

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	11415947		
		Catalog # :	30018ET3G449T-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	: 2859 lb		
Protection degree	: IP55	Moment of inertia (J)	: 89.6 sq.ft.lb		
Design	: B				
Output [HP]	300	250	250	250	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	330	337	320	311	
L. R. Amperes [A]	2145	2056	2144	2239	
LRC [A]	6.5x(Code G)	6.1x(Code F)	6.7x(Code G)	7.2x(Code H)	
No load current [A]	105	104	111	116	
Rated speed [RPM]	1780	1480	1480	1485	
Slip [%]	1.11	1.33	1.33	1.00	
Rated torque [ft.lb]	885	887	887	884	
Locked rotor torque [%]	250	210	240	260	
Breakdown torque [%]	250	220	250	270	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	105 K	105 K	105 K	
Locked rotor time	28s (cold) 16s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	
Noise level ²	75.0 dB(A)	71.0 dB(A)	71.0 dB(A)	71.0 dB(A)	
Efficiency (%)	25%	95.7	95.5	95.8	94.9
	50%	95.8	95.8	95.8	95.4
	75%	96.2	95.8	96.2	95.8
	100%	96.2	96.0	96.0	96.2
Power Factor	25%	0.52	0.53	0.49	0.47
	50%	0.77	0.78	0.75	0.73
	75%	0.84	0.84	0.83	0.82
	100%	0.87	0.87	0.87	0.86
Bearing type	: <u>Drive end</u> 6322 C3 <u>Non drive end</u> 6319 C3	Foundation loads			
Sealing	: WSeal WSeal	Max. traction	: 4934 lb		
Lubrication interval	: 6000 h 8000 h	Max. compression	: 7793 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



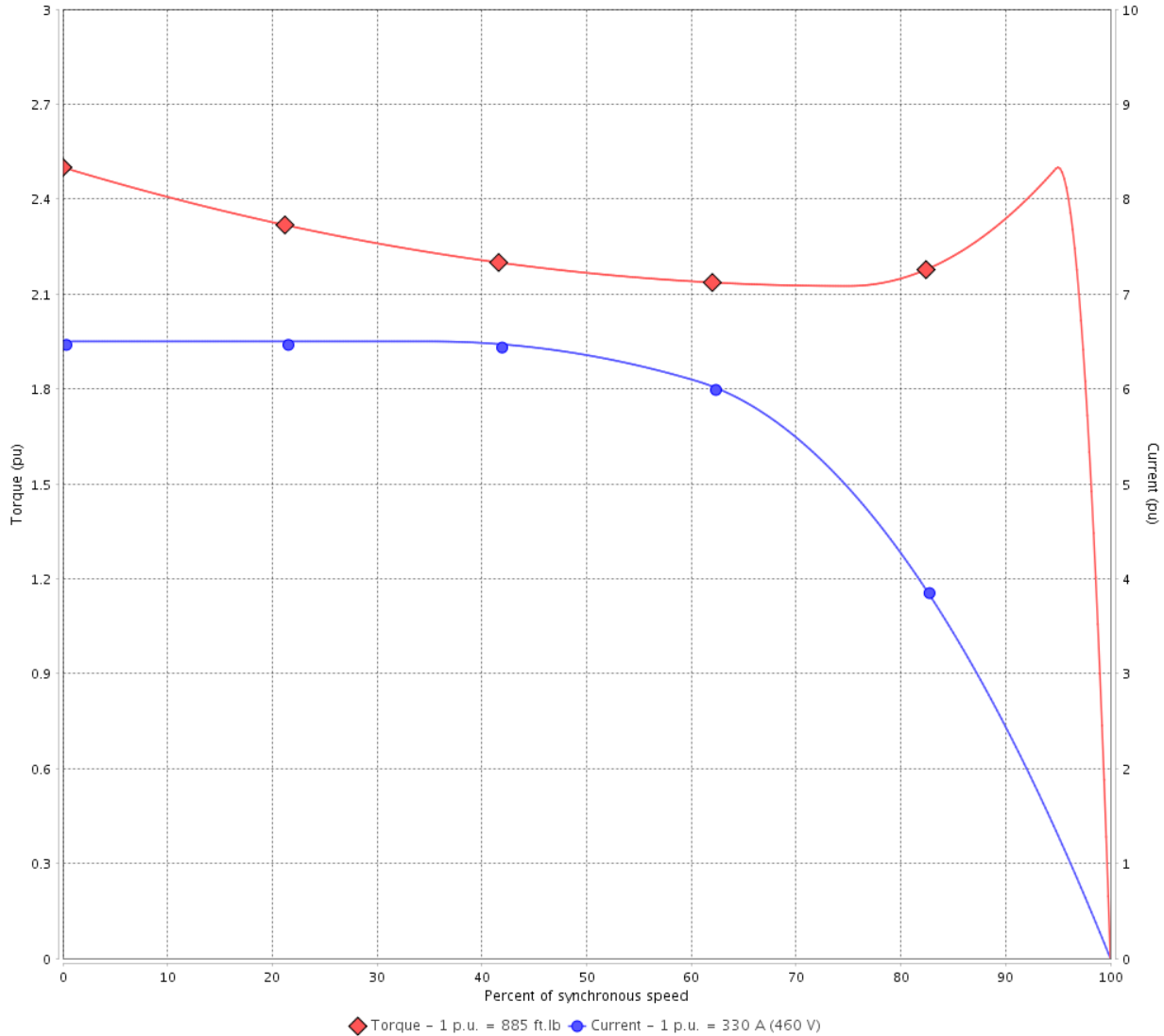
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11415947

Catalog # : 30018ET3G449T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 4P

Rated current	: 330 A	Moment of inertia (J)	: 89.6 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 885 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

Locked rotor time : 28s (cold) 16s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



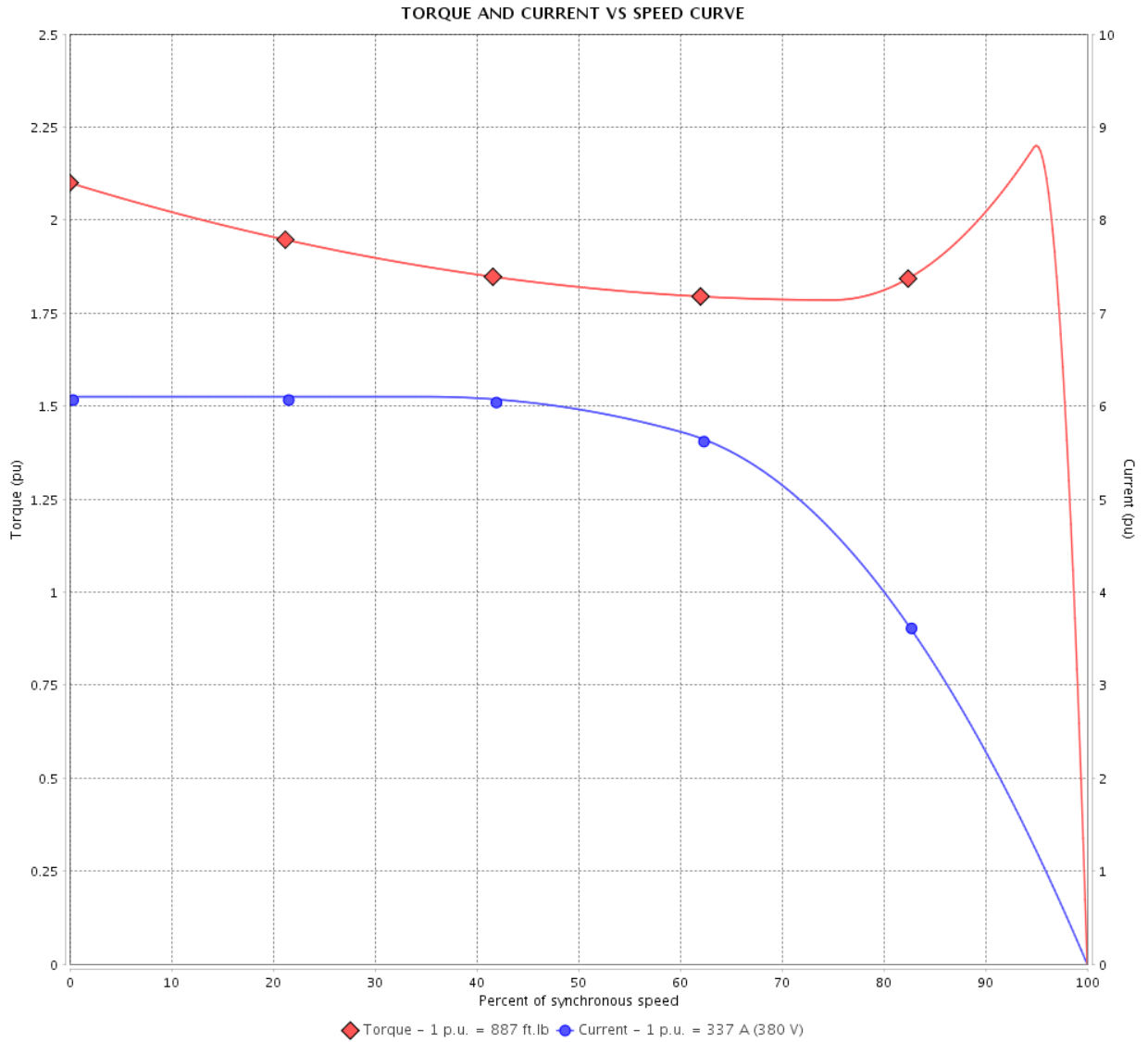
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11415947

