

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: W40 NEMA Premium Efficiency Three-Phase	Product code :	14272437	
			Catalog # :	15012OT3G445T-W40	
Frame		: 444/5T	Cooling method		: IC01 - ODP
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		: 1533 lb
Protection degree		: IP23	Moment of inertia (J)		: 79.0 sq.ft.lb
Design		: B			
Output [HP]	150	125	125	125	
Poles	6	6	6	6	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	183	183	175	176	
L. R. Amperes [A]	1171	1208	1173	1250	
LRC [A]	6.4x(Code G)	6.6x(Code H)	6.7x(Code H)	7.1x(Code J)	
No load current [A]	86.0	76.3	93.1	100	
Rated speed [RPM]	1188	985	990	990	
Slip [%]	1.00	1.50	1.00	1.00	
Rated torque [ft.lb]	663	666	663	663	
Locked rotor torque [%]	210	220	240	270	
Breakdown torque [%]	260	250	280	310	
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)	16s (cold) 9s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	
Noise level ²	69.0 dB(A)				
Efficiency (%)	25%	94.0	94.1	94.2	93.6
	50%	94.5	94.2	94.3	93.9
	75%	95.0	94.6	94.9	94.7
	100%	95.4	94.6	94.9	94.9
Power Factor	25%	0.37	0.38	0.34	0.31
	50%	0.62	0.60	0.58	0.54
	75%	0.73	0.73	0.71	0.68
	100%	0.79	0.79	0.78	0.75
Bearing type		Drive end : 6319 C3	Non drive end : 6314 C3	Foundation loads	
Sealing		: Without	: Without	Max. traction	: 4713 lb
		Bearing Seal	Bearing Seal	Max. compression	: 6246 lb
Lubrication interval		: 20000 h	: 20000 h		
Lubricant amount		: 45 g	: 27 g		
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



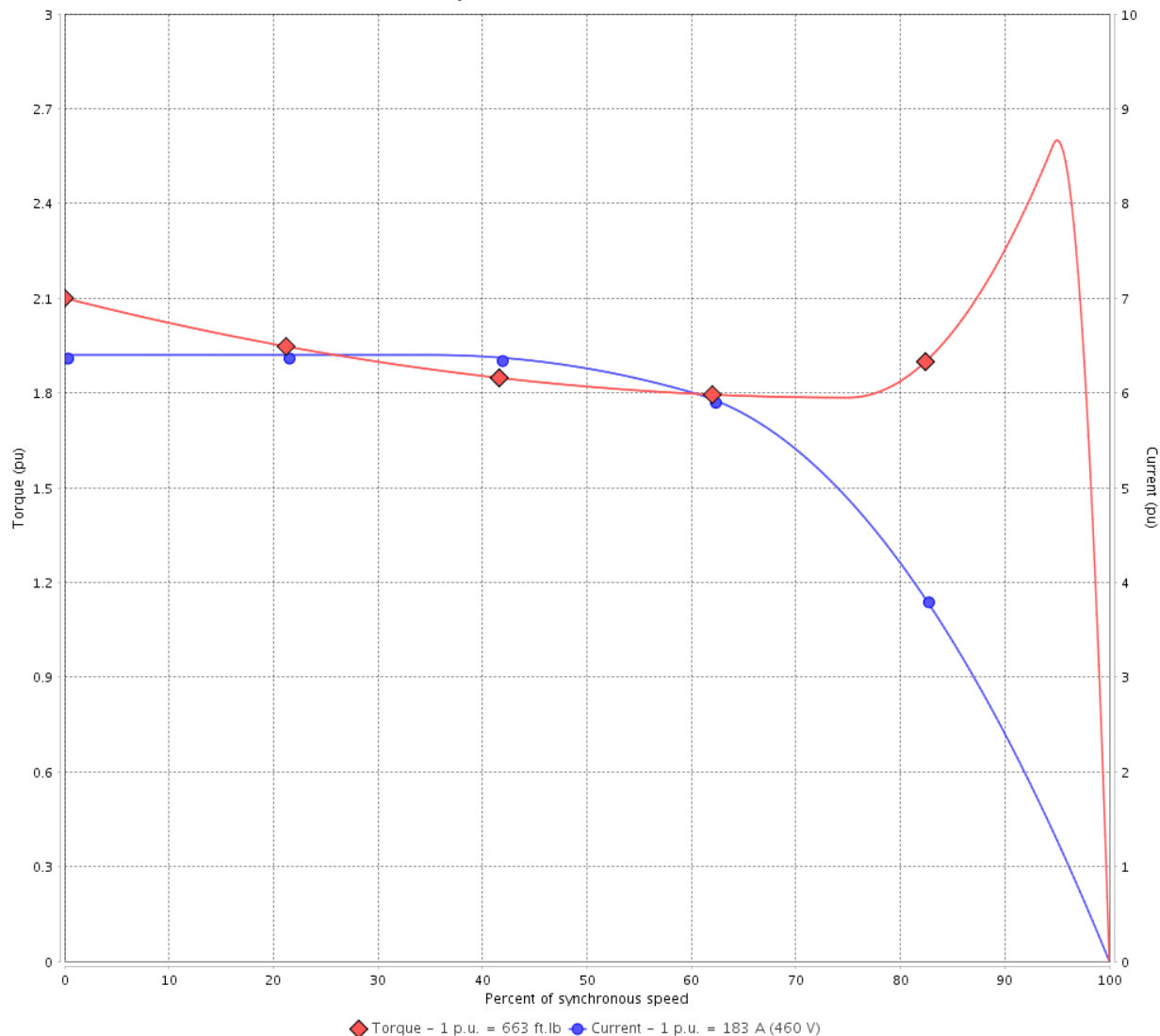
Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14272437

Catalog # : 150120T3G445T-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 6P

Rated current	: 183 A	Moment of inertia (J)	: 79.0 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 663 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1188 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE



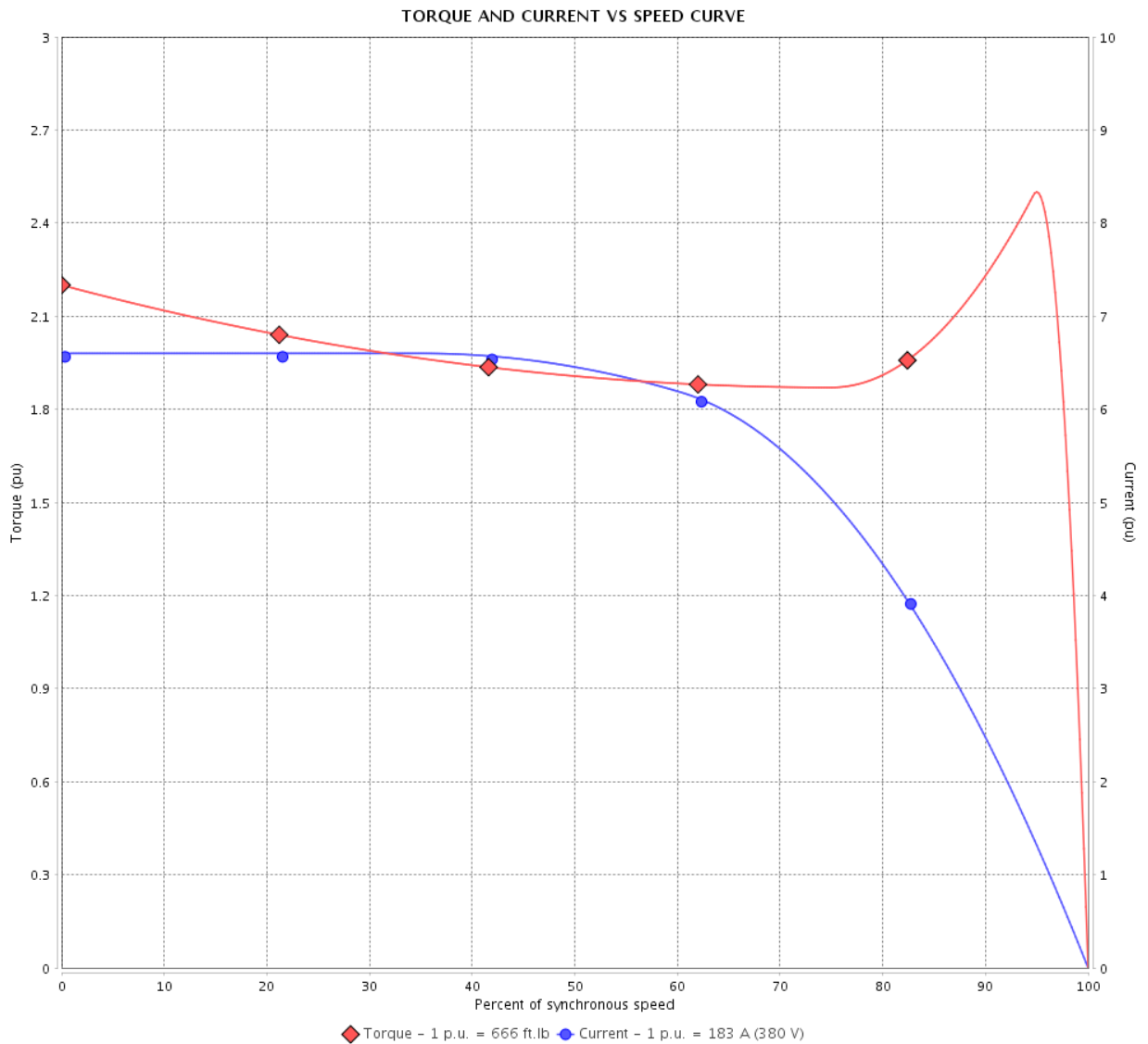
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency
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Product code : 14272437

