

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer					
Product line		: NEMA Premium Efficiency Three-Phase		Product code : 11356741	
				Catalog # : 30012ET3G449T-W22	
Frame		: 447/9T		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 : 3055 lb	
Protection degree		: IP55		Moment of inertia (J) : 145 sq.ft.lb	
Design		: A			
Output [HP]	300	250	250	250	250
Poles	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	460	380	400	415	415
Rated current [A]	356	362	357	349	349
L. R. Amperes [A]	2741	2679	2785	2862	2862
LRC [A]	7.7x(Code J)	7.4x(Code H)	7.8x(Code J)	8.2x(Code K)	8.2x(Code K)
No load current [A]	170	170	185	200	200
Rated speed [RPM]	1189	988	990	990	990
Slip [%]	0.92	1.20	1.00	1.00	1.00
Rated torque [ft.lb]	1320	1330	1330	1330	1330
Locked rotor torque [%]	270	229	260	290	290
Breakdown torque [%]	300	250	270	290	290
Service factor	1.00	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	80 K
Locked rotor time	18s (cold) 10s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)
Noise level ²	70.0 dB(A)				
Efficiency (%)	25%	95.3	94.5	94.0	93.3
	50%	95.4	95.0	94.5	94.1
	75%	95.8	95.4	95.4	95.0
	100%	95.8	95.8	95.8	95.8
Power Factor	25%	0.38	0.37	0.35	0.32
	50%	0.63	0.61	0.59	0.56
	75%	0.75	0.75	0.71	0.69
	100%	0.81	0.81	0.78	0.77
Bearing type		Drive end : 6322 C3	Non drive end : 6319 C3	Foundation loads	
Sealing		: WSeal	: WSeal	Max. traction : 8725 lb	
Lubrication interval		: 11000 h	: 13000 h	Max. compression : 11780 lb	
Lubricant amount		: 60 g	: 45 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



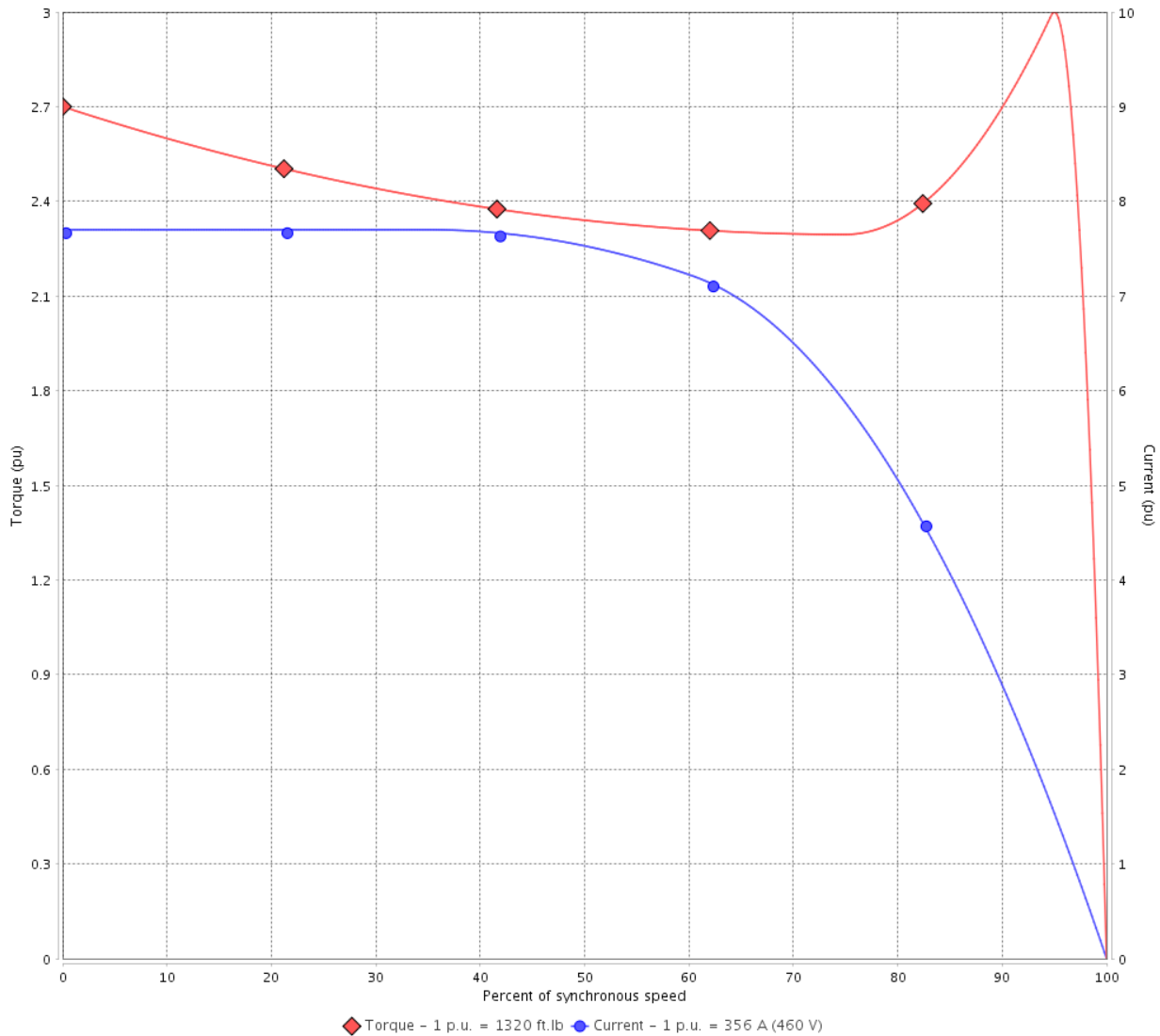
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11356741

Catalog # : 30012ET3G449T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 6P

Rated current	: 356 A	Moment of inertia (J)	: 145 sq.ft.lb
LRC	: 7.7	Duty cycle	: Cont.(S1)
Rated torque	: 1320 ft.lb	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1189 rpm	Design	: A

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

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TORQUE AND CURRENT VS SPEED CURVE



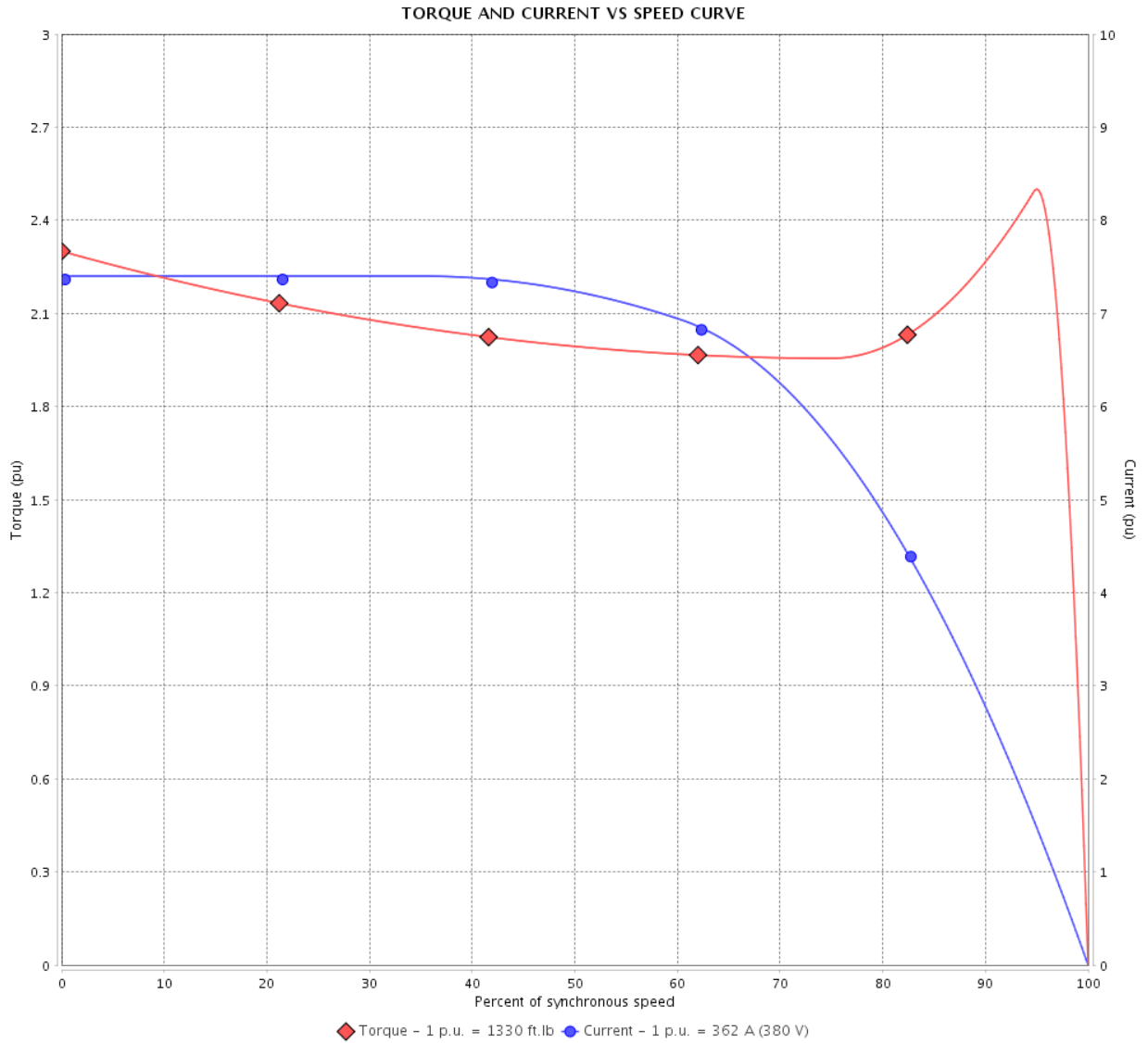
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11356741

