

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :		
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	
Product code :	12676949	
Catalog # :	00536OT3E182JM-S	
Frame	: 182/4JM	
Insulation class	: F	
Duty cycle	: Cont.(S1)	
Ambient temperature	: -20°C to +40°C	
Altitude	: 1000 m.a.s.l.	
Design	: B	
Cooling method	: IC01 - ODP	
Mounting	: F-1	
Rotation ¹	: Both (CW and CCW)	
Starting method	: Direct On Line	
Approx. weight ²	: 62.9 lb	
Moment of inertia (J)	: 0.1386 sq.ft.lb	
Output [HP]	5	
Poles	2	
Frequency [Hz]	60	
Rated voltage [V]	230/460	
Rated current [A]	12.2/6.10	
L. R. Amperes [A]	92.7/46.4	
LRC [A]	7.6x(Code J)	
No load current [A]	5.15/2.58	
Rated speed [RPM]	3510	
Slip [%]	2.50	
Rated torque [ft.lb]	7.48	
Locked rotor torque [%]	190	
Breakdown torque [%]	300	
Service factor	1.15	
Temperature rise	80 K	
Locked rotor time	21s (cold) 12s (hot)	
Noise level ²	65.0 dB(A)	
Efficiency (%)	25%	85.2
	50%	85.5
	75%	86.5
	100%	86.5
Power Factor	25%	0.45
	50%	0.73
	75%	0.83
	100%	0.88
Bearing type	: <u>Drive end</u> 6207 ZZ <u>Non drive end</u> 6205 ZZ	
Sealing	: Without Without	
	: Bearing Seal Bearing Seal	
Lubrication interval	: - -	
Lubricant amount	: - -	
Lubricant type	: Mobil Polyrex EM	
Foundation loads	Max. traction : 113 lb	
	Max. compression : 176 lb	
Notes USABLE @208V 13.5A SF 1.00 SFA 13.5A		
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 by	Performed	
Checked by	Checked	
Date	Date	
13/04/2022		
Page	Revision	
1 /		

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



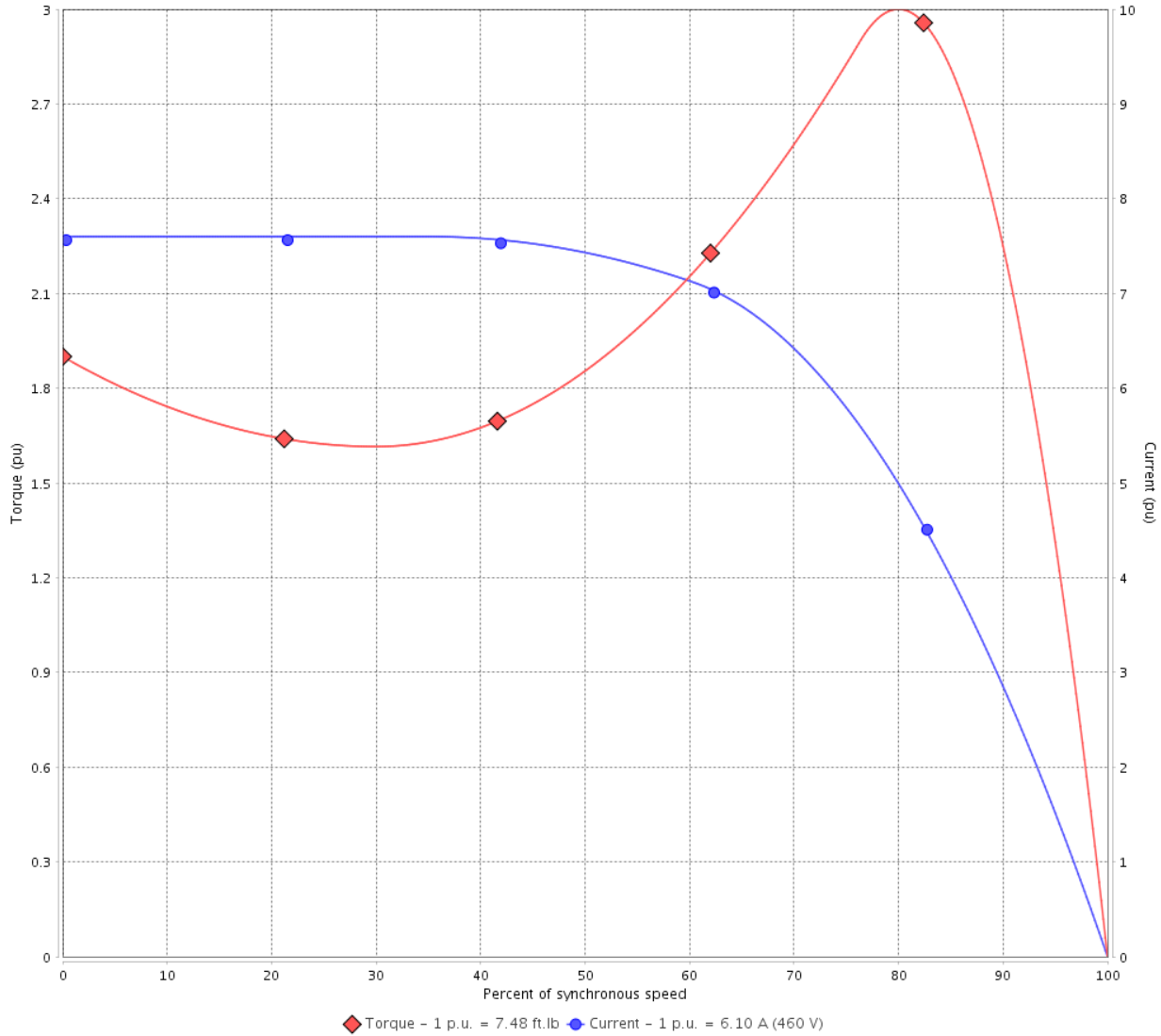
Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 12676949

Catalog # : 00536OT3E182JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current : 12.2/6.10 A
LRC : 7.6
Rated torque : 7.48 ft.lb
Locked rotor torque : 190 %
Breakdown torque : 300 %
Rated speed : 3510 rpm

Moment of inertia (J) : 0.1386 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

Locked rotor time : 21s (cold) 12s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 /	Revision
Checked by				
Date	13/04/2022			