Catalog # : 15012OT3G445T-W40



Performance : 380 V 50 Hz 6P IE2

Rated current	: 183 A	Moment of inertia (J)	: 79.0 sq.ft.lb
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 666 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 985 rpm	Design	: B

Locked rotor time : 16s (cold) 9s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



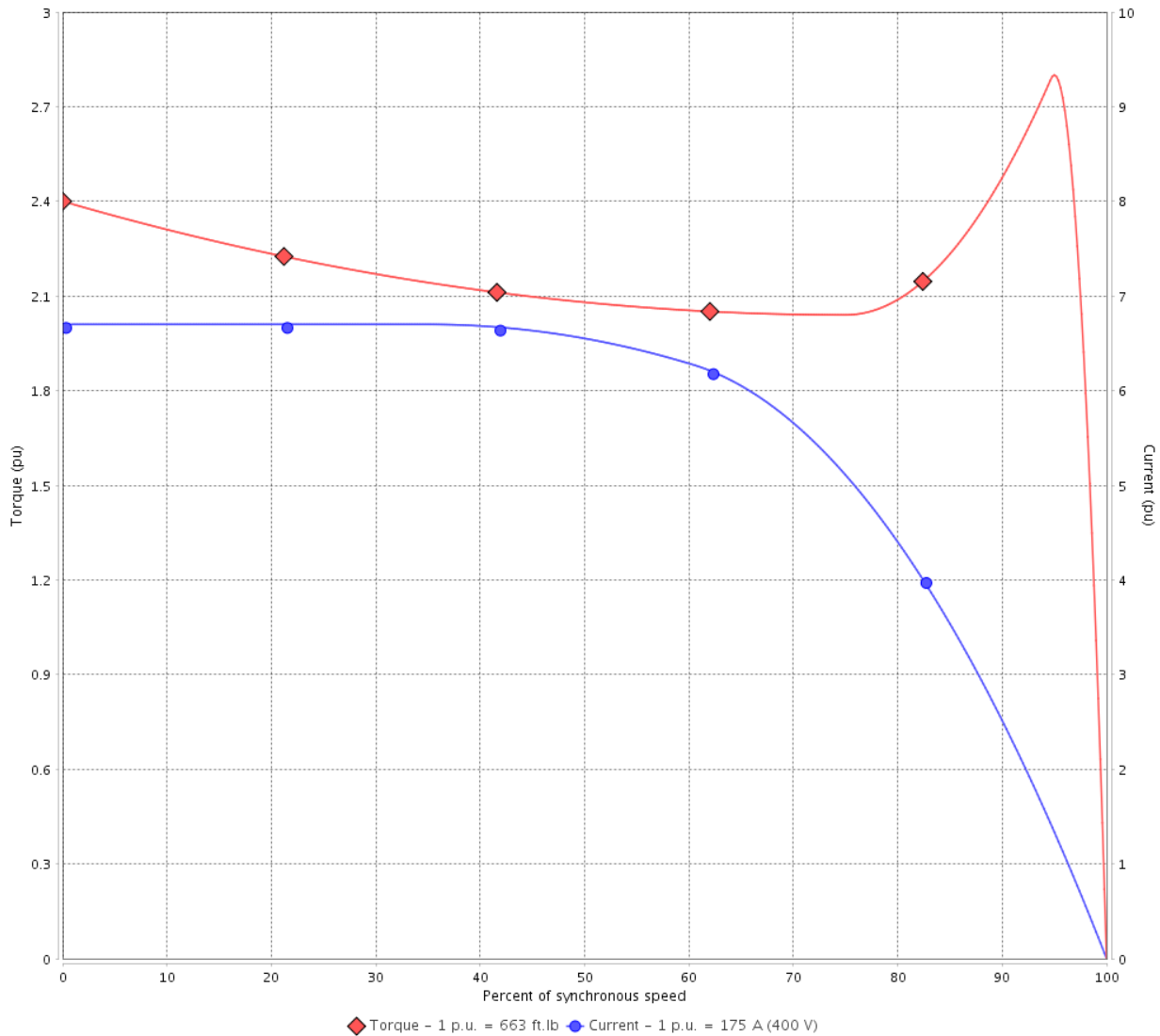
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Three-Phase

Product code : 14272437

Catalog # : 150120T3G445T-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 6P IE3

Rated current	: 175 A	Moment of inertia (J)	: 79.0 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 663 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 990 rpm	Design	: B

Locked rotor time : 18s (cold) 10s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



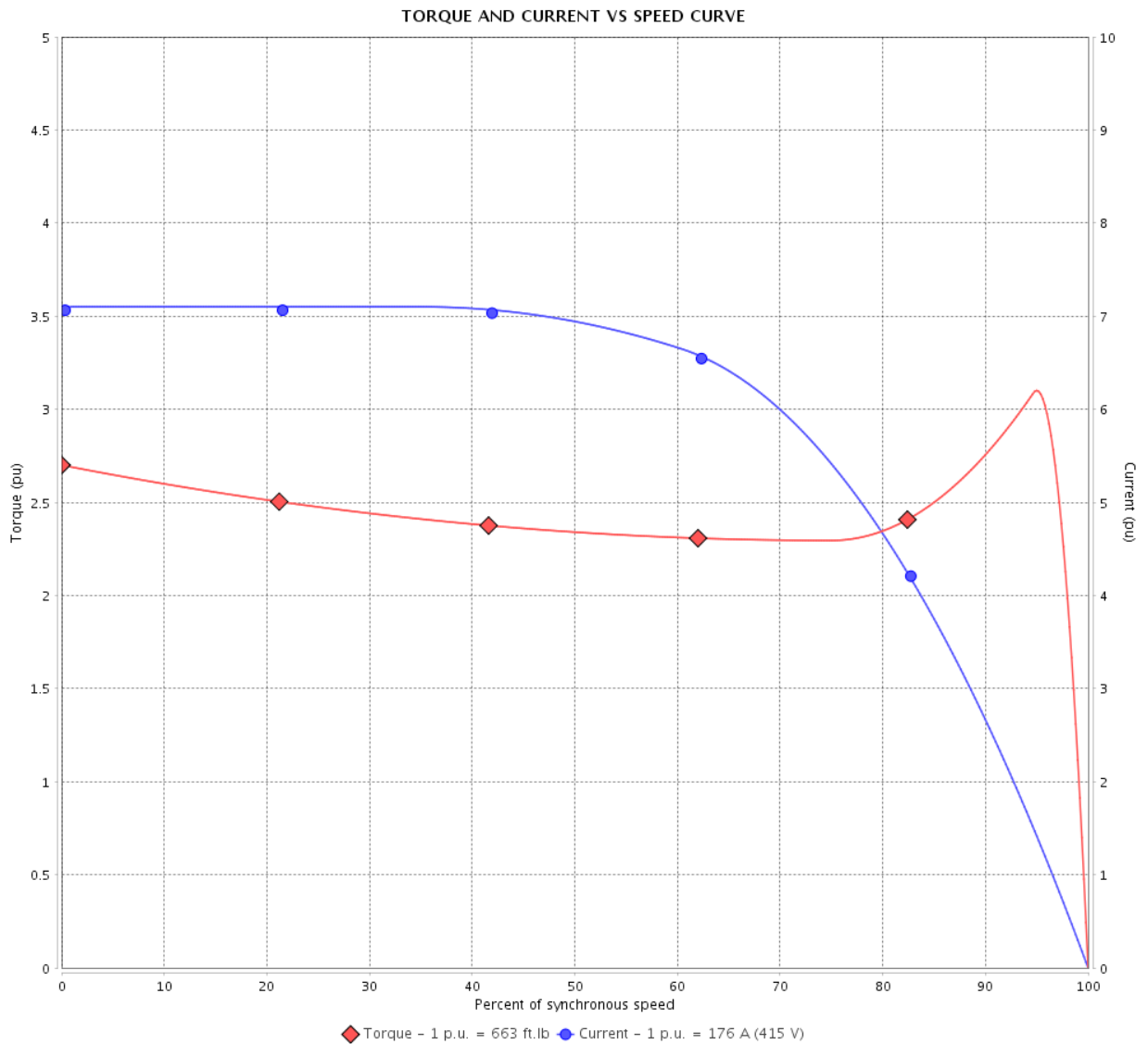
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Rated current	: 176 A	Moment of inertia (J)	: 79.0 sq.ft.lb
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 663 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 990 rpm	Design	: B

Locked rotor time : 18s (cold) 10s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



