

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	11975467		
		Catalog # :	35018ET3GRB449T-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	: 3066 lb		
Protection degree	: IP55	Moment of inertia (J)	: 118 sq.ft.lb		
Design	: A				
Output [HP]	350	300	300	300	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	399	405	389	379	
L. R. Amperes [A]	3192	2957	3151	3373	
LRC [A]	8.0x(Code J)	7.3x(Code H)	8.1x(Code J)	8.9x(Code K)	
No load current [A]	135	135	143	151	
Rated speed [RPM]	1785	1483	1485	1487	
Slip [%]	0.83	1.13	1.00	0.87	
Rated torque [ft.lb]	1030	1060	1060	1060	
Locked rotor torque [%]	280	260	290	310	
Breakdown torque [%]	280	260	290	310	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	105 K	105 K	80 K	
Locked rotor time	25s (cold) 14s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (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	95.9	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%	0.48	0.49	0.45	0.43
	50%	0.73	0.73	0.70	0.68
	75%	0.82	0.82	0.80	0.79
	100%	0.85	0.86	0.85	0.84
Bearing type	: <u>Drive end</u> NU-322 C3	<u>Non drive end</u> 6319 C3	Foundation loads		
Sealing	: WSeal	WSeal	Max. traction	: 7223 lb	
Lubrication interval	: 4000 h	8000 h	Max. compression	: 10288 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



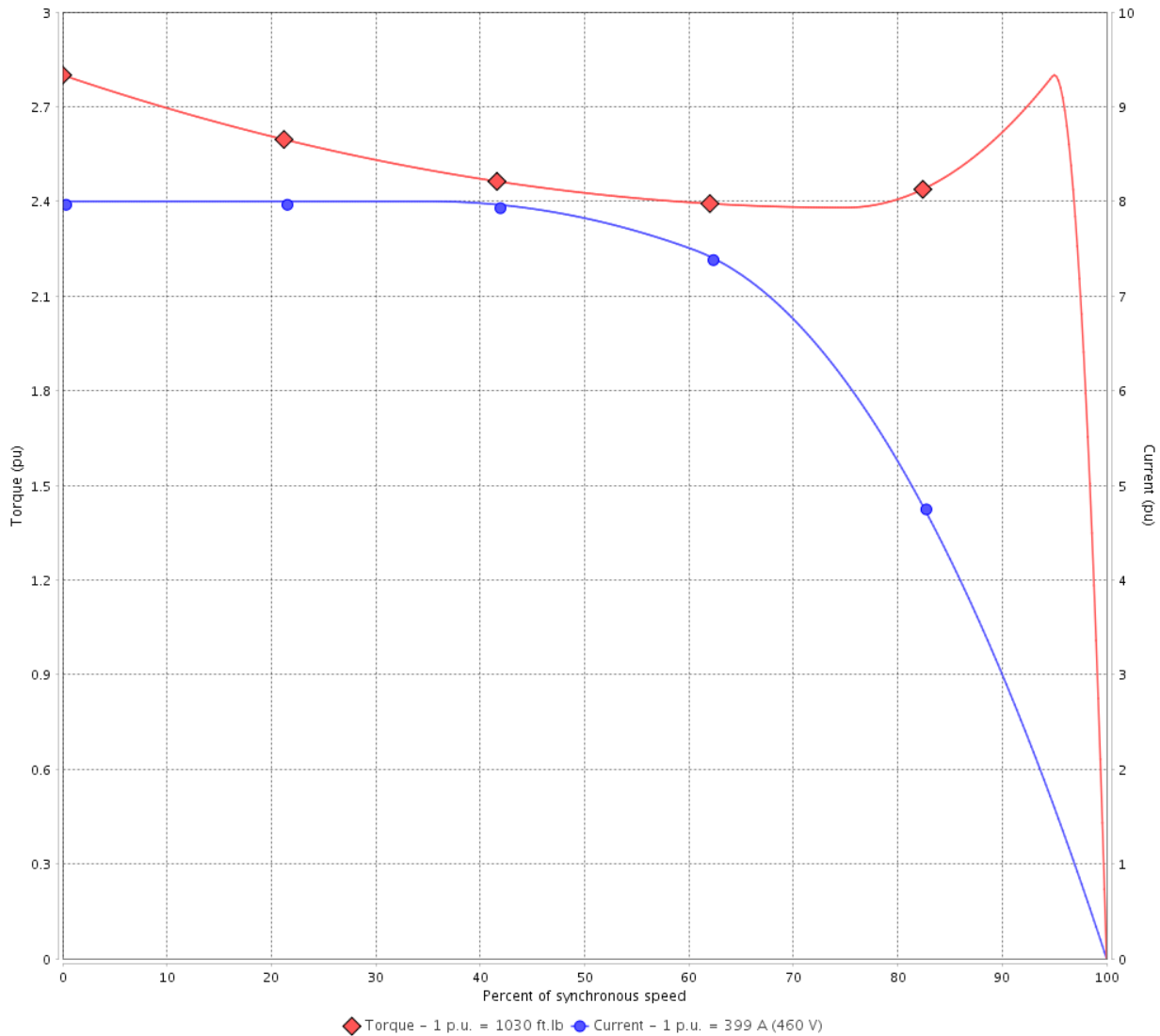
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11975467

Catalog # : 35018ET3GRB449T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 4P

Rated current	: 399 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 1030 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1785 rpm	Design	: A

Locked rotor time : 25s (cold) 14s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



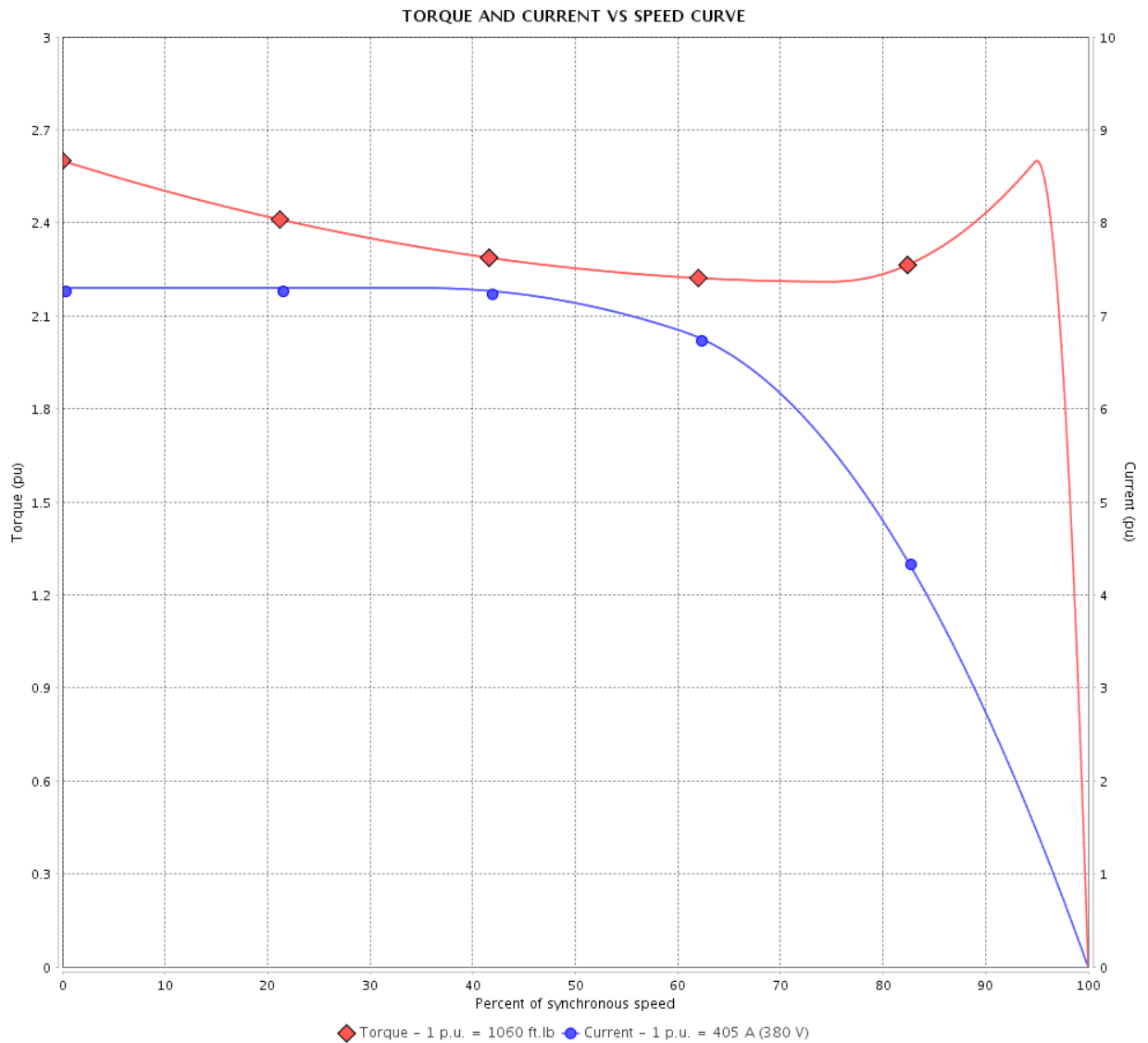
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11975467

Catalog # : 35018ET3GRB449T-W22



Performance : 380 V 50 Hz 4P IE3

Rated current	: 405 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 7.3	Duty cycle	: Cont.(S1)
Rated torque	: 1060 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 105 K
Rated speed	: 1483 rpm	Design	: A

Locked rotor time : 21s (cold) 12s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



