

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer					
Product line		: NEMA Premium Efficiency Three-Phase		Product code : 11408910	
				Catalog # : 40018ET3GRB449T-W22	
Frame		: L447/9T		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 : 3259 lb	
Protection degree		: IP55		Moment of inertia (J) : 136 sq.ft.lb	
Design		: B			
Output [HP]	400	350	350	350	350
Poles	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	460	380	400	415	415
Rated current [A]	445	461	448	437	437
L. R. Amperes [A]	2893	2766	3002	3146	3146
LRC [A]	6.5x(Code G)	6.0x(Code F)	6.7x(Code G)	7.2x(Code H)	7.2x(Code H)
No load current [A]	125	125	140	155	155
Rated speed [RPM]	1785	1485	1485	1485	1485
Slip [%]	0.83	1.00	1.00	1.00	1.00
Rated torque [ft.lb]	1180	1240	1240	1240	1240
Locked rotor torque [%]	250	229	250	280	280
Breakdown torque [%]	260	240	270	290	290
Service factor	1.15	1.15	1.15	1.15	1.15
Temperature rise	80 K	105 K	80 K	80 K	80 K
Locked rotor time	37s (cold) 21s (hot)	43s (cold) 24s (hot)	37s (cold) 21s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)
Noise level ²	79.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)
Efficiency (%)	25%	94.9	95.4	94.9	94.9
	50%	95.4	95.8	95.4	95.4
	75%	95.8	95.8	95.8	95.8
	100%	96.2	96.2	96.2	96.2
Power Factor	25%	0.55	0.56	0.52	0.48
	50%	0.80	0.81	0.77	0.74
	75%	0.85	0.86	0.84	0.82
	100%	0.88	0.89	0.87	0.86
Bearing type		Drive end : NU-322 C3	Non drive end : 6319 C3	Foundation loads	
Sealing		: WSeal	: WSeal	Max. traction : 7939 lb	
Lubrication interval		: 4000 h	: 8000 h	Max. compression : 11198 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



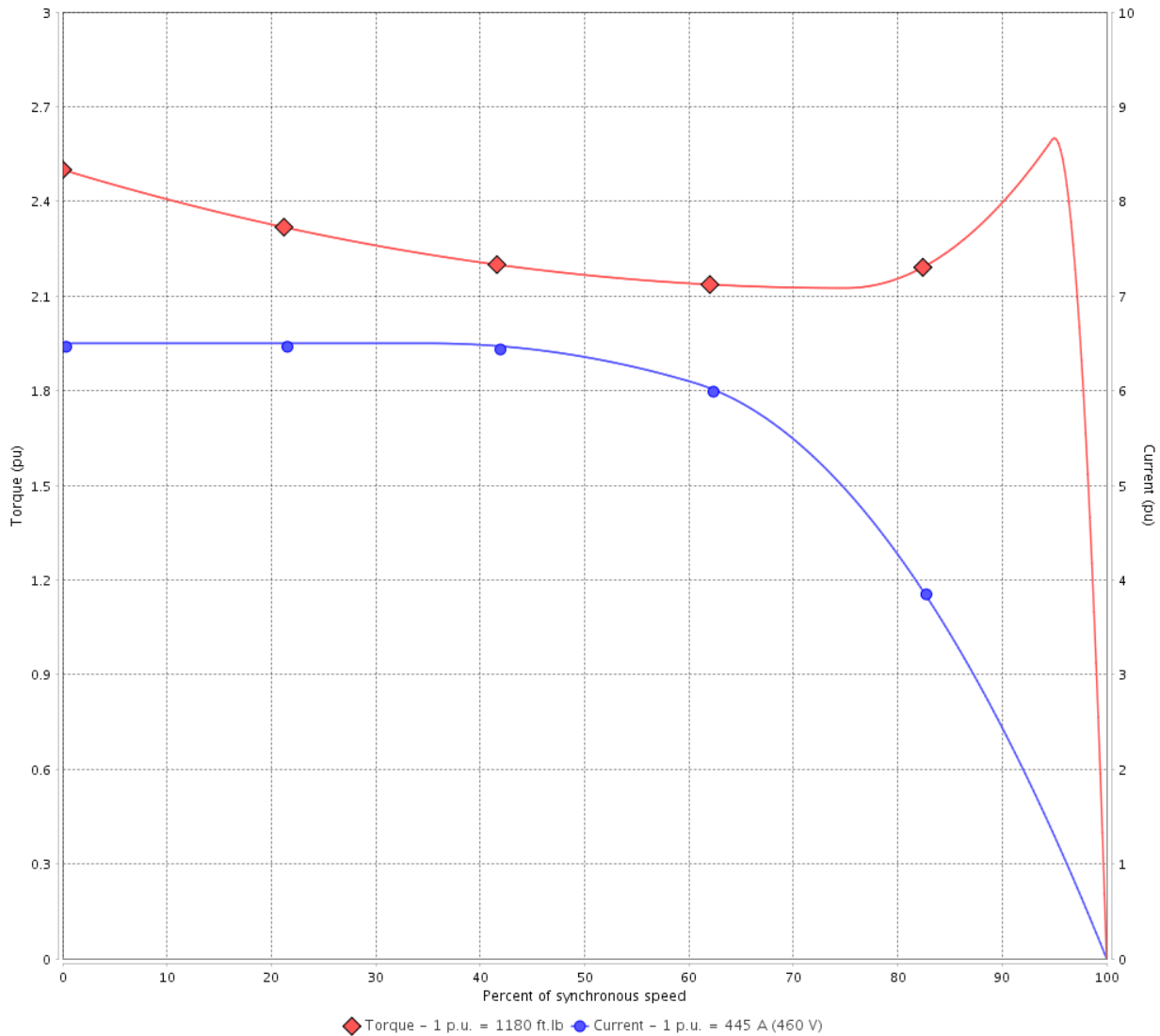
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408910

Catalog # : 40018ET3GRB449T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 4P

Rated current	: 445 A	Moment of inertia (J)	: 136 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 1180 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1785 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE



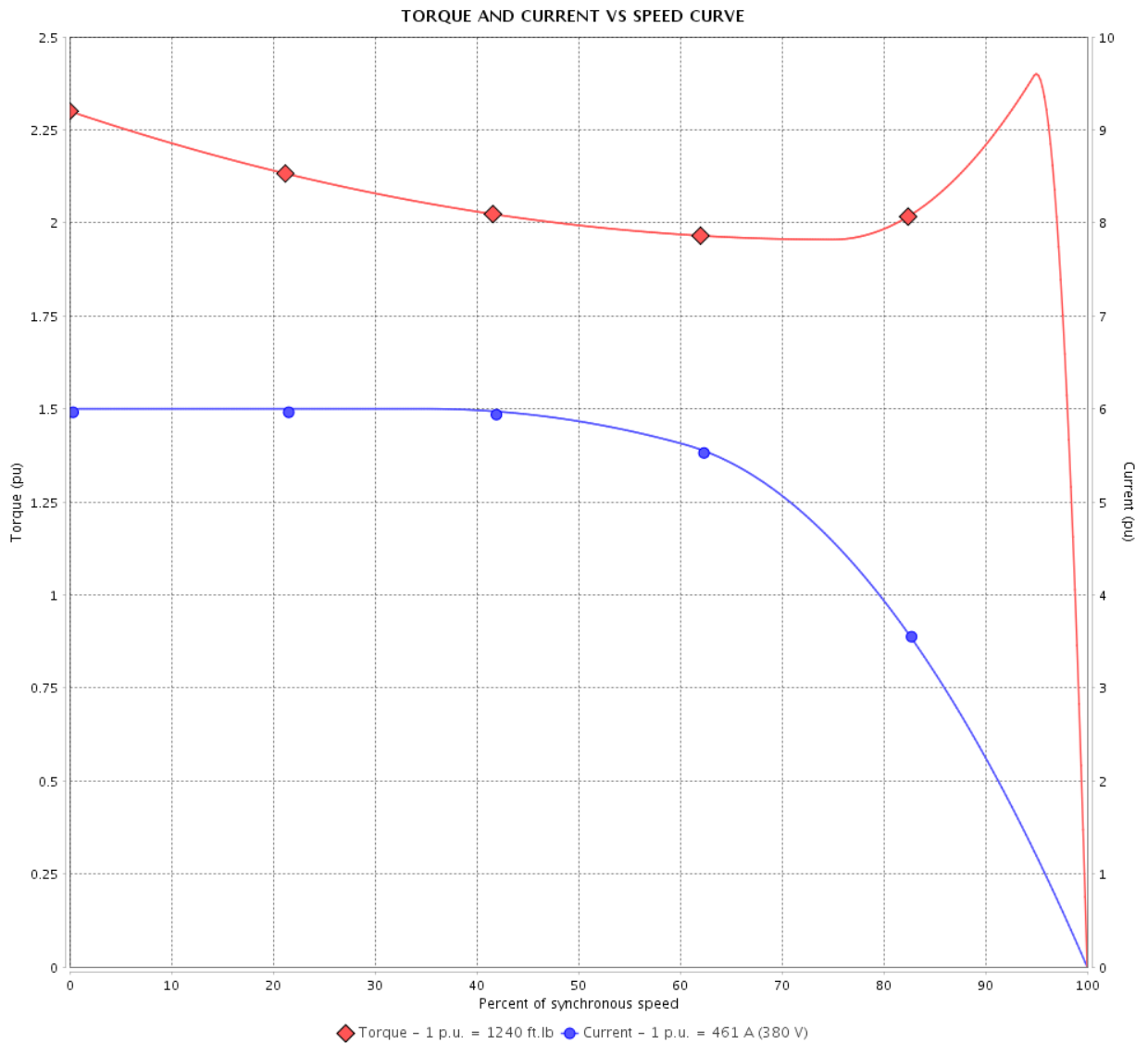
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408910

