

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: W40 NEMA Premium Efficiency Three-Phase	Product code :	14285008	
			Catalog # :	15018OT3G444TS-W40	
Frame		: 444/5TS	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	: 1332 lb	
Protection degree		: IP23	Moment of inertia (J)	: 42.1 sq.ft.lb	
Design		: B			
Output [HP]	150	125	125	125	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	170	169	162	158	
L. R. Amperes [A]	1105	1183	1199	1138	
LRC [A]	6.5x(Code G)	7.0x(Code G)	7.4x(Code H)	7.2x(Code H)	
No load current [A]	58.0	57.7	62.5	66.5	
Rated speed [RPM]	1784	1485	1485	1485	
Slip [%]	0.89	1.00	1.00	1.00	
Rated torque [ft.lb]	442	442	442	442	
Locked rotor torque [%]	200	190	220	240	
Breakdown torque [%]	240	240	270	290	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	39s (cold) 22s (hot)	37s (cold) 21s (hot)	36s (cold) 20s (hot)	39s (cold) 22s (hot)	
Noise level ²	78.0 dB(A)				
Efficiency (%)	25%	95.3	94.8	94.8	
	50%	95.4	94.9	94.9	
	75%	95.8	95.3	95.3	
	100%	95.8	95.3	95.3	
Power Factor	25%	0.49	0.49	0.45	
	50%	0.74	0.74	0.70	
	75%	0.82	0.82	0.80	
	100%	0.85	0.85	0.84	
Bearing type		Drive end : 6314 C3 Non drive end : 6212 Z C3	Foundation loads		
Sealing		Without Bearing Seal	Max. traction : 2751 lb Max. compression : 4083 lb		
Lubrication interval		20000 h	20000 h		
Lubricant amount		27 g	13 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



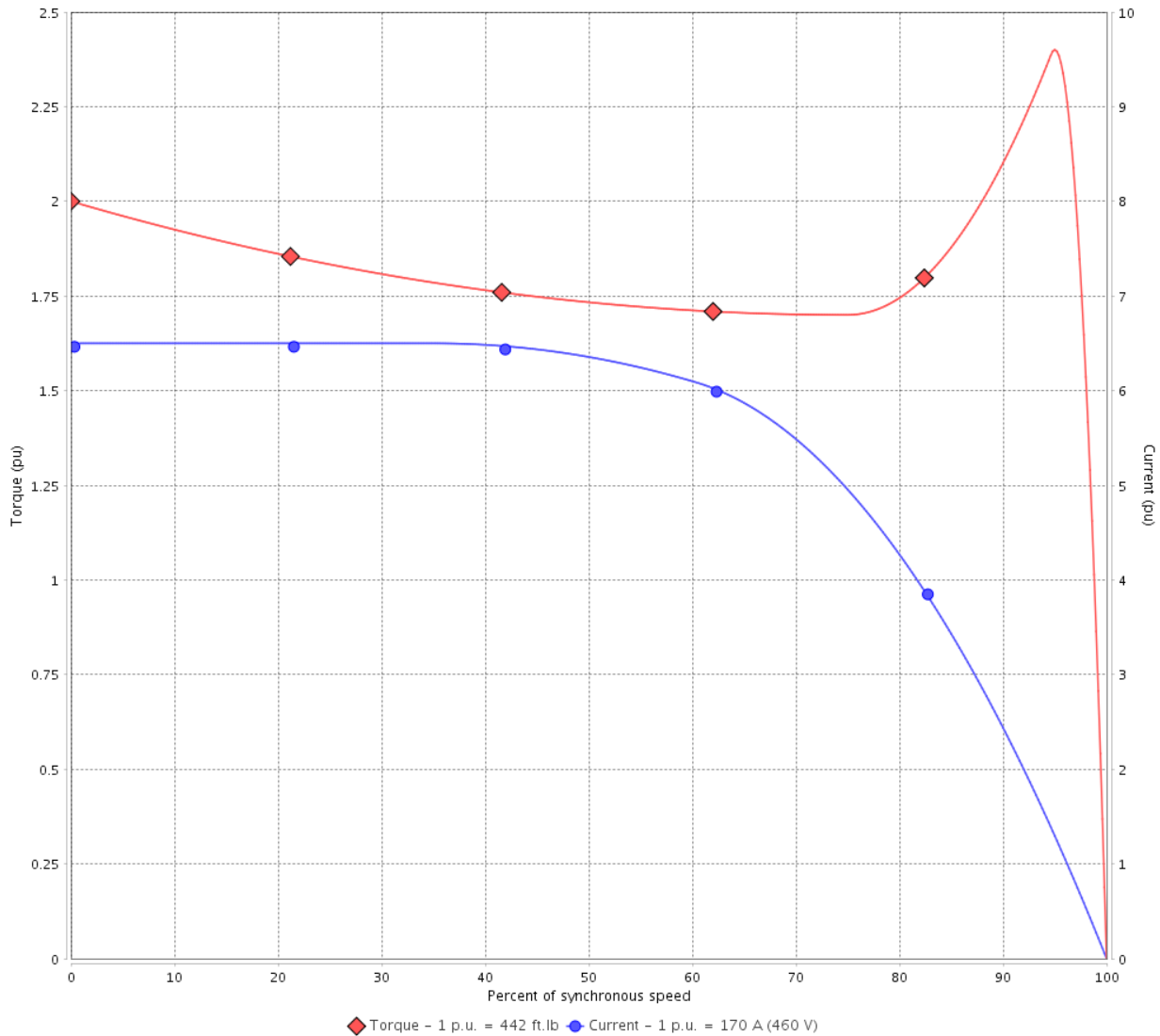
Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14285008

Catalog # : 15018OT3G444TS-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 4P

Rated current	: 170 A	Moment of inertia (J)	: 42.1 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 442 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1784 rpm	Design	: B

Locked rotor time : 39s (cold) 22s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



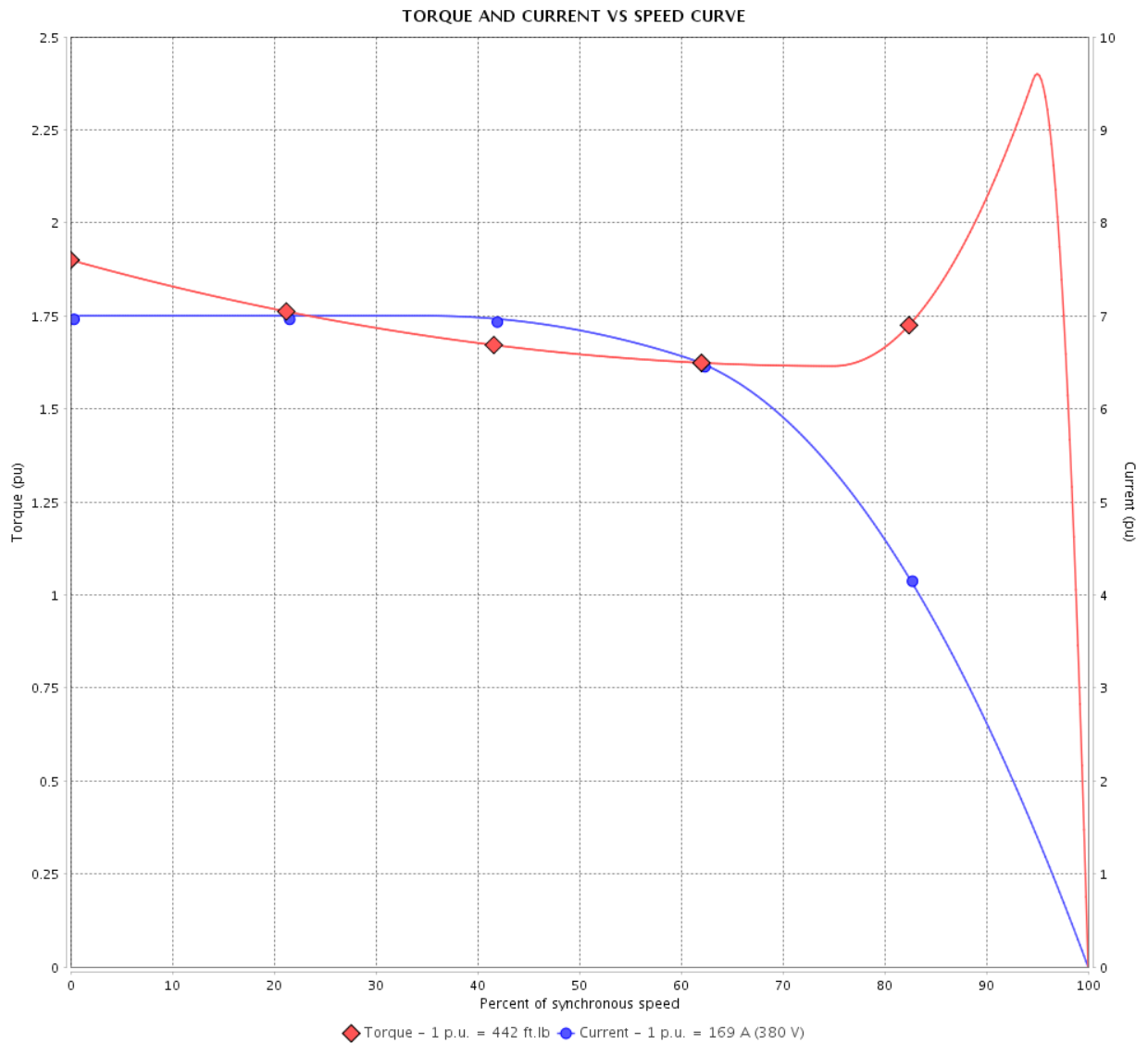
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency
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Catalog # : 15018OT3G444TS-W40



