

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Multimounting IE3 Three-Phase Product code : 14052059
Catalog # : 00218ET3EAL100LFF-W2

Frame : 100L	Cooling method : IC411 - TEFC
Insulation class : F	Mounting : B35L(E)
Duty cycle : 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 : 71.2 lb
Protection degree : IP55	Moment of inertia (J) : 0.2136 sq.ft.lb
Design : N	

Output [HP]	3	3	3
Poles	4	4	4
Frequency [Hz]	50	50	60
Rated voltage [V]	380	415	230/460
Rated current [A]	4.88	4.87	8.22/4.11
L. R. Amperes [A]	36.1	40.9	74.0/37.0
LRC [A]	7.4	8.4	9.0
No load current [A]	2.20	2.50	4.40/2.20
Rated speed [RPM]	1430	1445	1750
Slip [%]	4.67	3.67	2.78
Rated torque [ft.lb]	11.0	10.9	9.00
Locked rotor torque [%]	280	380	380
Breakdown torque [%]	300	370	370
Service factor	1.00	1.00	1.25
Temperature rise	80 K	80 K	80 K
Locked rotor time	32s (cold) 18s (hot)	32s (cold) 18s (hot)	36s (cold) 20s (hot)
Noise level ²	53.0 dB(A)	53.0 dB(A)	54.0 dB(A)
Efficiency (%)	25%		
	50%	87.2	86.6
	75%	87.1	88.2
	100%	86.7	89.5
Power Factor	25%		
	50%	0.57	0.54
	75%	0.70	0.67
	100%	0.79	0.75

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6206 ZZ	6205 ZZ	Max. traction : 214 lb
Sealing :	V'Ring	V'Ring	Max. compression : 285 lb
Lubrication interval :	-	-	
Lubricant amount :	-	-	
Lubricant type :	Mobil Polyrex EM		

Notes

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.

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

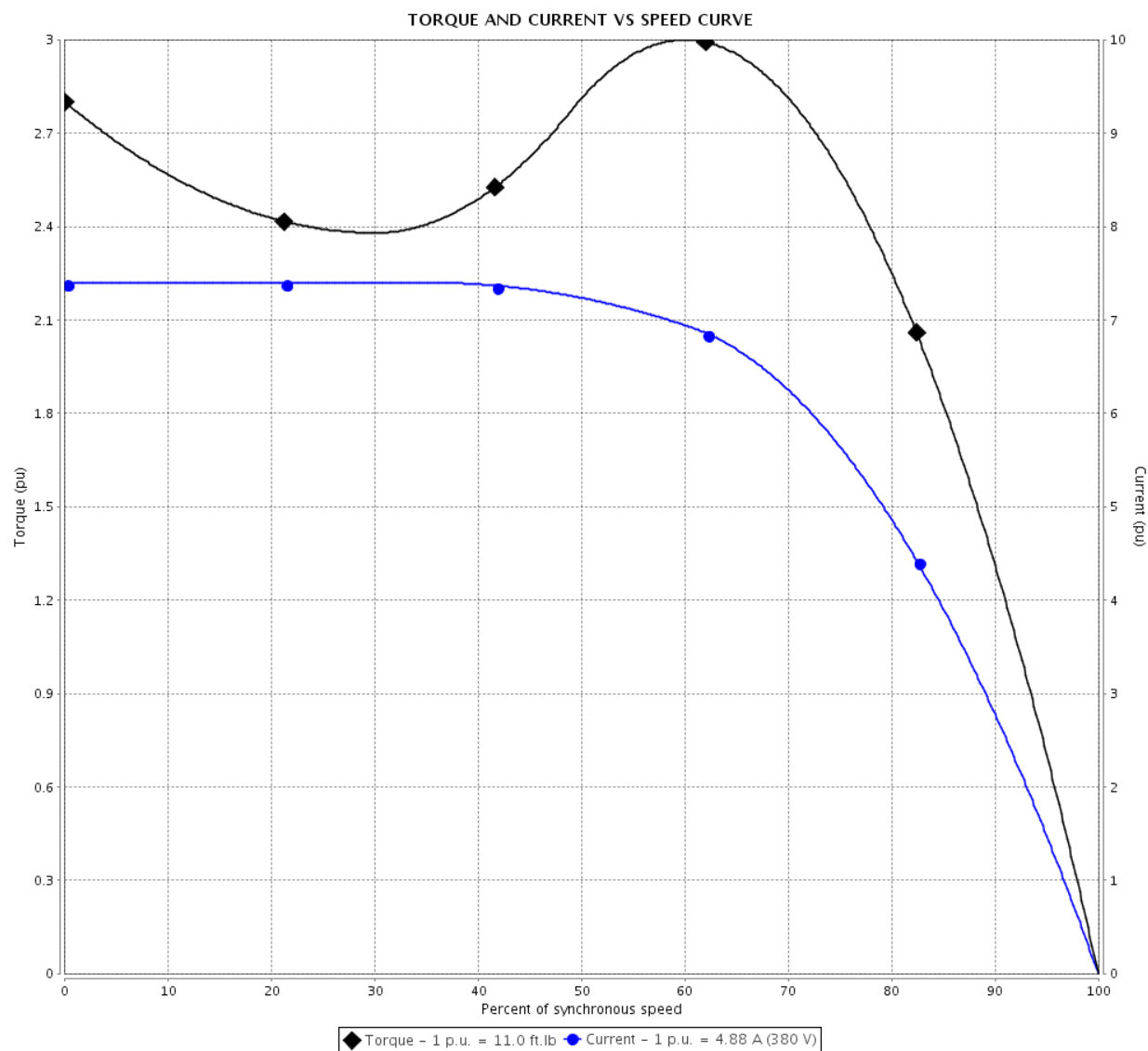
Product line : Multimounting IE3 Three-Phase

Product code :

14052059

Catalog # :

00218ET3EAL100LFF-W2



Performance : 380 V 50 Hz 4P

Rated current	: 4.88 A	Moment of inertia (J)	: 0.2136 sq.ft.lb
LRC	: 7.4	Duty cycle	: S1
Rated torque	: 11.0 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1430 rpm	Design	: N