TORQUE AND CURRENT VS SPEED CURVE



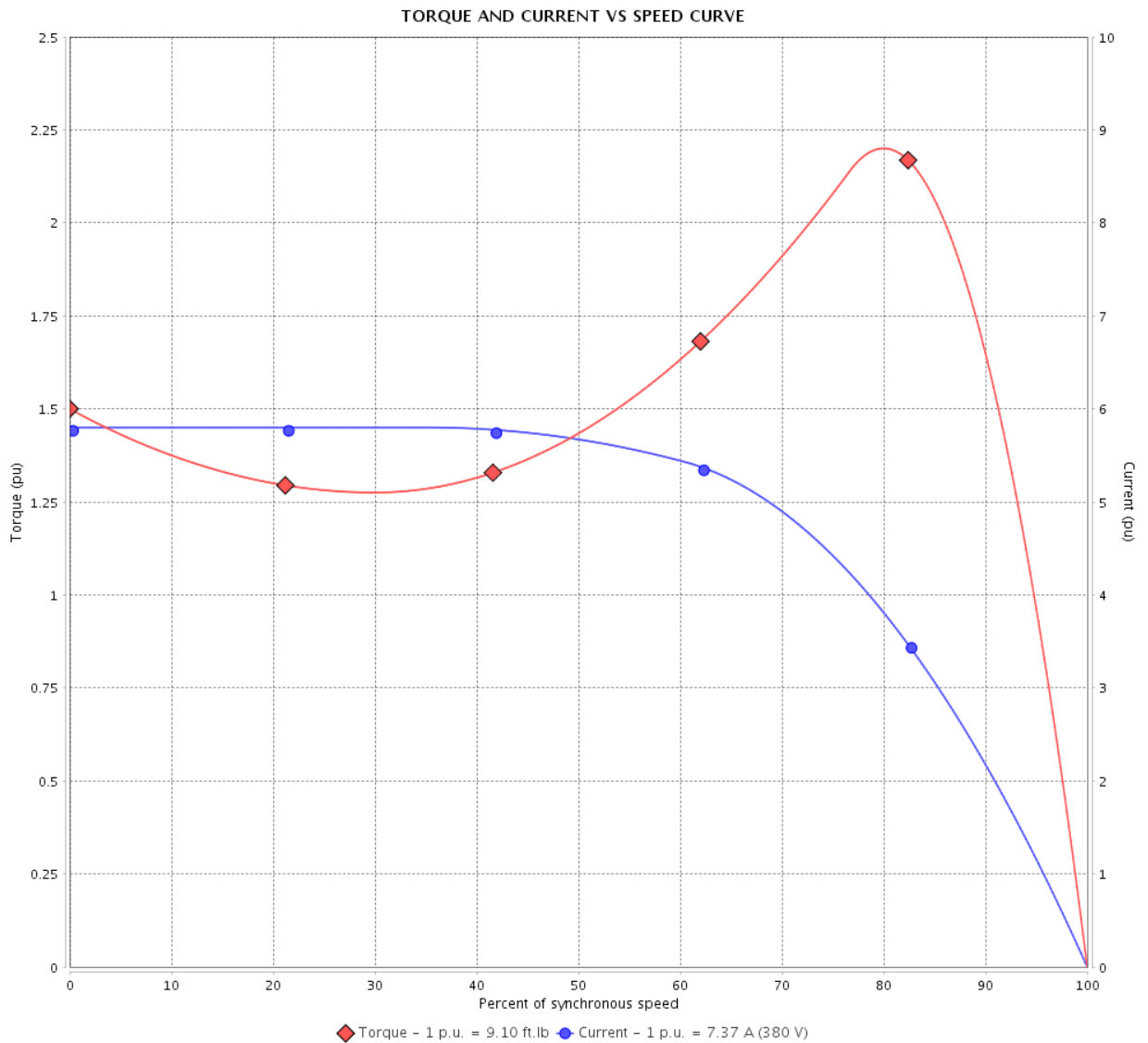
Three Phase Induction Motor - Squirrel Cage

Customer :

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Performance : 190/380 V 50 Hz 2P

Rated current : 14.7/7.37 A
 LRC : 5.8
 Rated torque : 9.10 ft.lb
 Locked rotor torque : 150 %
 Breakdown torque : 220 %
 Rated speed : 2885 rpm

Moment of inertia (J) : 0.1386 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 /	Revision
Checked by				
Date	13/04/2022			

TORQUE AND CURRENT VS SPEED CURVE

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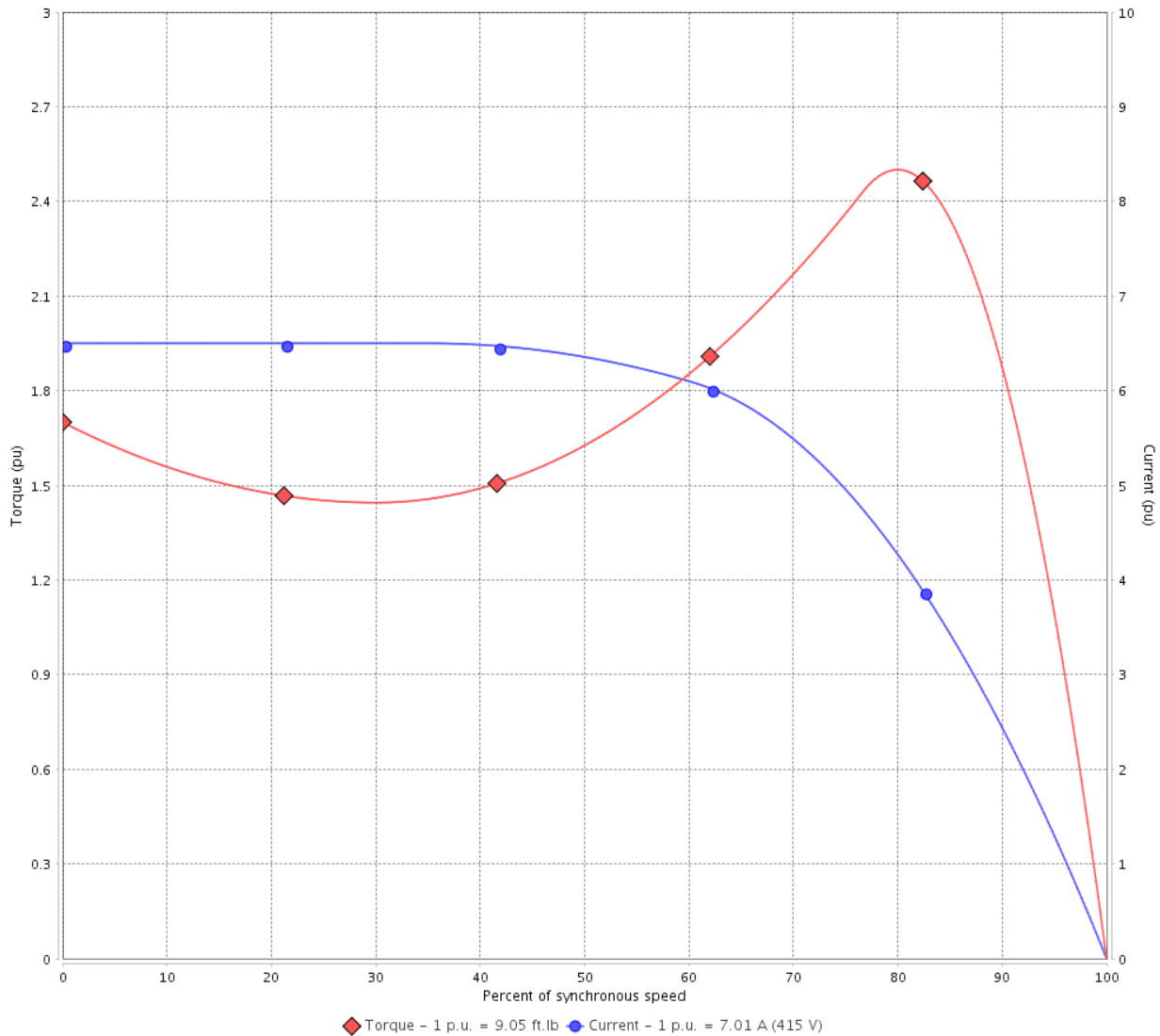
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current : 13.2/7.01 A
 LRC : 6.5
 Rated torque : 9.05 ft.lb
 Locked rotor torque : 170 %
 Breakdown torque : 250 %
 Rated speed : 2900 rpm