Performance : 380 V 50 Hz 4P IE3

Rated current	: 169 A	Moment of inertia (J)	: 42.1 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 442 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1485 rpm	Design	: B

Locked rotor time : 37s (cold) 21s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



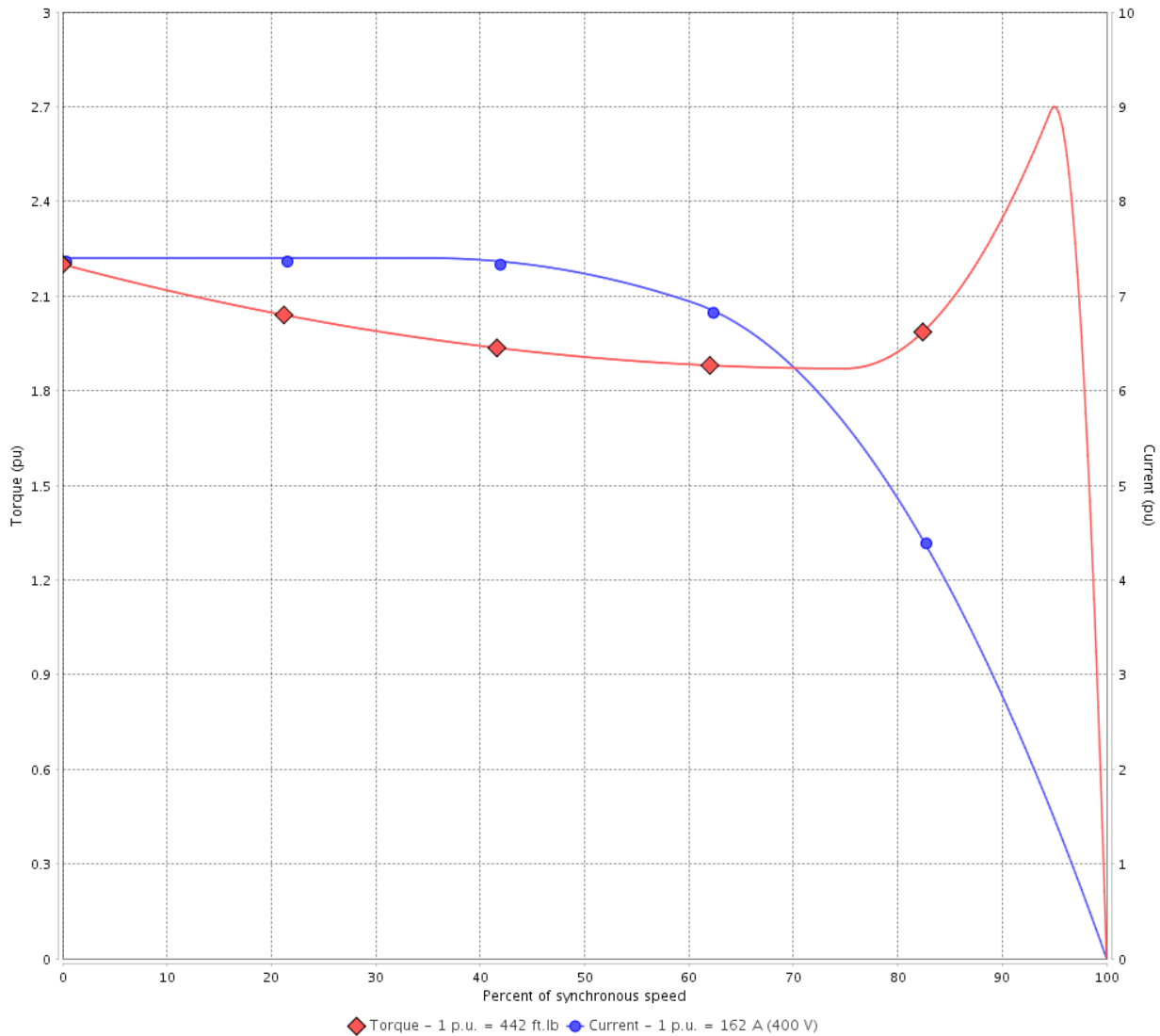
Customer :

Product line : W40 NEMA Premium Efficiency
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Product code : 14285008

Catalog # : 15018OT3G444TS-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current	: 162 A	Moment of inertia (J)	: 42.1 sq.ft.lb
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 442 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1485 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE



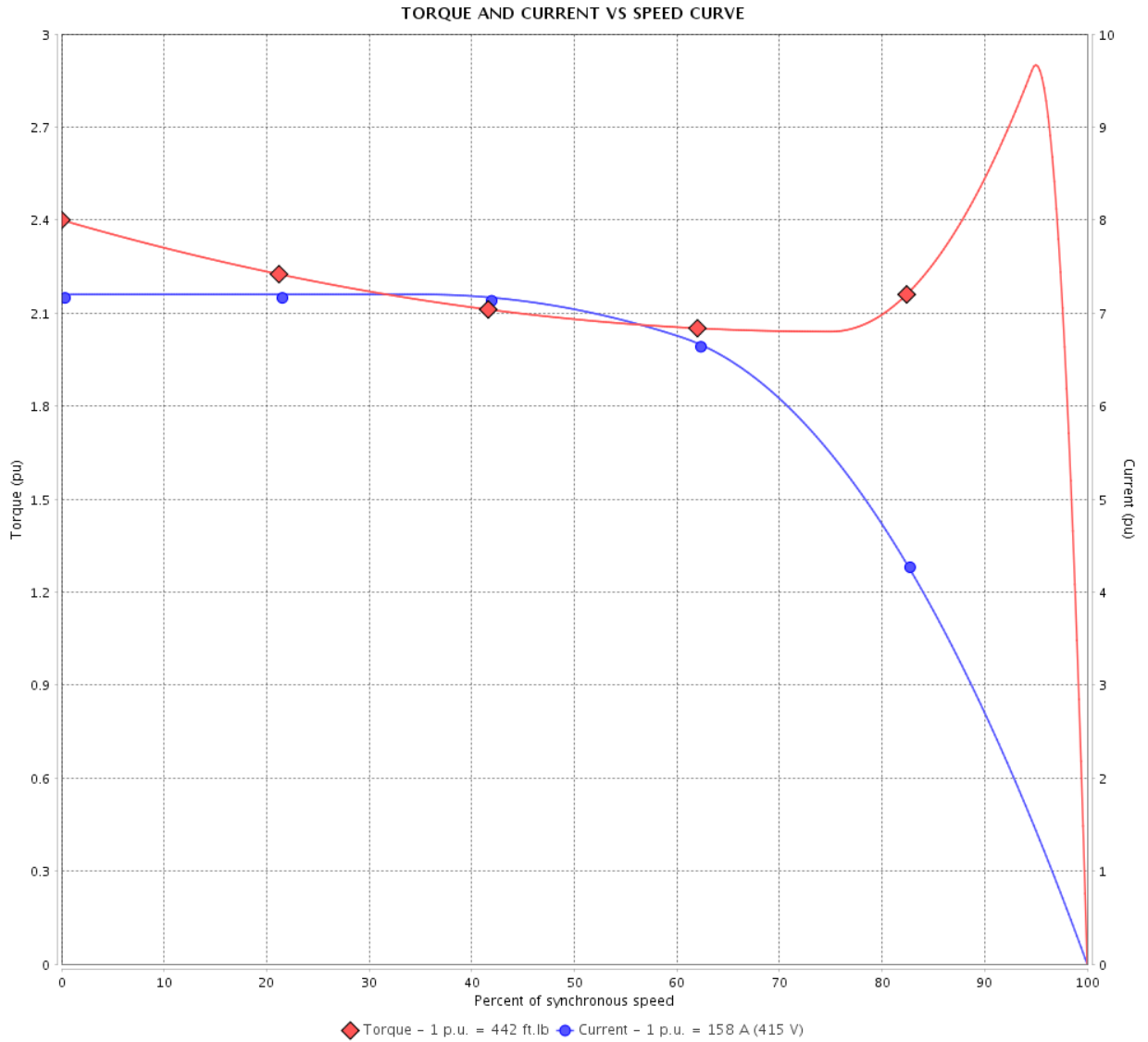
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LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 442 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 1485 rpm	Design	: B