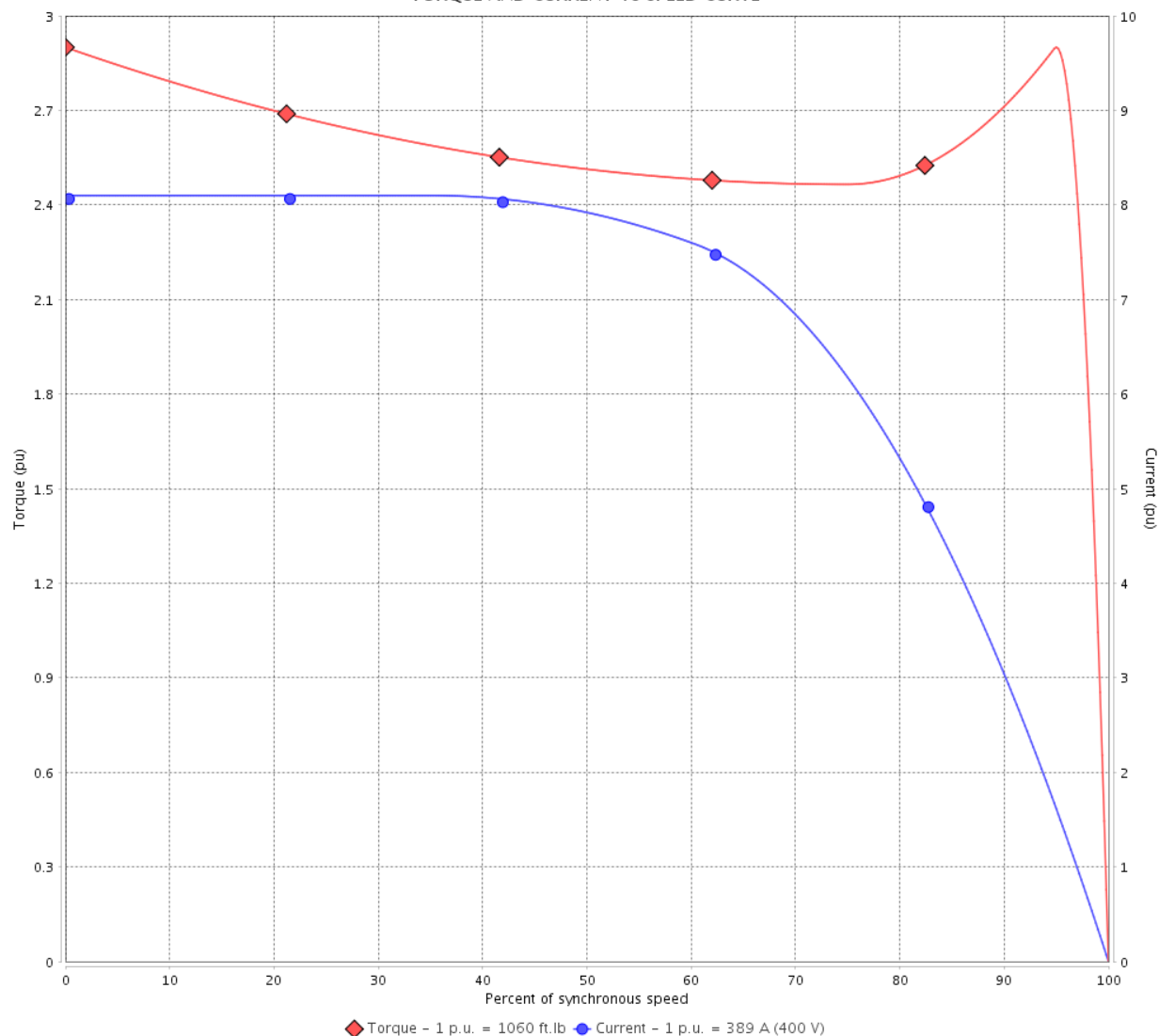
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11975467

Catalog # : 35018ET3GRB449T-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current	: 389 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 8.1	Duty cycle	: Cont.(S1)
Rated torque	: 1060 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 105 K
Rated speed	: 1485 rpm	Design	: A

Locked rotor time : 21s (cold) 12s (hot)

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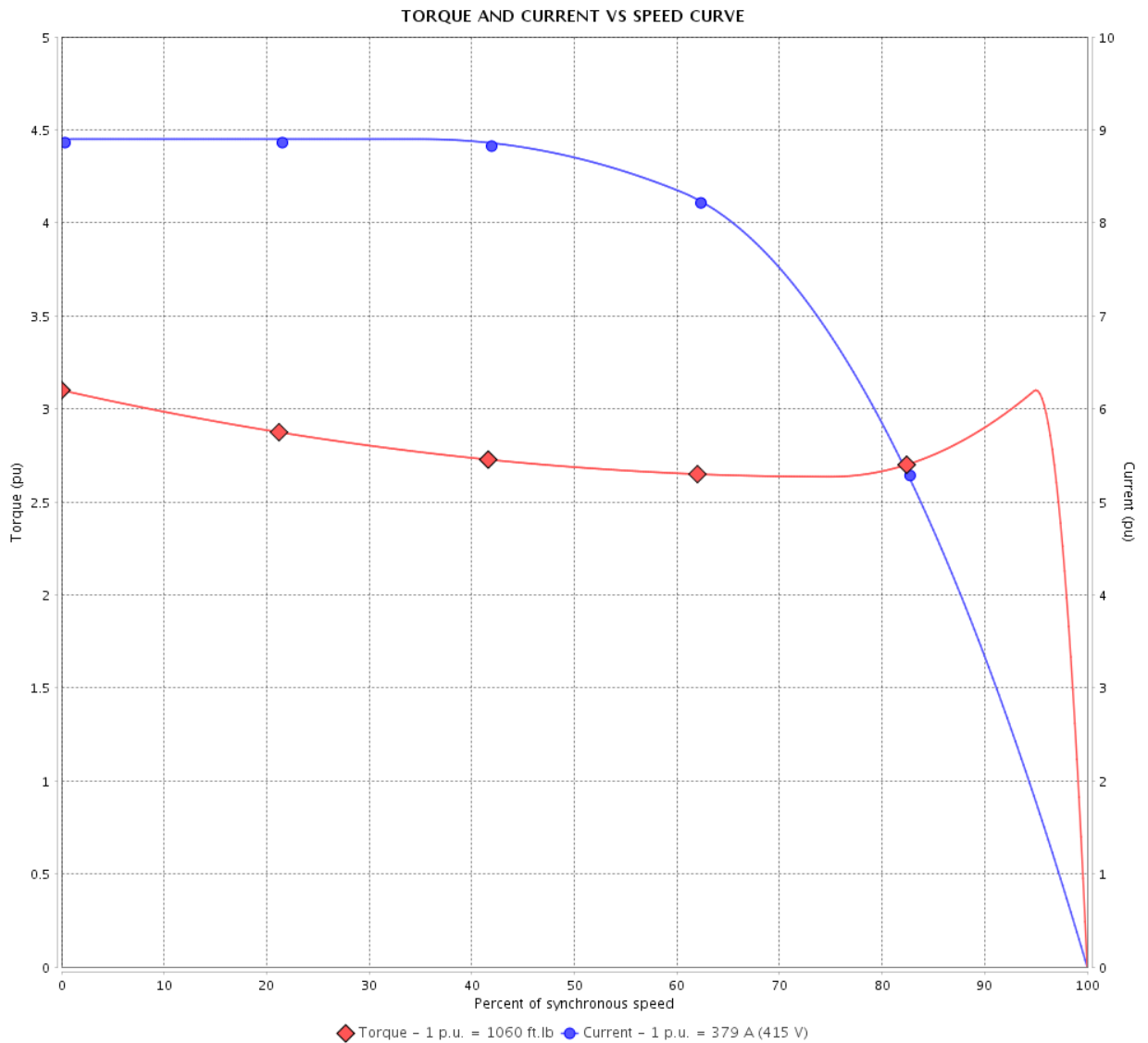
TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

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 Product code : 11975467
 Catalog # : 35018ET3GRB449T-W22



Performance : 415 V 50 Hz 4P IE3

Rated current	: 379 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 8.9	Duty cycle	: Cont.(S1)
Rated torque	: 1060 ft.lb	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1487 rpm	Design	: A

Locked rotor time : 21s (cold) 12s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

