

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line : Premium Efficiency Three-Phase		Product code : 14797787		
		Catalog # : 00118ET3E56-S		
Frame	: 56	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 ³	: 36.8 lb	
Protection degree	: IP55	Moment of inertia (J)	: 0.1232 sq.ft.lb	
Design	: B			
Output [HP]	1	1	1	
Poles	4	4	4	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	2.94/1.47	3.40/1.70	3.09/1.64	
L. R. Amperes [A]	25.3/12.6	22.1/11.0	22.0/11.6	
LRC [A]	8.6x(Code M)	6.5x(Code J)	7.1x(Code K)	
No load current [A]	1.78/0.890	1.76/0.879	1.77/0.938	
Rated speed [RPM]	1765	1450	1455	
Slip [%]	1.94	3.33	3.00	
Rated torque [ft.lb]	2.98	3.62	3.61	
Locked rotor torque [%]	280	200	220	
Breakdown torque [%]	300	270	300	
Service factor		1.00	1.00	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	34s (cold) 19s (hot)	32s (cold) 18s (hot)	30s (cold) 17s (hot)	
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	
Efficiency (%)	25%	81.0	82.5	81.2
	50%	82.5	82.2	81.5
	75%	84.0	83.7	83.6
	100%	85.5	82.9	83.5
Power Factor	25%	0.30	0.36	0.33
	50%	0.52	0.62	0.58
	75%	0.66	0.74	0.71
	100%	0.75	0.81	0.79
Bearing type	: <u>Drive end</u> 6204 ZZ	<u>Non drive end</u> 6202 ZZ	Foundation loads	
Sealing	: V'Ring	Without Bearing Seal	Max. traction	: 88 lb
			Max. compression	: 125 lb
Lubrication interval	: -	-		
Lubricant amount	: -	-		
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 3.25A SF 1.00 SFA 3.25A				
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
Performed by				
Checked by			Page	Revision
Date	27/07/2022		1 / 13	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

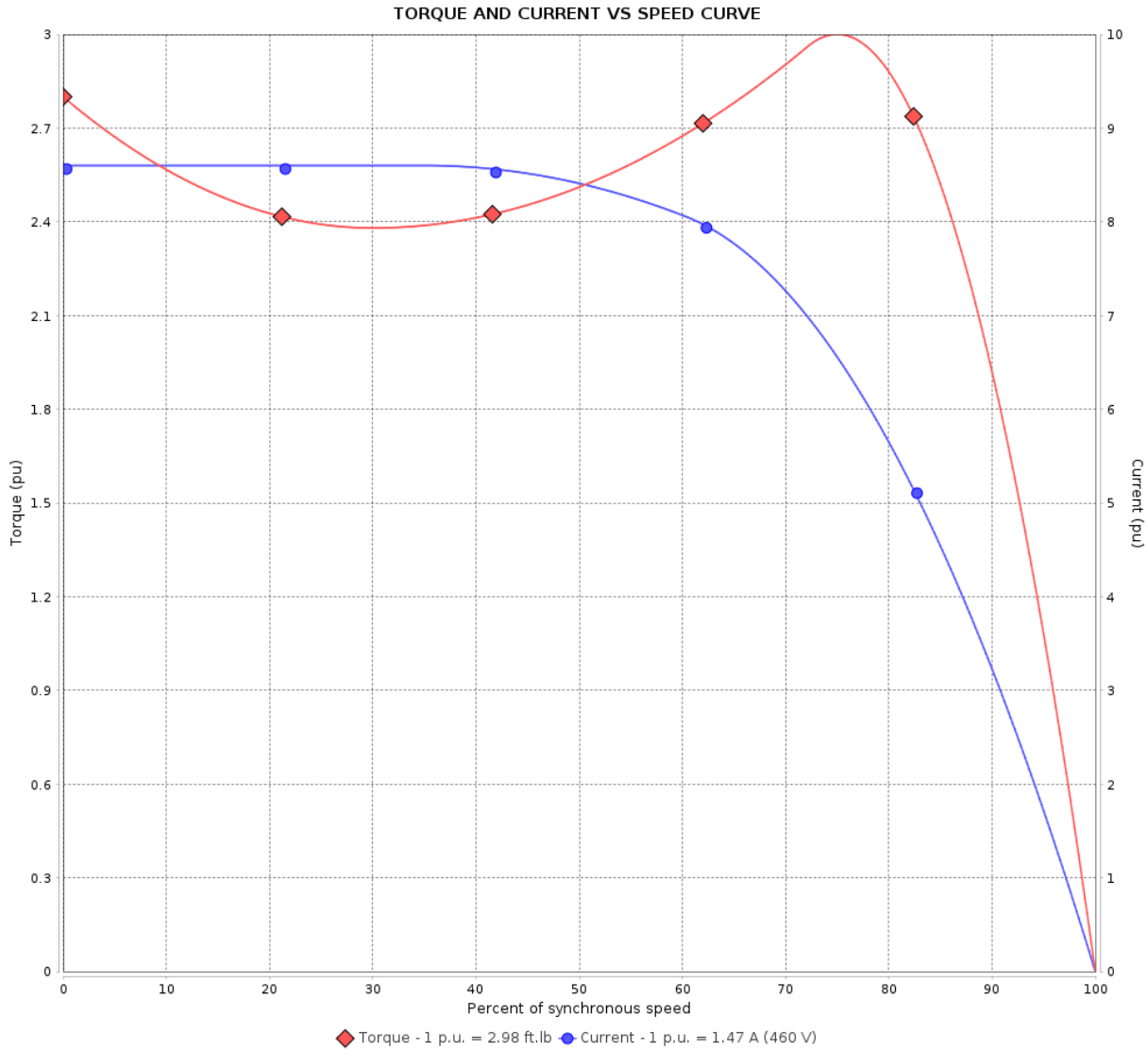
Product line : Premium Efficiency Three-Phase

Product code :

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Catalog # :

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Performance : 230/460 V 60 Hz 4P

Rated current : 2.94/1.47 A
 LRC : 8.6
 Rated torque : 2.98 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 300 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.1232 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

Locked rotor time : 34s (cold) 19s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		2 / 13		
Date		27/07/2022		