Catalog # : 30012ET3G449T-W22



Performance : 380 V 50 Hz 6P IE3

Rated current	: 362 A	Moment of inertia (J)	: 145 sq.ft.lb
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 1330 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 988 rpm	Design	: A

Locked rotor time : 14s (cold) 8s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



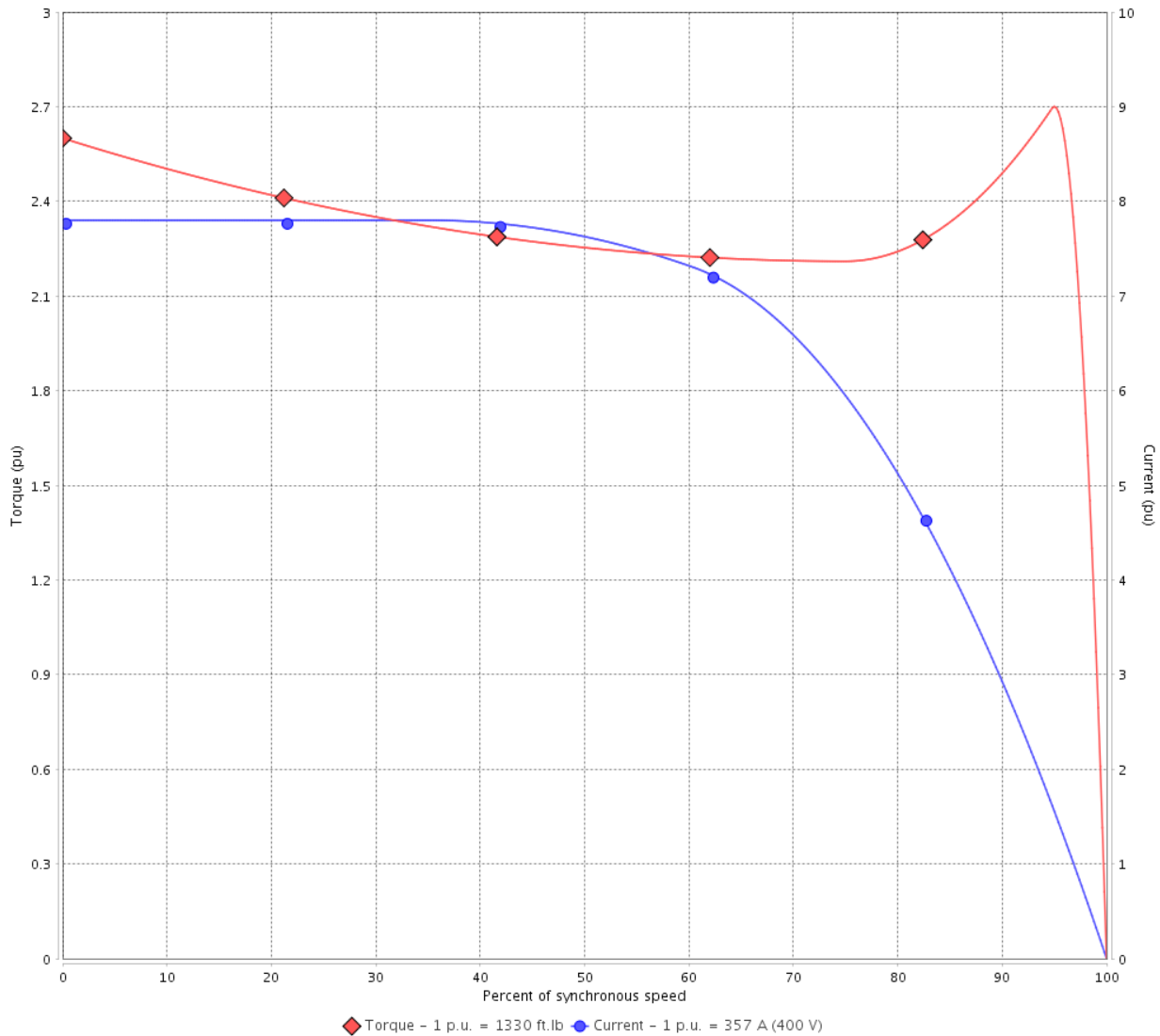
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TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 6P IE3

Rated current	: 357 A	Moment of inertia (J)	: 145 sq.ft.lb
LRC	: 7.8	Duty cycle	: Cont.(S1)
Rated torque	: 1330 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 990 rpm	Design	: A

Locked rotor time : 14s (cold) 8s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



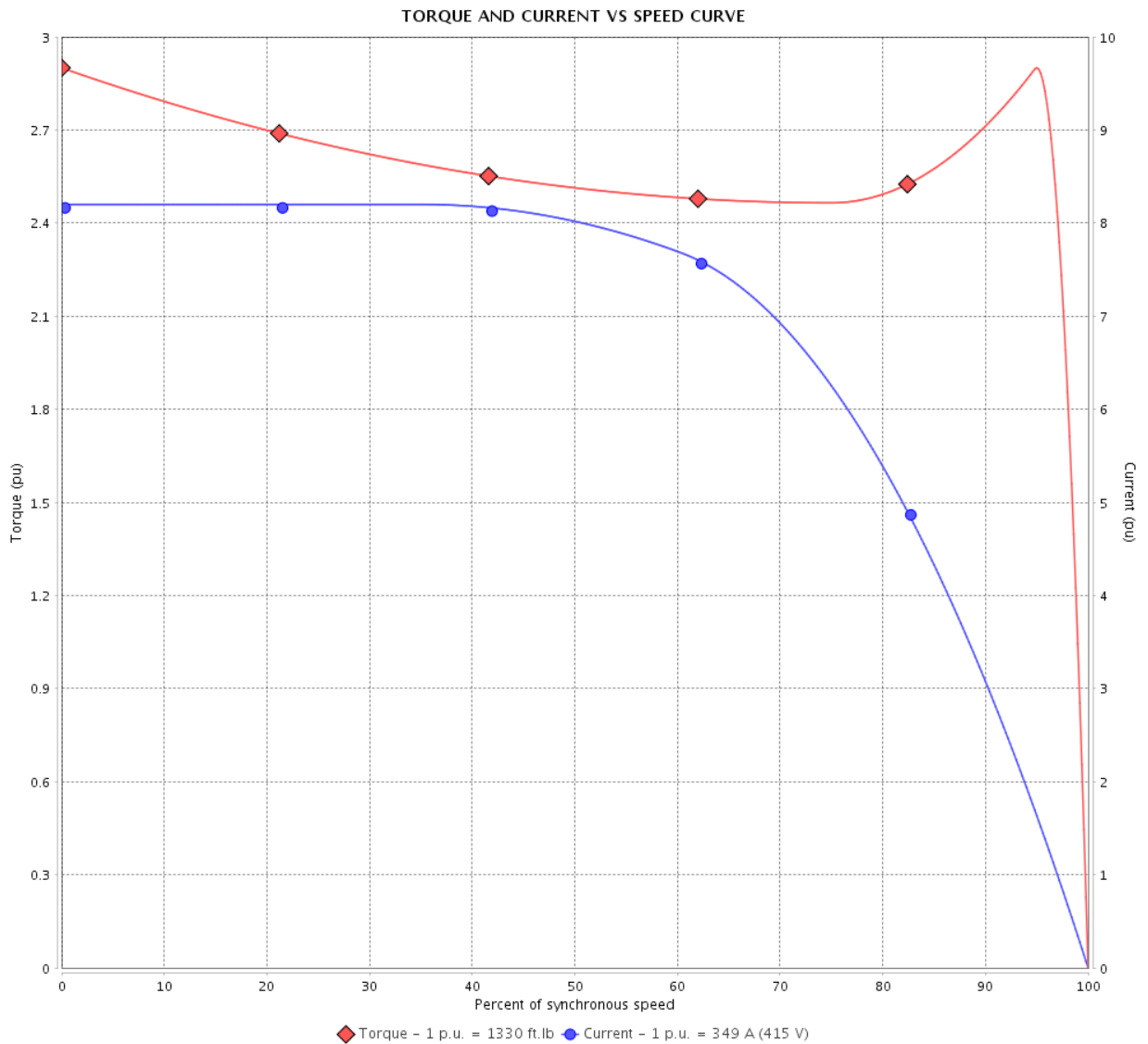
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Performance : 415 V 50 Hz 6P IE3

Rated current	: 349 A	Moment of inertia (J)	: 145 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 1330 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 990 rpm	Design	: A

Locked rotor time : 14s (cold) 8s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