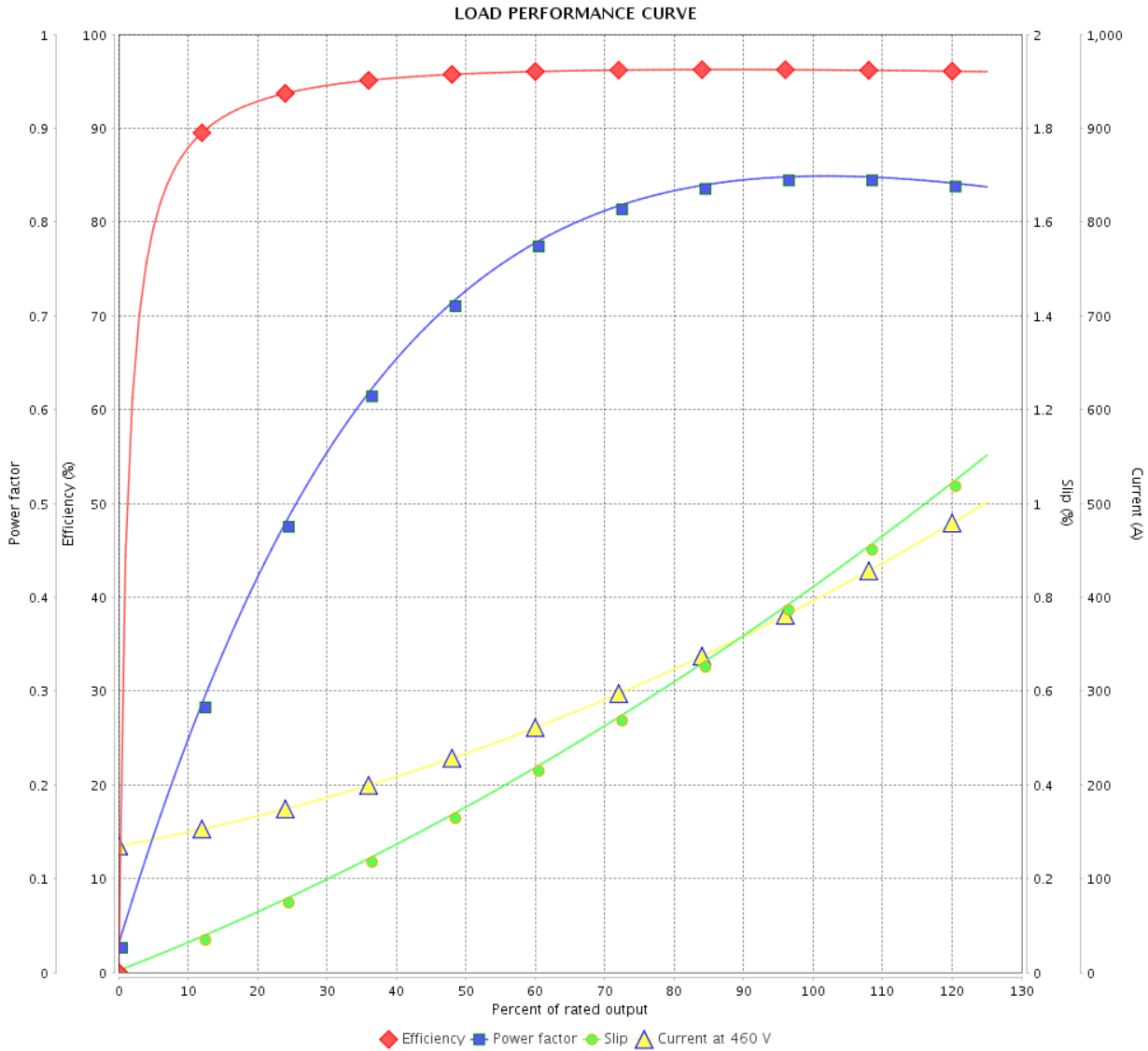


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Performance : 460 V 60 Hz 4P

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LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 1030 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1785 rpm	Design	: A

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Three Phase Induction Motor - Squirrel Cage

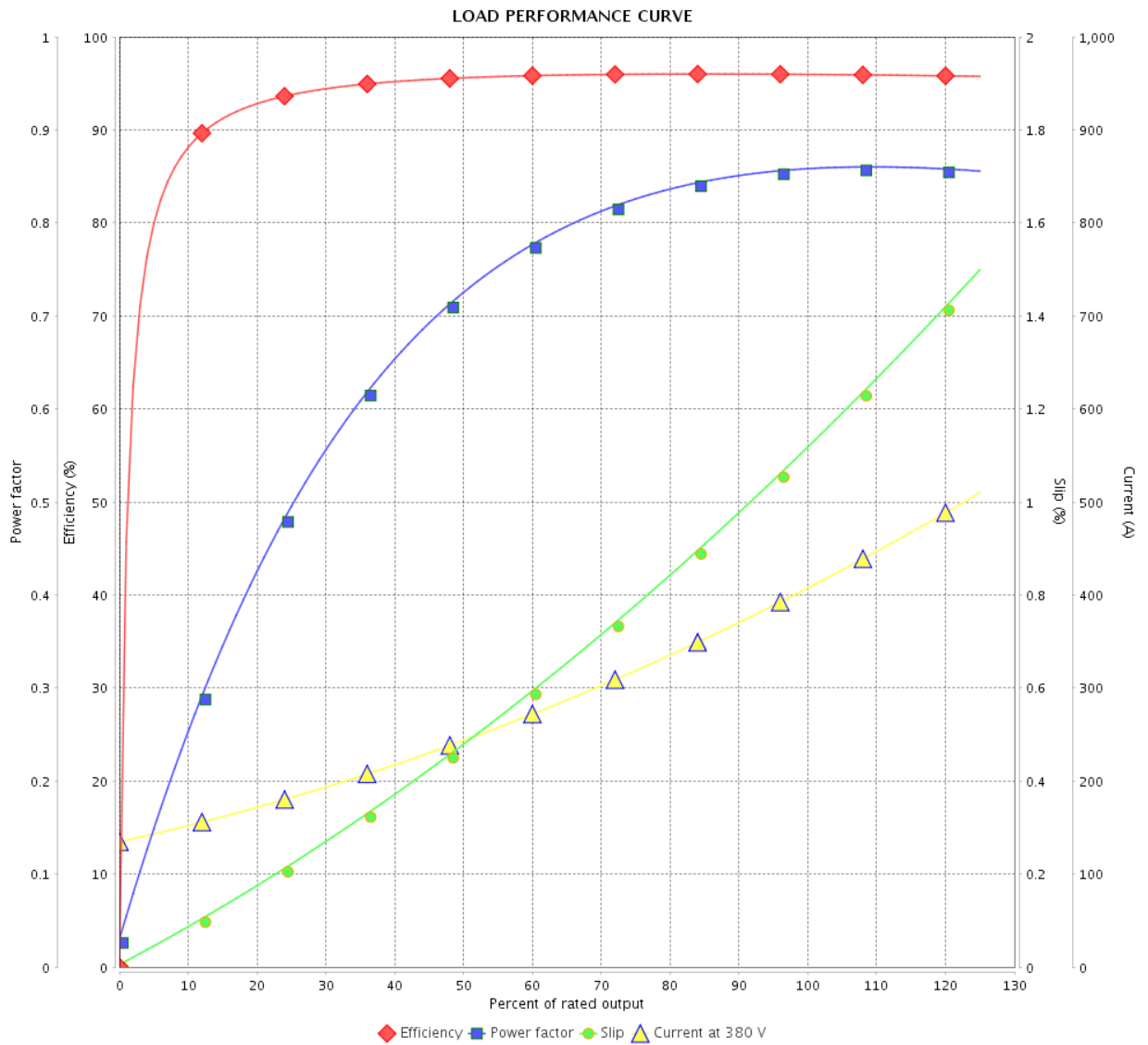


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Catalog # : 35018ET3GRB449T-W22



Performance : 380 V 50 Hz 4P IE3

Rated current : 405 A
 LRC : 7.3
 Rated torque : 1060 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 260 %
 Rated speed : 1483 rpm

Moment of inertia (J) : 118 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : A

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Three Phase Induction Motor - Squirrel Cage

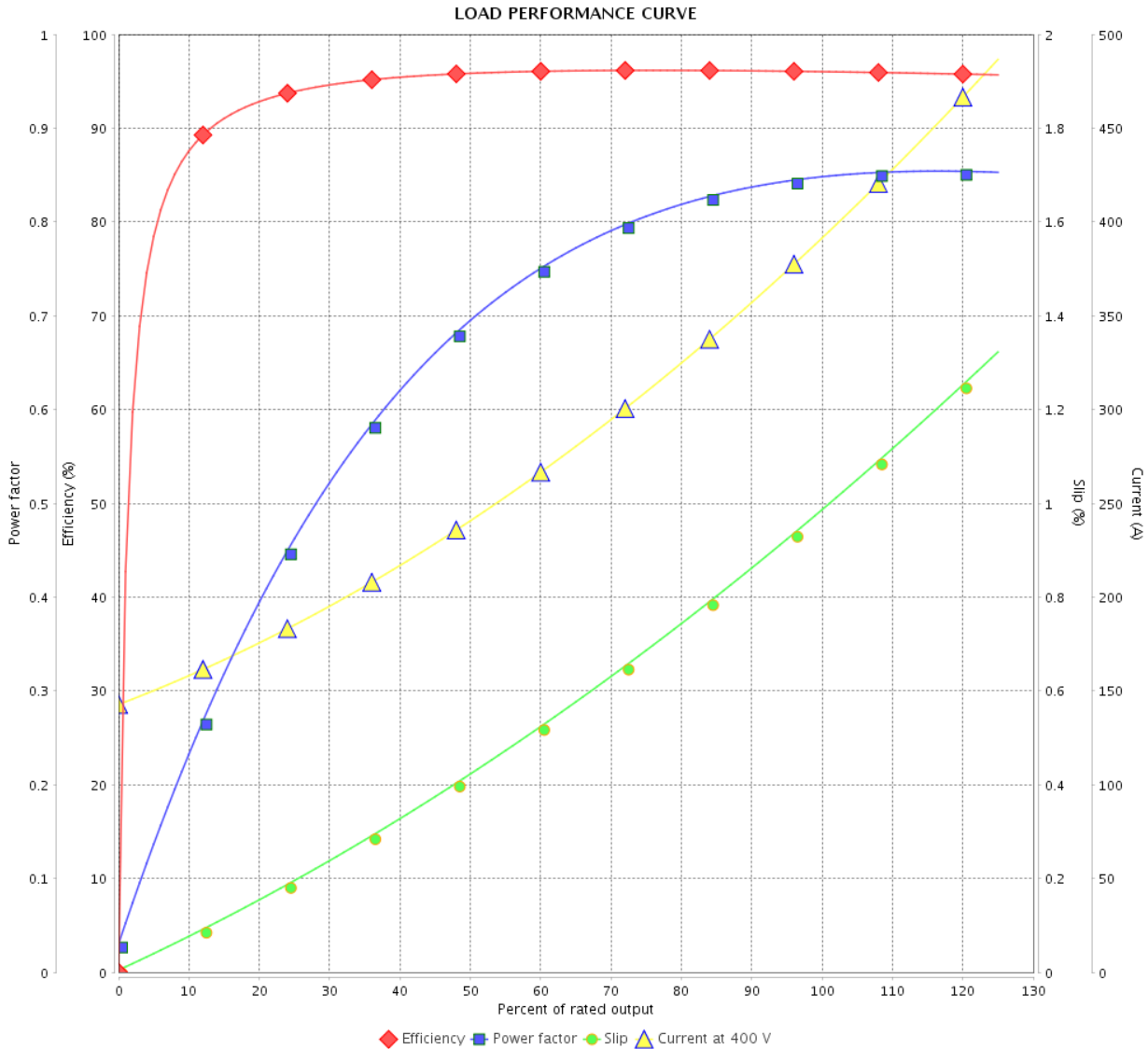


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Breakdown torque	: 290 %	Temperature rise	: 105 K
Rated speed	: 1485 rpm	Design	: A

