

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W40 JP Pump NEMA Premium Efficiency Three-Phase	Product code :	14836790		
		Catalog # :	05018OT3E326JPV-W40		
Frame	: 324/6JP	Cooling method	: IC01 - ODP		
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	: 515 lb		
Protection degree	: IP23	Moment of inertia (J)	: 7.08 sq.ft.lb		
Design	: B				
Output [HP]	50	40	40	40	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	117/58.5	58.0	56.4	55.7	
L. R. Amperes [A]	737/369	383	389	401	
LRC [A]	6.3x(Code G)	6.6x(Code G)	6.9x(Code H)	7.2x(Code J)	
No load current [A]	46.4/23.2	22.8	25.2	27.0	
Rated speed [RPM]	1775	1475	1475	1480	
Slip [%]	1.39	1.67	1.67	1.33	
Rated torque [ft.lb]	148	142	142	142	
Locked rotor torque [%]	240	220	250	270	
Breakdown torque [%]	240	240	270	300	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	19s (cold) 11s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	
Noise level ²	66.0 dB(A)				
Efficiency (%)	25%	94.0	92.9	92.9	92.9
	50%	94.1	93.1	93.1	93.1
	75%	94.5	93.5	93.5	93.5
	100%	94.5	93.6	93.6	93.6
Power Factor	25%	0.44	0.44	0.40	0.37
	50%	0.70	0.70	0.66	0.62
	75%	0.80	0.80	0.77	0.74
	100%	0.84	0.84	0.82	0.80
Bearing type	: Drive end 6312 Z C3 Non drive end 6211 Z C3	Foundation loads			
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction			
		Max. compression			
Lubrication interval	: 20000 h 20000 h				
Lubricant amount	: 21 g 11 g				
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 129A SF 1.15 SFA 149A					
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 / 21	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



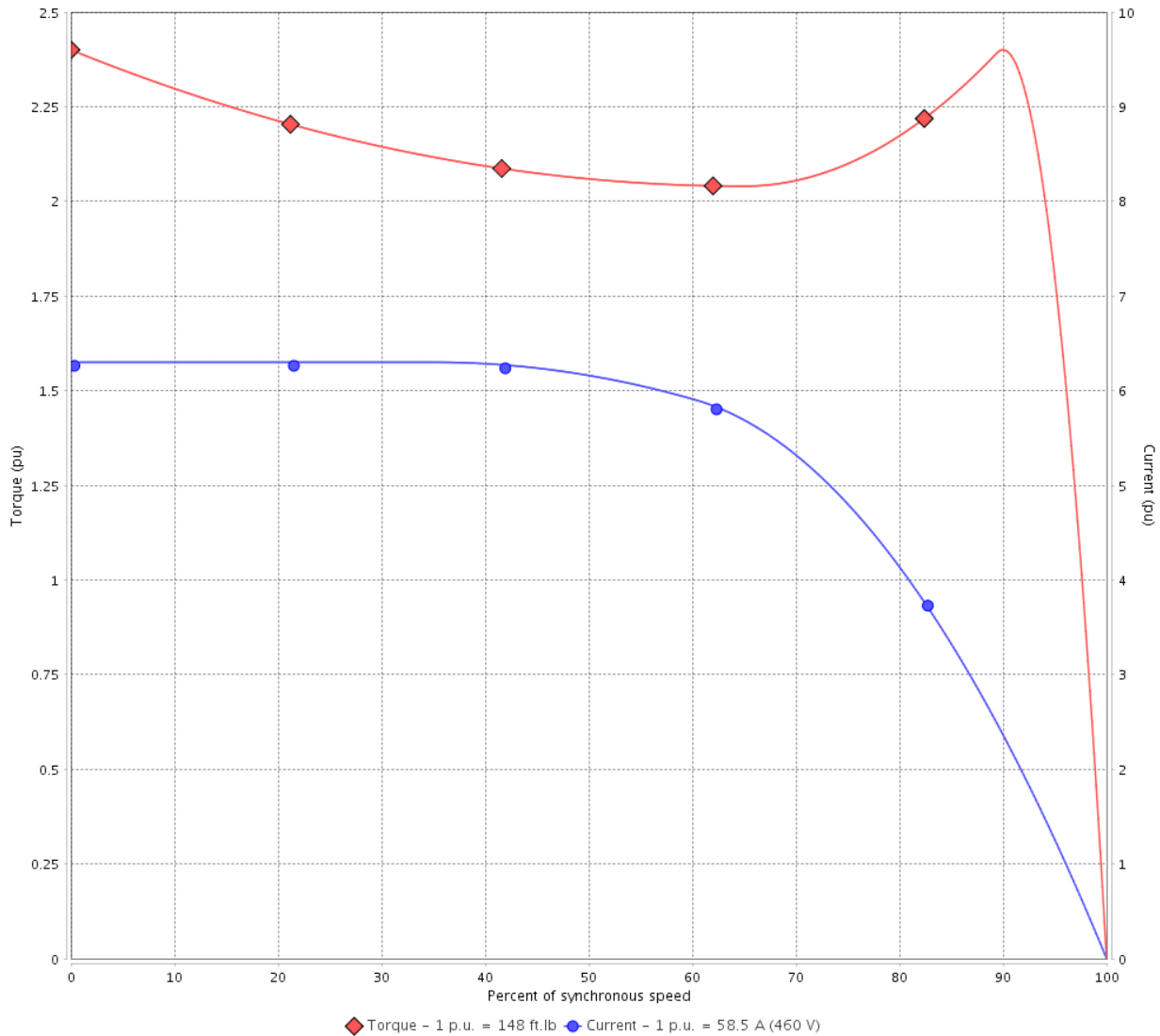
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Catalog # : 05018OT3E326JPV-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 117/58.5 A
 LRC : 6.3
 Rated torque : 148 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 240 %
 Rated speed : 1775 rpm

Moment of inertia (J) : 7.08 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

Locked rotor time : 19s (cold) 11s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 21	Revision
Checked by				
Date	12/04/2022			

TORQUE AND CURRENT VS SPEED CURVE



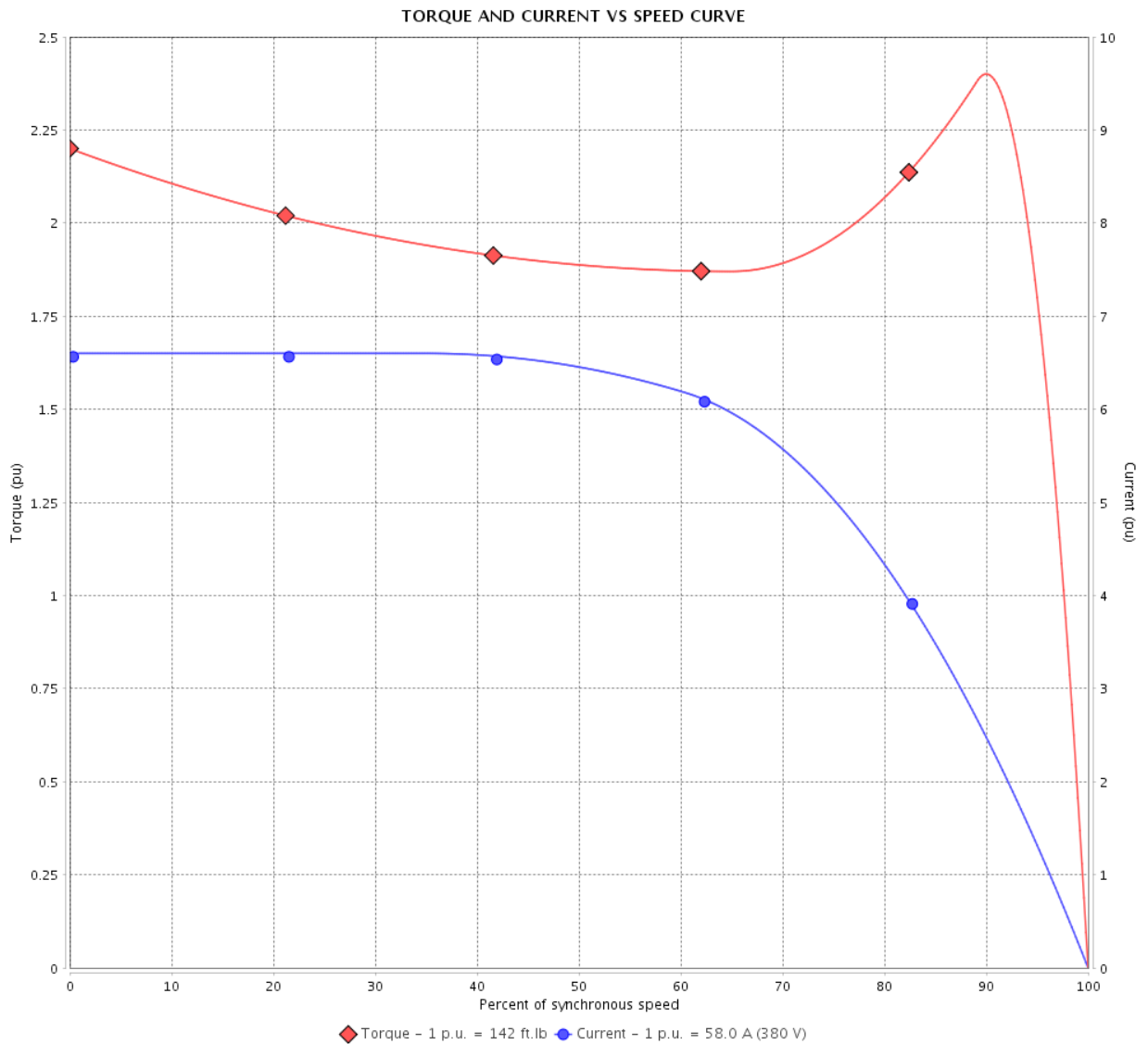
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Performance : 380 V 50 Hz 4P IE3