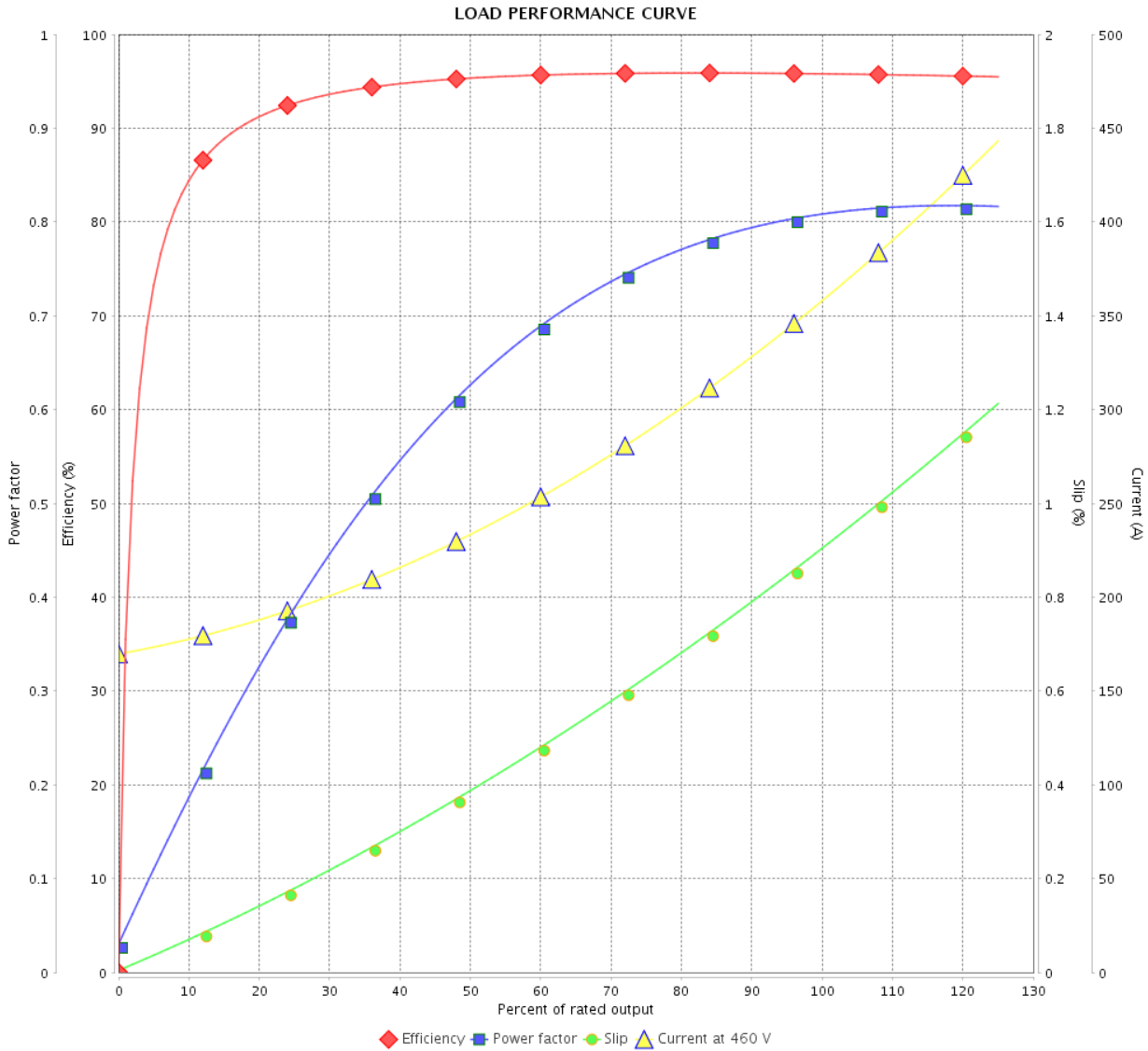


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Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1189 rpm	Design	: A

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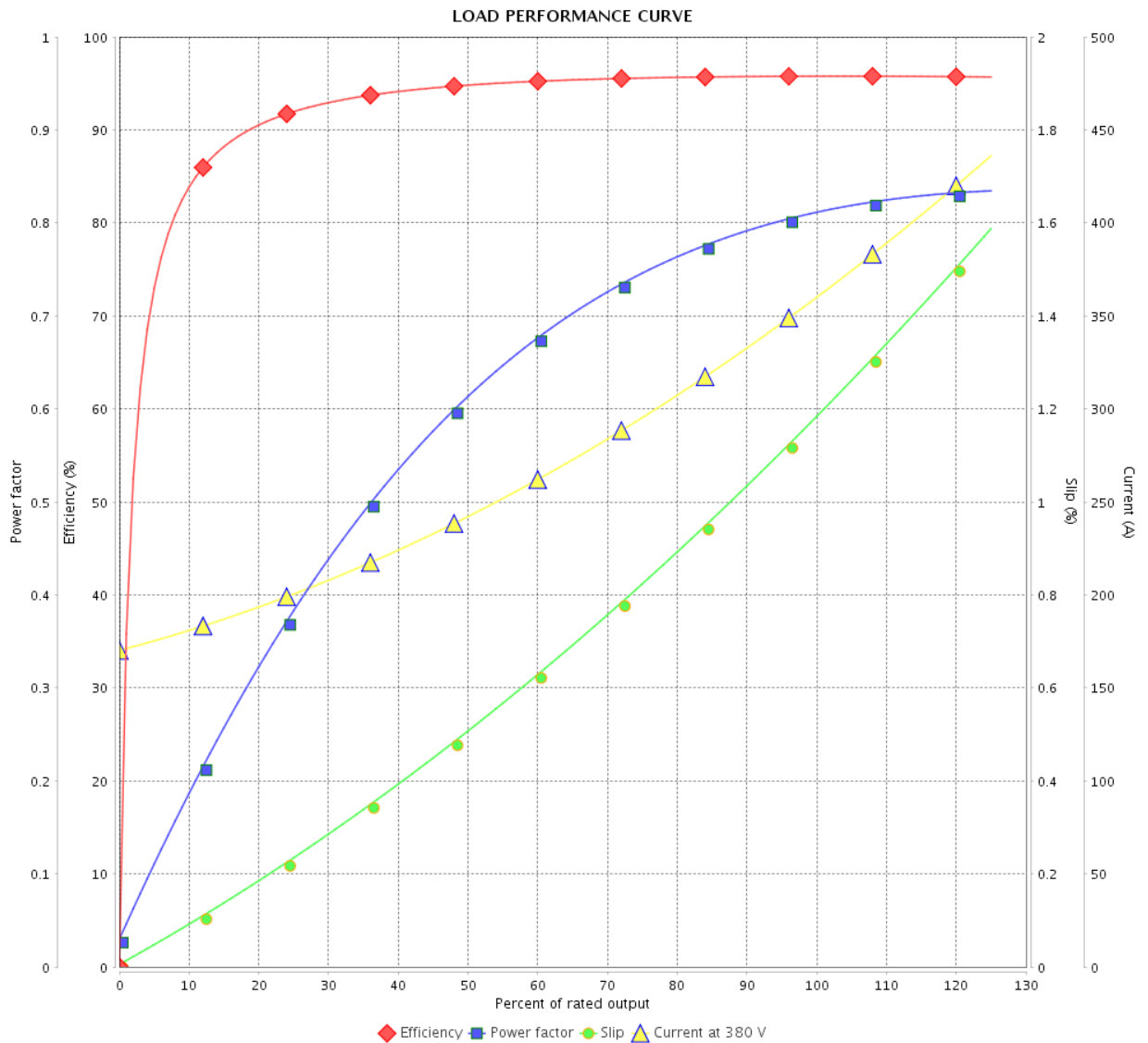


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Performance : 380 V 50 Hz 6P IE3

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 Breakdown torque : 250 %
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Moment of inertia (J) : 145 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
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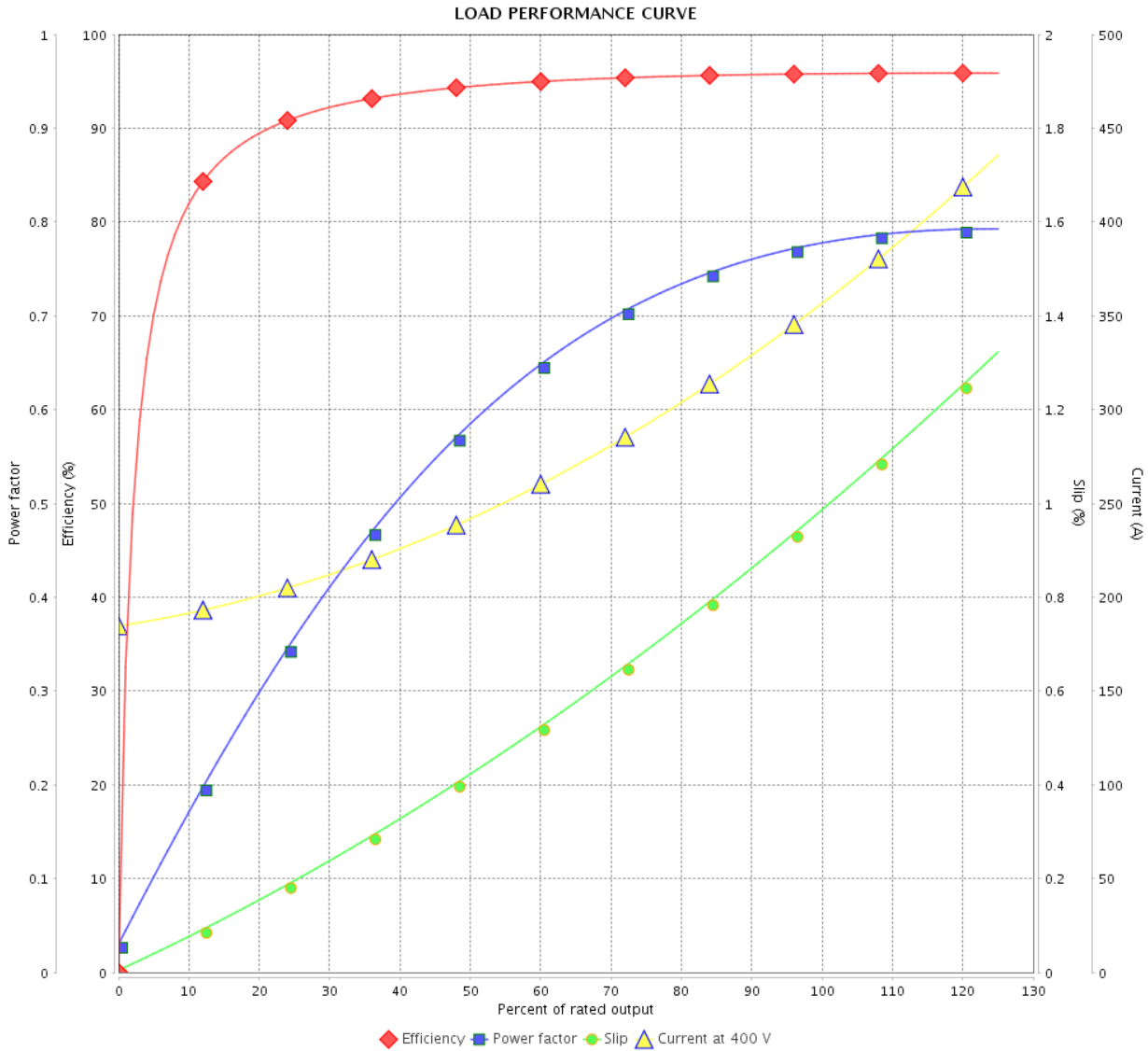