TORQUE AND CURRENT VS SPEED CURVE

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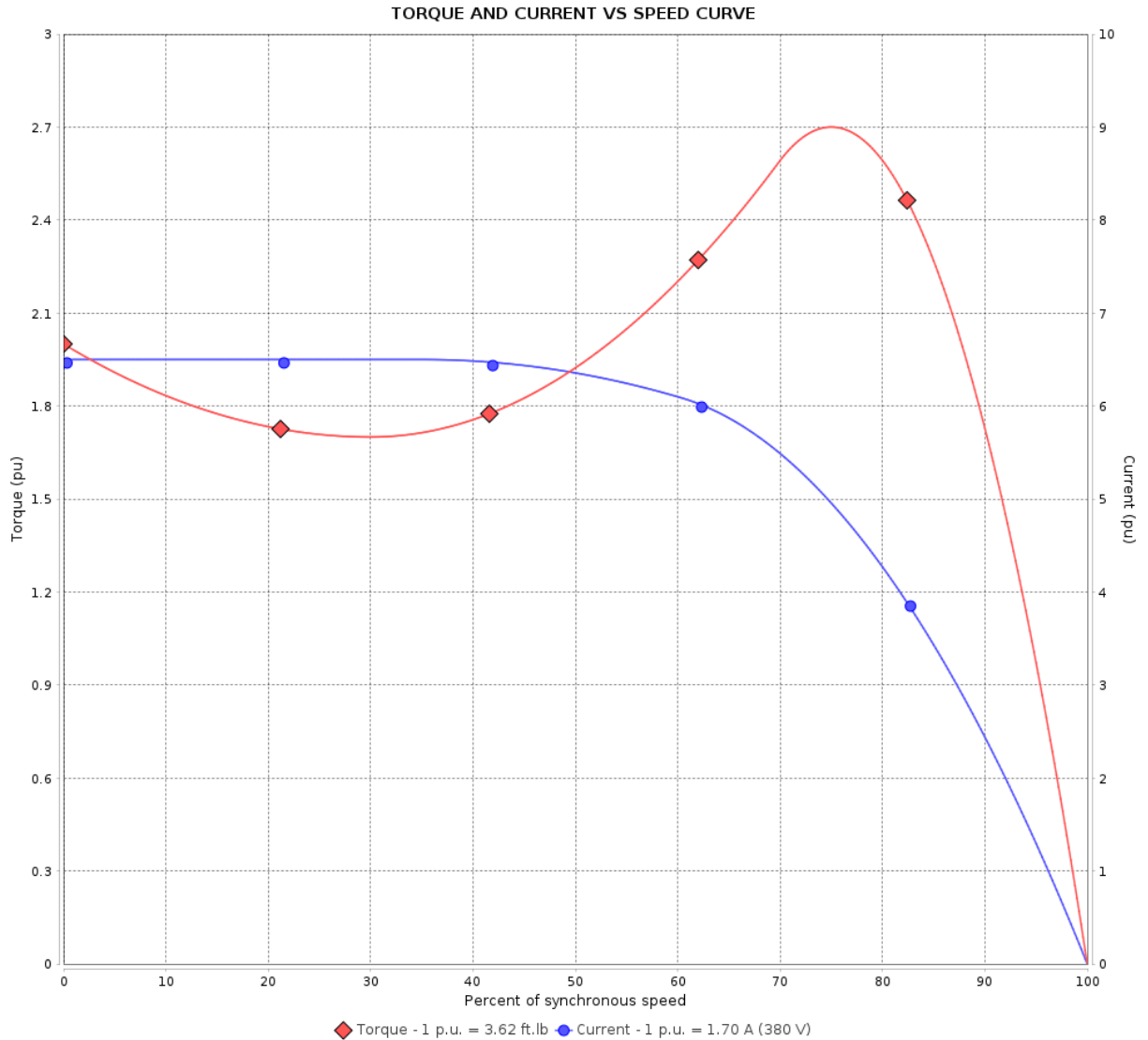
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Performance : 190/380 V 50 Hz 4P

Rated current : 3.40/1.70 A
 LRC : 6.5
 Rated torque : 3.62 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 270 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.1232 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Locked rotor time : 32s (cold) 18s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date	27/07/2022			
			3 / 13	

TORQUE AND CURRENT VS SPEED CURVE

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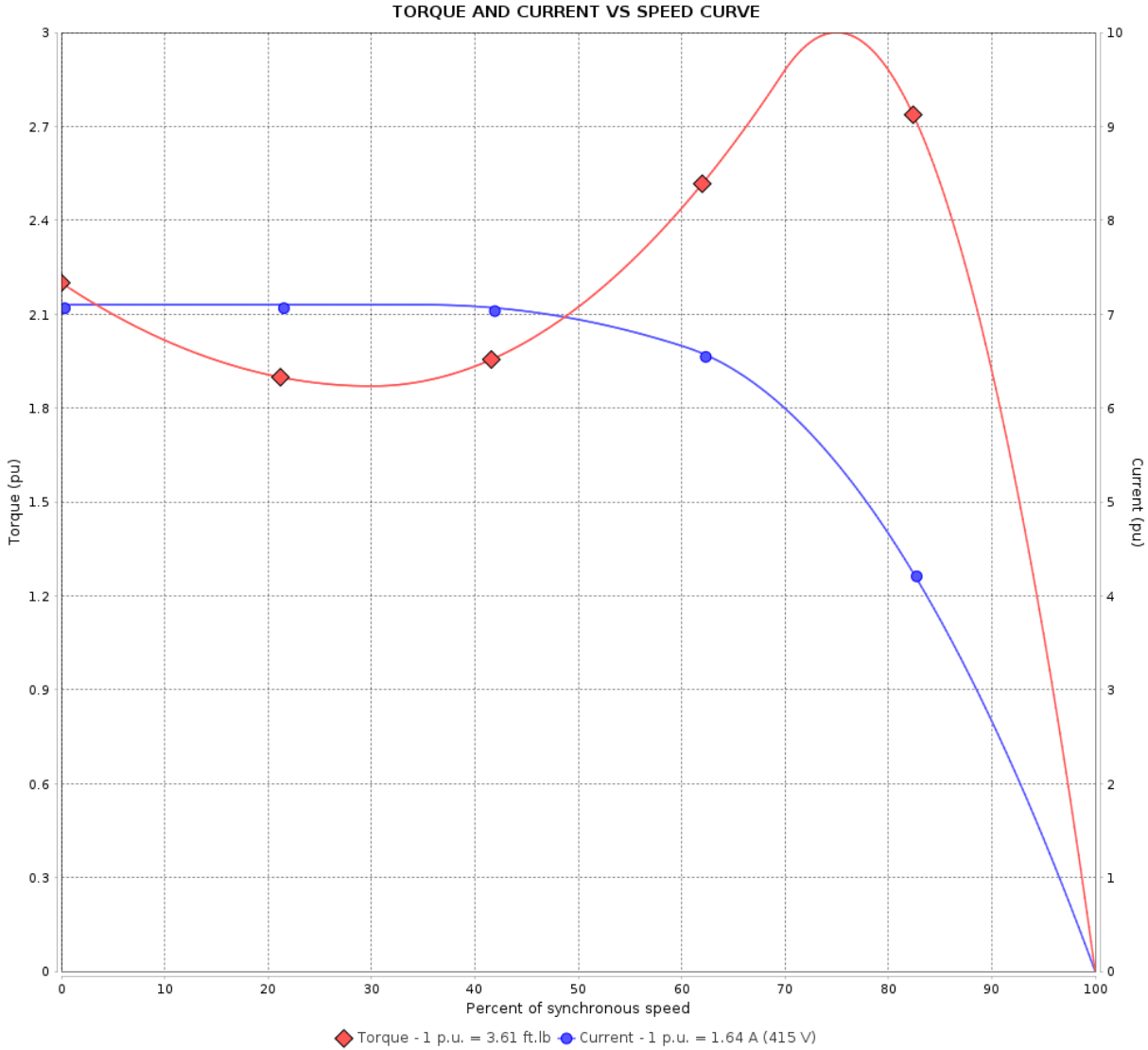
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Product code :

