : 1470 rpm

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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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Design : B

Heating constant

Cooling constant

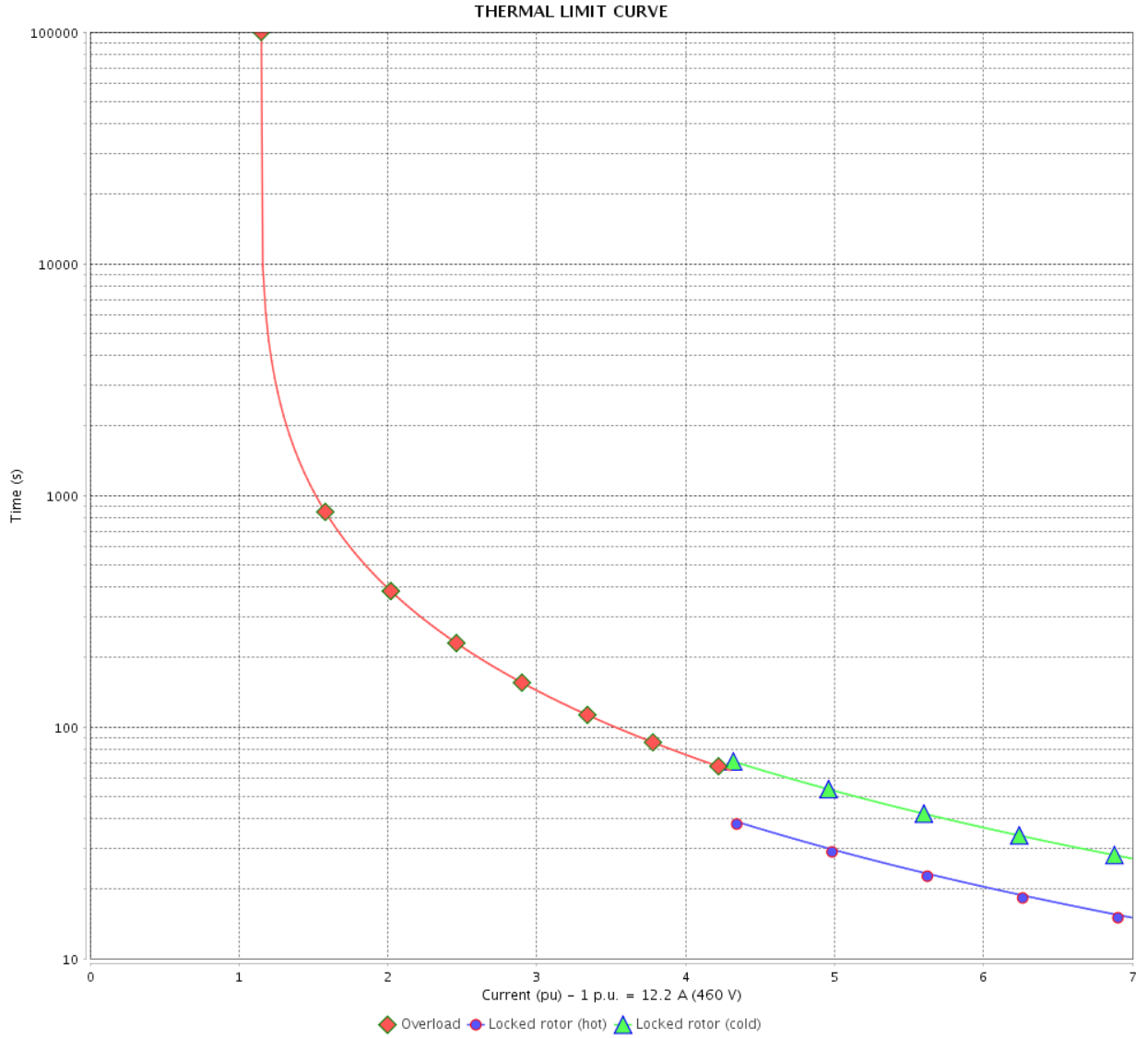
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Date	12/04/2022		8 / 16	

