

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer					
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	11473721		
		Catalog # :	35018ET3G449T-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	: 3042 lb		
Protection degree	: IP55	Moment of inertia (J)	: 118 sq.ft.lb		
Design	: A				
Output [HP]	350	300	300	300	300
Poles	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	460	380	400	415	415
Rated current [A]	399	405	389	379	379
L. R. Amperes [A]	3192	2957	3151	3373	3373
LRC [A]	8.0x(Code J)	7.3x(Code H)	8.1x(Code J)	8.9x(Code K)	8.9x(Code K)
No load current [A]	135	135	143	151	151
Rated speed [RPM]	1785	1483	1485	1487	1487
Slip [%]	0.83	1.13	1.00	0.87	0.87
Rated torque [ft.lb]	1030	1060	1060	1060	1060
Locked rotor torque [%]	280	260	290	310	310
Breakdown torque [%]	280	260	290	310	310
Service factor	1.15	1.00	1.00	1.00	1.00
Temperature rise	80 K	105 K	105 K	80 K	80 K
Locked rotor time	25s (cold) 14s (hot)	21s (cold) 12s (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)	71.0 dB(A)
Efficiency (%)	25%				
	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%				
	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> 6322 C3 <u>Non drive end</u> 6319 C3	Foundation loads			
Sealing	: WSeal WSeal	Max. traction : 7235 lb			
Lubrication interval	: 6000 h 8000 h	Max. compression : 10276 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



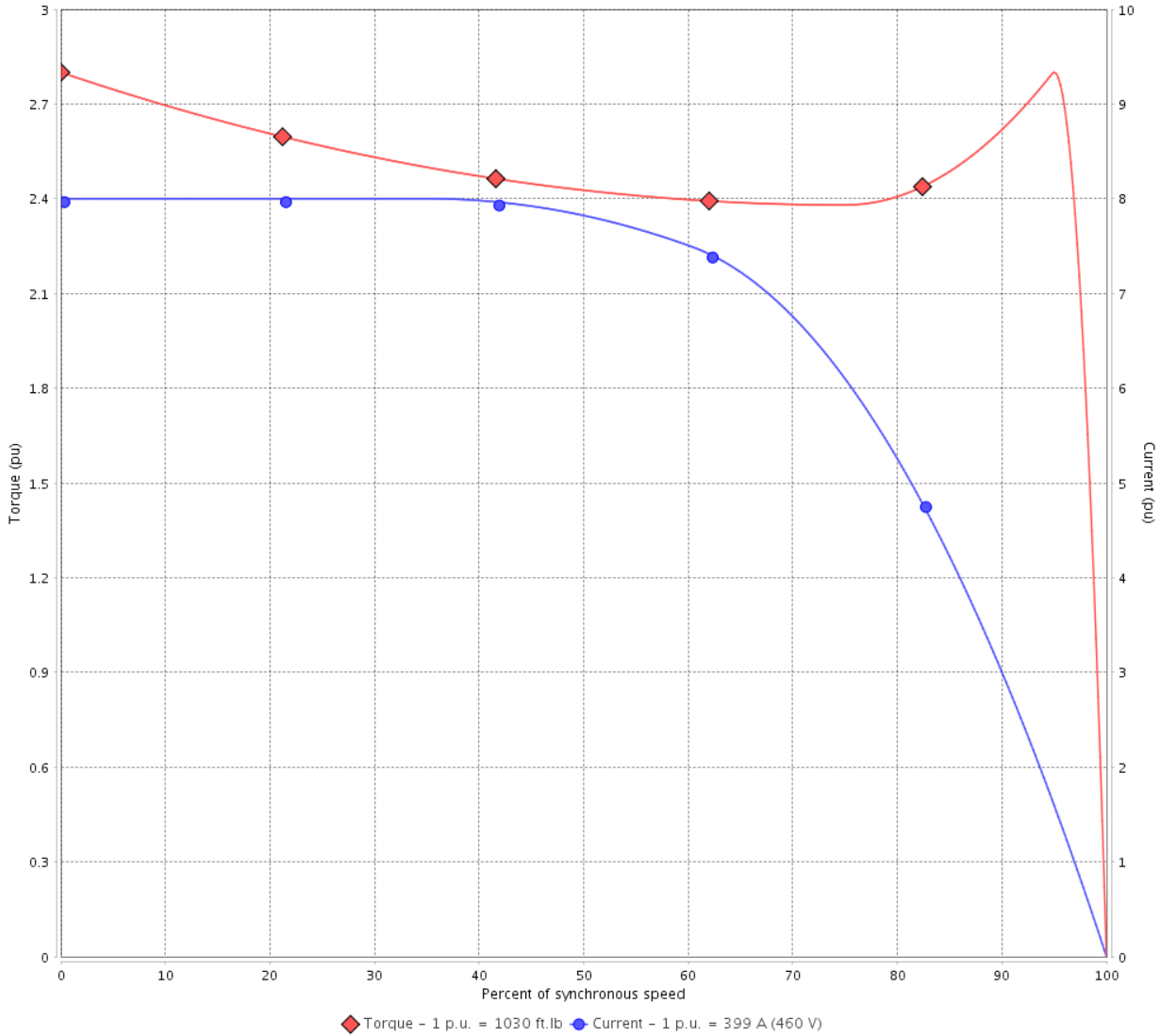
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11473721

Catalog # : 35018ET3G449T-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



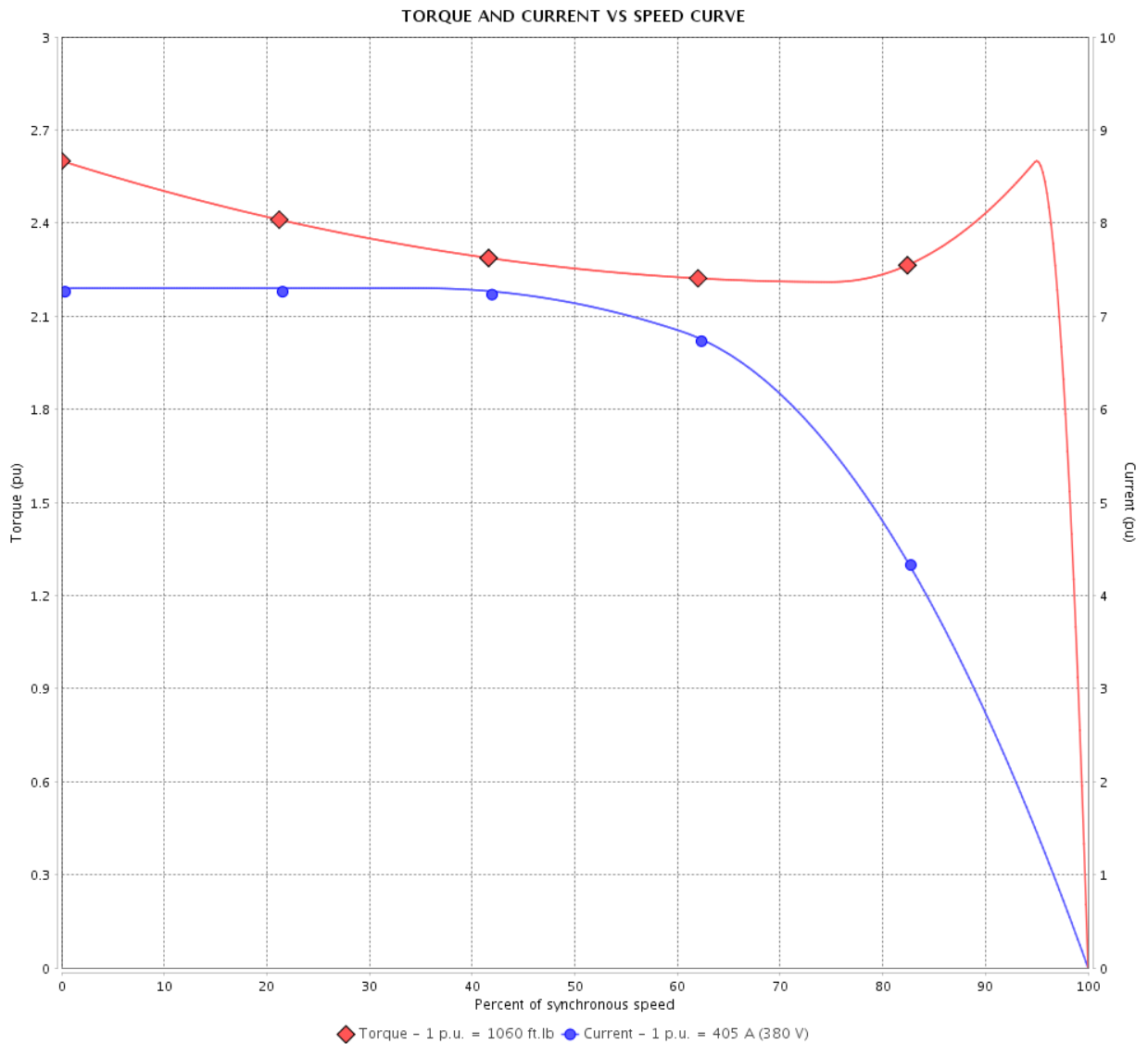
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11473721