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

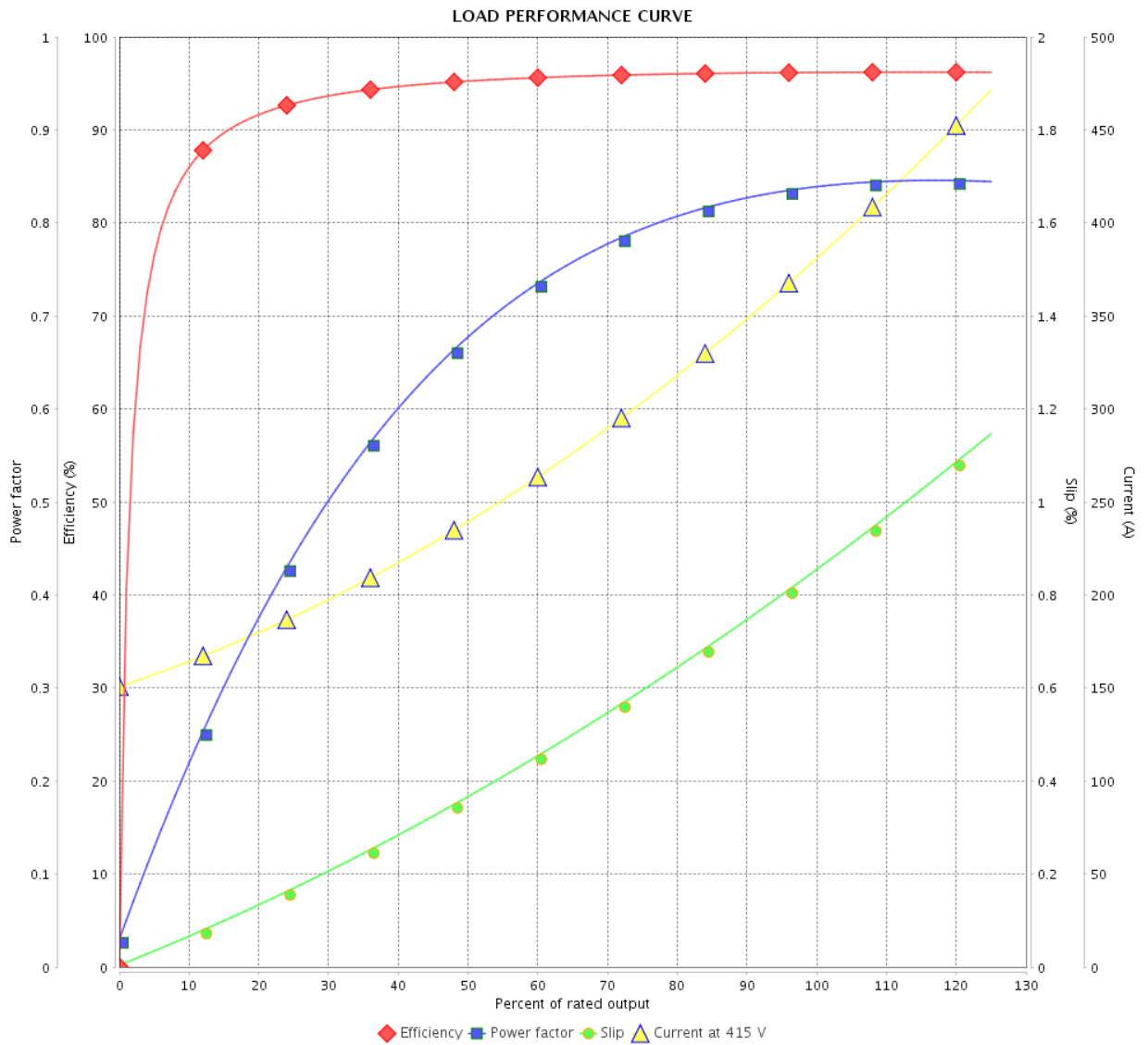


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 Rated speed : 1487 rpm

Moment of inertia (J) : 118 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : A

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THERMAL LIMIT CURVE

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Rated speed	: 1785 rpm	Design	: A

Heating constant

Cooling constant

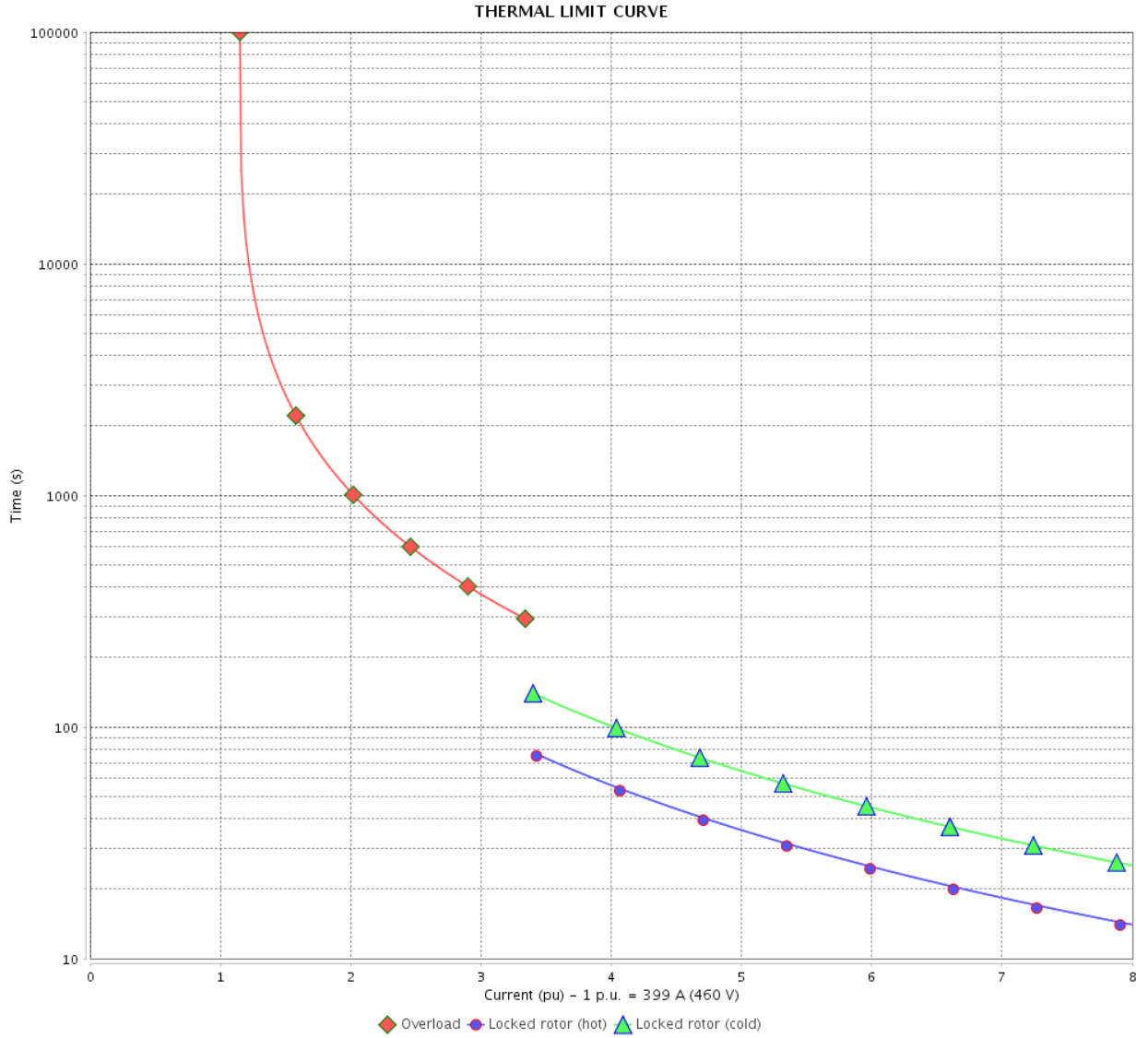
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THERMAL LIMIT CURVE

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Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 105 K
Rated speed	: 1483 rpm	Design	: A