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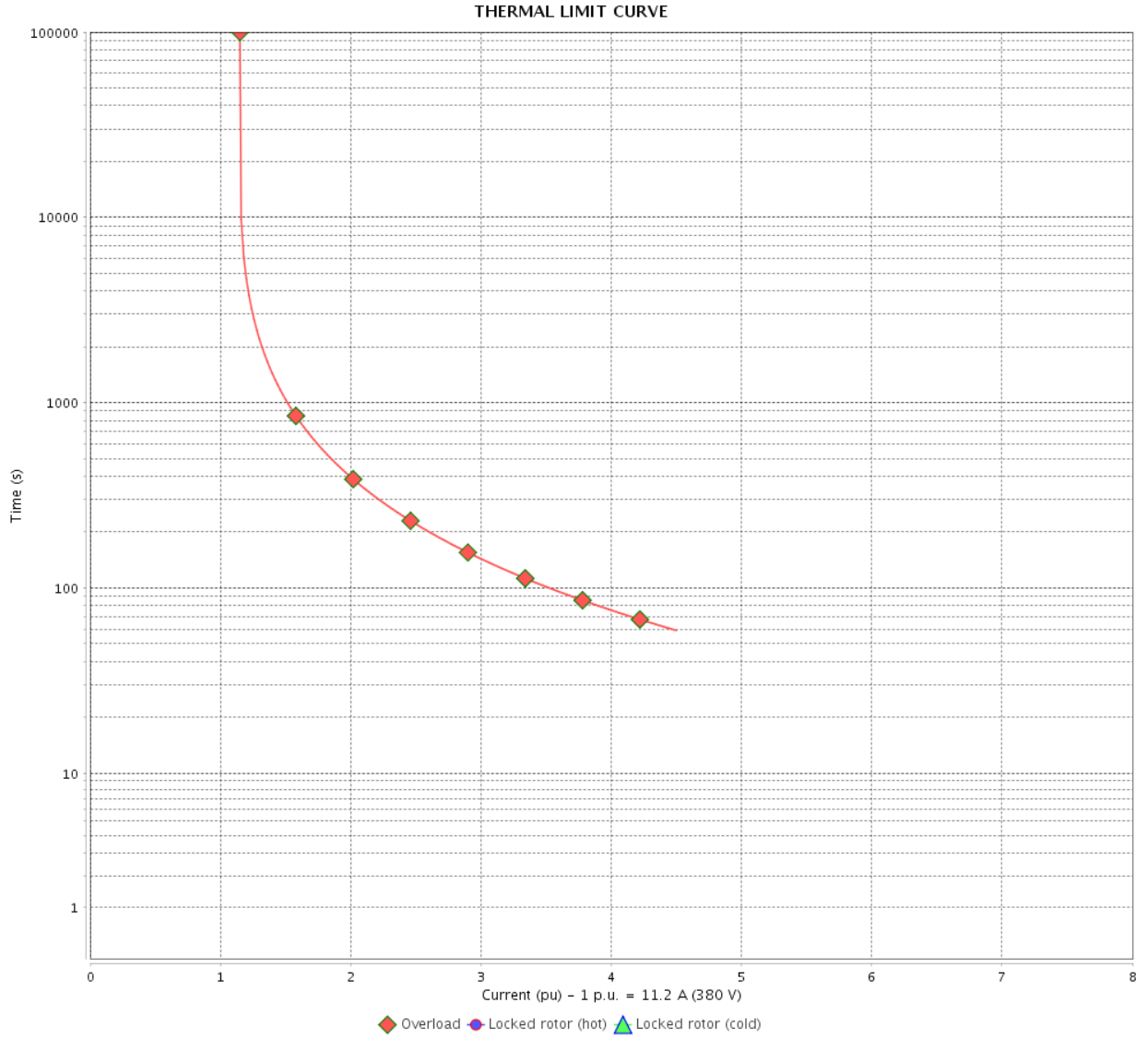
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 10 / 16	Revision
Checked by				
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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		11 / 16		