Rated current : 58.0 A
 LRC : 6.6
 Rated torque : 142 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 240 %
 Rated speed : 1475 rpm

Moment of inertia (J) : 7.08 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 21	Revision
Checked by				
Date	12/04/2022			

TORQUE AND CURRENT VS SPEED CURVE

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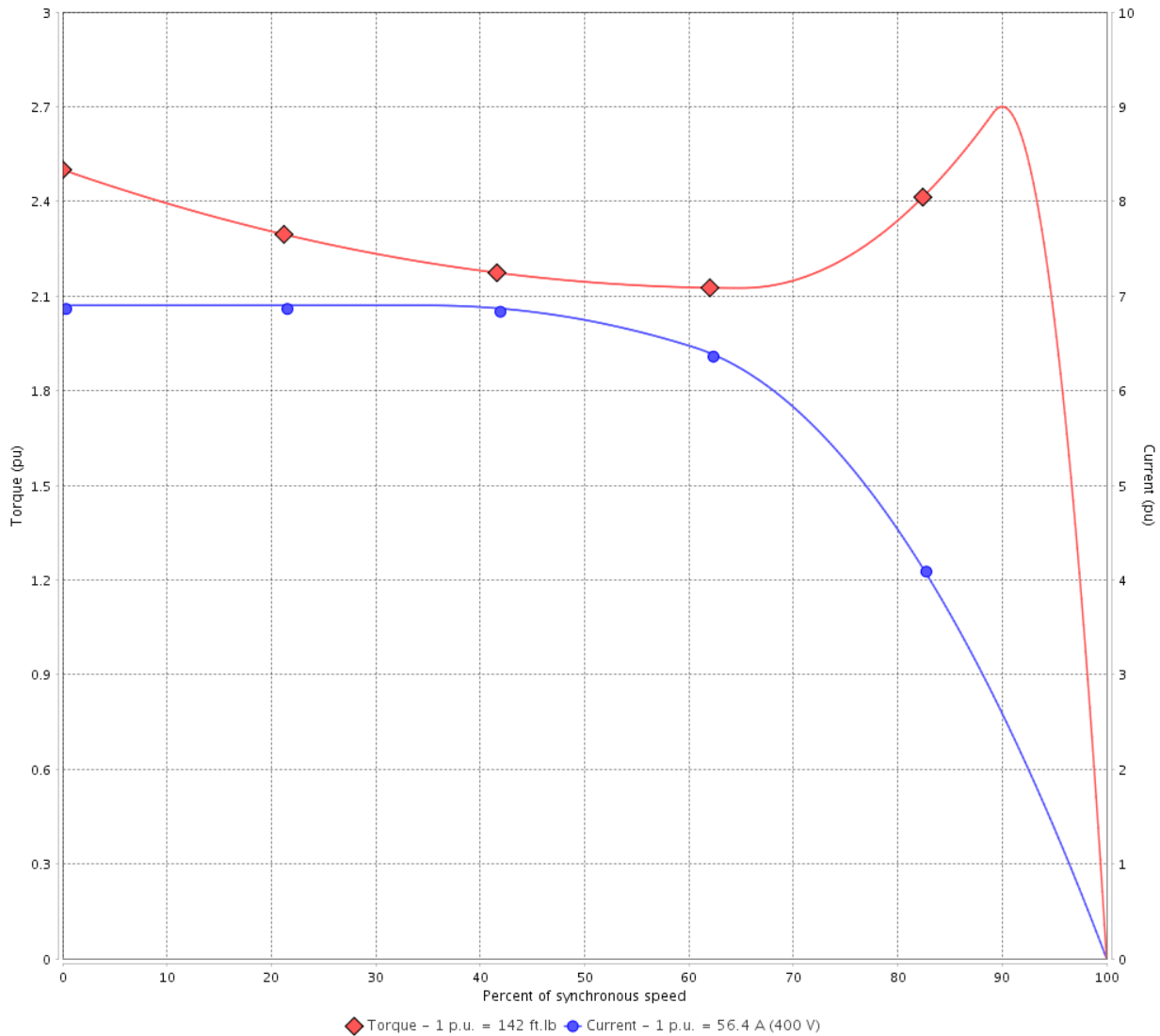
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current	: 56.4 A	Moment of inertia (J)	: 7.08 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 142 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 21	Revision
Checked by				
Date	12/04/2022			

TORQUE AND CURRENT VS SPEED CURVE



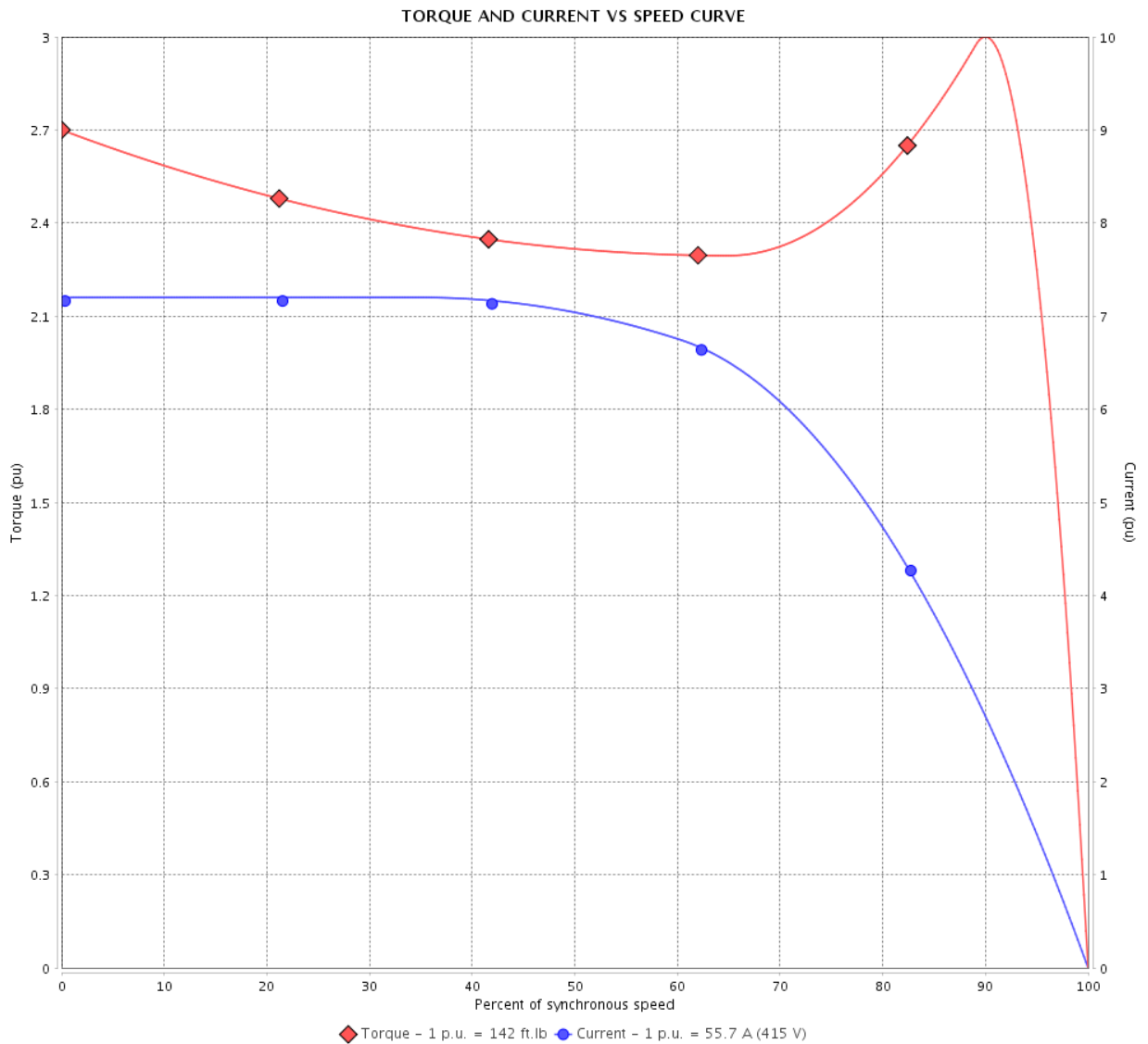
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Locked rotor torque	: 270 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by			5 / 21	
Date	12/04/2022			