Catalog # : 35018ET3G449T-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



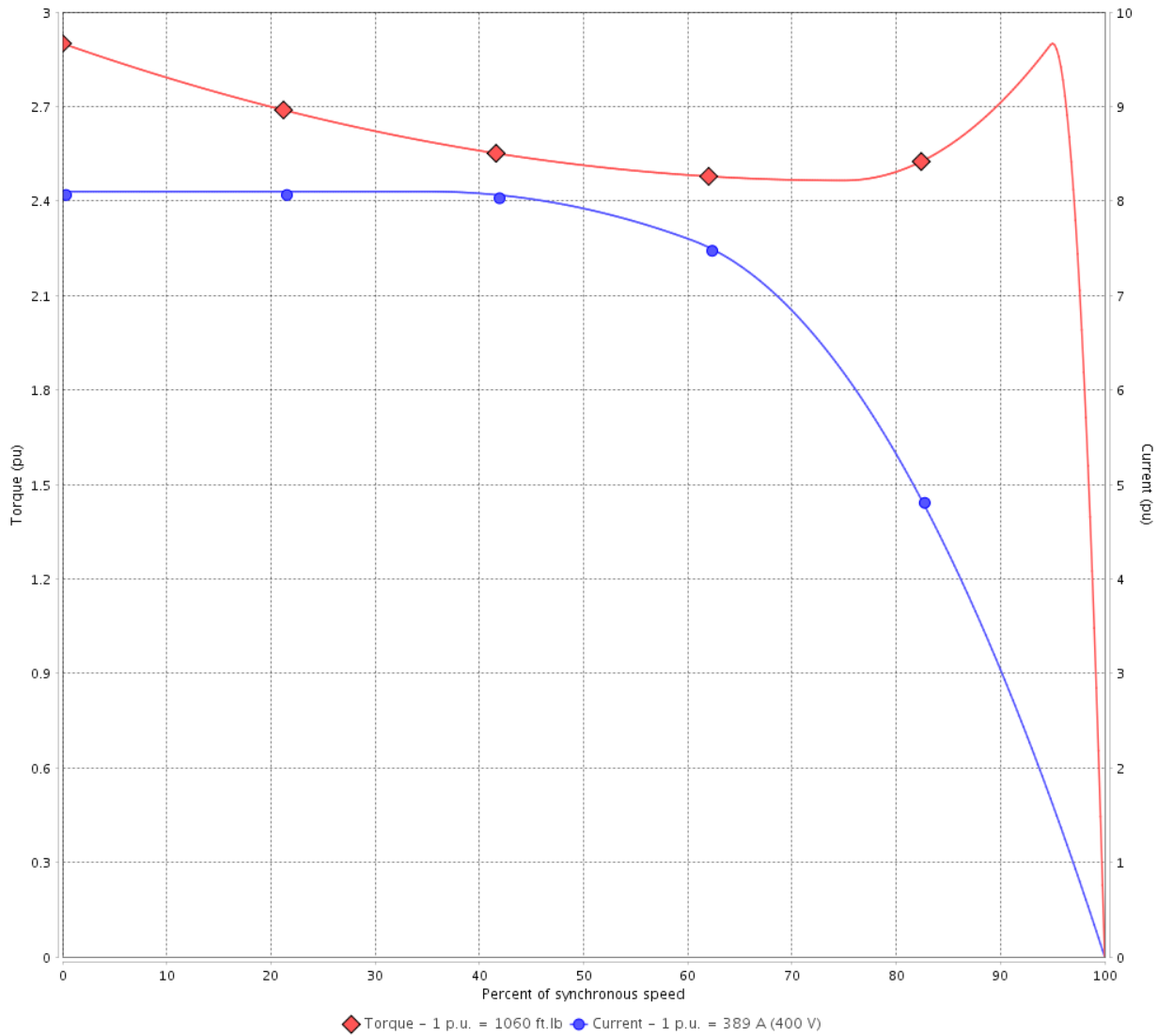
Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11473721

Catalog # : 35018ET3G449T-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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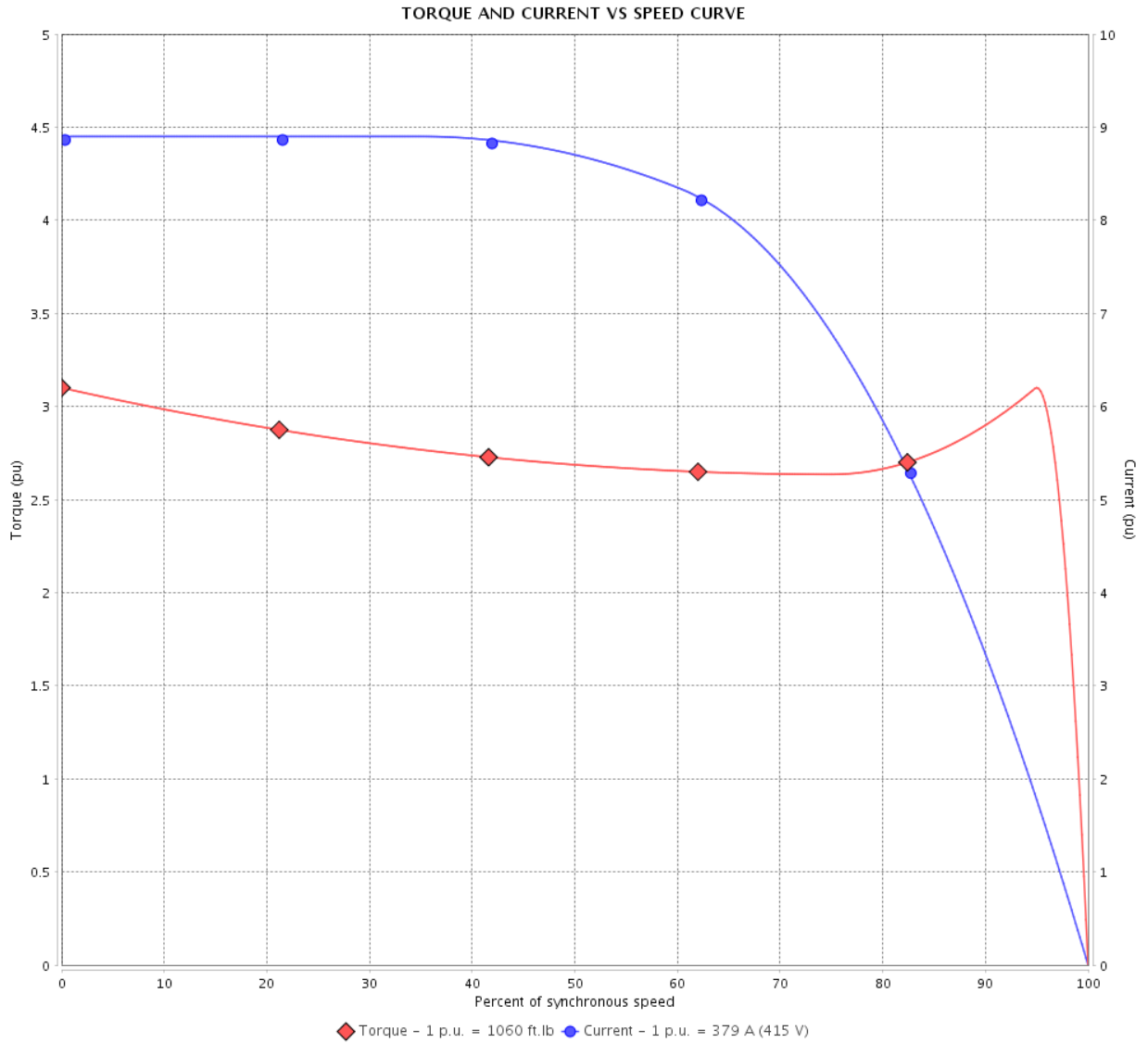
TORQUE AND CURRENT VS SPEED CURVE