Catalog # : 40018ET3GRB449T-W22



Performance : 380 V 50 Hz 4P IE3

Rated current	: 461 A	Moment of inertia (J)	: 136 sq.ft.lb
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 1240 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 105 K
Rated speed	: 1485 rpm	Design	: B

Locked rotor time : 43s (cold) 24s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



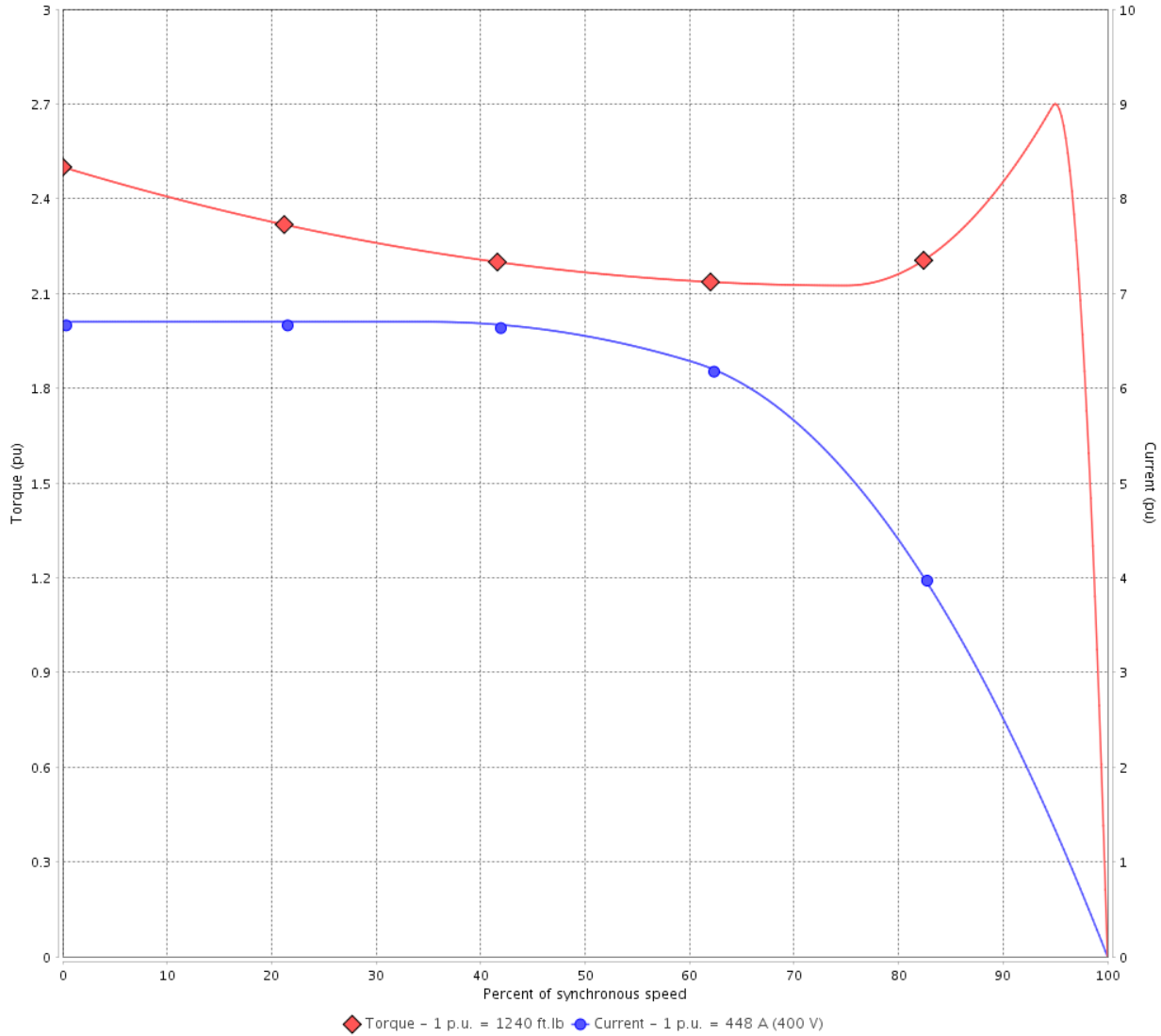
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408910

Catalog # : 40018ET3GRB449T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current	: 448 A	Moment of inertia (J)	: 136 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 1240 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.15
Breakdown torque	: 270 %	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



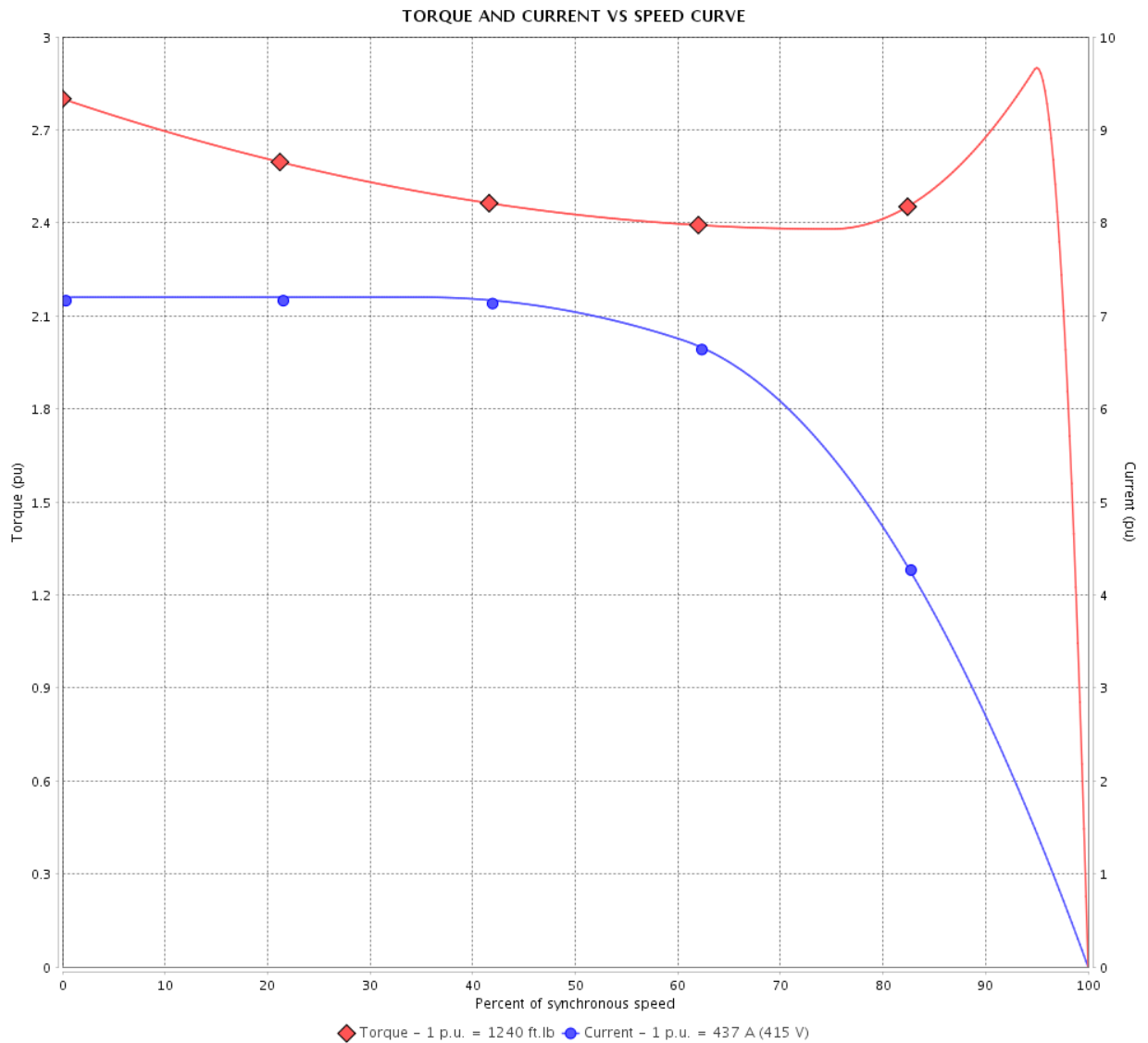
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408910

Catalog # : 40018ET3GRB449T-W22



Performance : 415 V 50 Hz 4P IE3

Rated current : 437 A
 LRC : 7.2
 Rated torque : 1240 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 290 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 136 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

