

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: NEMA Premium Efficiency Three-Phase	Product code :	11485689	
			Catalog # :	02509XT3E326T	
Frame	: 326T	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	: 682 lb		
Protection degree	: IP55	Moment of inertia (J)	: 11.9 sq.ft.lb		
Design	: B				
Output [HP]	25	25	25	25	
Poles	8	8	8	8	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	70.8/35.4	41.5	40.2	40.4	
L. R. Amperes [A]	361/181	212	205	206	
LRC [A]	5.1x(Code G)	5.1x(Code F)	5.1x(Code G)	5.1x(Code G)	
No load current [A]	40.7/20.4	20.1	22.2	24.1	
Rated speed [RPM]	885	725	730	730	
Slip [%]	1.67	3.33	2.67	2.67	
Rated torque [ft.lb]	148	181	180	180	
Locked rotor torque [%]	220	180	200	220	
Breakdown torque [%]	240	190	210	229	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	
Noise level ²	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	
Efficiency (%)	25%	90.8	92.0	89.9	
	50%	91.0	91.0	89.5	
	75%	92.4	91.7	91.0	
	100%	92.4	90.2	91.0	
Power Factor	25%	0.29	0.34	0.31	
	50%	0.51	0.58	0.53	
	75%	0.63	0.69	0.65	
	100%	0.71	0.75	0.73	
Bearing type	Drive end		Non drive end		
	6312		6212		
	2RS C3		2RS C3		
	Oil Seal		Lip Seal		
	-		-		
Sealing	-		-		
Lubrication interval	-		-		
Lubricant amount	-		-		
Lubricant type	Mobil Polyrex EM				
Foundation loads Max. traction : 1247 lb Max. compression : 1928 lb					
Notes USABLE @208V 78.2A SF 1.00 SFA 78.2A					
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	14/04/2022			1 / 22	

DATA SHEET

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Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		2 / 22	

TORQUE AND CURRENT VS SPEED CURVE



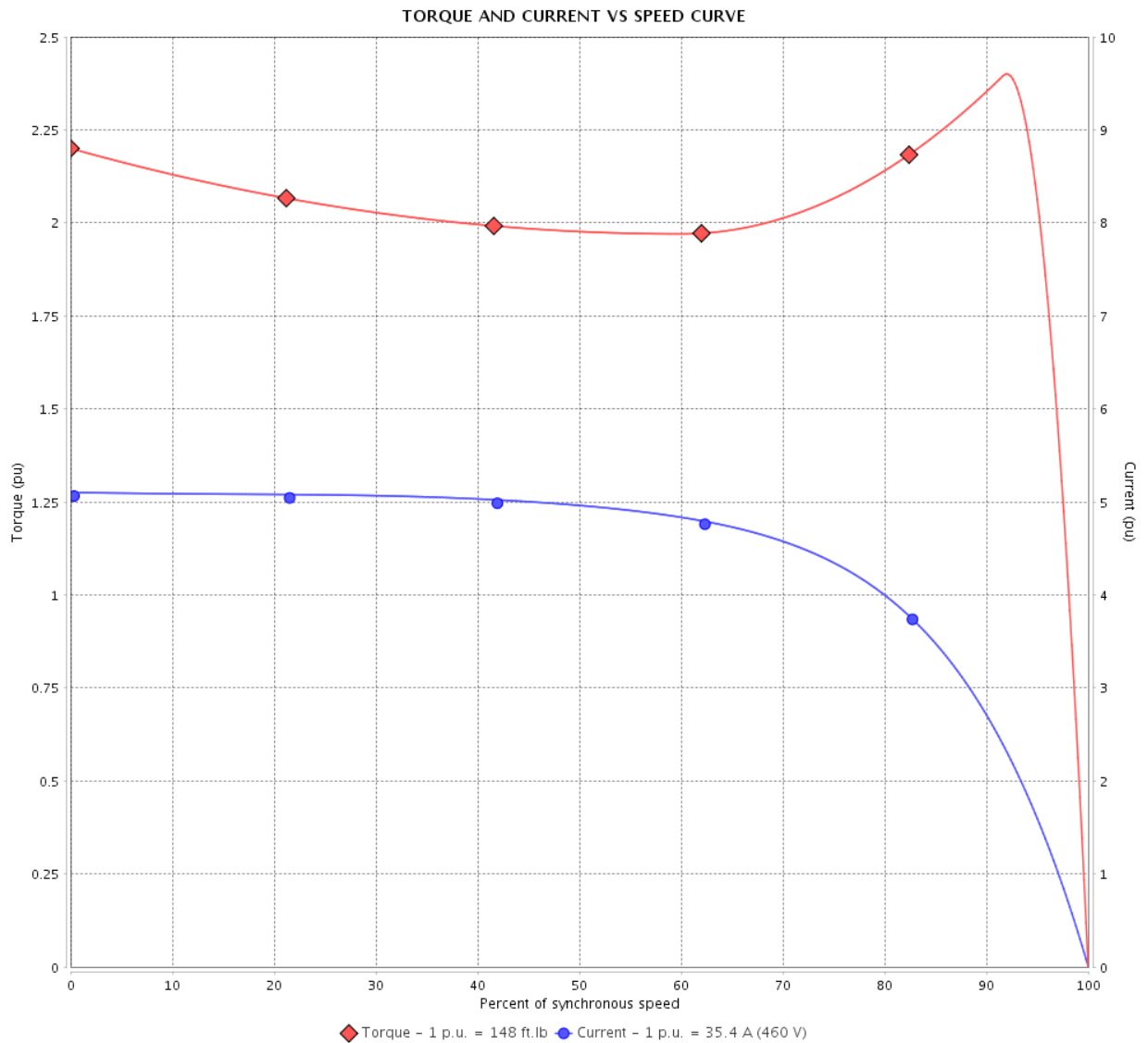
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11485689

Catalog # : 02509XT3E326T



Performance : 230/460 V 60 Hz 8P

Rated current : 70.8/35.4 A
 LRC : 5.1
 Rated torque : 148 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 240 %
 Rated speed : 885 rpm

Moment of inertia (J) : 11.9 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 36s (cold) 20s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 3 / 22	Revision
Checked by				
Date	14/04/2022			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



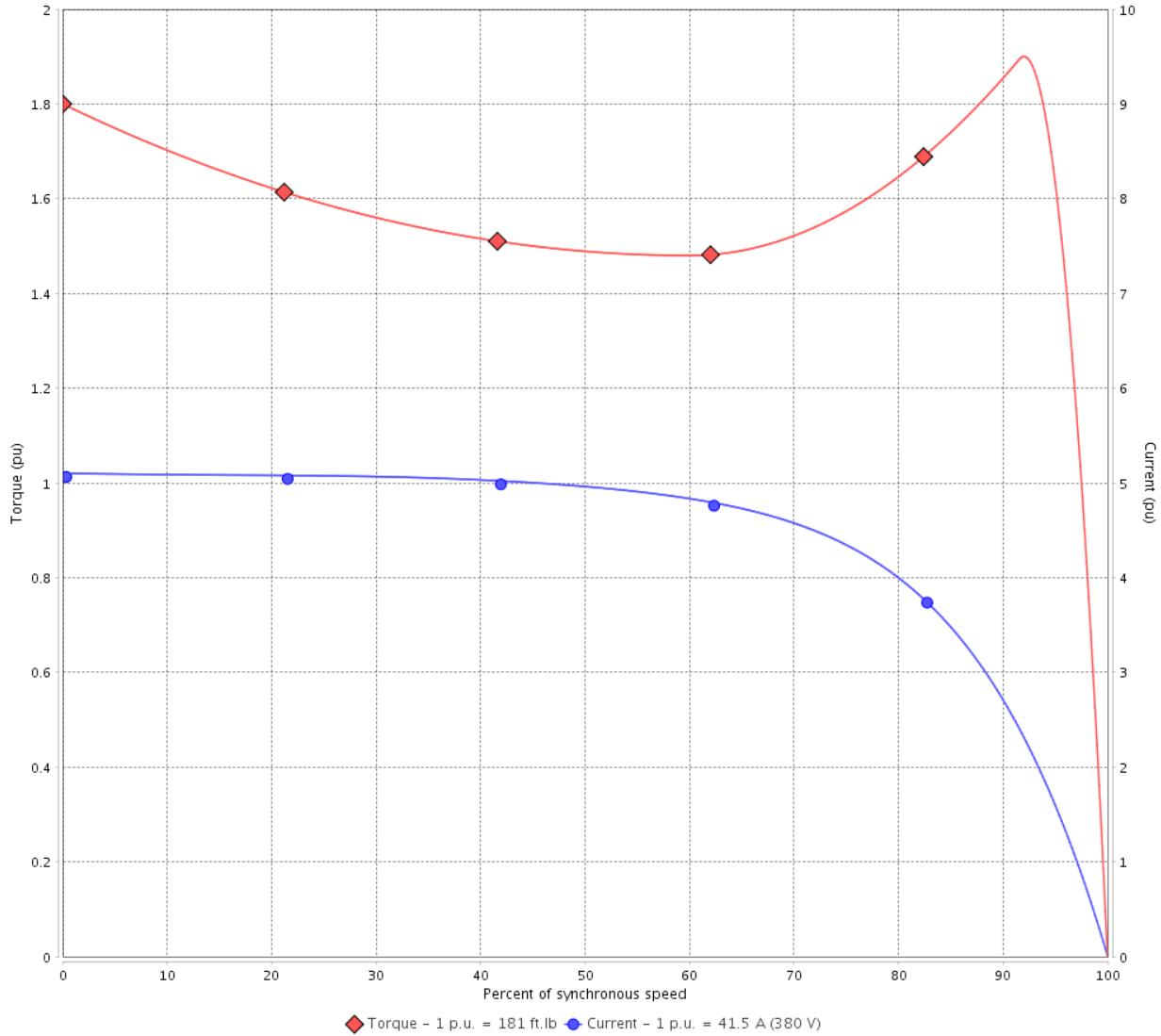
Customer :