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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

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

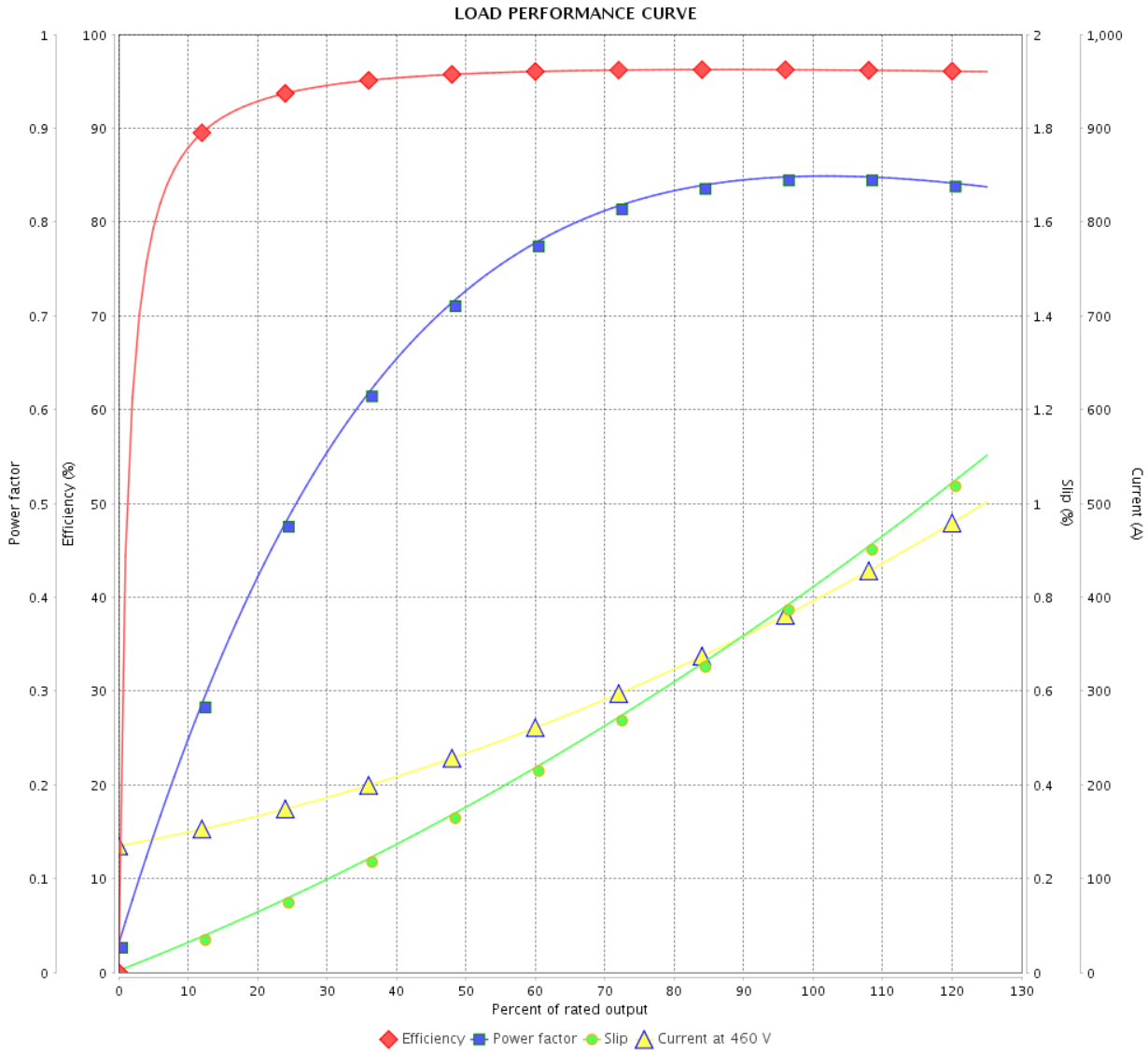


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11473721

Catalog # : 35018ET3G449T-W22



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

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Three Phase Induction Motor - Squirrel Cage