Heating constant

Cooling constant

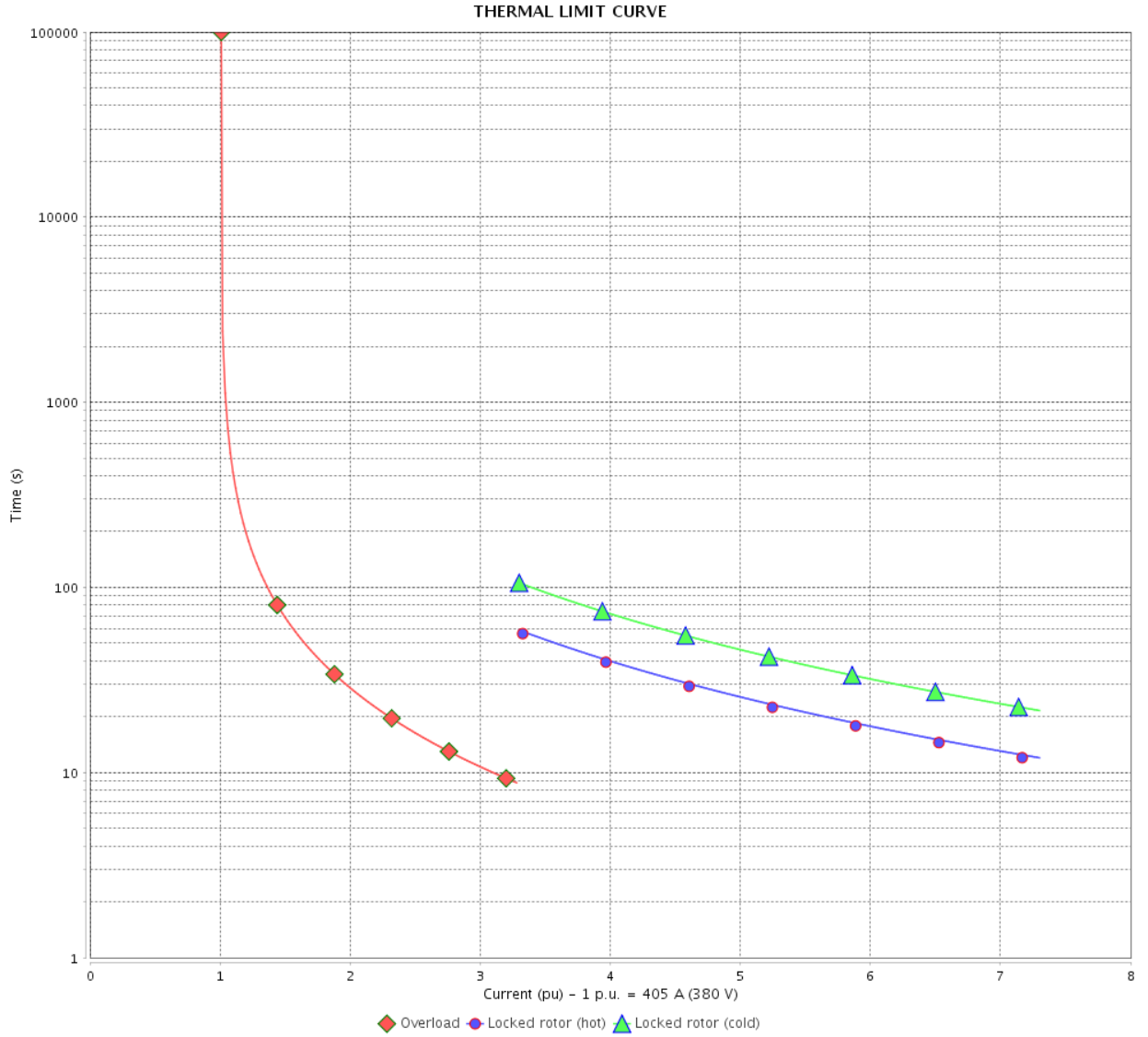
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Locked rotor torque	: 290 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 105 K
Rated speed	: 1485 rpm	Design	: A

Heating constant

Cooling constant

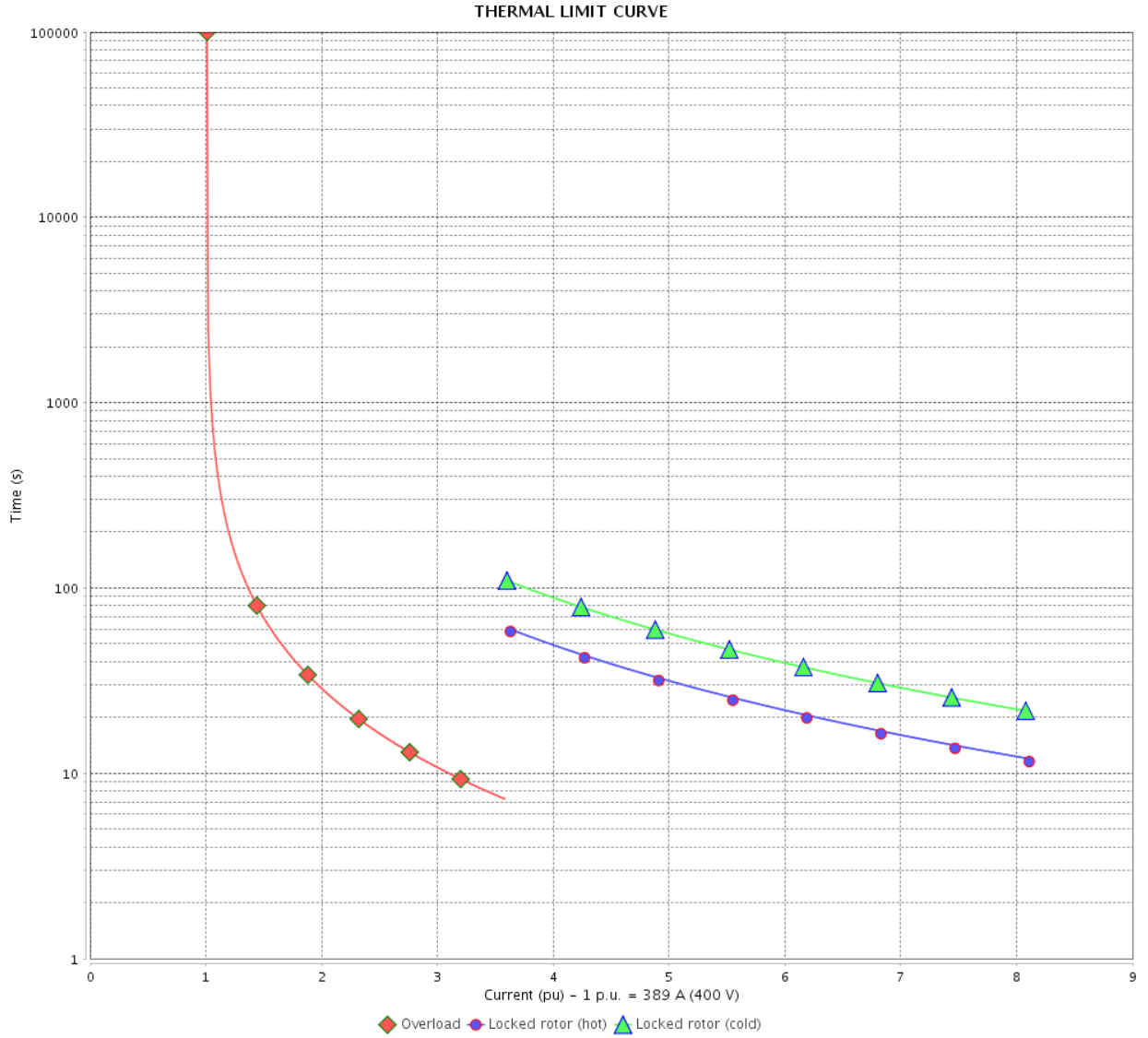
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THERMAL LIMIT CURVE



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Performance : 415 V 50 Hz 4P IE3

Rated current	: 379 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 8.9	Duty cycle	: Cont.(S1)
Rated torque	: 1060 ft.lb	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1487 rpm	Design	: A

Heating constant

Cooling constant

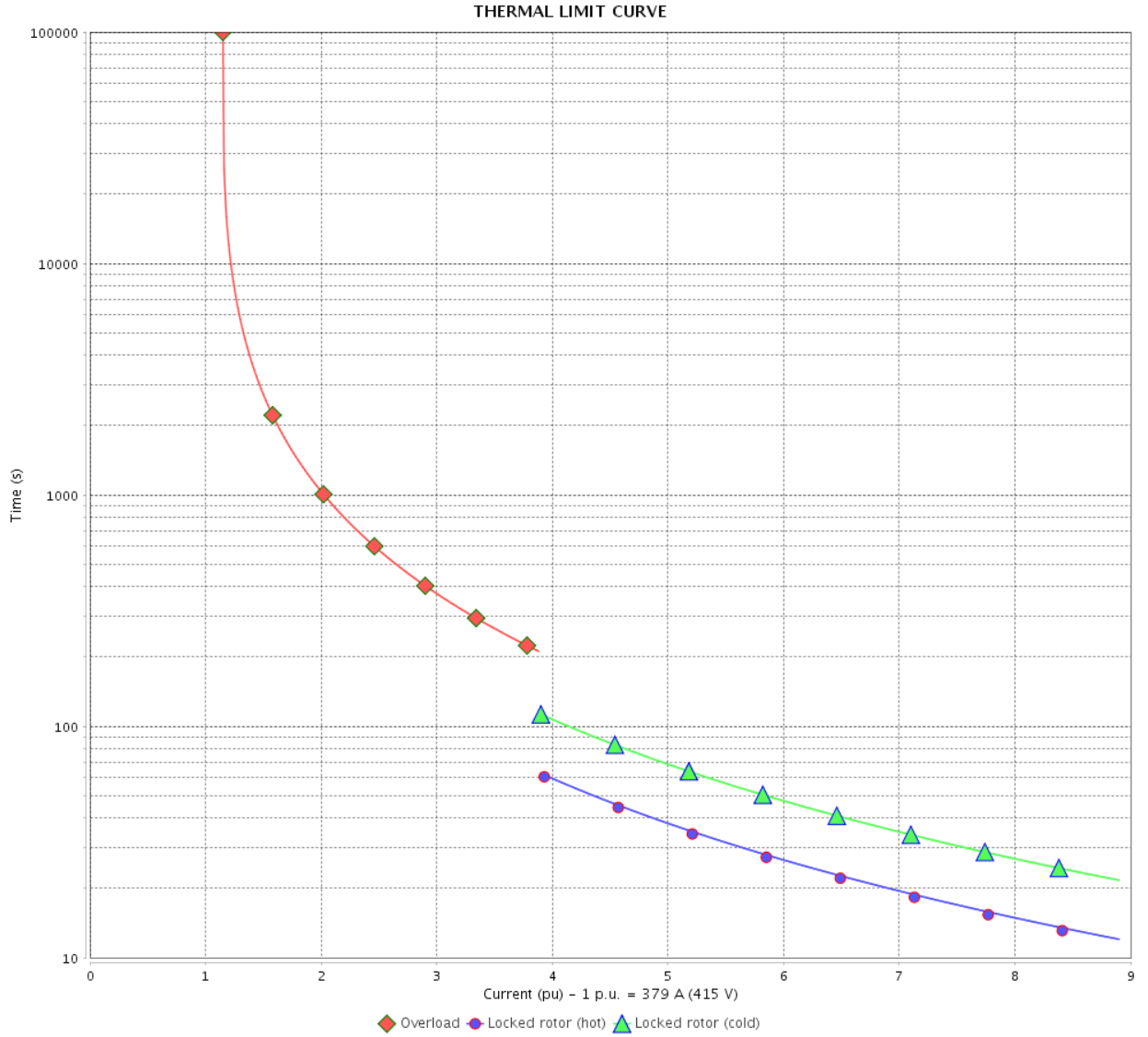
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