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

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

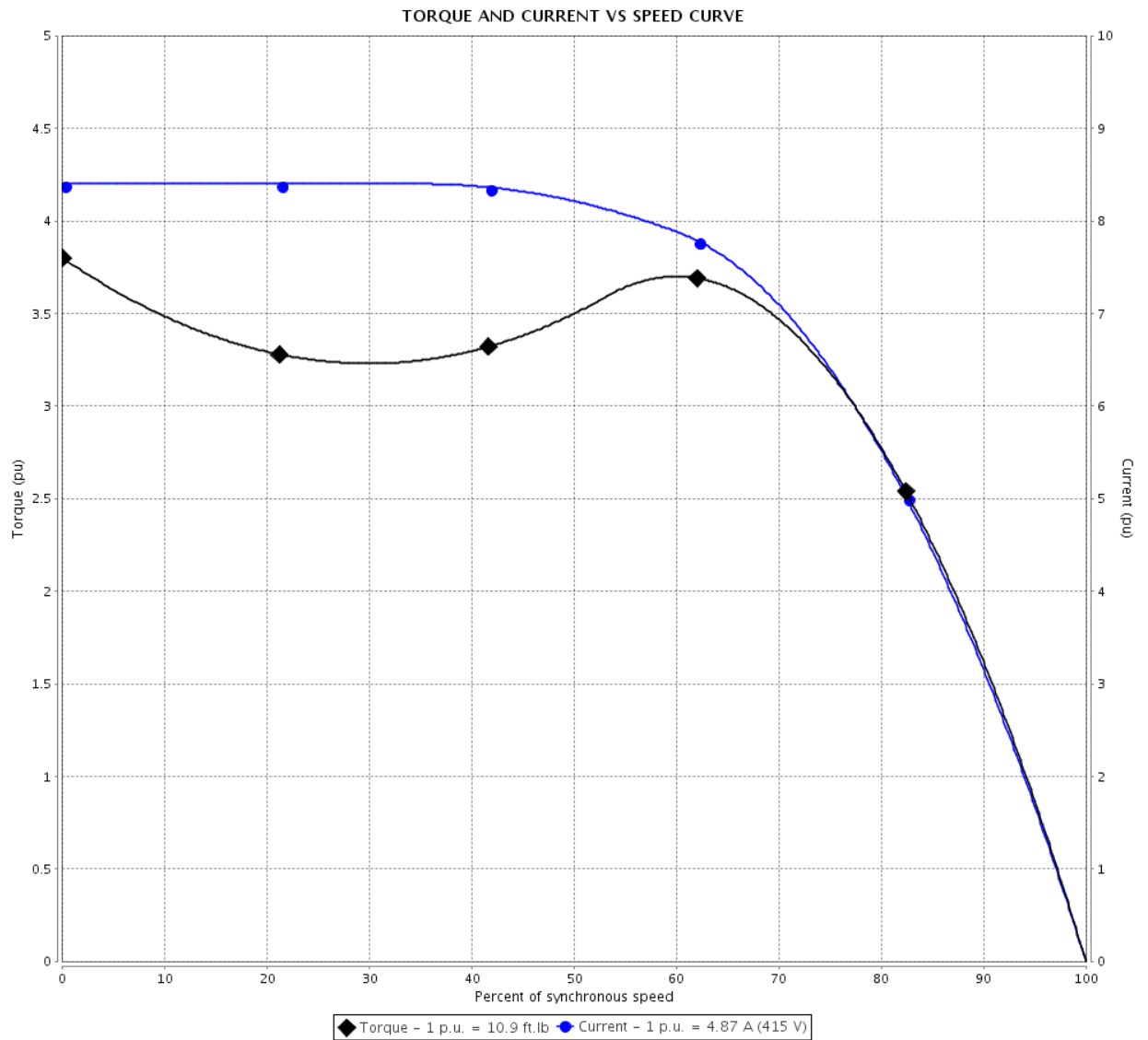
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Performance : 415 V 50 Hz 4P

Rated current	: 4.87 A	Moment of inertia (J)	: 0.2136 sq.ft.lb
LRC	: 8.4	Duty cycle	: S1
Rated torque	: 10.9 ft.lb	Insulation class	: F
Locked rotor torque	: 380 %	Service factor	: 1.00
Breakdown torque	: 370 %	Temperature rise	: 80 K
Rated speed	: 1445 rpm	Design	: N

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

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



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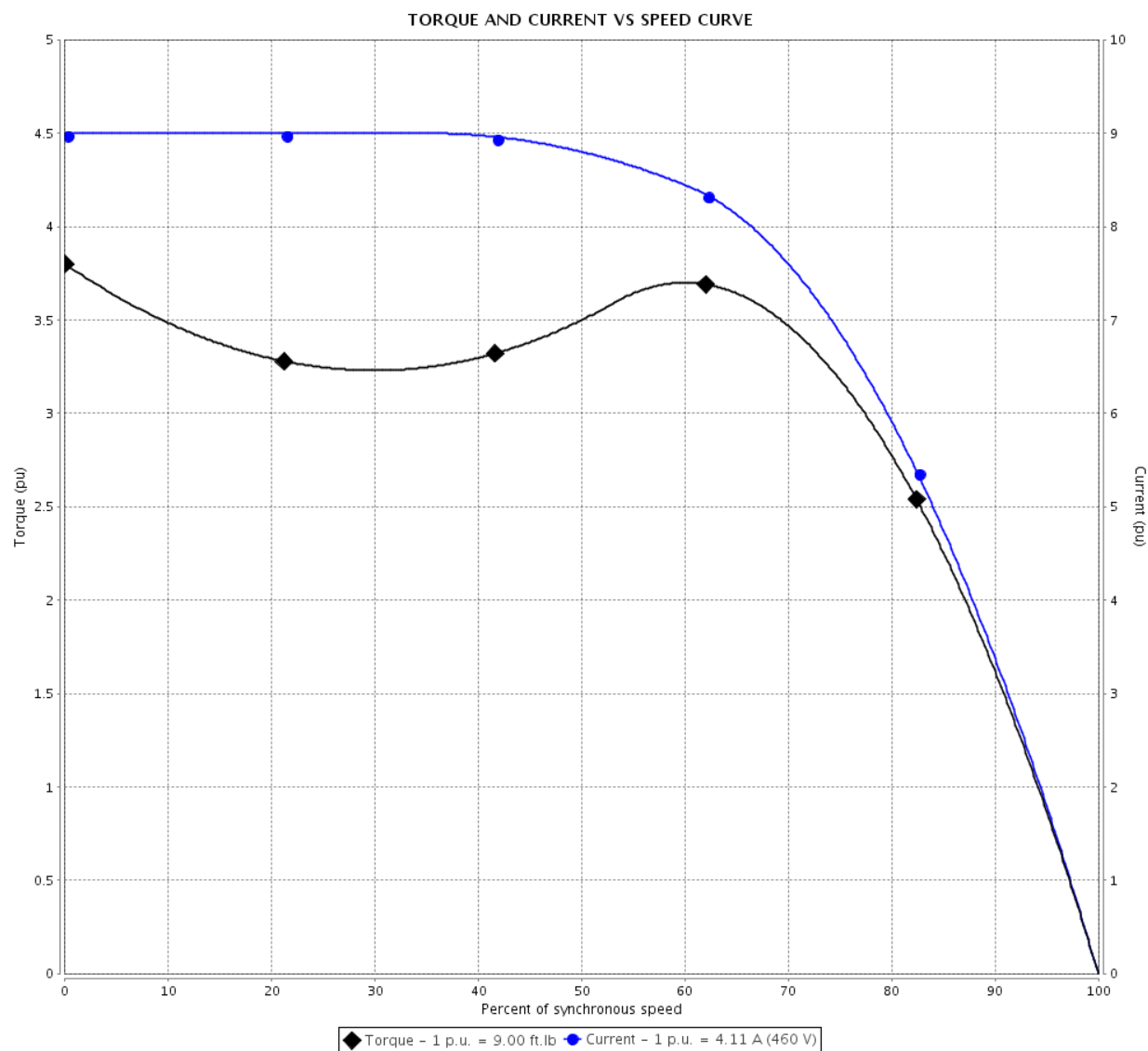
Product line : Multimounting IE3 Three-Phase