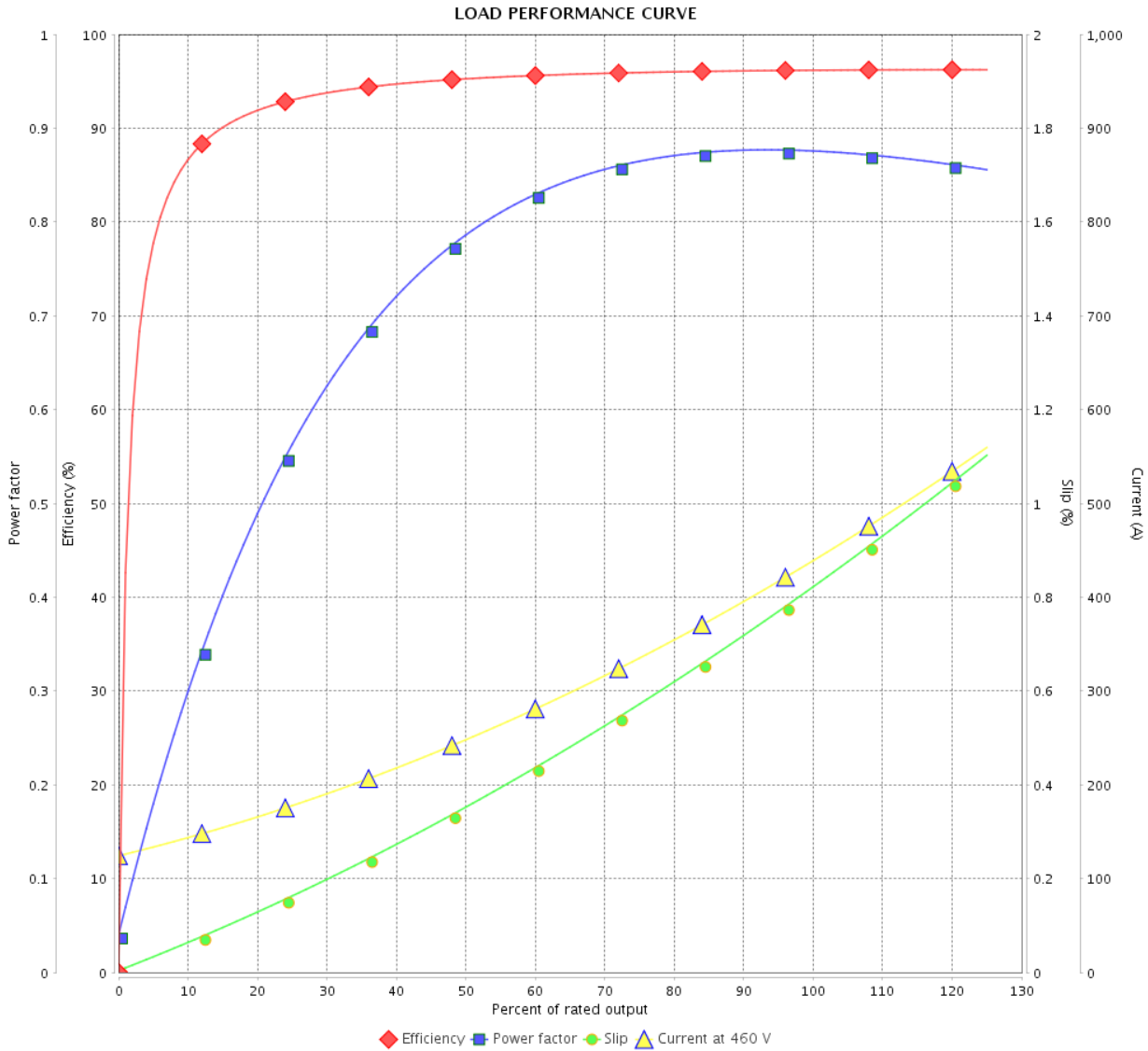


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11408910

Catalog # : 40018ET3GRB449T-W22



Performance : 460 V 60 Hz 4P

Rated current : 445 A
 LRC : 6.5
 Rated torque : 1180 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 260 %
 Rated speed : 1785 rpm

Moment of inertia (J) : 136 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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Three Phase Induction Motor - Squirrel Cage

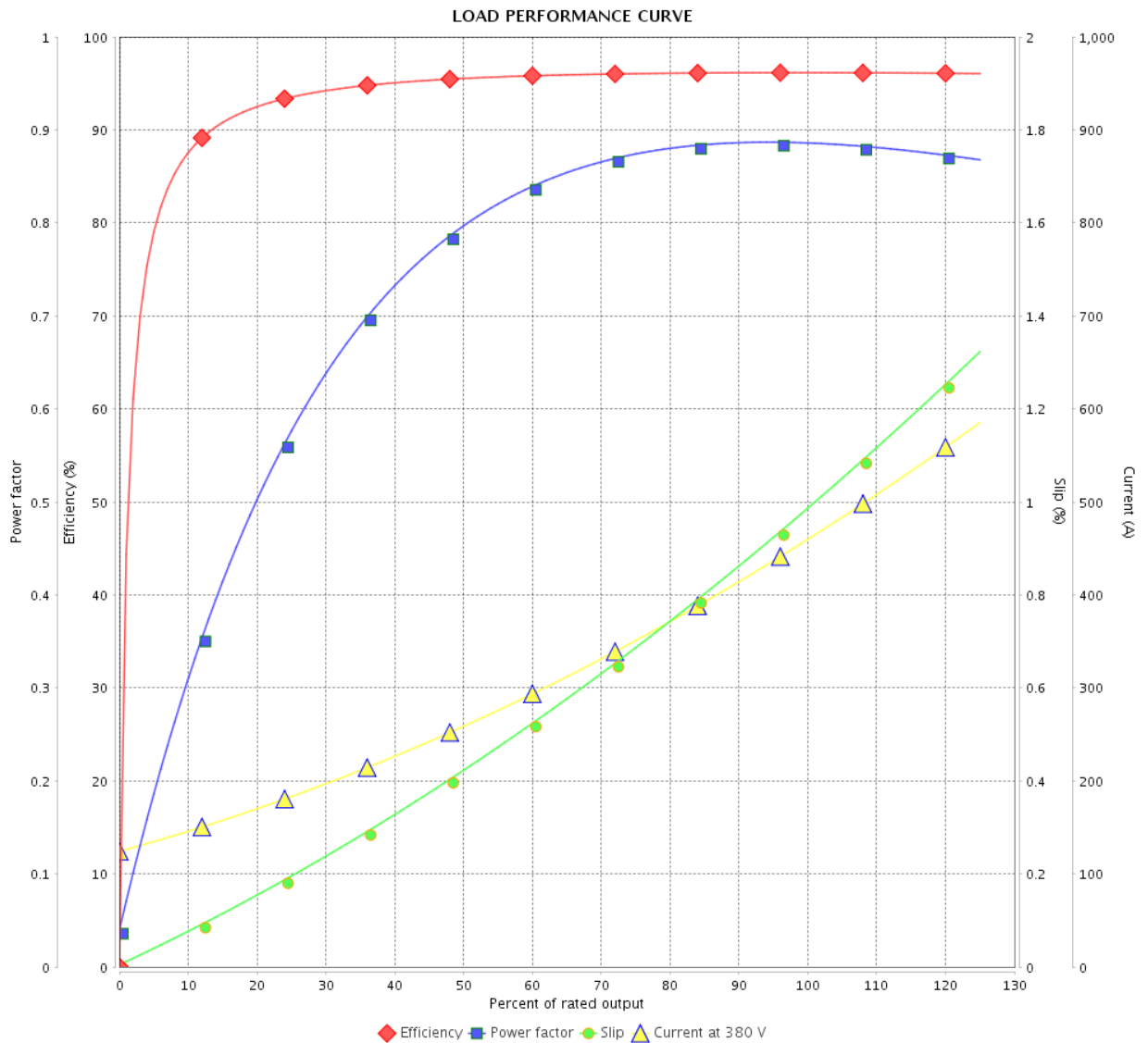


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 Breakdown torque : 240 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 136 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 105 K
 Design : B

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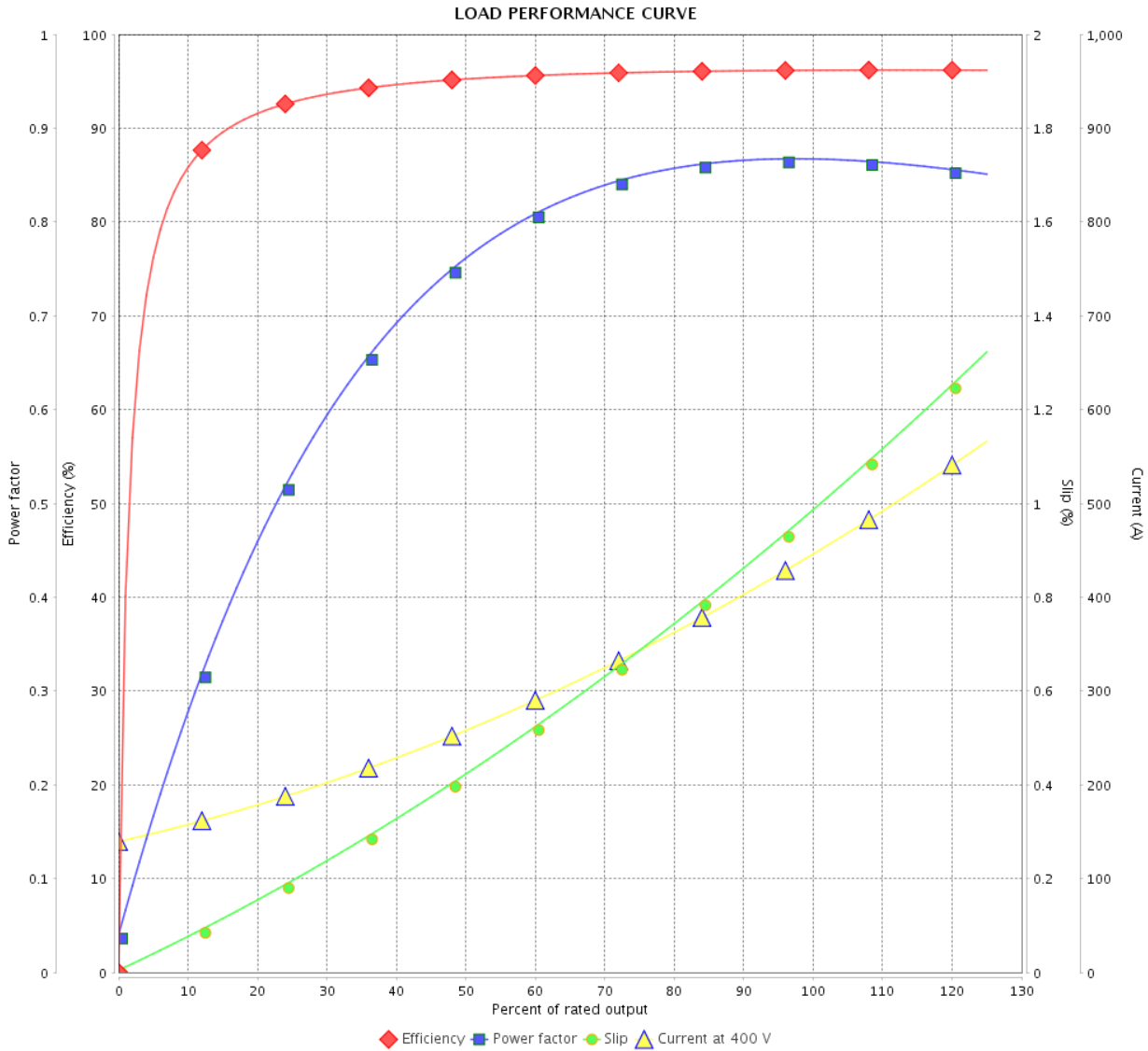