Locked rotor time : 39s (cold) 22s (hot)

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LOAD PERFORMANCE CURVE

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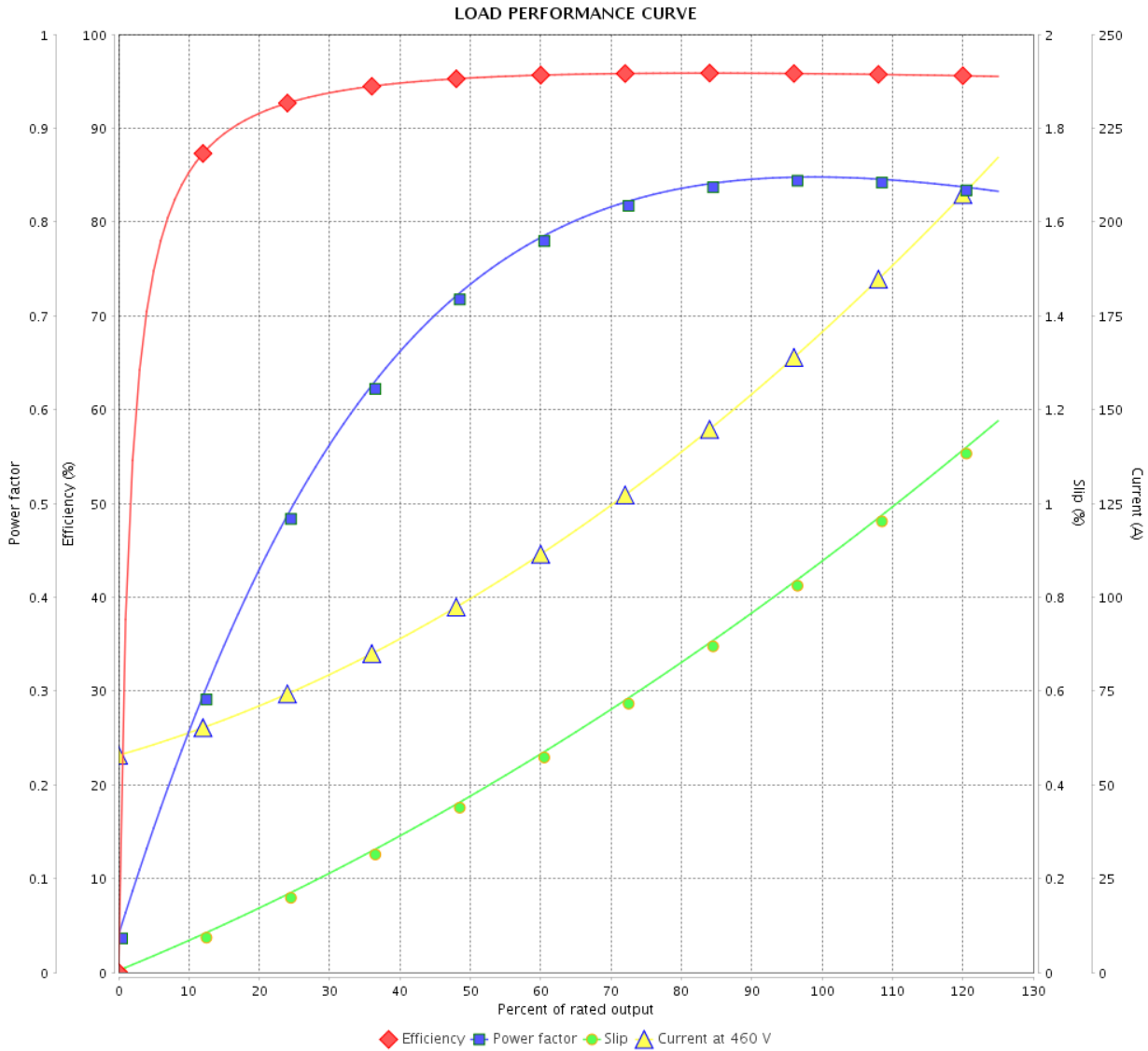


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Performance : 460 V 60 Hz 4P

Rated current	: 170 A	Moment of inertia (J)	: 42.1 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 442 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1784 rpm	Design	: B

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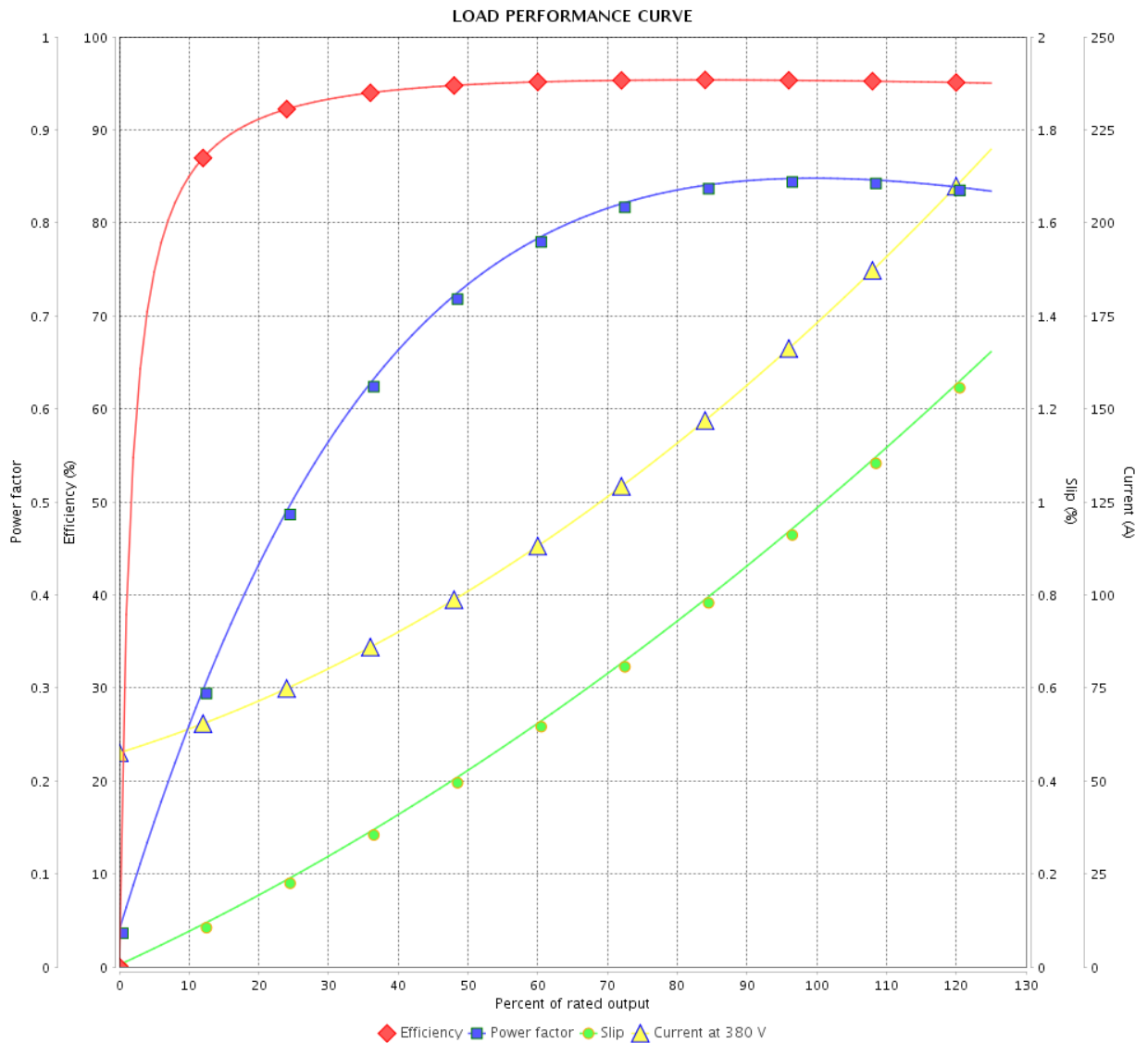