Catalog # : 30018ET3G449T-W22



Performance : 380 V 50 Hz 4P IE3

Rated current	: 337 A	Moment of inertia (J)	: 89.6 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 887 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 105 K
Rated speed	: 1480 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



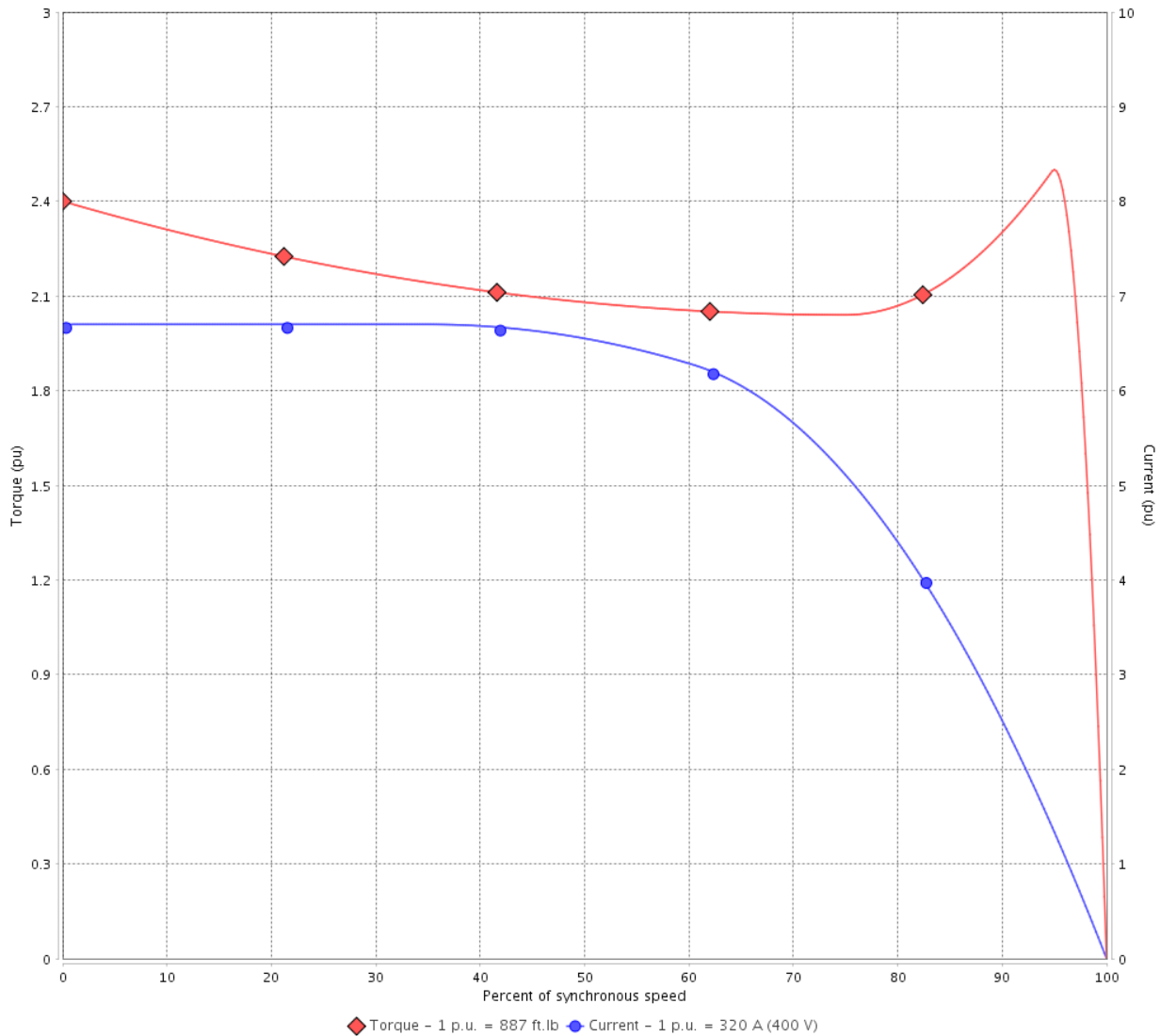
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11415947

Catalog # : 30018ET3G449T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current	: 320 A	Moment of inertia (J)	: 89.6 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 887 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 105 K
Rated speed	: 1480 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE



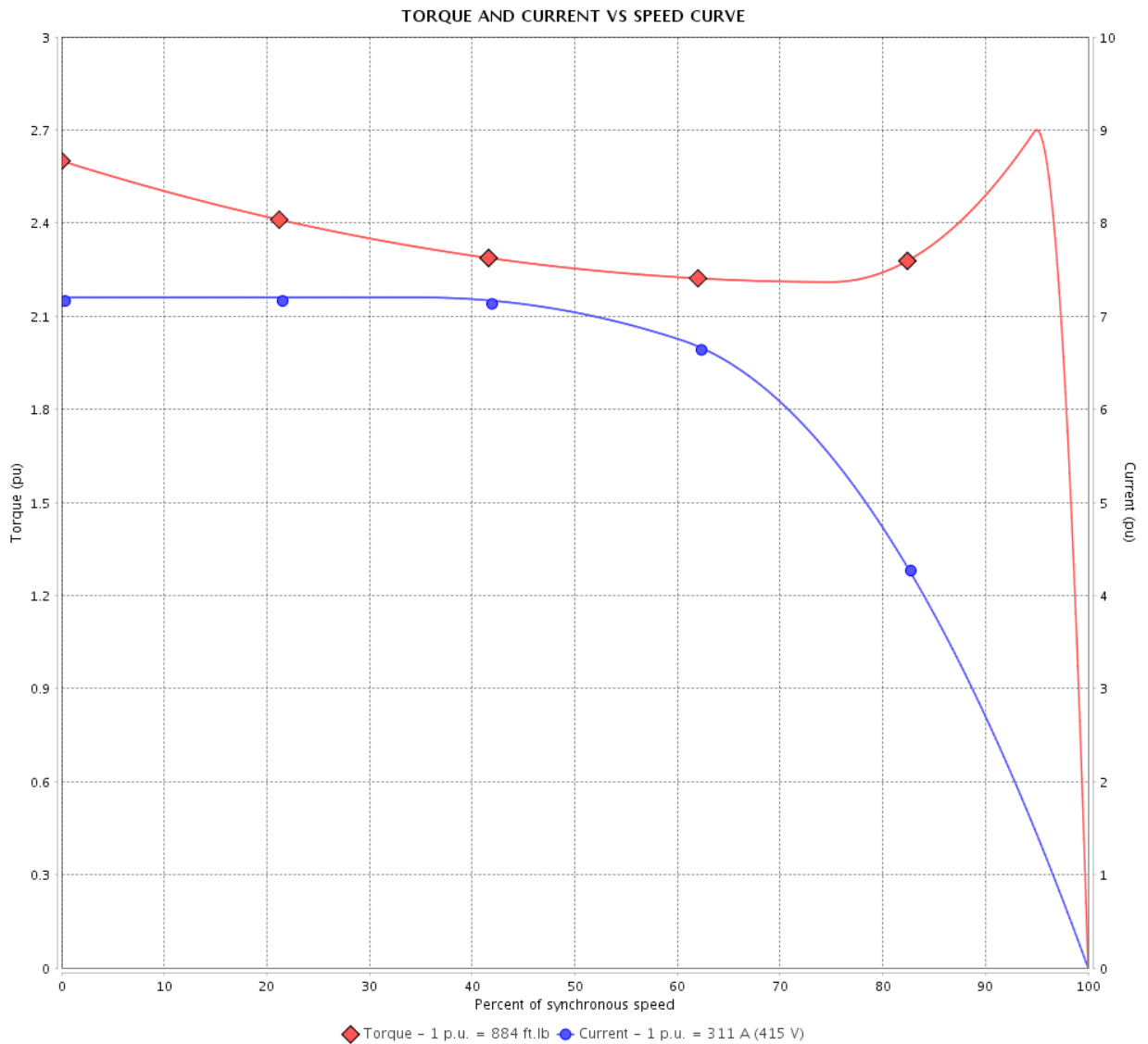
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11415947

Catalog # : 30018ET3G449T-W22



Performance : 415 V 50 Hz 4P IE3

Rated current	: 311 A	Moment of inertia (J)	: 89.6 sq.ft.lb
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 884 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 105 K
Rated speed	: 1485 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