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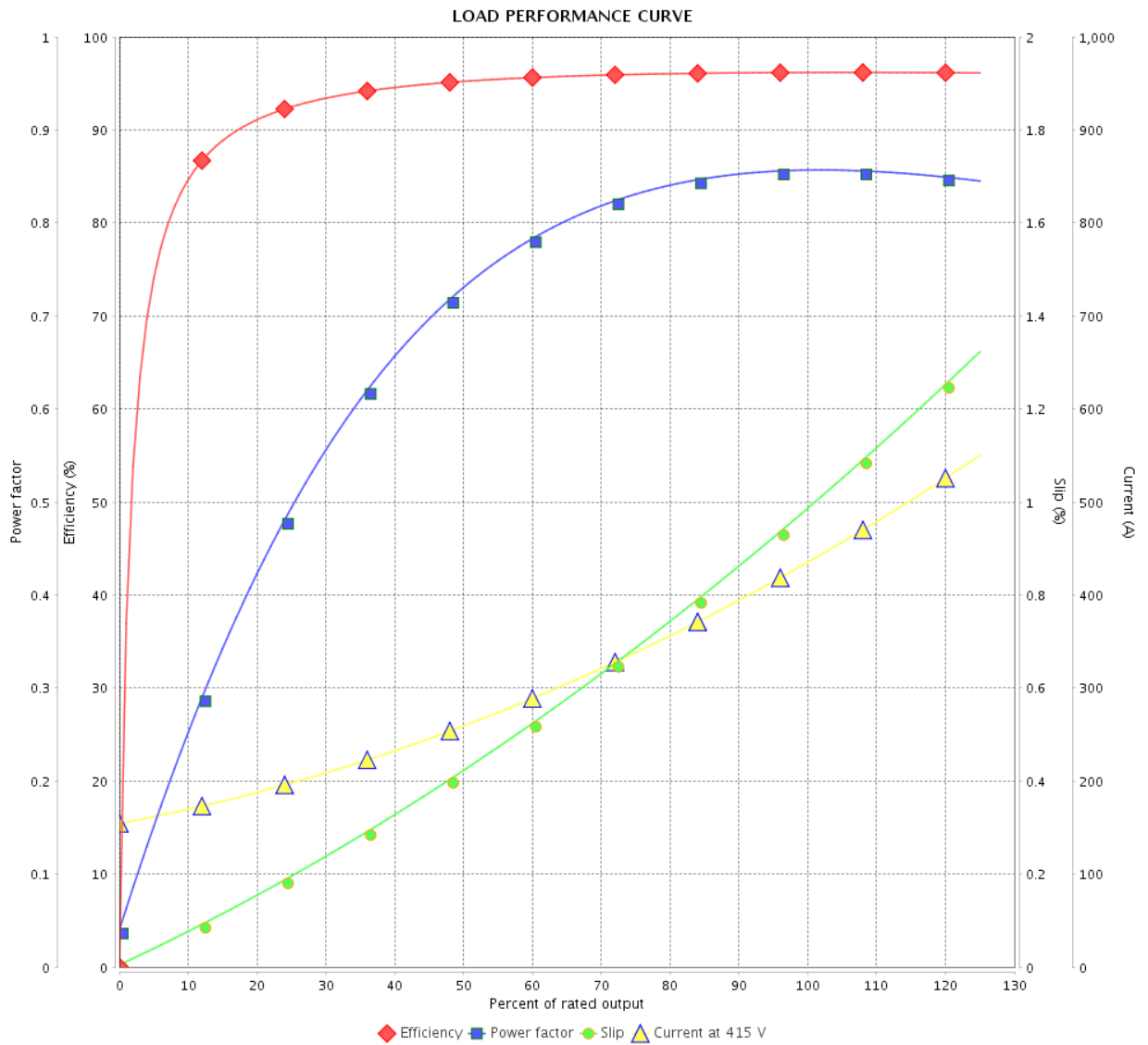


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Performance : 415 V 50 Hz 4P IE3

Rated current : 437 A
 LRC : 7.2
 Rated torque : 1240 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 290 %
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Moment of inertia (J) : 136 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE



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Heating constant

Cooling constant

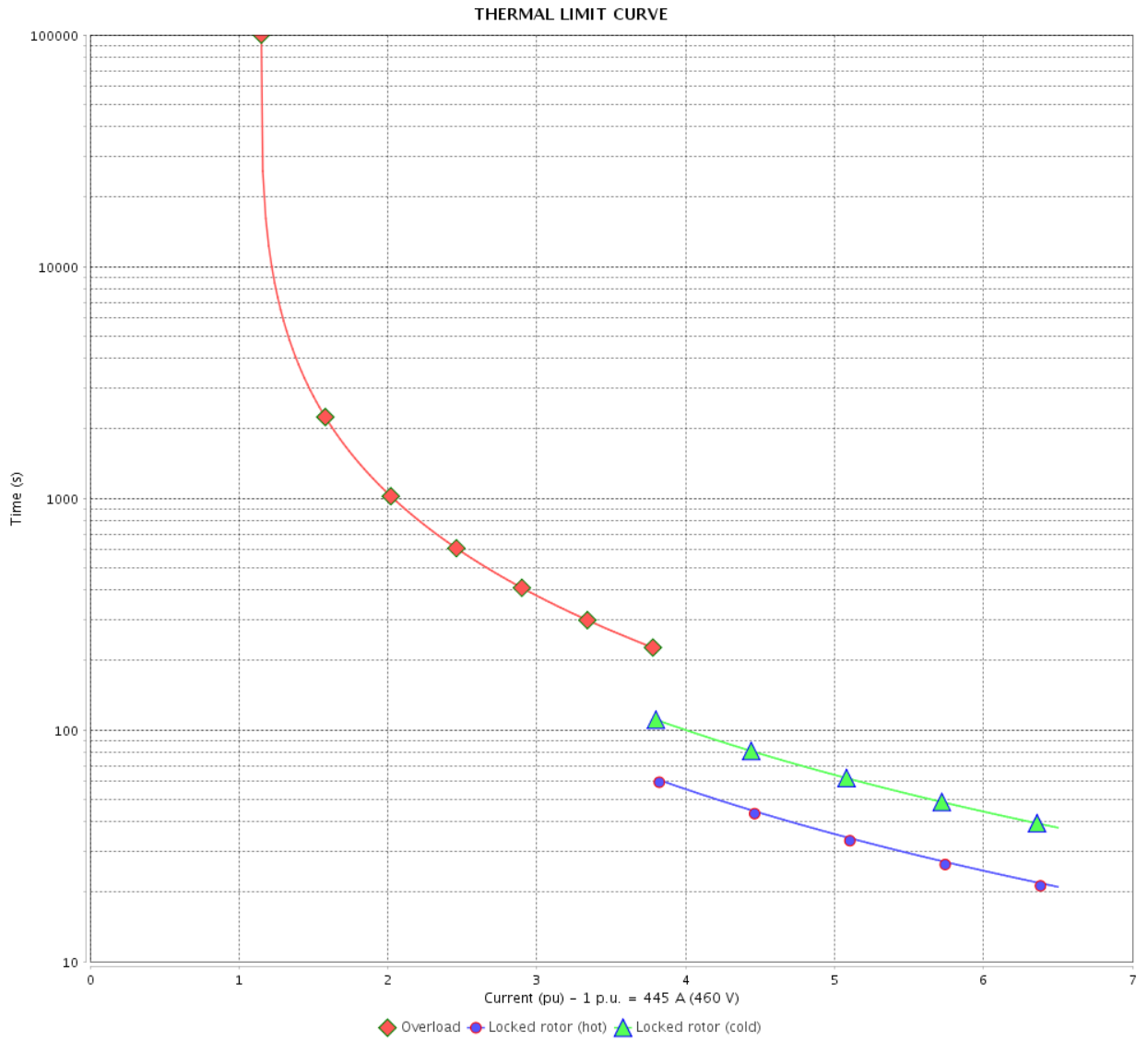
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THERMAL LIMIT CURVE