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Catalog # :

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Performance : 220/415 V 50 Hz 4P

Rated current	: 3.09/1.64 A	Moment of inertia (J)	: 0.1232 sq.ft.lb
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 3.61 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

Locked rotor time : 30s (cold) 17s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 13	Revision
Checked by				
Date	27/07/2022			

LOAD PERFORMANCE CURVE

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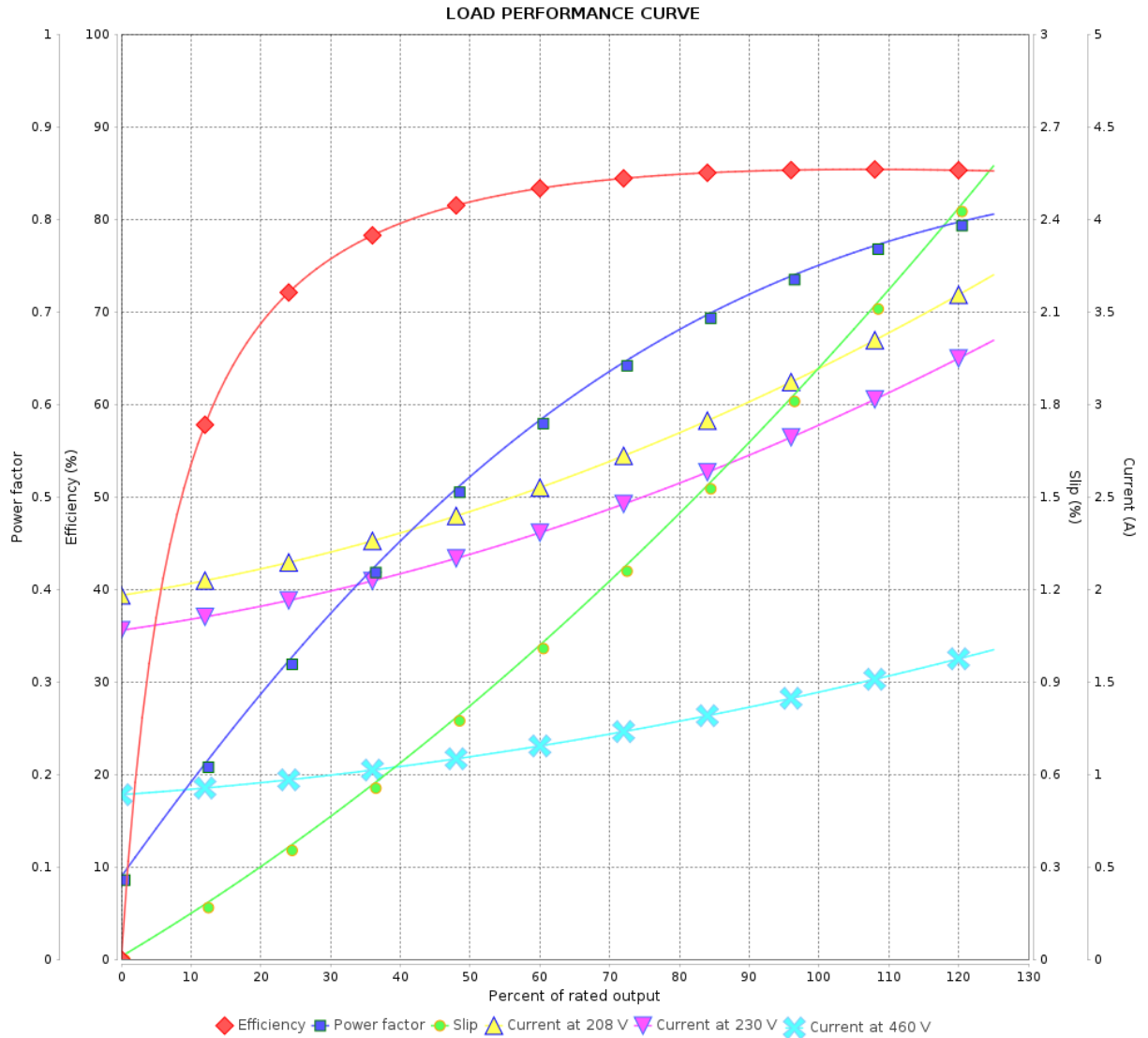
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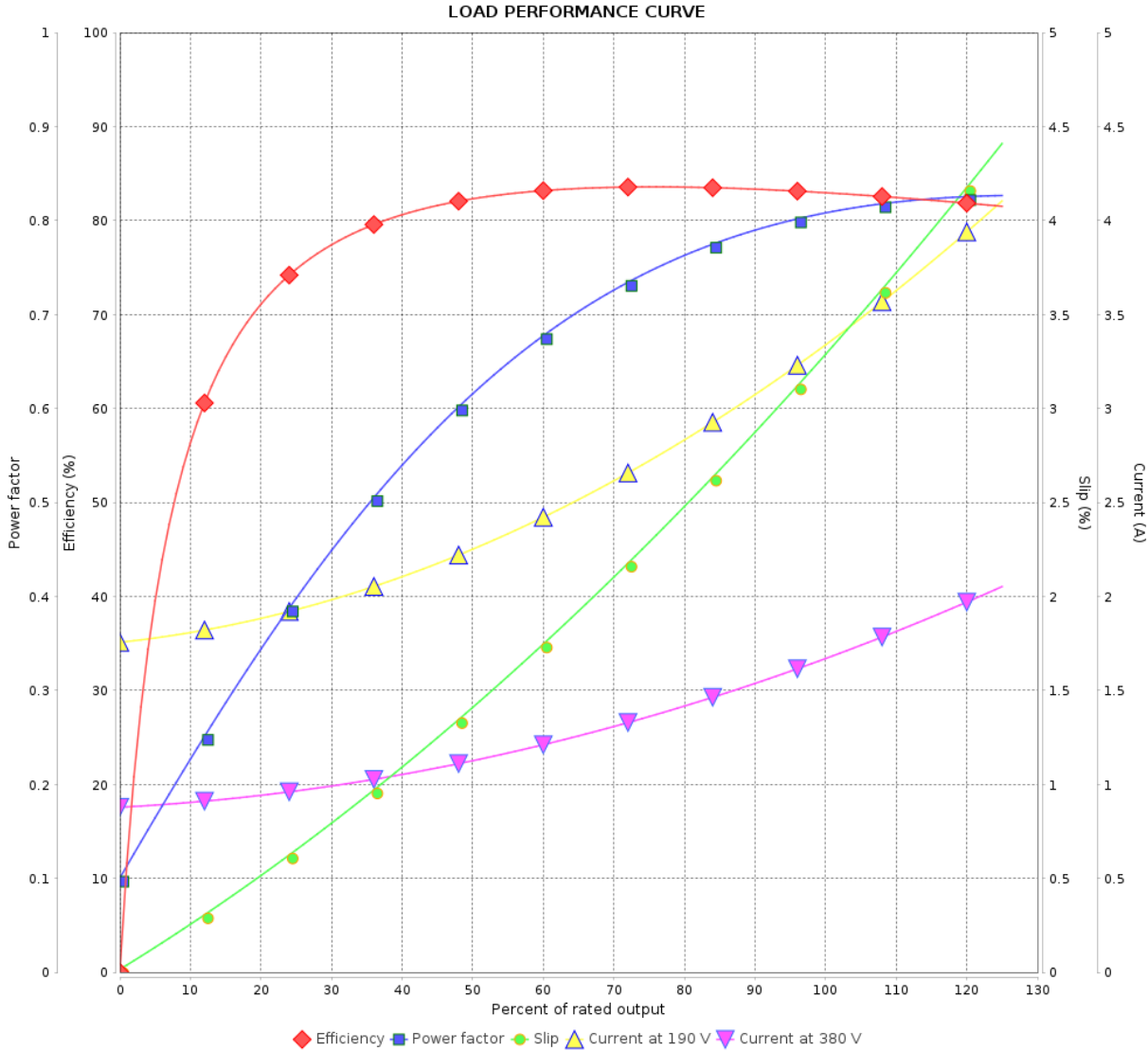
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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 13	Revision
Checked by				
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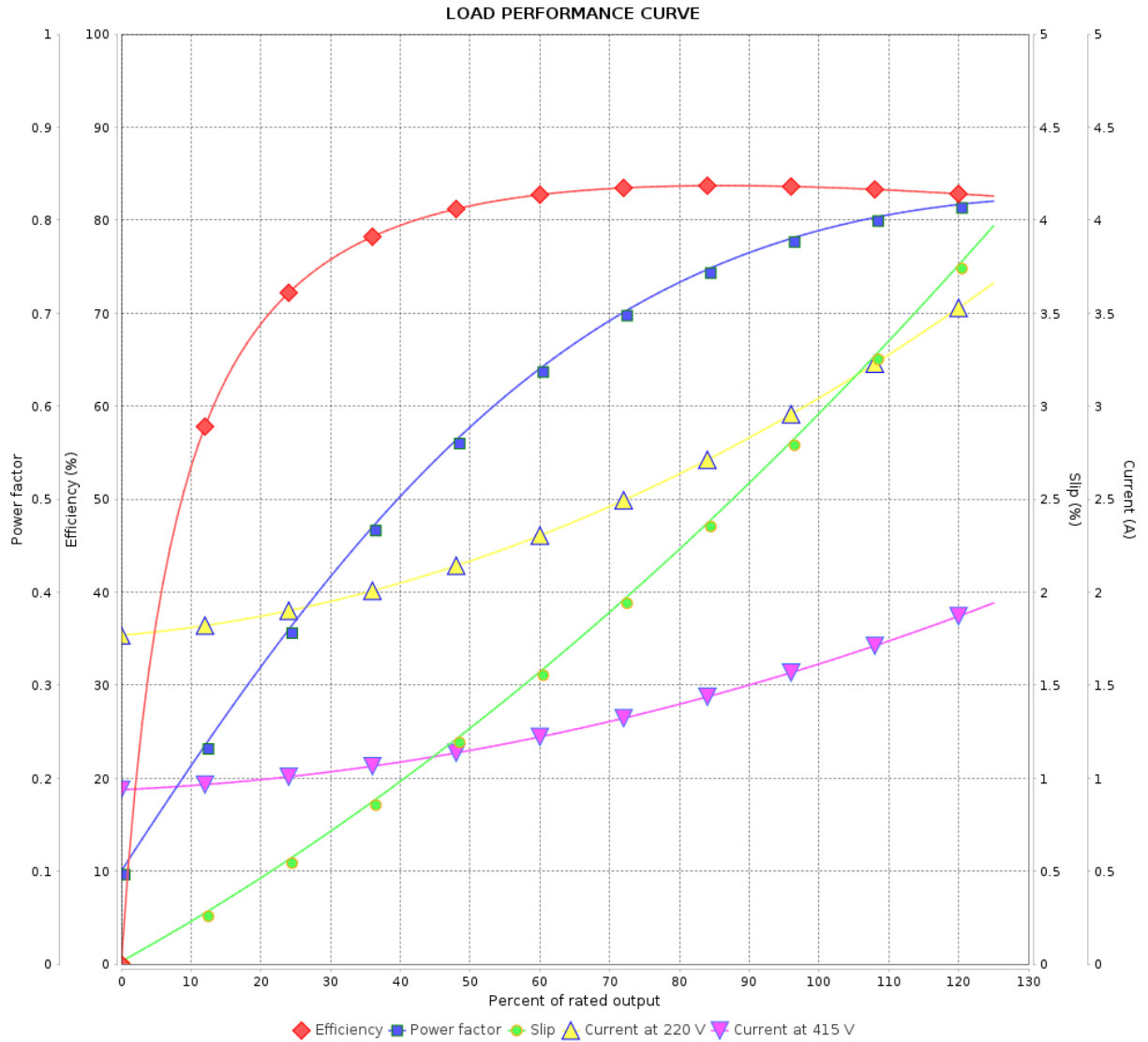
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THERMAL LIMIT CURVE