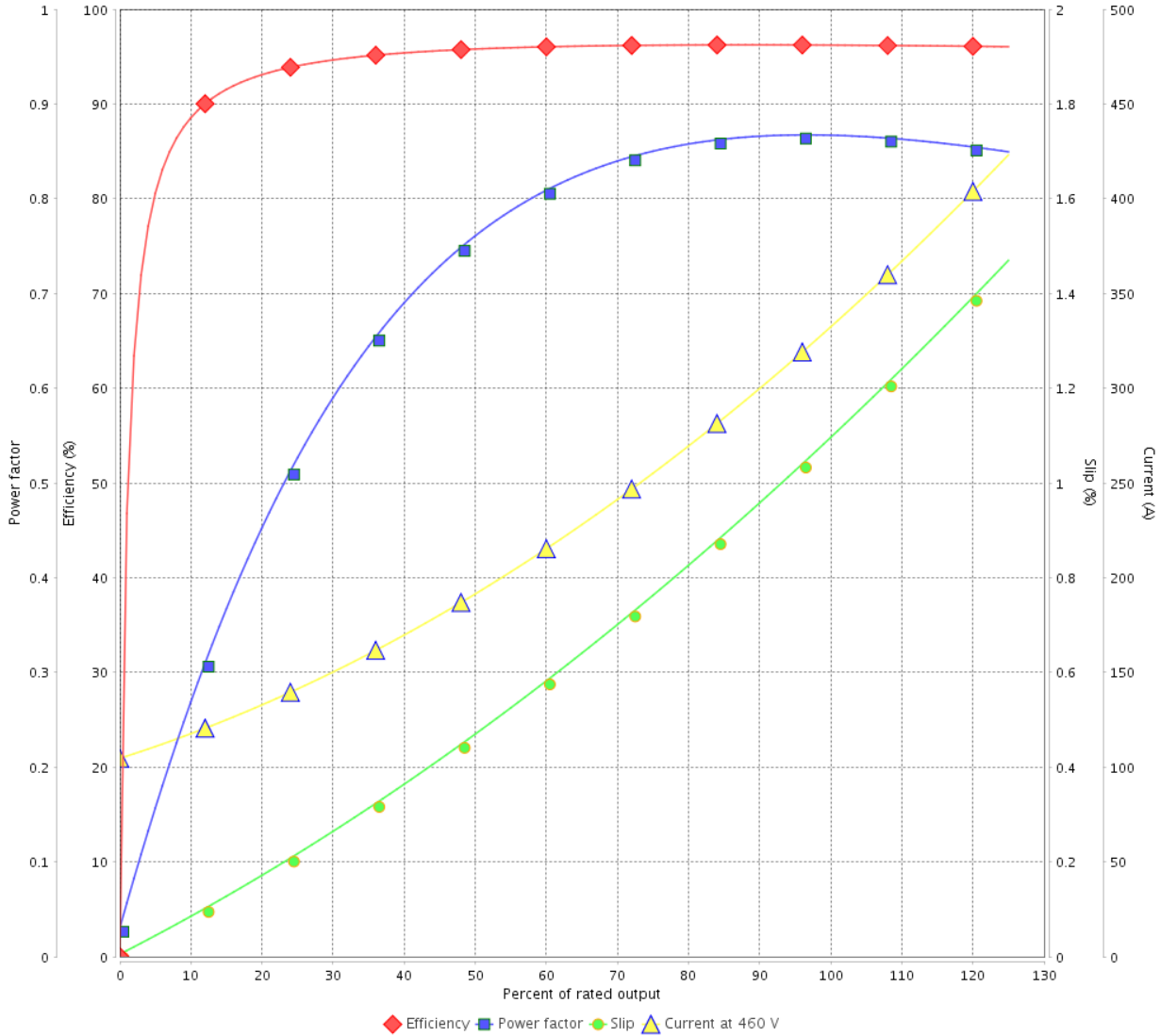
Customer :

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Product code : 11415947

Catalog # : 30018ET3G449T-W22

LOAD PERFORMANCE CURVE



Performance : 460 V 60 Hz 4P

Rated current : 330 A
 LRC : 6.5
 Rated torque : 885 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 250 %
 Rated speed : 1780 rpm

Moment of inertia (J) : 89.6 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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Date				

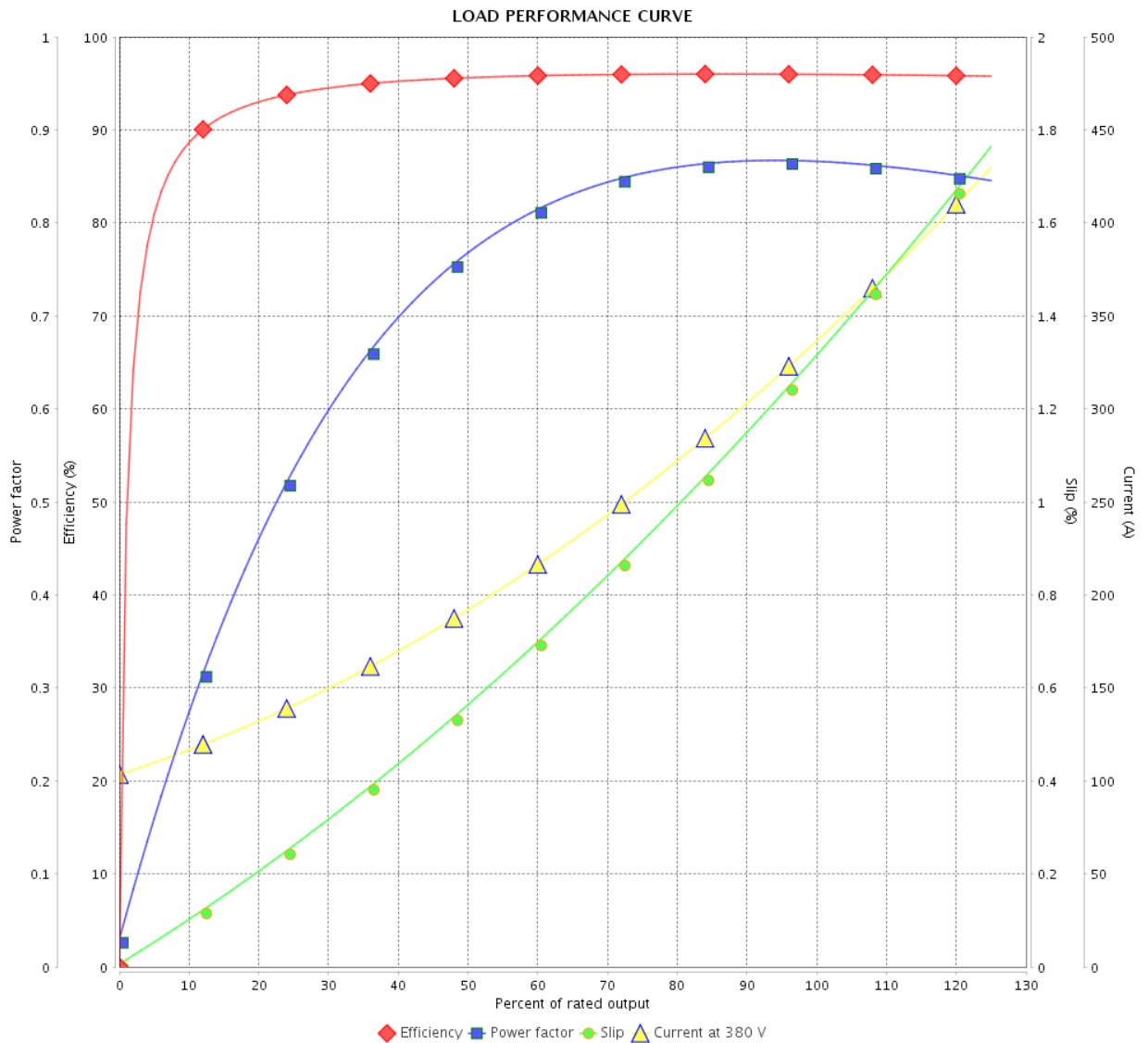
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Breakdown torque	: 220 %	Temperature rise	: 105 K
Rated speed	: 1480 rpm	Design	: B