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TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 8P IE3

Rated current	: 41.5 A	Moment of inertia (J)	: 11.9 sq.ft.lb
LRC	: 5.1	Duty cycle	: Cont.(S1)
Rated torque	: 181 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 190 %	Temperature rise	: 80 K
Rated speed	: 725 rpm	Design	: B

Locked rotor time : 36s (cold) 20s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 22	Revision
Checked by				
Date	14/04/2022			

TORQUE AND CURRENT VS SPEED CURVE



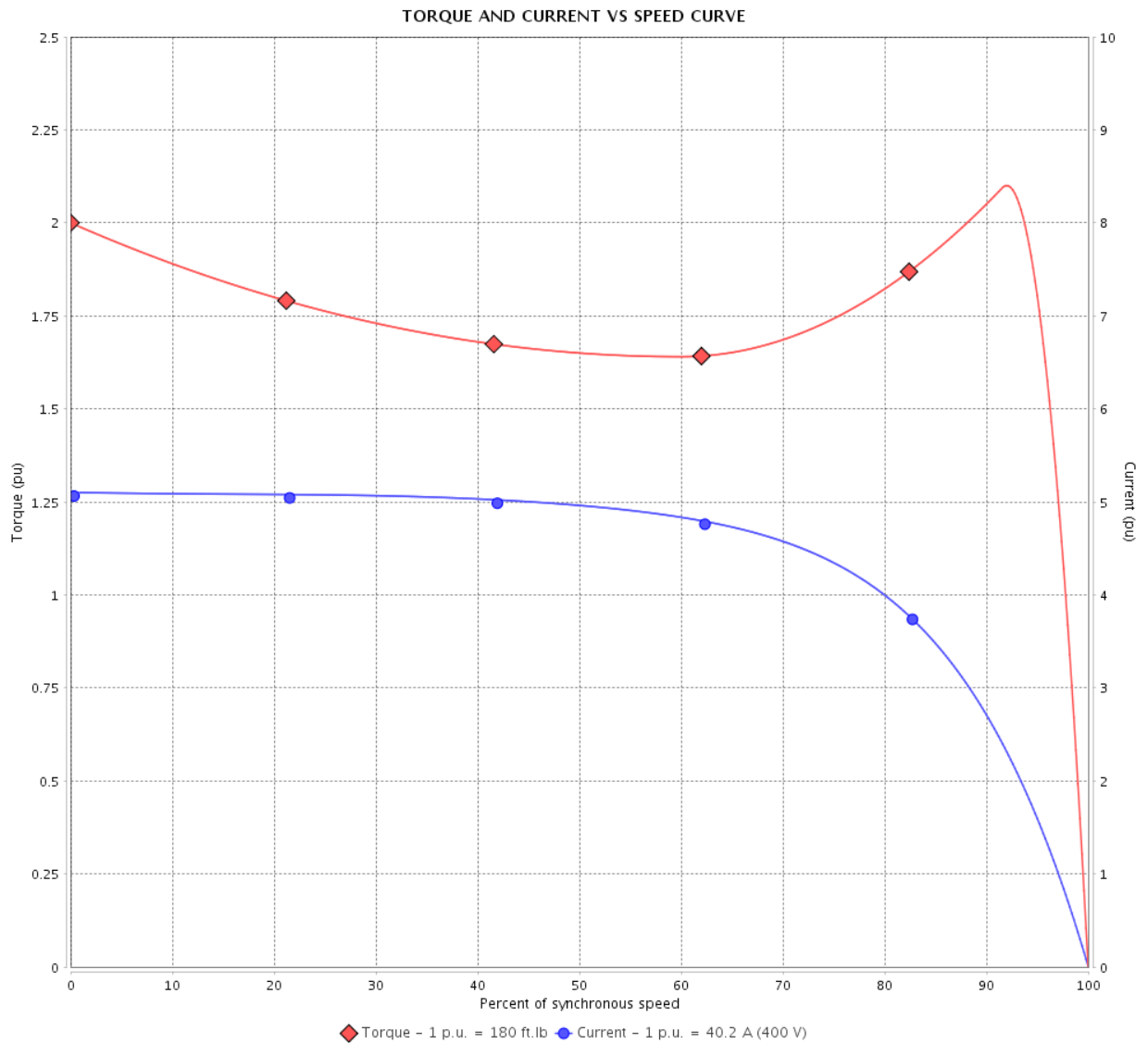
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

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Performance : 400 V 50 Hz 8P IE3

Rated current	: 40.2 A	Moment of inertia (J)	: 11.9 sq.ft.lb
LRC	: 5.1	Duty cycle	: Cont.(S1)
Rated torque	: 180 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 730 rpm	Design	: B

Locked rotor time : 36s (cold) 20s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 5 / 22	Revision
Checked by				
Date	14/04/2022			

TORQUE AND CURRENT VS SPEED CURVE

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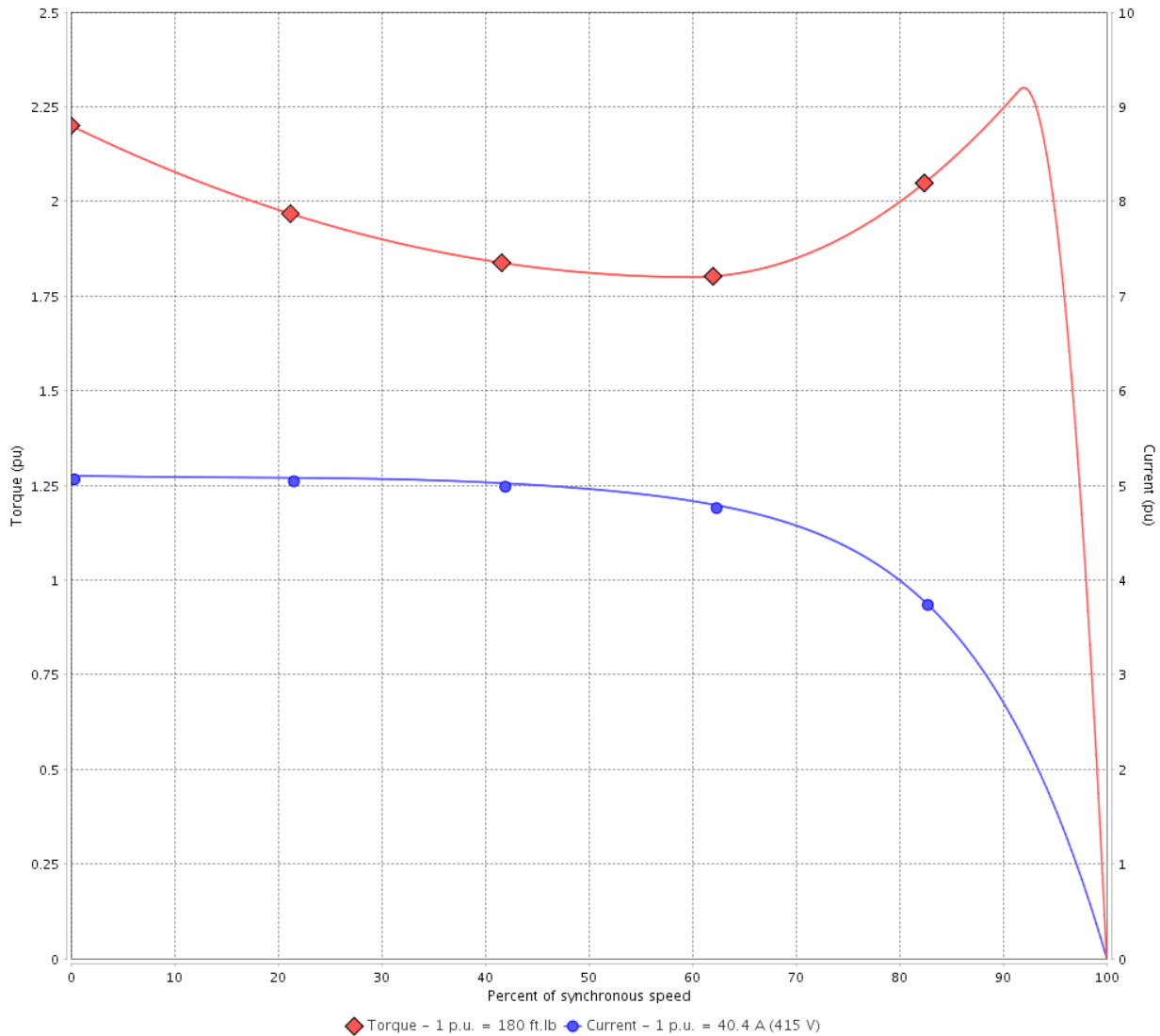
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Performance : 415 V 50 Hz 8P IE3