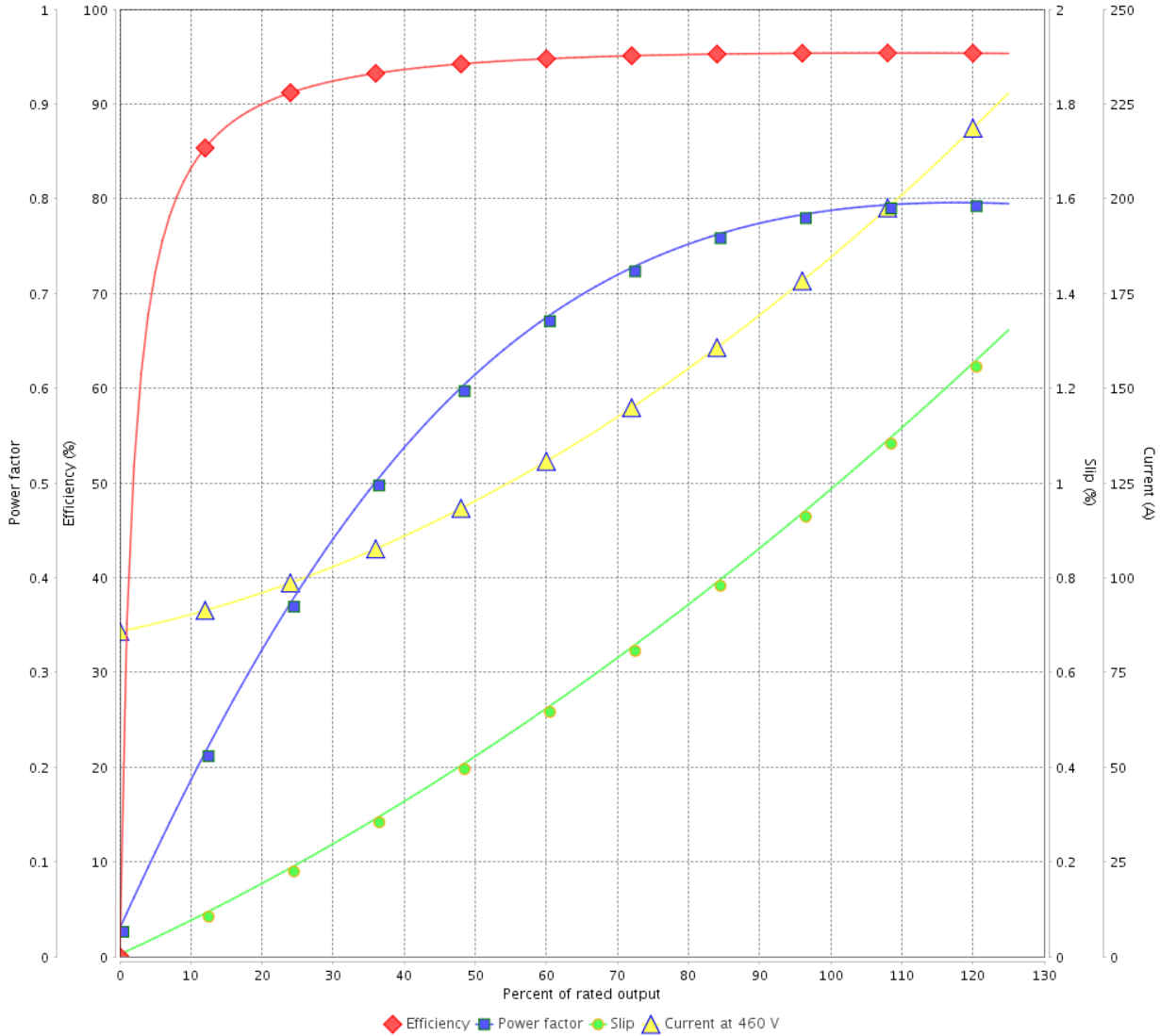
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Performance : 460 V 60 Hz 6P

Rated current : 183 A
 LRC : 6.4
 Rated torque : 663 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 260 %
 Rated speed : 1188 rpm

Moment of inertia (J) : 79.0 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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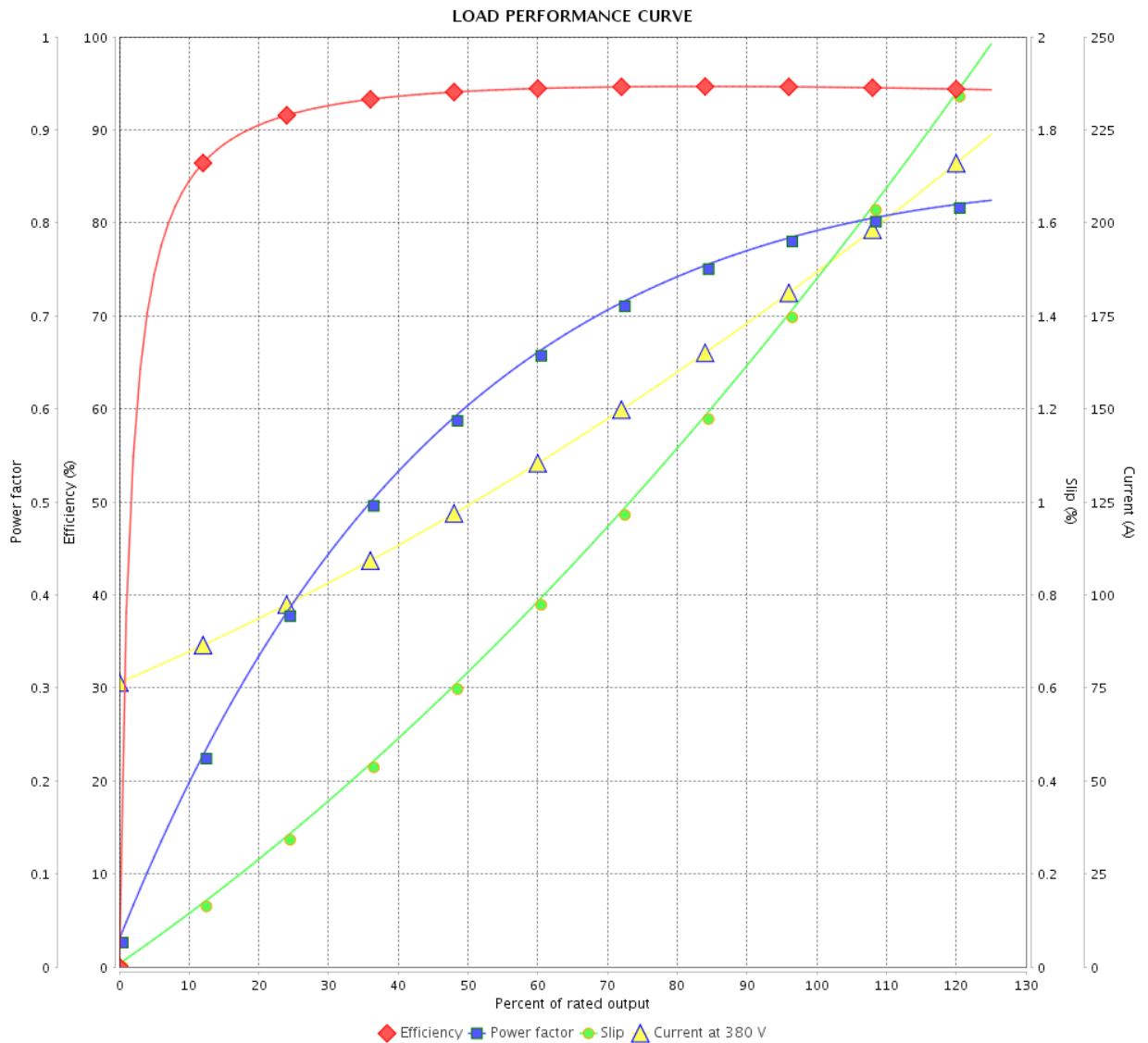


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Performance : 380 V 50 Hz 6P IE2