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 Rated speed : 1485 rpm

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

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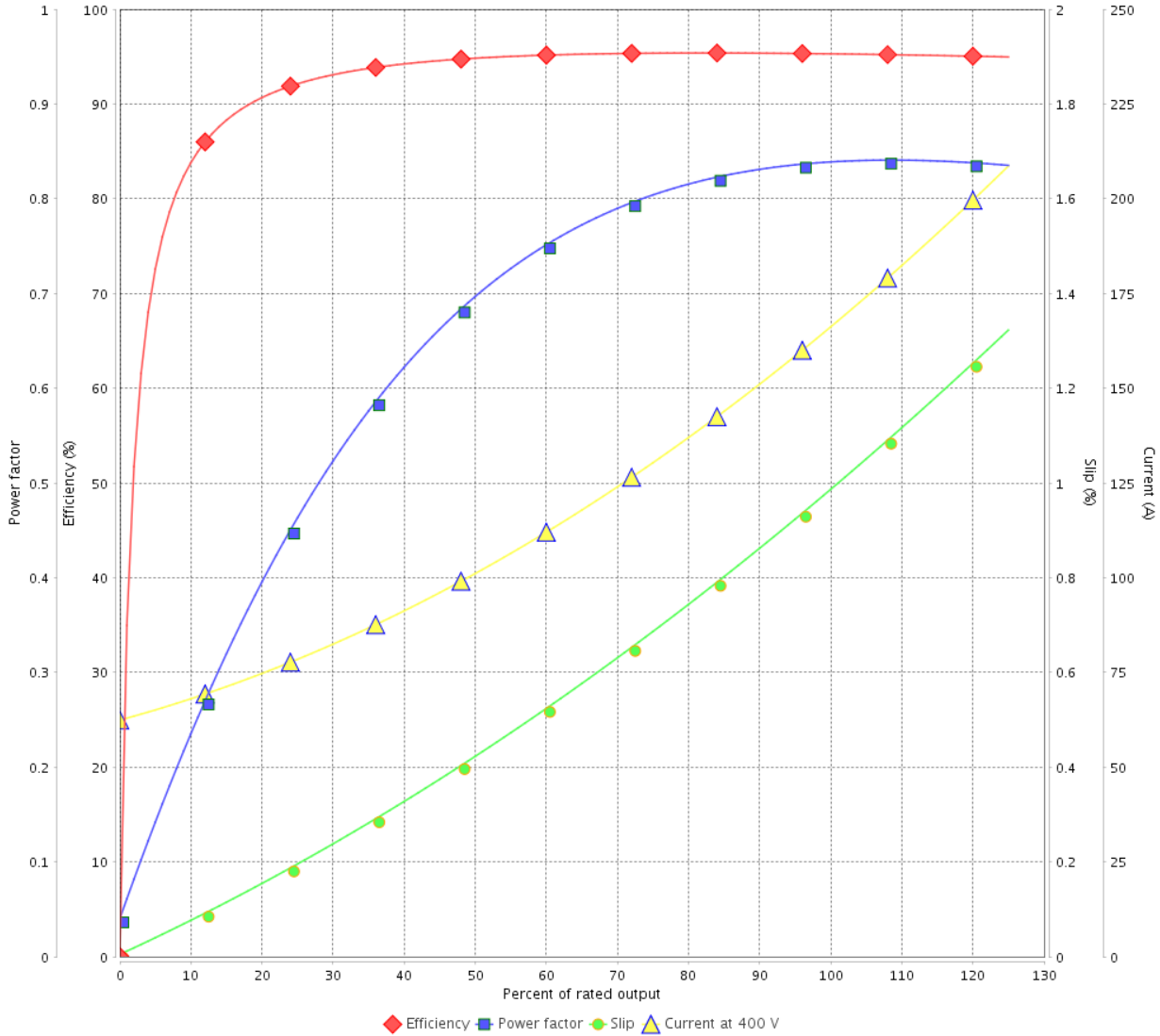
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Performance : 400 V 50 Hz 4P IE3

Rated current : 162 A
LRC : 7.4
Rated torque : 442 ft.lb
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Breakdown torque : 270 %
Rated speed : 1485 rpm

Moment of inertia (J) : 42.1 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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Three Phase Induction Motor - Squirrel Cage

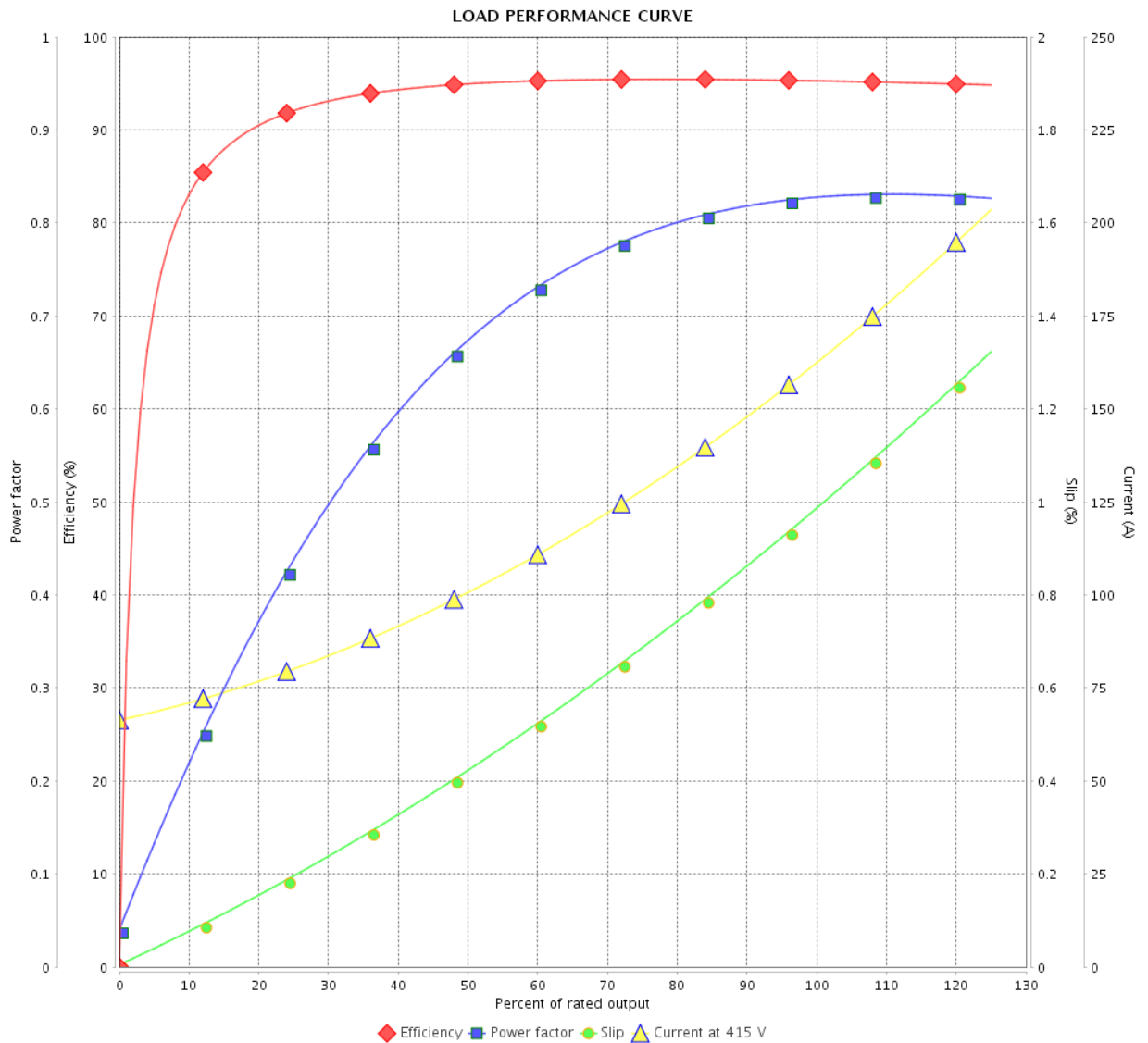


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 Breakdown torque : 290 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 42.1 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
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THERMAL LIMIT CURVE

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Rated speed	: 1784 rpm	Design	: B