Product code :

14052059

Catalog # :

00218ET3EAL100LFF-W2



Performance : 230/460 V 60 Hz 4P

Rated current : 8.22/4.11 A
 LRC : 9.0
 Rated torque : 9.00 ft.lb
 Locked rotor torque : 380 %
 Breakdown torque : 370 %
 Rated speed : 1750 rpm

Moment of inertia (J) : 0.2136 sq.ft.lb
 Duty cycle : S1
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : N

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

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LOAD PERFORMANCE CURVE

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Customer :

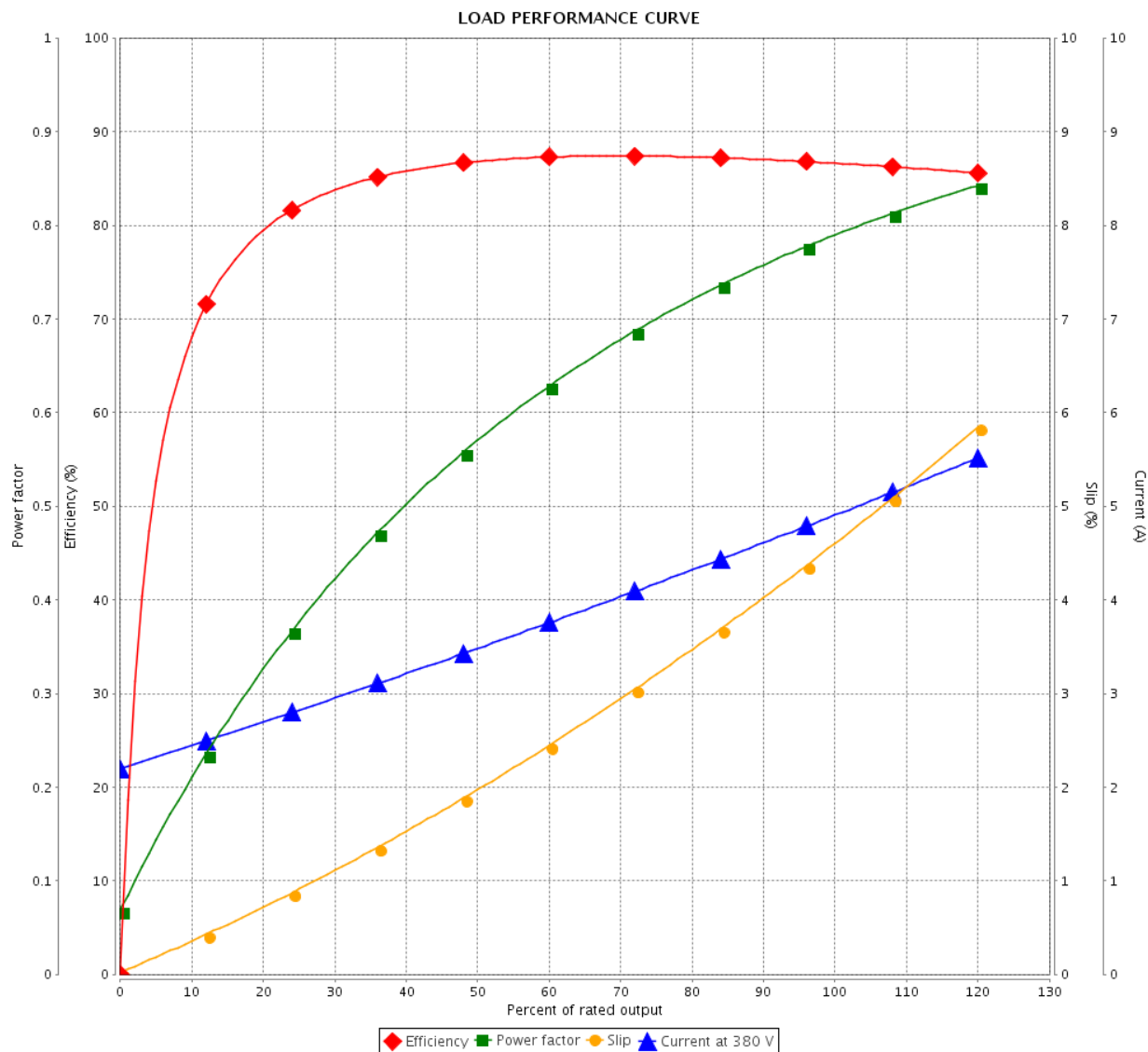
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 Locked rotor torque : 280 %
 Breakdown torque : 300 %
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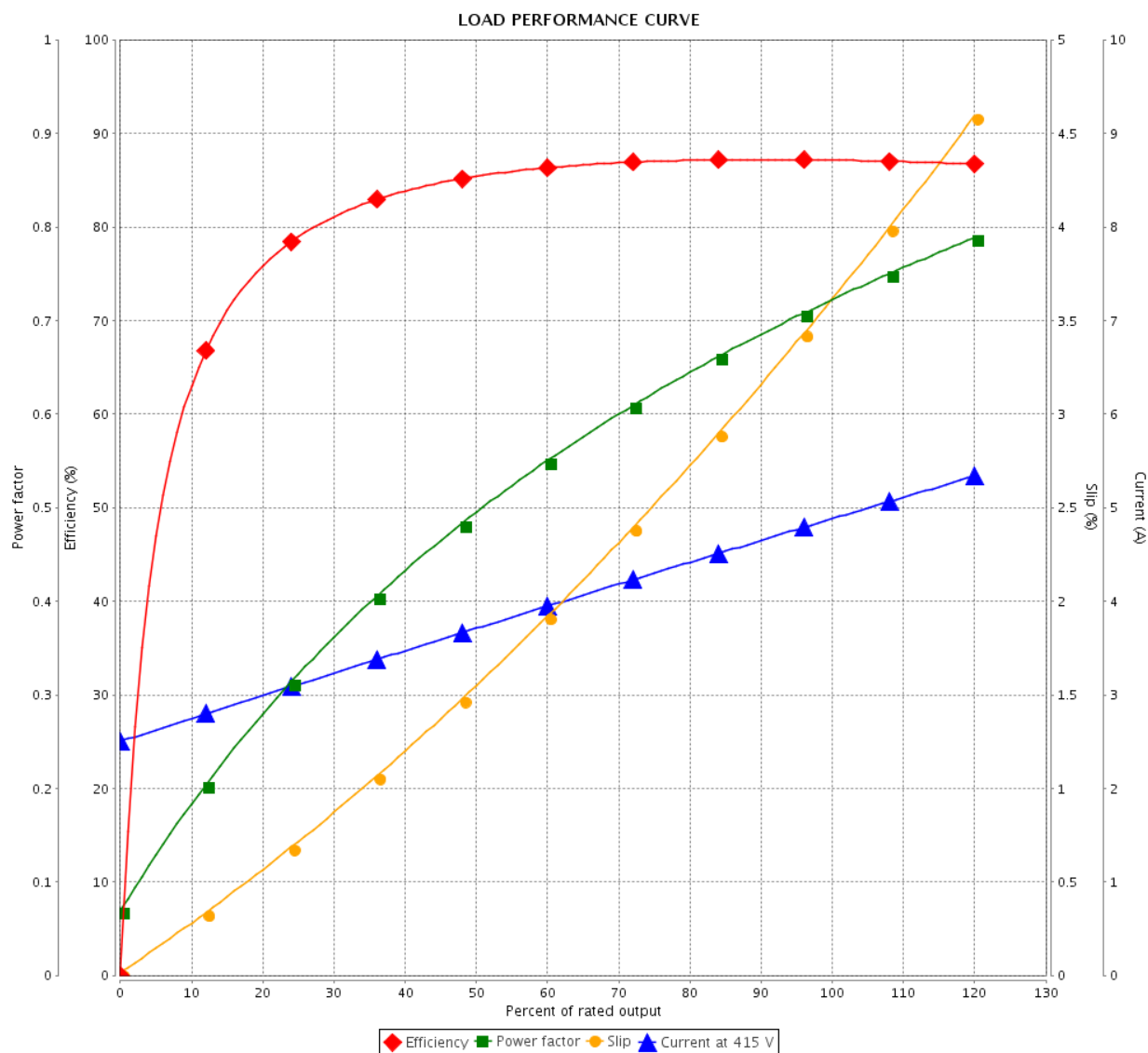
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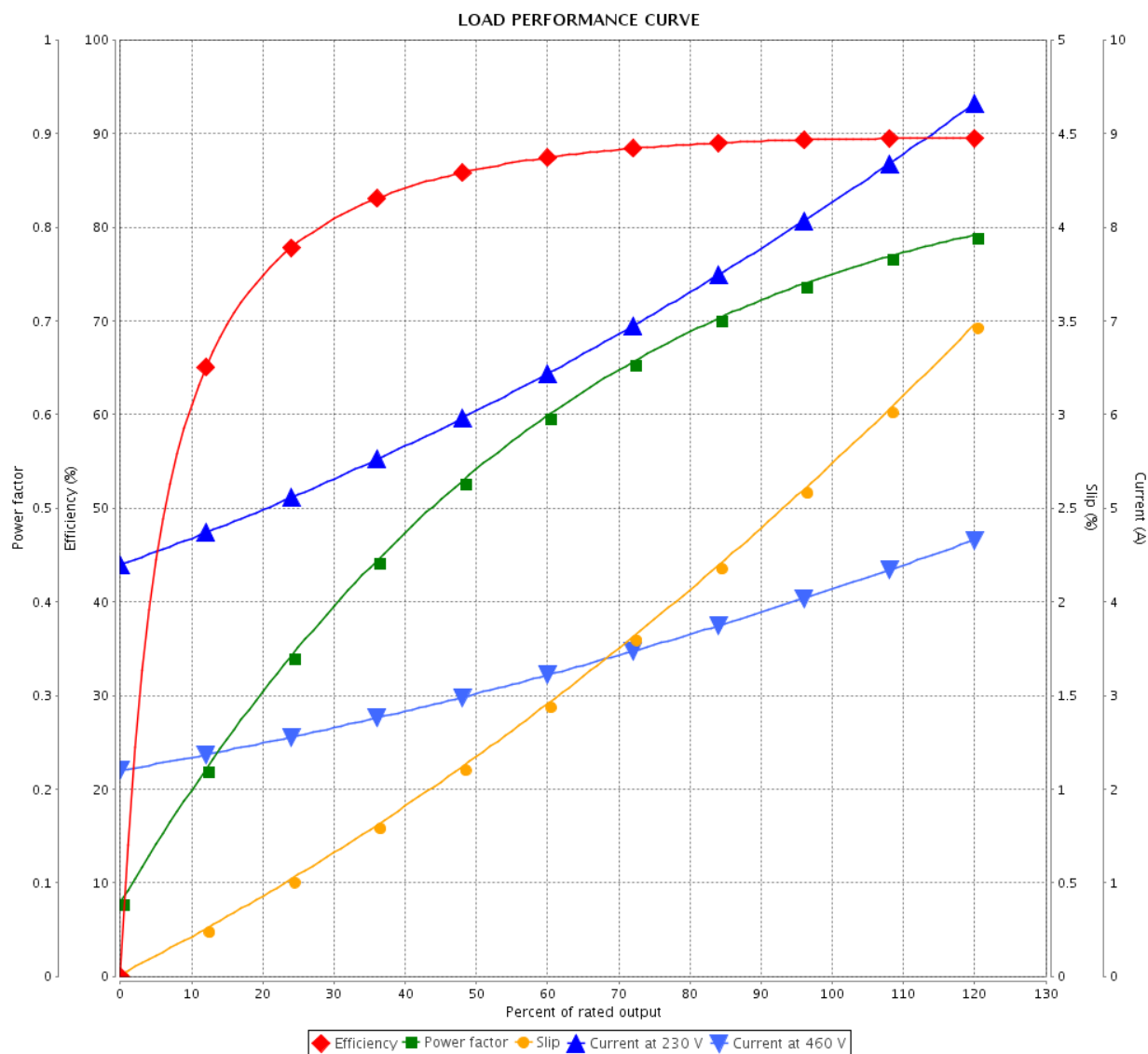
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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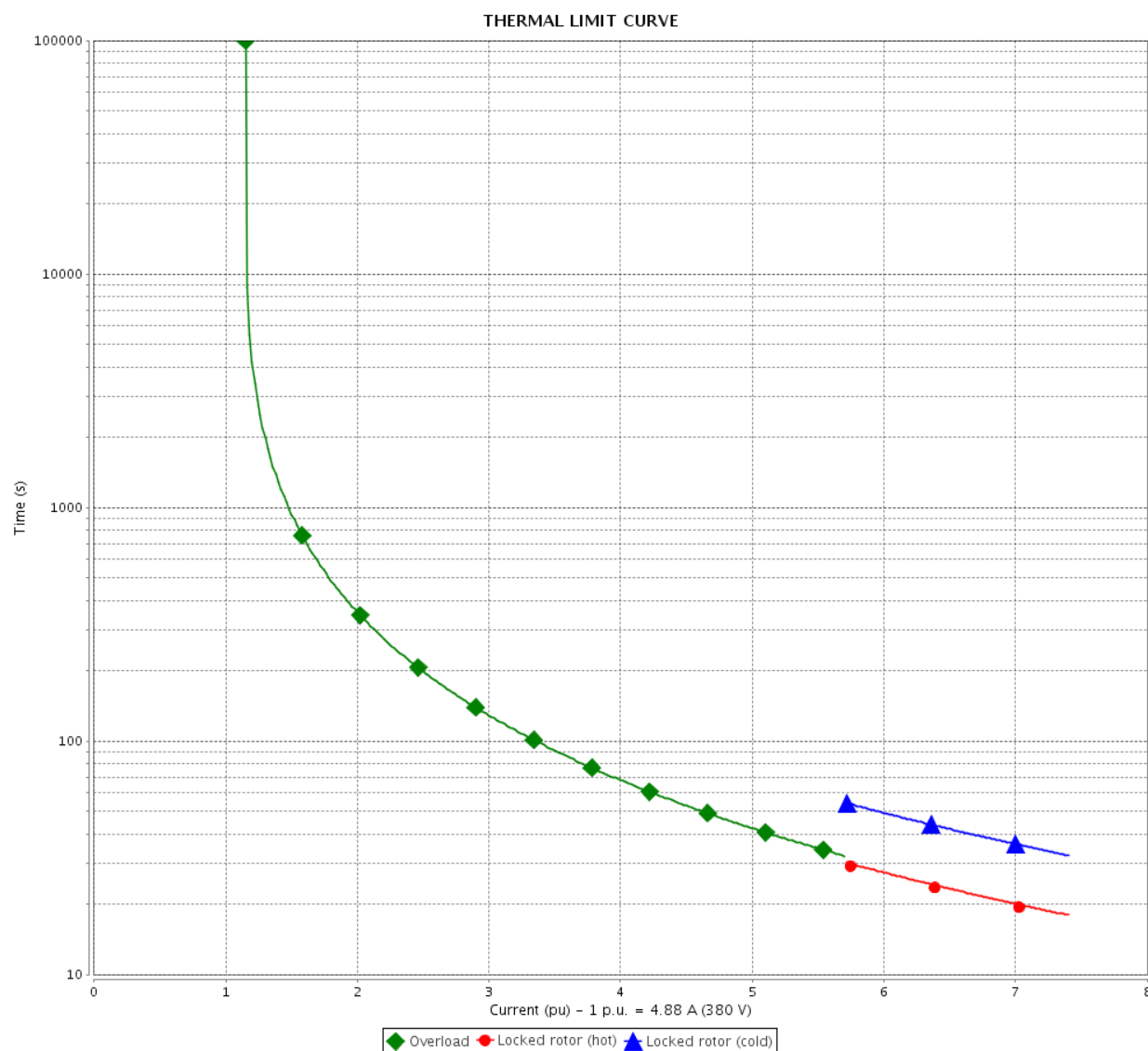
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 Temperature rise : 80 K
 Design : N