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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : A

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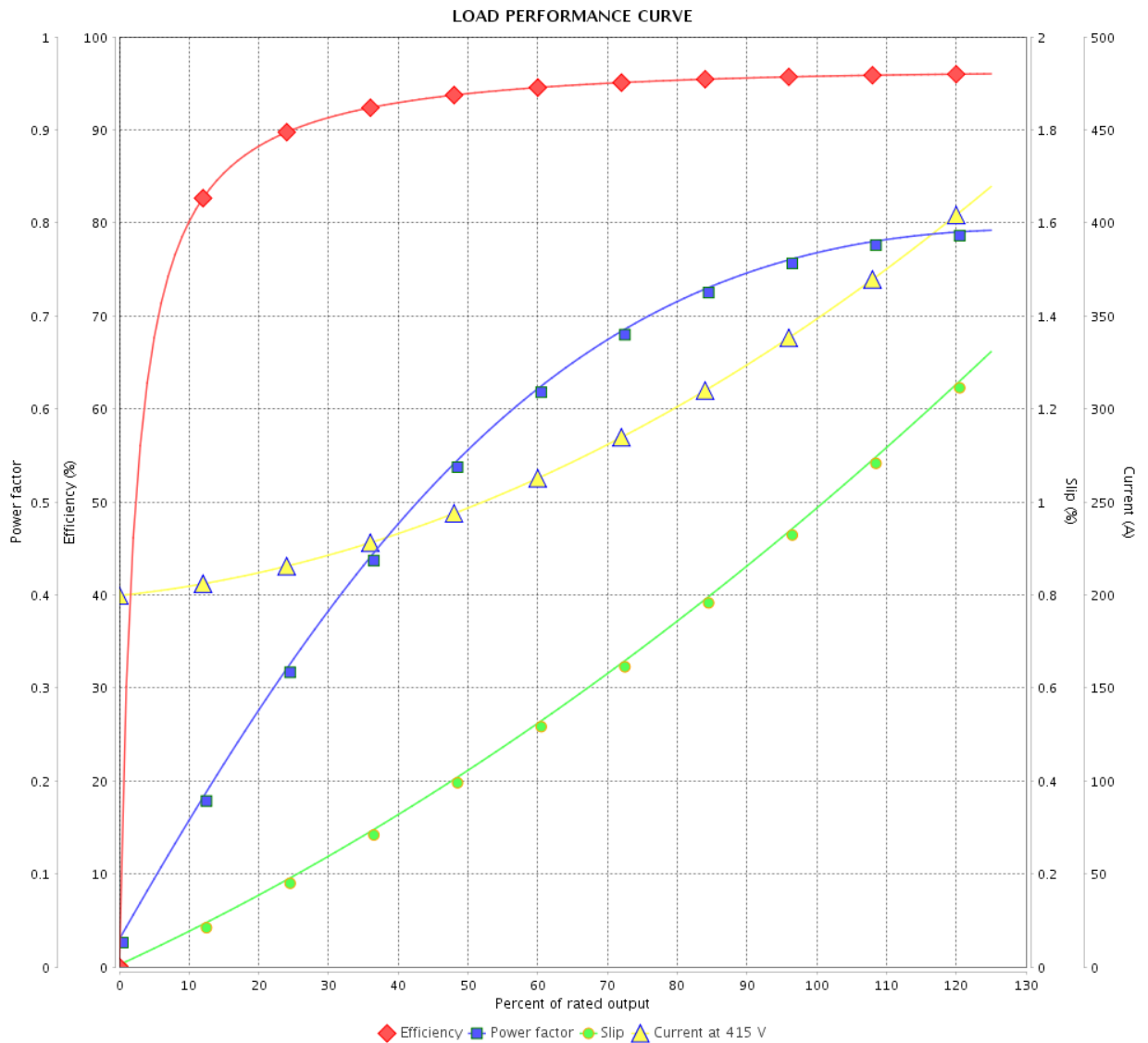