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Three Phase Induction Motor - Squirrel Cage

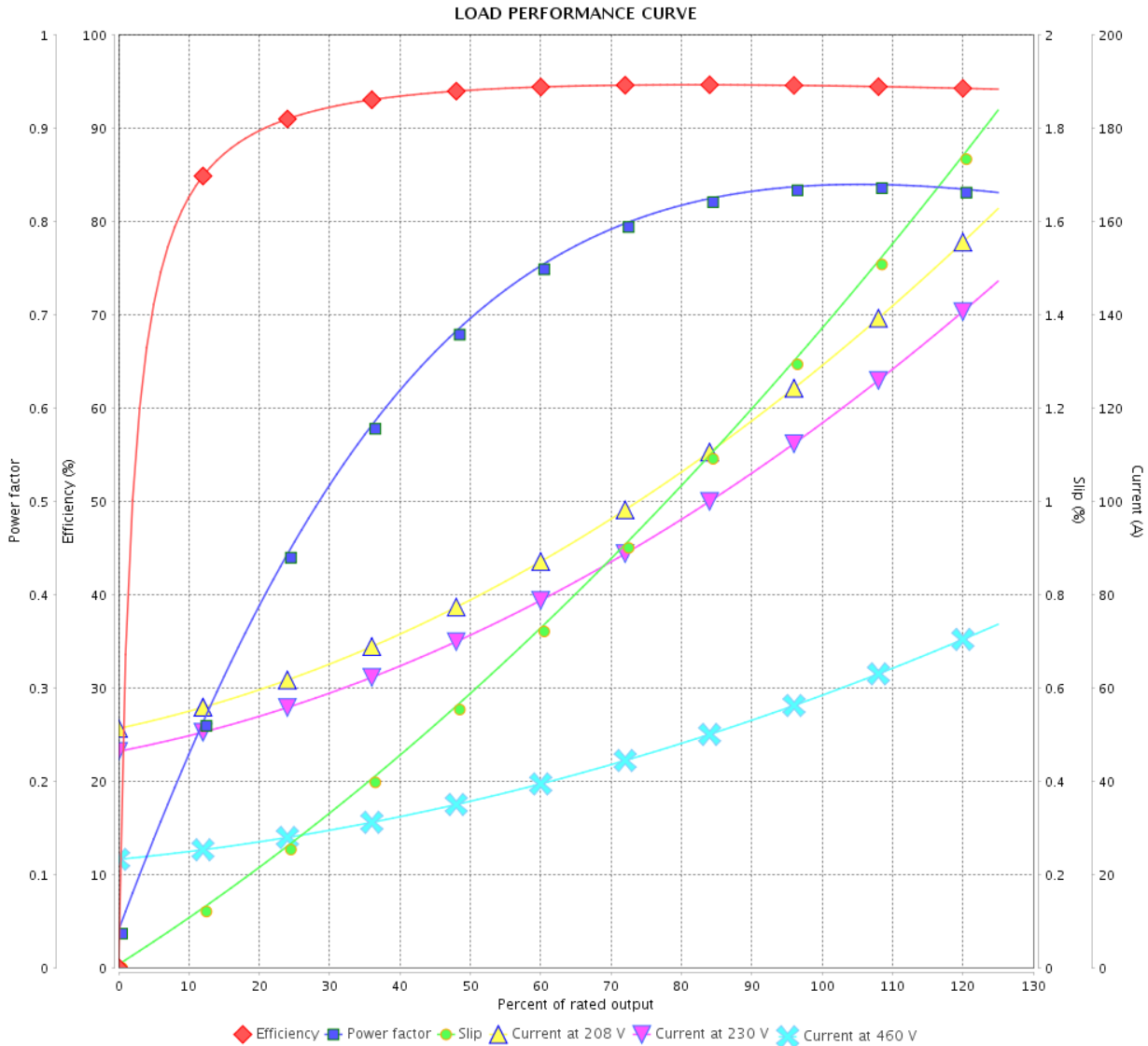


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Performance : 230/460 V 60 Hz 4P

Rated current : 117/58.5 A
 LRC : 6.3
 Rated torque : 148 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 240 %
 Rated speed : 1775 rpm

Moment of inertia (J) : 7.08 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 21	Revision
Checked by				
Date	12/04/2022			

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Three Phase Induction Motor - Squirrel Cage