Heating constant

Cooling constant

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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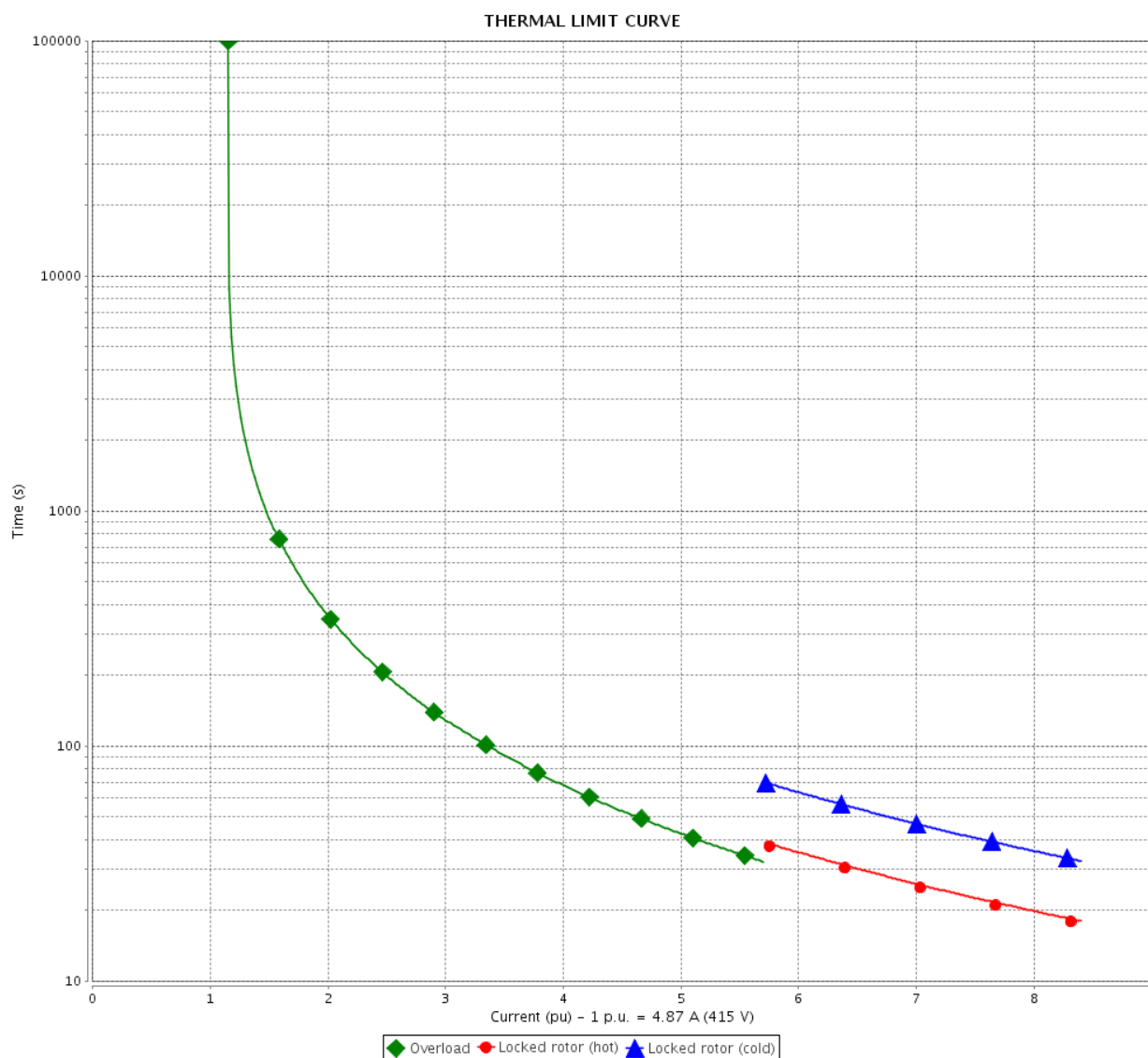
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Cooling constant