Moment of inertia (J) : 0.1386 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 /	Revision
Checked by				
Date	13/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

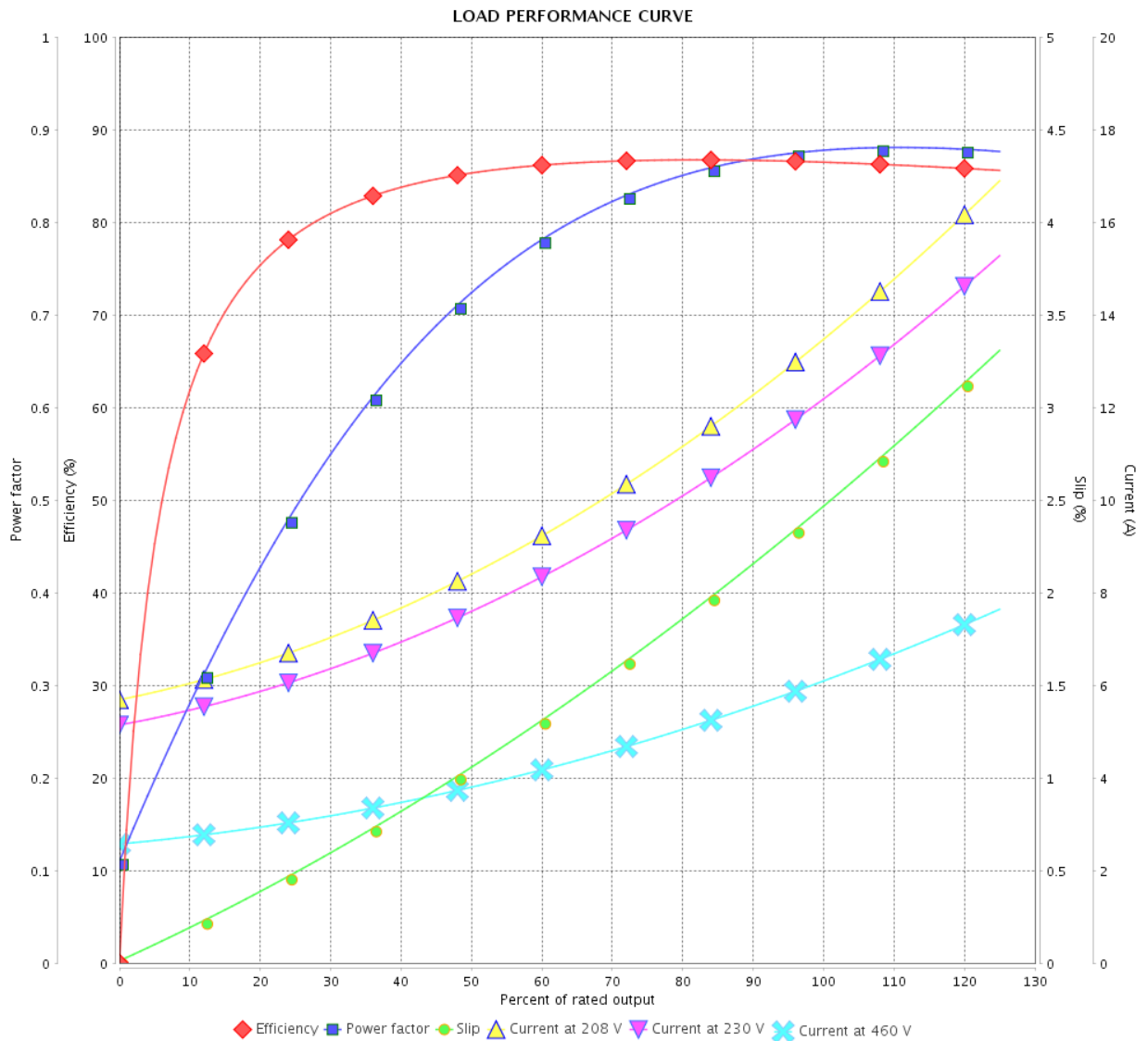


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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				
			5 /	