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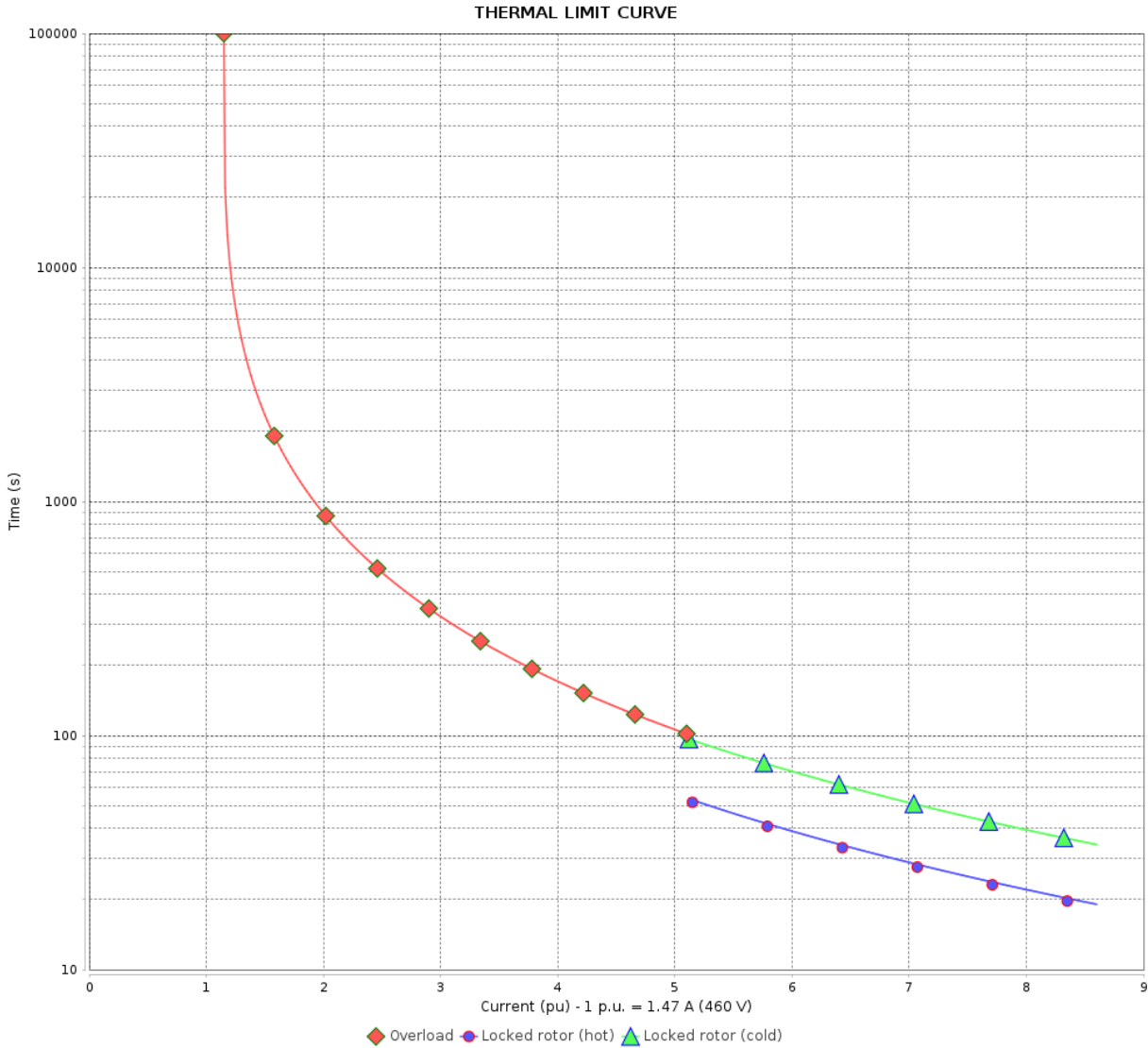
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 Service factor :
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 Design : B