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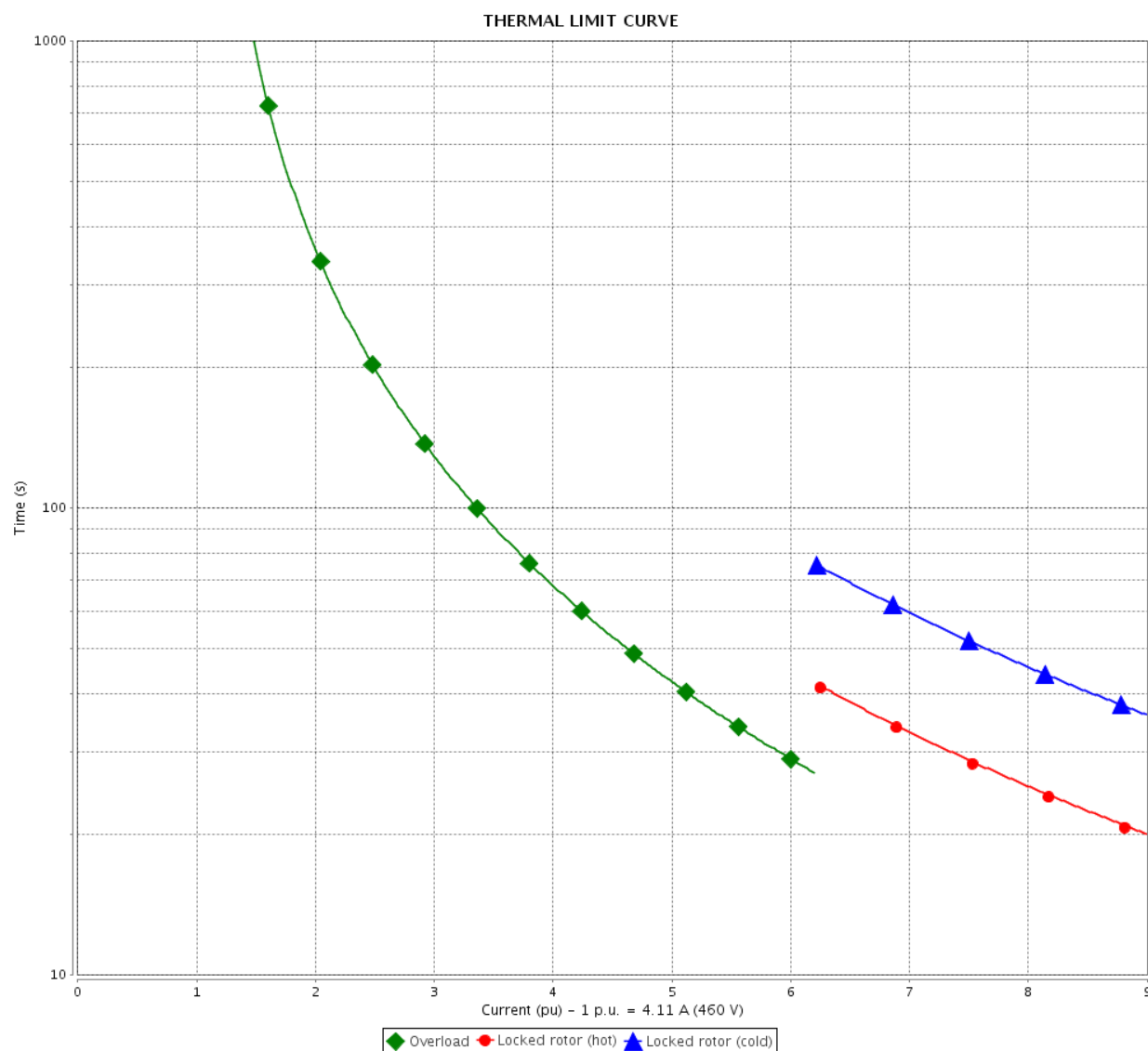
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



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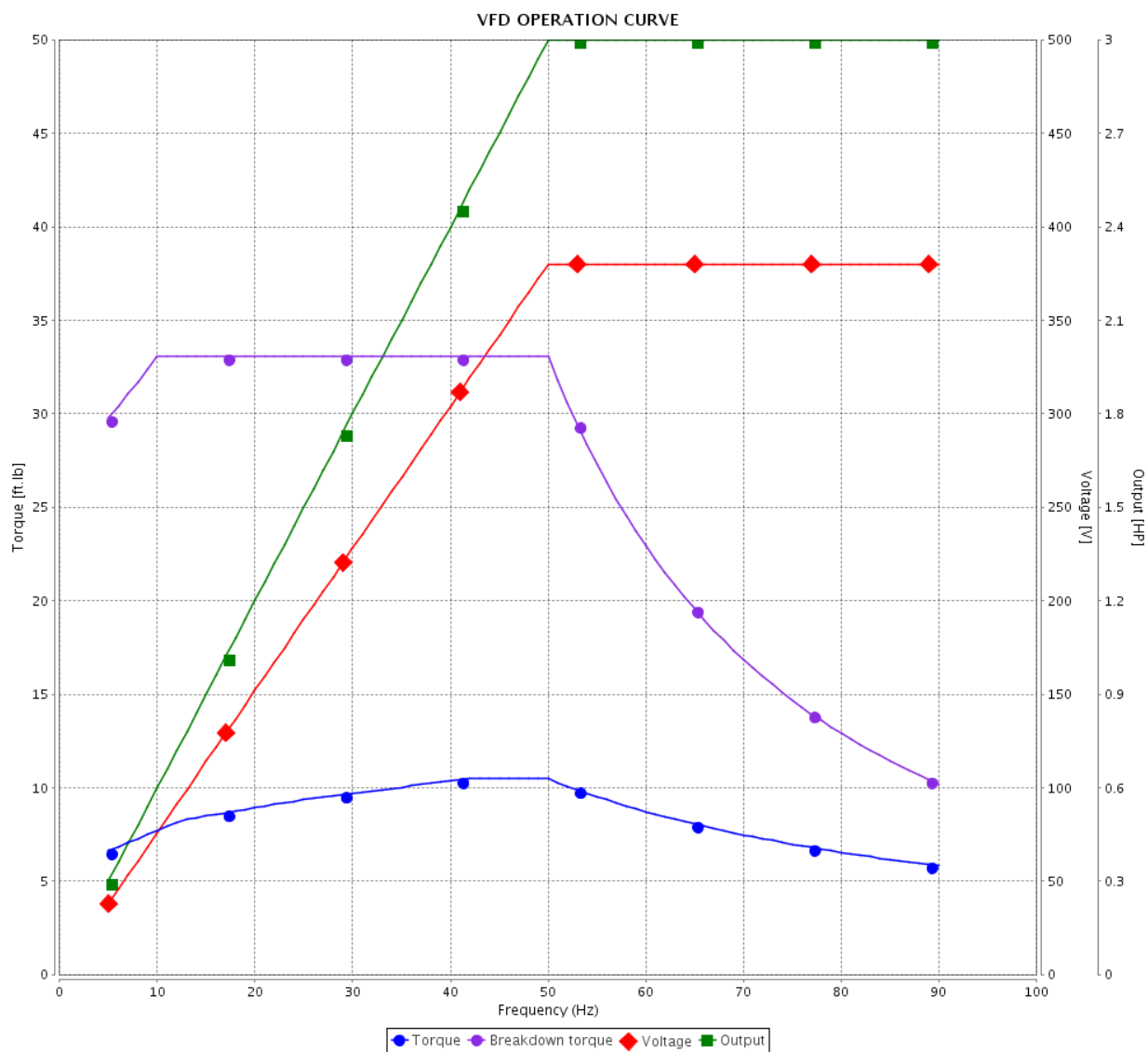
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VFD OPERATION CURVE