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

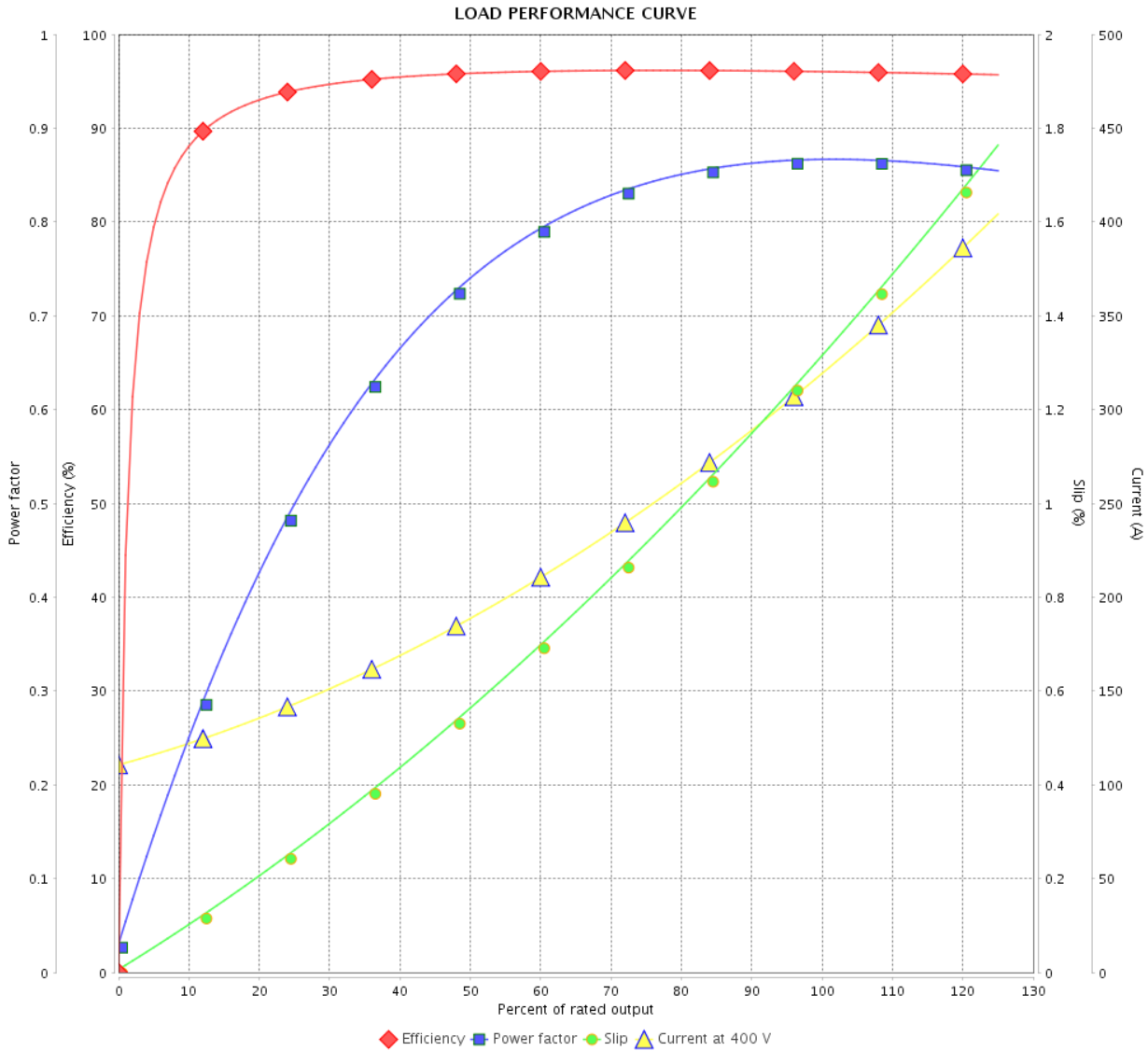


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Performance : 400 V 50 Hz 4P IE3

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 Breakdown torque : 250 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 89.6 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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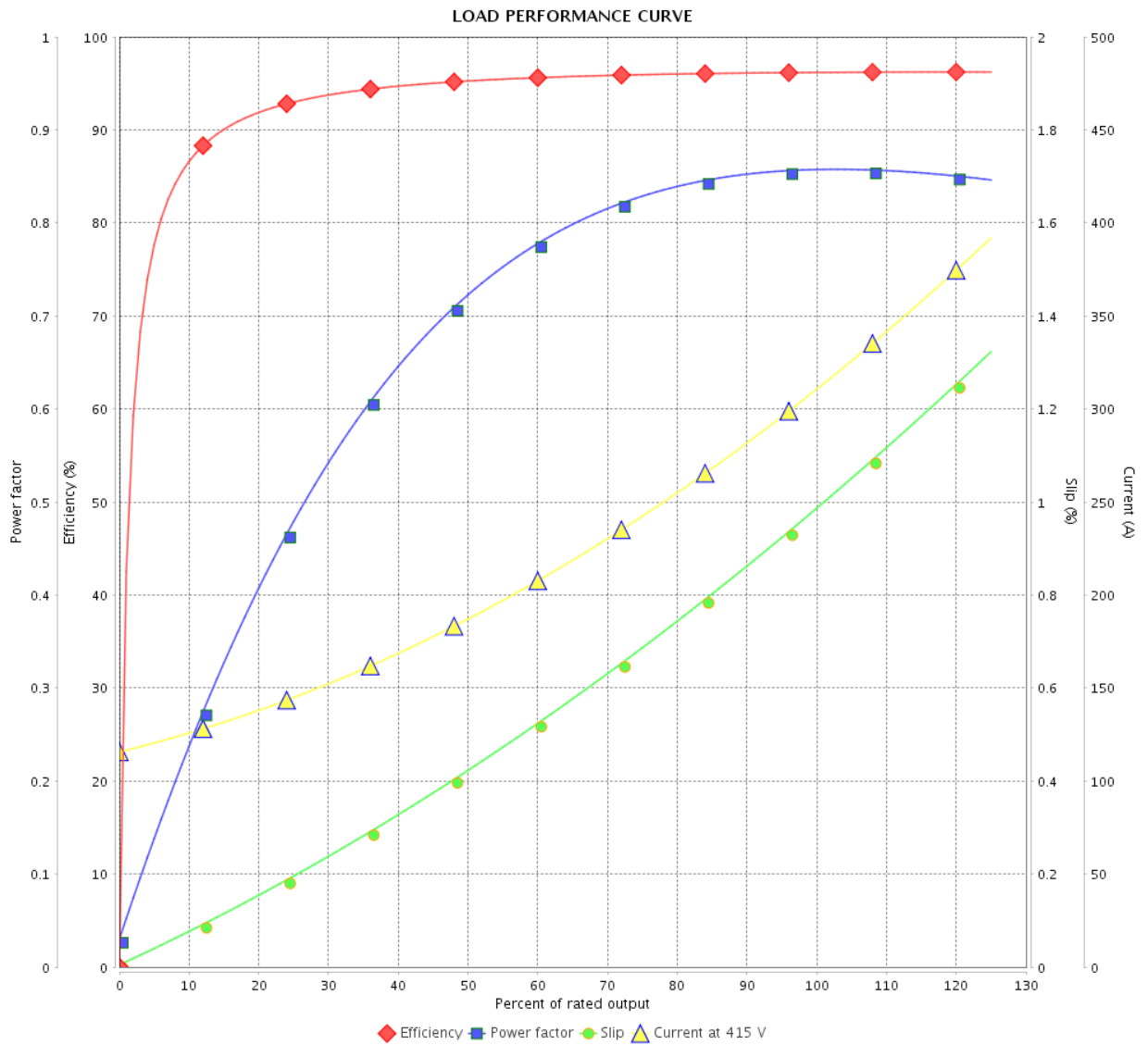


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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