Heating constant

Cooling constant

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Performed by			Page 8 / 13	Revision
Checked by				
Date	27/07/2022			

THERMAL LIMIT CURVE

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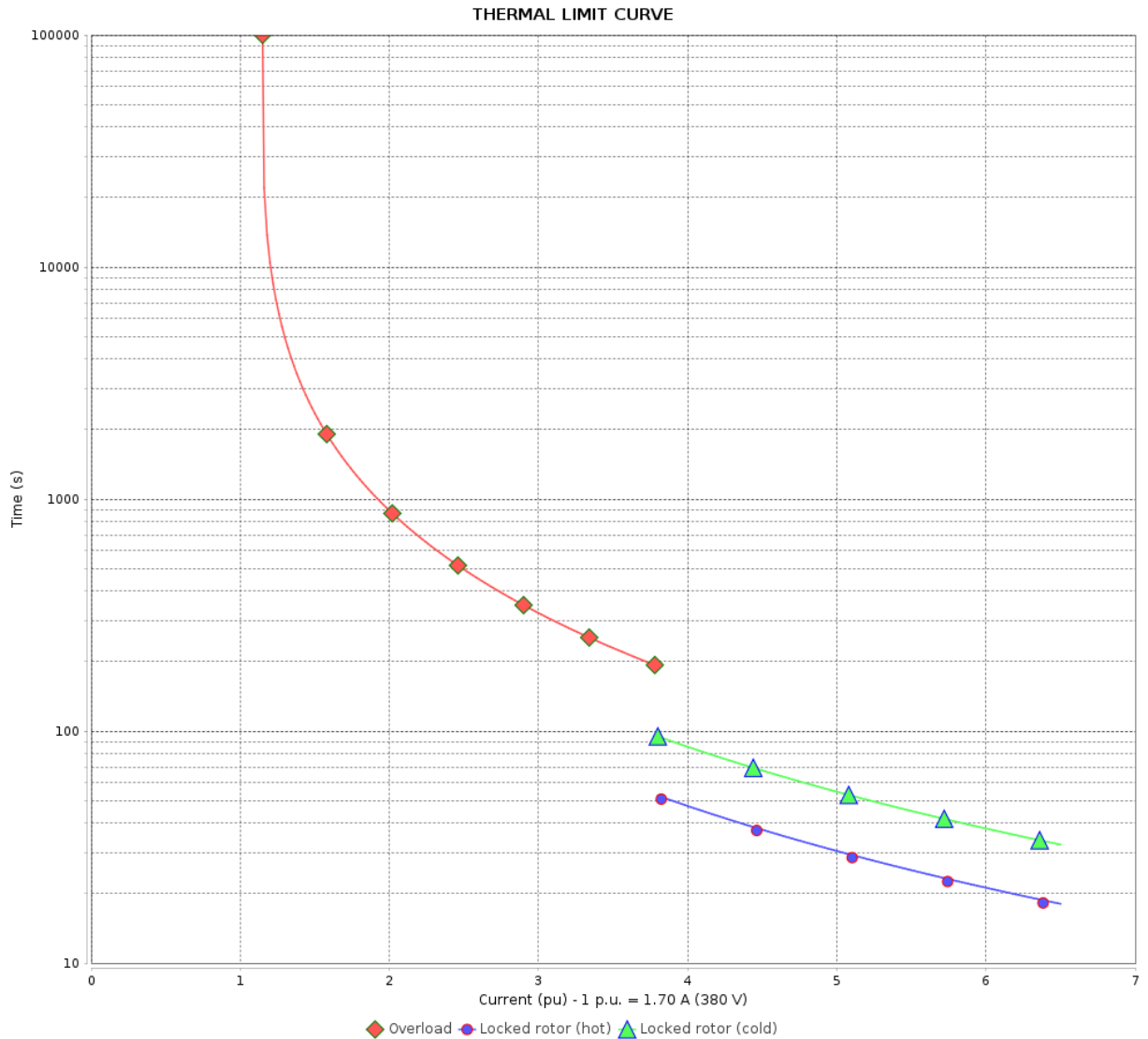
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Performed by			Page 9 / 13	Revision
Checked by				
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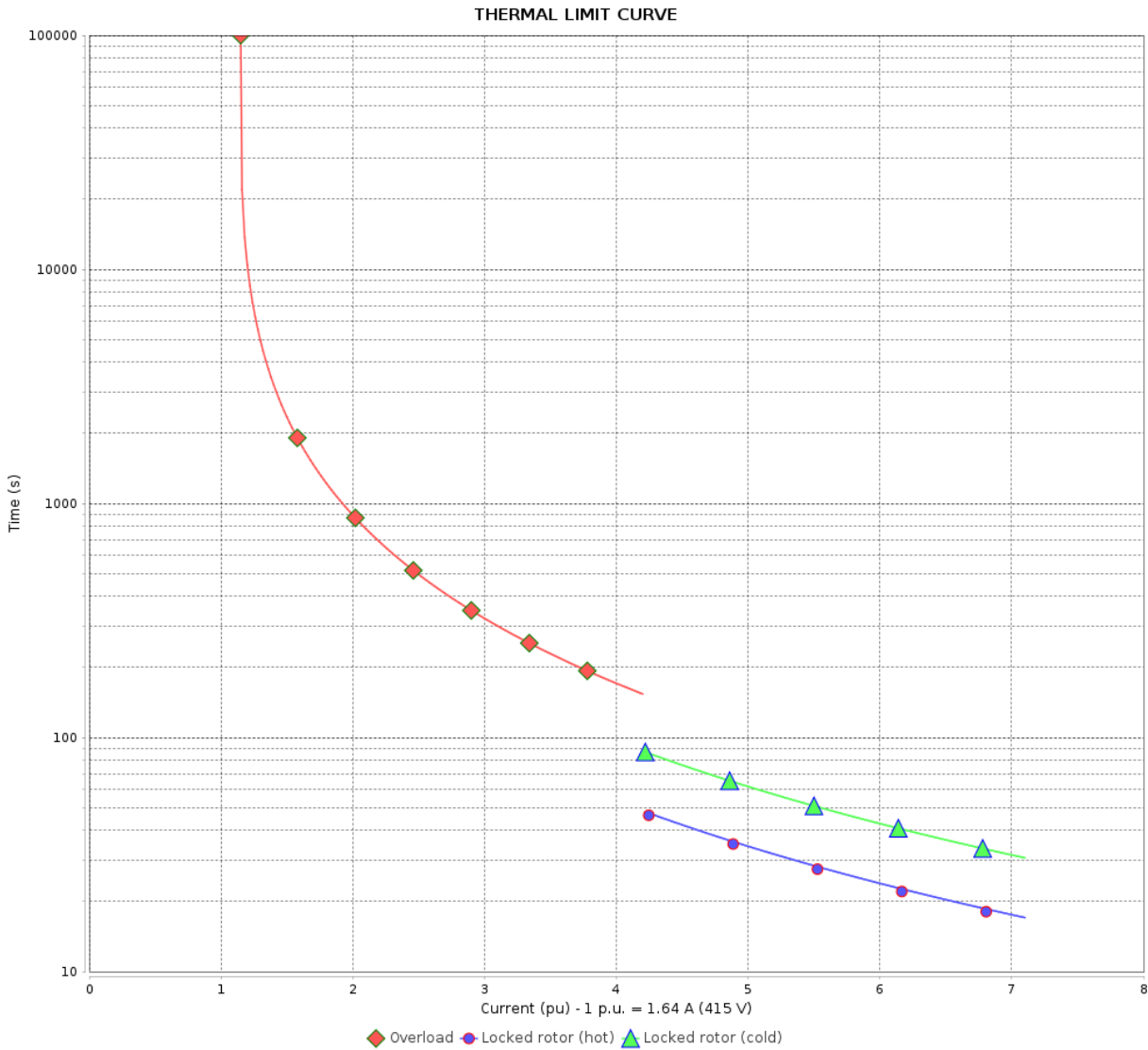
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Rev.	Changes Summary	Performed	Checked	Date
Performed by	27/07/2022	Page 10 / 13		Revision
Checked by				
Date				