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Cooling constant

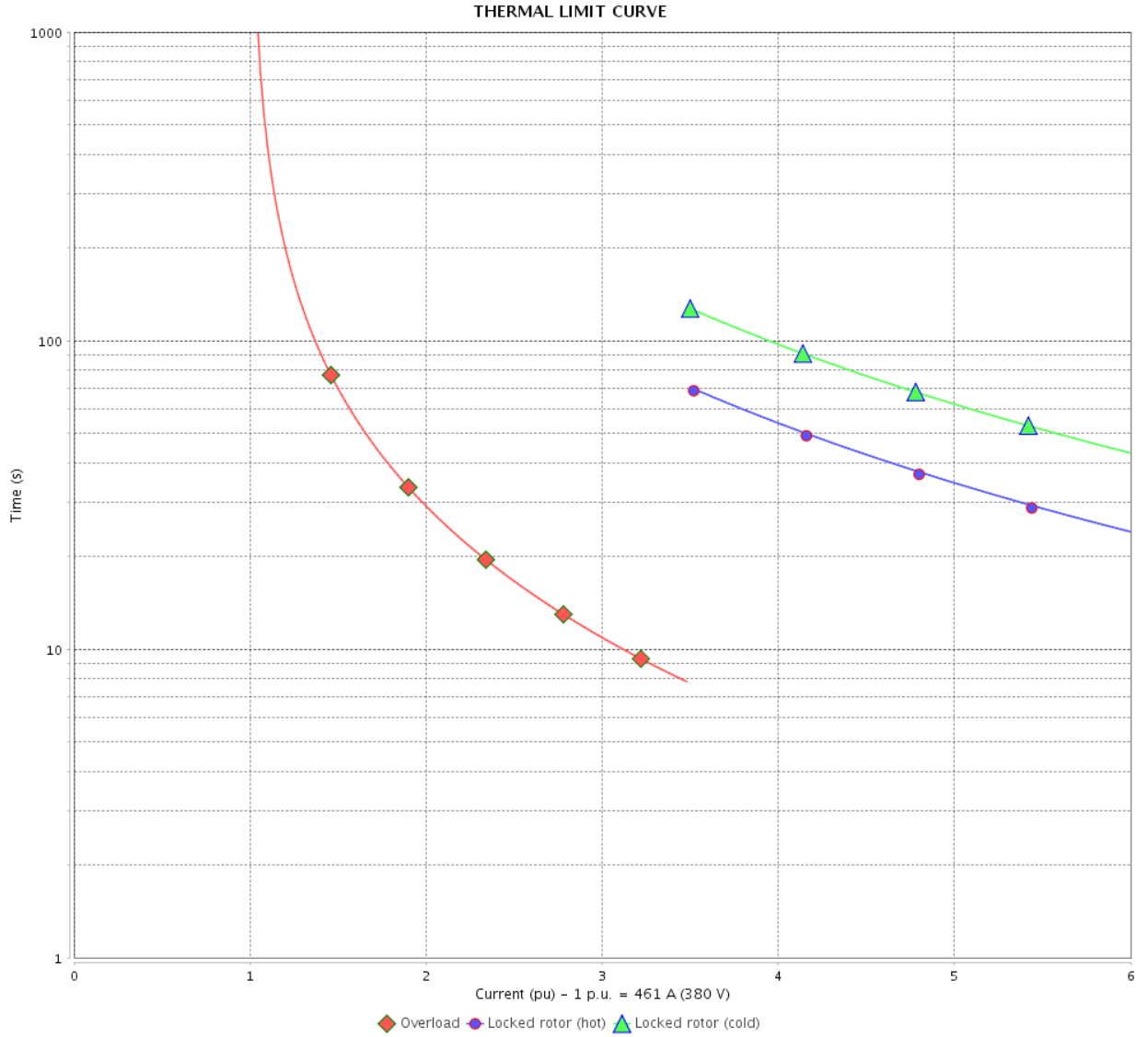
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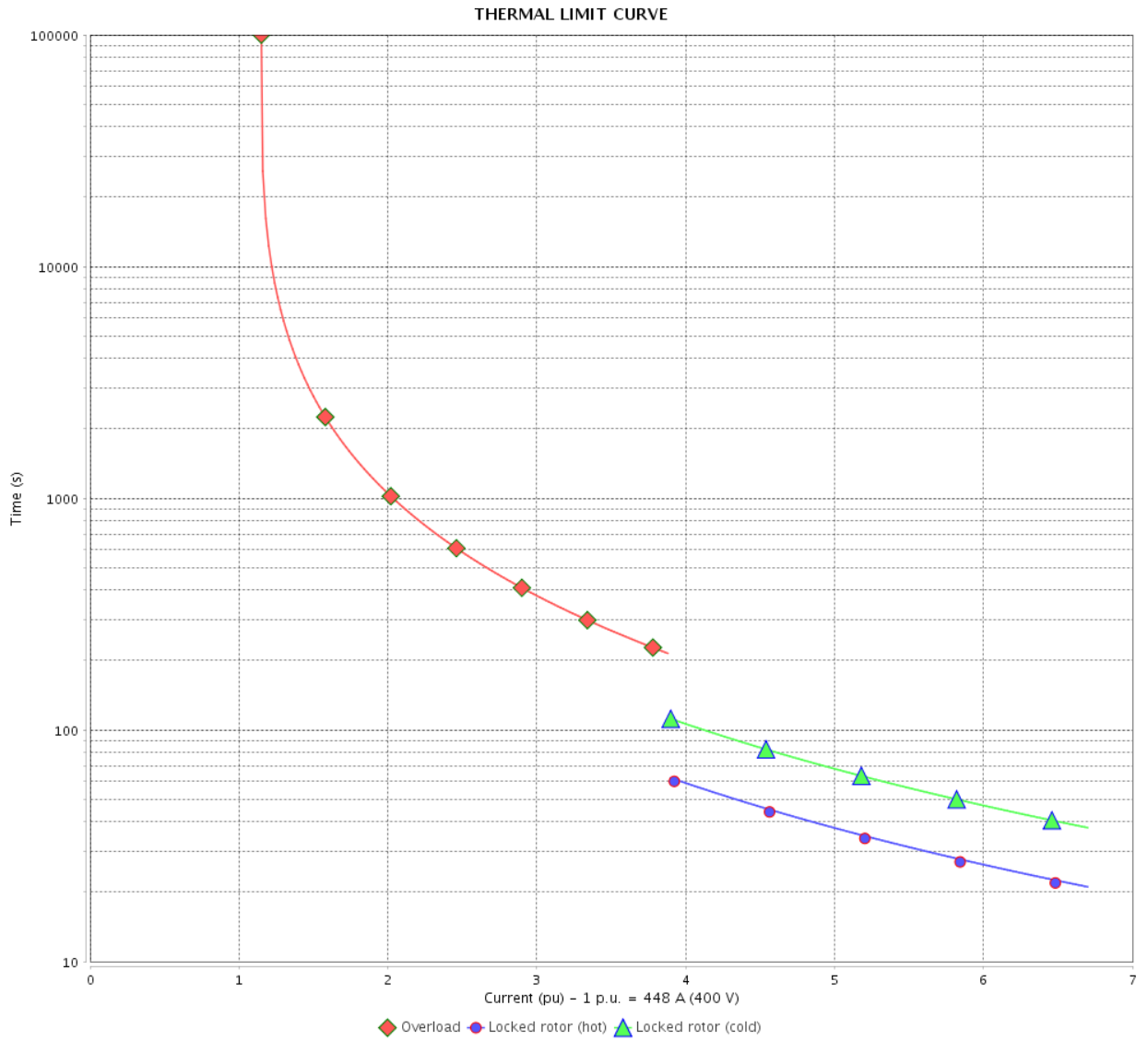
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Customer :

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Product code : 11408910
Catalog # : 40018ET3GRB449T-W22

Performance : 415 V 50 Hz 4P IE3

Rated current	: 437 A	Moment of inertia (J)	: 136 sq.ft.lb
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 1240 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.15
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 1485 rpm	Design	: B

Heating constant

Cooling constant

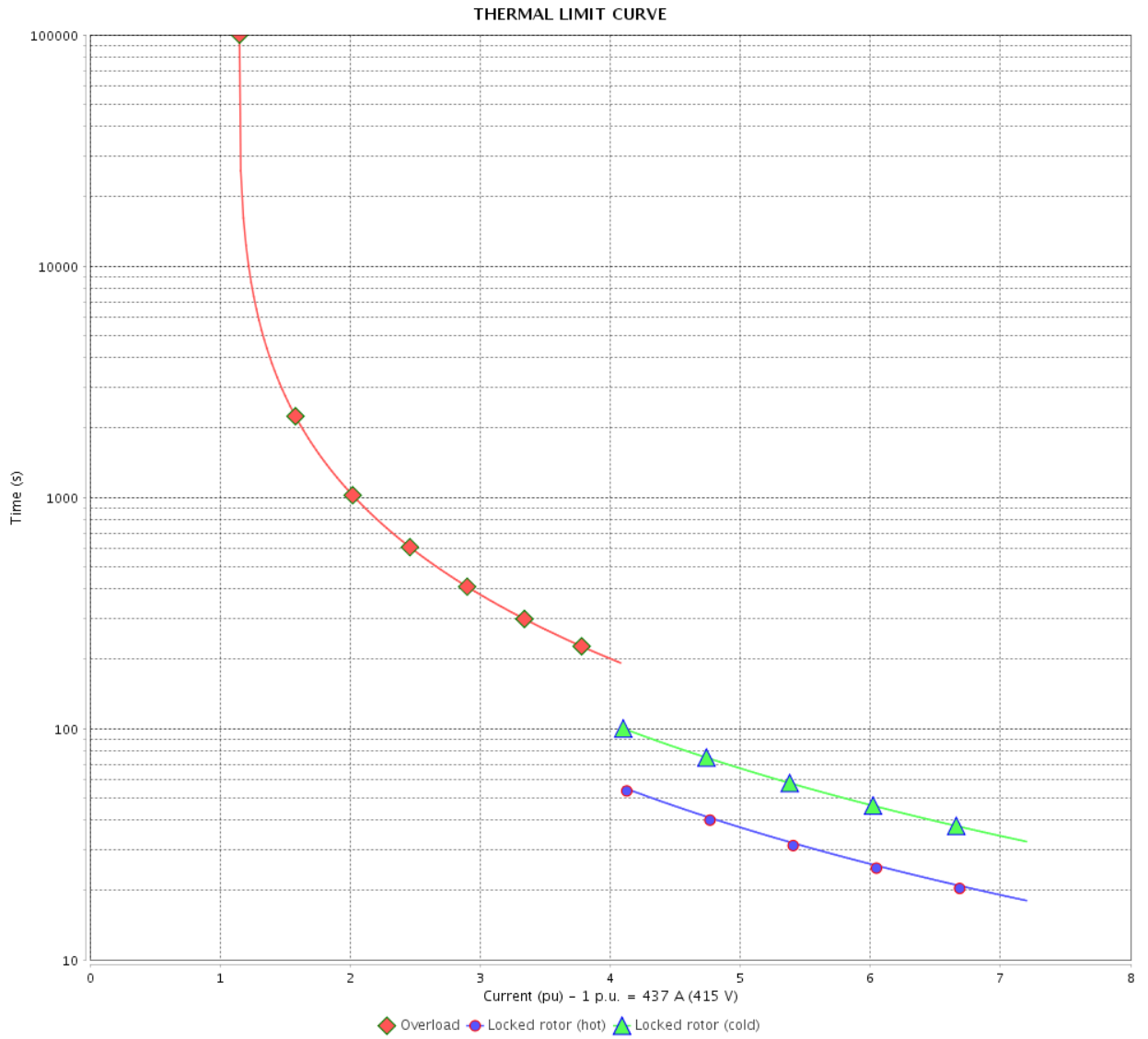
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