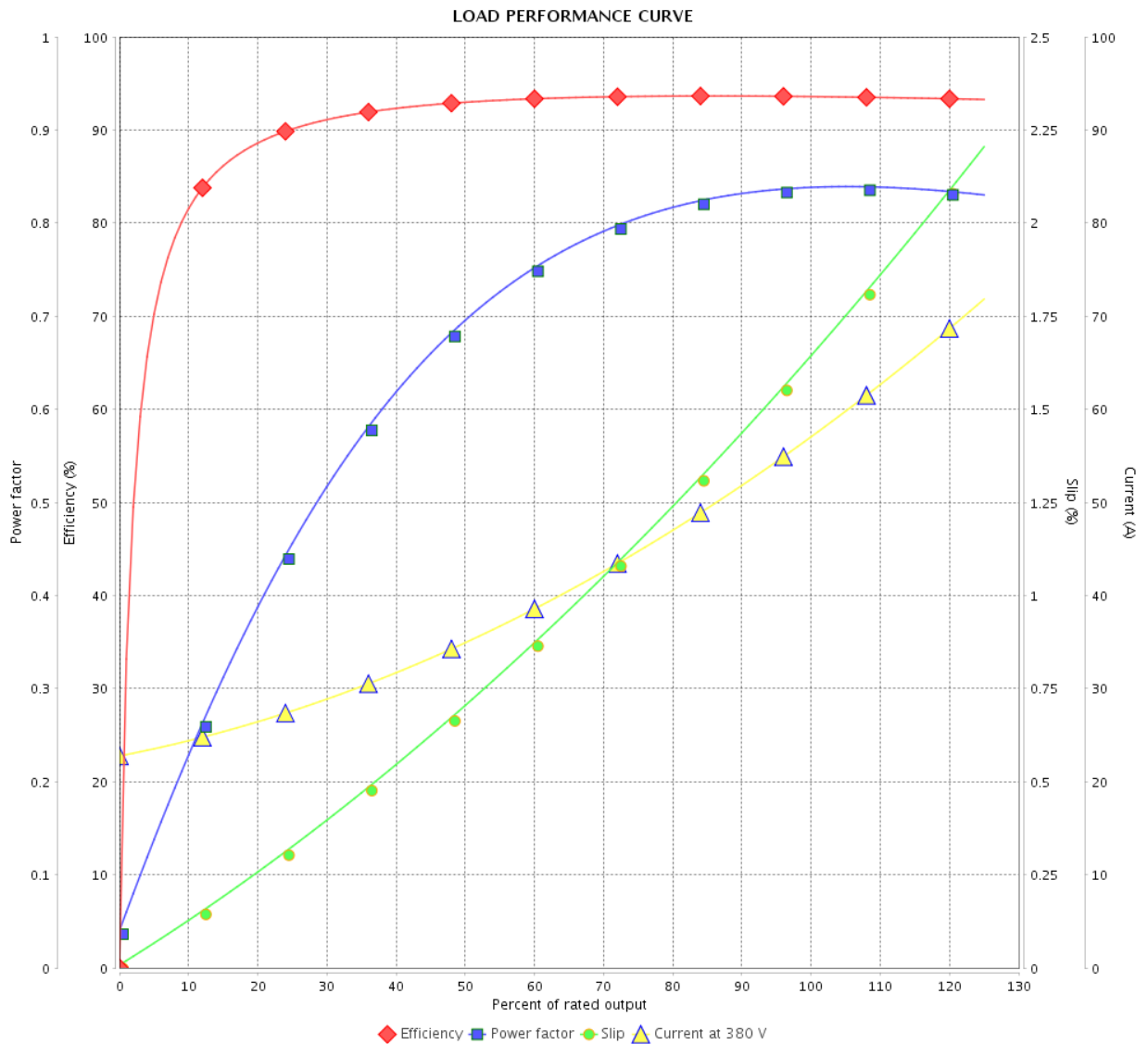


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Performed by			Page	Revision
Checked by				
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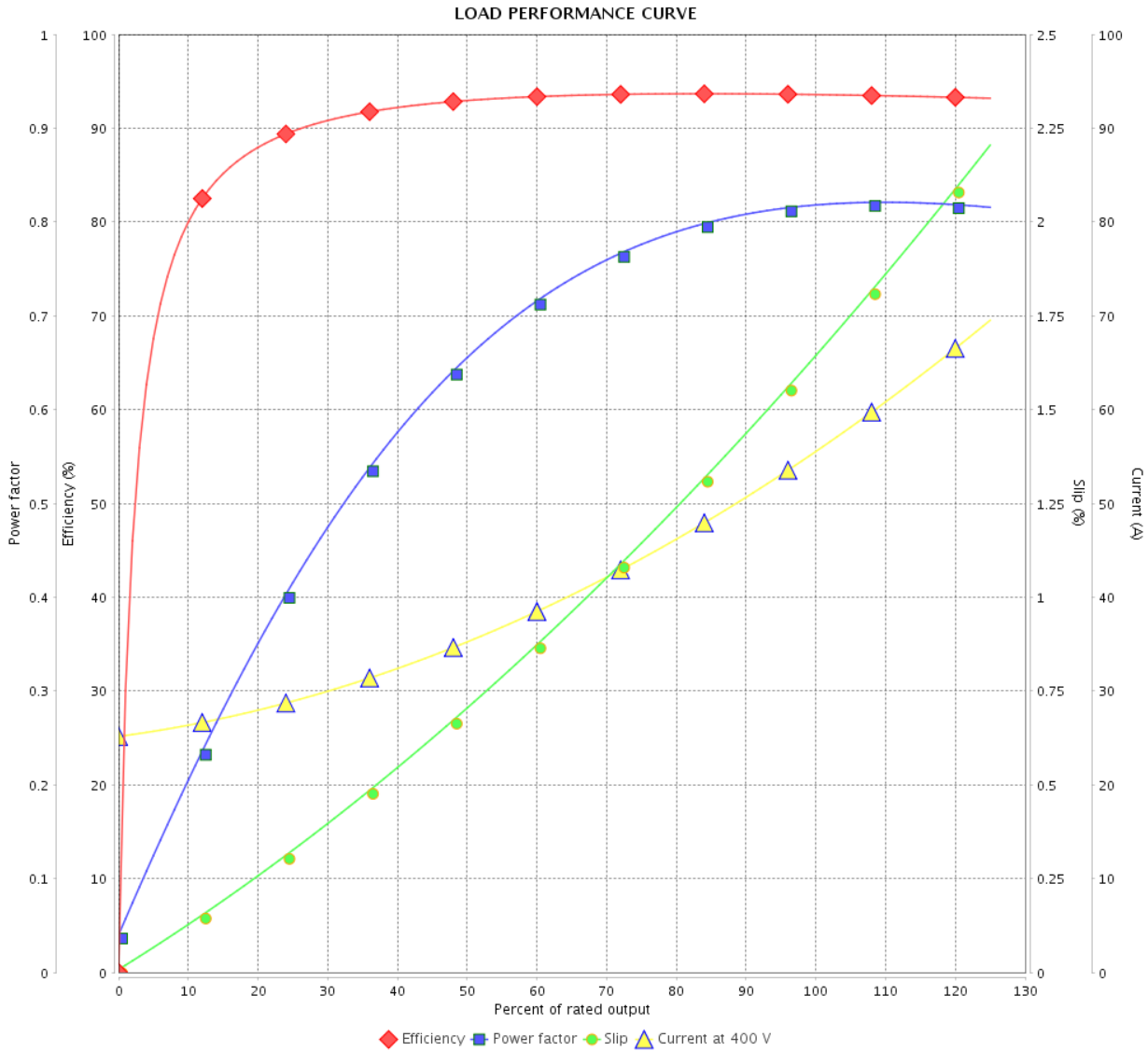


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 Duty cycle : Cont.(S1)
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 Service factor : 1.00
 Temperature rise : 80 K
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 8 / 21	Revision
Checked by				
Date	12/04/2022			

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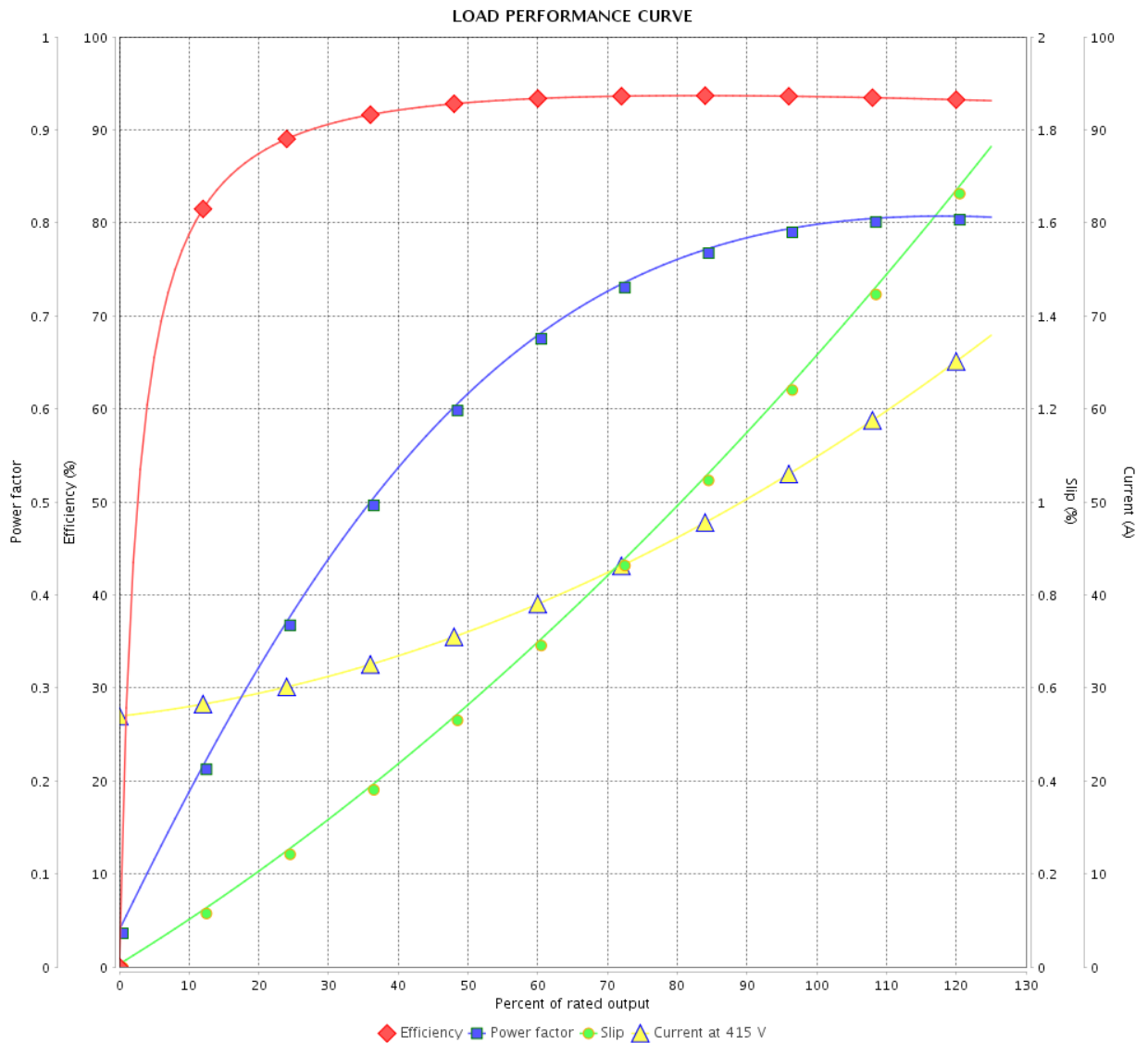


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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by			9 / 21	
Date	12/04/2022			