VFD OPERATION CURVE

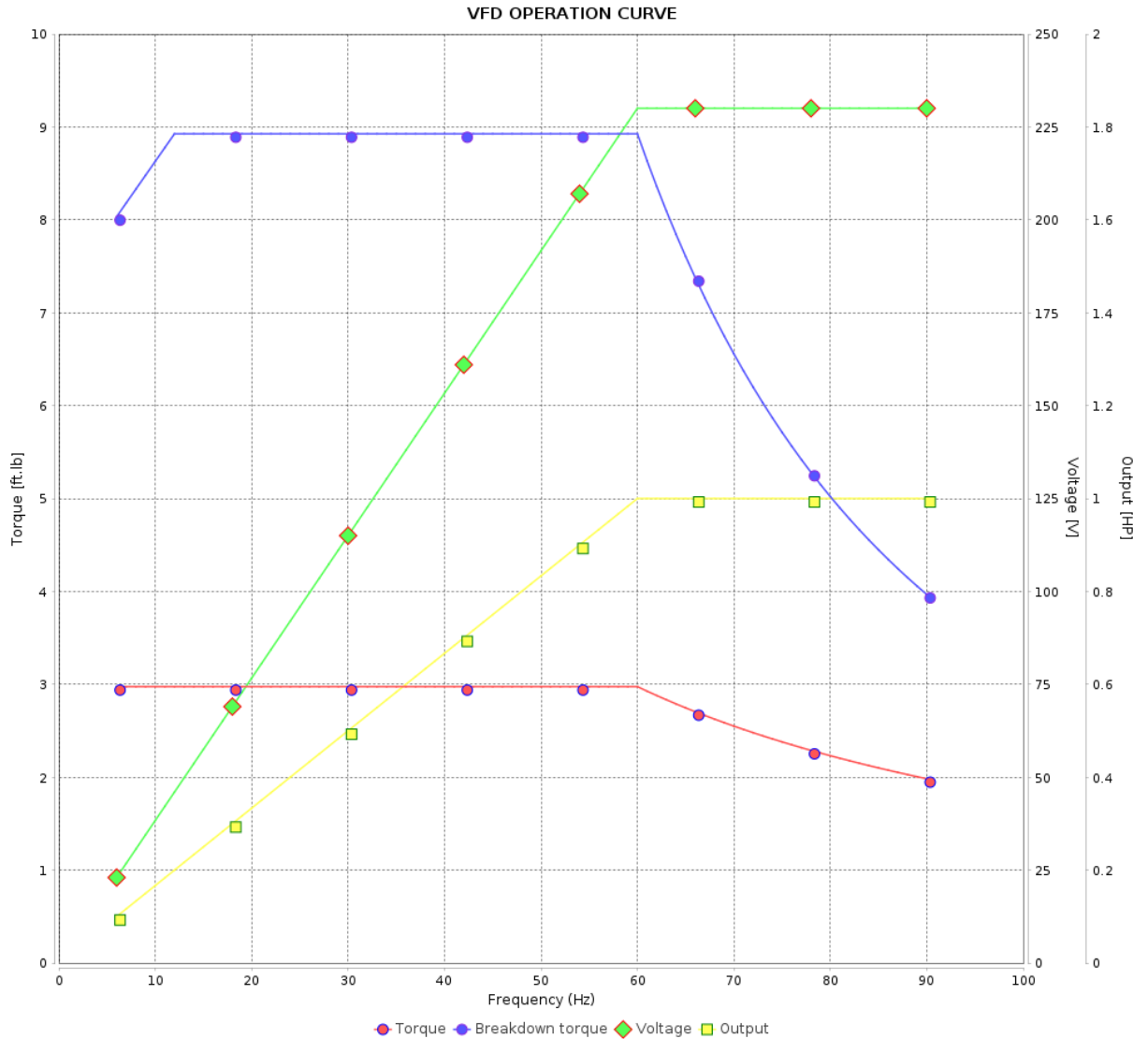
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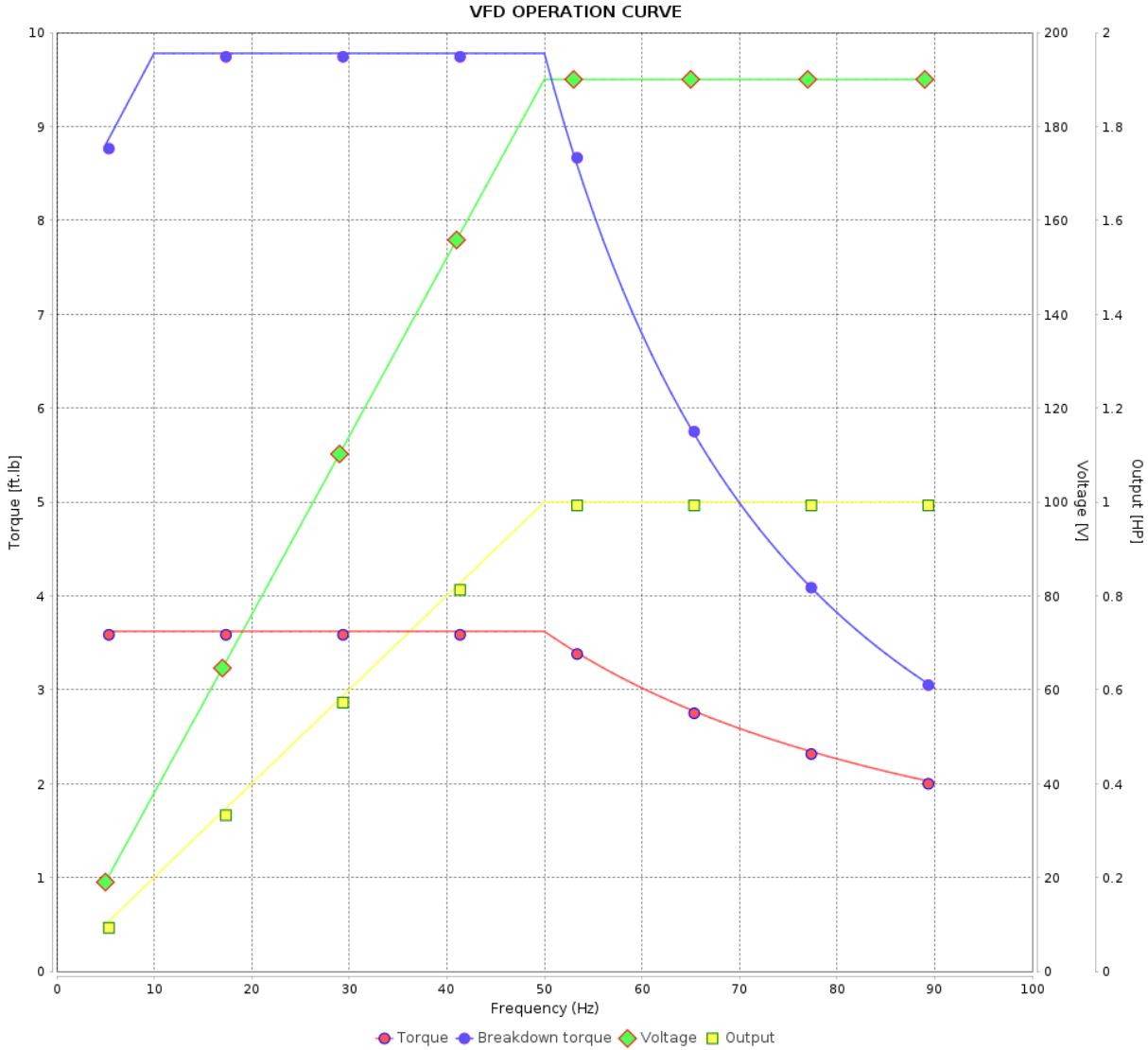
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Checked by				