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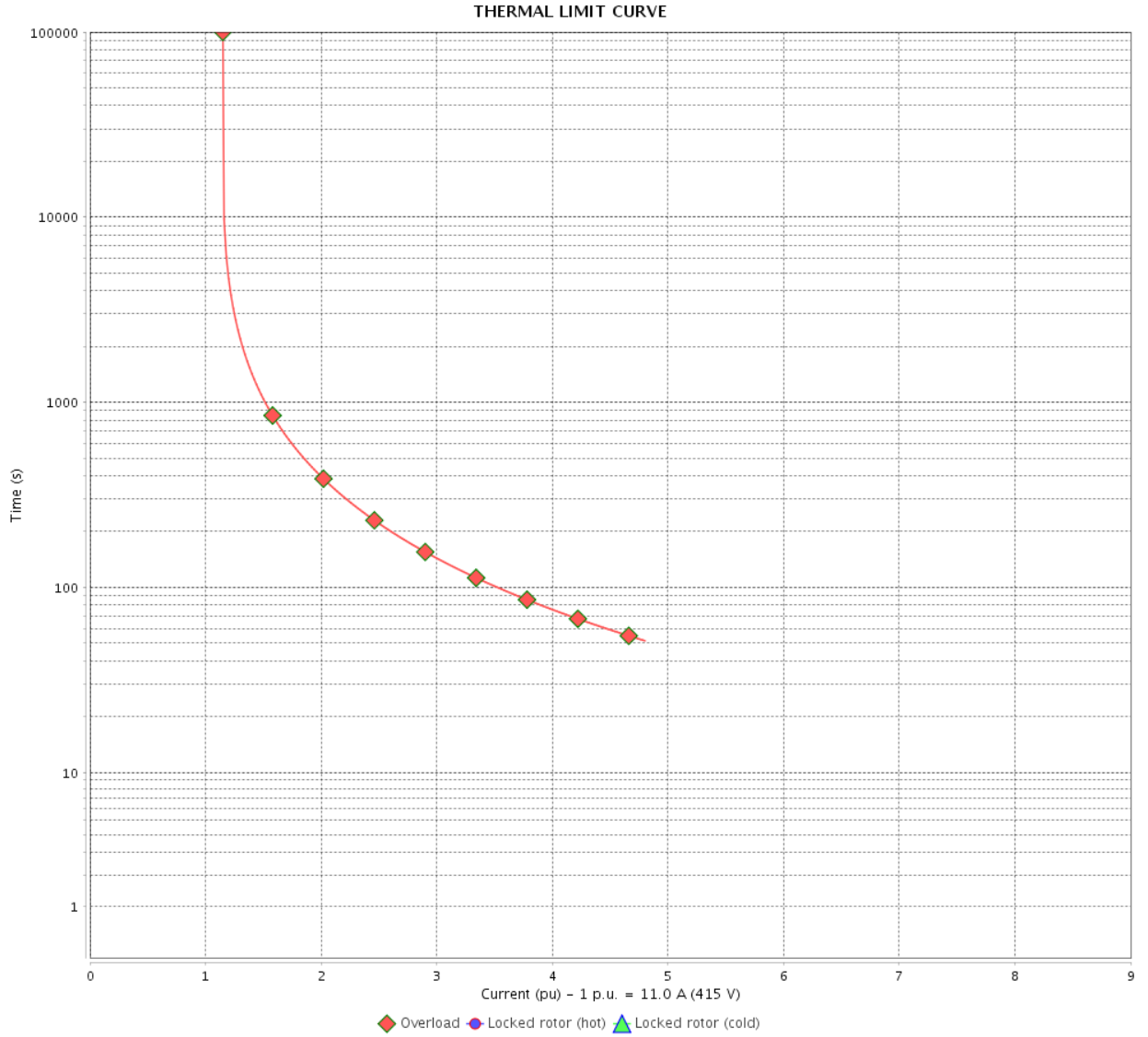
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 12 / 16	Revision
Checked by				
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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		13 / 16		
Date		12/04/2022		