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

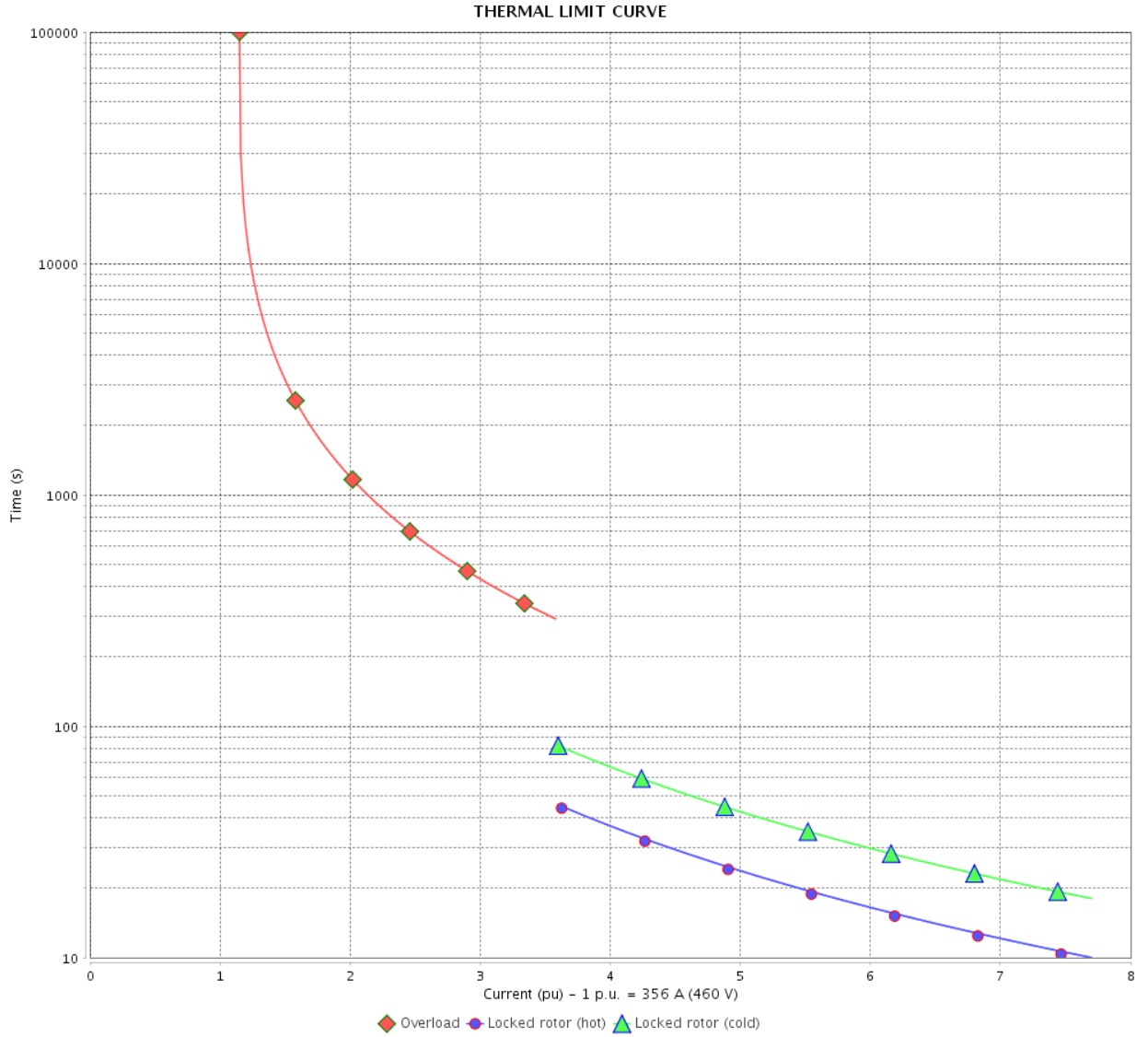
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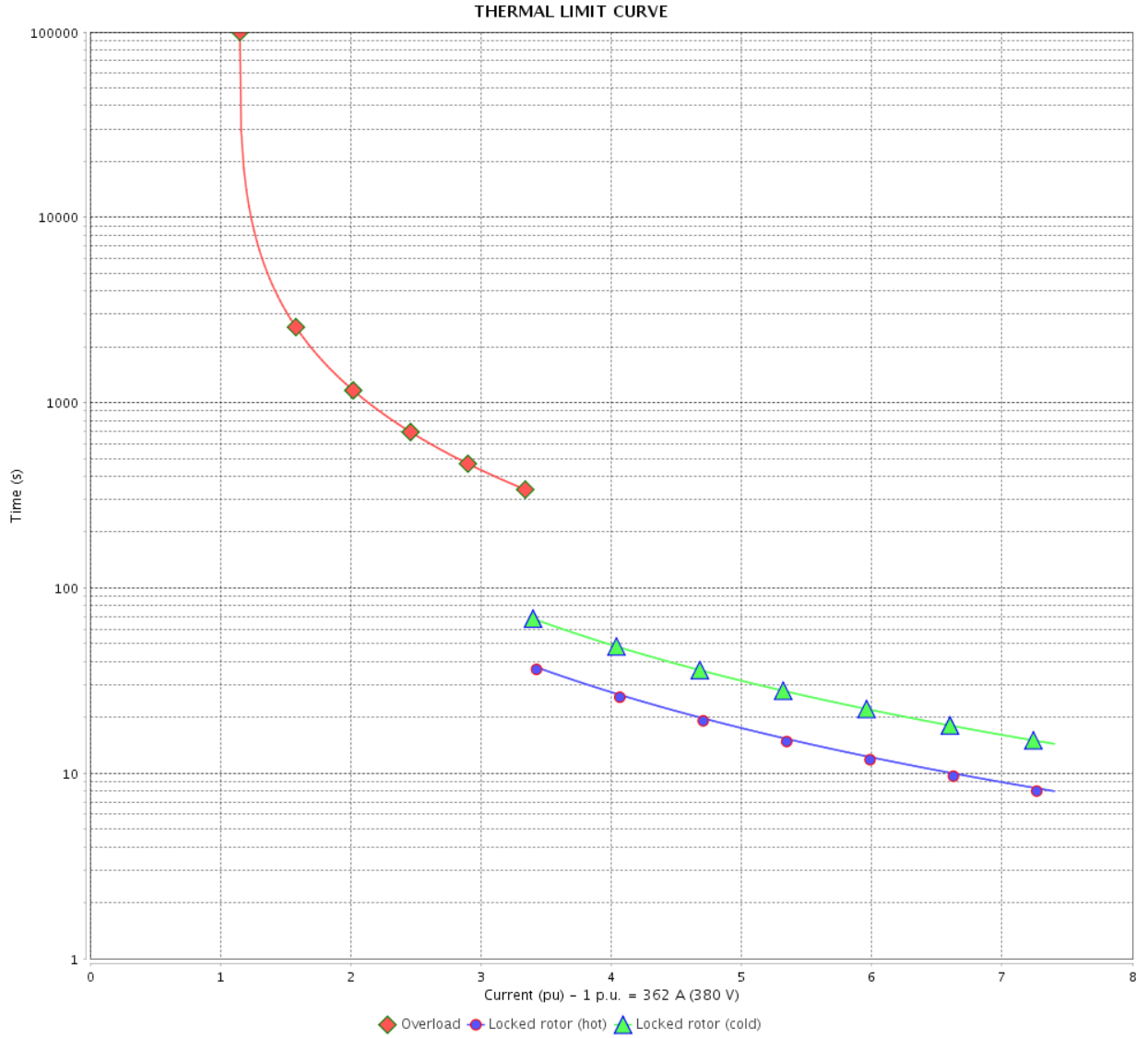
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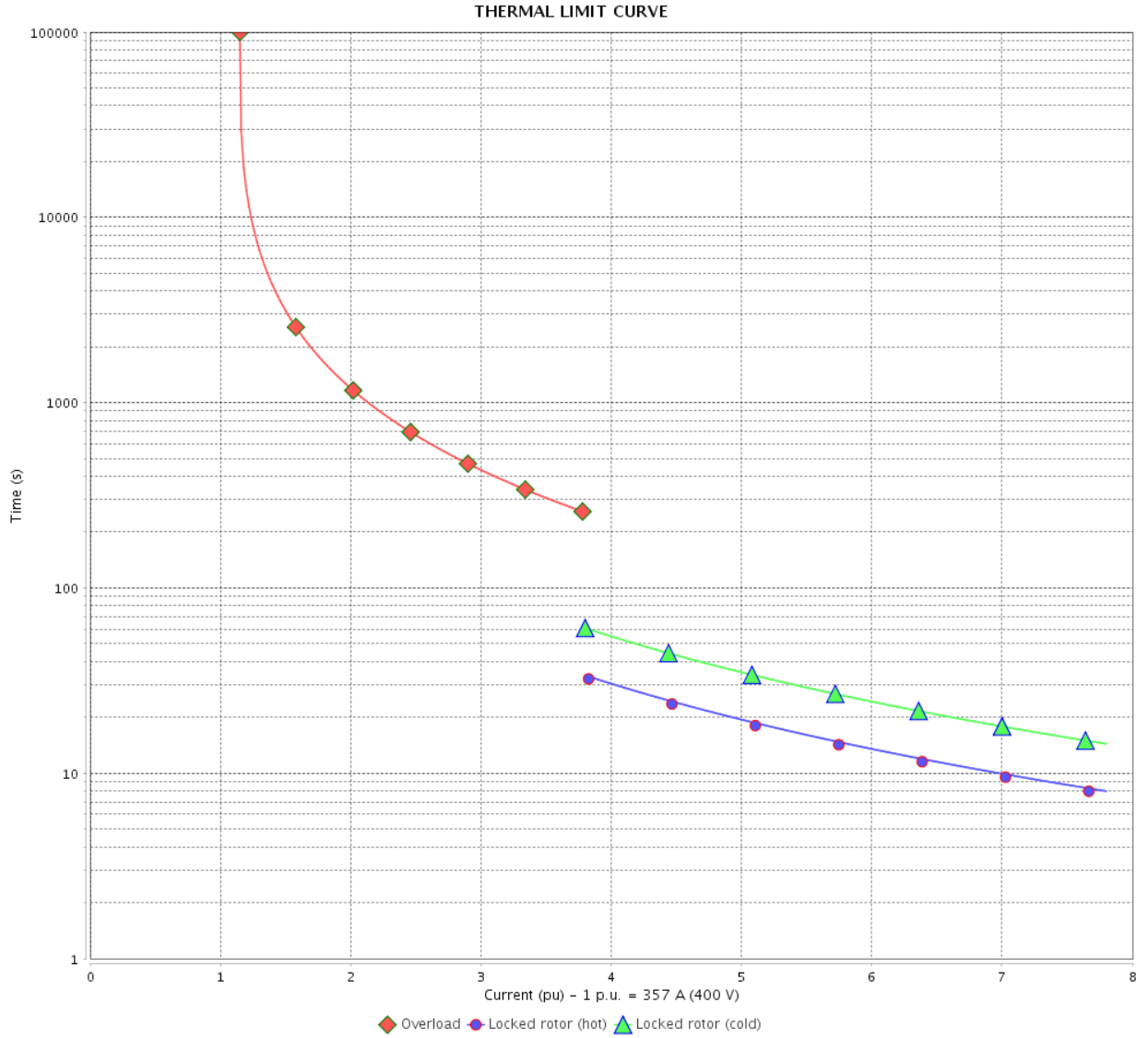
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Rated speed	: 990 rpm	Design	: A