Heating constant

Cooling constant

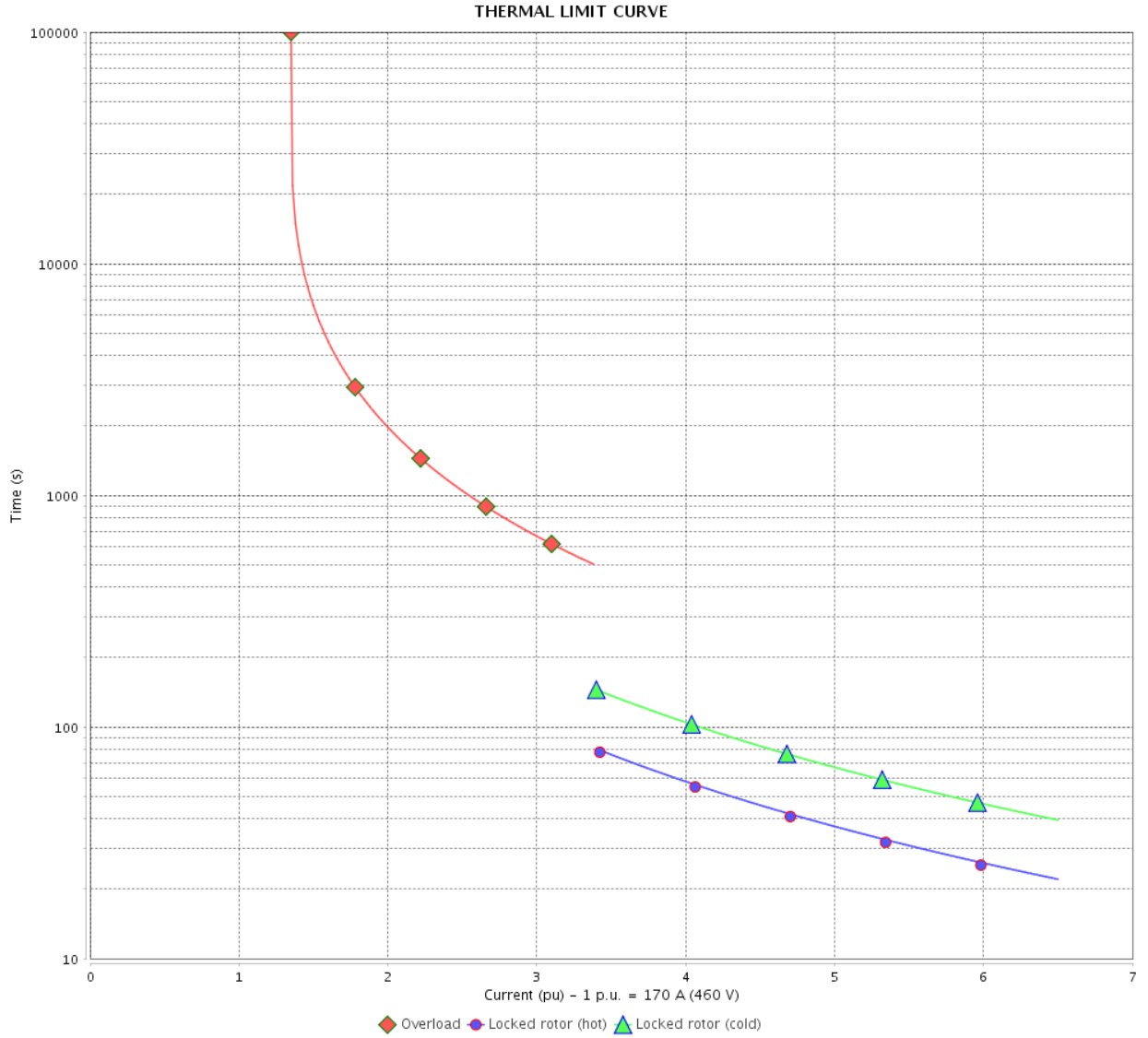
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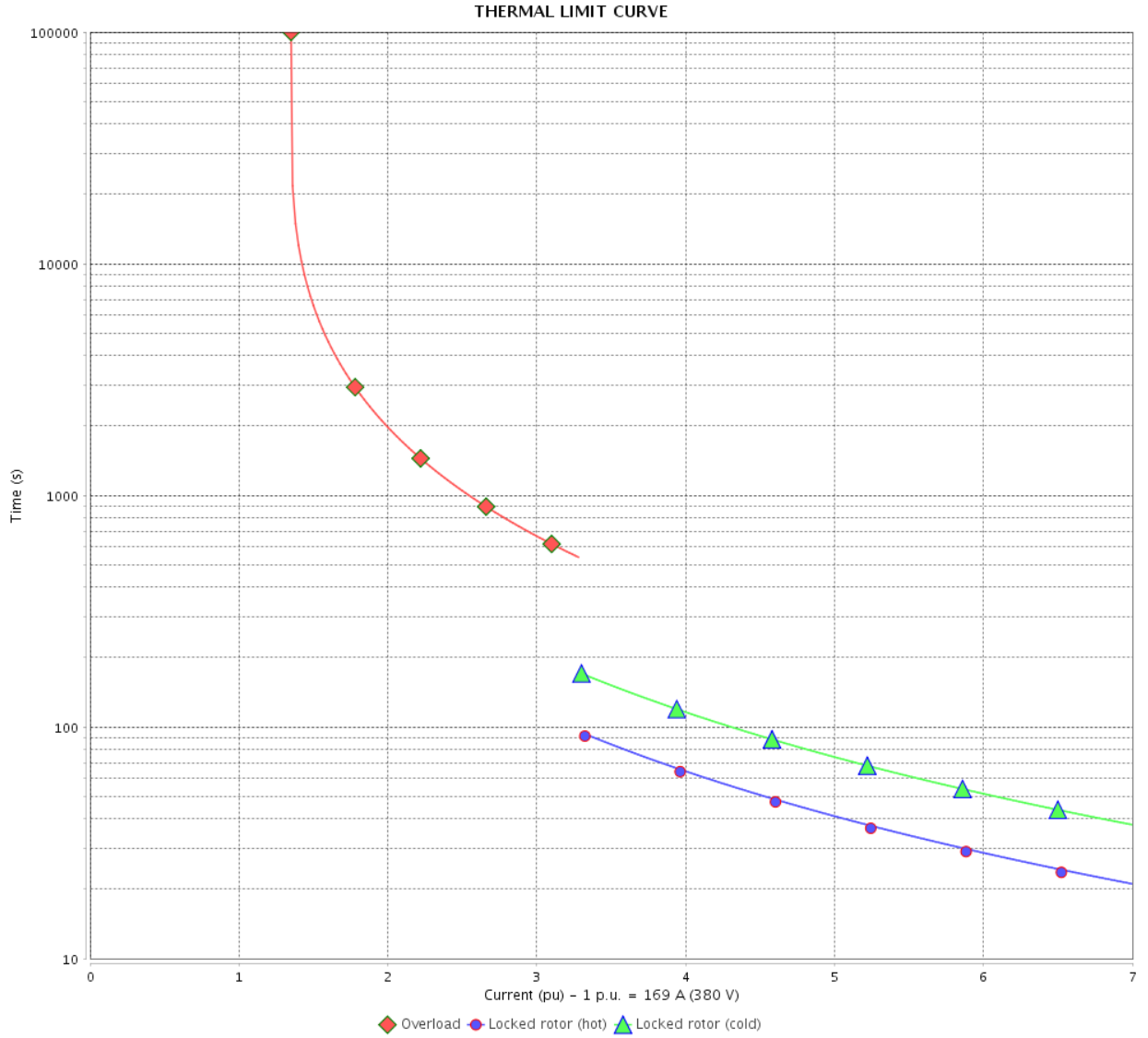
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Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1485 rpm	Design	: B

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Cooling constant

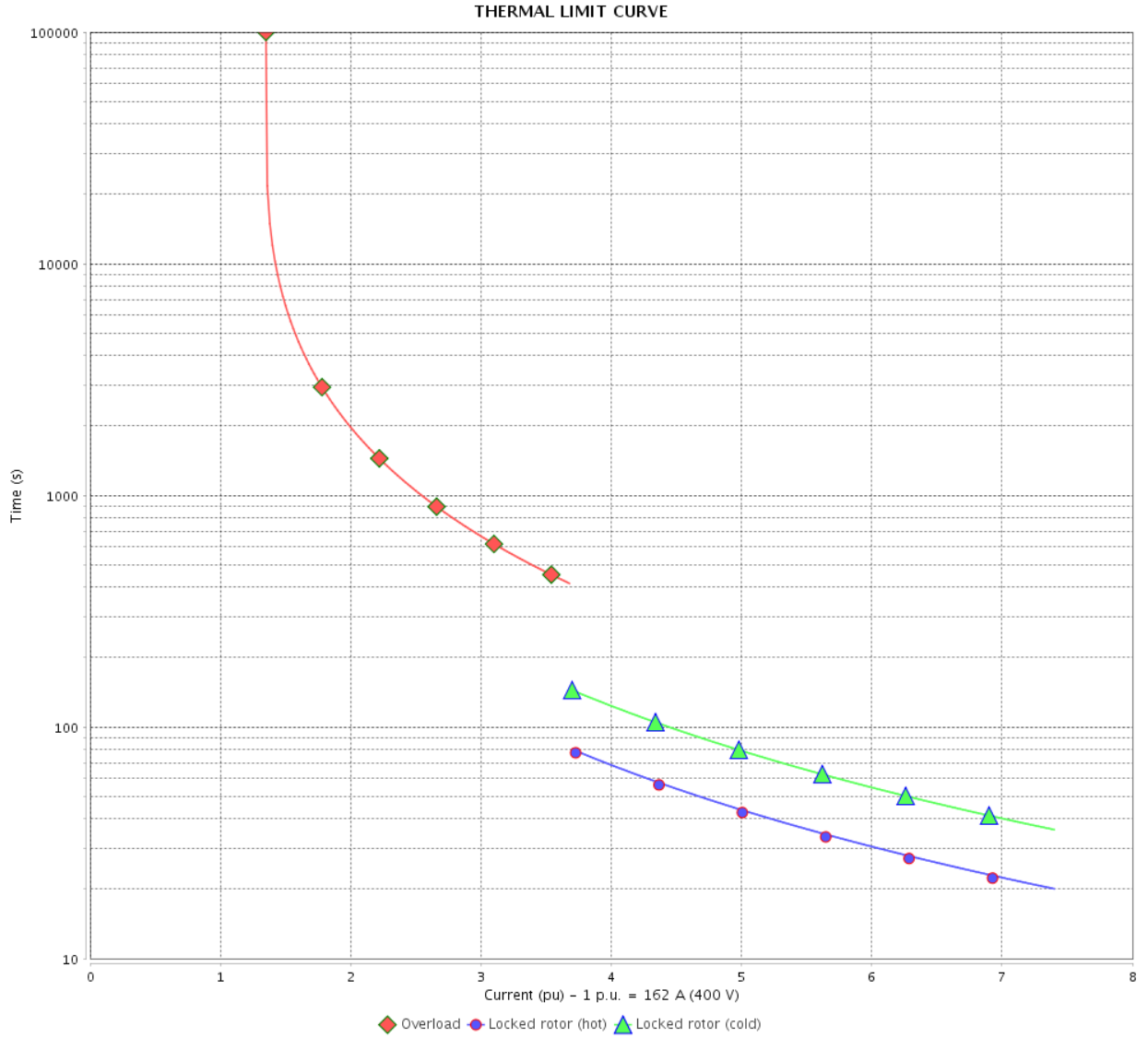
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Rated current	: 158 A	Moment of inertia (J)	: 42.1 sq.ft.lb
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Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 1485 rpm	Design	: B