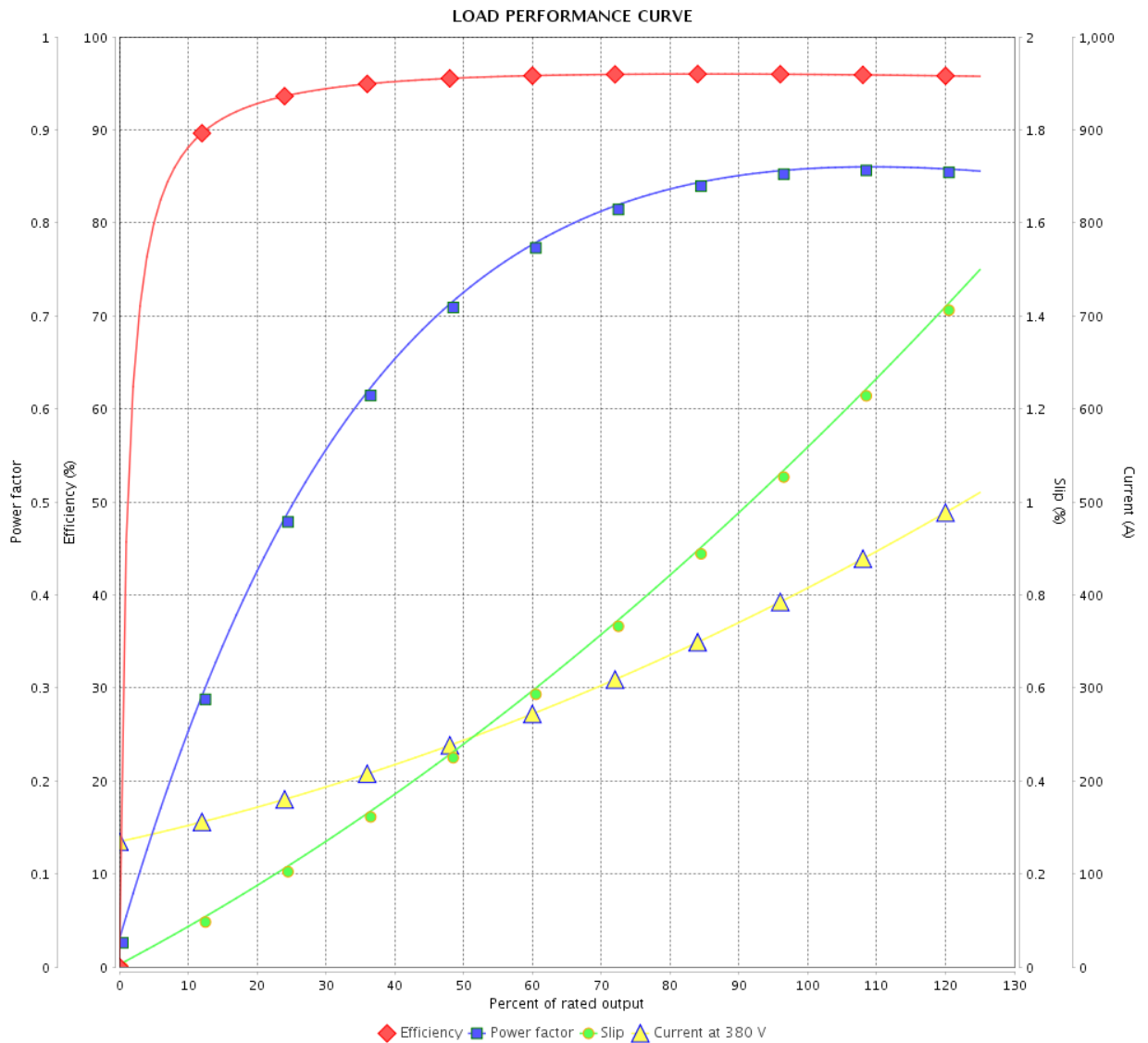


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Product code : 11473721

Catalog # : 35018ET3G449T-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

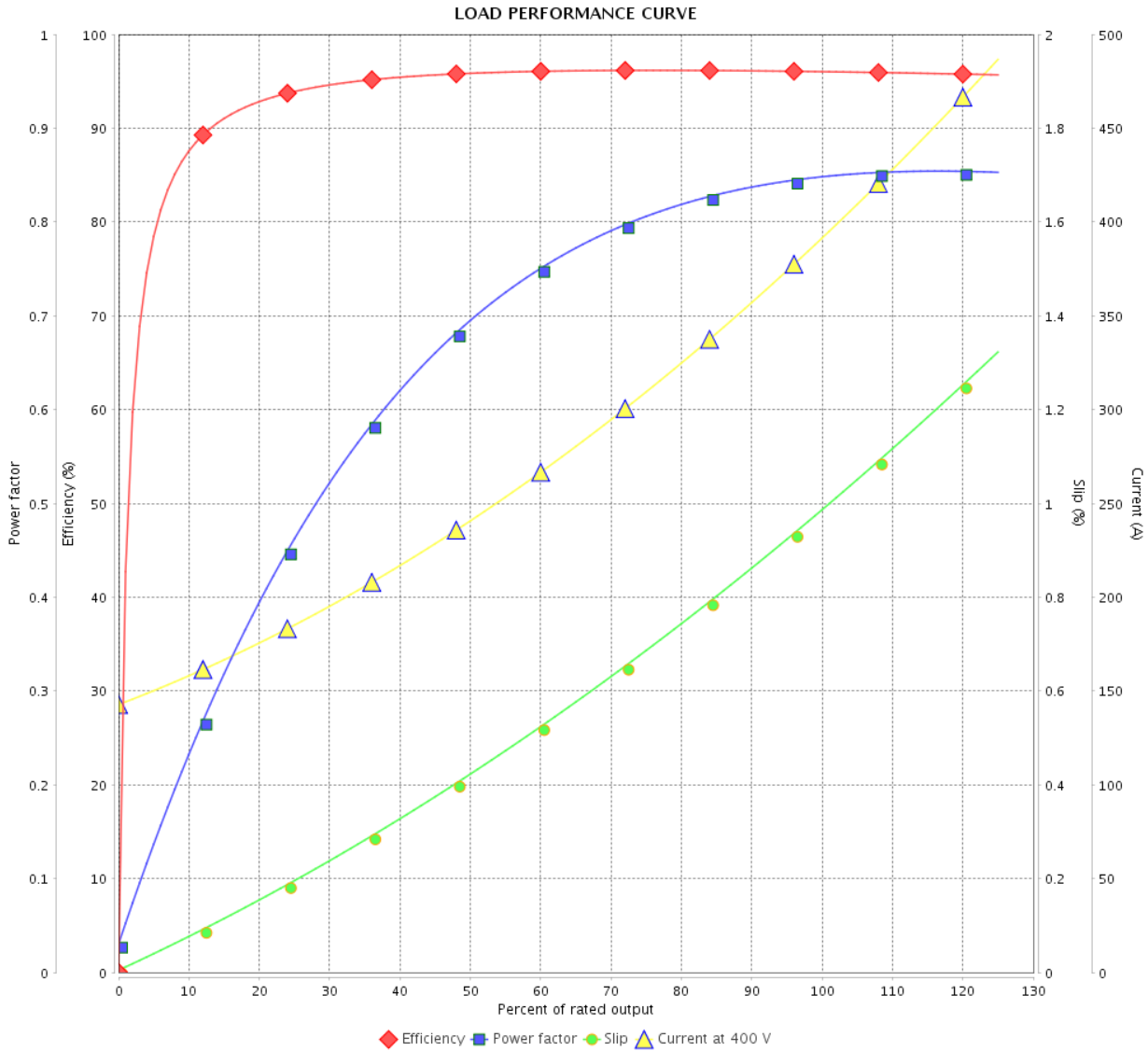


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Performance : 400 V 50 Hz 4P IE3

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

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Three Phase Induction Motor - Squirrel Cage

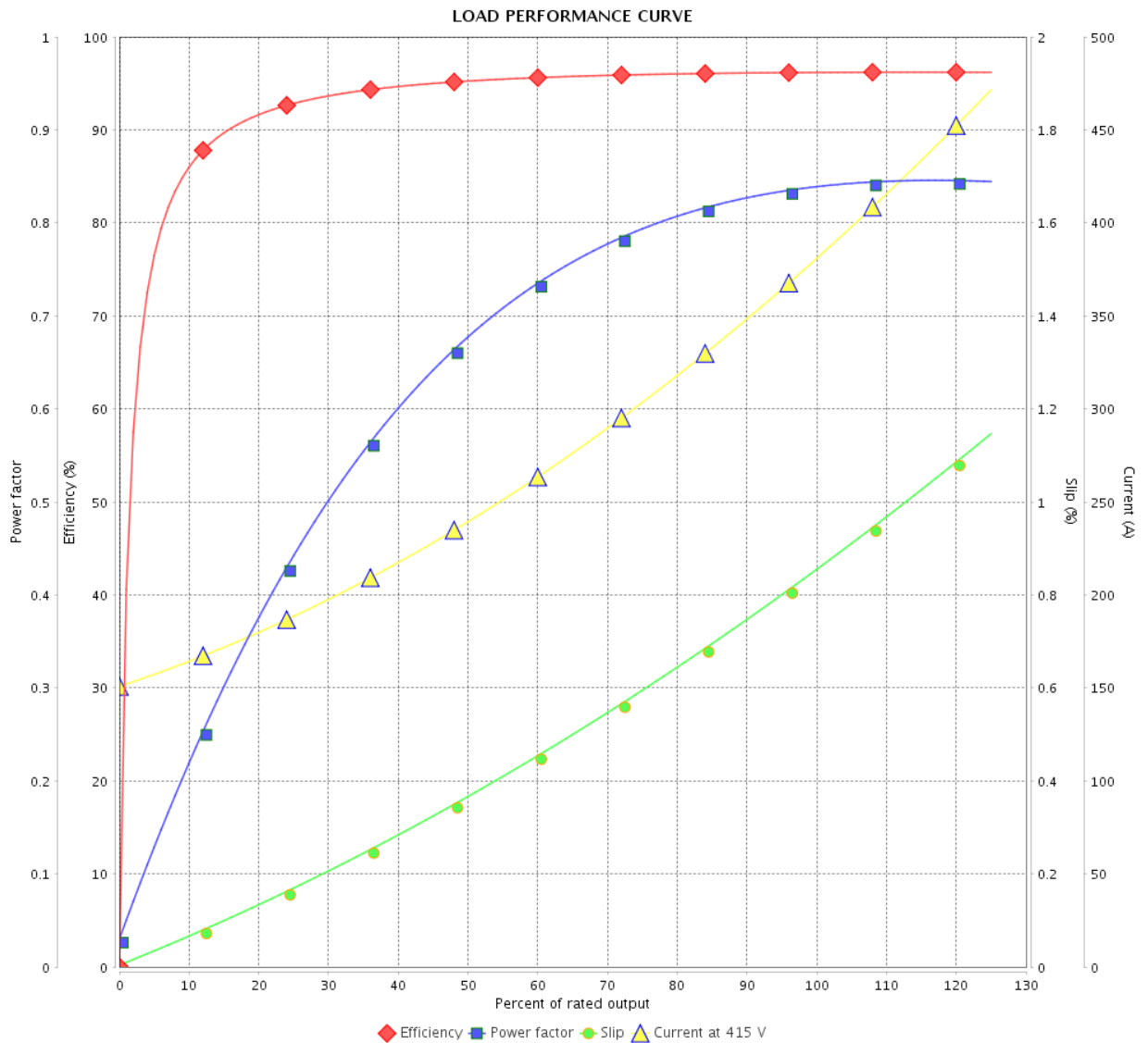


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 Breakdown torque : 310 %
 Rated speed : 1487 rpm