Heating constant

Cooling constant

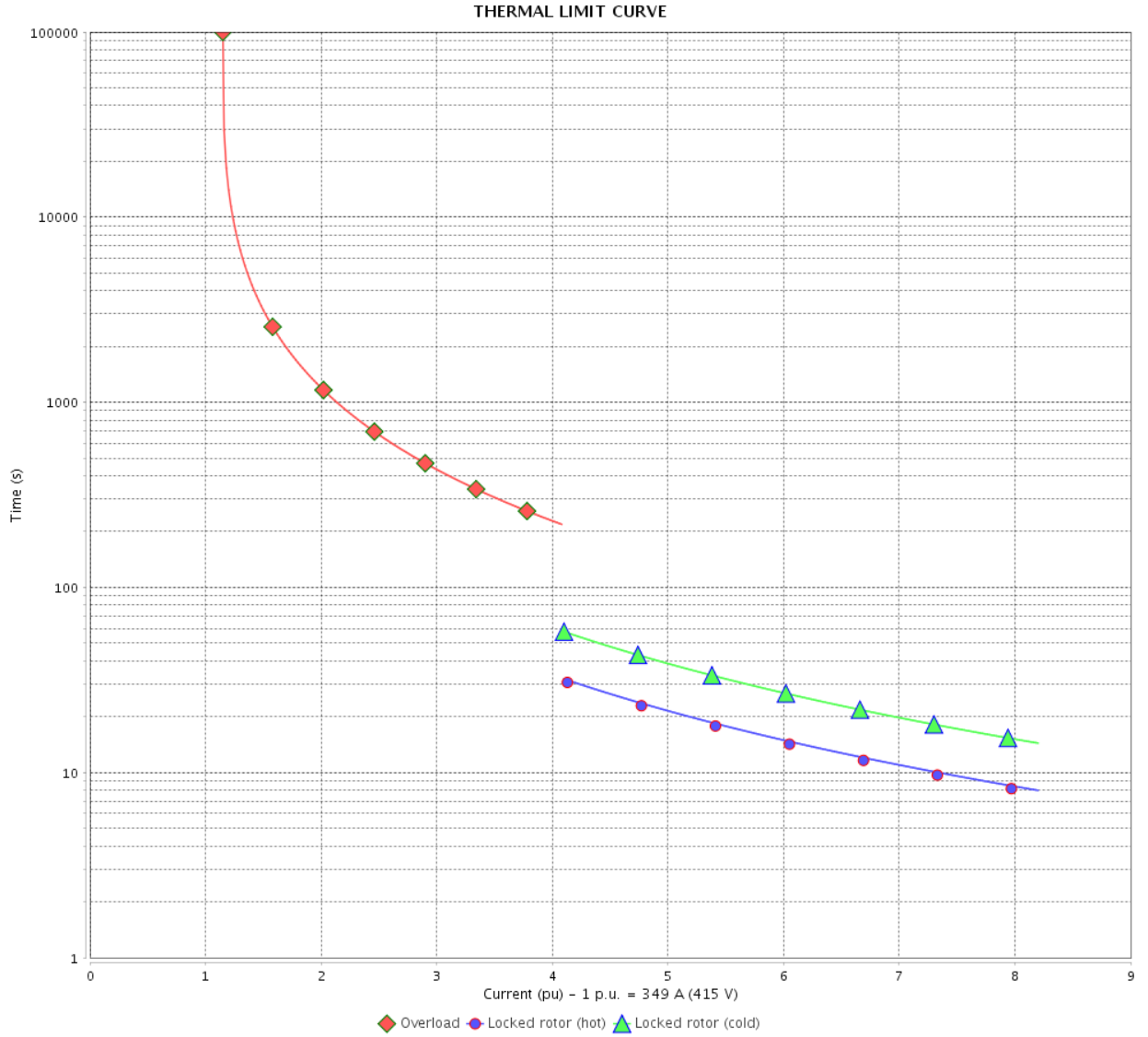
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Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



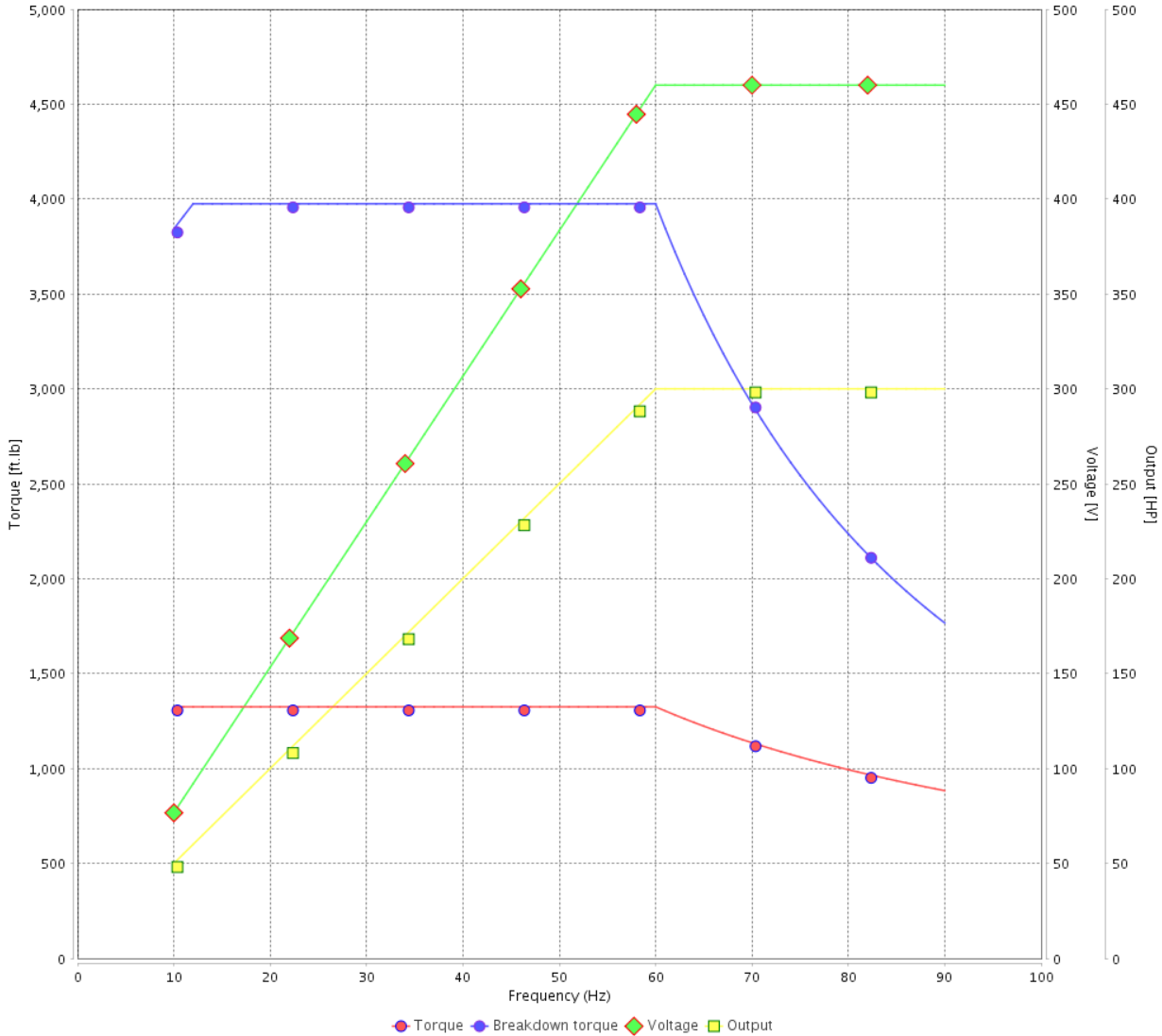
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VFD OPERATION CURVE



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 Insulation class : F
 Service factor : 1.00
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 Design : A

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

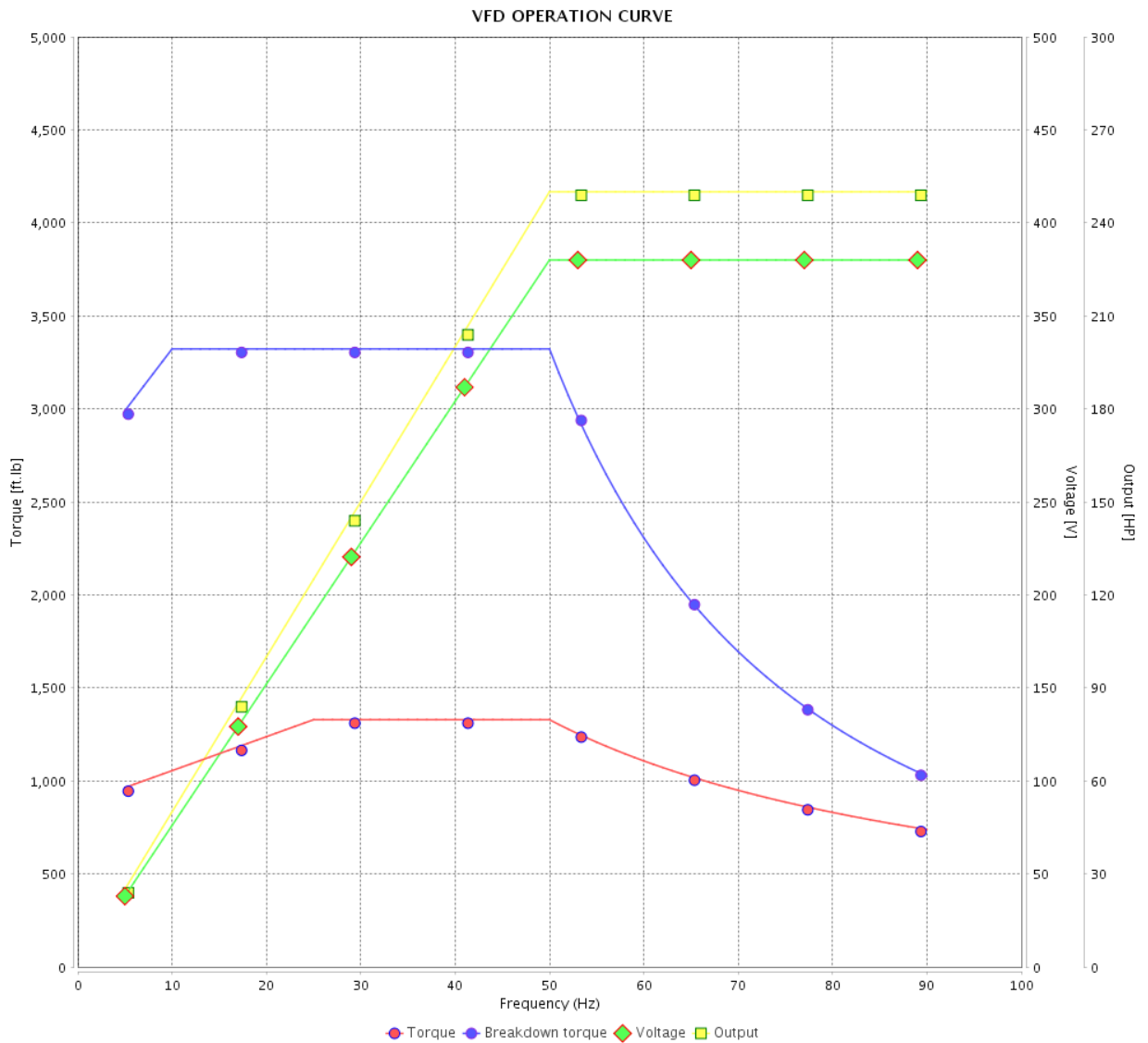


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Performance : 380 V 50 Hz 6P IE3