Rated current : 183 A
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 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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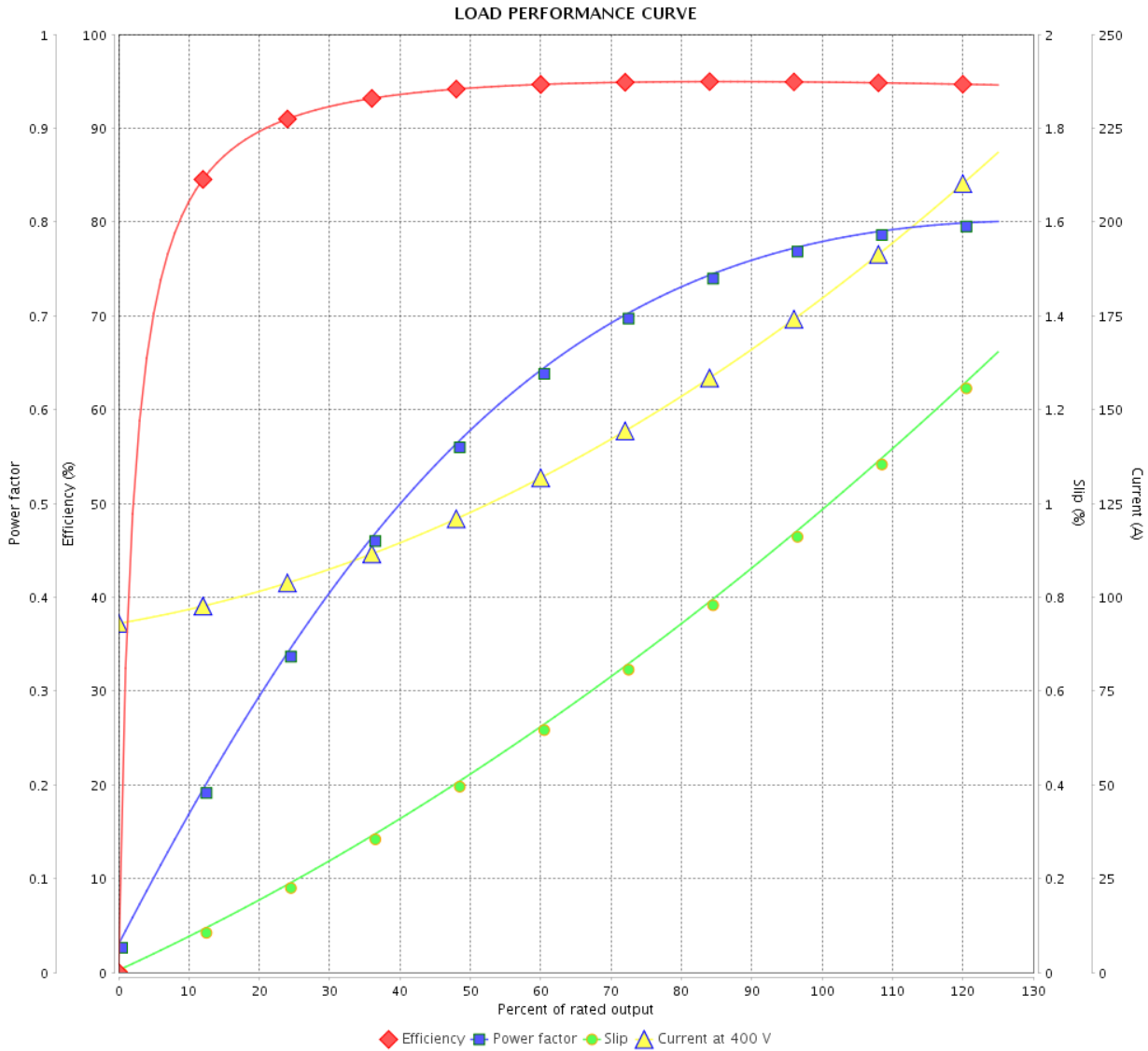


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Performance : 400 V 50 Hz 6P IE3

Rated current : 175 A	Moment of inertia (J) : 79.0 sq.ft.lb
LRC : 6.7	Duty cycle : Cont.(S1)
Rated torque : 663 ft.lb	Insulation class : F
Locked rotor torque : 240 %	Service factor : 1.00
Breakdown torque : 280 %	Temperature rise : 80 K
Rated speed : 990 rpm	Design : B

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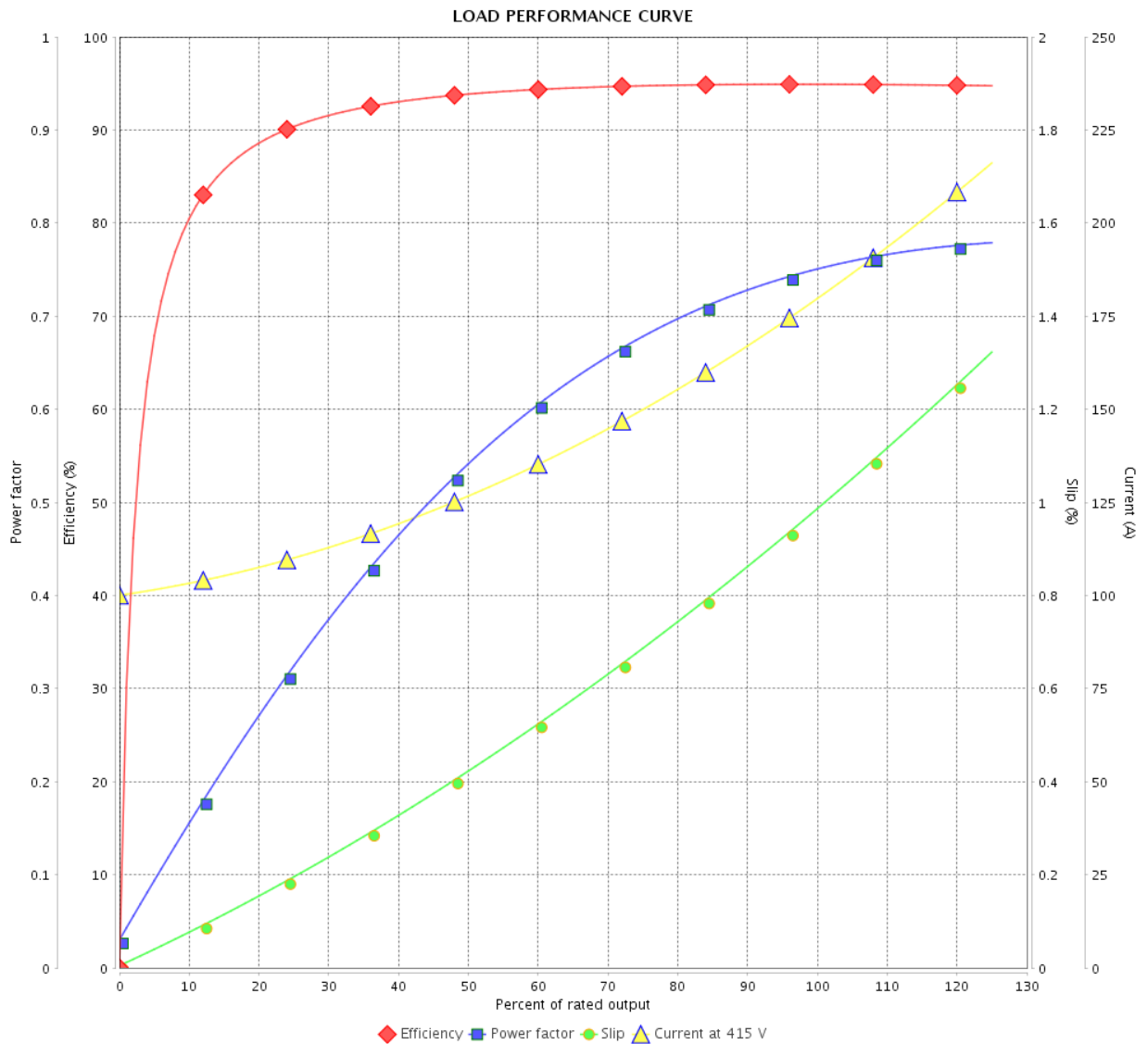


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 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