THERMAL LIMIT CURVE



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Heating constant

Cooling constant

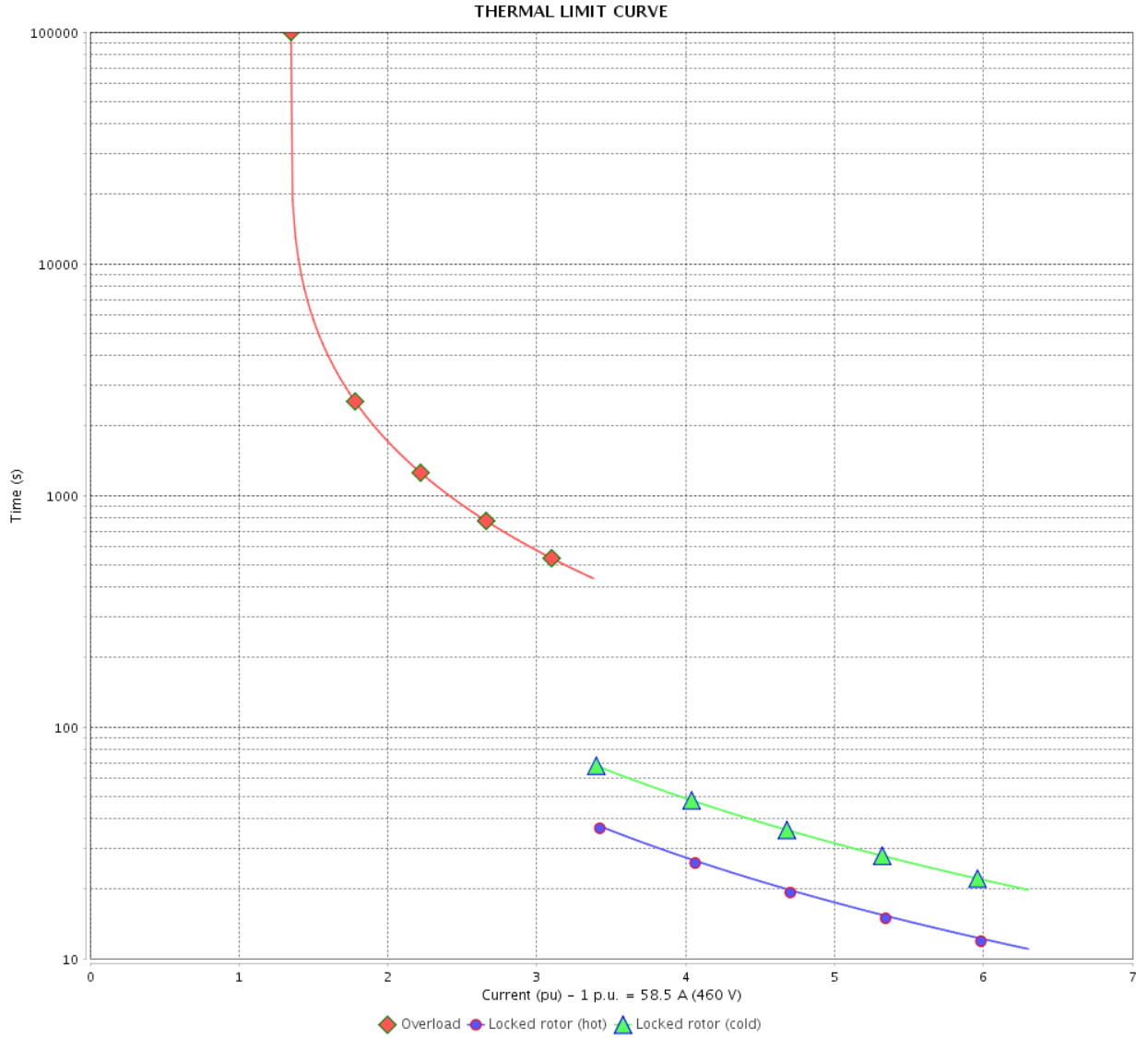
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 10 / 21	Revision
Checked by				
Date	12/04/2022			

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Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		11 / 21		
Date		12/04/2022		

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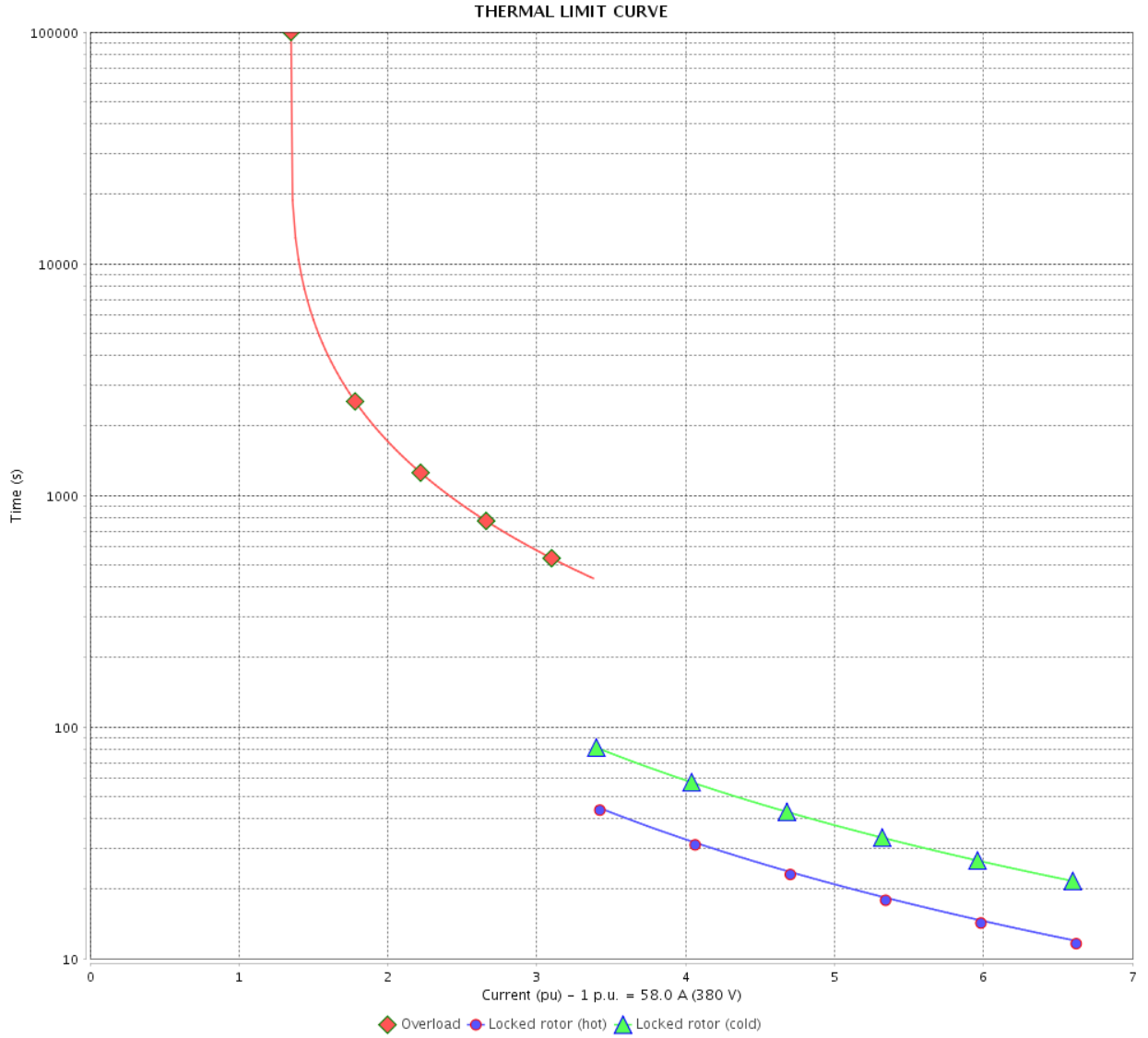
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 12 / 21	Revision
Checked by				
Date	12/04/2022			

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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		13 / 21		
Date		12/04/2022		

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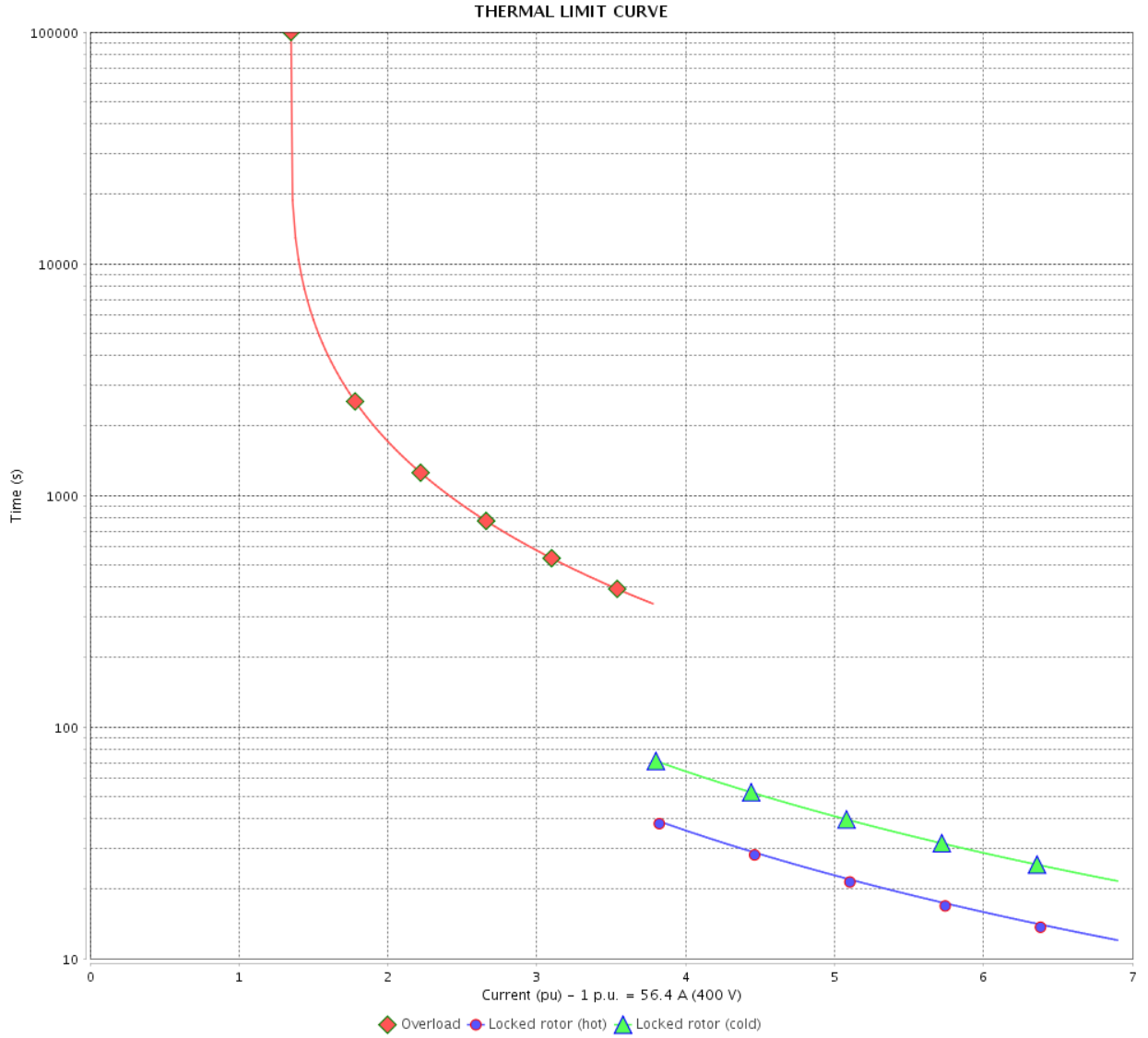
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 14 / 21	Revision
Checked by				
Date	12/04/2022			