VFD OPERATION CURVE

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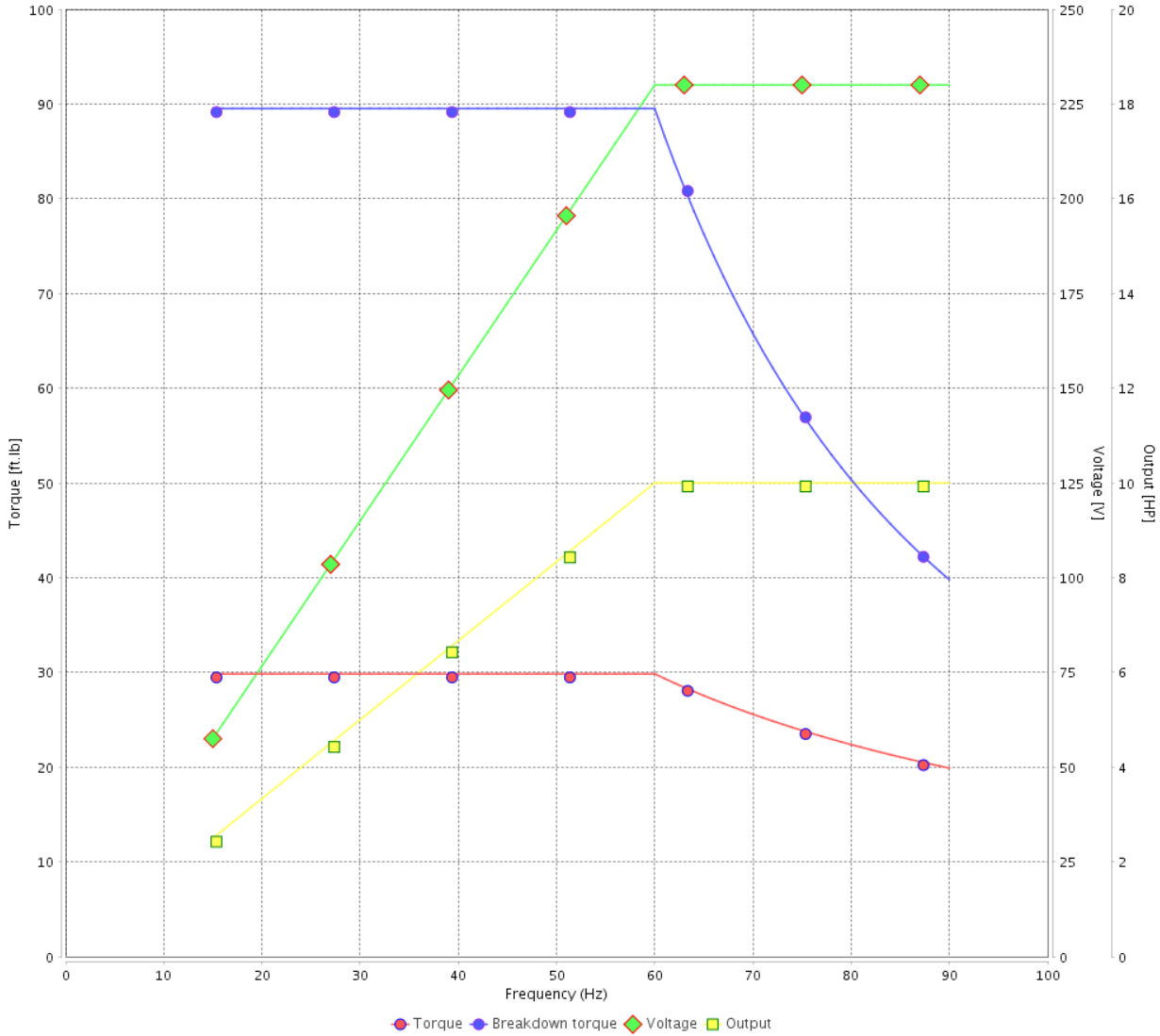
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 14 / 16	Revision
Checked by				
Date	12/04/2022			