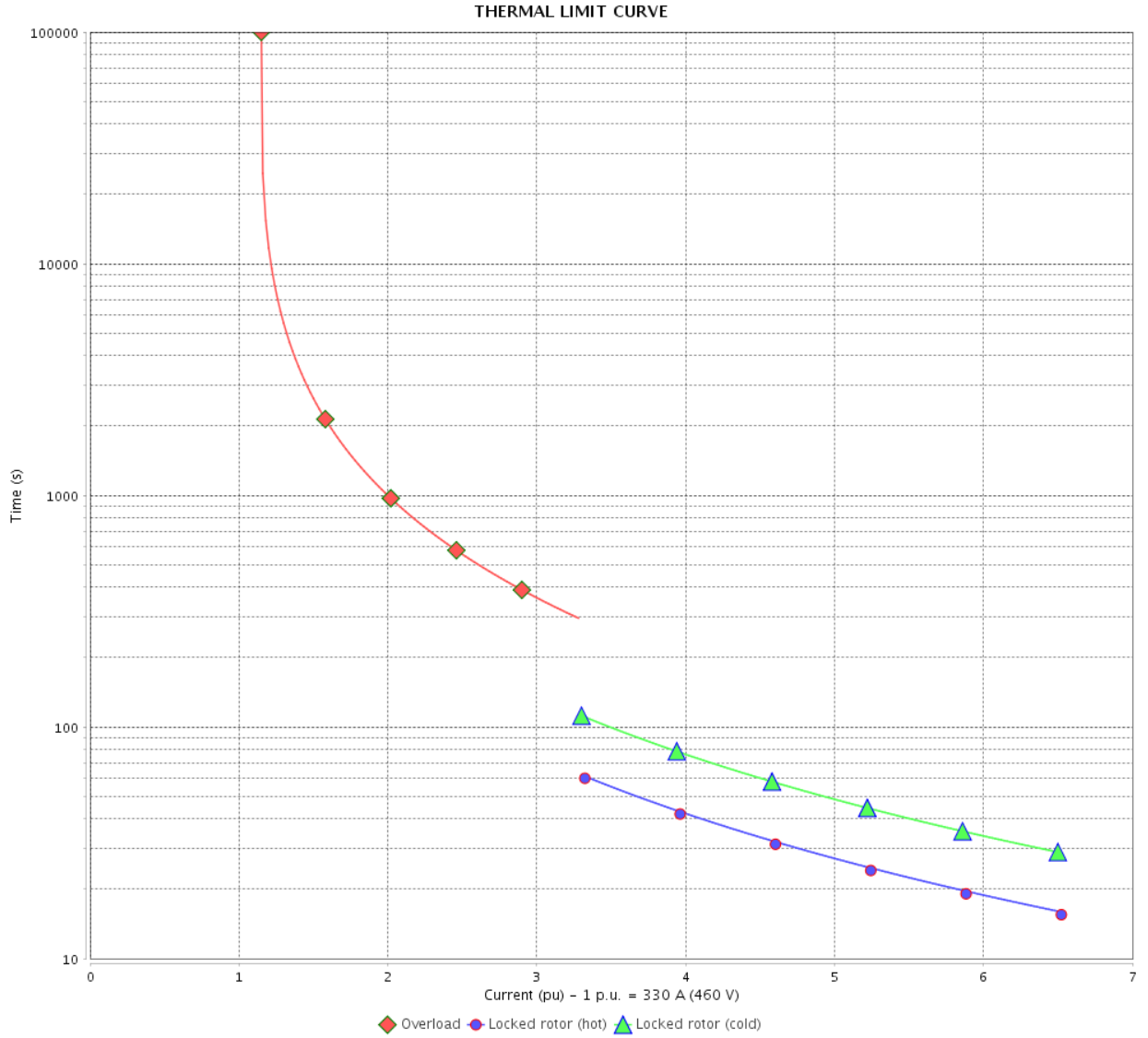
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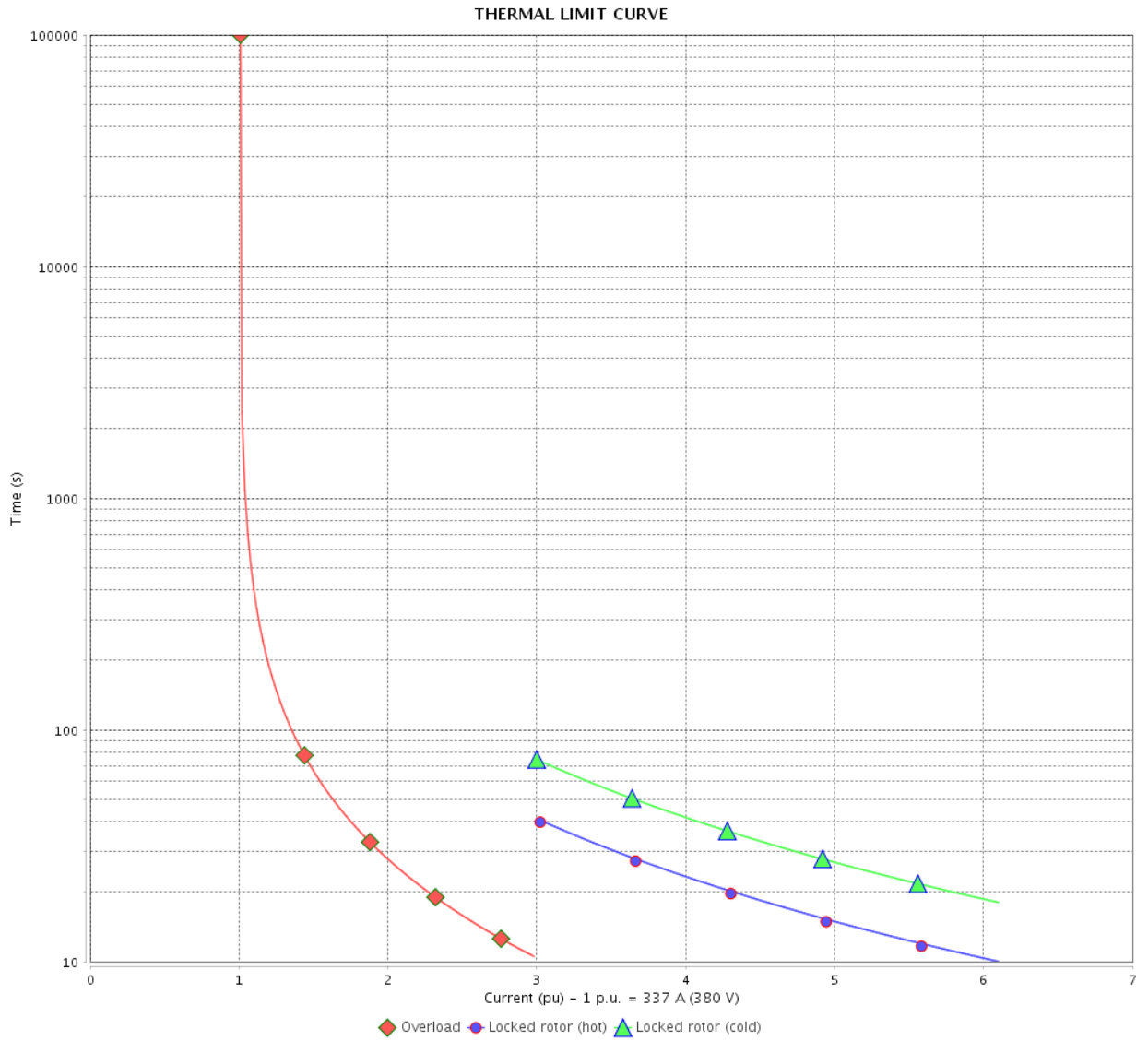
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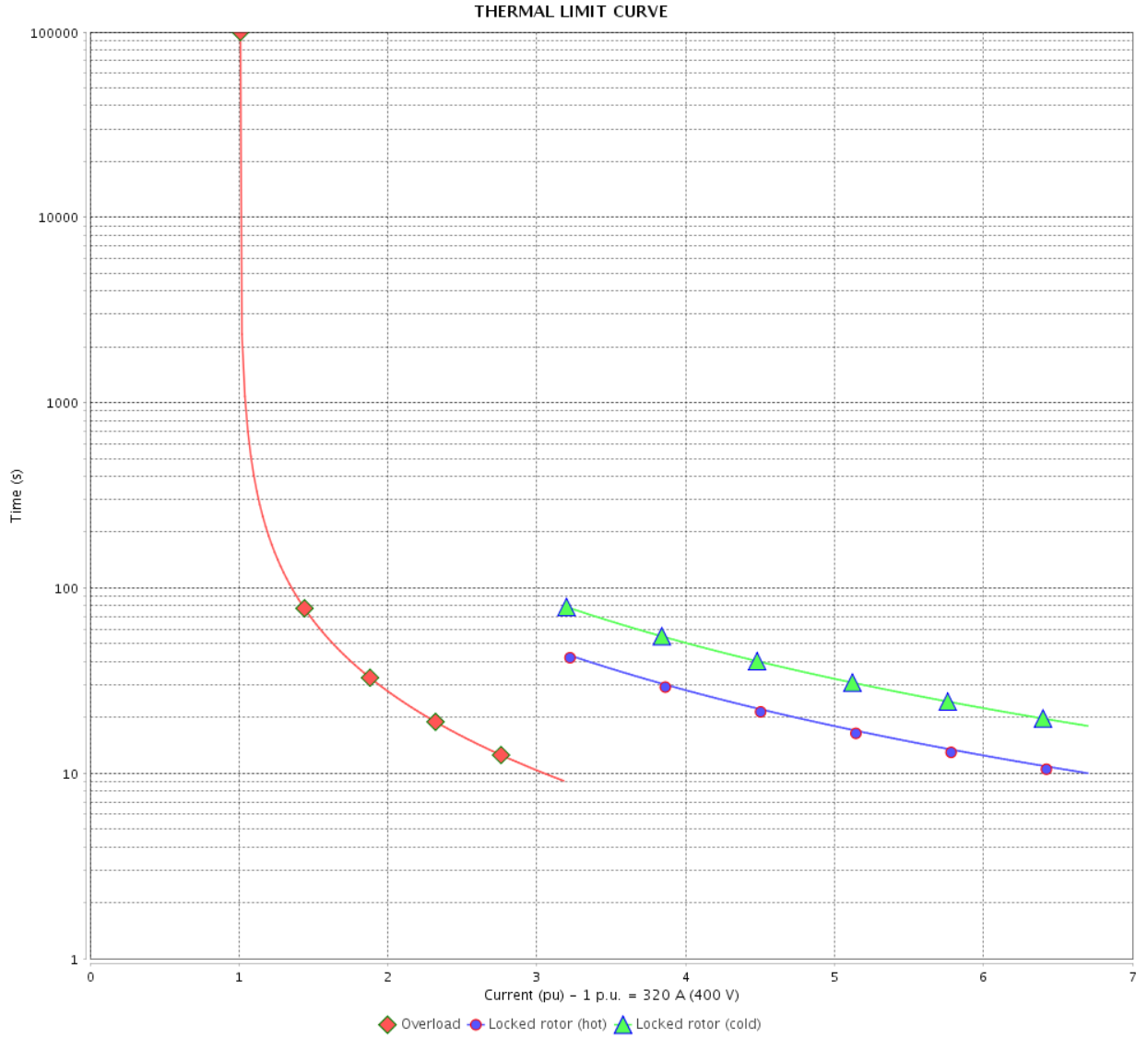
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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THERMAL LIMIT CURVE



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 Catalog # : 30018ET3G449T-W22

Performance : 415 V 50 Hz 4P IE3

Rated current : 311 A	Moment of inertia (J) : 89.6 sq.ft.lb
LRC : 7.2	Duty cycle : Cont.(S1)
Rated torque : 884 ft.lb	Insulation class : F
Locked rotor torque : 260 %	Service factor : 1.00
Breakdown torque : 270 %	Temperature rise : 105 K
Rated speed : 1485 rpm	Design : B