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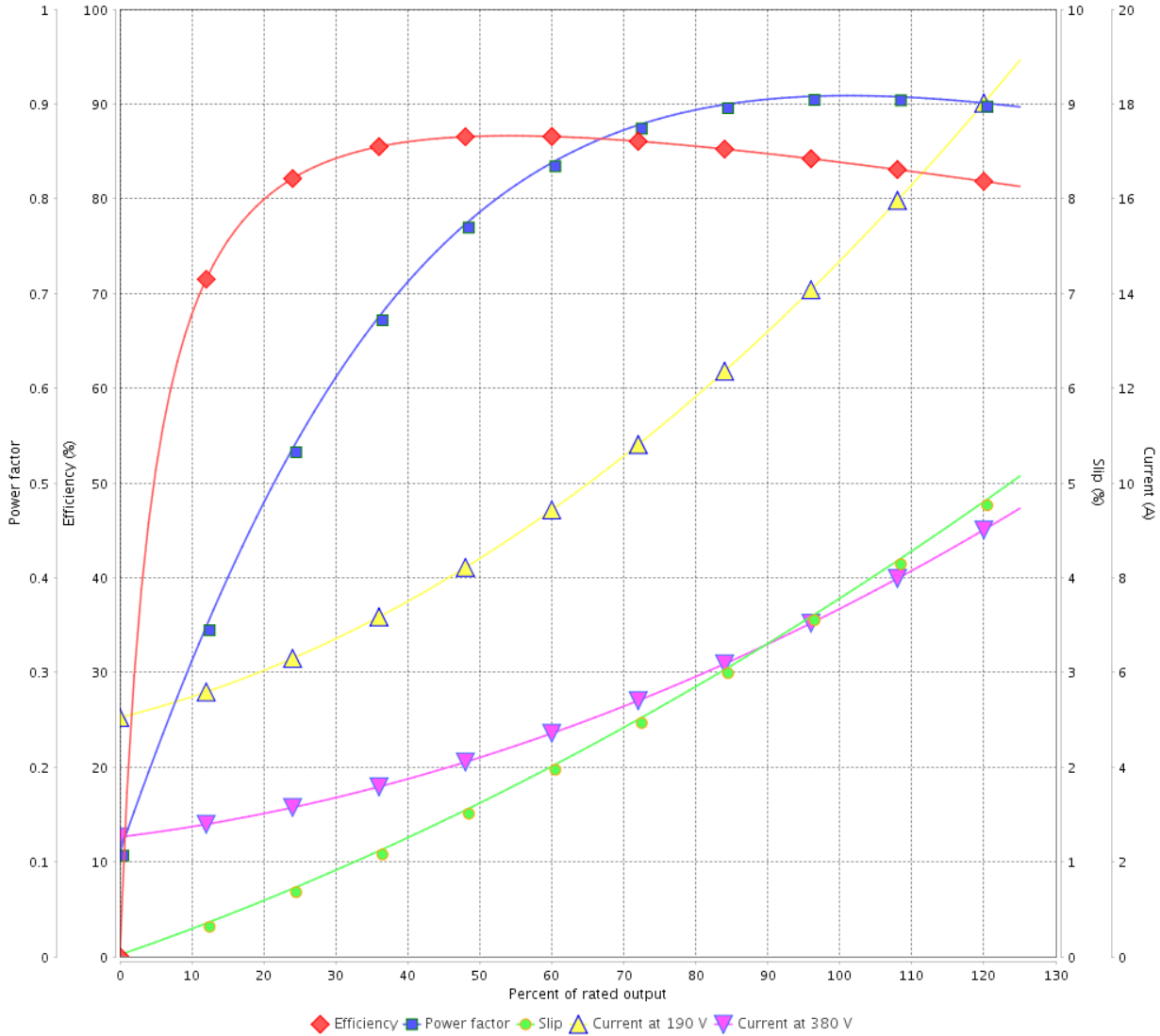
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 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				
			6 /	

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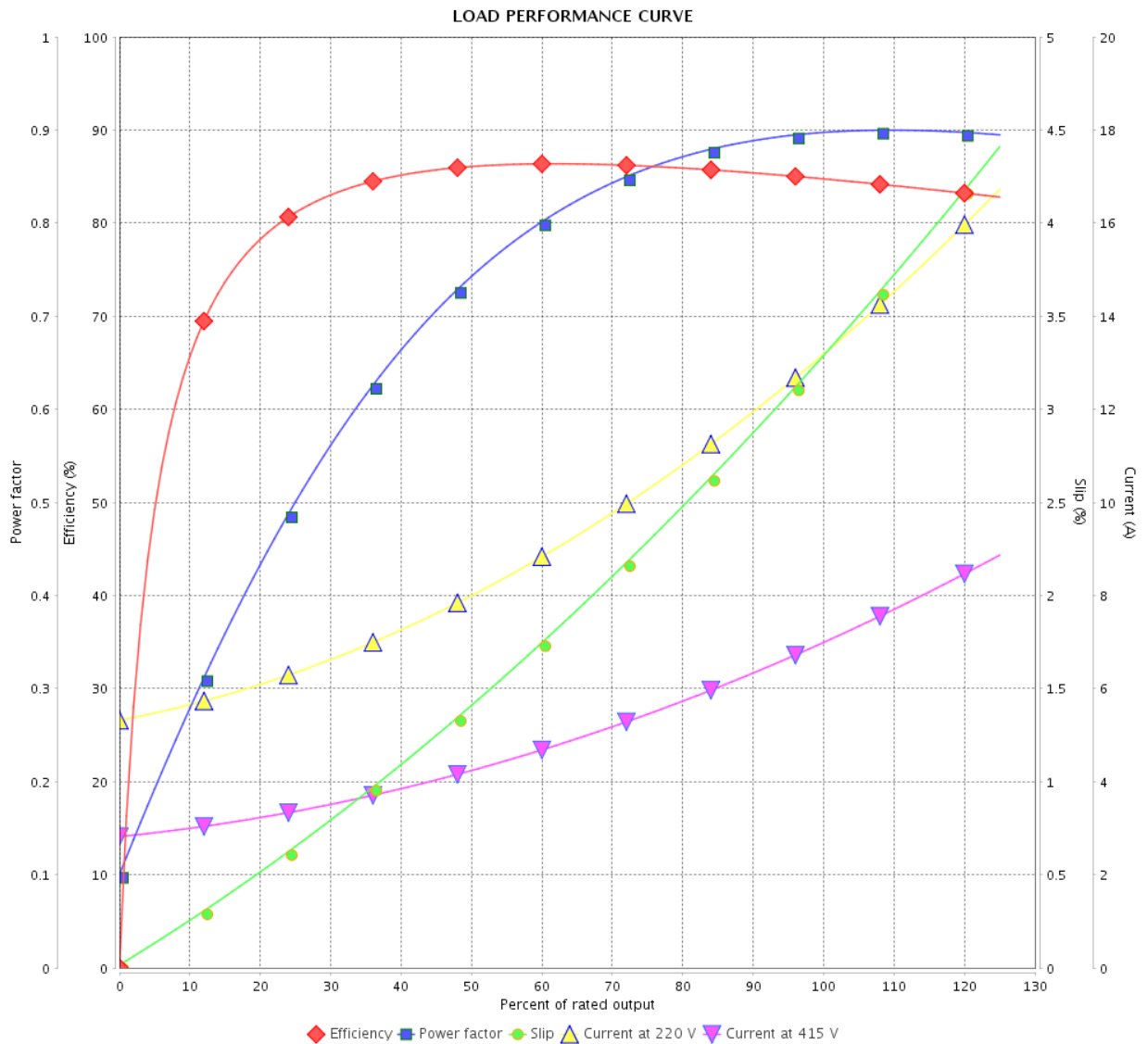