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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Locked rotor torque	: 280 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1785 rpm	Design	: A

Heating constant

Cooling constant

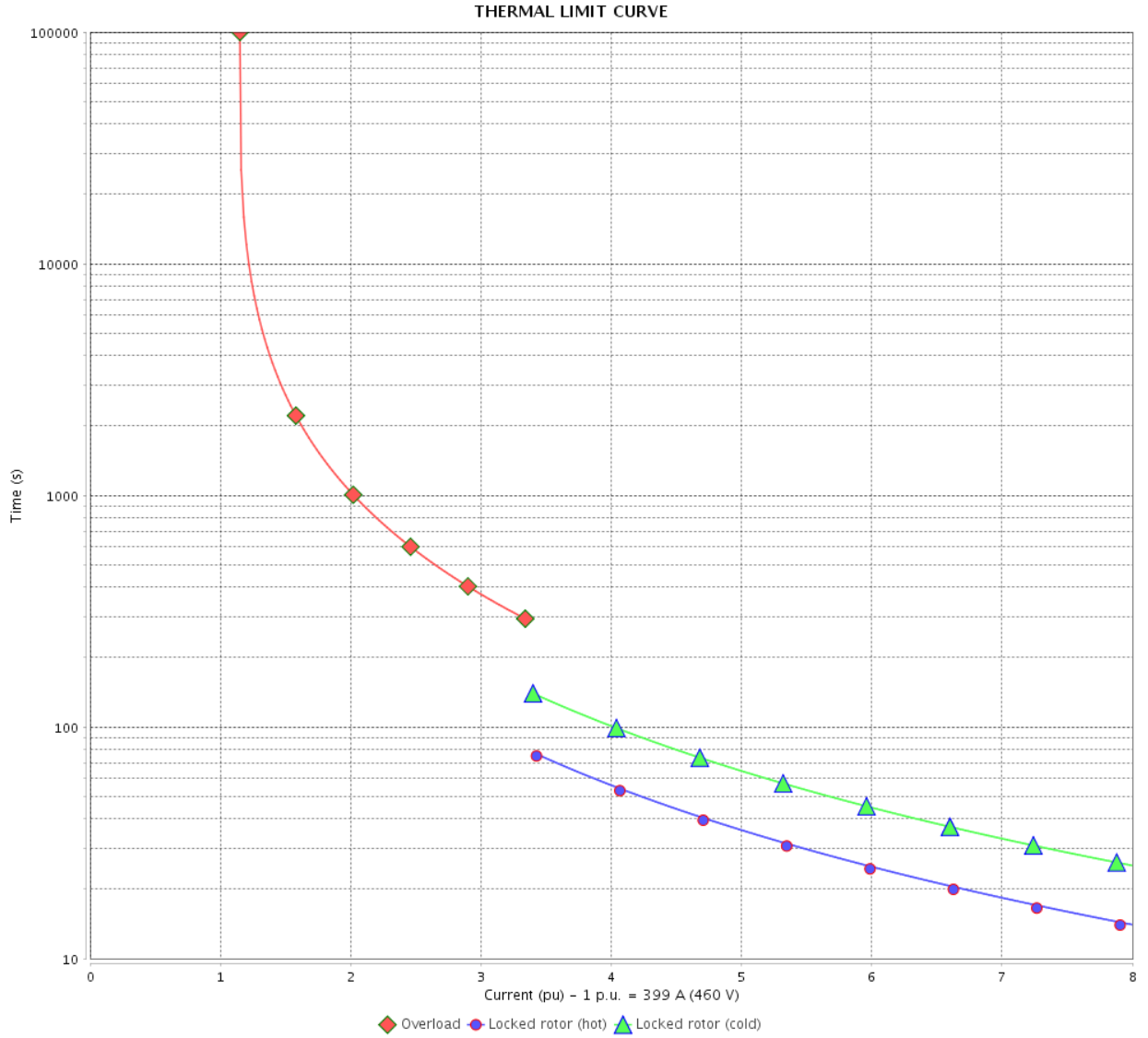
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Three Phase Induction Motor - Squirrel Cage



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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

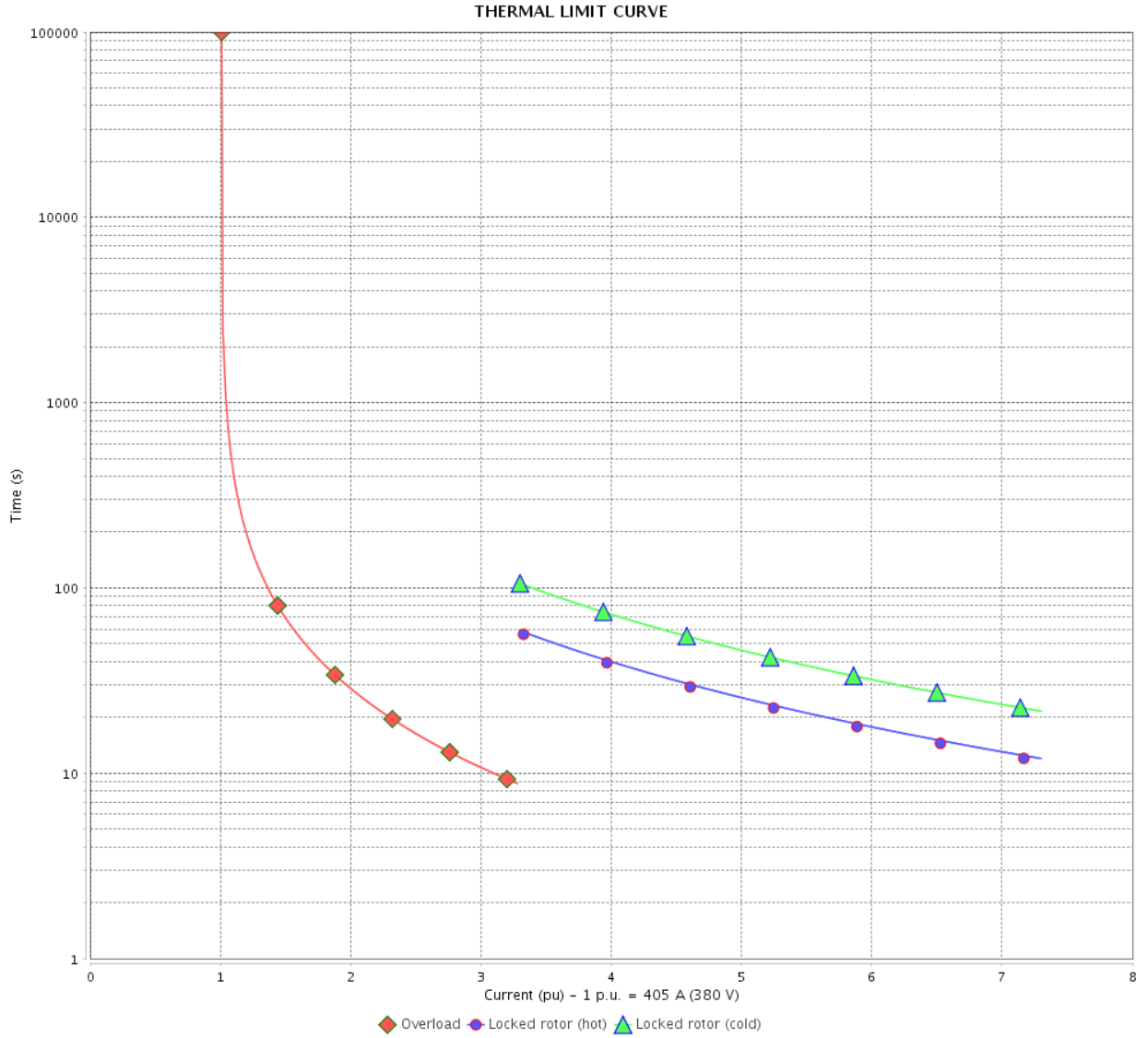
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Locked rotor torque	: 290 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 105 K
Rated speed	: 1485 rpm	Design	: A