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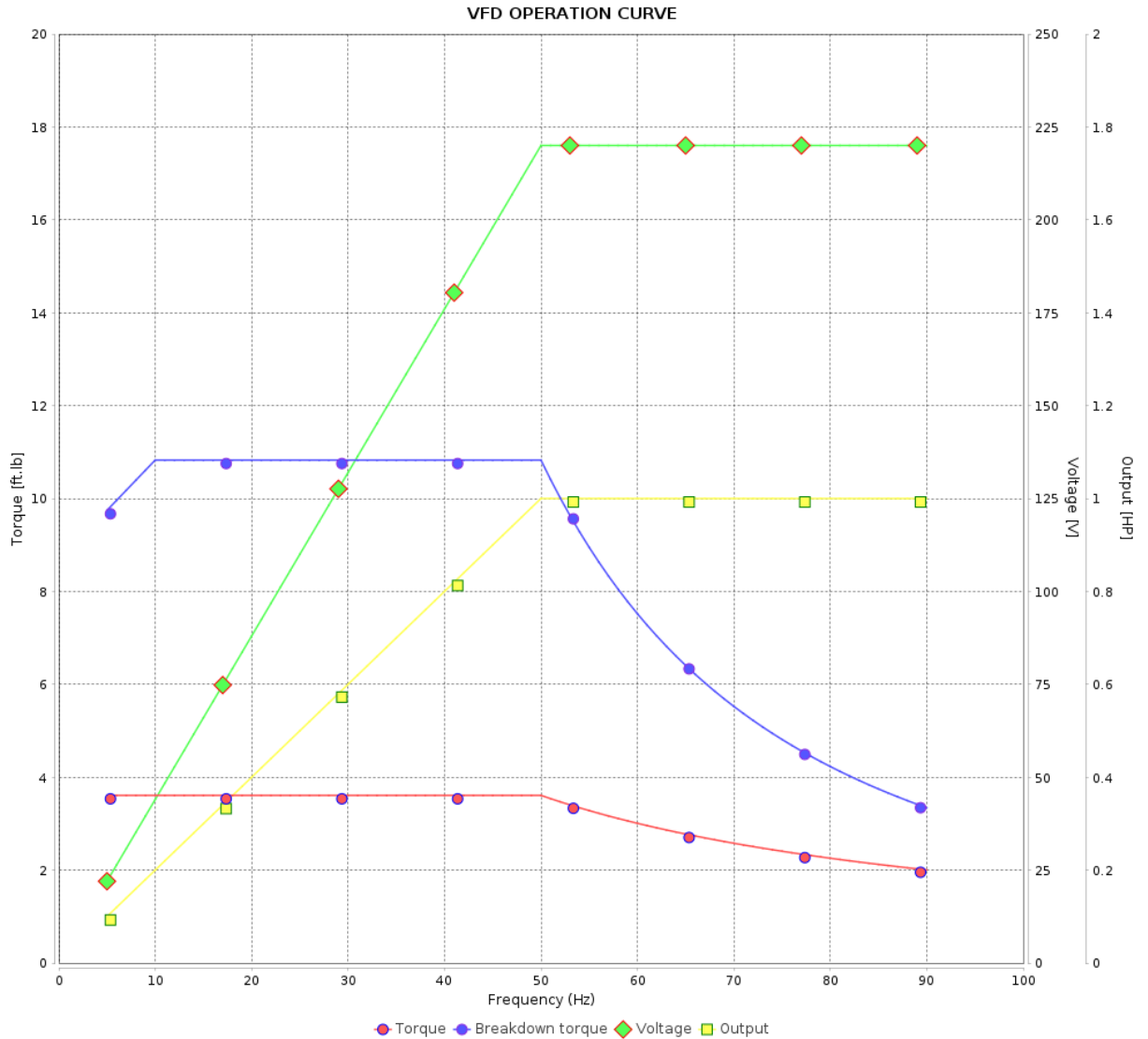
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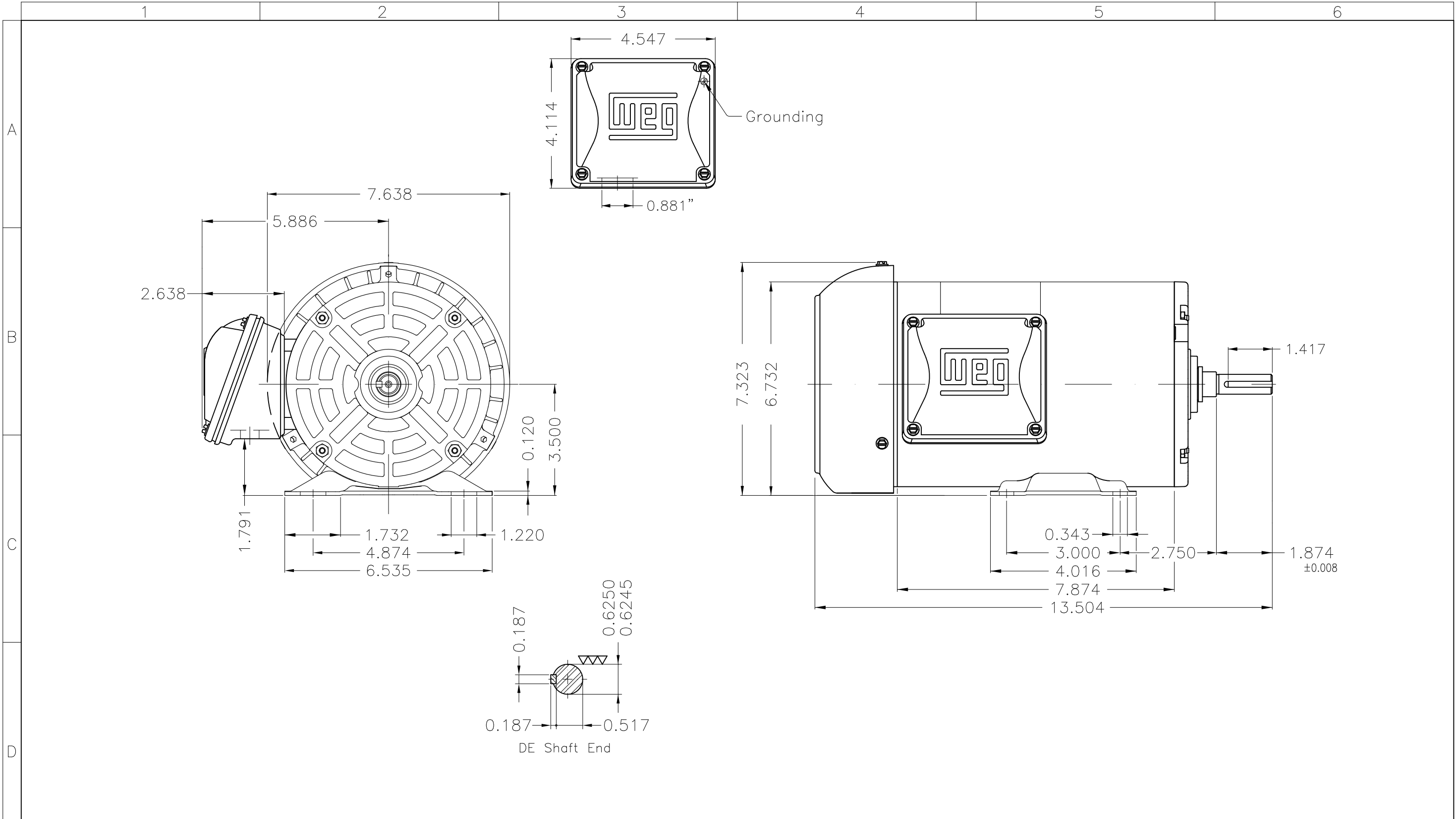