Rated current	: 40.4 A	Moment of inertia (J)	: 11.9 sq.ft.lb
LRC	: 5.1	Duty cycle	: Cont.(S1)
Rated torque	: 180 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 730 rpm	Design	: B

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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 22	Revision
Checked by				
Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

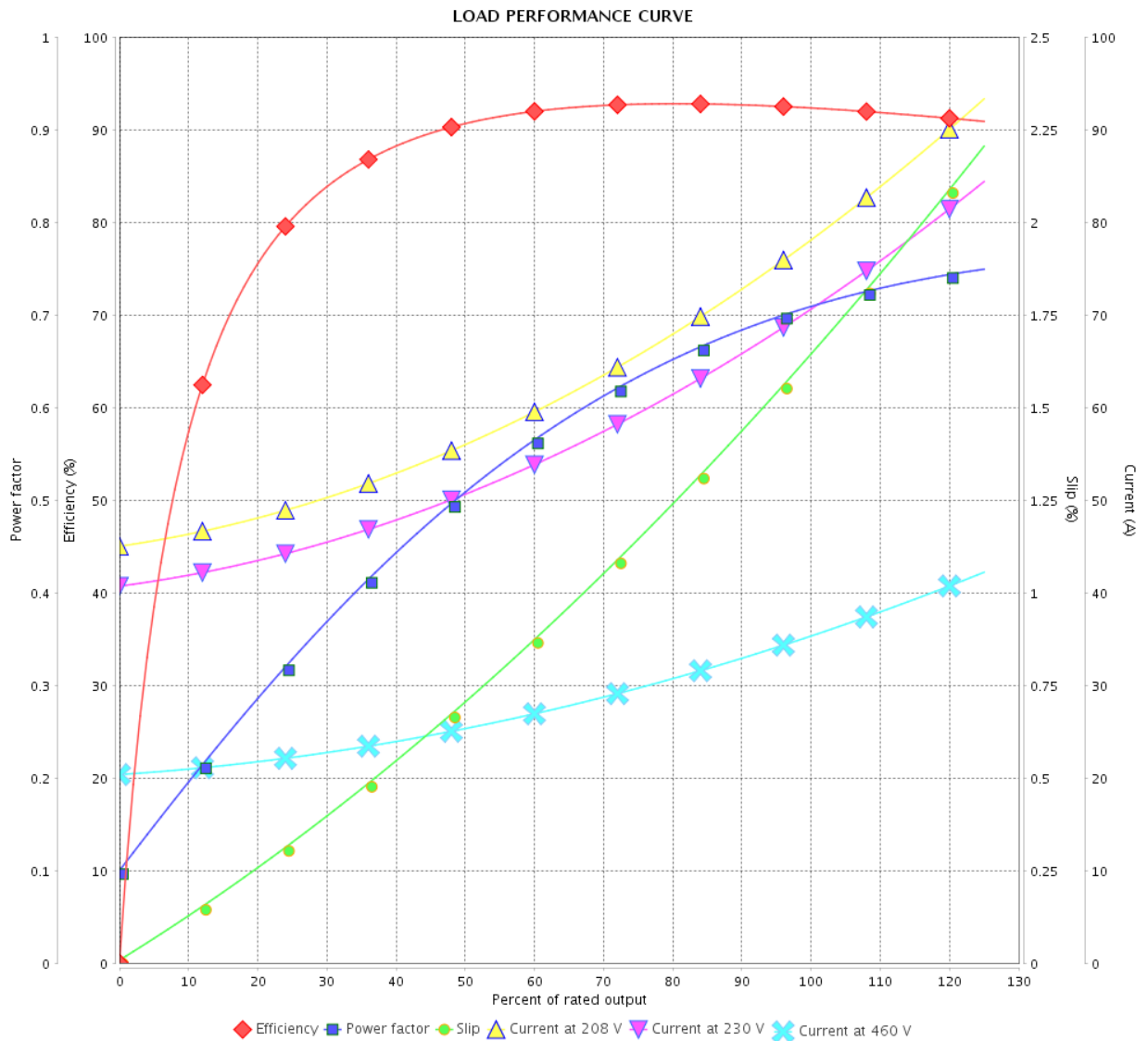


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Performance : 230/460 V 60 Hz 8P

Rated current : 70.8/35.4 A
 LRC : 5.1
 Rated torque : 148 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 240 %
 Rated speed : 885 rpm

Moment of inertia (J) : 11.9 sq.ft.lb
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

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Three Phase Induction Motor - Squirrel Cage



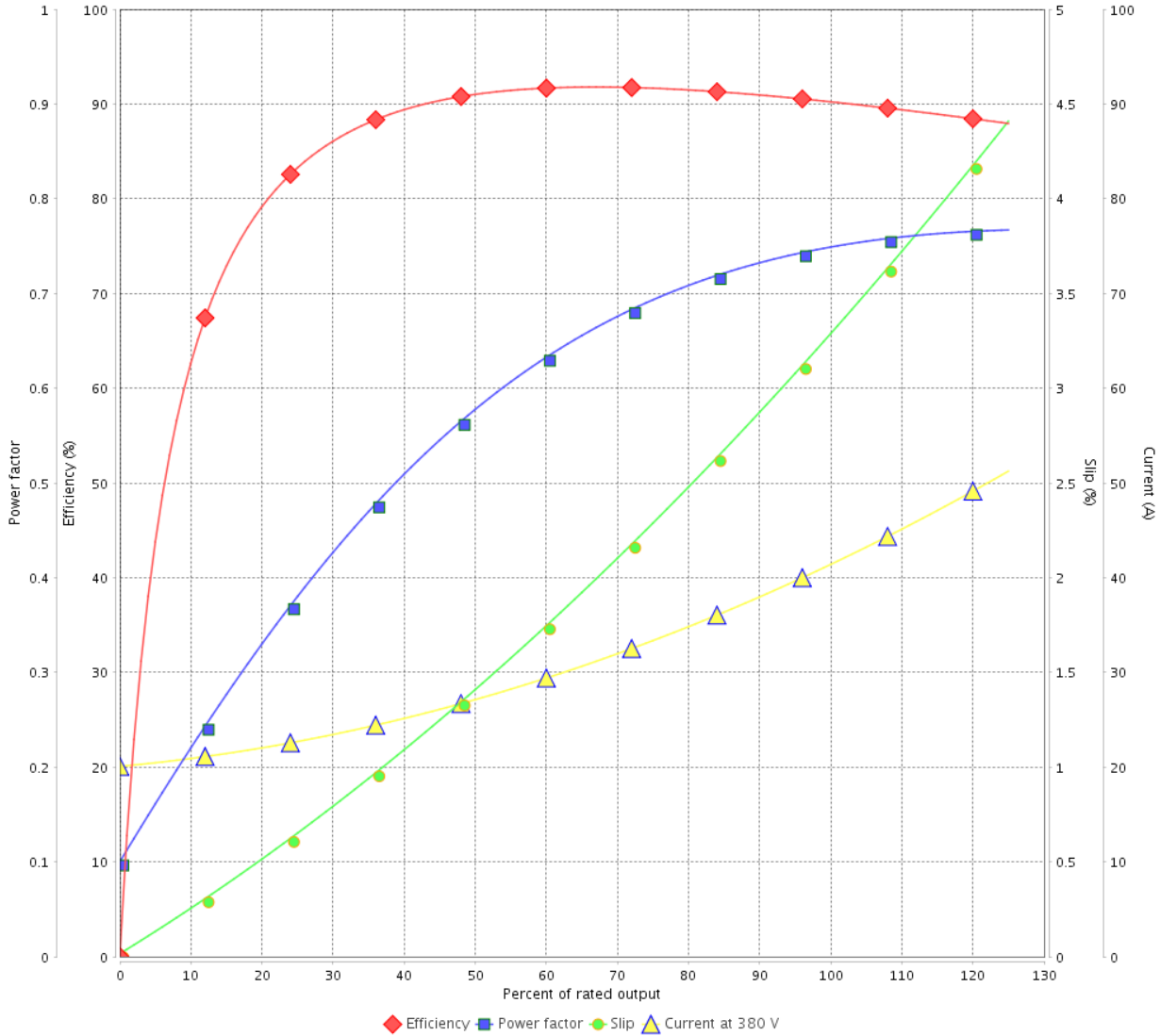
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 Breakdown torque : 190 %
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Moment of inertia (J) : 11.9 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 8 / 22	Revision
Checked by				
Date	14/04/2022			