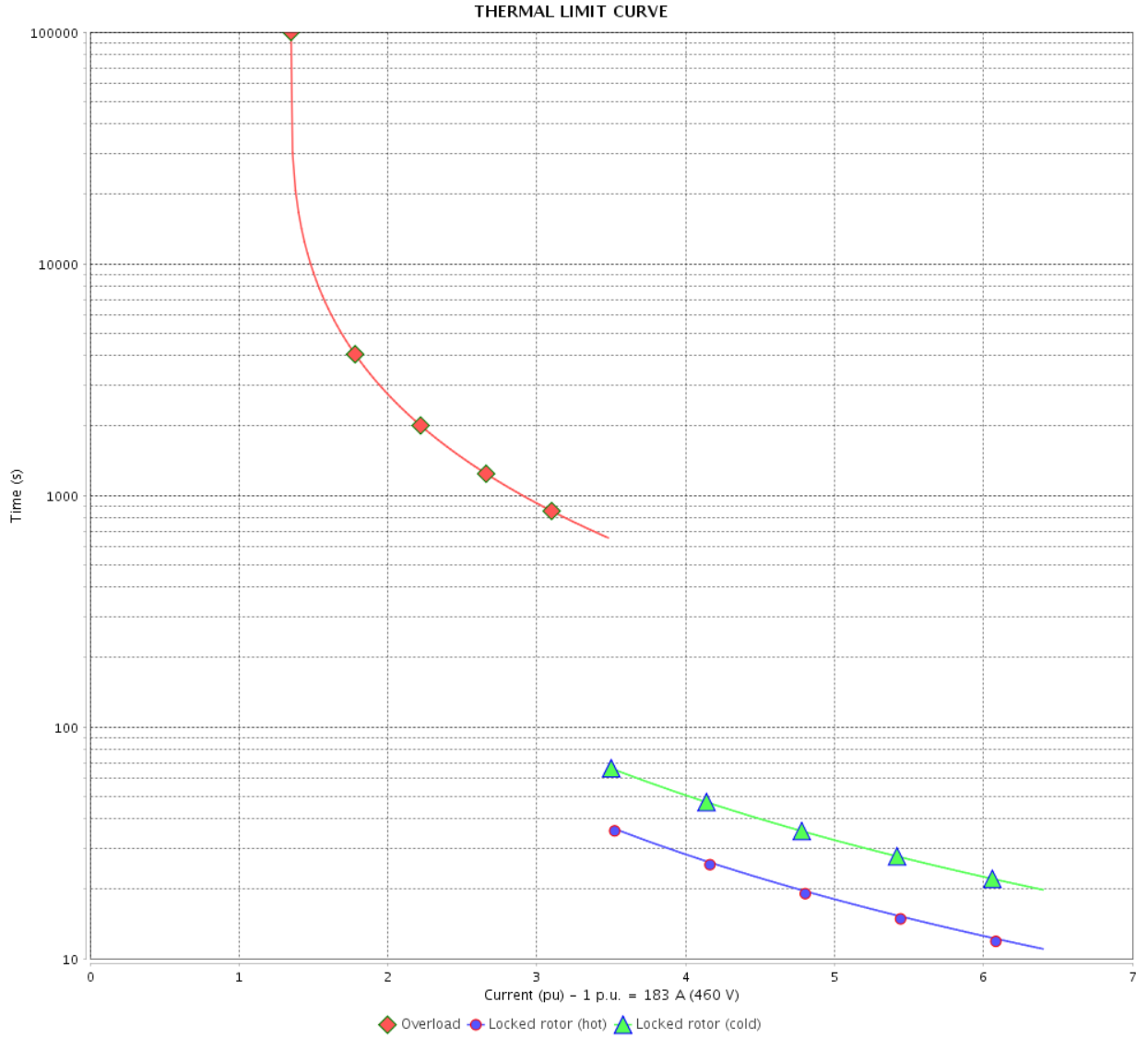
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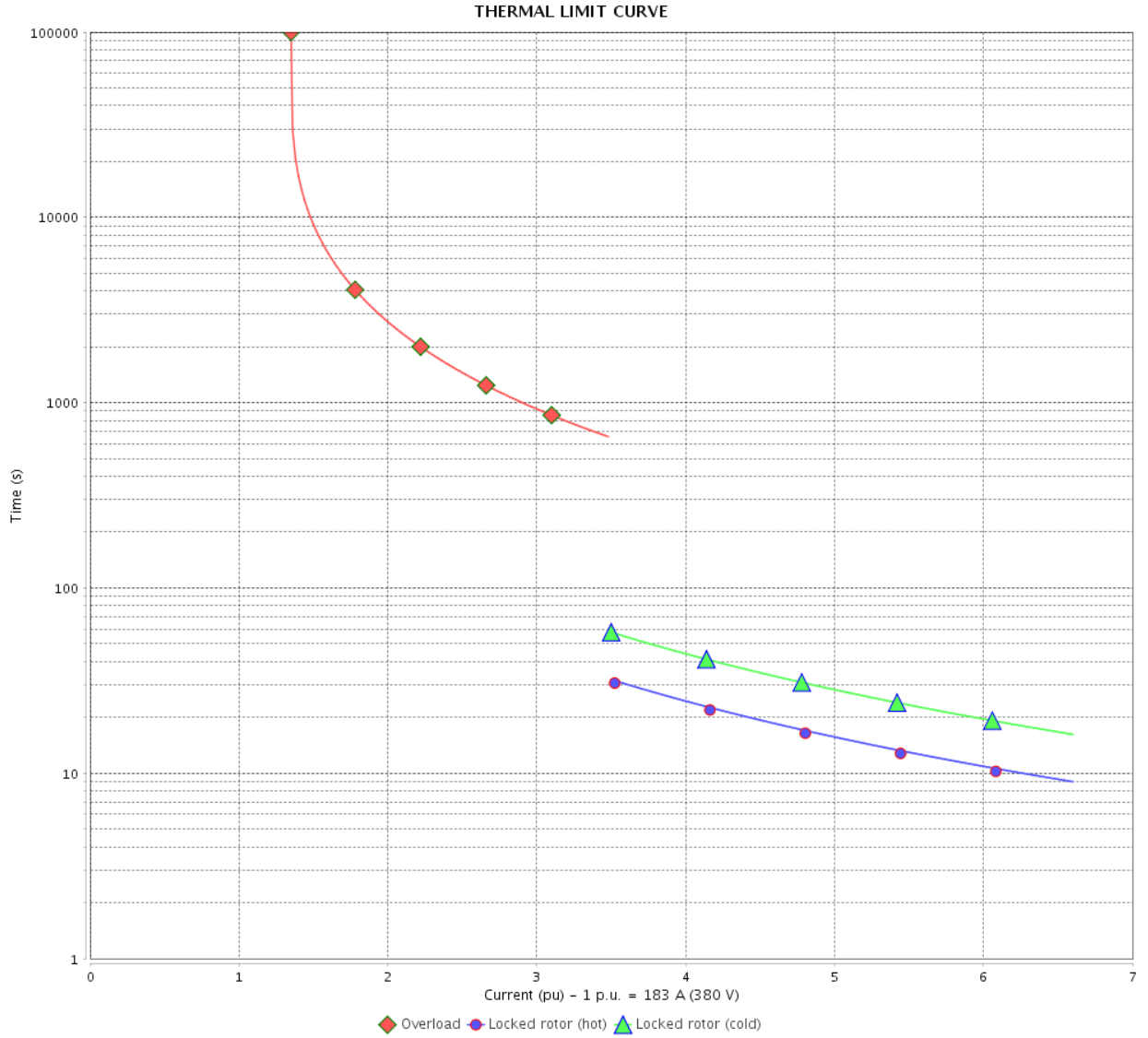
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Locked rotor torque : 240 %
Breakdown torque : 280 %
Rated speed : 990 rpm

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Service factor : 1.00
Temperature rise : 80 K
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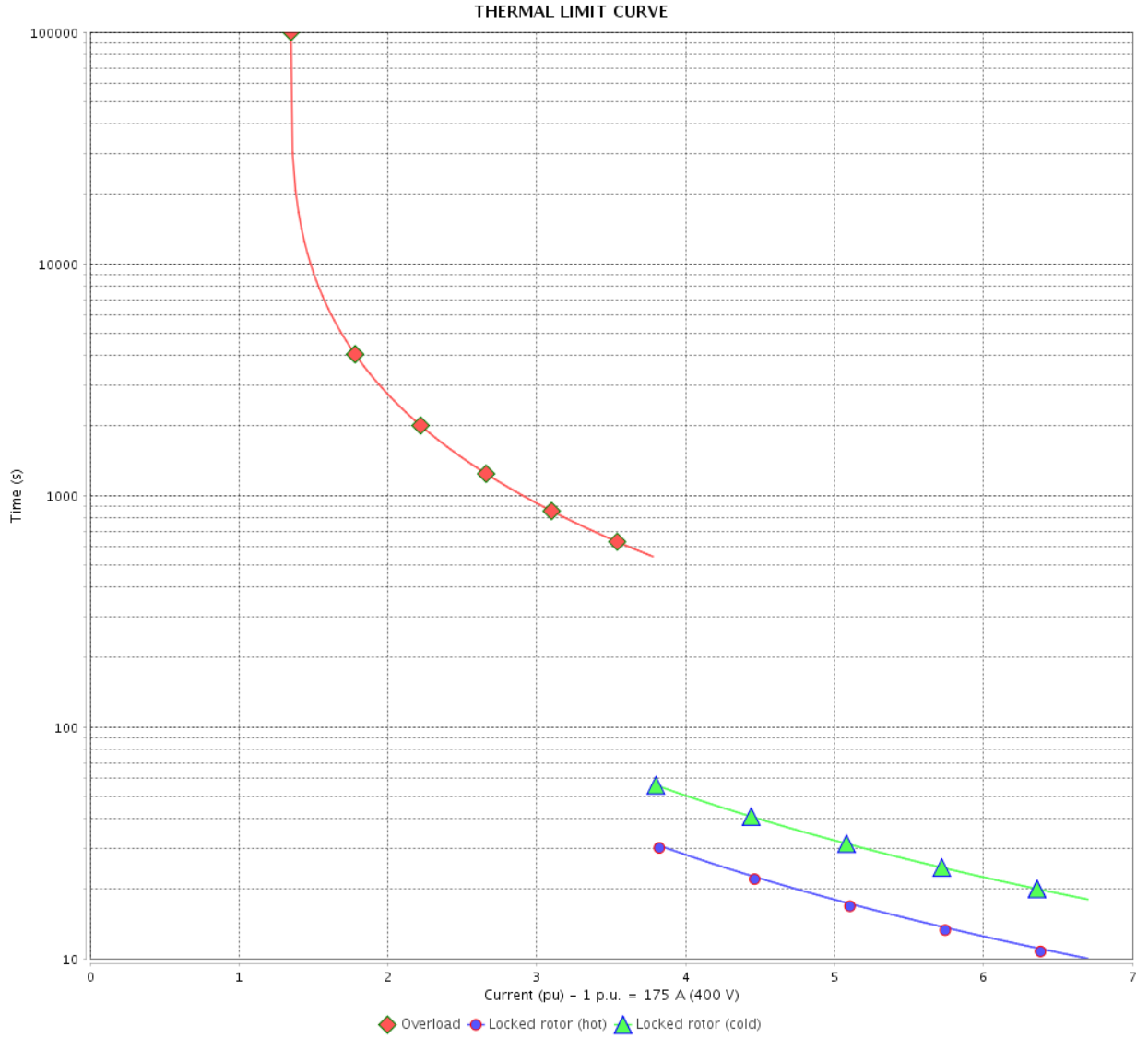
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Rated speed	: 990 rpm	Design	: B