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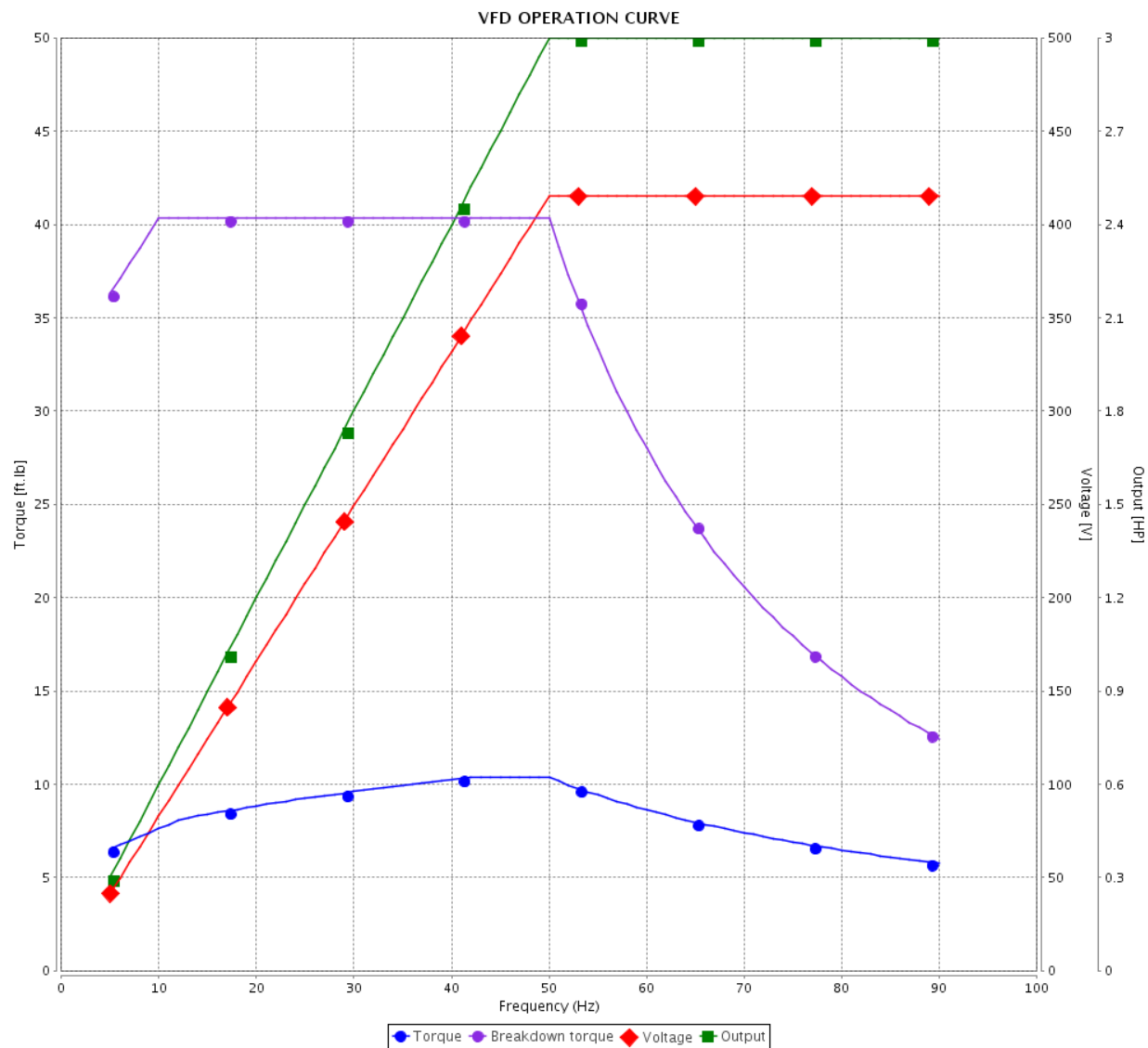
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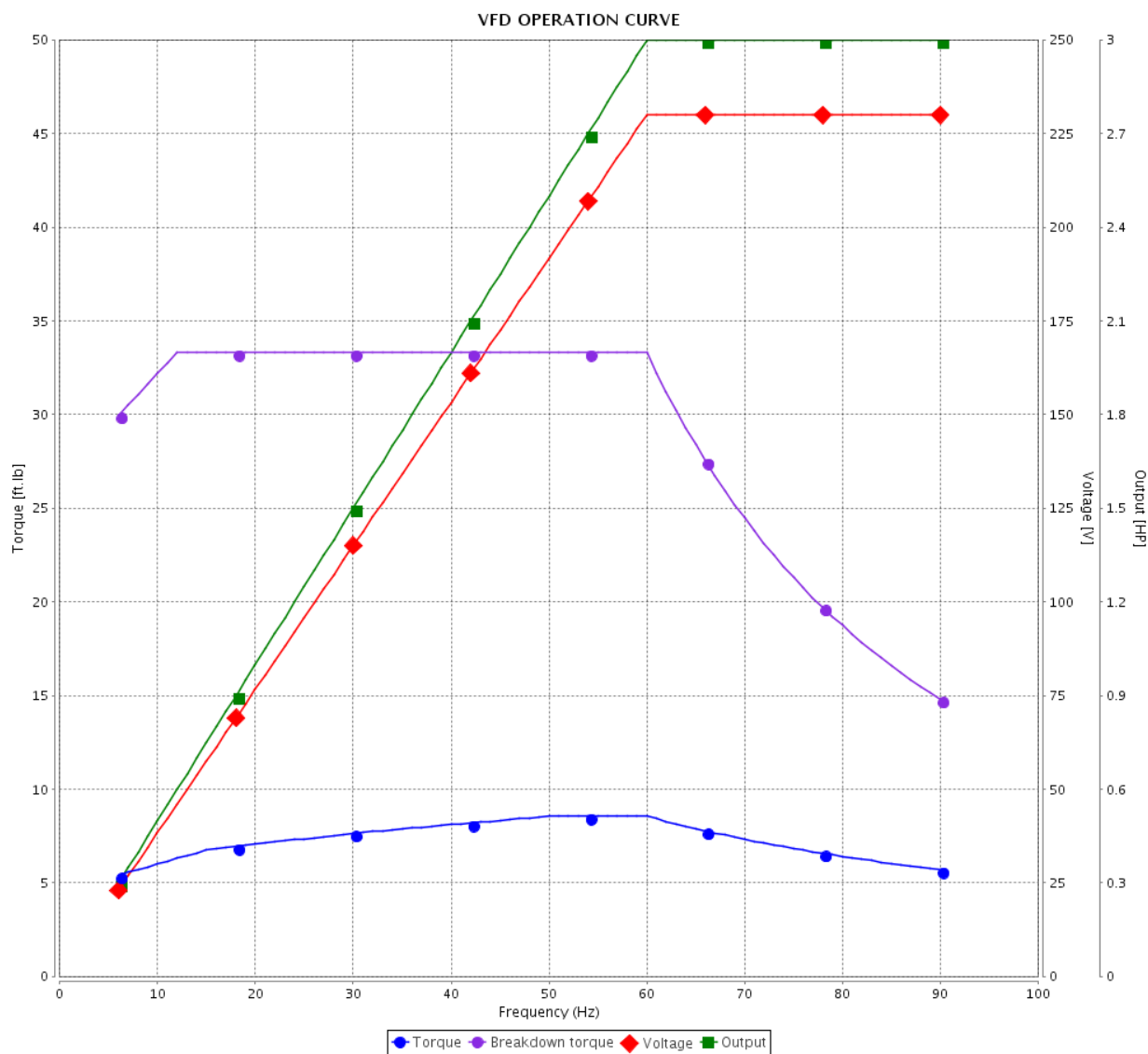
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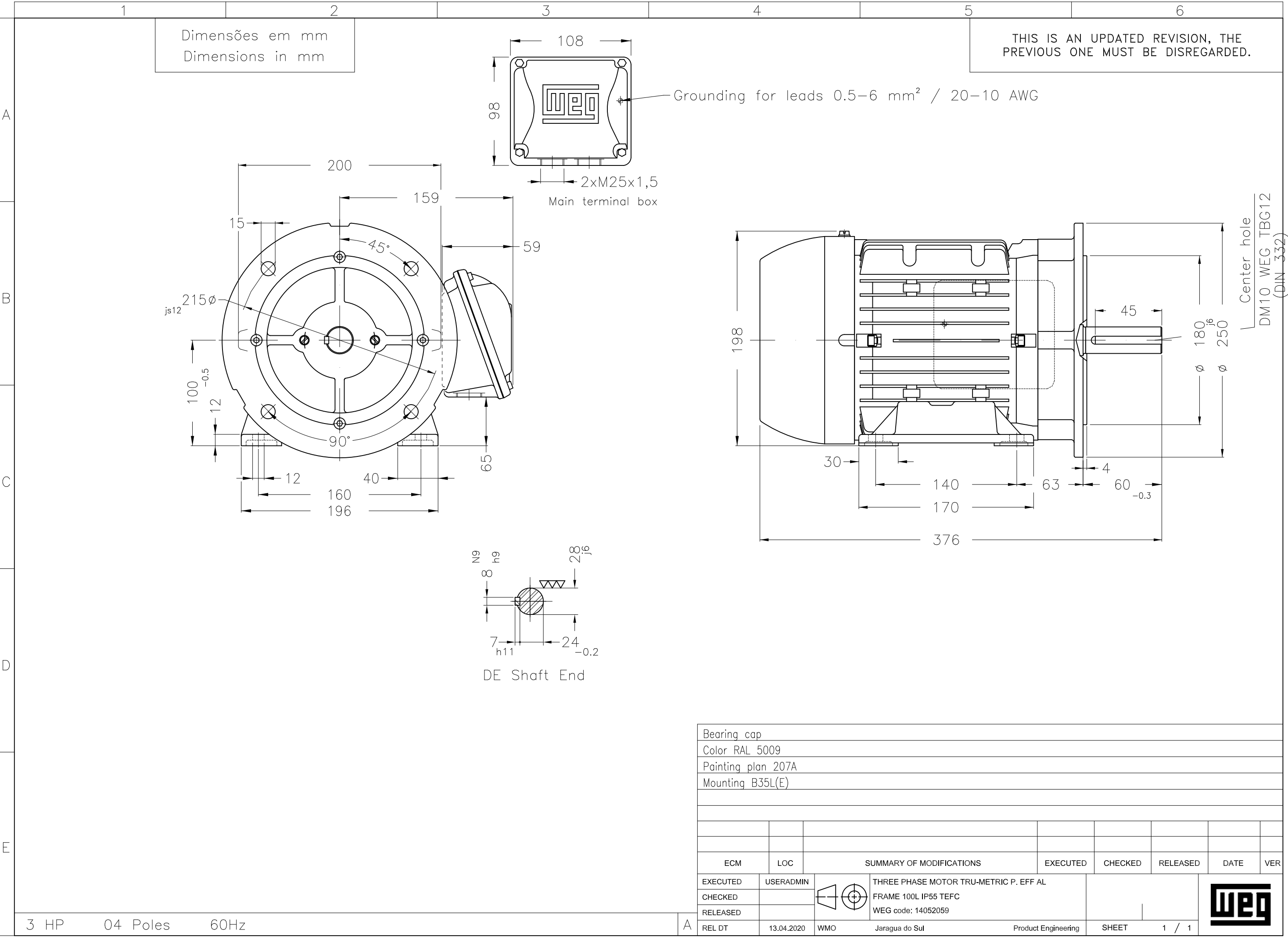