Heating constant

Cooling constant

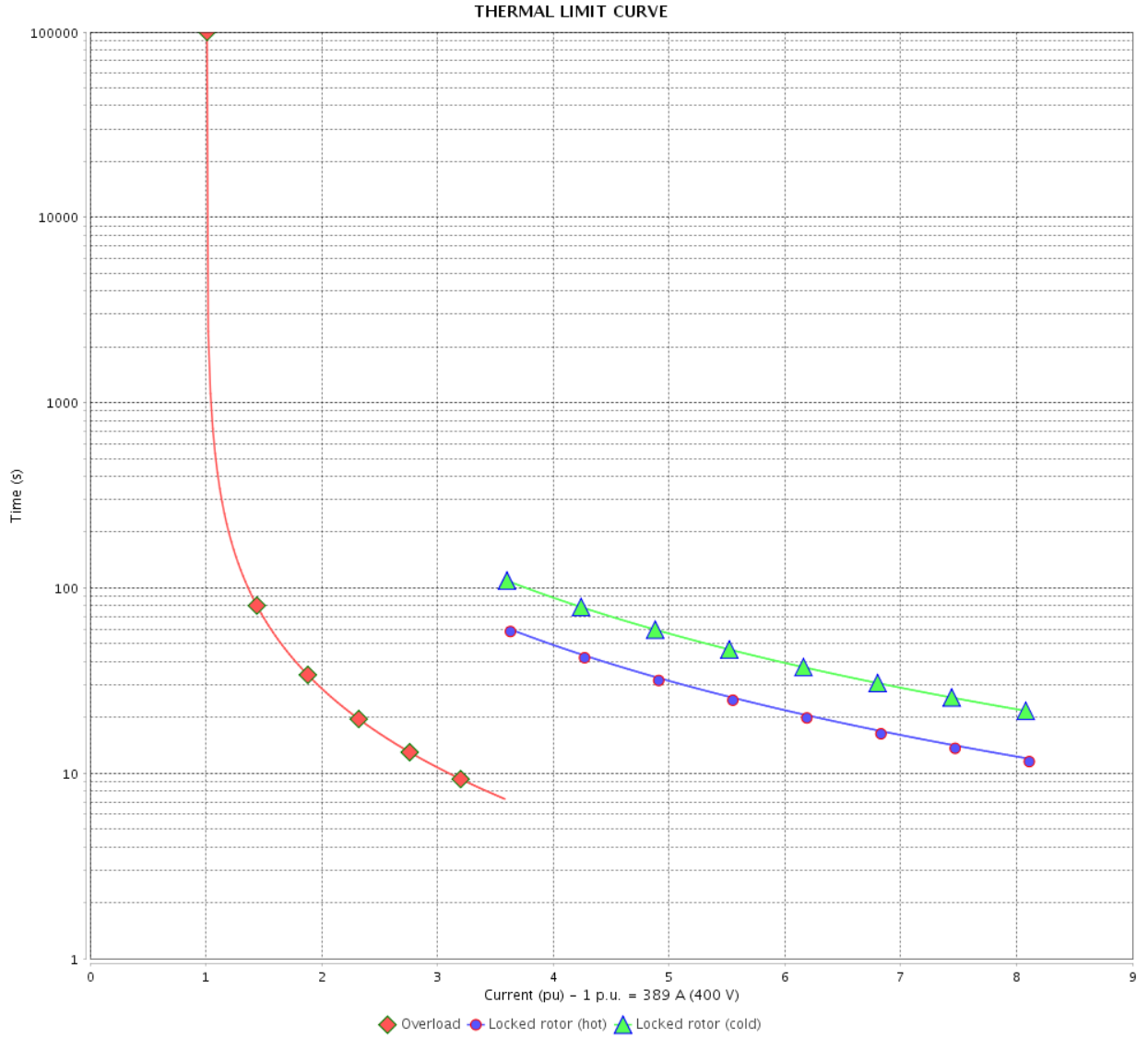
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Three Phase Induction Motor - Squirrel Cage



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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

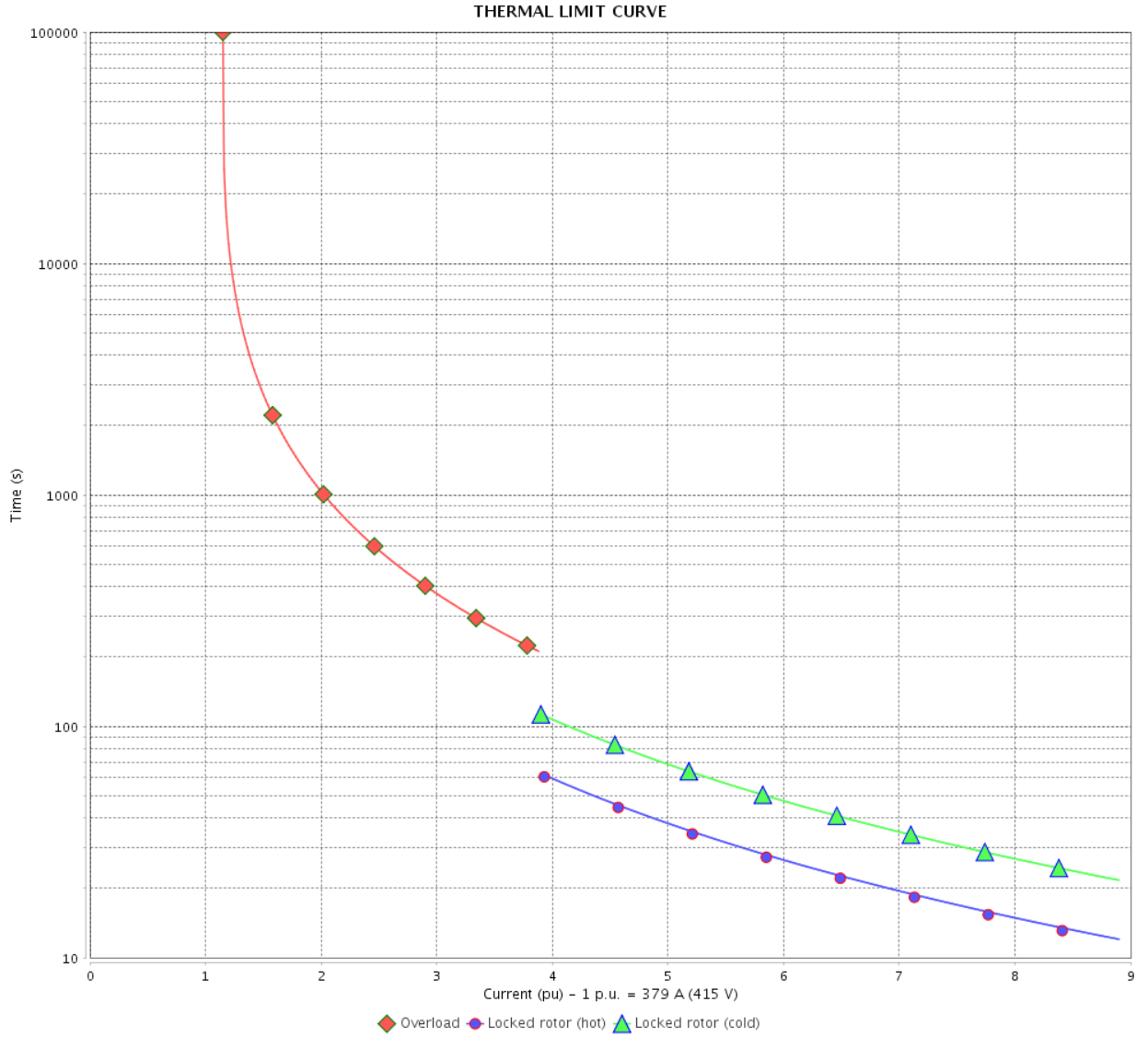
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Checked by			Page	Revision
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