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Cooling constant

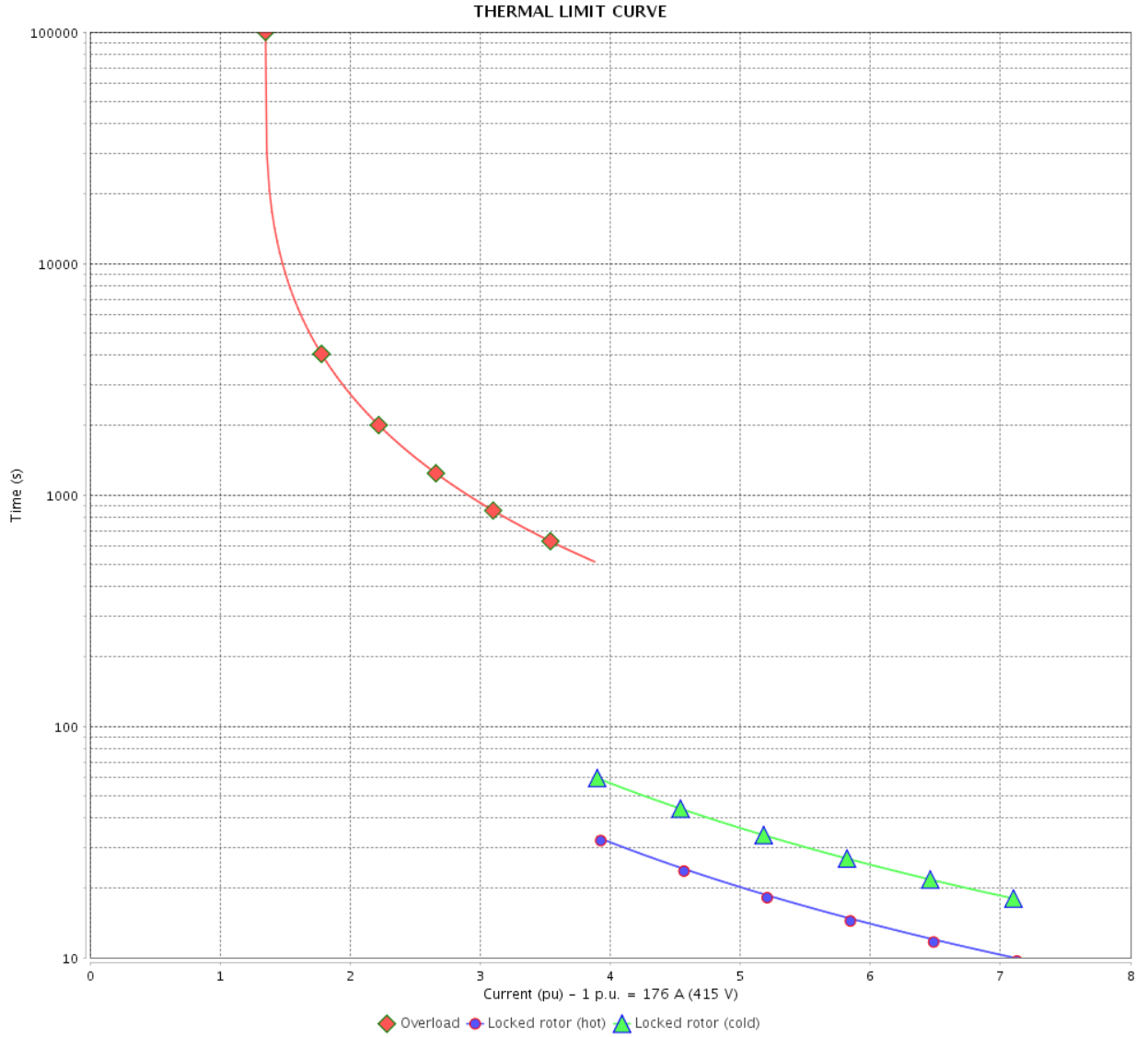
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

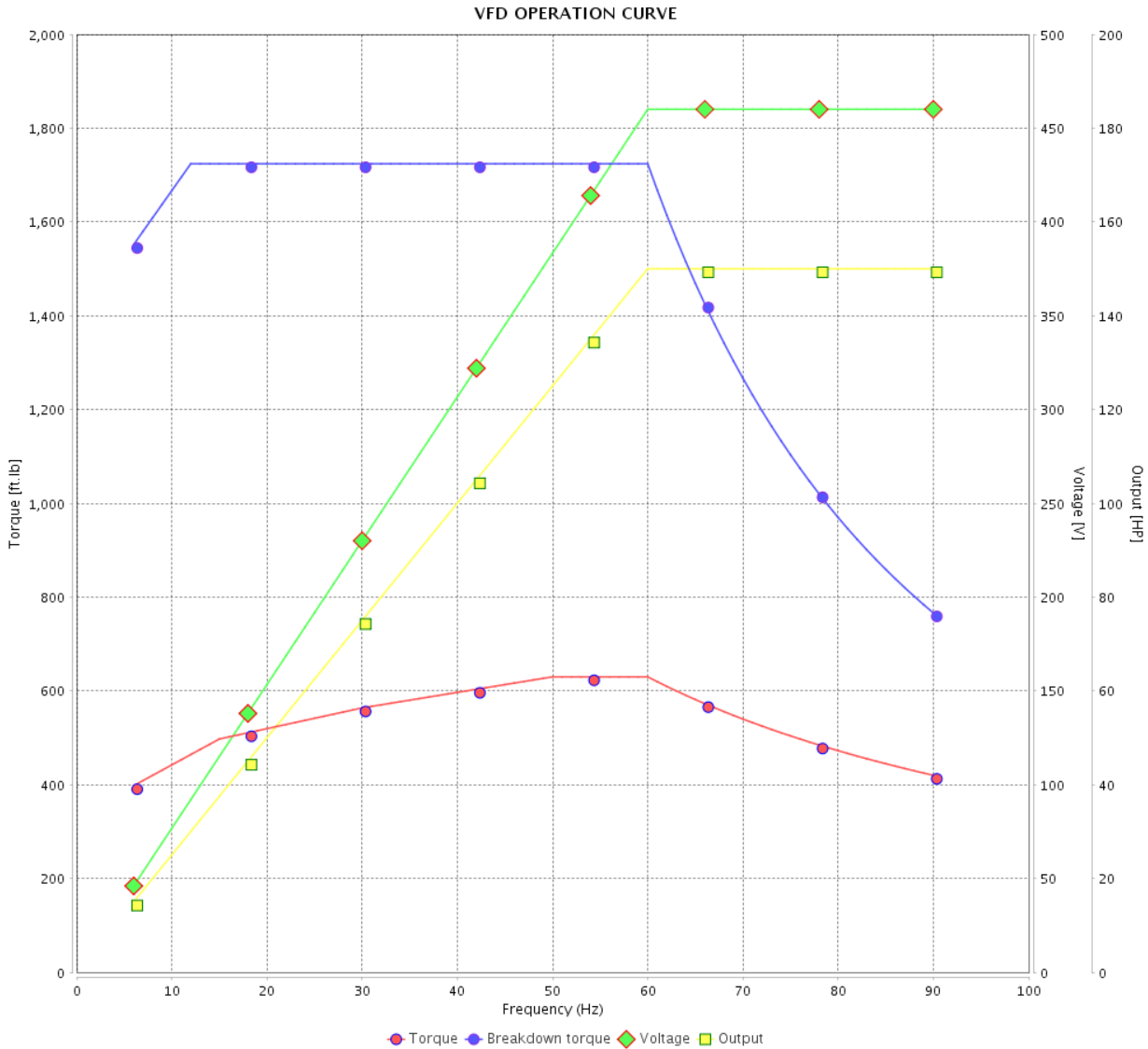


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Date	13/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