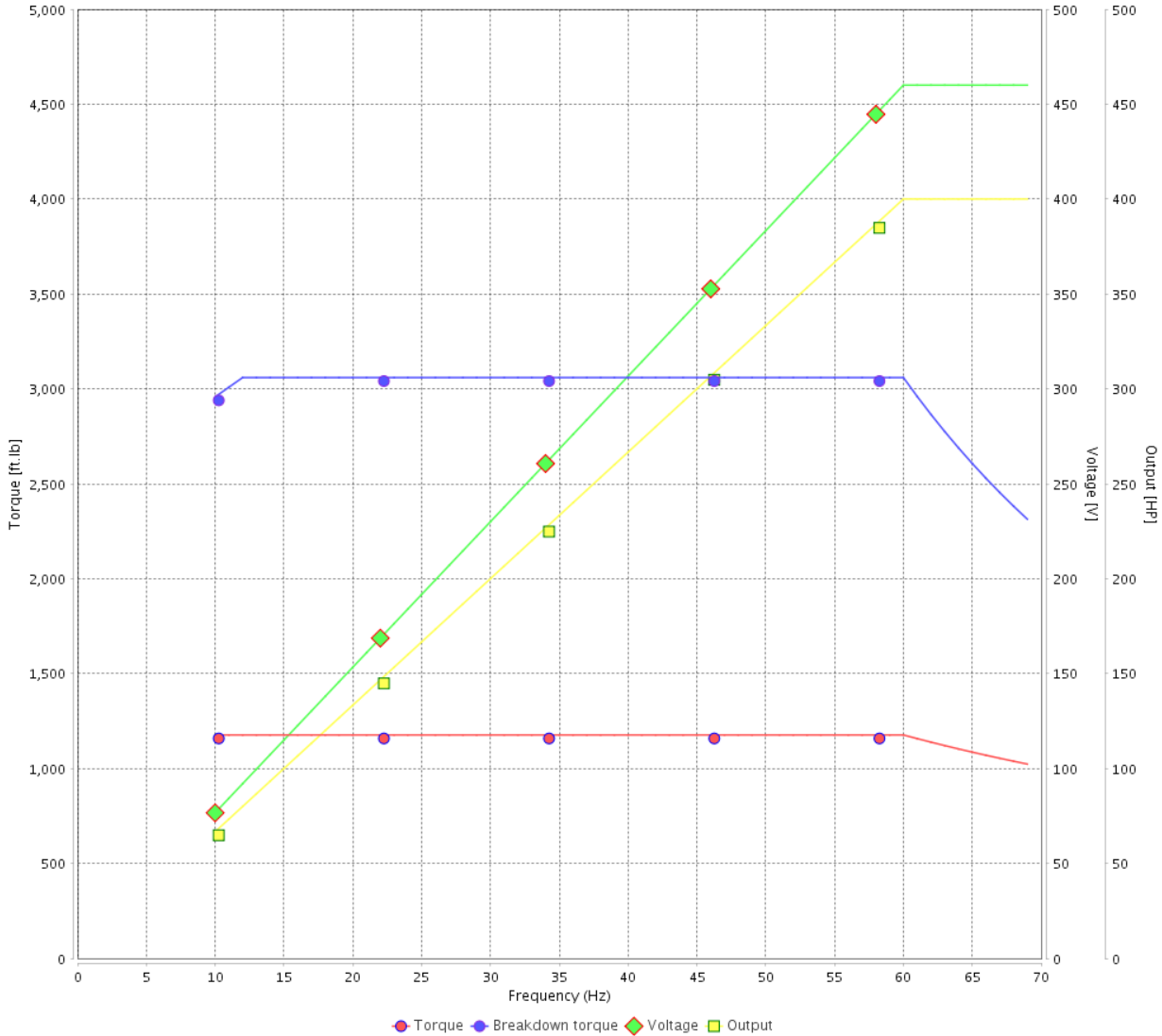
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VFD OPERATION CURVE



Performance : 460 V 60 Hz 4P

Rated current	: 445 A	Moment of inertia (J)	: 136 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 1180 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1785 rpm	Design	: B

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

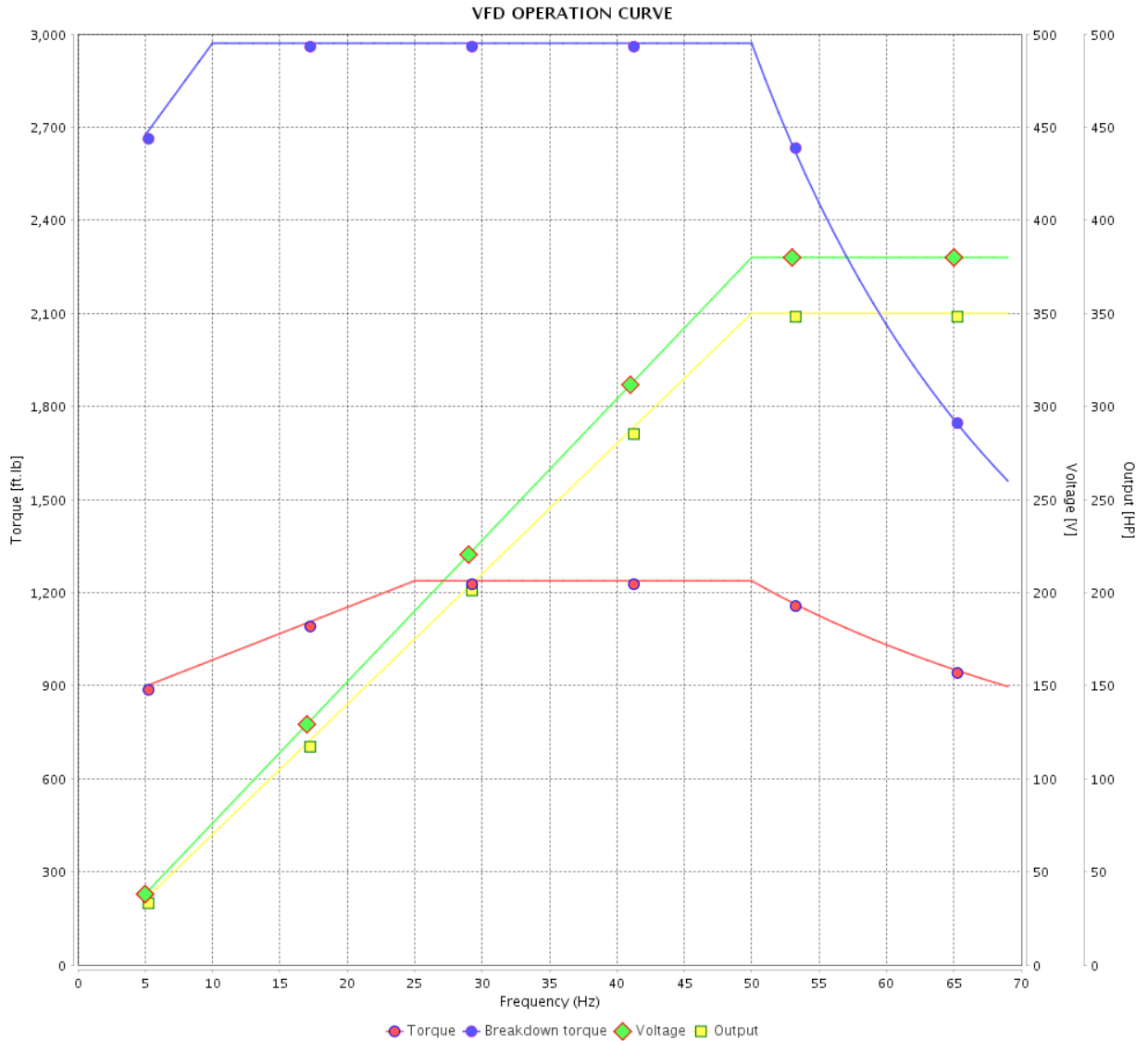


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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 105 K
 Design : B