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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		7 /		
Date	13/04/2022			

THERMAL LIMIT CURVE



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Design : B

Heating constant

Cooling constant

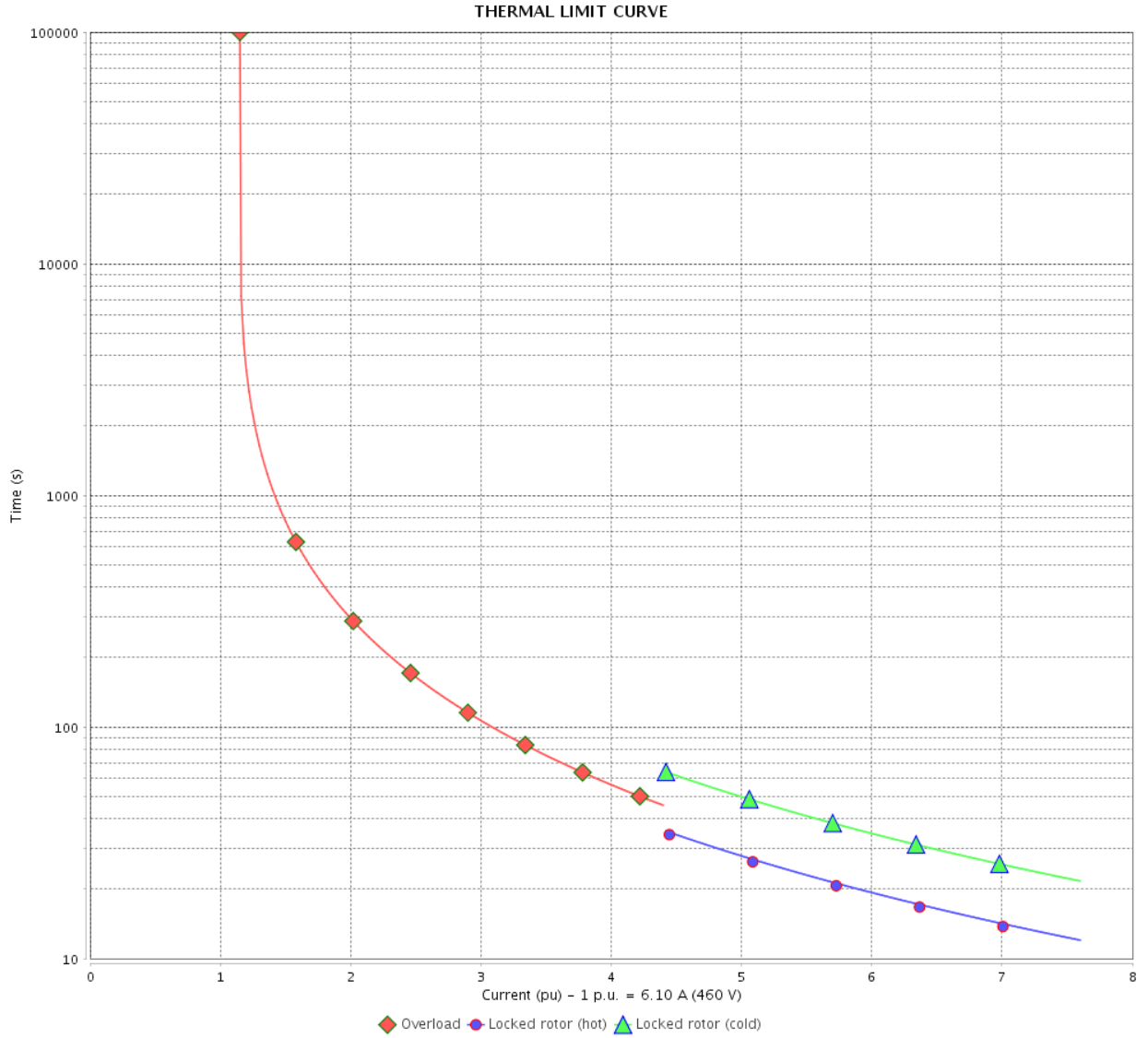
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		8 /	

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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		9 /		
Date		13/04/2022		