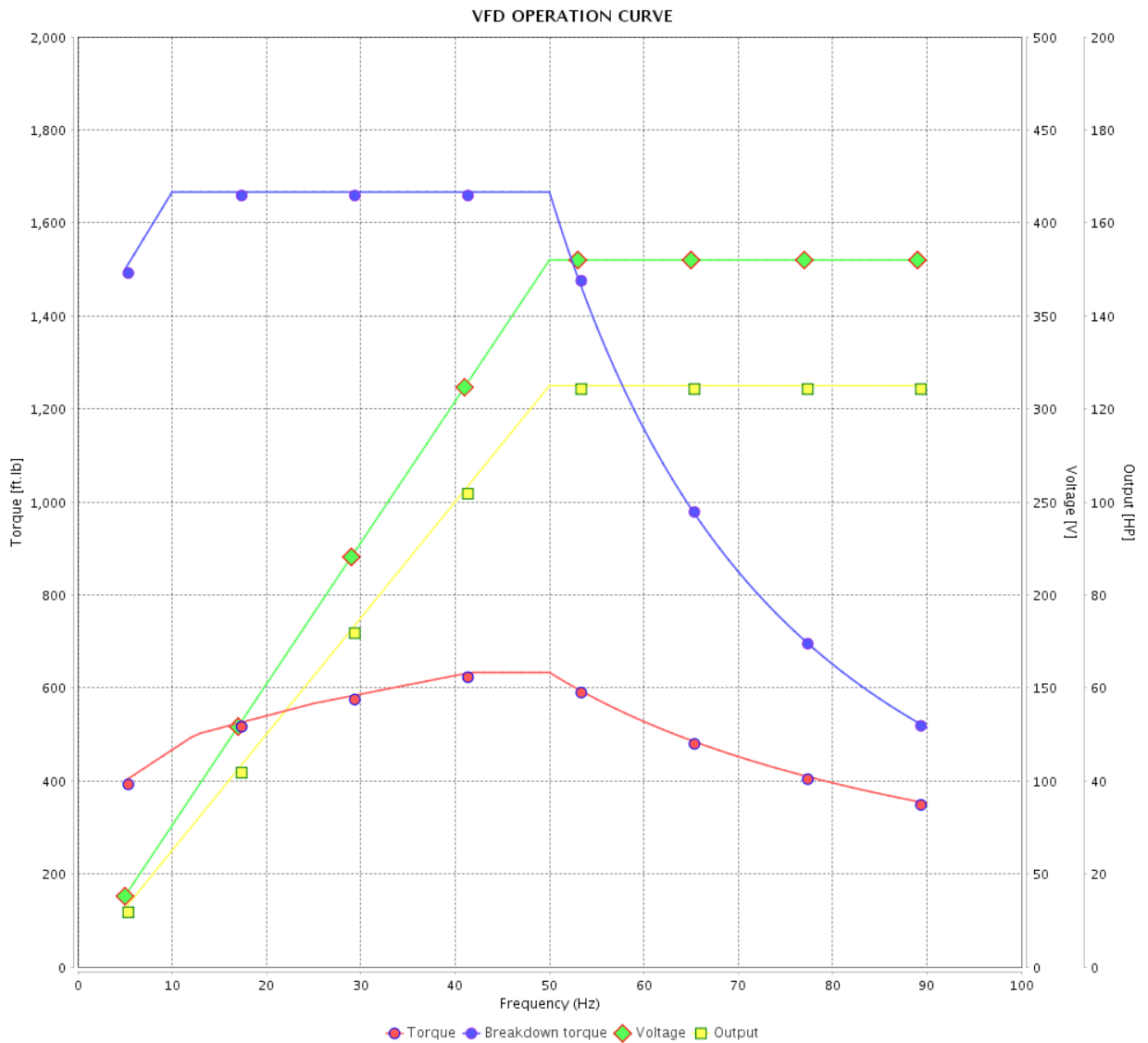


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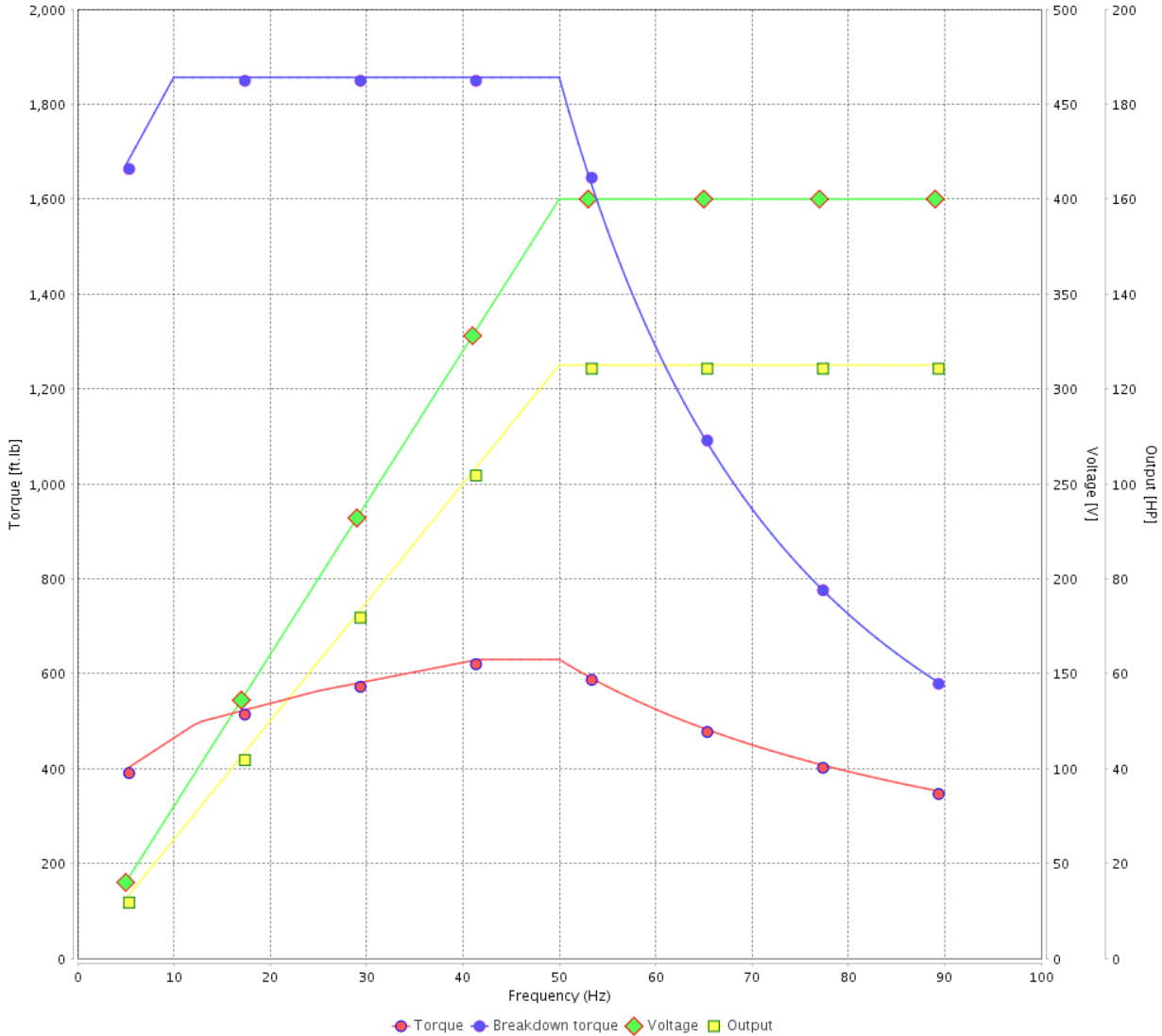
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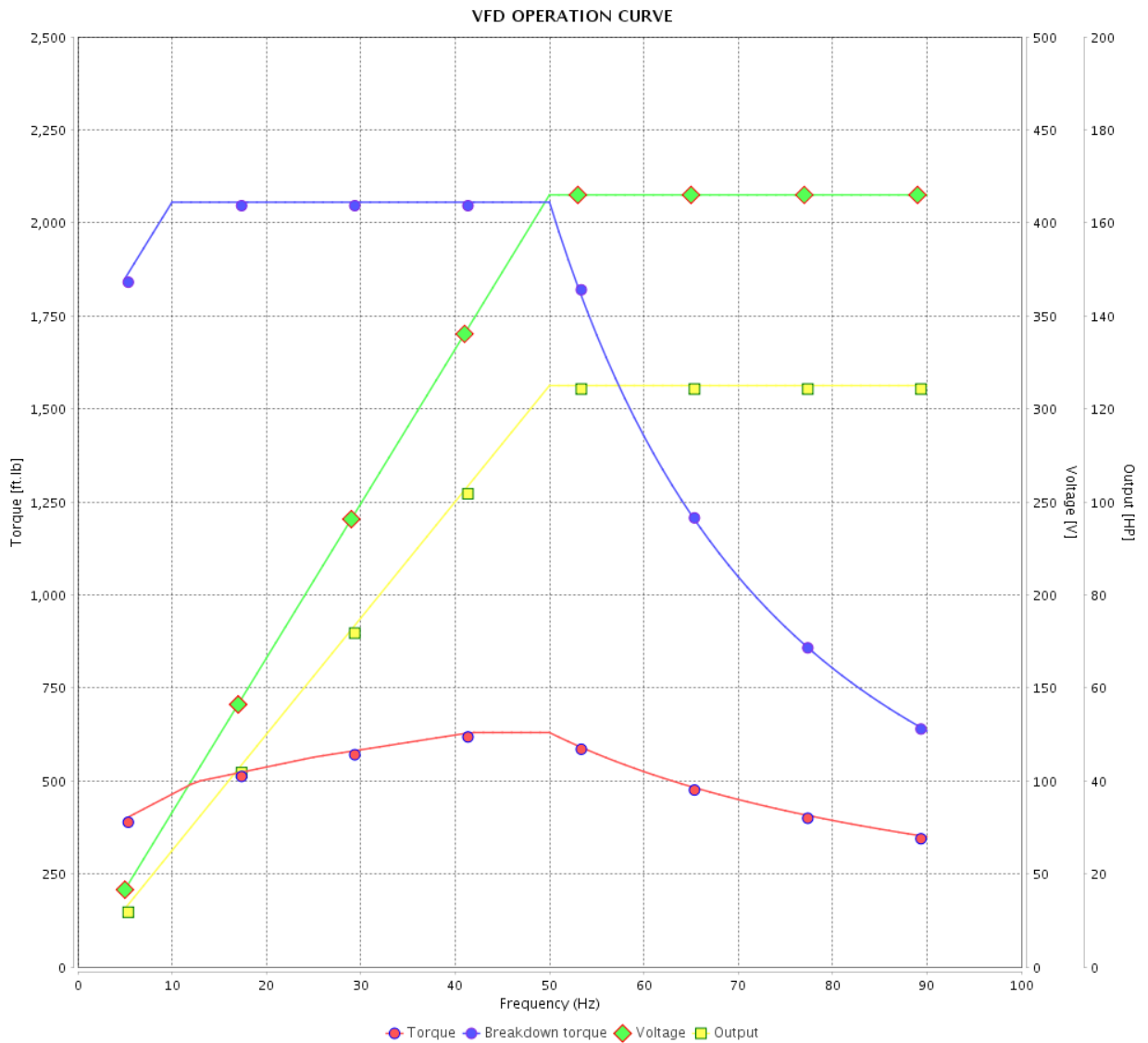