Heating constant

Cooling constant

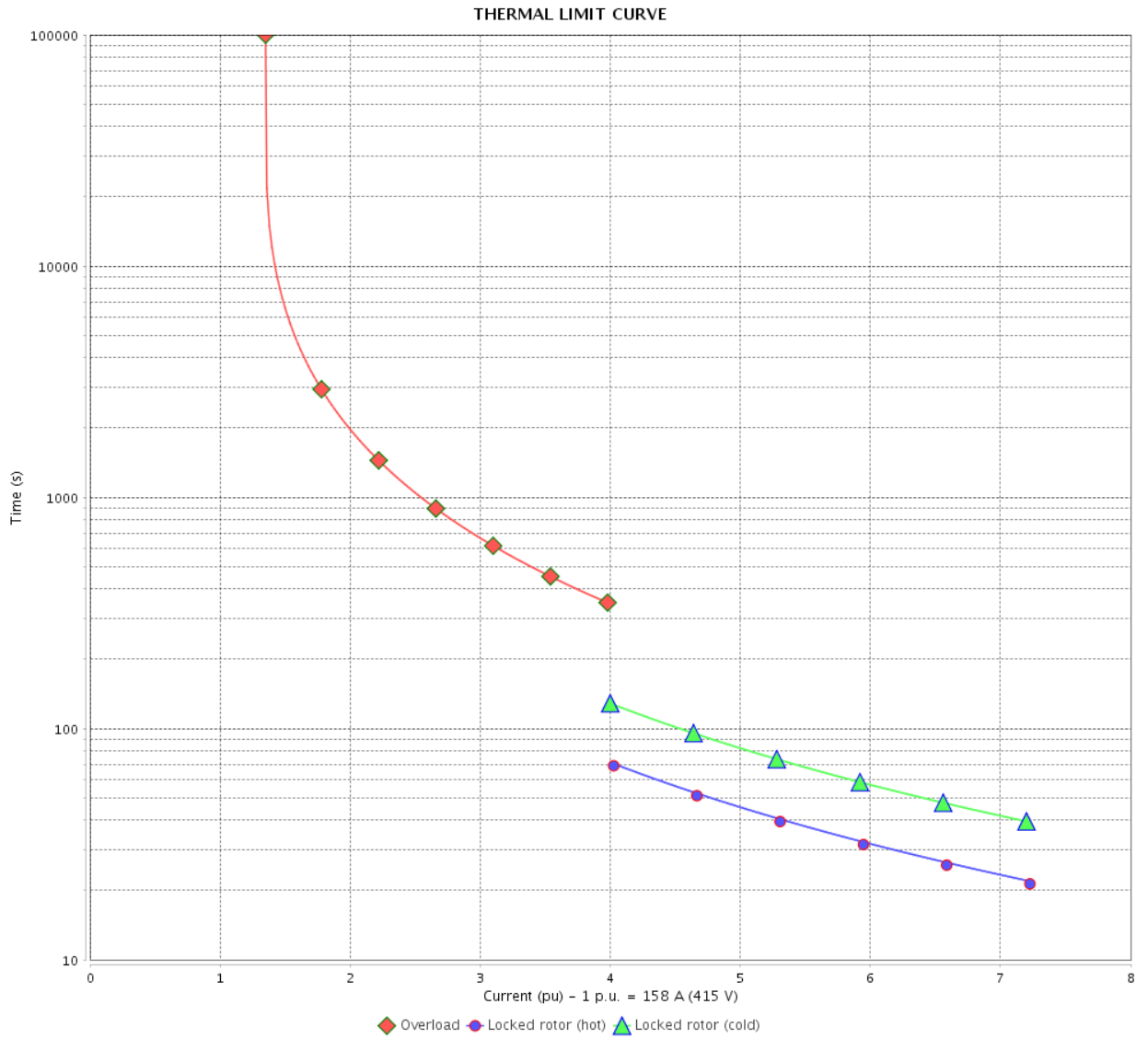
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



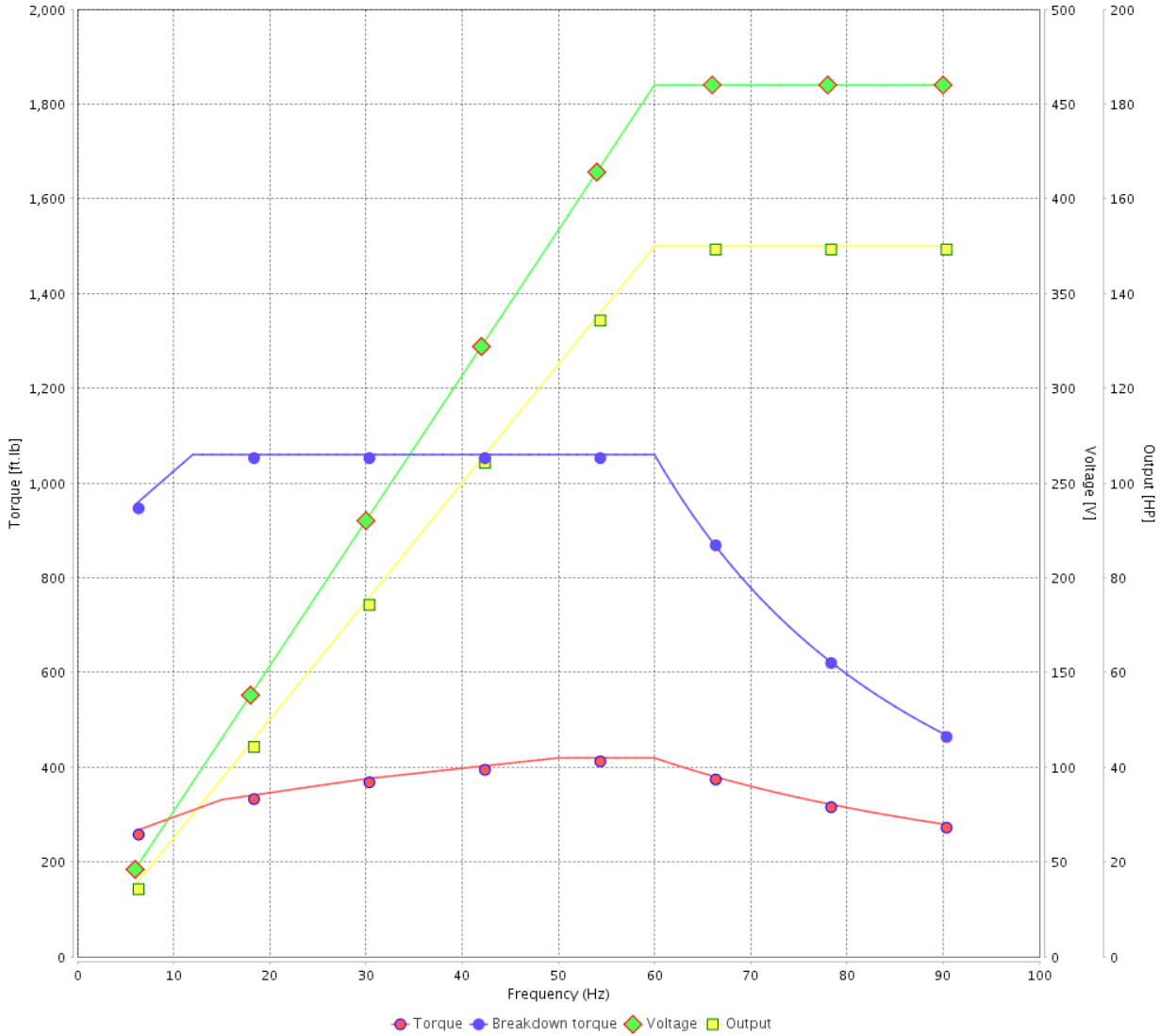
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Rev.	Changes Summary	Performed	Checked	Date
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