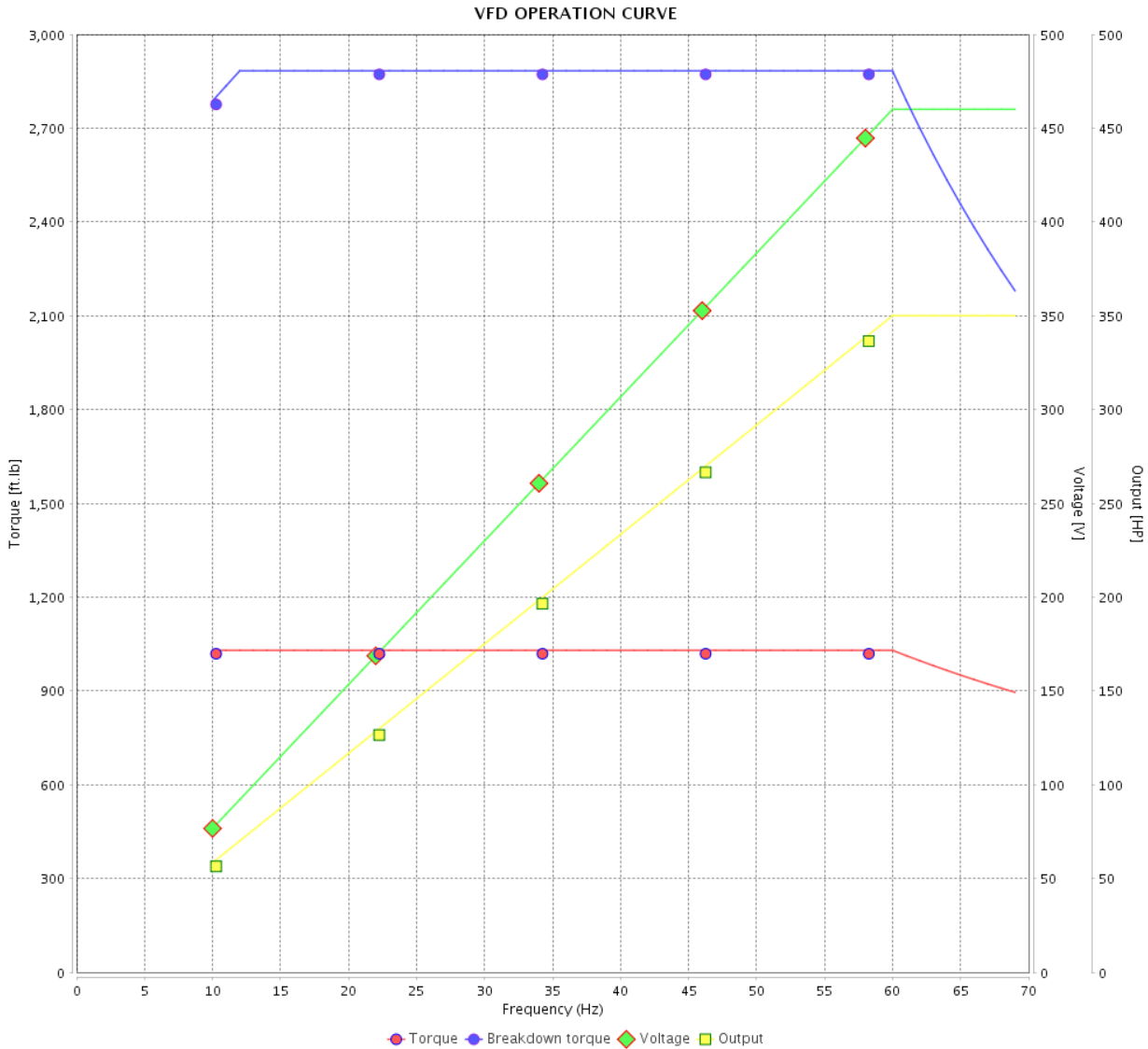


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Performance : 460 V 60 Hz 4P

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LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 1030 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1785 rpm	Design	: A

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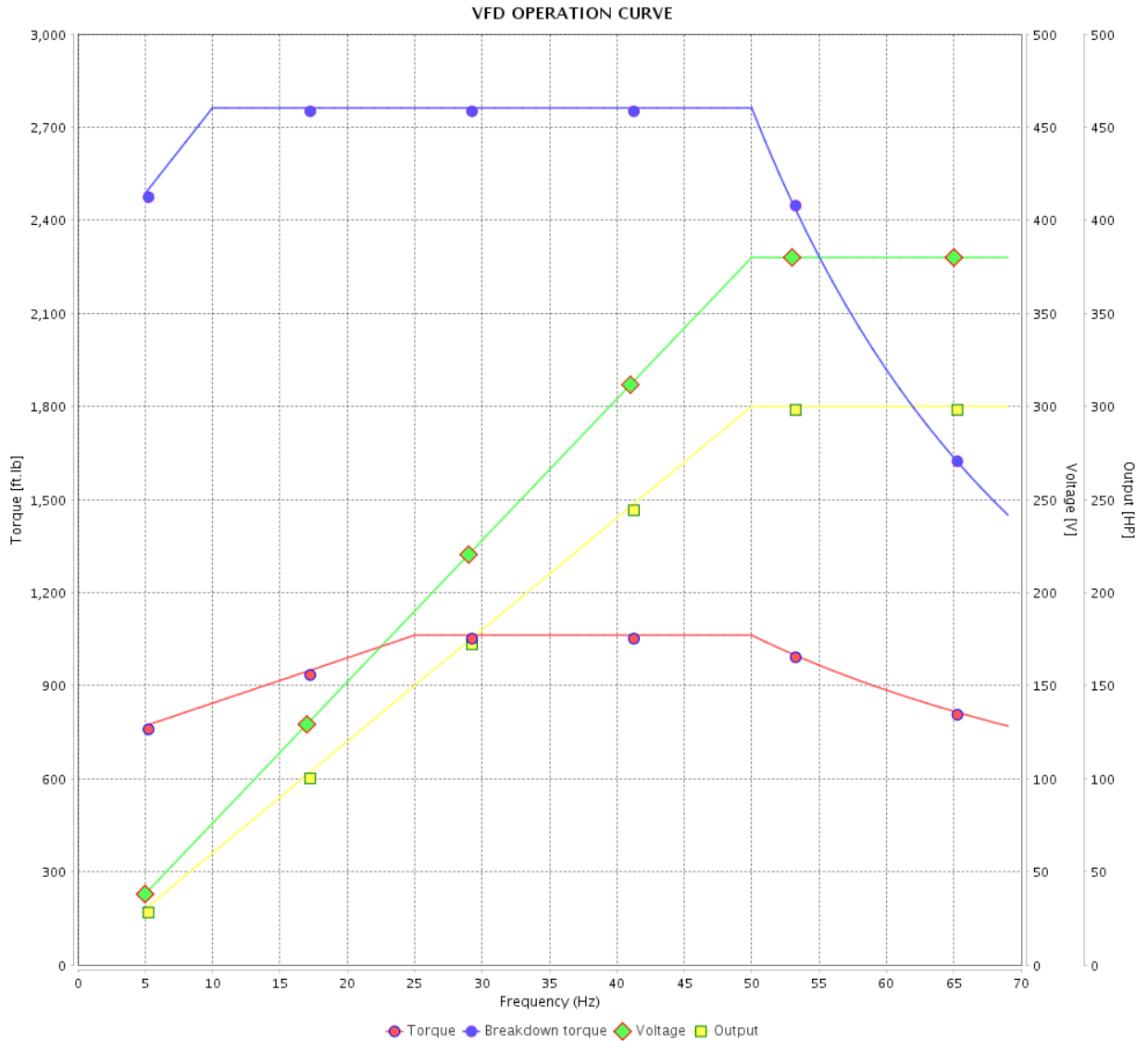
VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 380 V 50 Hz 4P IE3

Rated current	: 405 A	Moment of inertia (J)	: 118 sq.ft.lb
LRC	: 7.3	Duty cycle	: Cont.(S1)
Rated torque	: 1060 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 105 K
Rated speed	: 1483 rpm	Design	: A