Heating constant

Cooling constant

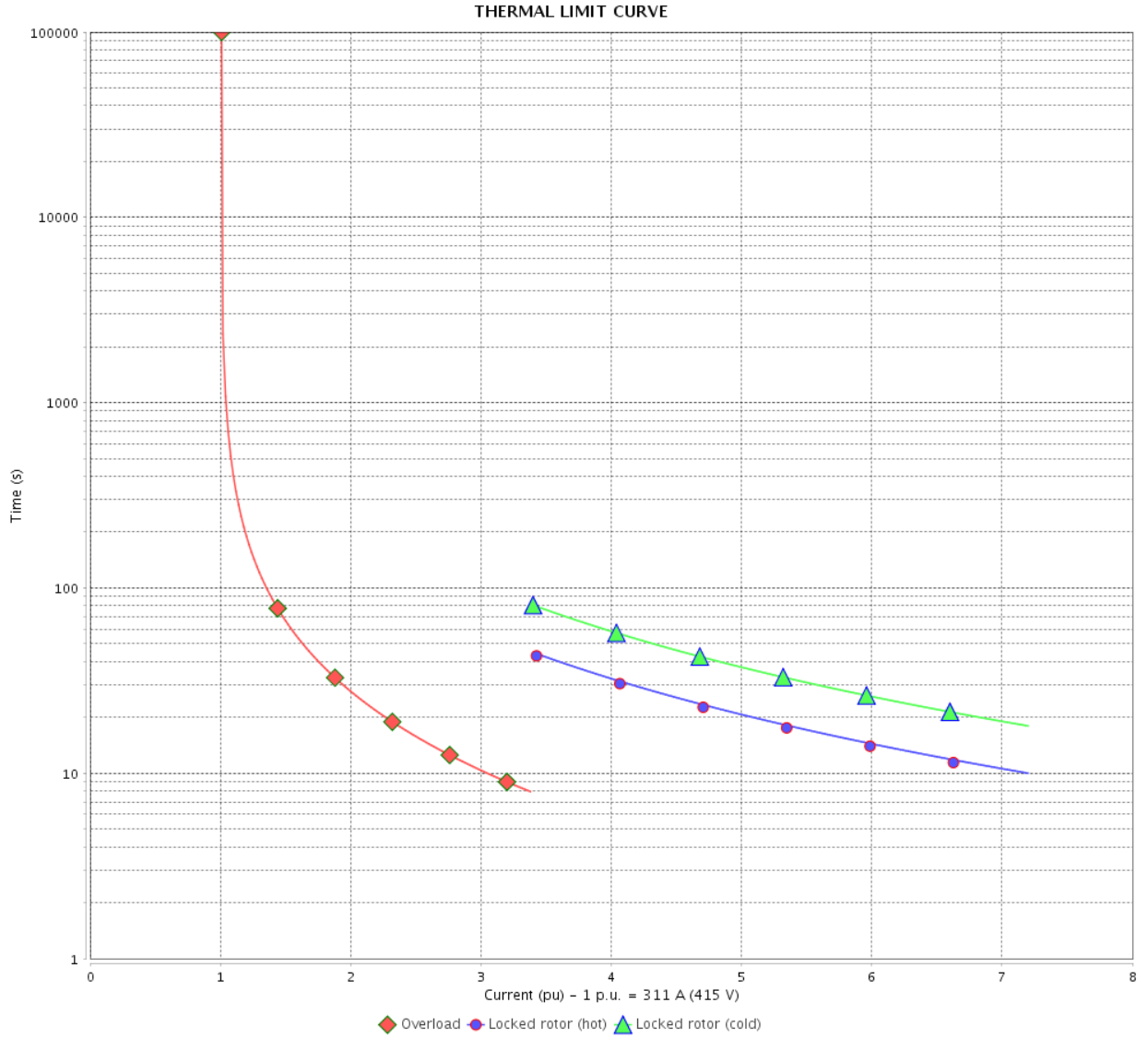
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



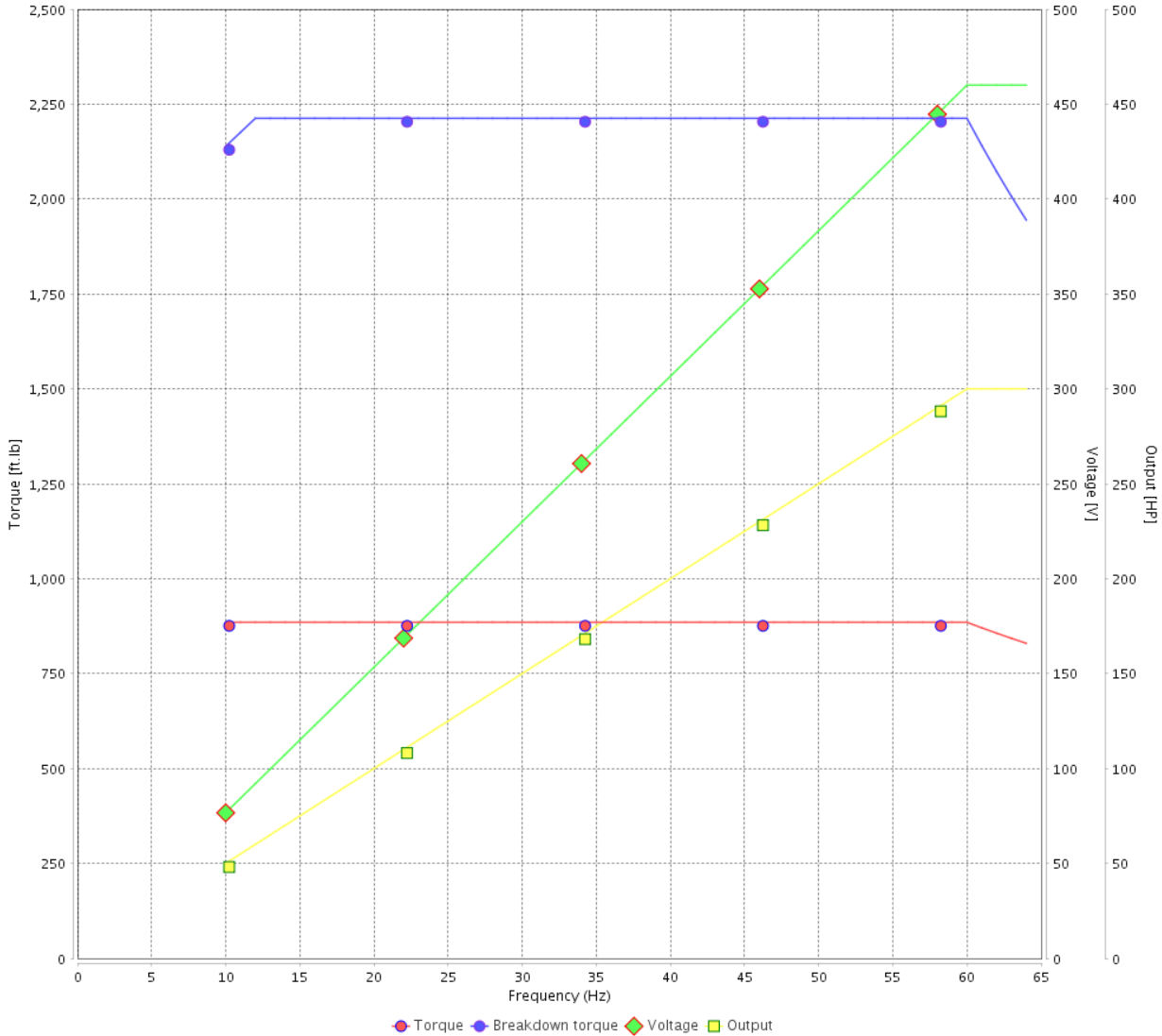
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VFD OPERATION CURVE



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 Rated speed : 1780 rpm

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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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Date	12/04/2022			

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

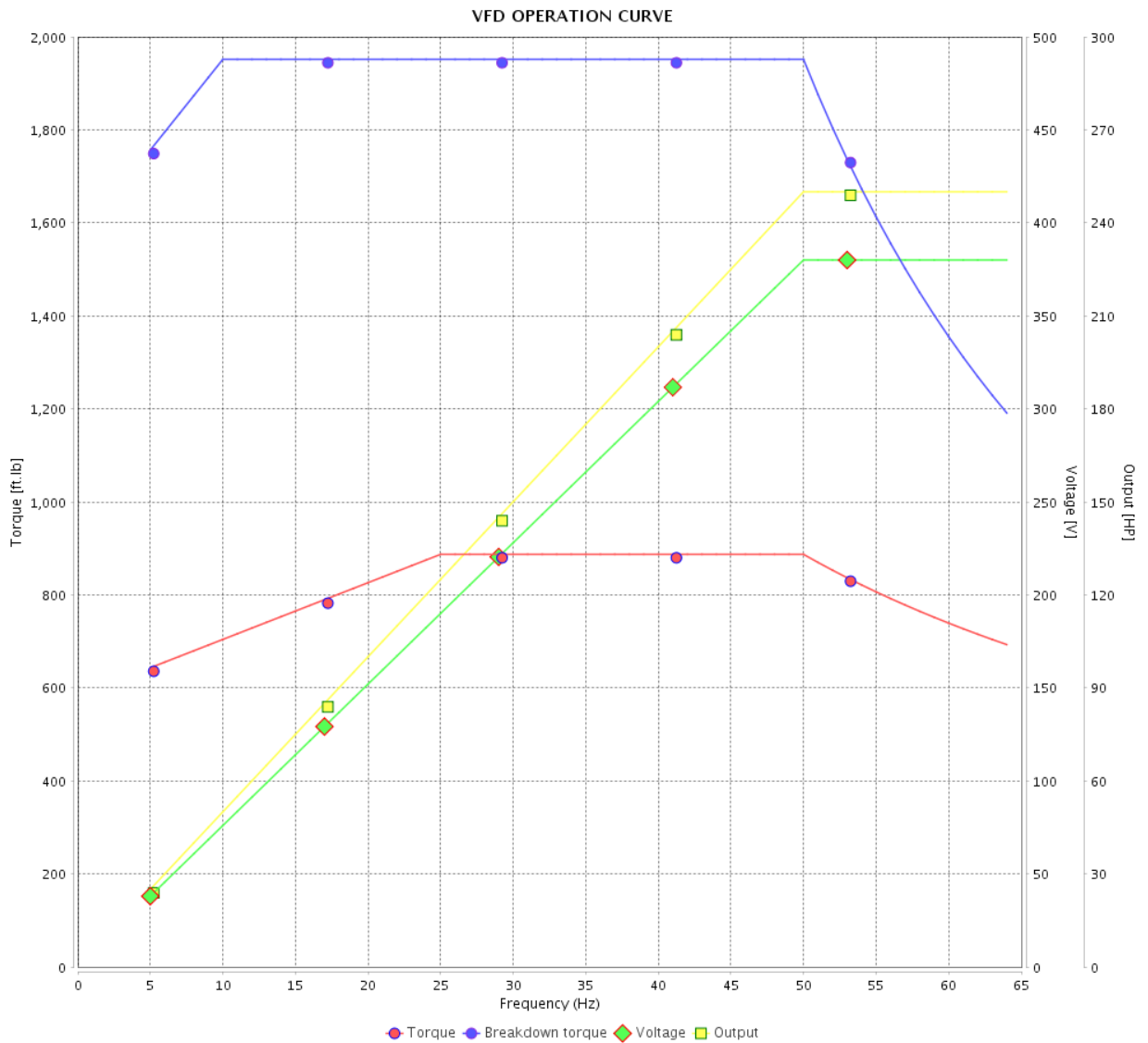


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Performance : 380 V 50 Hz 4P IE3