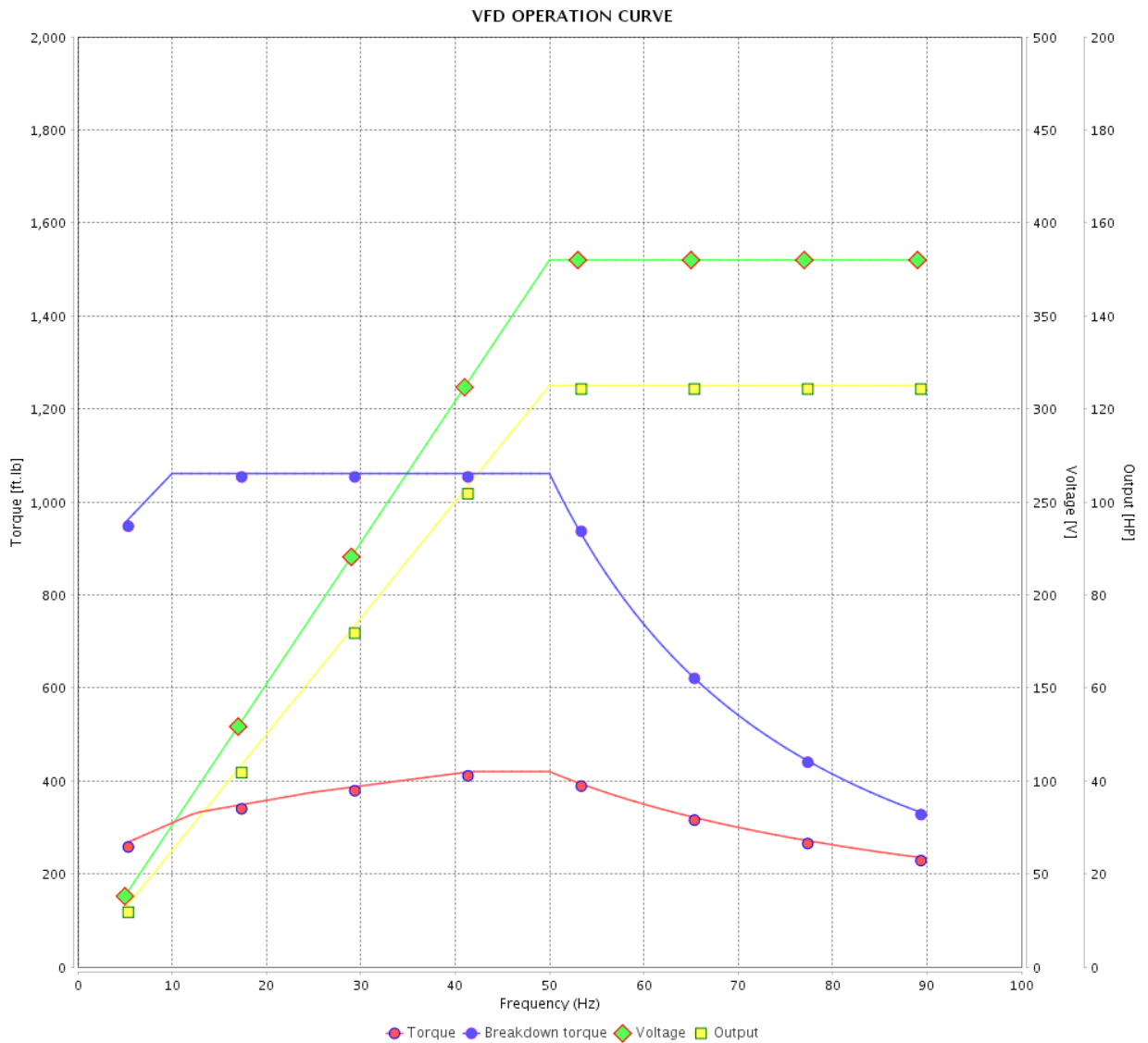


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Performance : 380 V 50 Hz 4P IE3

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Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
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Date	13/04/2022			

VFD OPERATION CURVE

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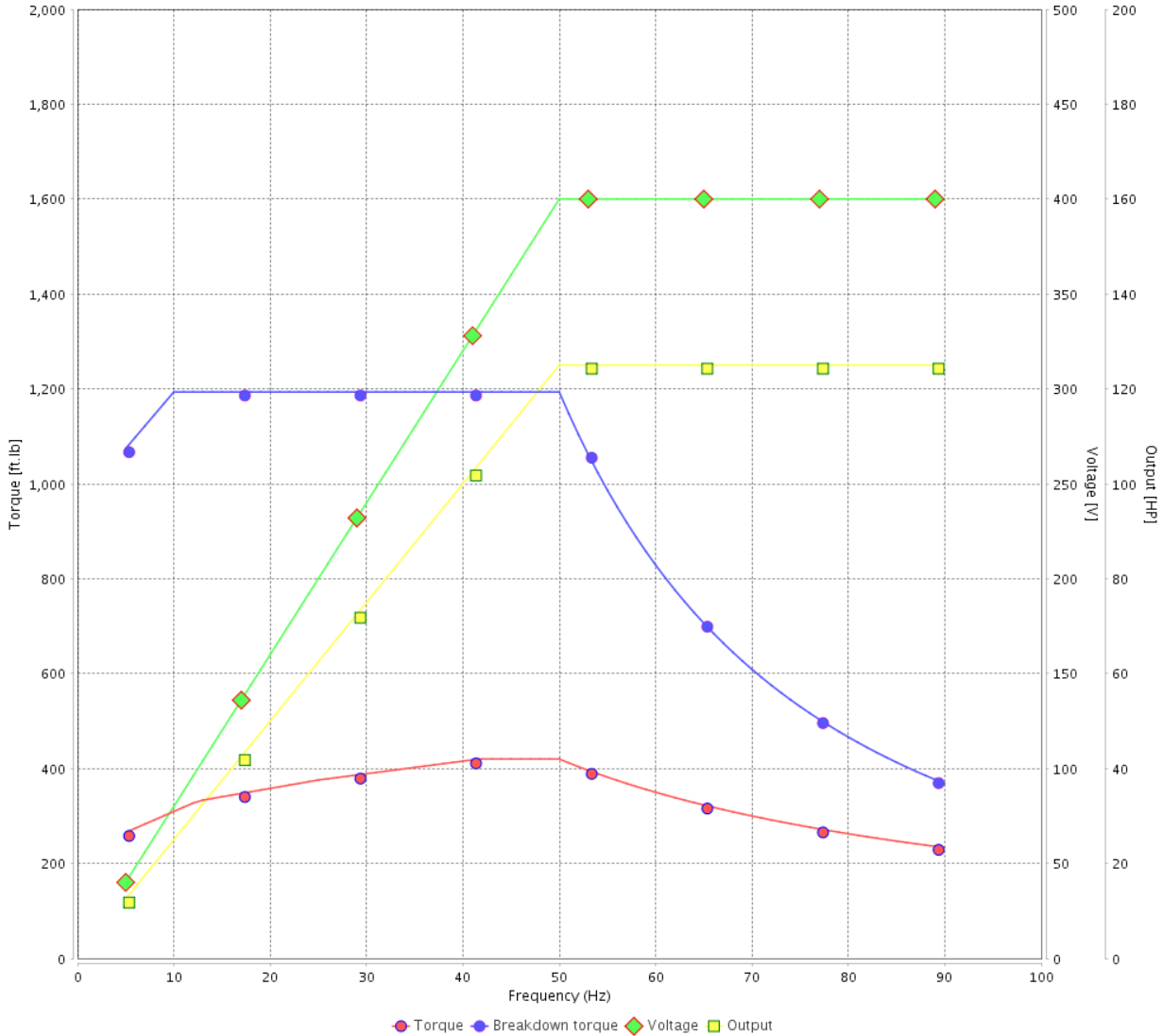
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VFD OPERATION CURVE