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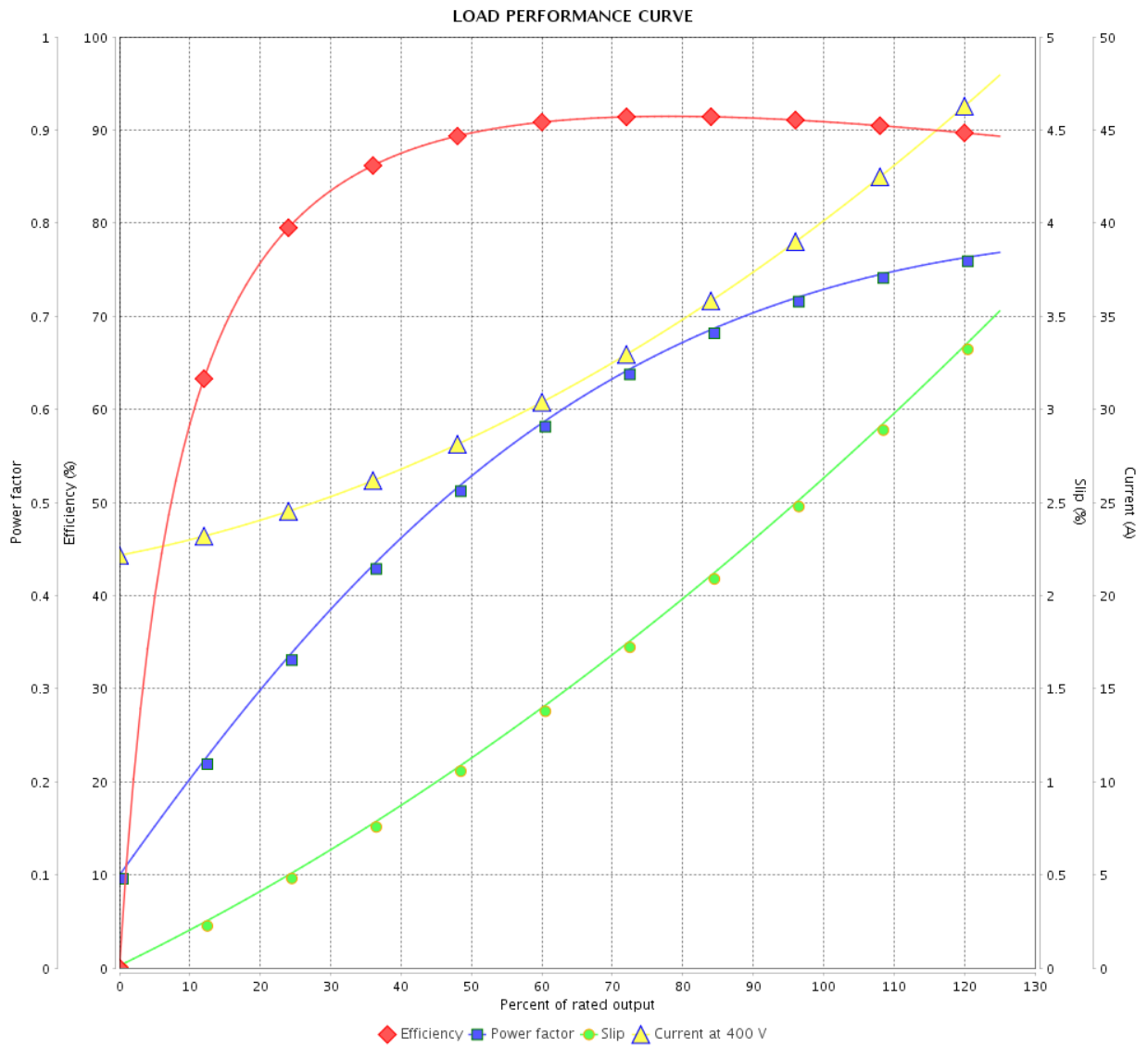


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Performed by			Page	Revision
Checked by				
Date				

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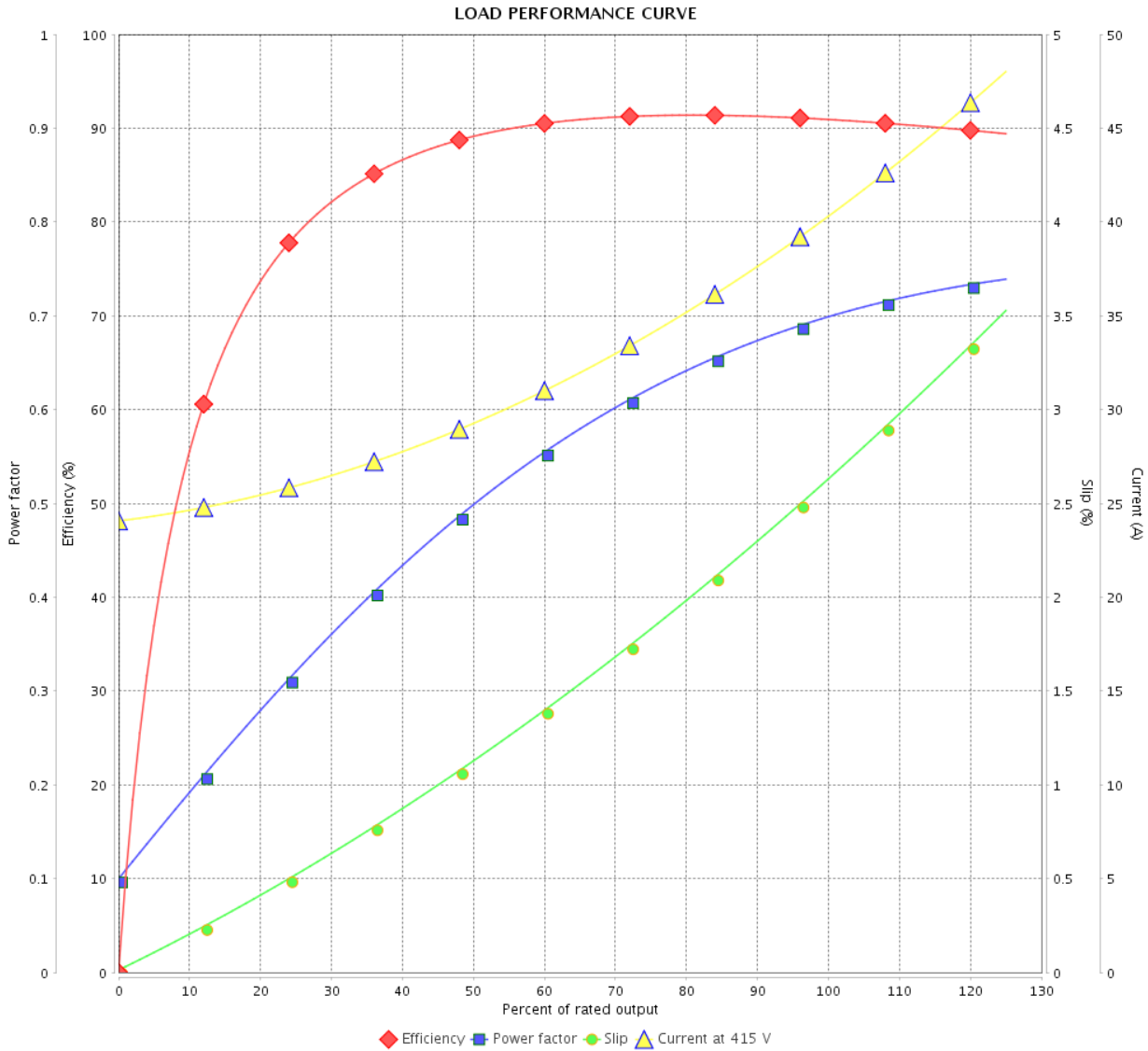


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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		10 / 22		
Date	14/04/2022			