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



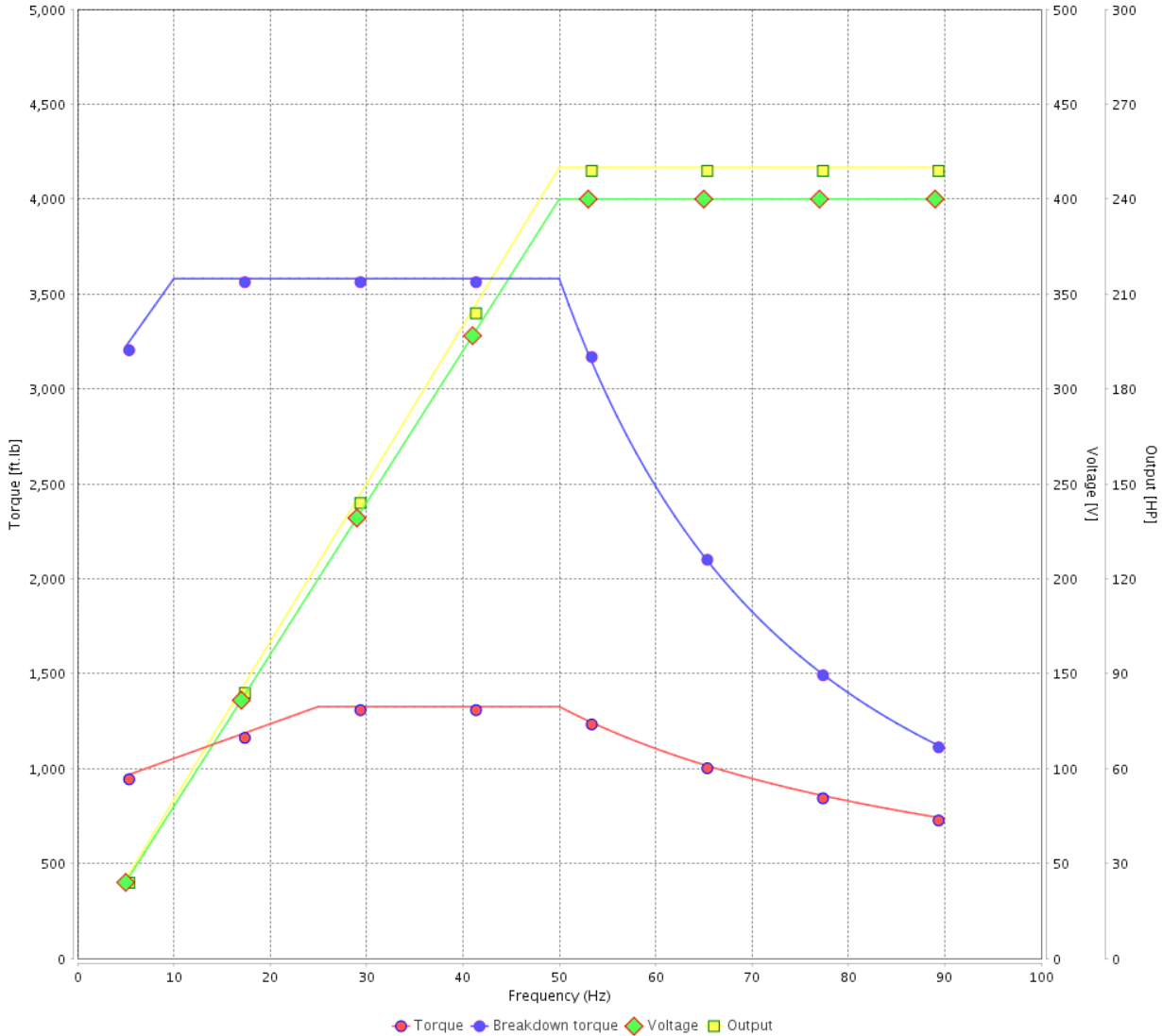
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VFD OPERATION CURVE

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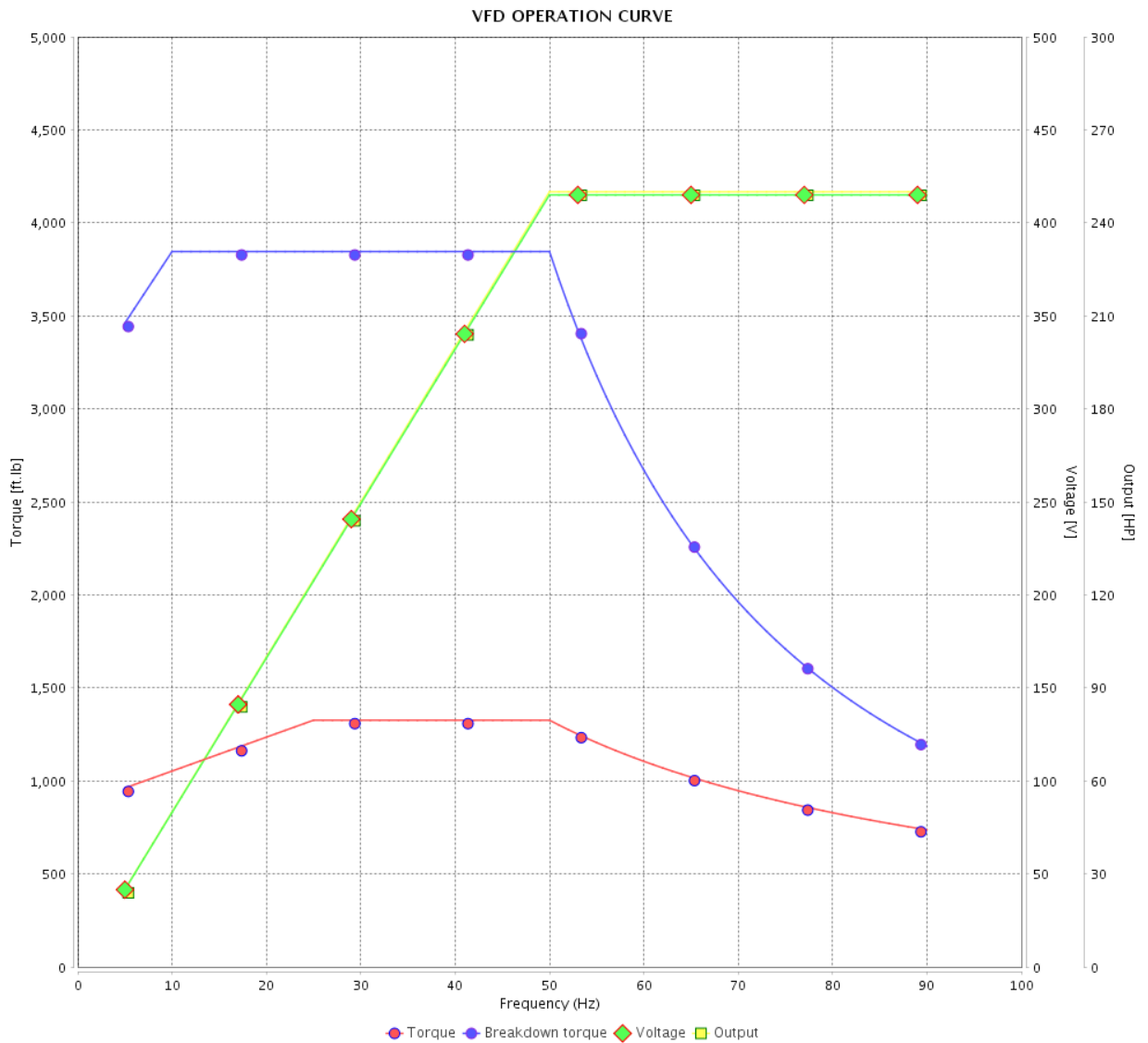