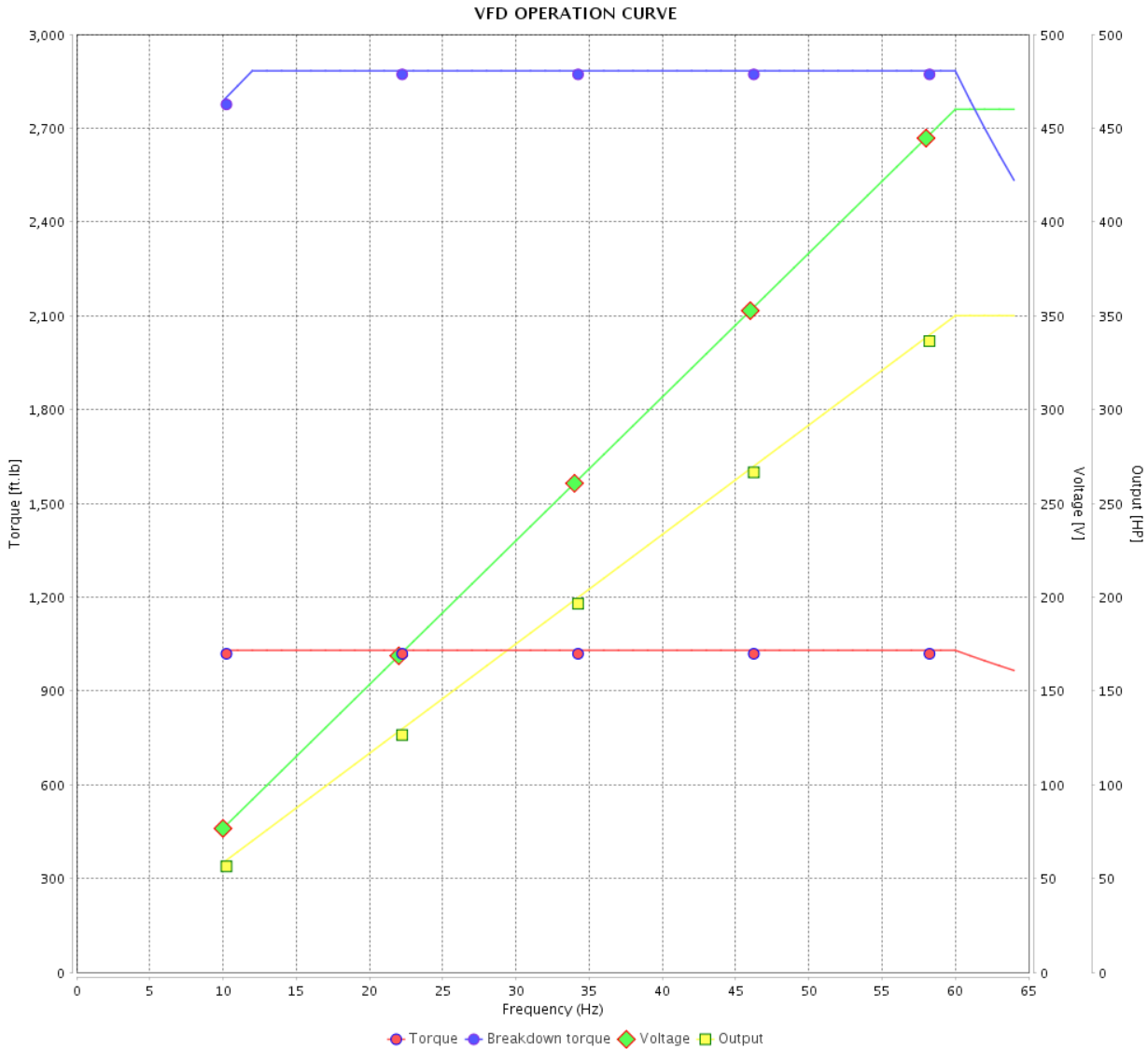


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LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 1030 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1785 rpm	Design	: A

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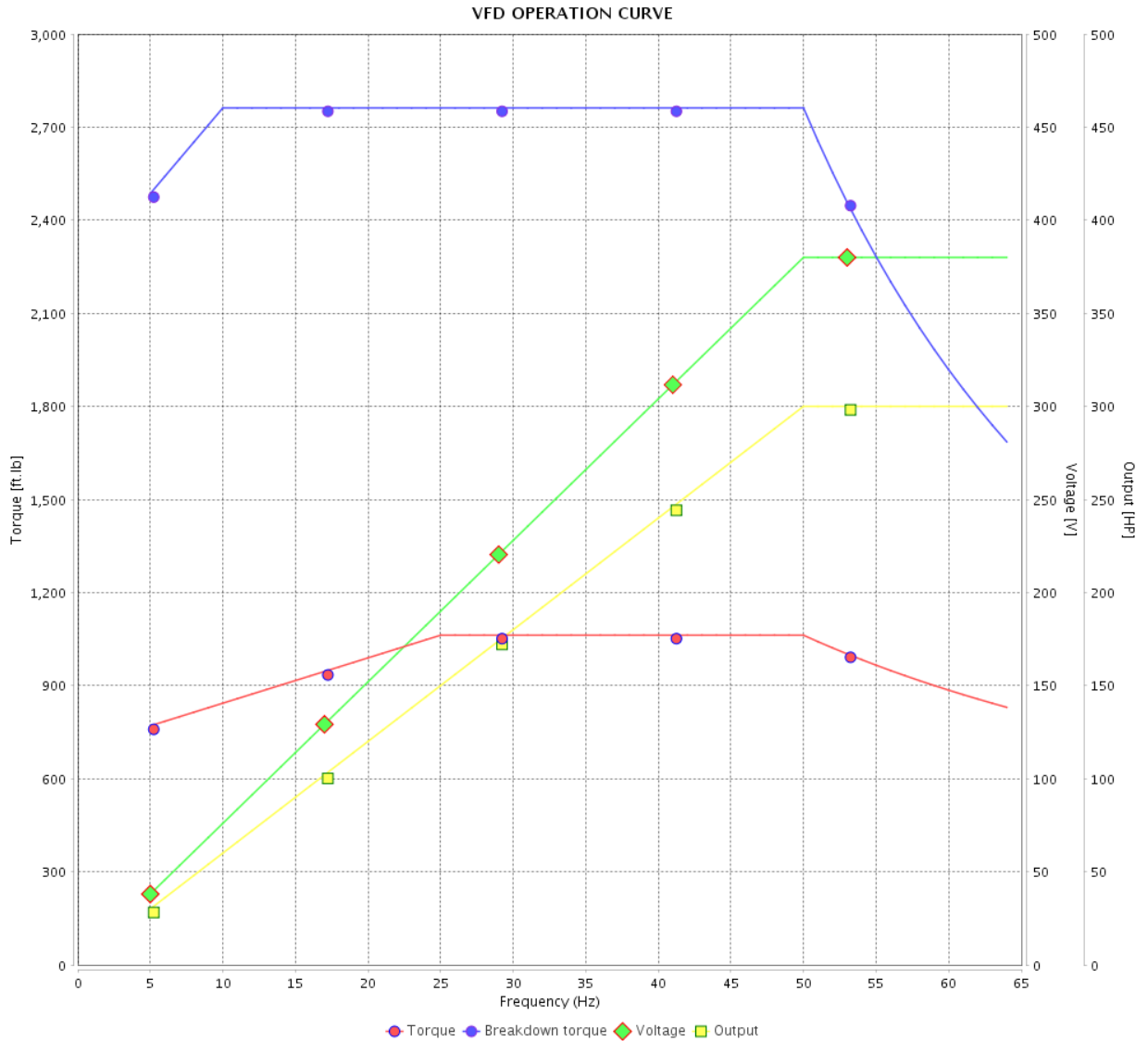
VFD OPERATION CURVE