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



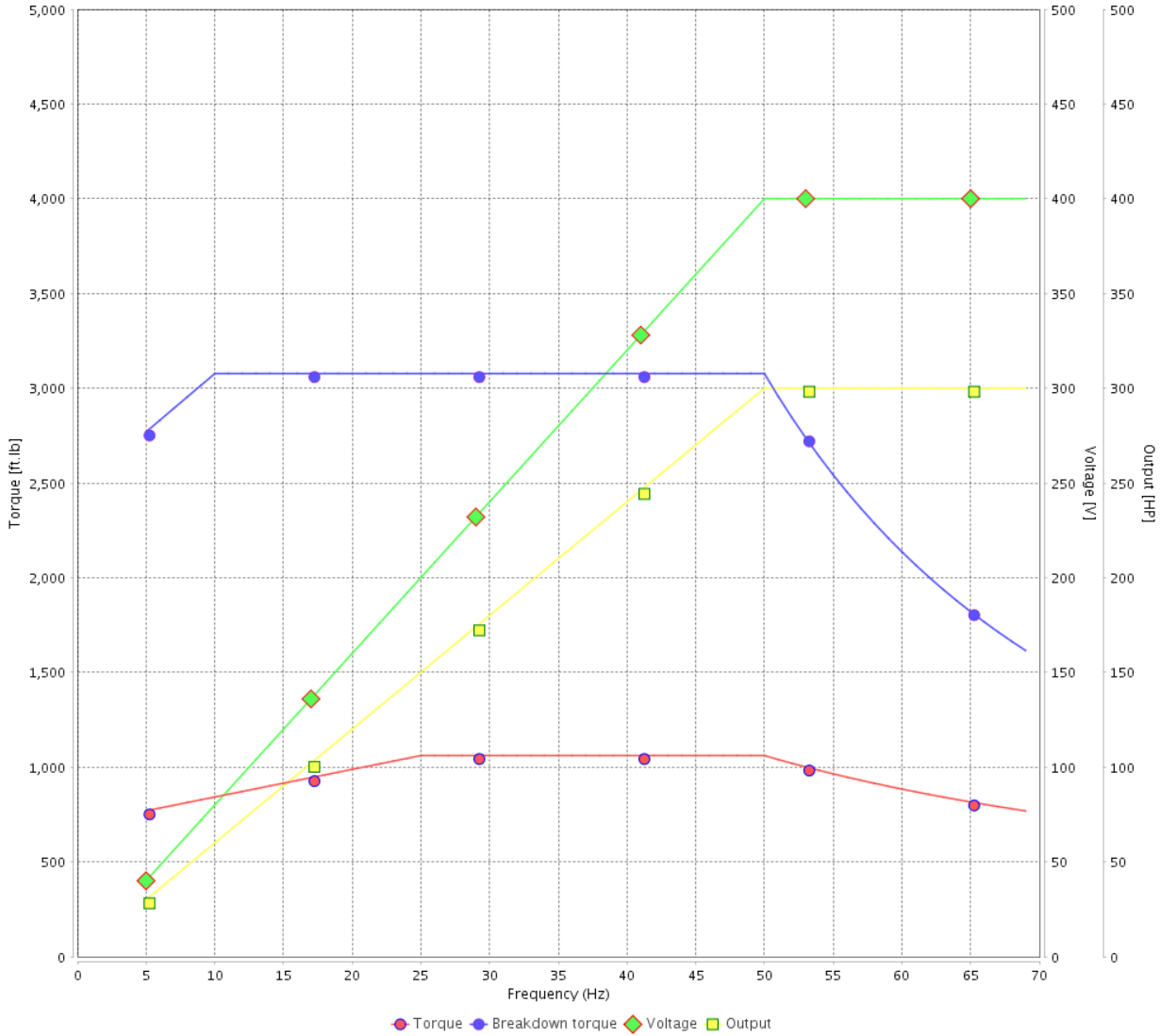
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VFD OPERATION CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current : 389 A
 LRC : 8.1
 Rated torque : 1060 ft.lb
 Locked rotor torque : 290 %
 Breakdown torque : 290 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 118 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : A

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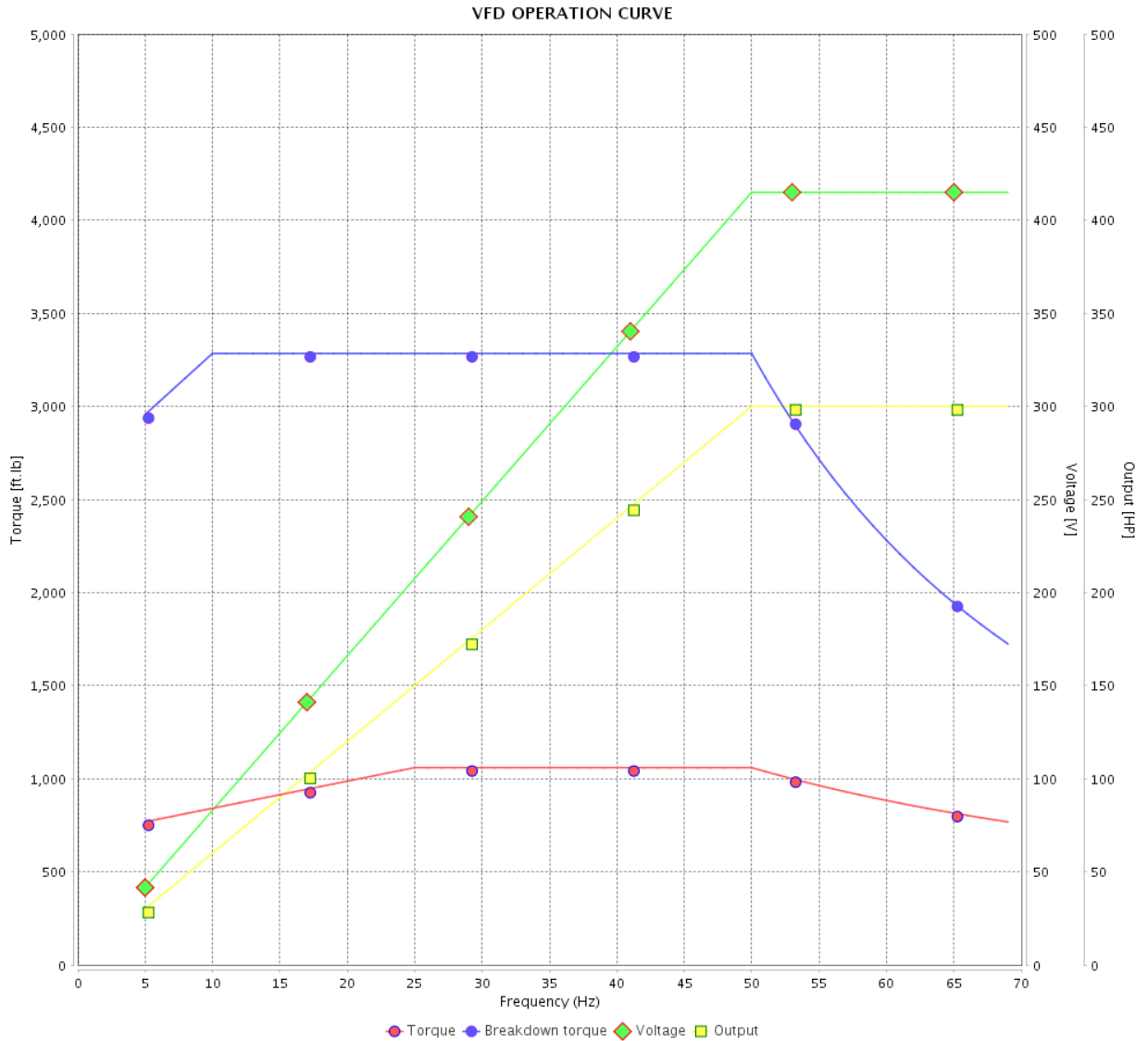
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 Locked rotor torque : 310 %
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 Rated speed : 1487 rpm

Moment of inertia (J) : 118 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : A

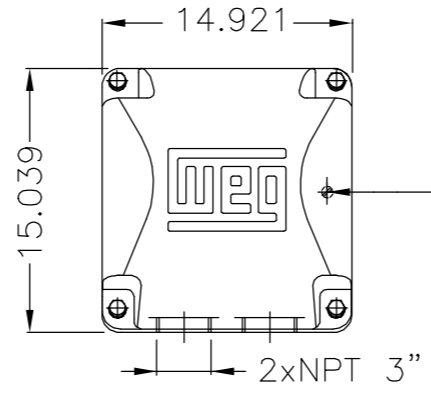
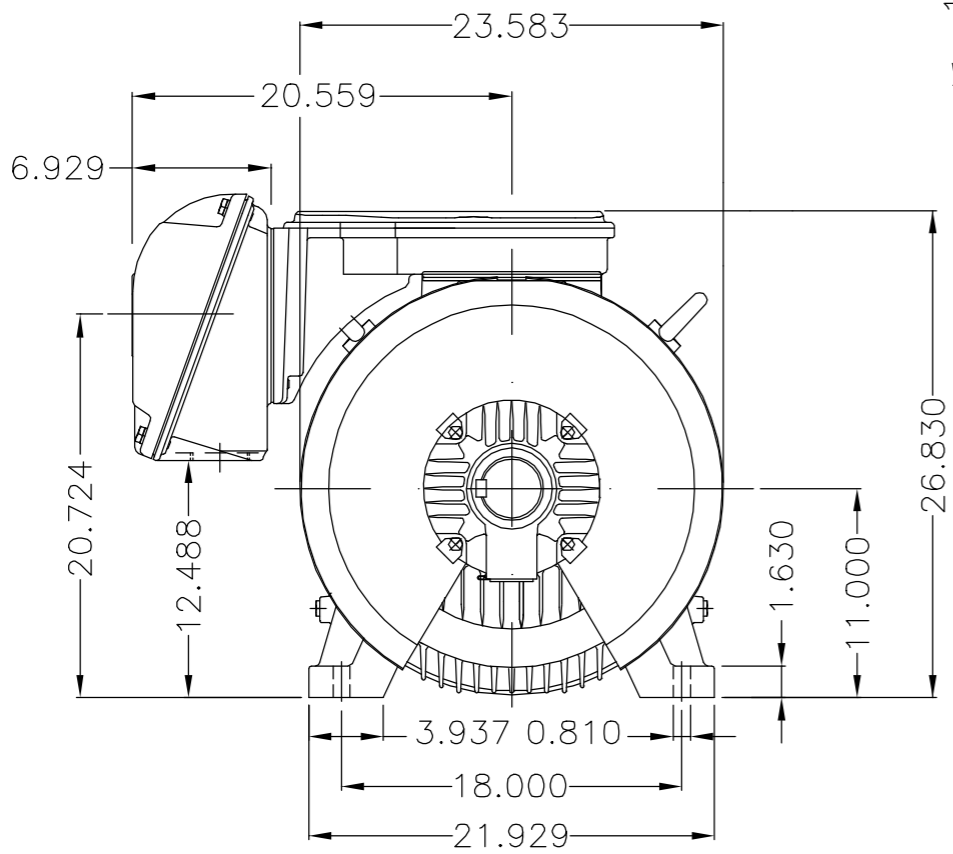
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EIXO/SHAFT	
PADRÃO/STANDARD	X
OPCIONAL/OPTIONAL	
ESPECIAL/SPECIAL	