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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		15 / 21		
Date		12/04/2022		

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Locked rotor torque	: 270 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

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Cooling constant

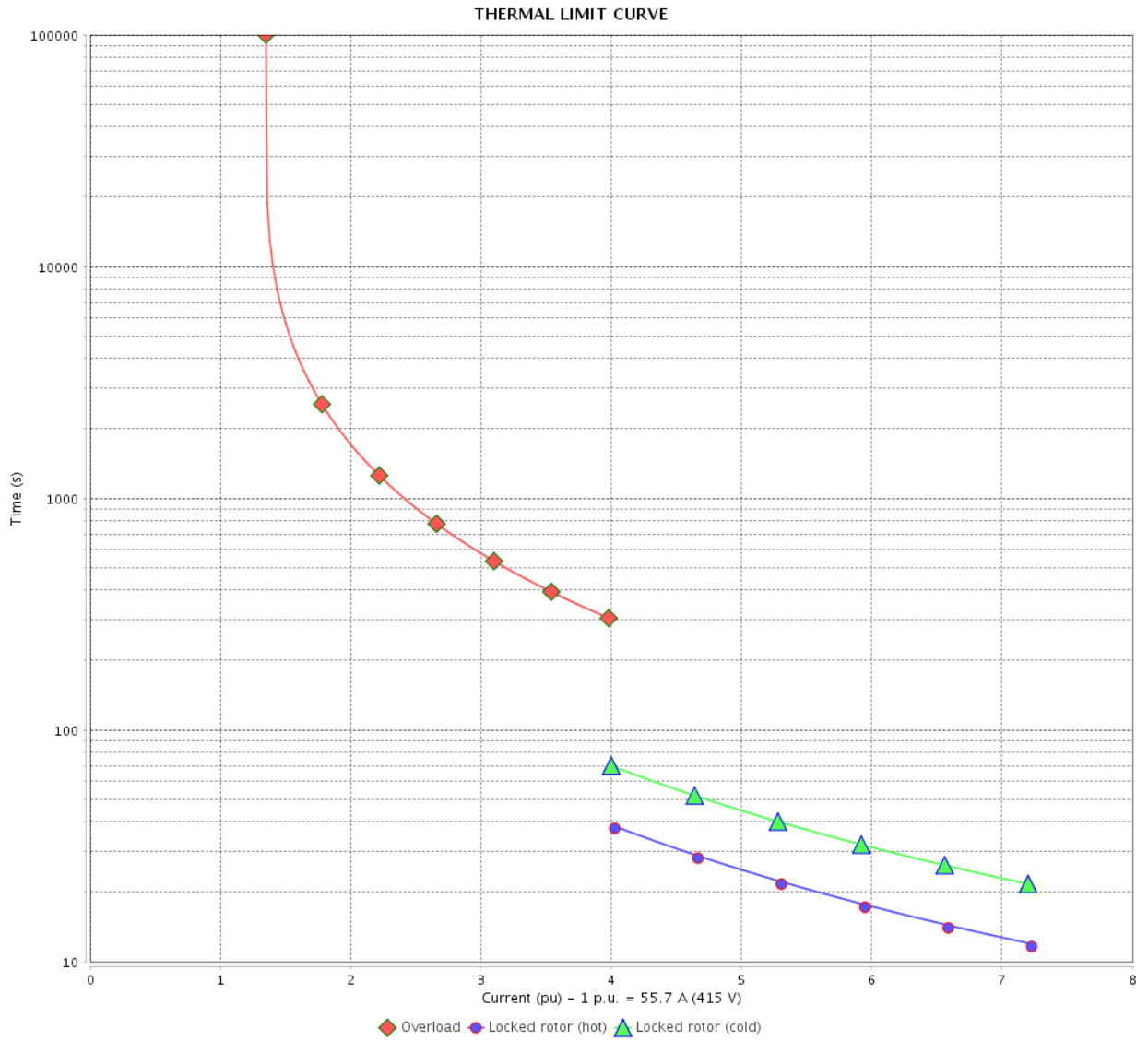
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	12/04/2022		16 / 21	

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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		17 / 21		
Date		12/04/2022		