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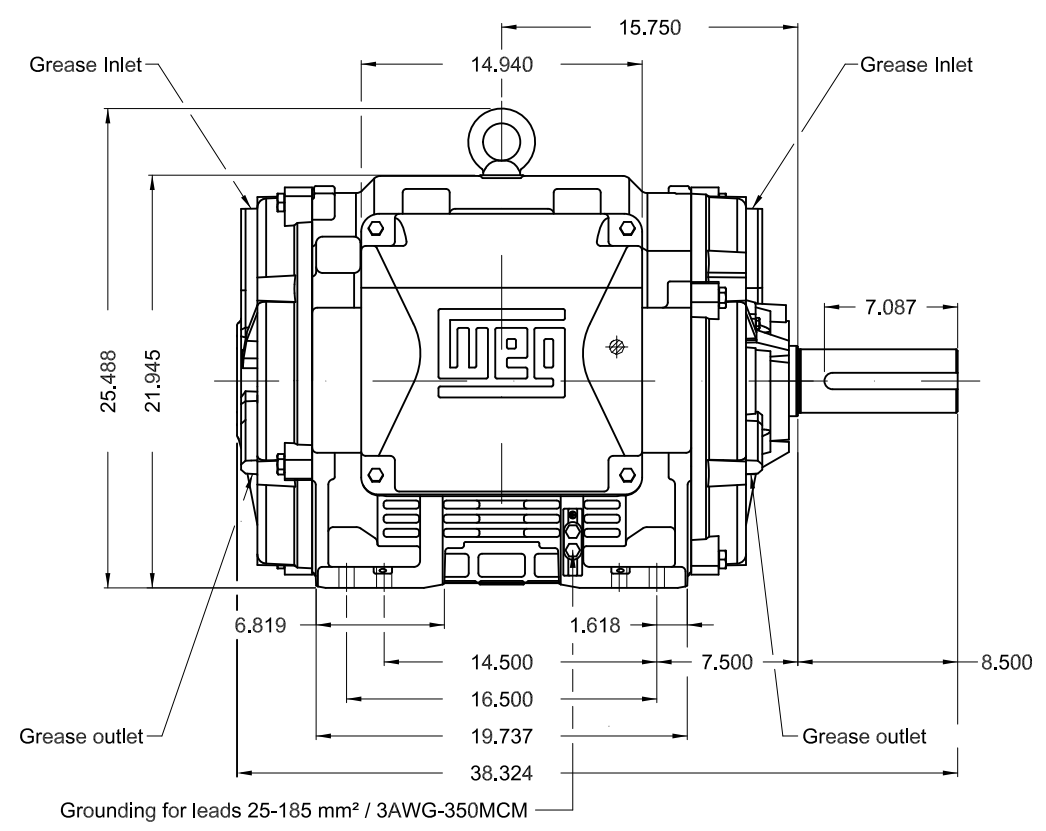
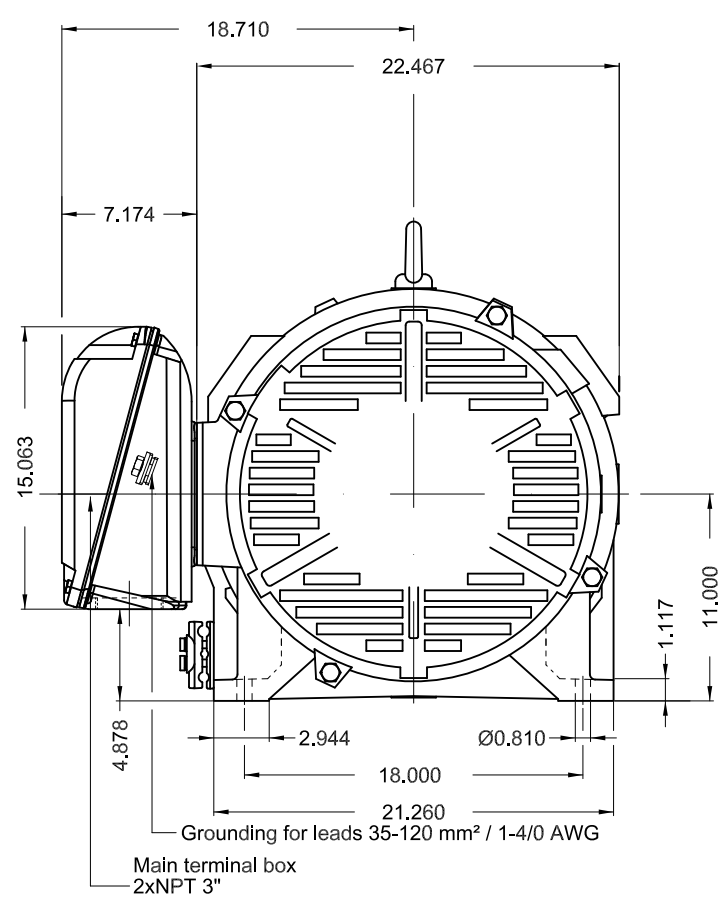


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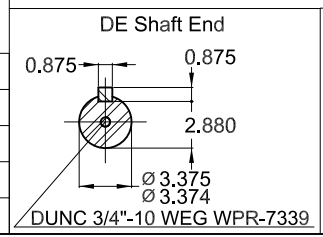
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C3 NDE bearing
Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B3R(D)



150 HP 06 Poles 60 Hz A

						1:10
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ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR W40 PREM. EFF. FRAME 444/5T IP23 ODP					
CHECKED							
RELEASED							
REL DT.		WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW

WDD

Dimensions in inches XME A3

MODEL 150120T3G445T-W40
MADE IN BRAZIL
14272437

WEG **W40 NEMA**
CC029A Premium
Inverter Duty Motor



MOD.T01#FOXON



For 60Hz use on PWM, VT 1000:1, CT 2:1, 1.0SF

PH 3	FR 444/5T	HP(kW) 150(110)	Hz 60	PART-WINDING			WYE-DELTA		
V 460		A 183	IP23	START	RUN		START	RUN	
NEMA NOM EFF		95.4 %	RPM 1188	○T12 ○T10 ○T11 ○T7 ○T8 ○T9	○T12 ○T10 ○T11 ○T7 ○T8 ○T9	○T12 ○T10 ○T11 ○T6 ○T4 ○T5	○T12 ○T10 ○T11 ○T6 ○T4 ○T5	○T12 ○T10 ○T11 ○T7 ○T8 ○T9	○T12 ○T10 ○T11 ○T7 ○T8 ○T9
ENCL ODP		DUTY CONT.	INS. CL. F ΔT 80 K	○T6 ○T4 ○T5 ○T1 ○T2 ○T3	○T6 ○T4 ○T5 ○T1 ○T2 ○T3	○T7 ○T8 ○T9 ○T1 ○T2 ○T3	○T7 ○T8 ○T9 ○T1 ○T2 ○T3	○T7 ○T8 ○T9 ○T1 ○T2 ○T3	○T7 ○T8 ○T9 ○T1 ○T2 ○T3
PF 0.79		DES B	CODE G	AMB. 40°C		MOBIL POLYREX EM		20000 h	
SF 1.25		SFA 229	ALT 1000 m.a.s.l.	1532		Lbs			
125HP 90kW 50Hz 380V 183A 985RPM SF1.00 EFF 94.6% (IE2)									