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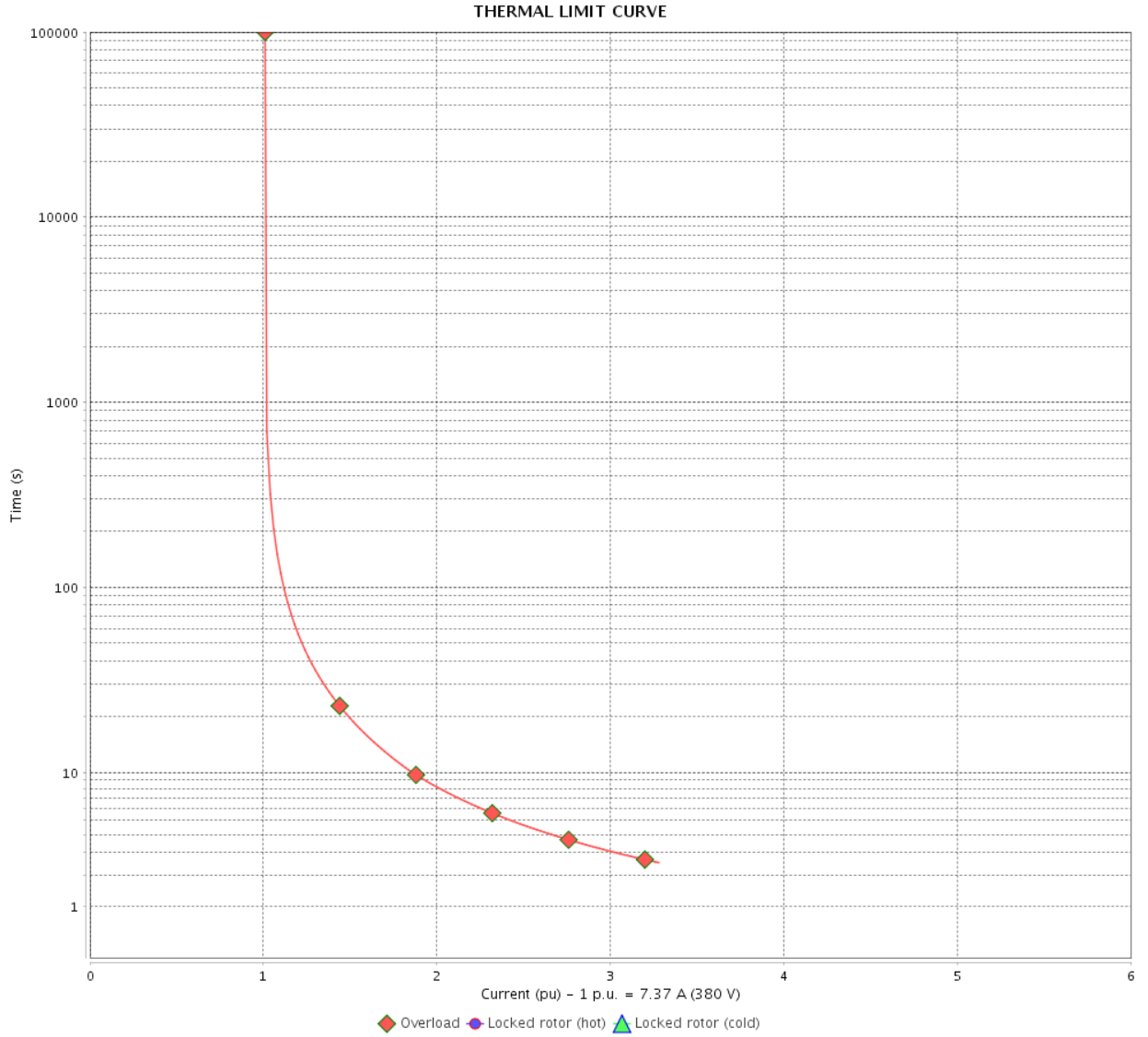
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		10 /	

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

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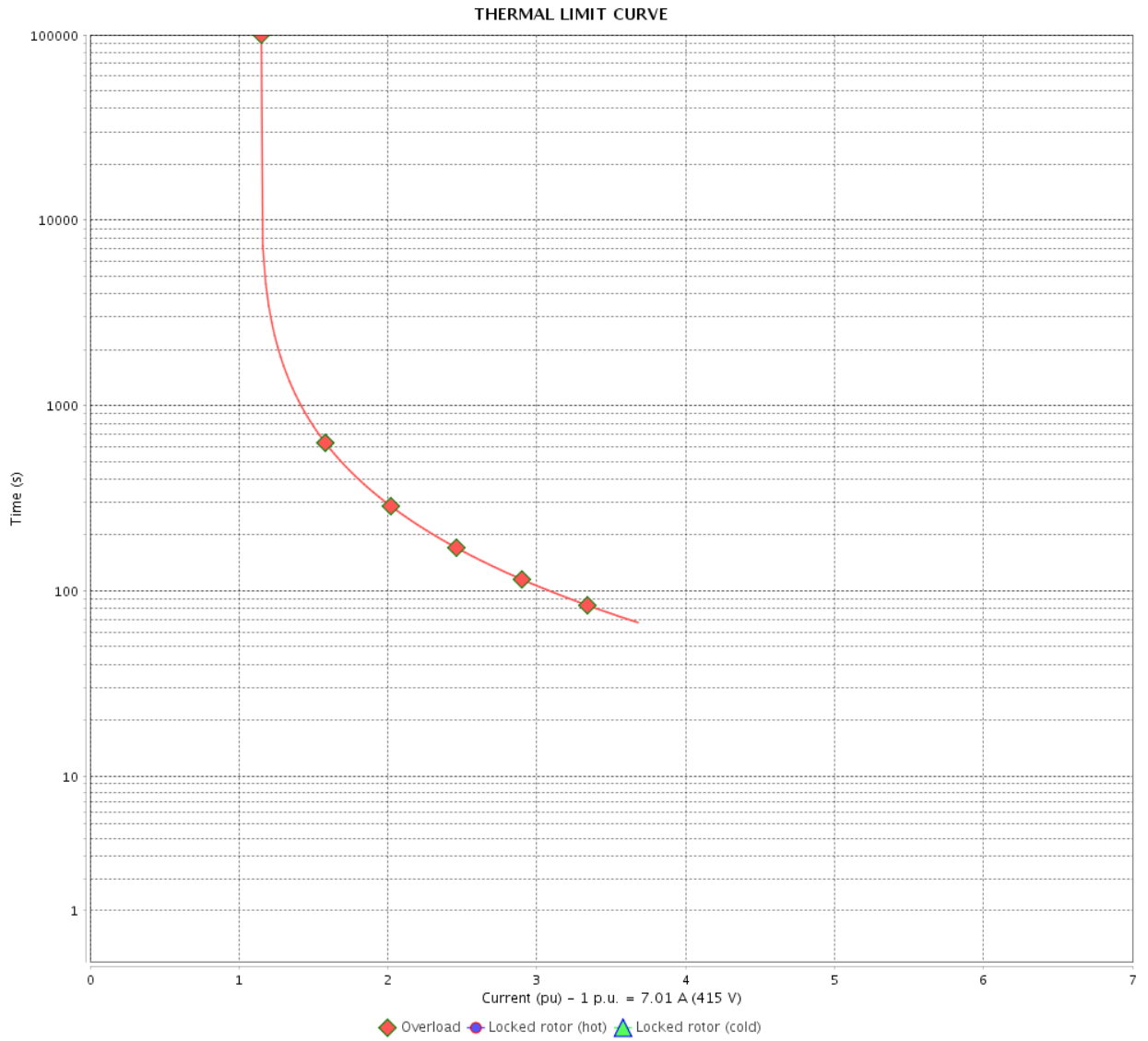
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	13/04/2022		12 /	