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VFD OPERATION CURVE

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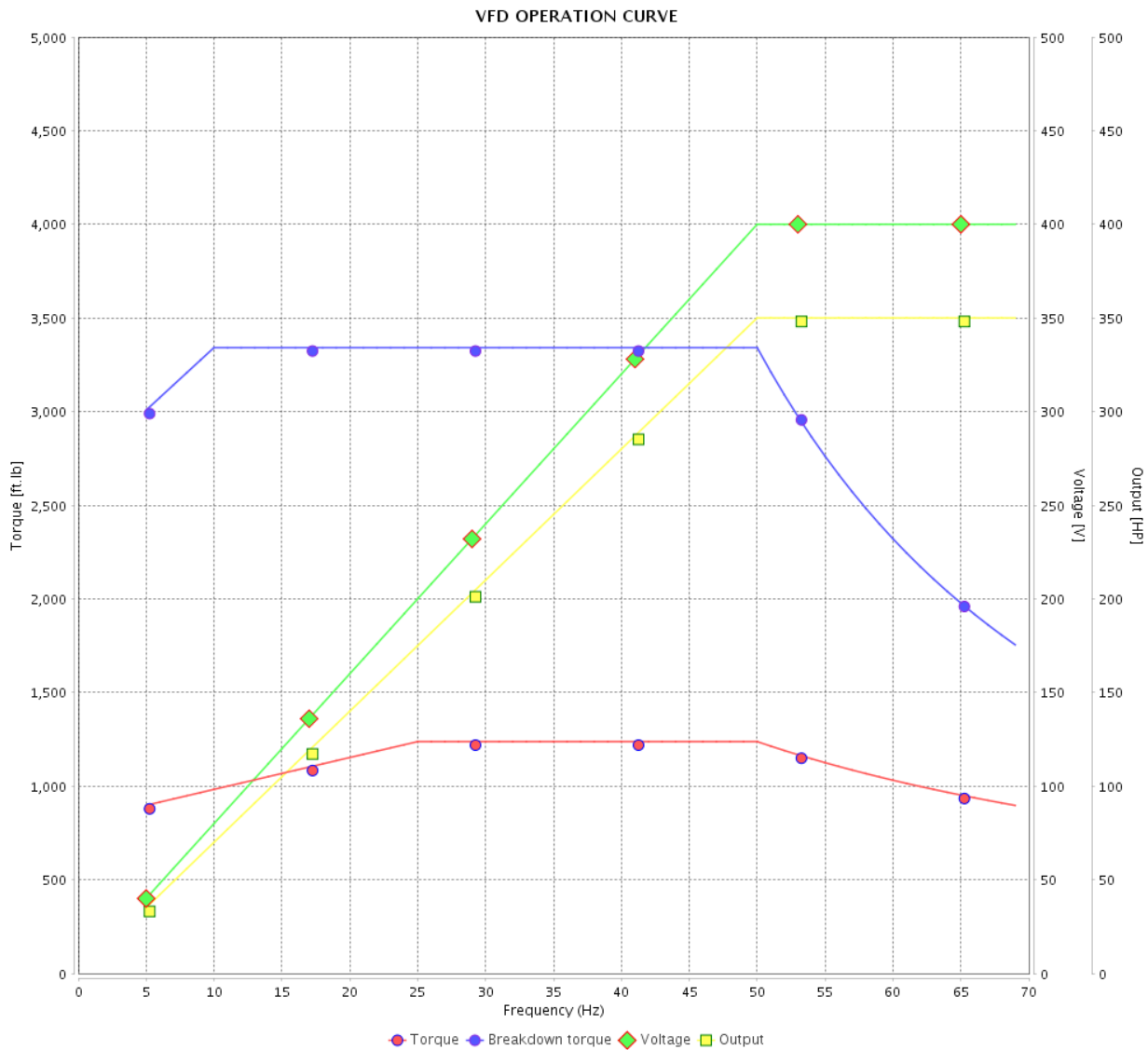


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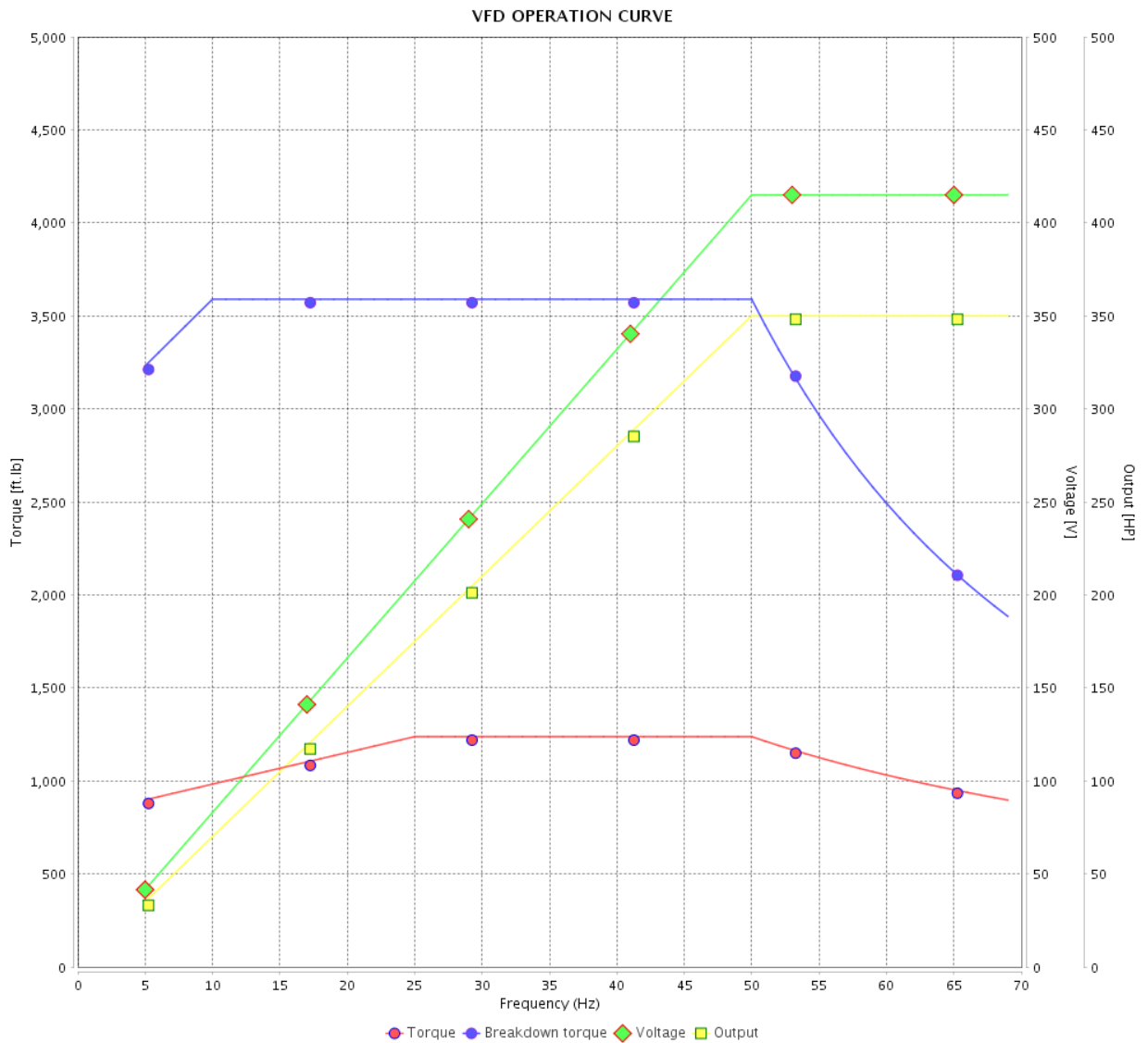
VFD OPERATION CURVE

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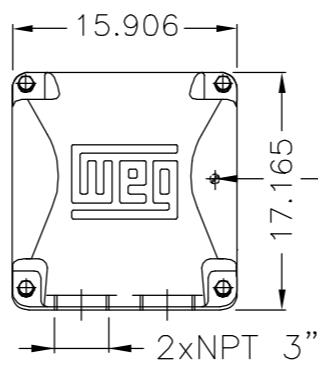
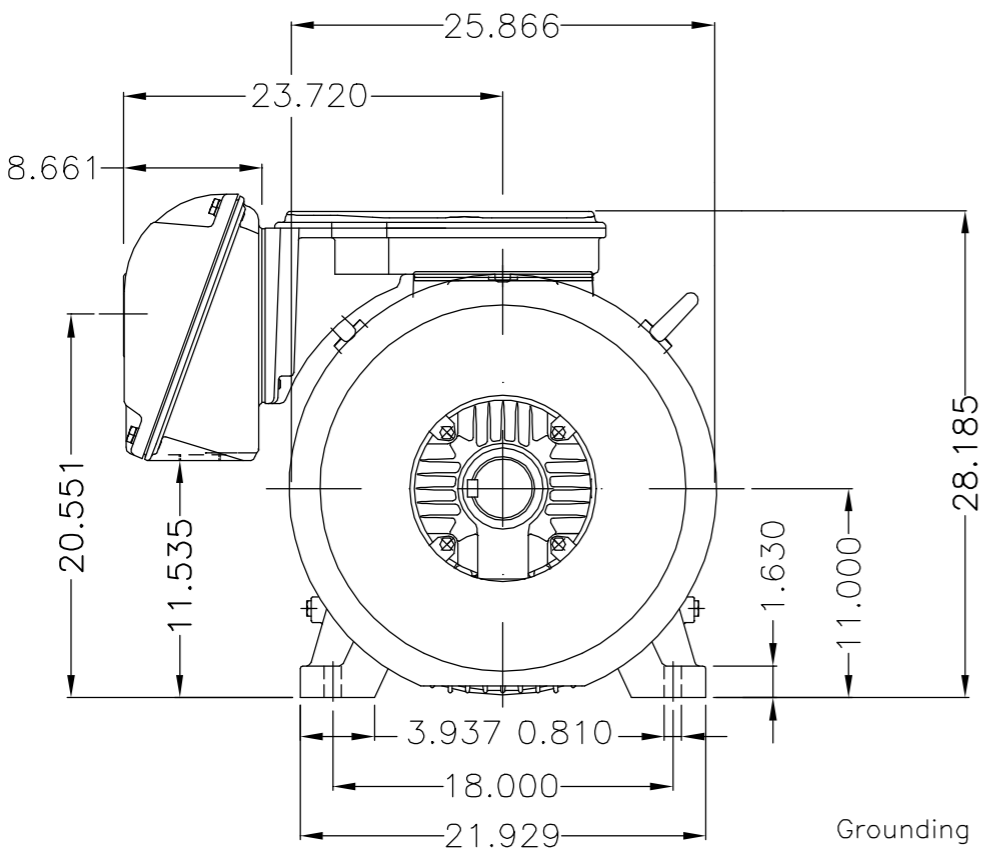
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Date				