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Performed by			Page 13 / 13	Revision
Checked by				
Date	27/07/2022			



Fan cover - steel plate										
Without coating										
Mounting F-1/B3R(D)										
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.				PREVIEW		WDD		
CHECKED		FRAME 56 IP55 TEFC				WDD		WEG		
RELEASED						SHEET		1 / 1		
REL DT.		WMO	Jaragua do Sul	Product Engineering						

1 HP 04 Poles 60 Hz

A REL DT. WMO Jaragua do Sul Product Engineering SHEET 1 / 1

**NEMA
Premium**3PT9
UL US LISTED
FOR SAFE AREA

Energy Verified

MADE IN BRAZIL

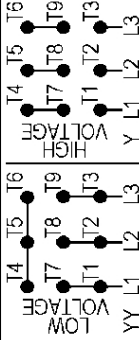
MAT: 14797787 CC029A**W01.TE0IC0X0X****MODEL 00118ET3E56-S****28JUL2022 B/N:****For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3
Div 2 Inverter Duty (SF1.00)****CT 2:1/VT 1000:1**

PH 3	Hz 60	HP 1.0
FR 56		KW 0.75
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 2.94/1.47
INS CL F AT 80K	IP55	SFA 3.38/1.69
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE M	PF 0.75
USABLE @ 208V 3.25A		RPM 1765
SF1.00		NEMA NOM. EFF 85.5%

ALTERNATE RATING: 1.0HP 50Hz 190-220/380-415V SF1.00
3.40-3.06/1.70-1.62A 1450RPM EFF 82.9% (IE3) IEC 60034-1

For safe area-inverter duty motor For 60Hz use on VPWM 1000:1 VT, 5:1 CT

DE 6204-ZZ	ODE 6202-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.