Rated current : 337 A
 LRC : 6.1
 Rated torque : 887 ft.lb
 Locked rotor torque : 210 %
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 Duty cycle : Cont.(S1)
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 Service factor : 1.00
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

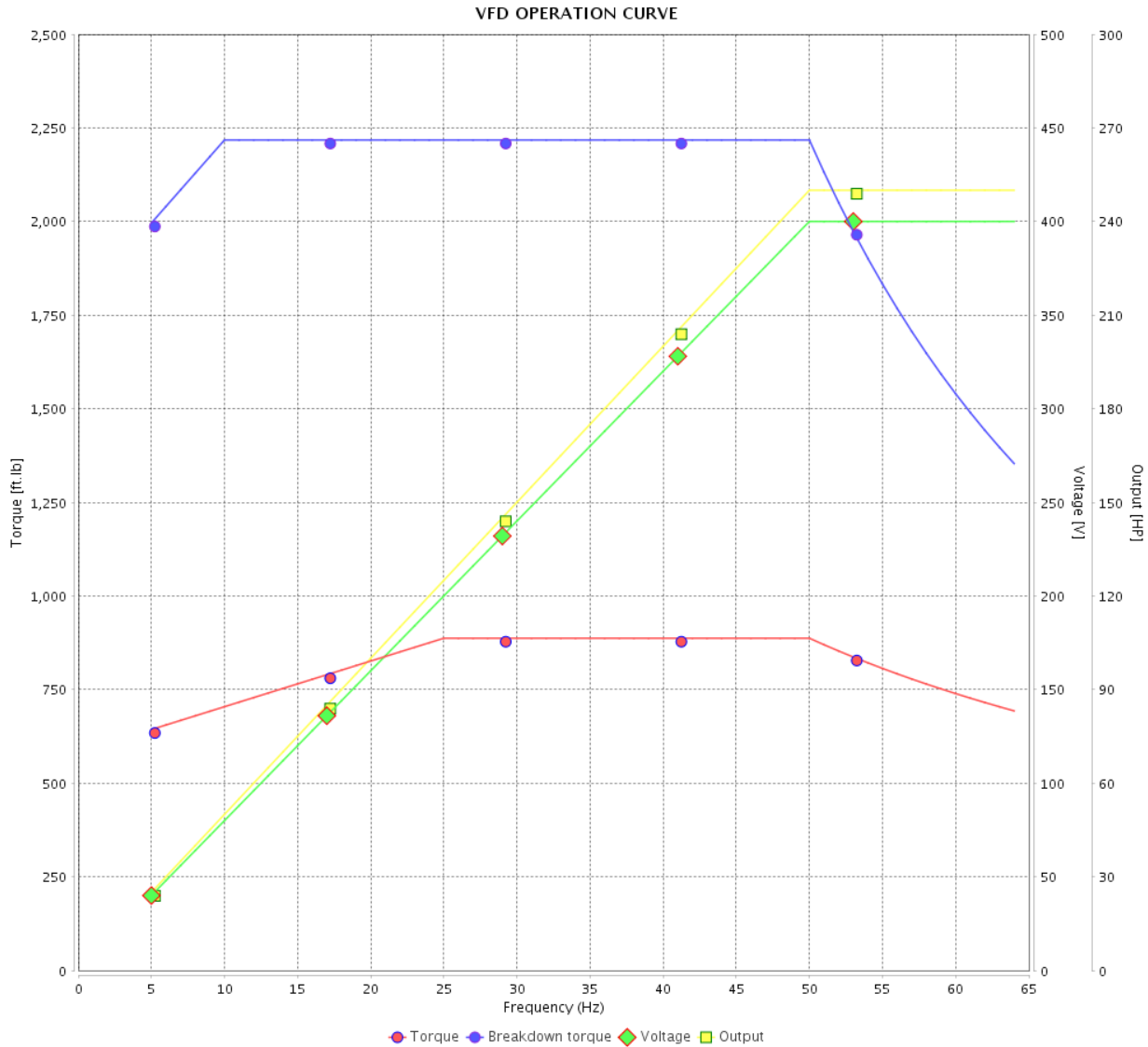


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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