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

VFD OPERATION CURVE

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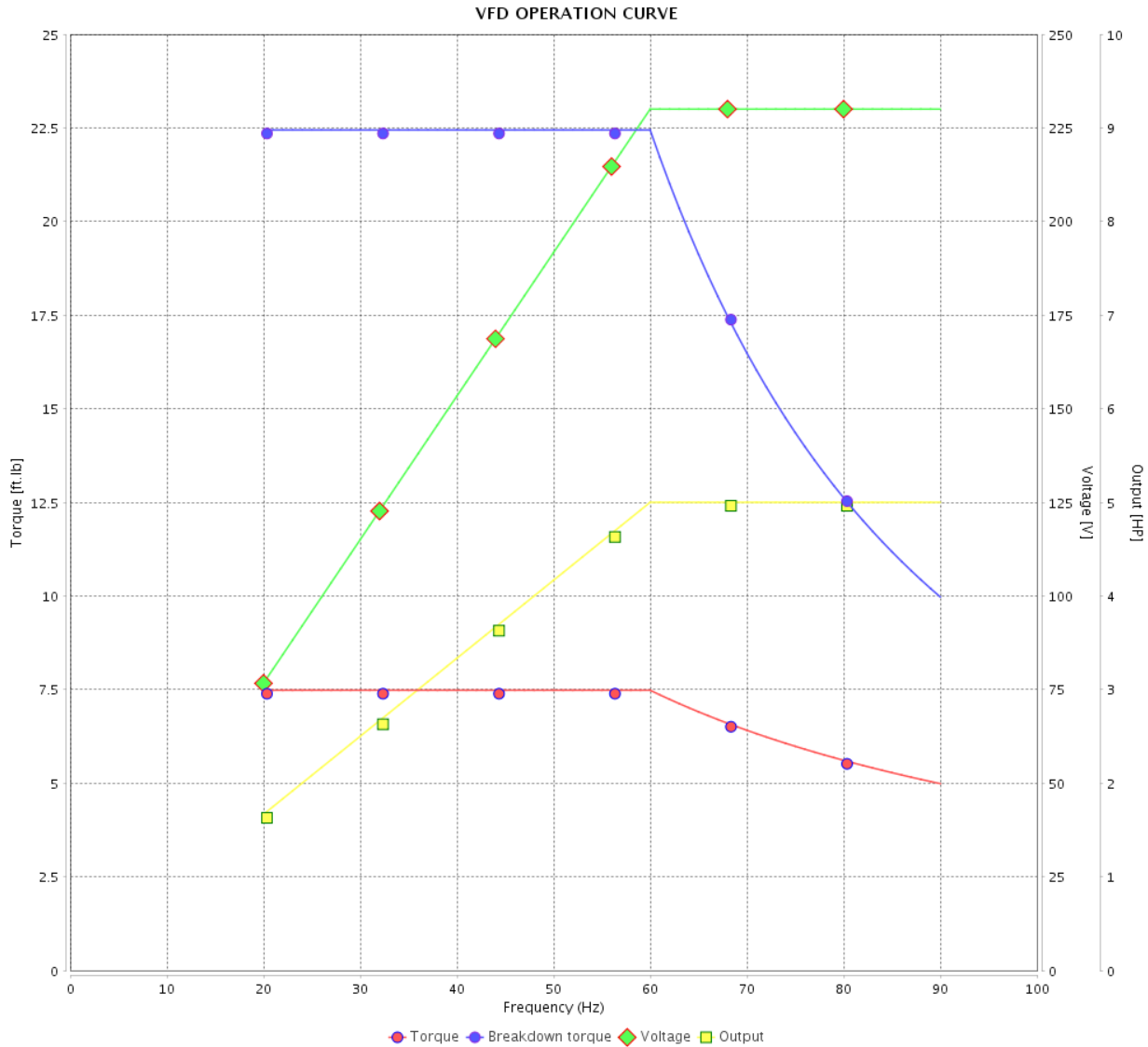


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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				
		14 /		