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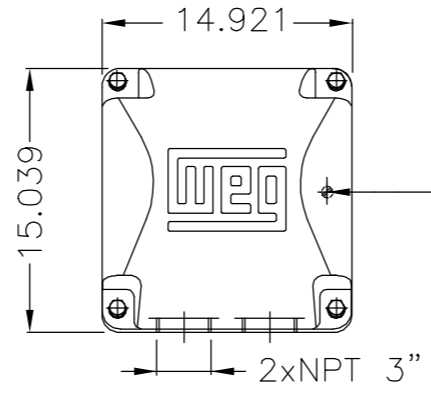
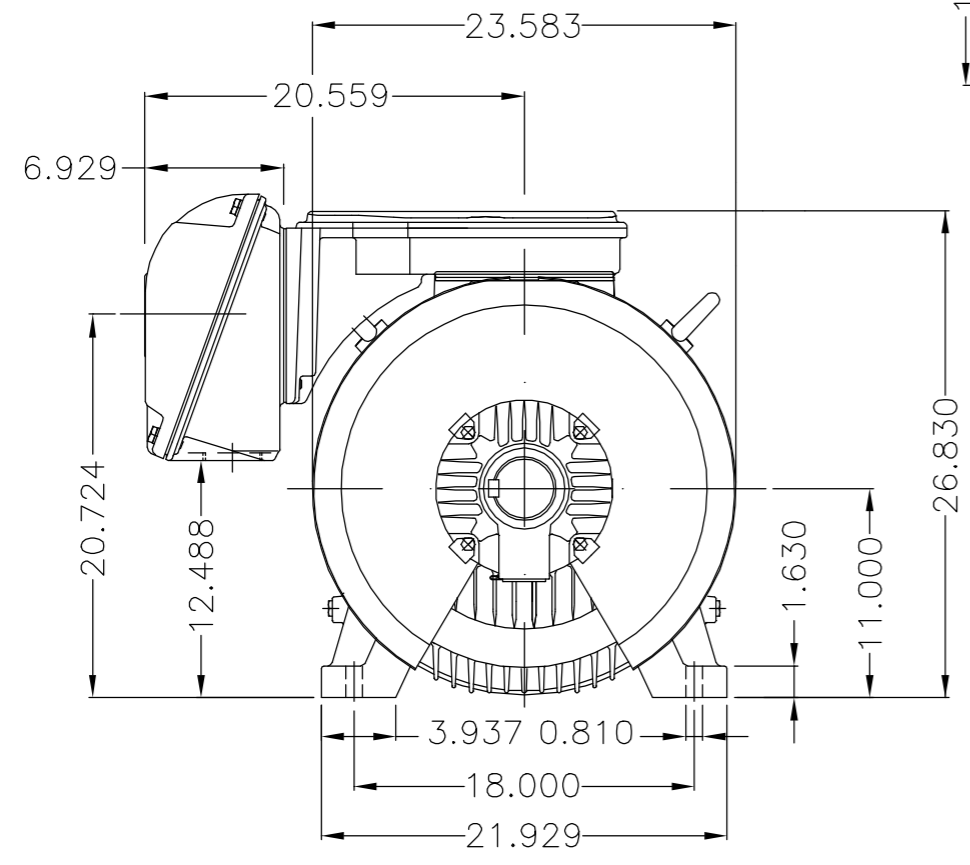
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EIXO/SHAFT	
PADRÃO/STANDARD	X
OPCIONAL/OPTIONAL	
ESPECIAL/SPECIAL	

Dimensões em polegada
Dimensions in inches

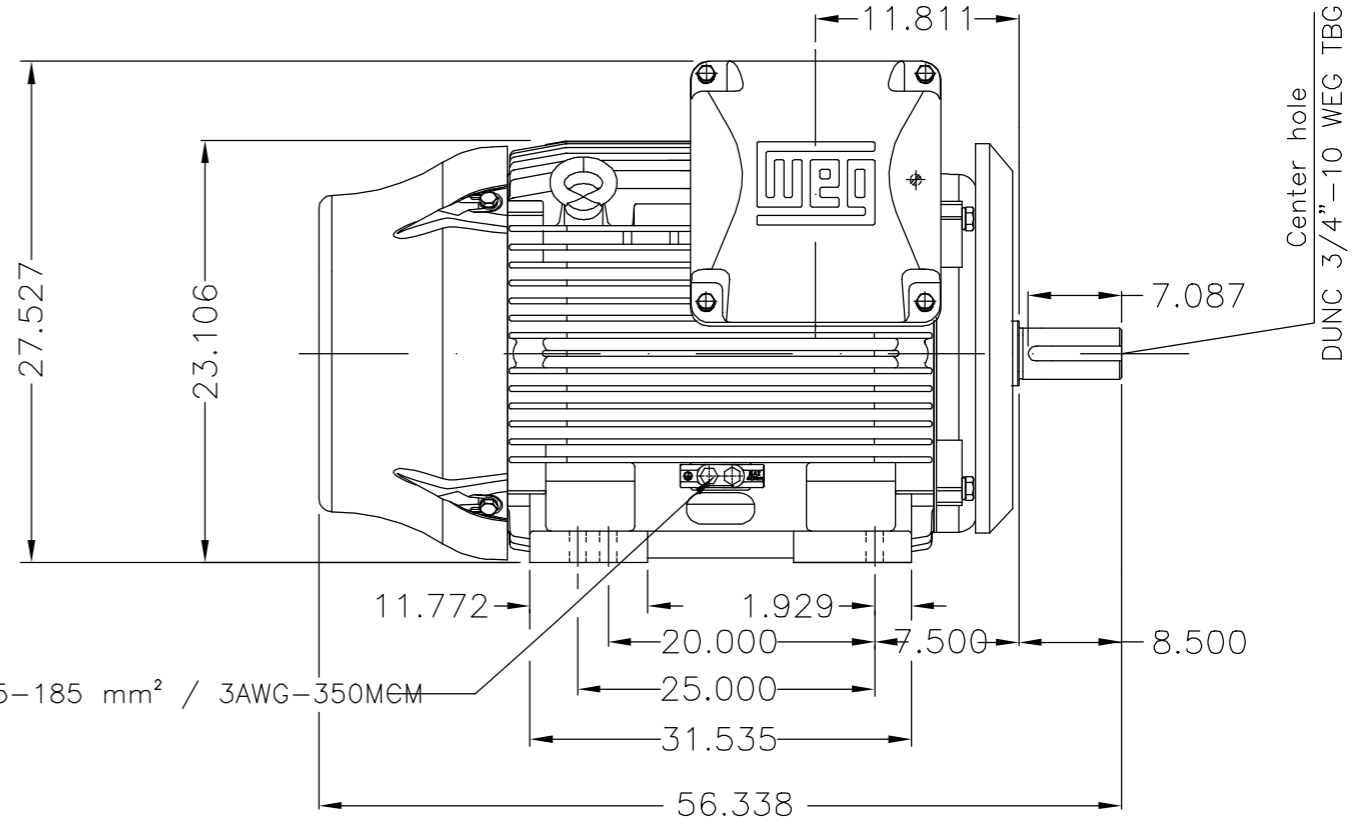
THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.

A
B
C
D
E

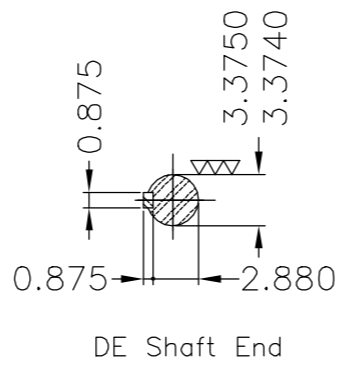


Main terminal box

Grounding for leads 35-70 mm² / 1-2/0 AWG



Grounding for leads 25-185 mm² / 3AWG-350MEM



DE Shaft End

Ventilador externo especial com diâmetro 420 mm e comprimento 110 mm
Special external fan with 420 mm diameter and 110 mm length
Cor RAL 5009 / Color RAL 5009
Plano de pintura 203A / Painting plan 203A
Forma construtiva B3D / Mounting B3R(D)

WEG ELECTRIC CORPORATION - WEC

OV: 4842403

500001462514	DOCUMENTO NOVO	SAORIN	ERIC	ERIC	11.06.2018	00
ECM ECM	LOC LOC	RESUMO MODIFICAÇÃO SUMMARY OF MODIFICATIONS	EXECUTADO EXECUTED	VERIFICADO CHECKED	LIBERADO RELEASED	DATA DATE
EXEC. /EXECUTED	SAORIN	THREE PHASE W22 MOTOR - NEMA PREMIUM EFF	10005817785			
VERIF. /CHECKED	ERIC	FRAME 447/9T IP55 TEFC	000	00		
LIBER. /RELEASED	ERIC					
DATA LB /REL DT	11.06.2018	WMO Jaragua do Sul	Product Engineering	FOLHA/SHEET	1 / 1	

300 HP 06 Poles 60Hz

UNCONTROLLED COPY
RELEASED
ZME A3

MADE IN BRAZIL
11356741



FOR SAFE AREA
Mod.TE1BFOXON
CC029A



Class I, Div 2, Gr A, B, C and D - T3B
Class I, Zone 2, IIC - T3B
Class II, Div 2, Gr F and G - T4
For use on PWM: Gr. A, B, C, D and F,
VT 1000:1, CT 6:1, 1.00SF - T3

MODEL 30012ET3G449T-W22

Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. 447/9T 1000m.a.s.l. IP55 TEFC 3053lb

V 460

A 356

HP 300

kW 220

SF 1.00

SFA -

RPM 1189

PF 0.81

AMB 40°C

INS cl. F DT80K

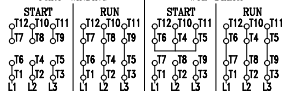
NEMA NOM EFF 95.8%

DUTY CONT.

DES A Code J

PART-WINDING

WYE-DELTA



→ 6322-C3 (60g)

→ 6319-C3 (45g)



MOBIL POLYREX EM (11000h)