THERMAL LIMIT CURVE



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Heating constant

Cooling constant

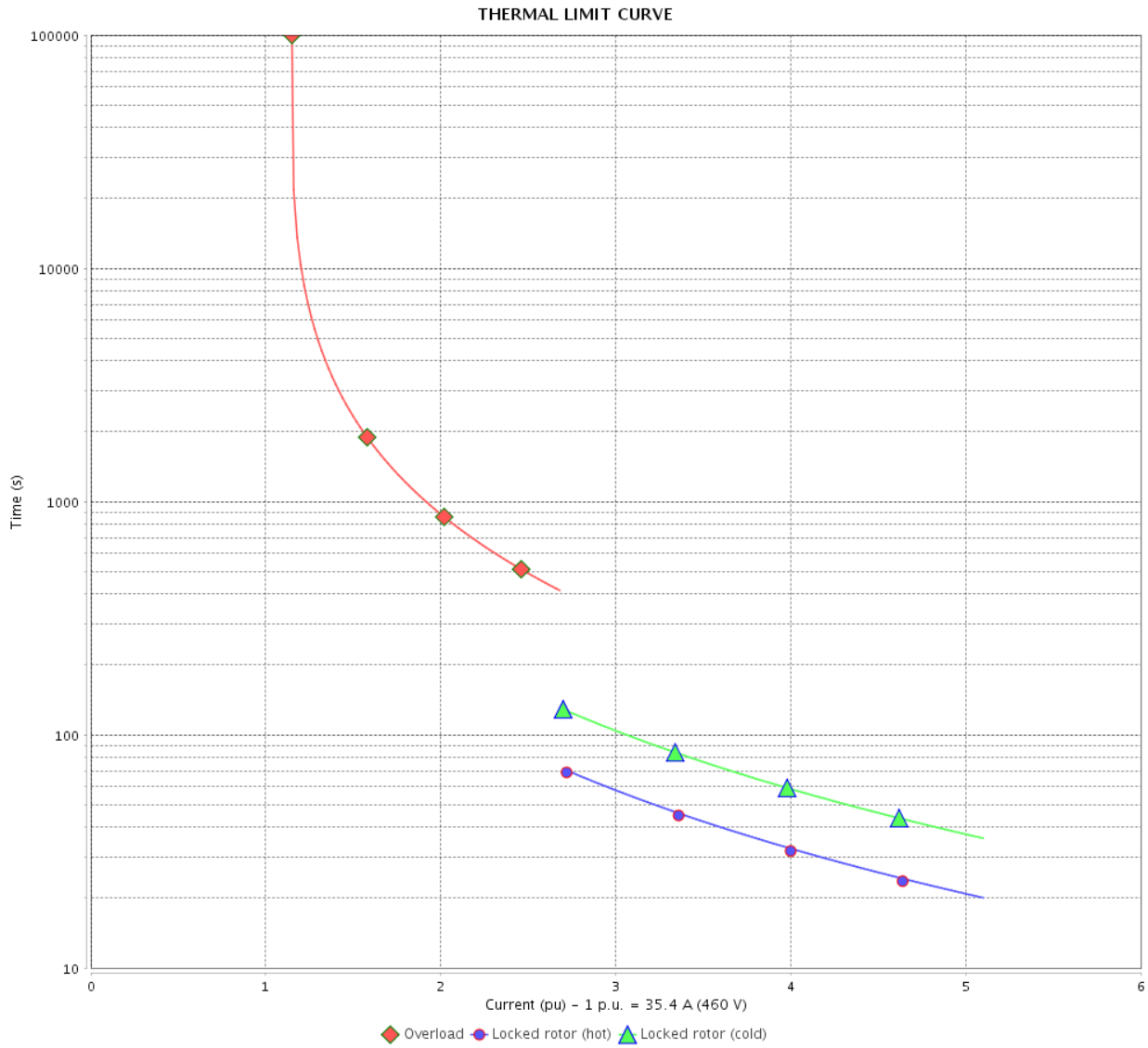
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date	14/04/2022	11 / 22		

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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		12 / 22		
Date		14/04/2022		

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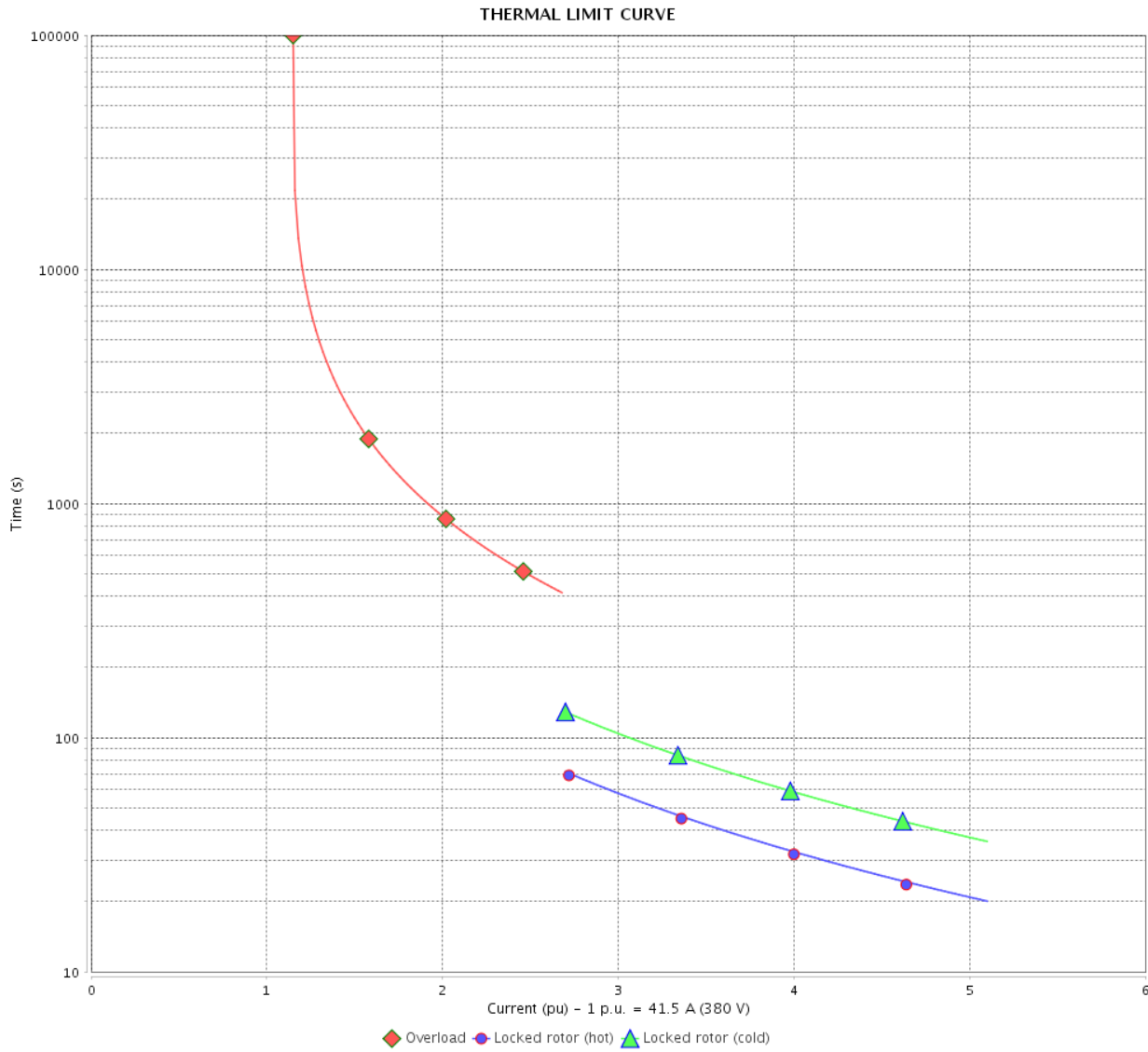
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 13 / 22	Revision
Checked by				
Date	14/04/2022			

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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
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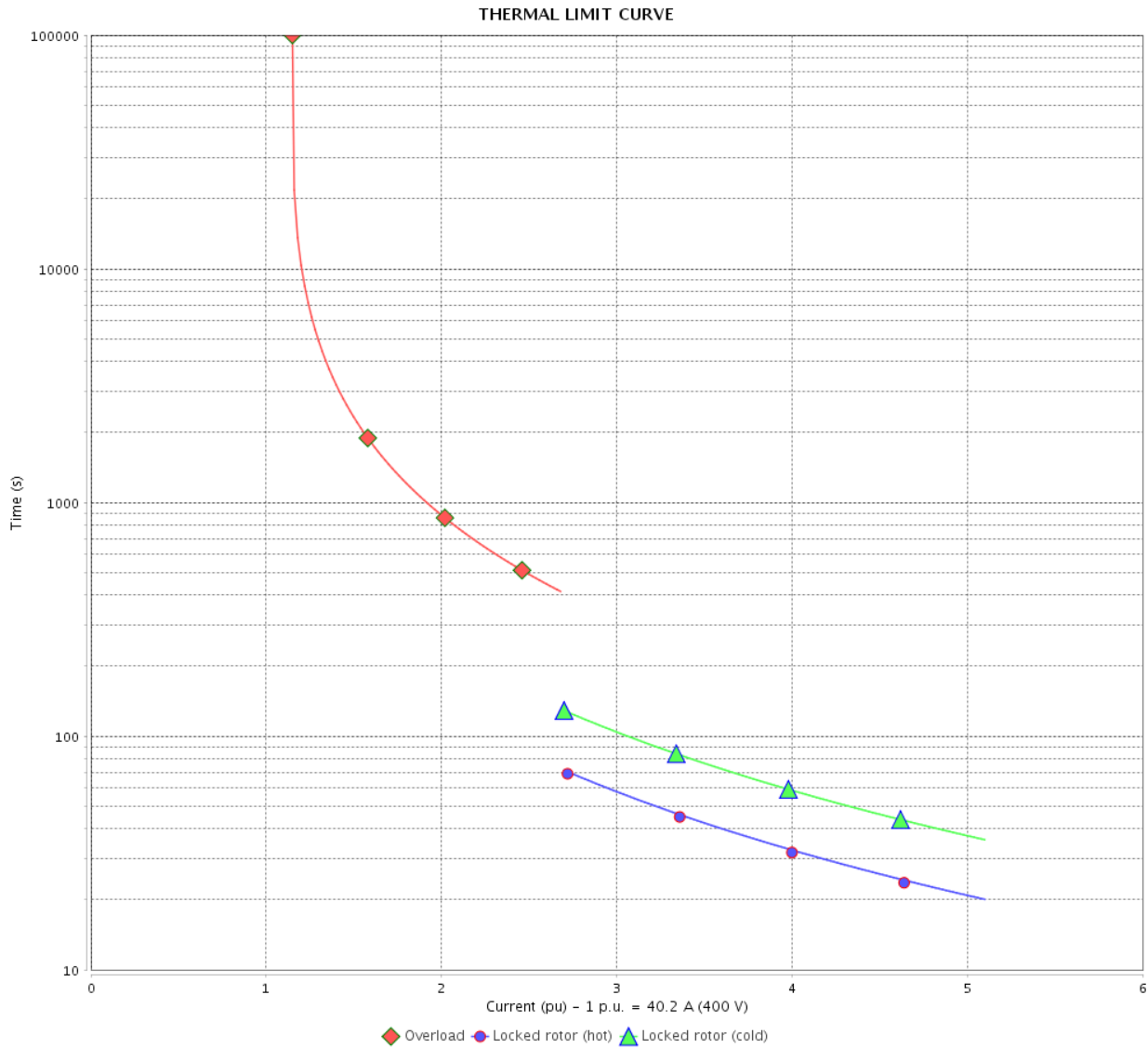
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		15 / 22	