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MADE IN BRAZIL

CC029A
Severe Duty

IE3-89.5%



IEC 60034-1

MODEL 00218ET3EAL100LFF-W2

3 ~ AL100L

AMB 40°C

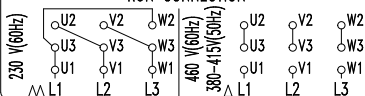
INS CL. F ENCL TEFC TYPE ET IP55 DUTY CONT.

kW(HP)	Hz	VOLTS	RPM	AMPS	PF	SFA
2.2(3.0)	50	380 Δ	1430	4.88	0.79	-
		415 Δ	1445	4.87	0.72	-
2.2(3.0)	60	230 $\Delta\Delta$	1750	8.22	0.75	10.3
		460 Δ		4.11		5.14

Hz SF CODE Δ † (k) ALT 1000 m.a.s.l.

50	1.00	L	80	NEMA EFF 60Hz DES NOM(%) 89.5 3/4(%) 88.2
60	1.25	L	80	

RUN CONNECTION



→ 6206-ZZ
 → 6205-ZZ

MOBIL POLYREX EM

71Lbs

TEMP CODE T3C

Class I, Div. 2, Gr. B, C and D

Class I, Zone 2, IIC

MOD.TE01A0X0\$0000302084



LR 38324



14052059