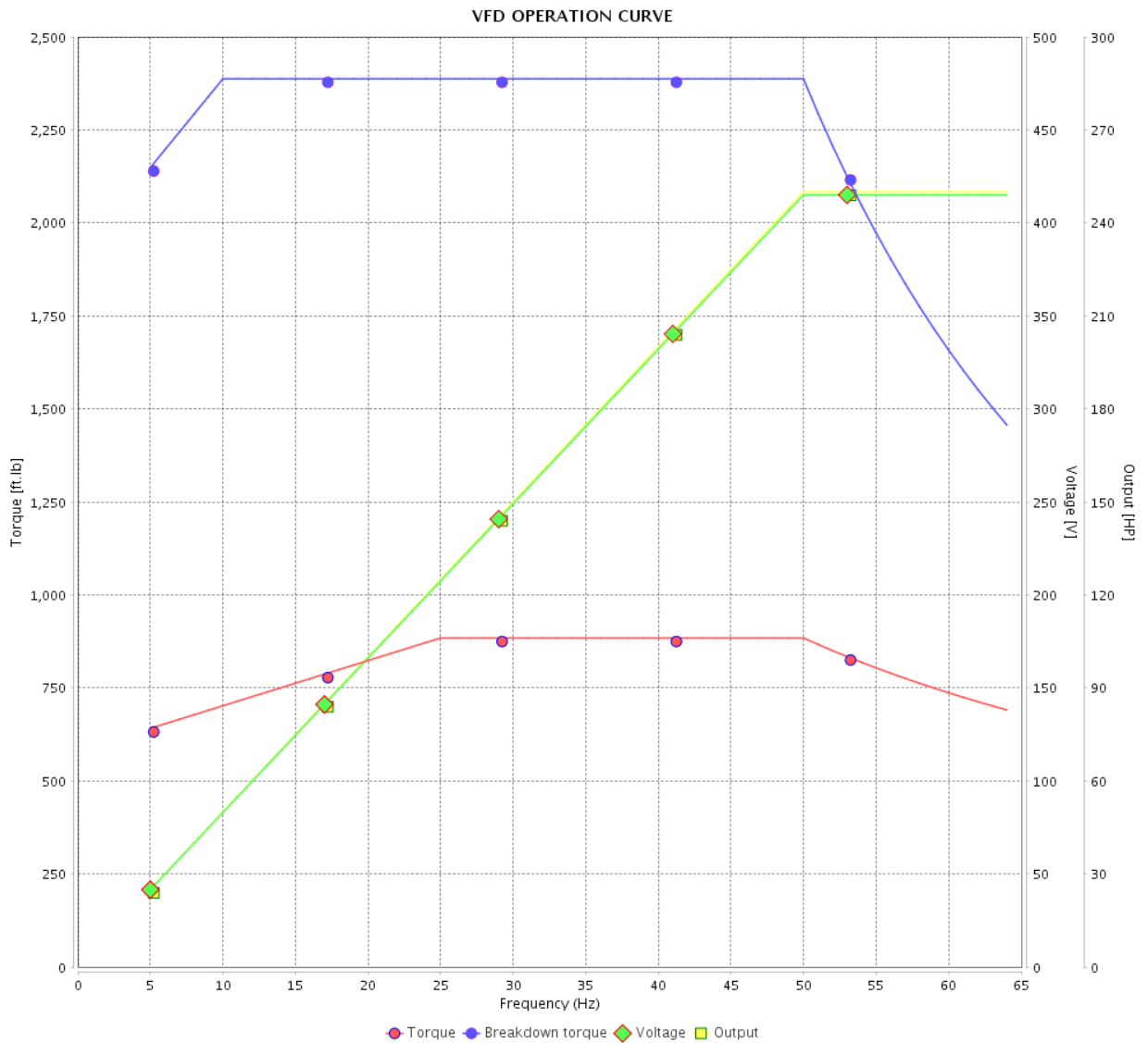


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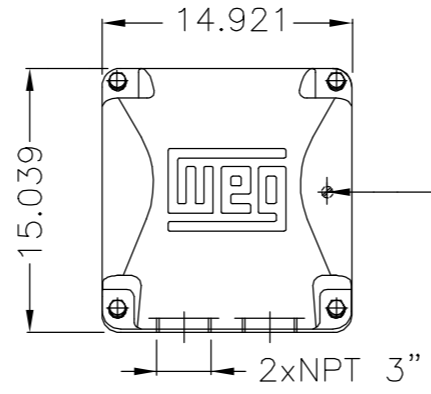
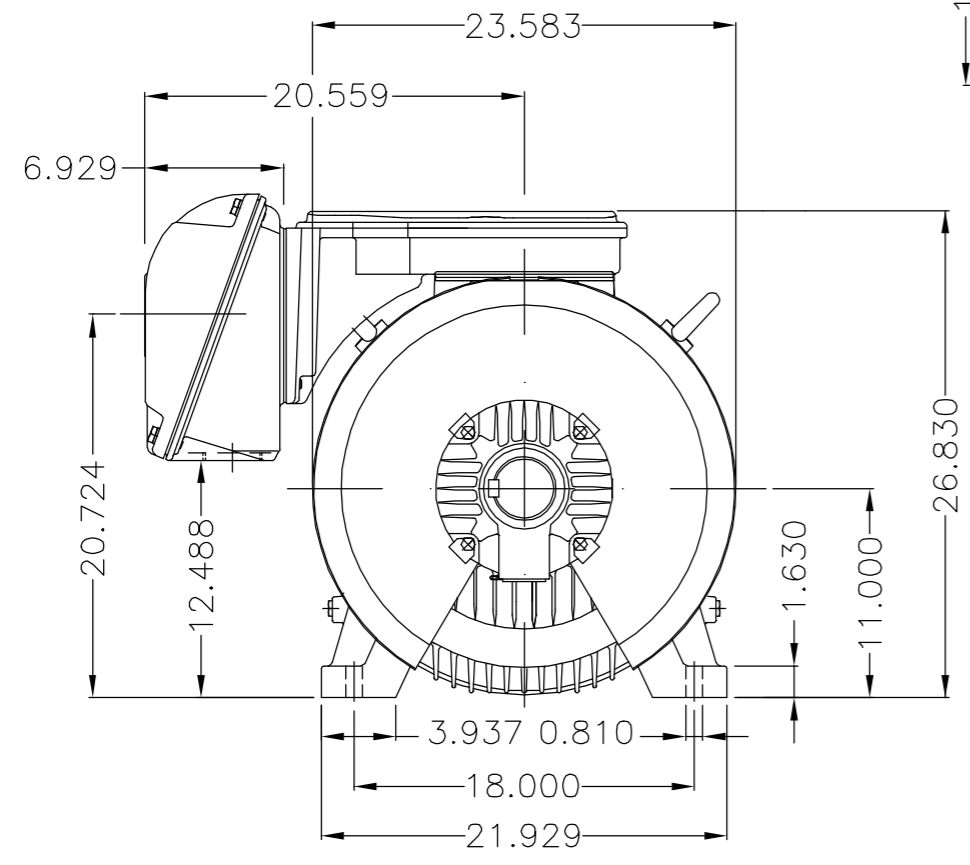
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EIXO/SHAFT	
PADRÃO/STANDARD	X
OPCIONAL/OPTIONAL	
ESPECIAL/SPECIAL	

Dimensões em polegada
Dimensions in inches

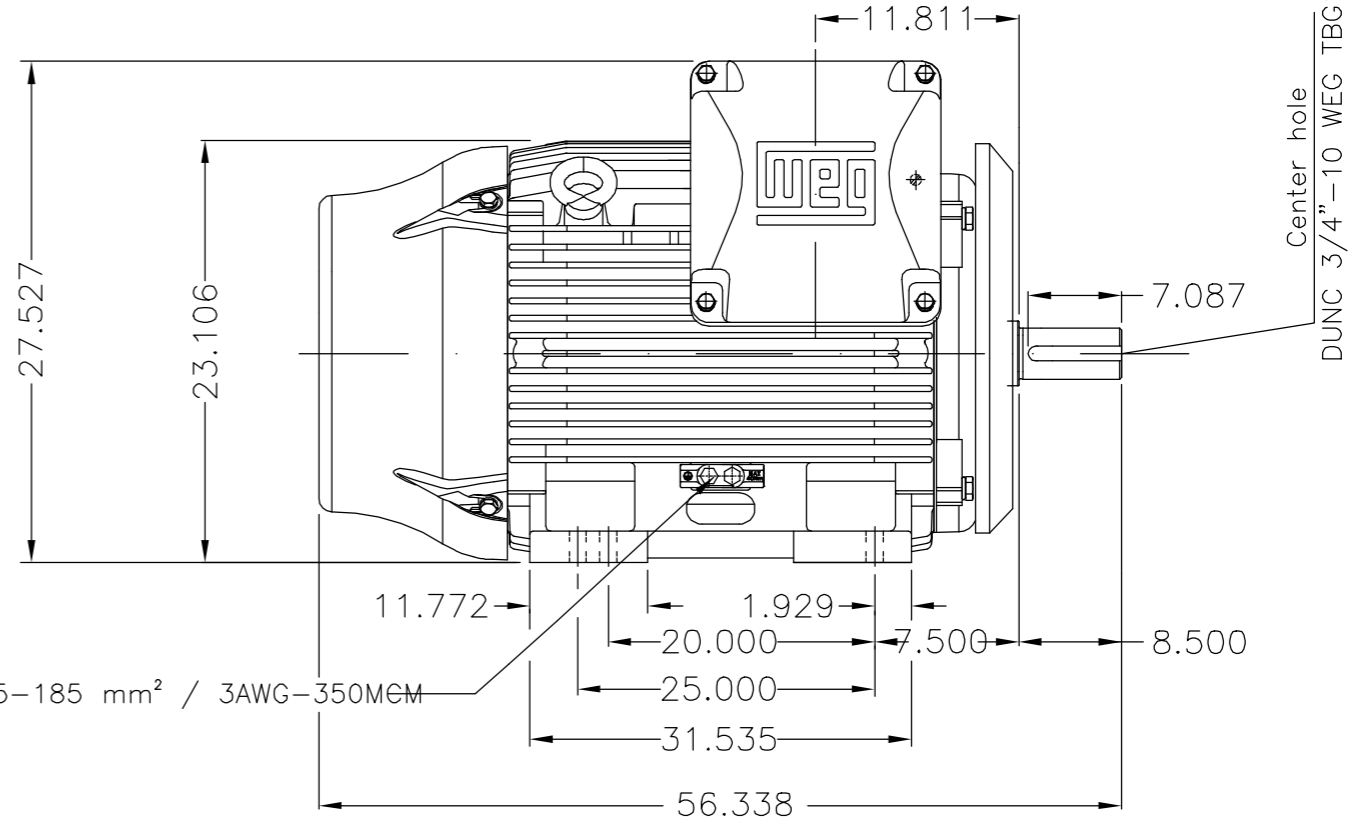
THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.

A
B
C
D
E

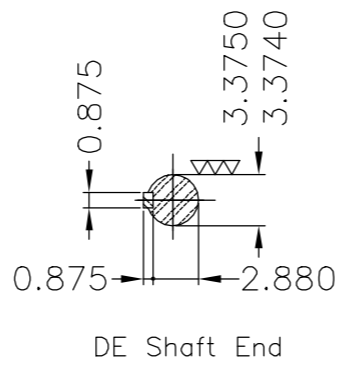


Main terminal box

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



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



DE Shaft End

Defletor de ar dianteiro / Drive-End Air Deflector
Anel de fixação especial / Special bearing cap
Cor RAL 5009 / Color RAL 5009
Plano de pintura 203A / Painting plan 203A
Forma construtiva B3D / Mounting B3R(D)

WEG ELECTRIC CORPORATION - WEG

OV: 4802271

500001452859		ALT. CONFORME CLAIM 415058500	FRANCINES	CLEBERP	CLEBERP	16.05.2018	01
500001446551		DOCUMENTO NOVO	ERIC	FRANCINES	FRANCINES	15.05.2018	00
ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	ERIC	THREE PHASE W22 MOTOR - NEMA PREMIUM EFF FRAME 447/9T IP55 TEFC			10005714088		
CHECKED	FRANCINES				000	01	
RELEASED	FRANCINES						
REL DT	15.05.2018	WMO	Jaragua do Sul	Product Engineering	SHEET	01 / 01	

300 HP 04 Poles 60Hz

A

UNCONTROLLED COPY
RELEASED
ZME A3

MADE IN MEXICO
11415947



FOR SAFE AREA
Mod.TE1BFOXON
CC029A

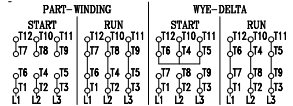




Class I, Div 2, Gr A, B, C and D - T3
Class I, Zone 2, IIC - T3
Class II, Div 2, Gr F and G - T3C
For use on PWM: Gr. A, B, C, D and F,
VT 1000:1, CT 6:1, 1.00SF - T3


MODEL 30018ET3G449T-W22

Inverter Duty Motor
Severe Duty

PH3	60Hz	Fr. 447/9T	1000m.a.s.l.	IP55	TEFC	2862lb
V 460				A 330		
HP 300				kW 220		
SF 1.15				SFA 379		
RPM 1780				PF 0.87		
AMB 40°C				INS cl. F DT80K	NEMA NOM EFF 96.2%	
DUTY CONT.				DES B Code G		



-  → 6322-C3 (60g)
-  → 6319-C3 (45g)

 MOBIL POLYREX EM (6000h)