THERMAL LIMIT CURVE

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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 16 / 22		Revision
Checked by				
Date				

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Heating constant

Cooling constant

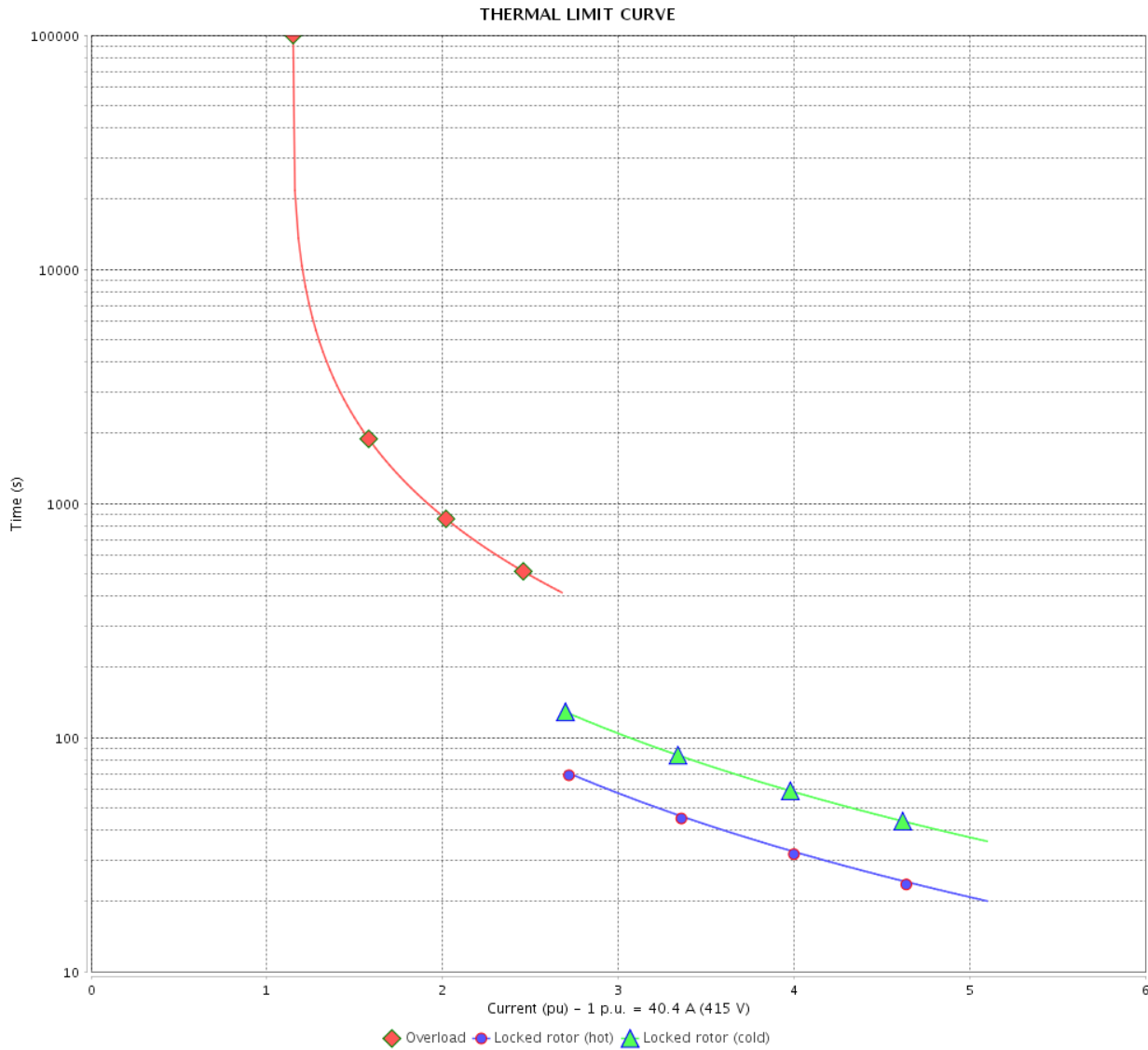
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 17 / 22	Revision
Checked by				
Date	14/04/2022			

THERMAL LIMIT CURVE

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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 18 / 22		Revision
Checked by				
Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

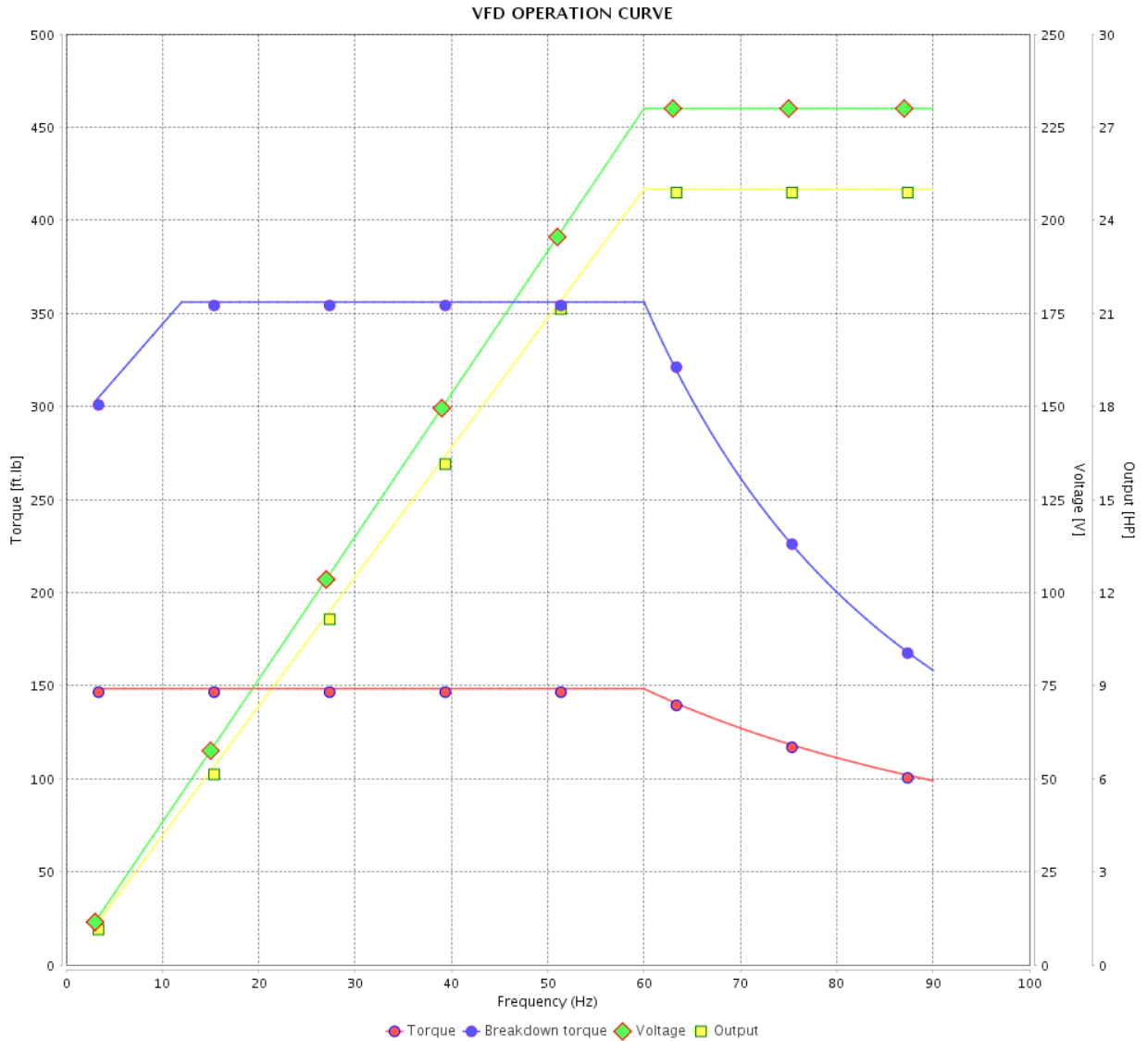


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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