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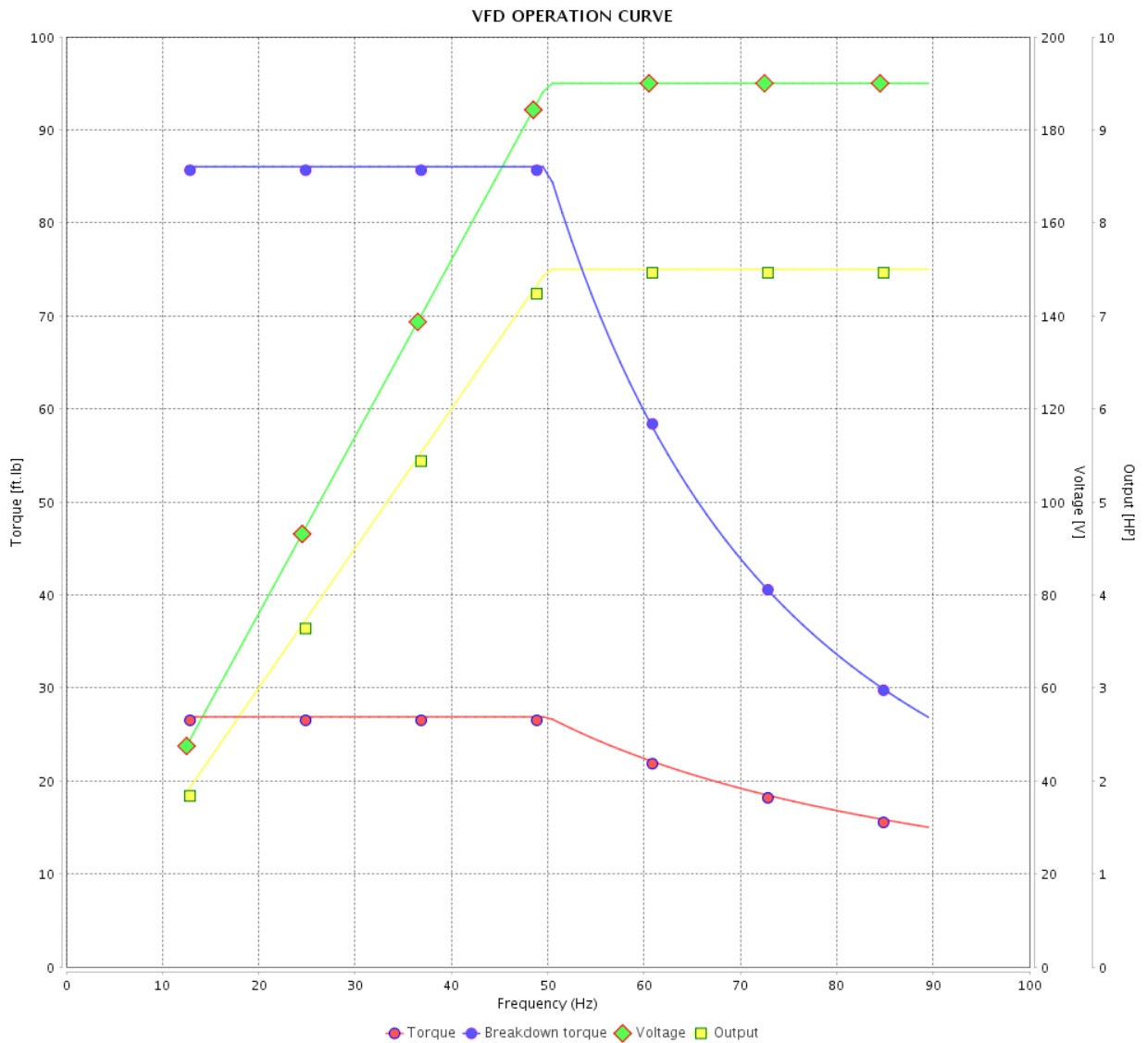