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



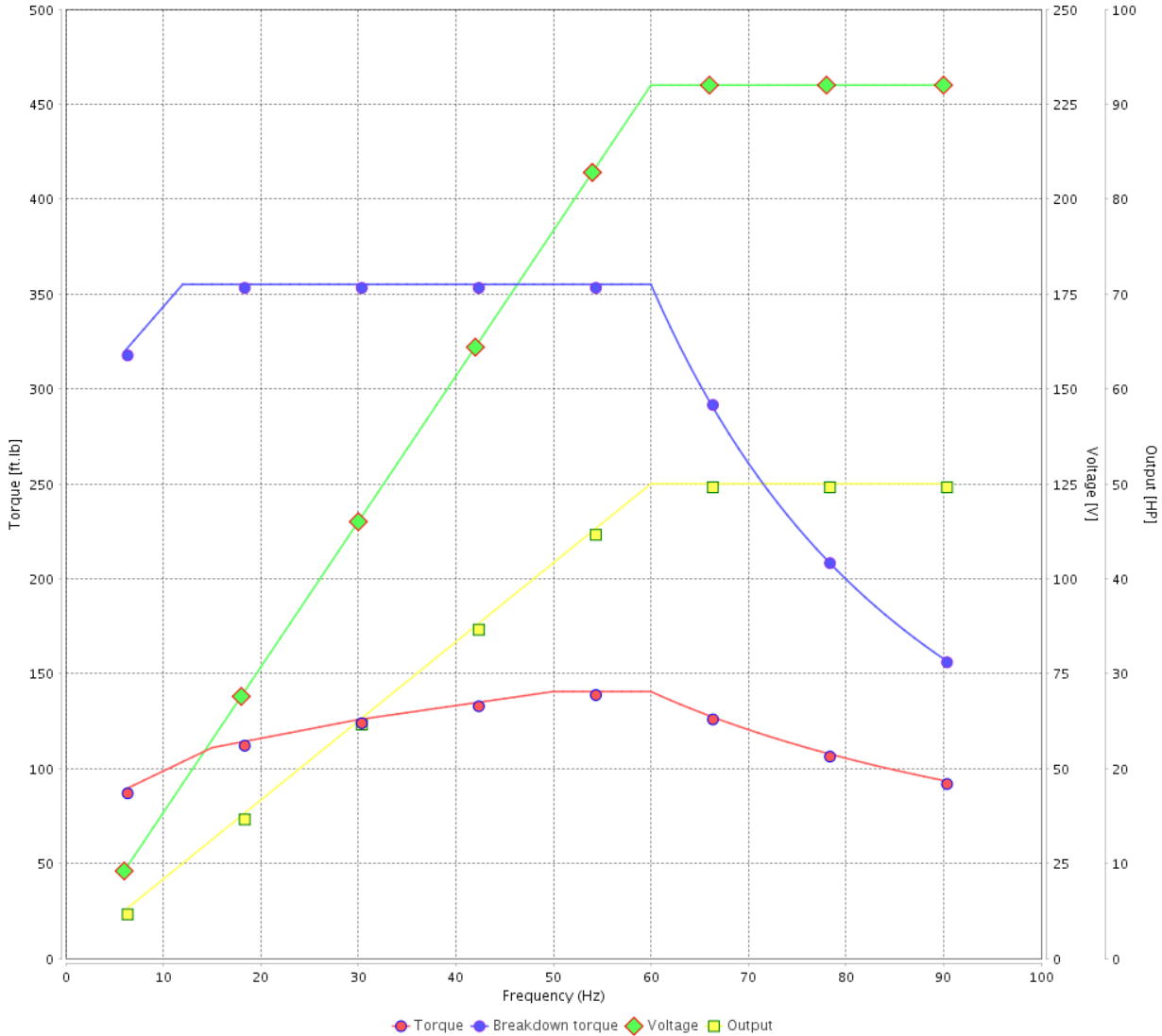
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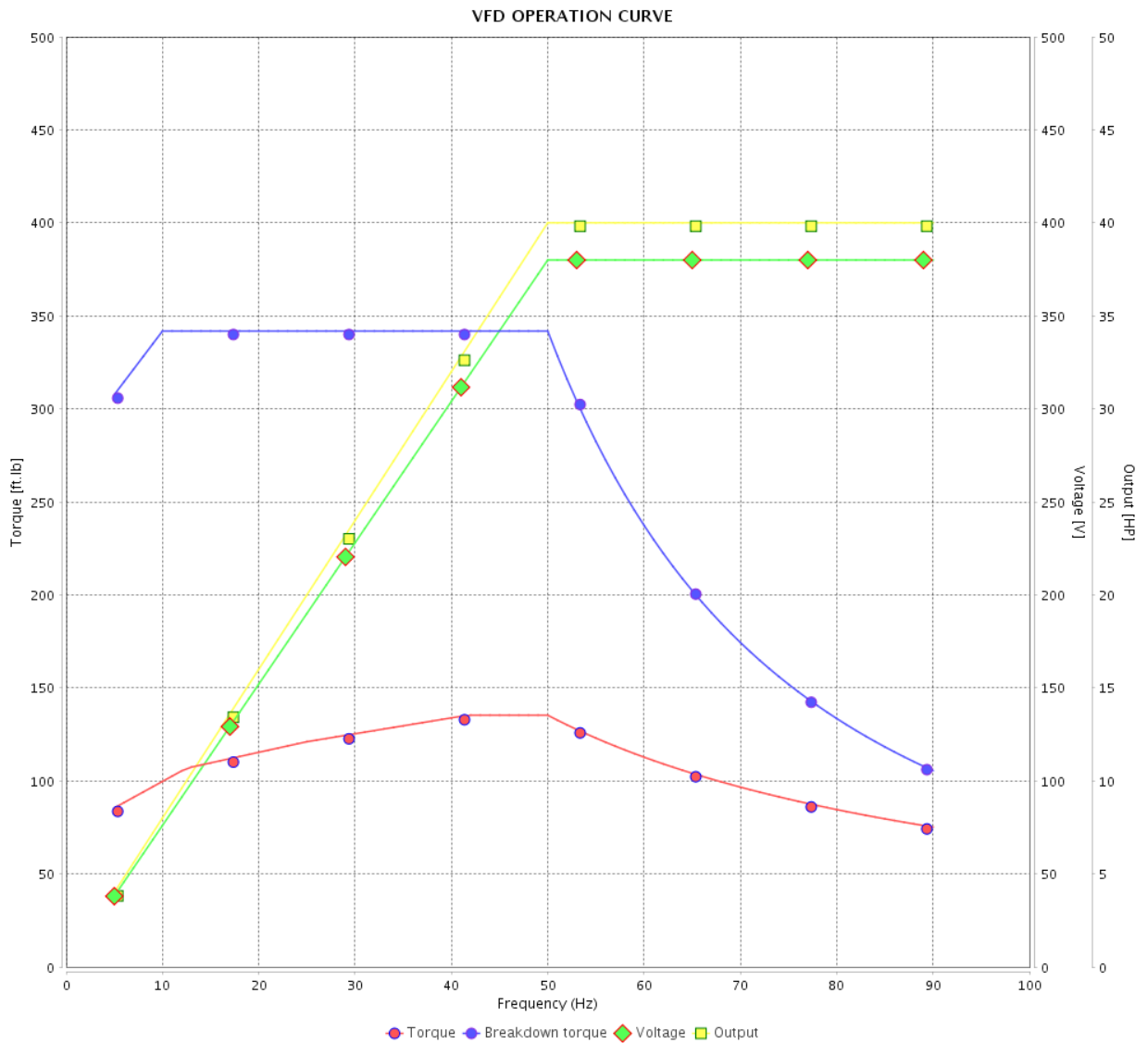


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Performed by				Page 19 / 21
Checked by				
Date	12/04/2022			

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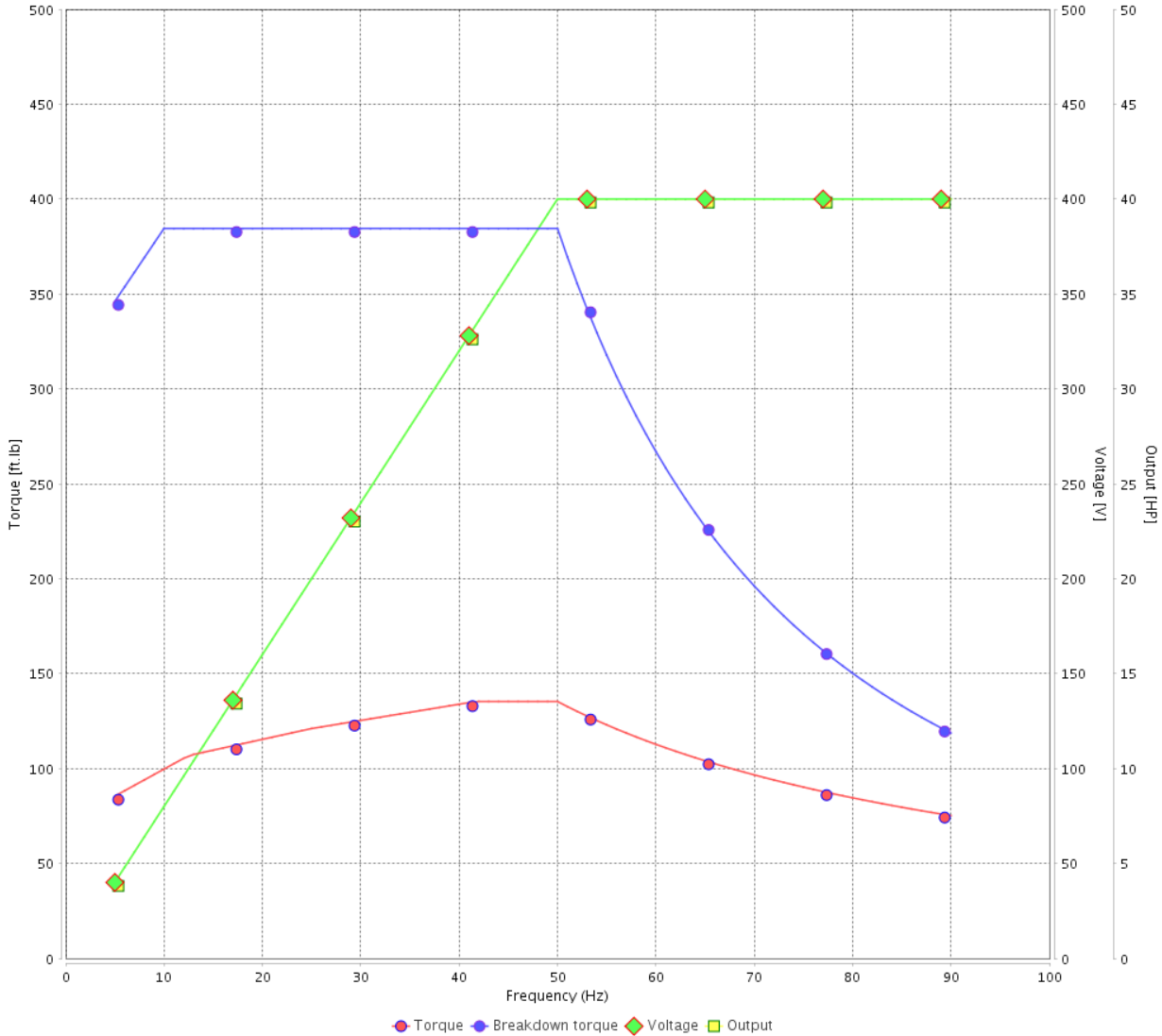
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Performed by			Page 20 / 21	Revision
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VFD OPERATION CURVE