VFD OPERATION CURVE

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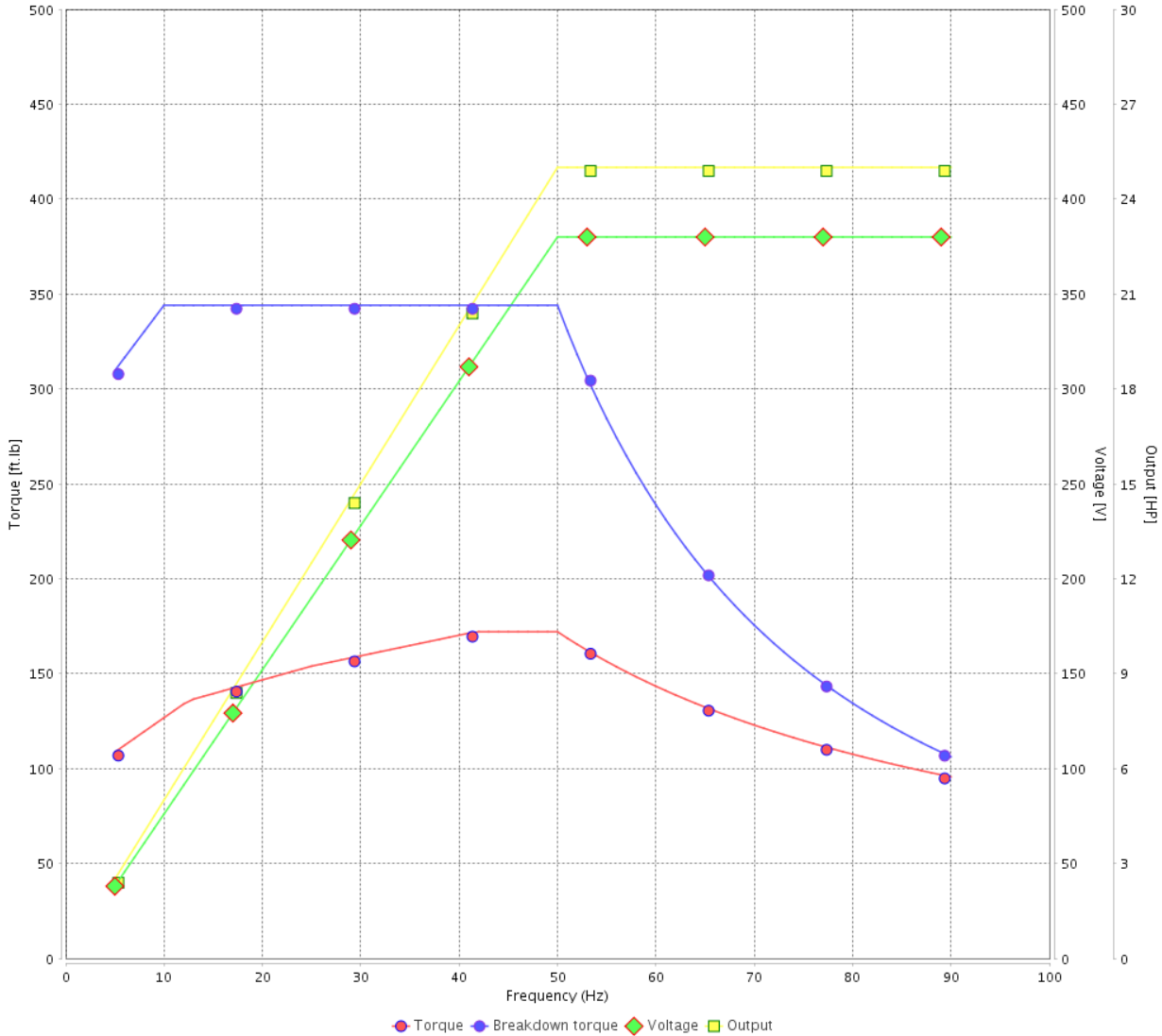
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VFD OPERATION CURVE



Performance : 380 V 50 Hz 8P IE3

Rated current : 41.5 A
 LRC : 5.1
 Rated torque : 181 ft.lb
 Locked rotor torque : 180 %
 Breakdown torque : 190 %
 Rated speed : 725 rpm

Moment of inertia (J) : 11.9 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 20 / 22	Revision
Checked by				
Date	14/04/2022			

VFD OPERATION CURVE

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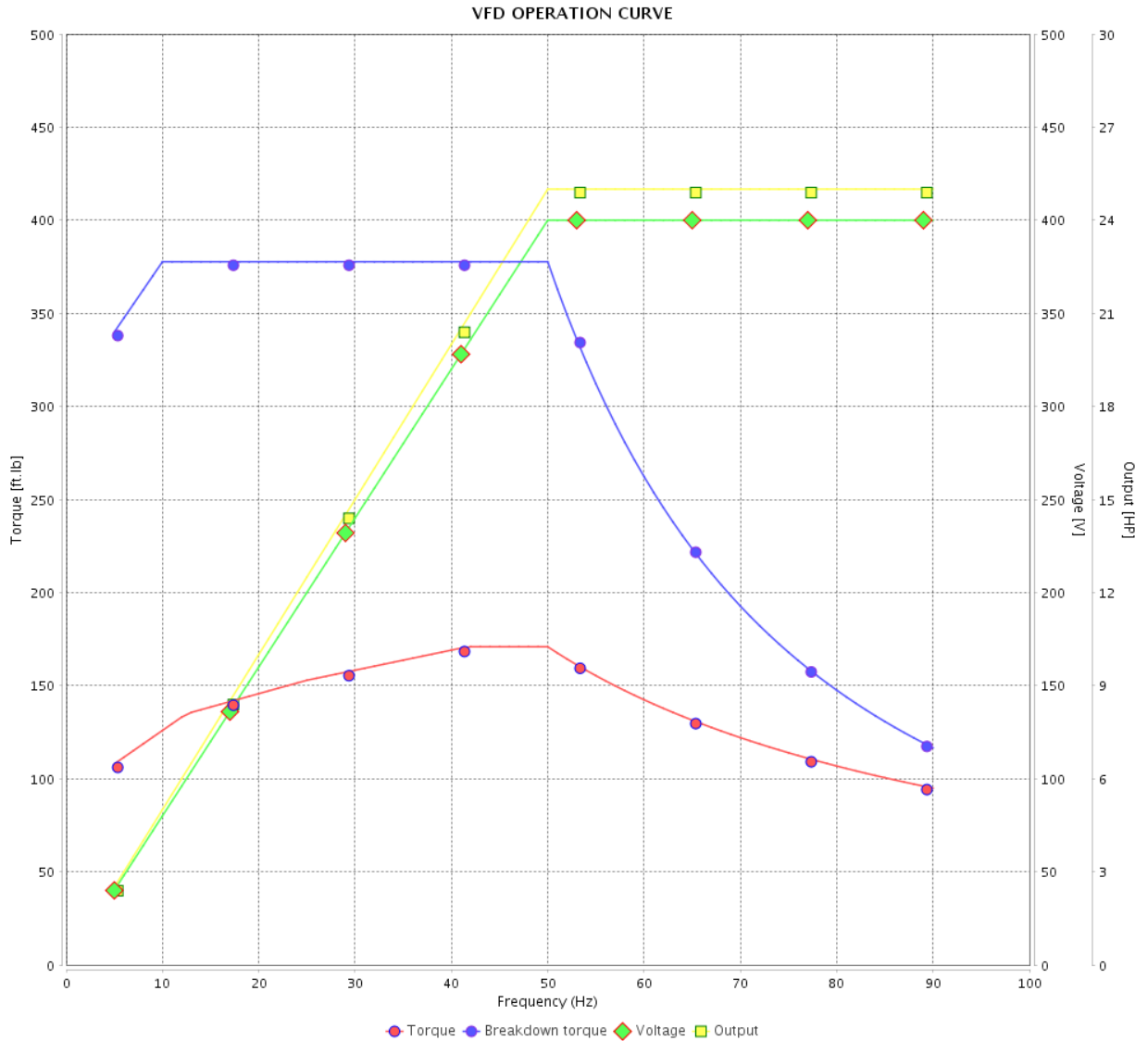


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Performance : 400 V 50 Hz 8P IE3

Rated current : 40.2 A
 LRC : 5.1
 Rated torque : 180 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 210 %
 Rated speed : 730 rpm

Moment of inertia (J) : 11.9 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
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Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 21 / 22	Revision
Checked by				
Date	14/04/2022			