Dimensões em polegada
Dimensions in inches

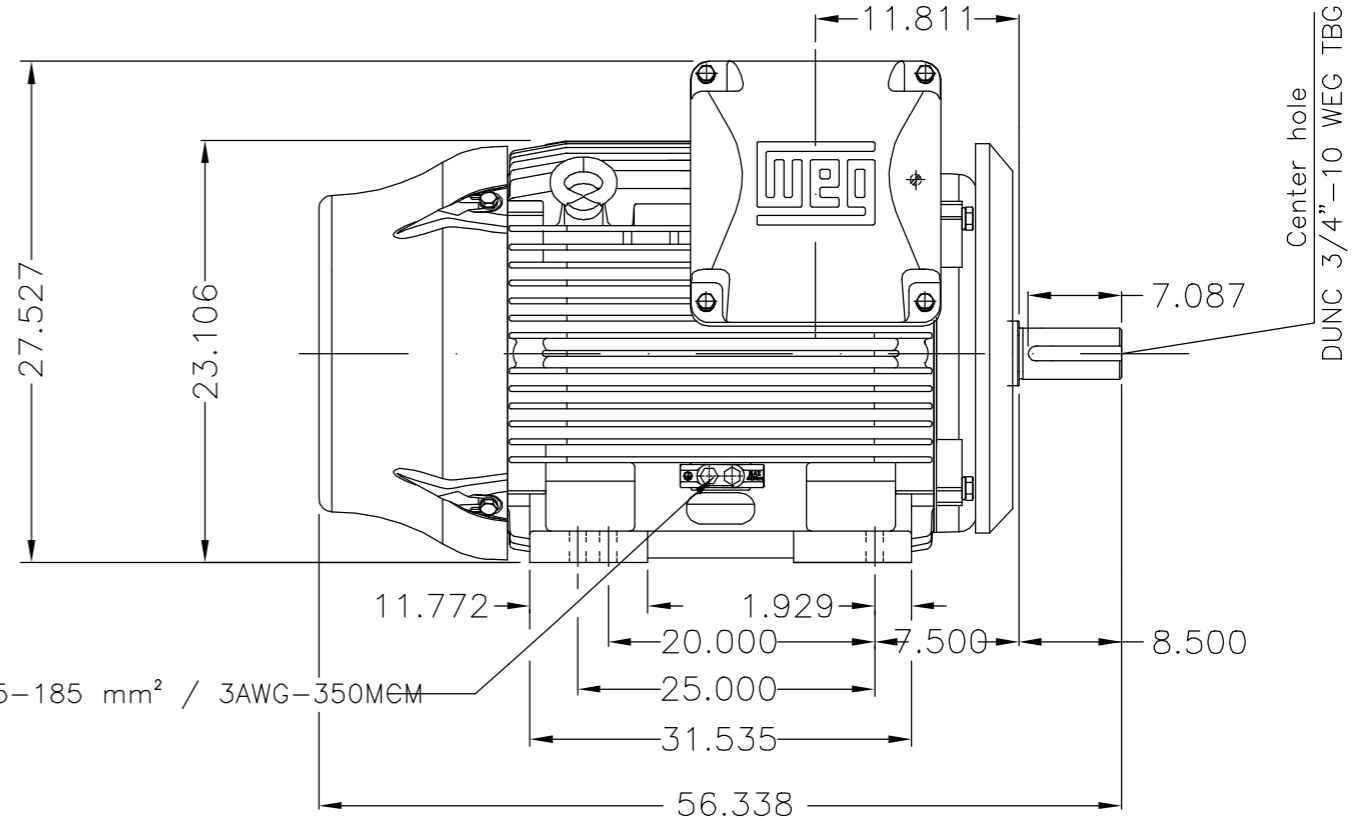
THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.

A
B
C
D
E



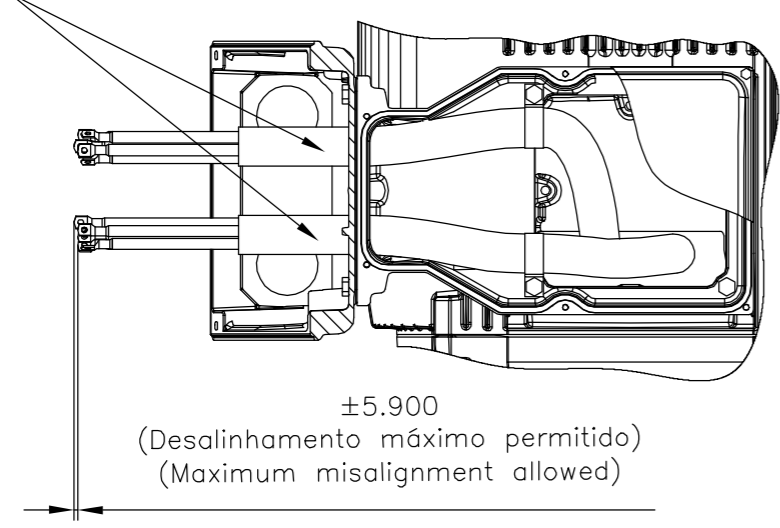
Main terminal box

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

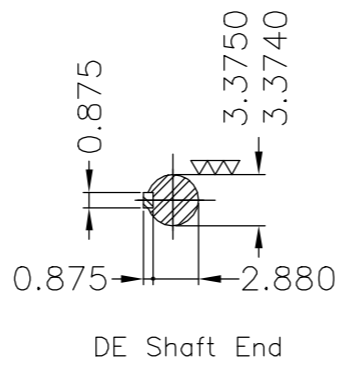


Grounding for leads 25-185 mm² / 3AWG-350MEM

Fixar o conduíte no suporte com abraçadeiras.
Fasten the conduit on support with cables ties.



±5.900
(Desalinhamento máximo permitido)
(Maximum misalignment allowed)



DE Shaft End

Linha do motor: Crusher Duty / Motor purpose: Crusher Duty	
Rolamento dianteiro de rolos / DE roller bearing	
Conduíte para cabos no interior do suporte da caixa de ligação	
Cables conduit inside terminal box support	
Dispositivo de travamento de eixo / Shaft locking device	
Cor RAL 5009 / Color RAL 5009	
Plano de pintura 203A / Painting plan 203A	
Forma construtiva B3D / Mounting B3R(D)	
WEG EQUIPAMENTOS ELÉTRICOS S/A	

E	200 HP	08 Poles	60Hz	414658029
	300 HP	06 Poles	60Hz	414658029
	250 HP	06 Poles	60Hz	414658029
	350 HP	04 Poles	60Hz	414658029
	300 HP	04 Poles	60Hz	414658029

E	500001474636	RET. LINHAS DE POTÊNCIA INCORRETAS	DCARDOSO	SAORIN	SAORIN	09.07.2018	05		
D	500001331189	ADIC.NOTA CONDUITE/ADD NOTE CONDUIT	MENSOR	EANJOS	EANJOS	05.07.2017	04		
C	EXECUTED	GABRIELID	SUMMARY OF MODIFICATIONS		EXECUTED	CHECKED	RELEASED	DATE	VER
B	CHECKED	JMANENTE	THREE PHASE W22 MOTOR		10004923929				
A	RELEASED	JMANENTE	FRAME 447/9T IP55 TEFC		000 05				
	REL DT	09.05.2017	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		



UNCONTROLLED COPY
RELEASED
ZME A3



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 35018ET3GRB449T-W22

Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. 447/9T 1000m.a.s.l. IP55 TEFC 3065lb

V 460

A 399

HP 350

kW 260

SF 1.15

SFA 459

RPM 1785

PF 0.85

AMB 40°C

INS cl. F DT80K

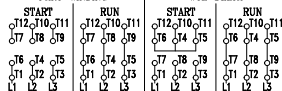
NEMA NOM EFF 96.2%

DUTY CONT.

DES A Code J

PART-WINDING

WYE-DELTA

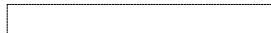


→ NU-322-C3 (60g)

→ 6319-C3 (45g)



MOBIL POLYREX EM (4000h)



MADE IN BRAZIL
11975467