1 2 3 4 5 6

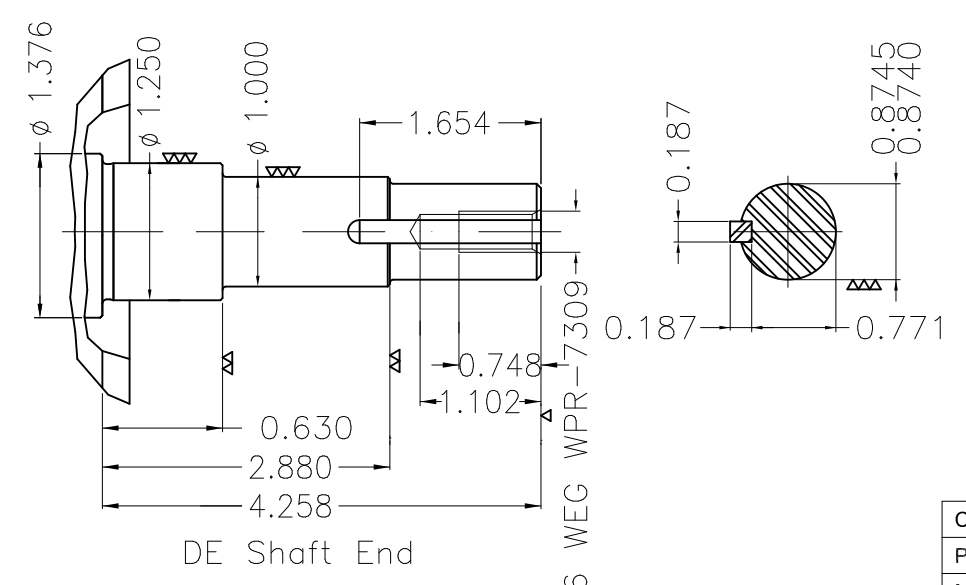
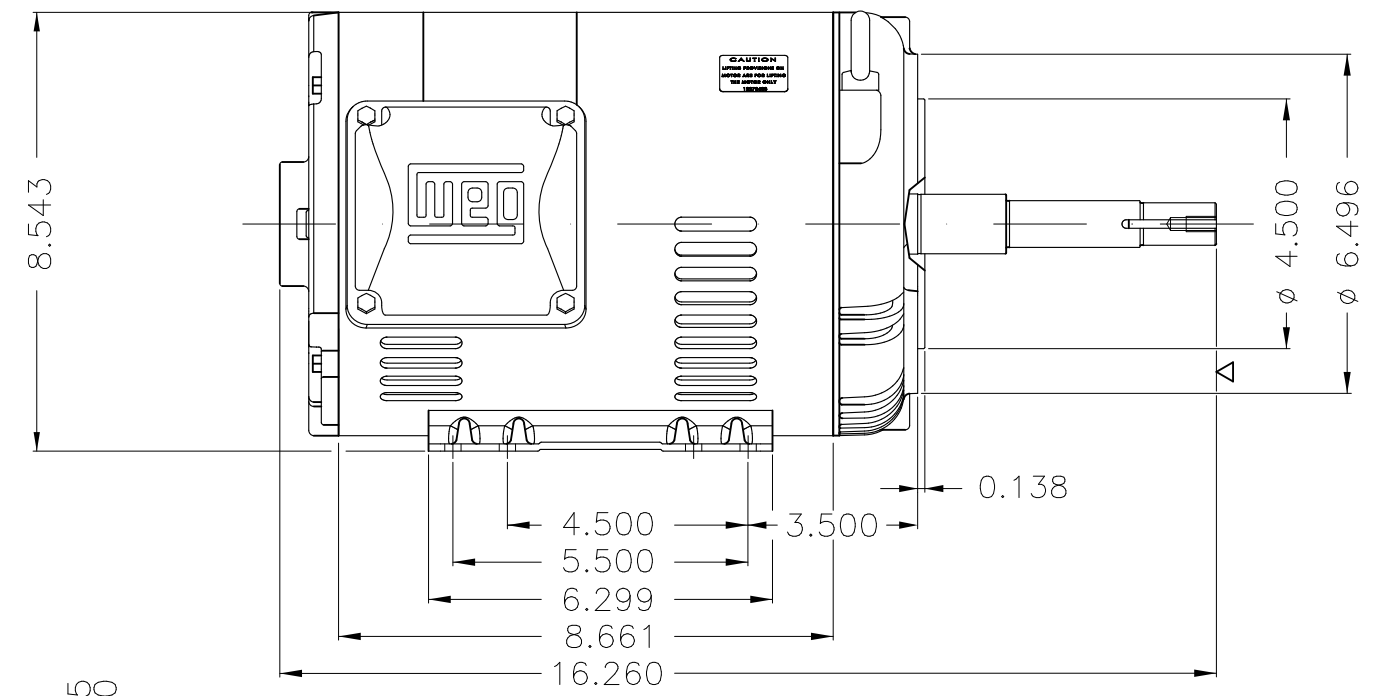
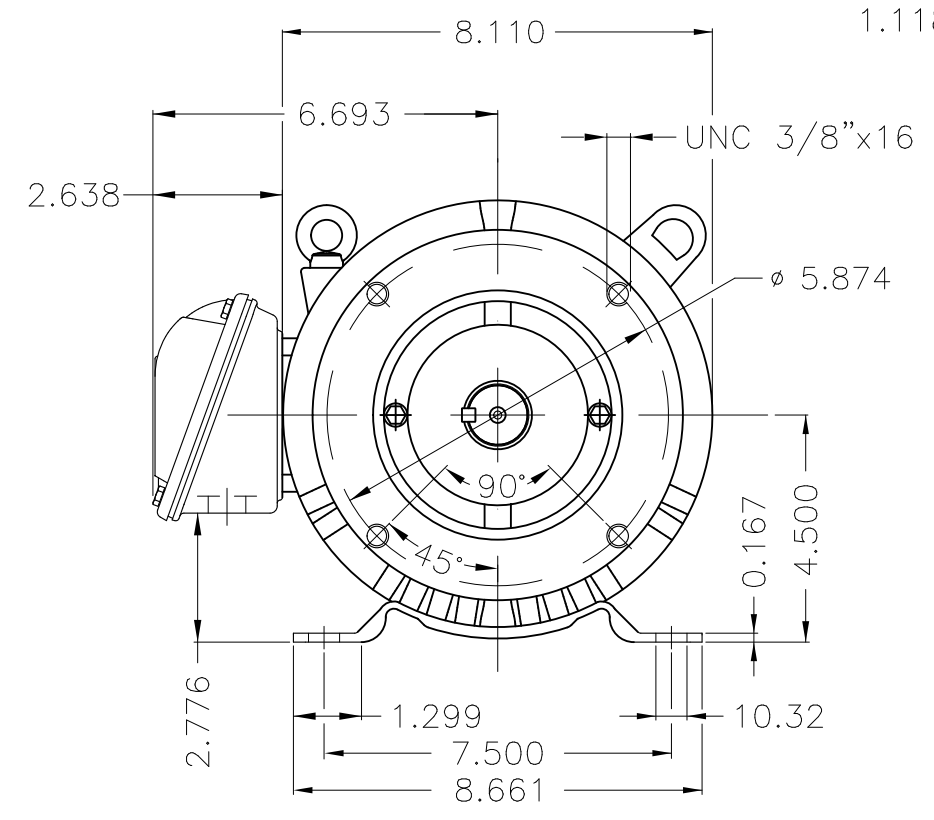
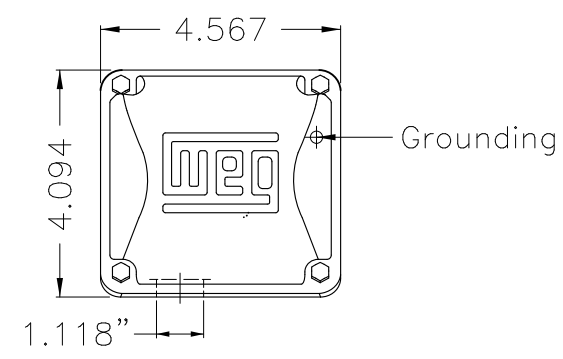
A

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 PSEF 107					
CHECKED		FRAME 182/4JM IP21 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

5 HP 02 Poles 60 Hz



**NEMA**
Premium

MADE IN MEXICO

MAT: 12676949 CC029A

W01.T00IC0X0N

MODEL 00536OT3E182JM-S

04APR2022 S/N:

PH 3	Hz 60	HP 5.0
FR 182/4JM		KW 3.7
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 12.2/6.10
INS CL F AT 80K		SFA 14.0/7.01
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE J	PF 0.88
USABLE @ 208V 13.5A		RPM 3510
SF1.00		NEMA NOM. EFF 86.5%

ALTERNATE RATING: 5.0HP 50Hz 190-220/380-415V SF1.00
14.7-13.0/7.37-6.87A 2885RPM EFF 83.8% (IE1) IEC 60034-1

Inverter duty motor For 80Hz use on VPWM 1000:1 VT, 3:1 CT

DE 6207-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-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.