VFD OPERATION CURVE

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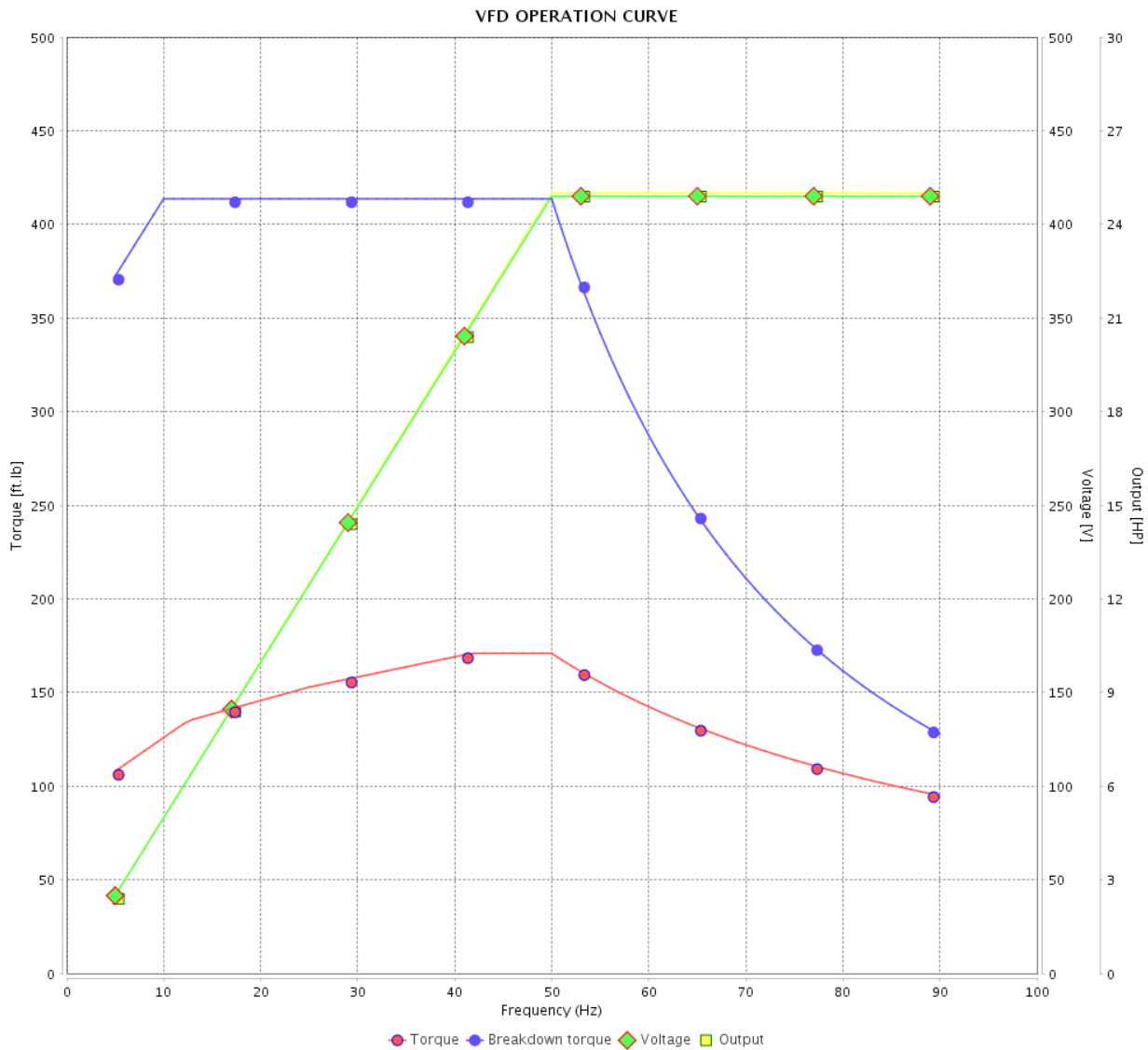


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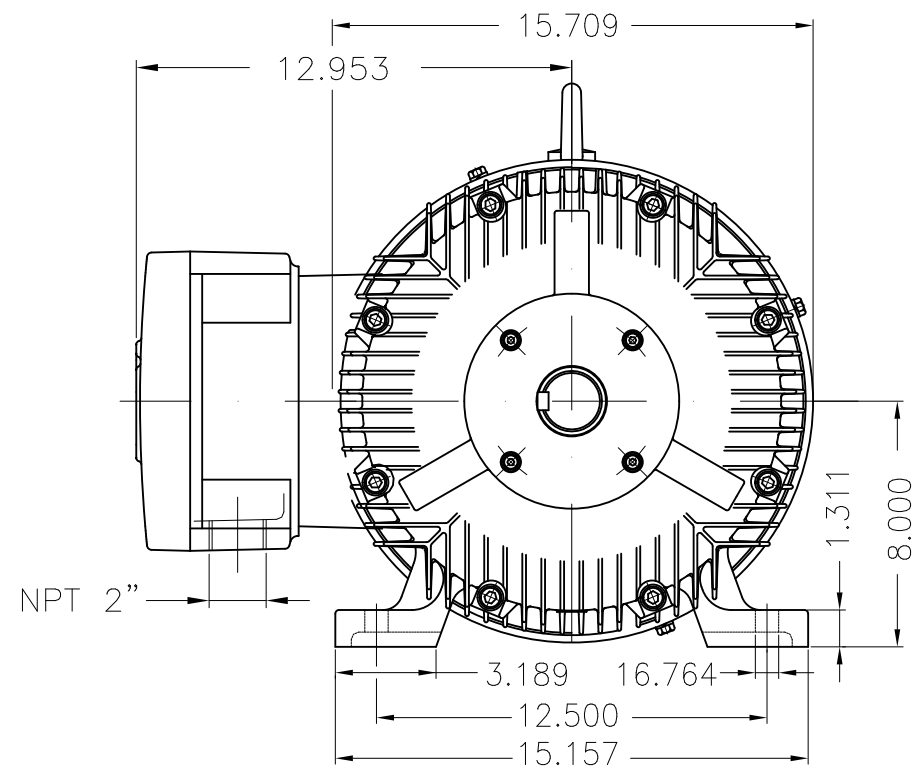
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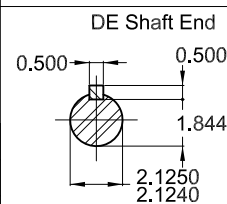
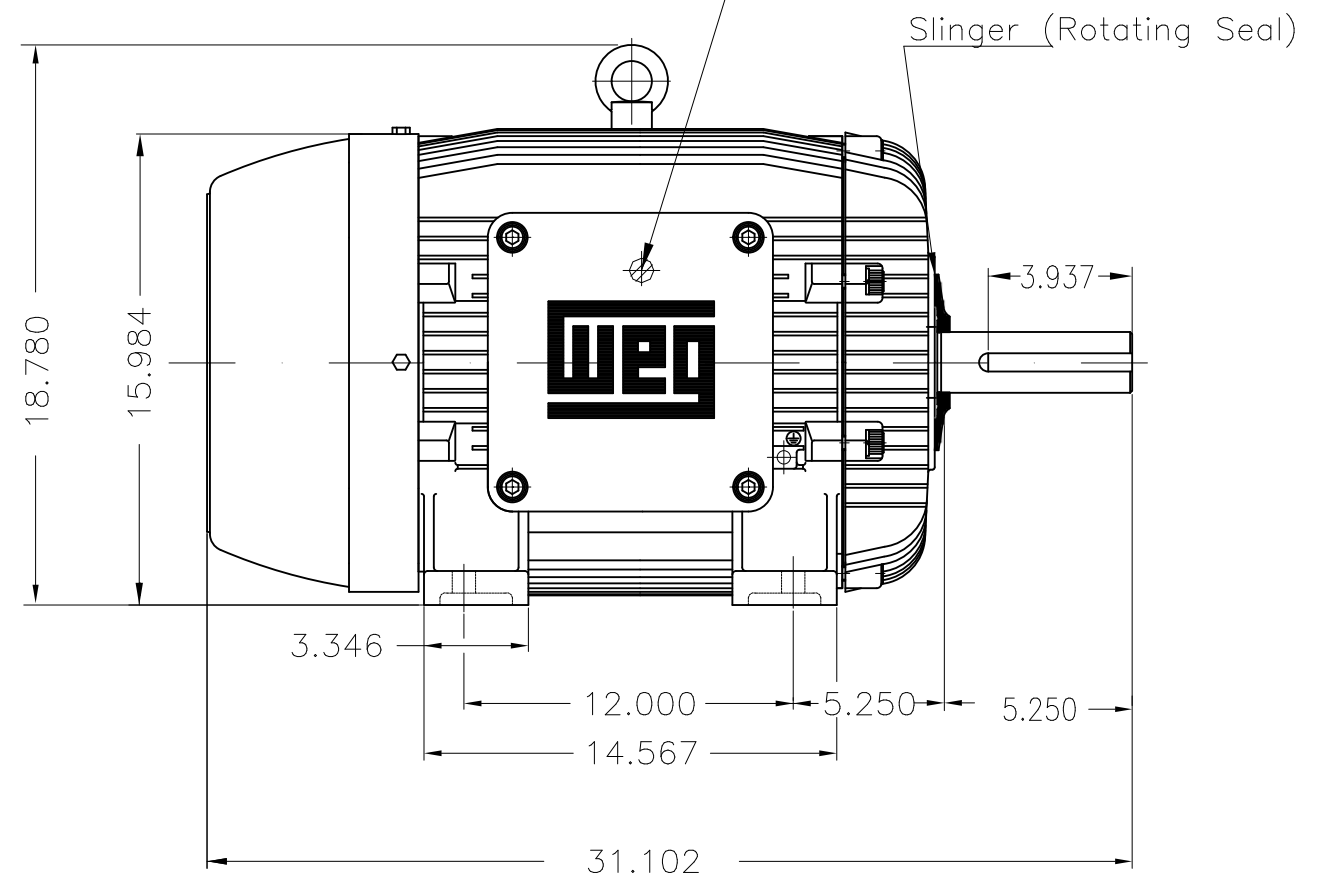
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Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 730 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 22 / 22	Revision
Checked by				
Date	14/04/2022			



Grounding for leads 5.2–35 mm² / 10–2 AWG



Color RAL 5009
 Painting plan 202P
 Mounting B3R(D)

25 HP 08 Poles 60 Hz

Dimensions in inches

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR EXPLOSION PROOF PREM. EFF.					
CHECKED		FRAME 326T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
 WDD



SHEET 1 / 1