Performance : 400 V 50 Hz 4P IE3

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Design : B

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

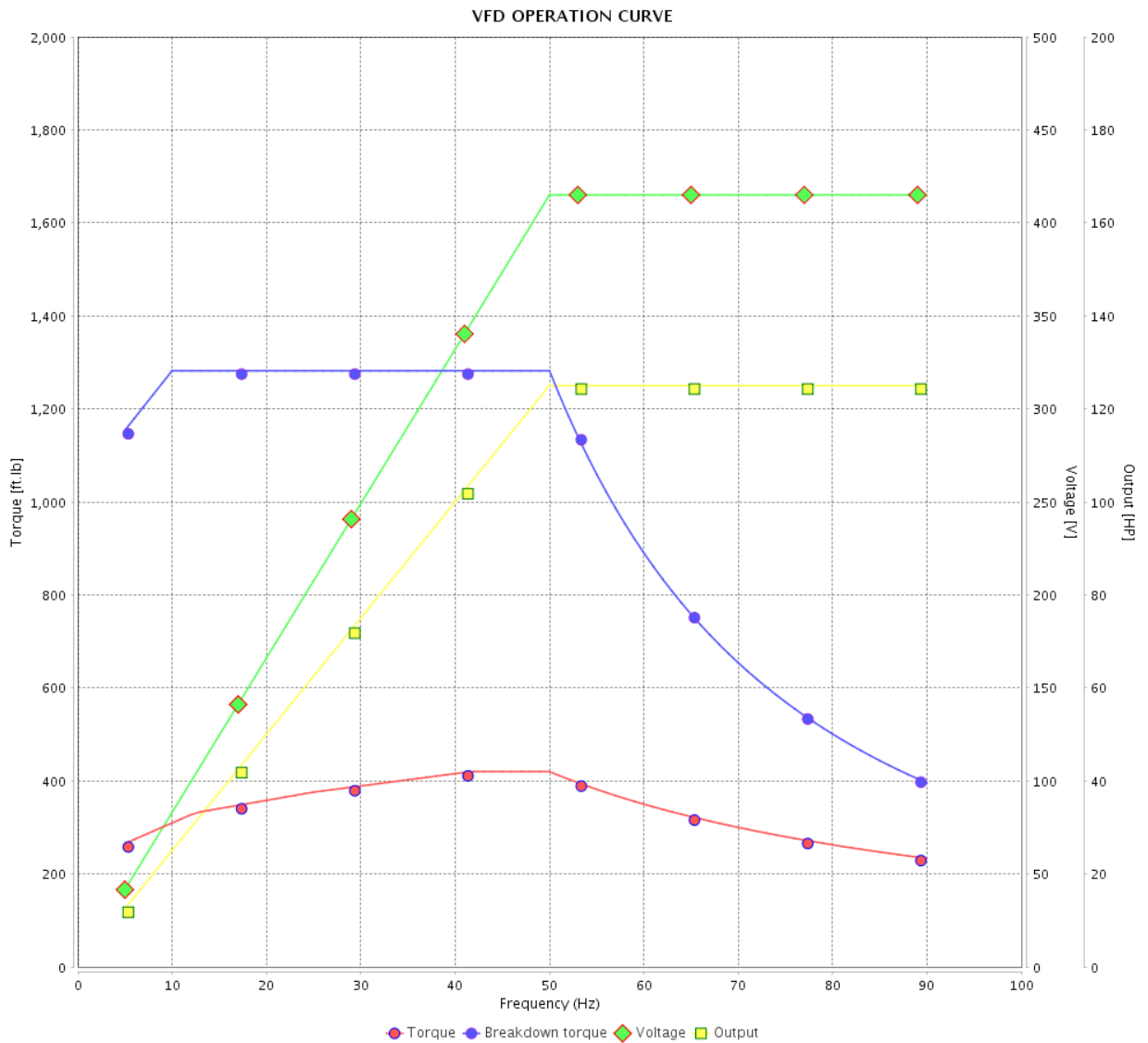


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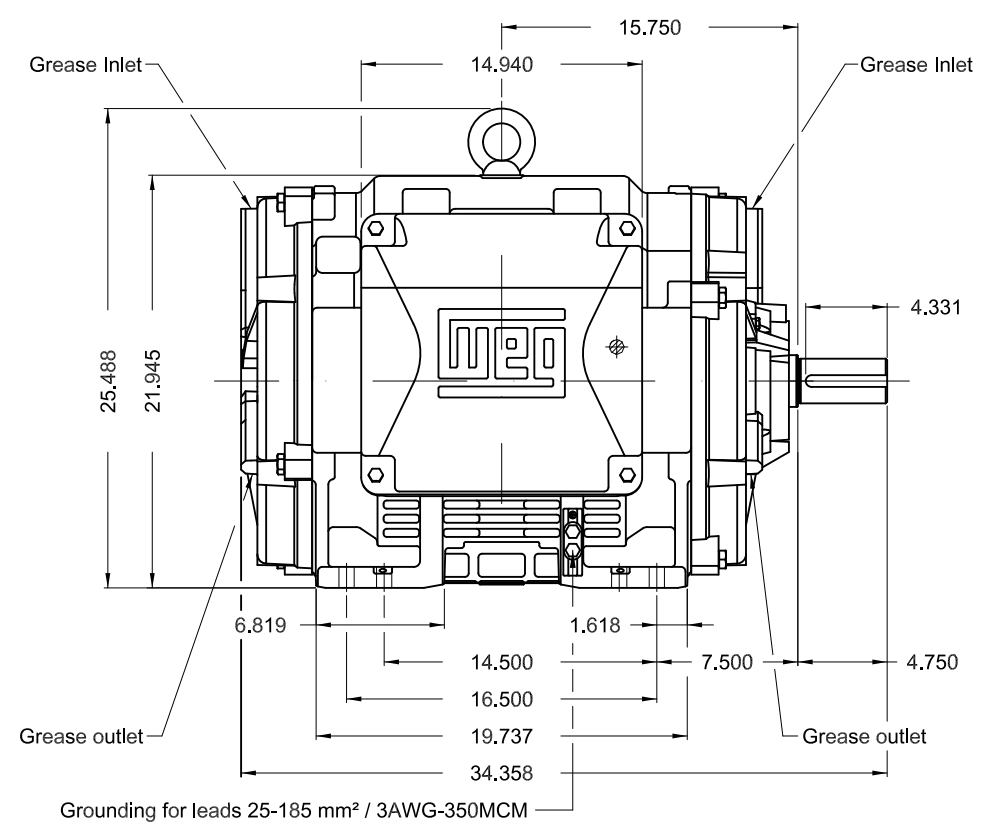
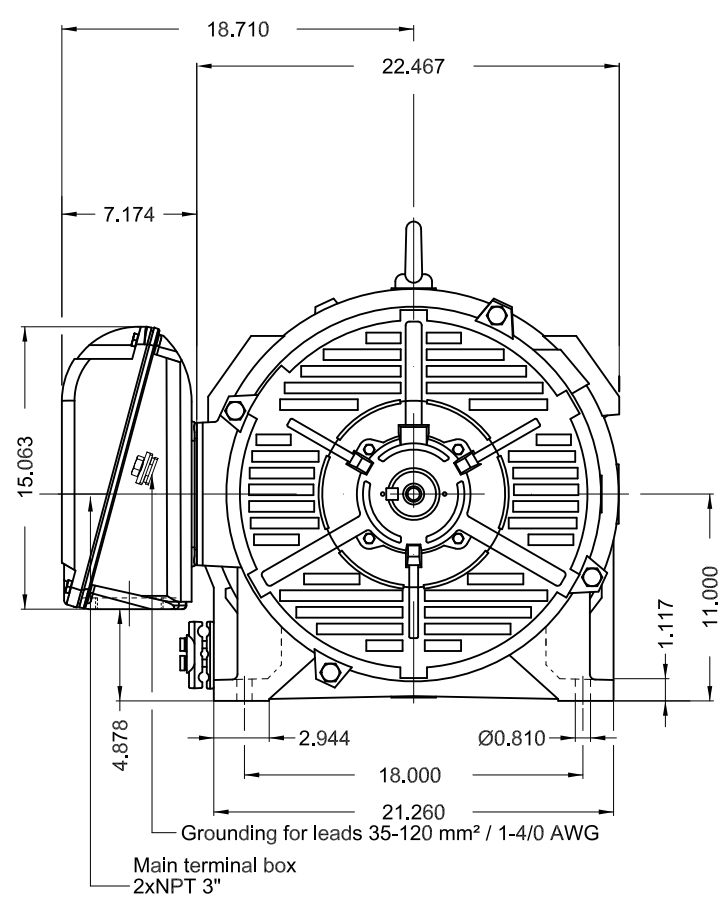


Performance : 415 V 50 Hz 4P IE3

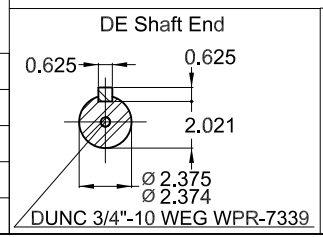
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TS shaft end
 Color RAL 5009
 Painting plan 203A
 Mounting NEMA F-1
 Mounting B3R(D)



150 HP 04 Poles 60 Hz A

1:10

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

PREVIEW
 WDD



MODEL 150180T3G444TS-W40
MADE IN BRAZIL
14285008

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

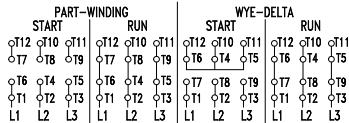



IEC 60034-1
MOD.T01#FOXON



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

PH 3	FR 444/5TS	HP(kW) 150(110)	Hz 60
V 460	A 170	IP23	
NEMA NOM EFF	95.8 %	RPM 1784	
ENCL ODP	DUTY CONT.	INS. CL. F ΔT 80 K	
PF 0.85	DES B	CODE G	AMB. 40°C
SF 1.25	SFA 213	ALT 1000 m.a.s.l.	
125HP 90kW 50Hz 380V 169A 1485RPM SF1.25 EFF 95.3% (IE3)			



 → 6314-C3(27g) MOBIL POLYREX EM
→ 6212-Z-C3(13g) 20000 h

1283 Lbs