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

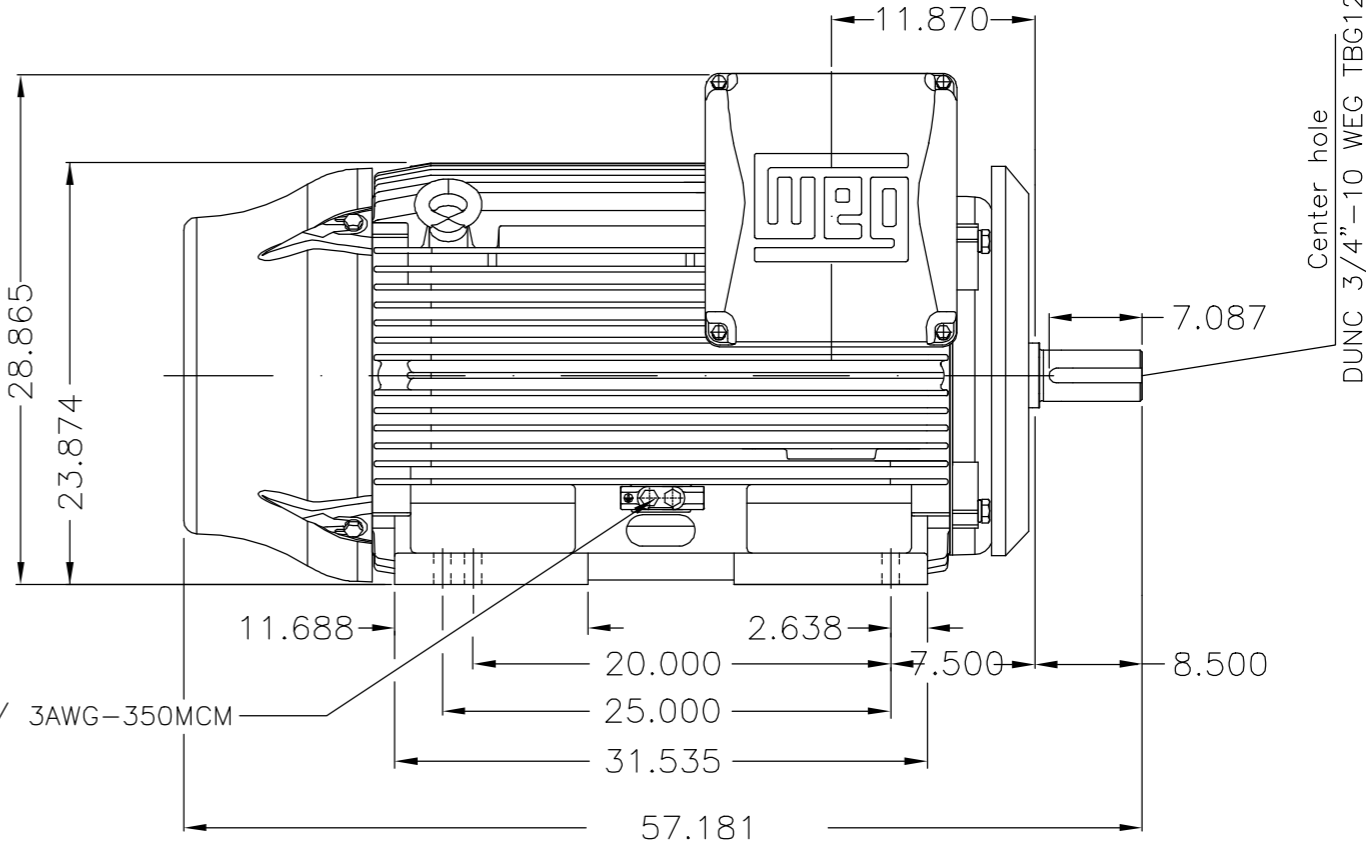
Dimensões em polegada
Dimensions in inches

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

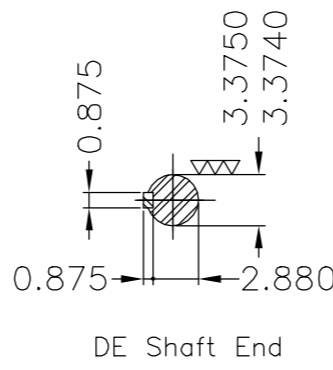
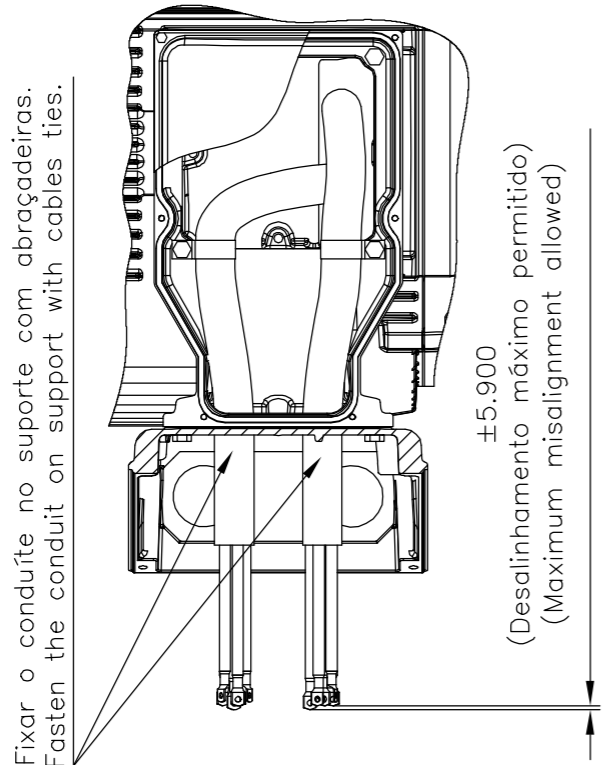
A
B
C
D
E



Main terminal box



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



DE Shaft End

Defletor de ar dianteiro / Drive-End Air Deflector
Rolamento dianteiro de rolos / DE roller bearing
Conduite para cabos no interior do suporte da caixa de ligação
Cables conduit inside terminal box support
Dispositivo de travamento de eixo / Shaft locking device
Linha do motor: Crusher Duty / Motor purpose: Crusher Duty
Tampa traseira com mancal eletricamente isolado
NDE endshield with electrically insulated bearing hub
Cor RAL 5009 / Color RAL 5009
Plano de pintura 203A / Painting plan 203A
Forma construtiva B3D / Mounting B3R(D)

WEG EQUIPAMENTOS ELÉTRICOS S/A

500001731403	ALTERADO CFME CLAIM 417220375	SCATOLIN	DALTONR	DALTONR	28.02.2020	05			
500001473490	ALTERADO CONFORME CLAIM 415116242	PKREYSSIG	CLEBERP	CLEBERP	09.07.2018	04			
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER

350 HP	06 Poles	60Hz	414668751
450 HP	04 Poles	60Hz	414668751
400 HP	04 Poles	60Hz	414668751

C	EXECUTED	GABRIELID		THREE PHASE W22 MOTOR FRAME L447/9T IP55 TEFC	10004946483 000 05
B	CHECKED	JMANENTE			
A	RELEASED	JMANENTE			
REL DT	23.05.2017	WMO	Jaragua do Sul	Product Engineering	SHEET 1 / 1

UNCONTROLLED COPY
RELEASED
ZME A3

MADE IN MEXICO
11408910



FOR SAFE AREA
Mod.TE1BFOXON
CC029A

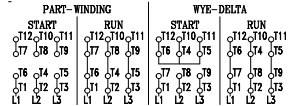




Class I, Div 2, Gr A, B, C and D - T3
Class I, Zone 2, IIC - T3
Class II, Div 2, Gr F and G - T3C
For use on PWM: Gr. A, B, C, D and F,
VT 1000:1, CT 6:1, 1.00SF - T3


MODEL 40018ET3GRB449T-W22

Inverter Duty Motor
Severe Duty

PH3	60Hz	Fr. L447/9T	1000m.a.s.l.	IP55	TEFC	3259lb
V 460				A 445		
HP 400				kW 300		
SF 1.15				SFA 512		
RPM 1785				PF 0.88		
AMB 40°C				INS cl. F DT80K	NEMA NOM EFF 96.2%	
DUTY CONT.				DES B Code G		



-  → NU-322-C3 (60g)
-  → 6319-C3 (45g)

 MOBIL POLYREX EM (4000h)