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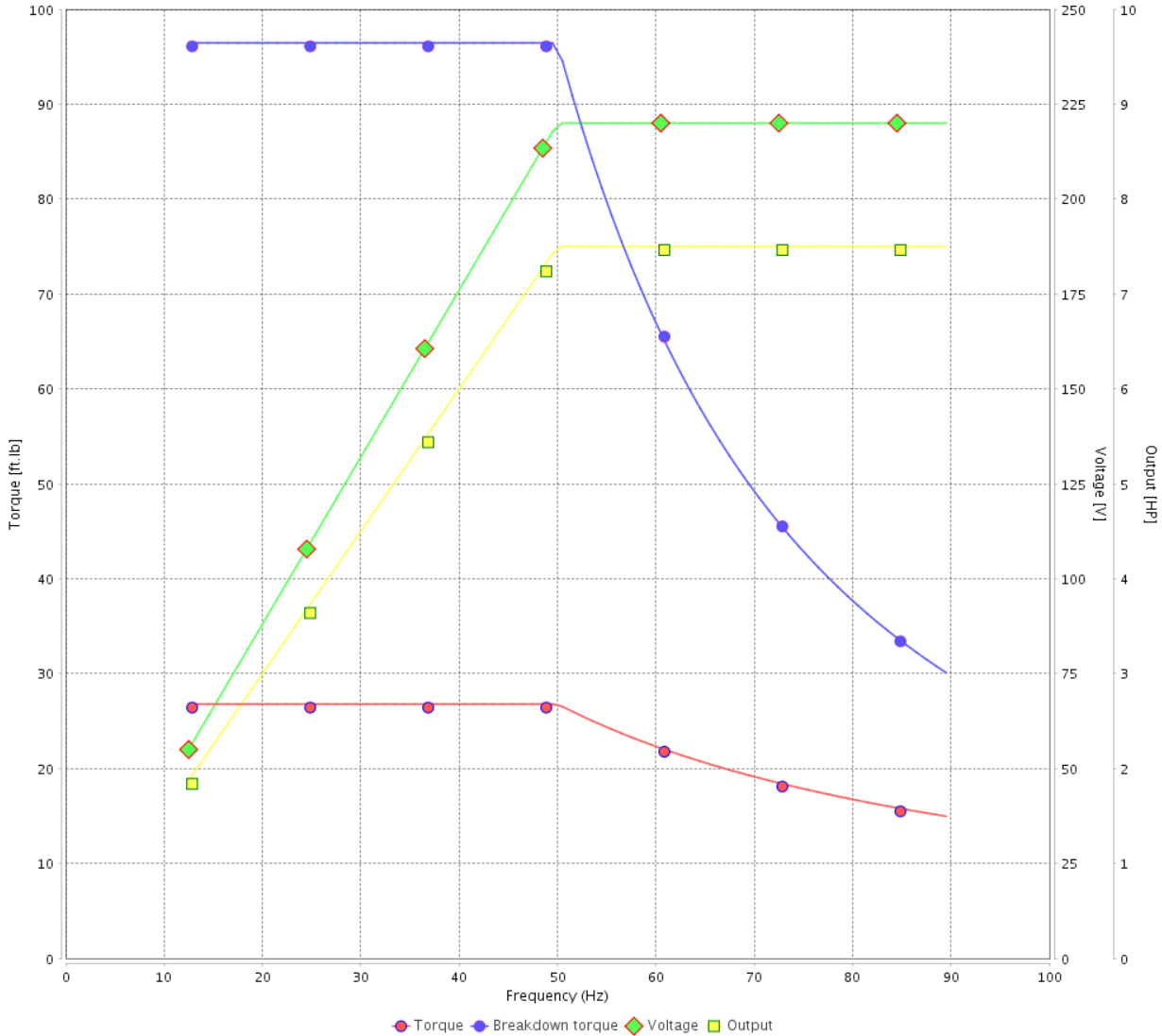
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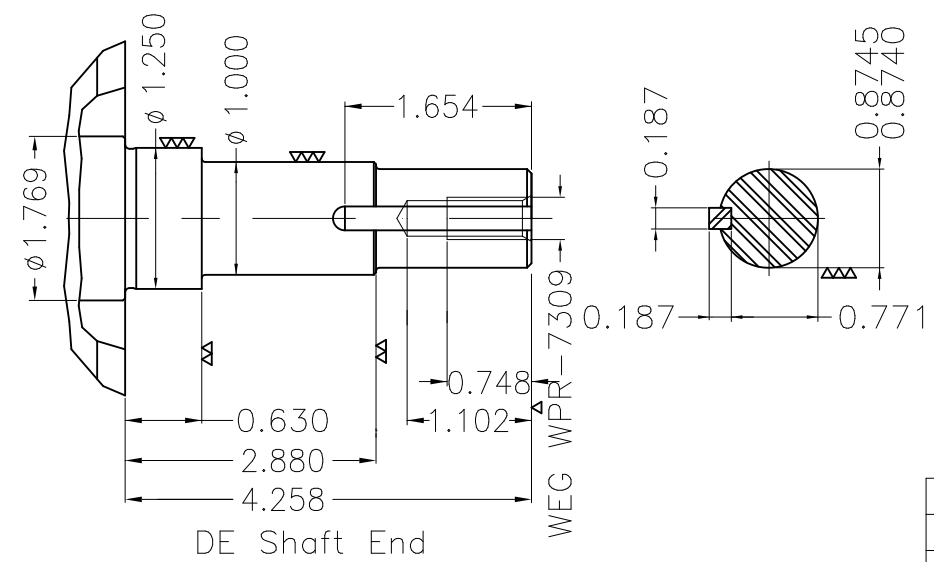
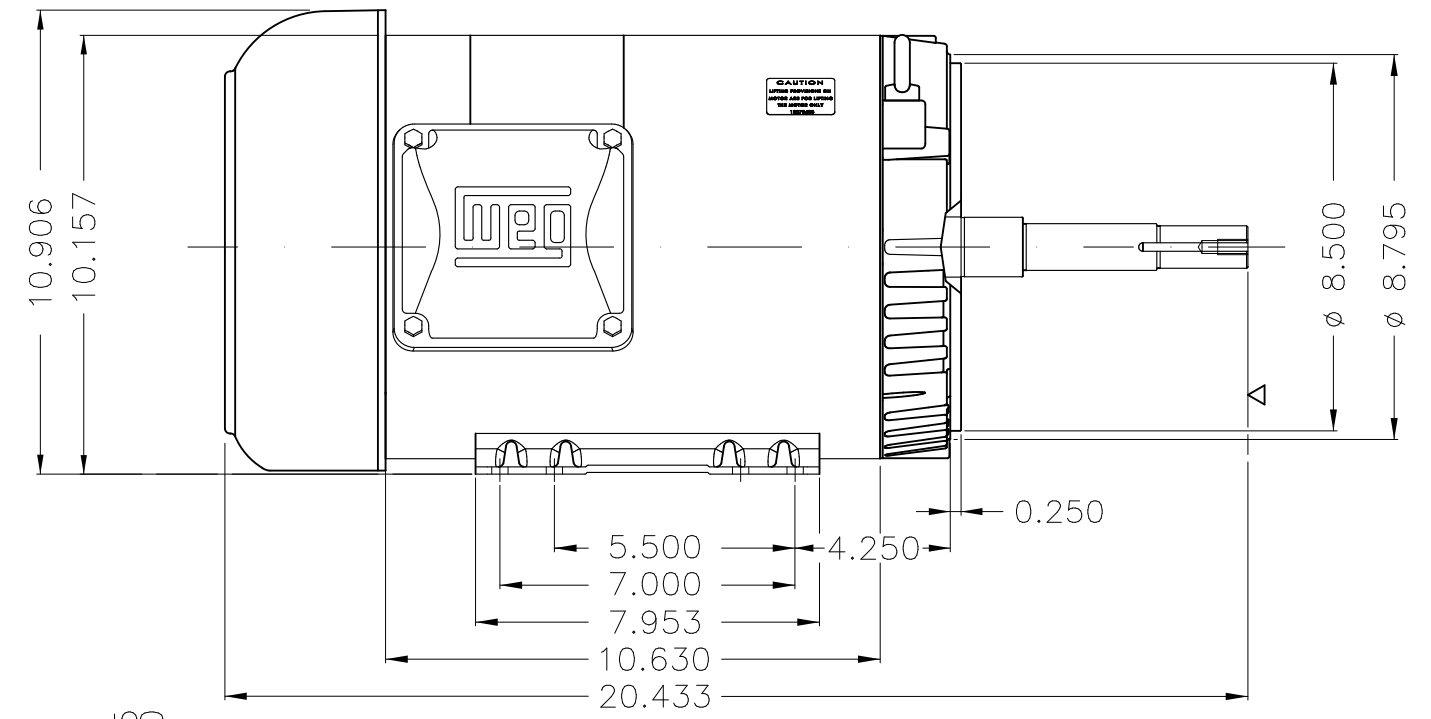
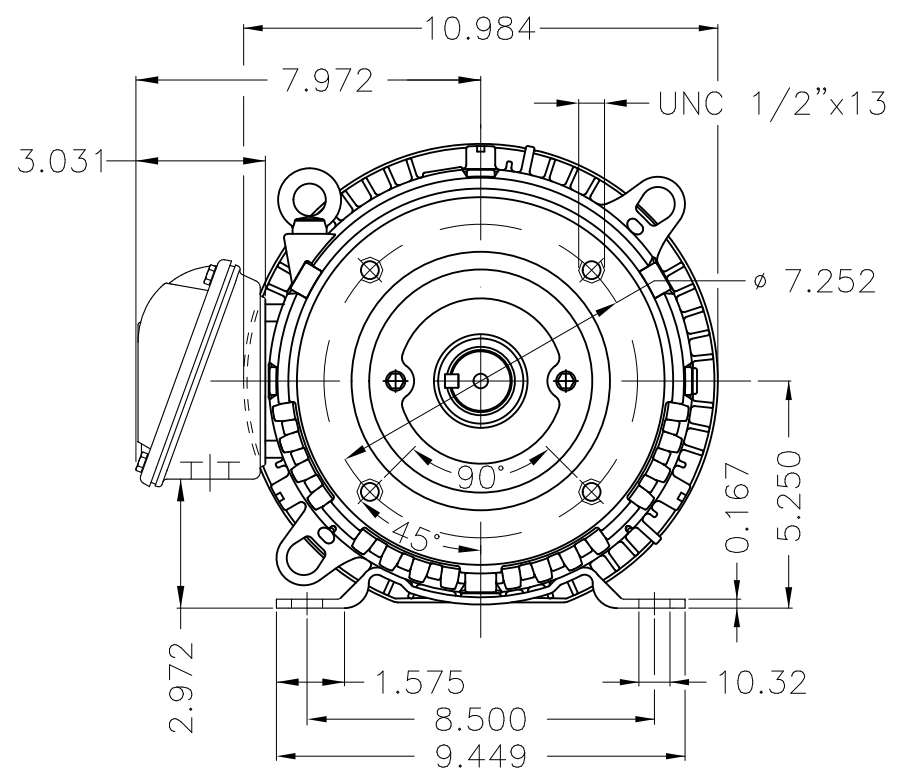
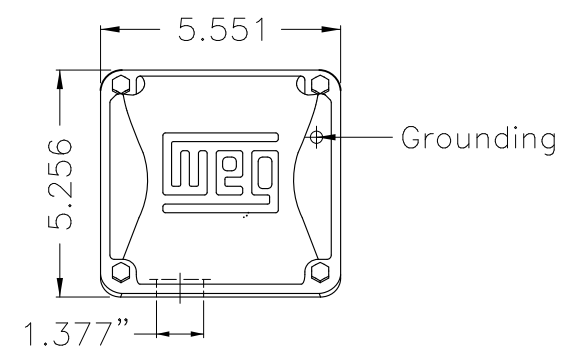
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 16 / 16	Revision
Checked by				
Date	12/04/2022			

1 2 3 4 5 6

A
B
C
D
E



EUNC 3/8" - 16 WEG WPR-7309

DE Shaft End

Color Munsell N 1 matte black									
Painting plan 207N									
Mounting F-1/B34R(D)									
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSE 1/2"							
CHECKED		FRAME 213/5JM IP55 TEFC							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

PREVIEW

WDD



10 HP 04 Poles 60 Hz



NEMA
Premium



MADE IN MEXICO

MAT: 13180570 CC029A
W01.TE0IC0X0N
MODEL 01018ET3E215JM-S
20APR2022 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 10
FR 213/5JM		KW 7.5
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 24.4/12.2
INS CL F AT 80K	IP55	SFA 28.1/14.0
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE H	PF 0.84
USABLE @ 208V 27.0A		RPM 1760
SF1.00		NEMA NOM. EFF 91.7%

ALTERNATE RATING: 7.5HP 50Hz 190-220/380-415V SF1.15
22.4-20.6/11.2-10.9A 1465RPM EFF 90.1% (IE3) IEC 60034-1

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

DE 6209-ZZ ODE 6206-ZZ MOBIL POLYREX EM



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.