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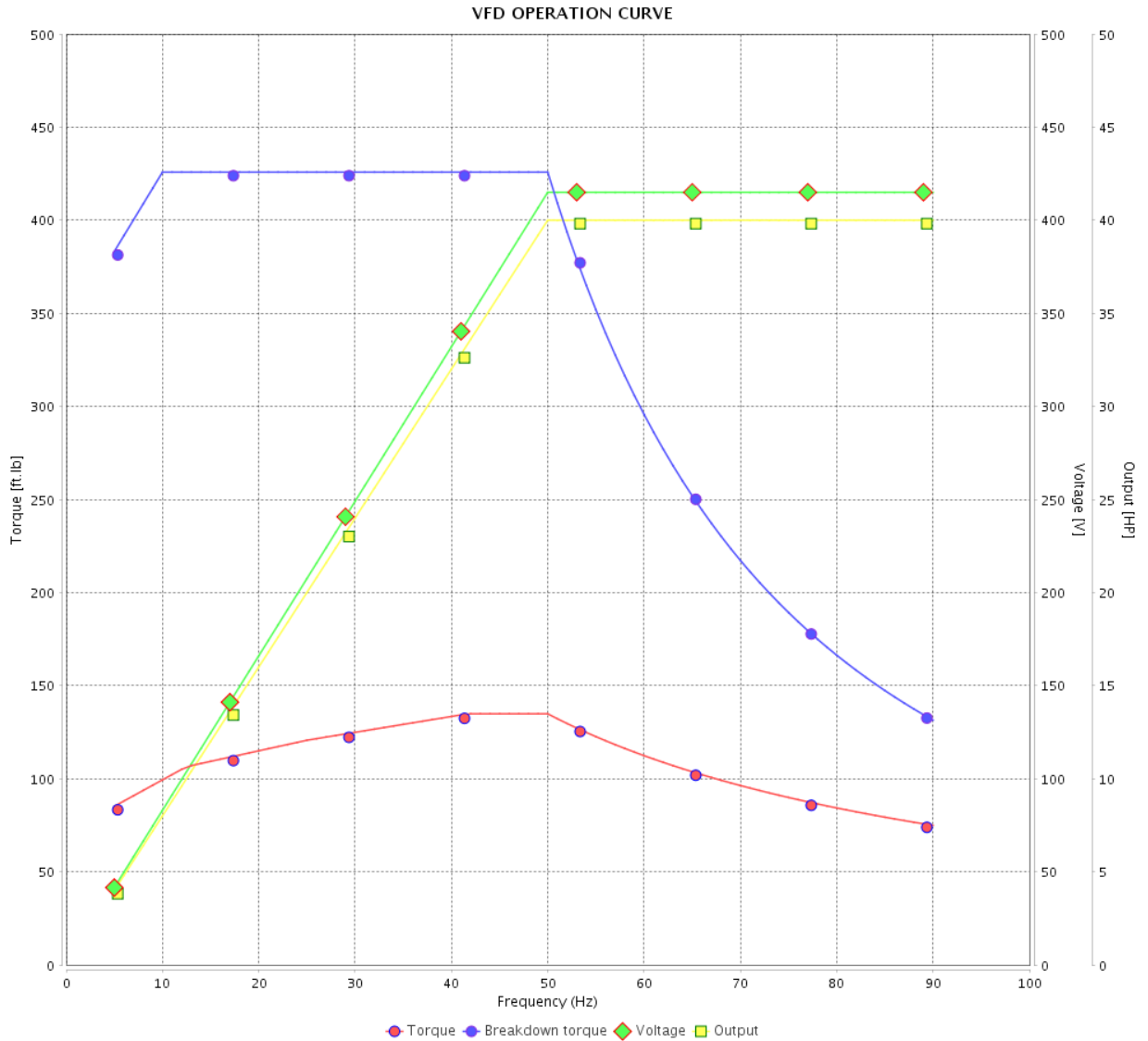


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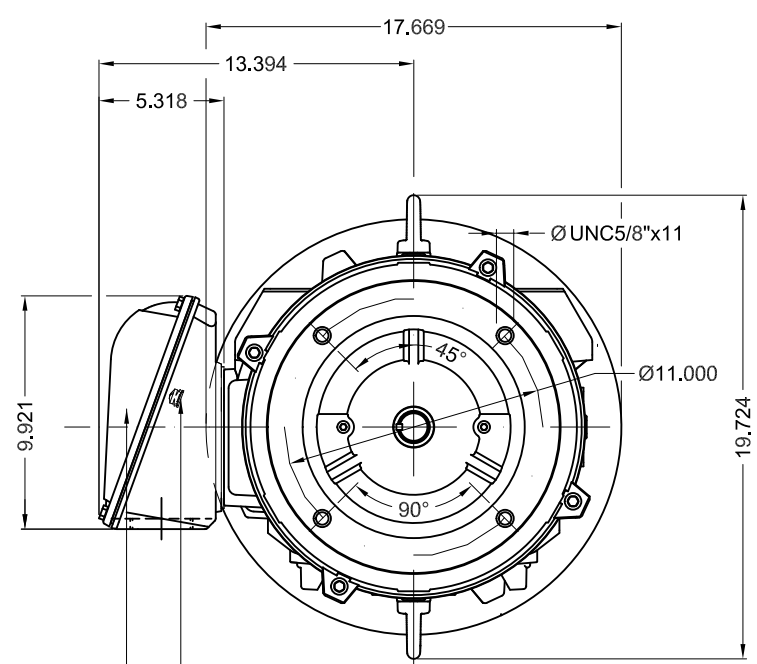


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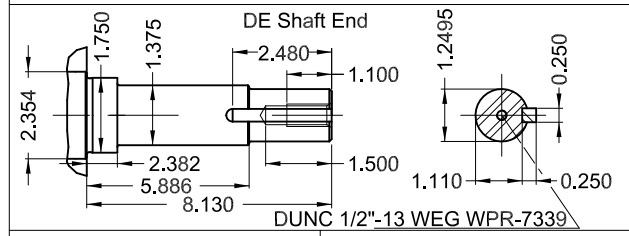
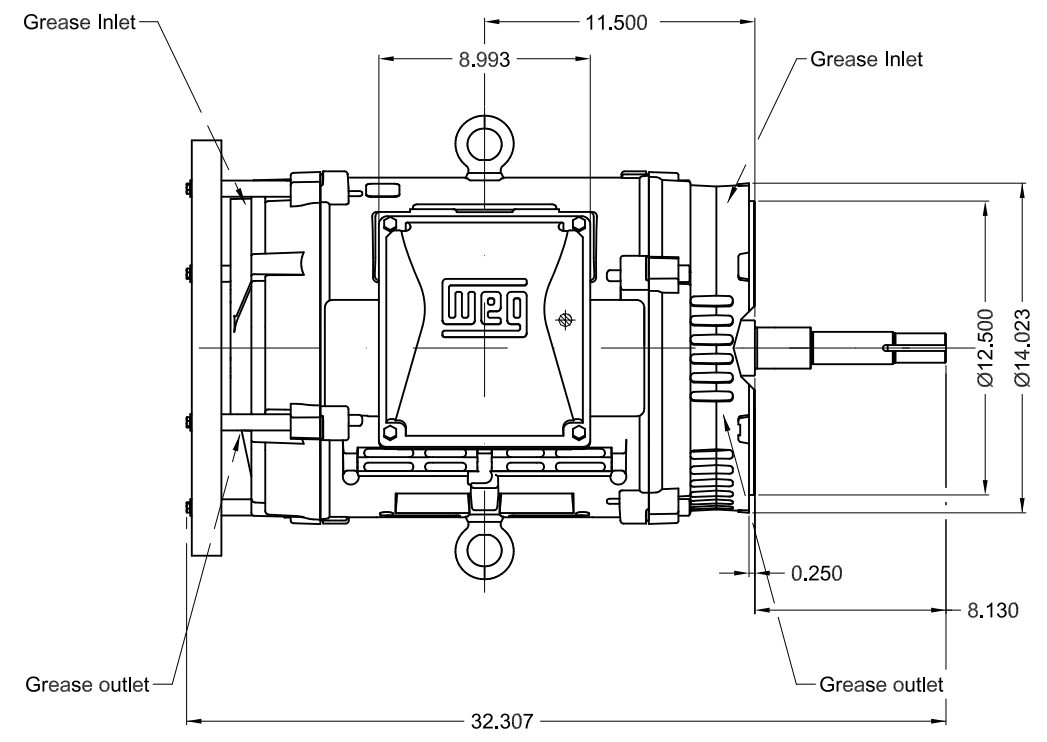
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Rev.	Changes Summary	Performed	Checked	Date
Performed by				Page 21 / 21
Checked by				
Date	12/04/2022			



Grounding for leads 5.2-35 mm² / 10-2 AWG
Main terminal box
NPT 2"



50 HP 04 Poles 60 Hz A

1:8

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 CLOSE COUPLED PUMP JP TYPE PREM. FT. FRAME 324/6JP IP23 ODP					
CHECKED							
RELEASED							
REL DT.			WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1	

Color RAL 5009
Painting plan 203A
Mounting NEMA W-6
Mounting V18

PREVIEW
WDD