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



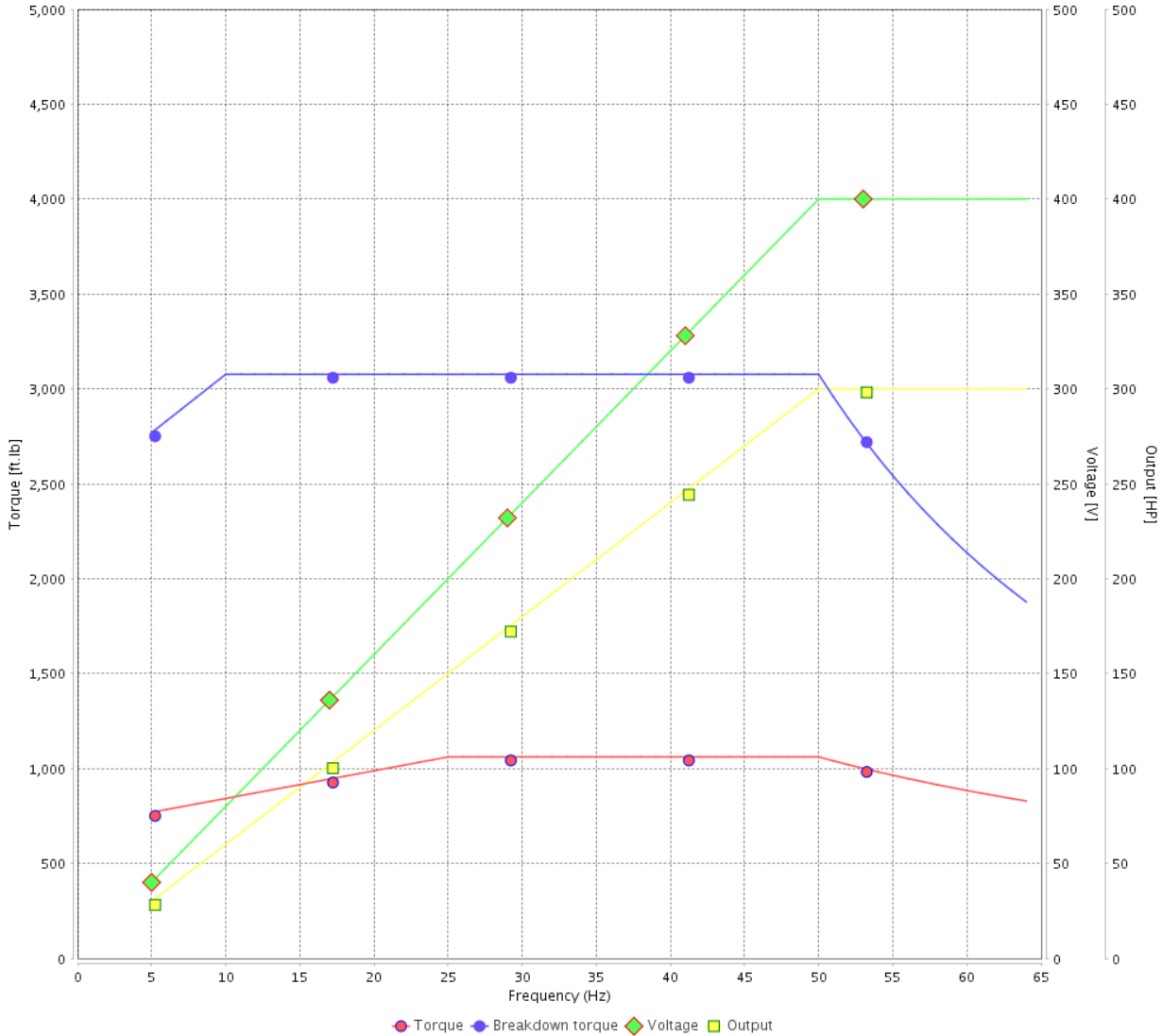
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VFD OPERATION CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current	: 389 A	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

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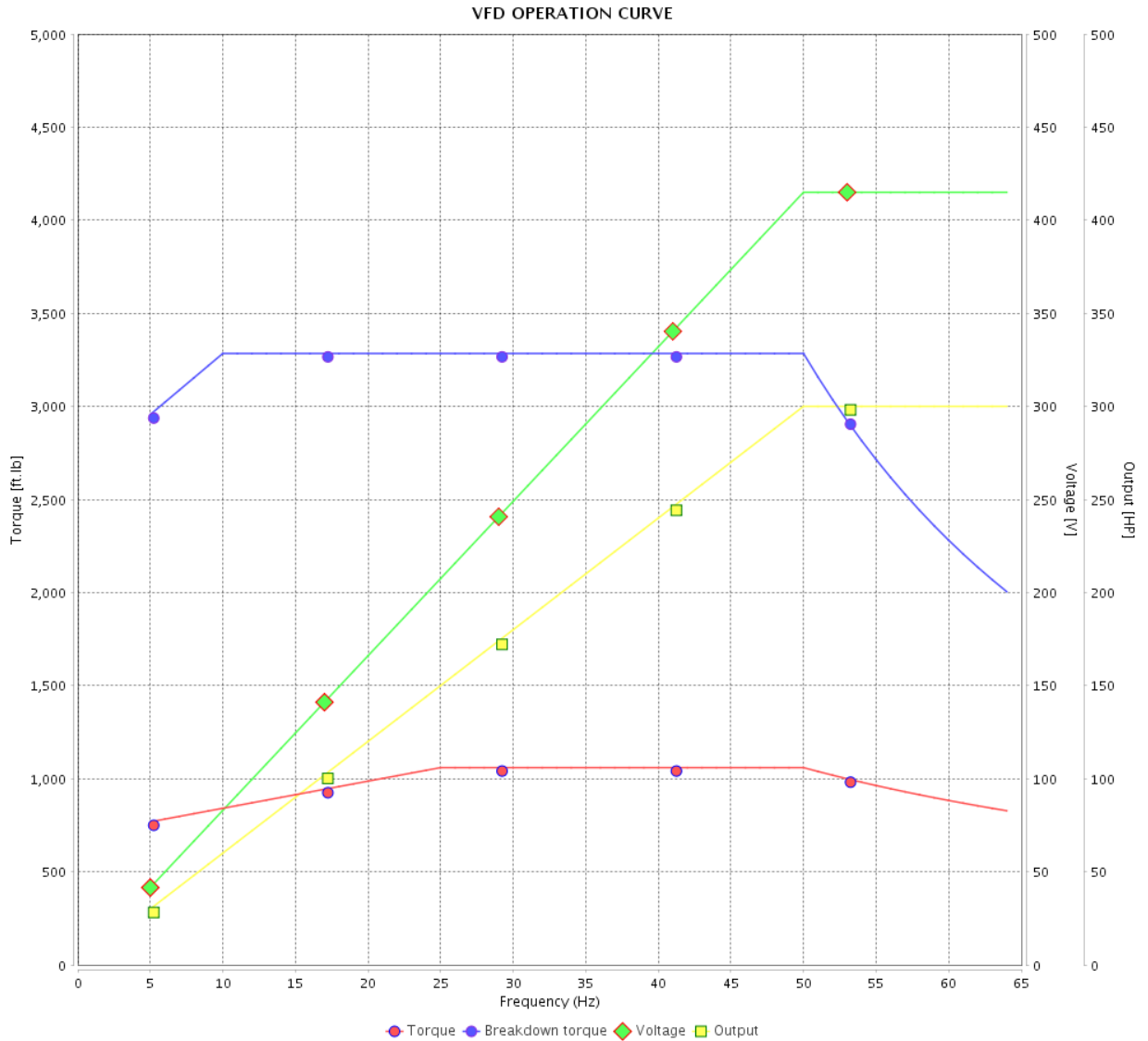
VFD OPERATION CURVE

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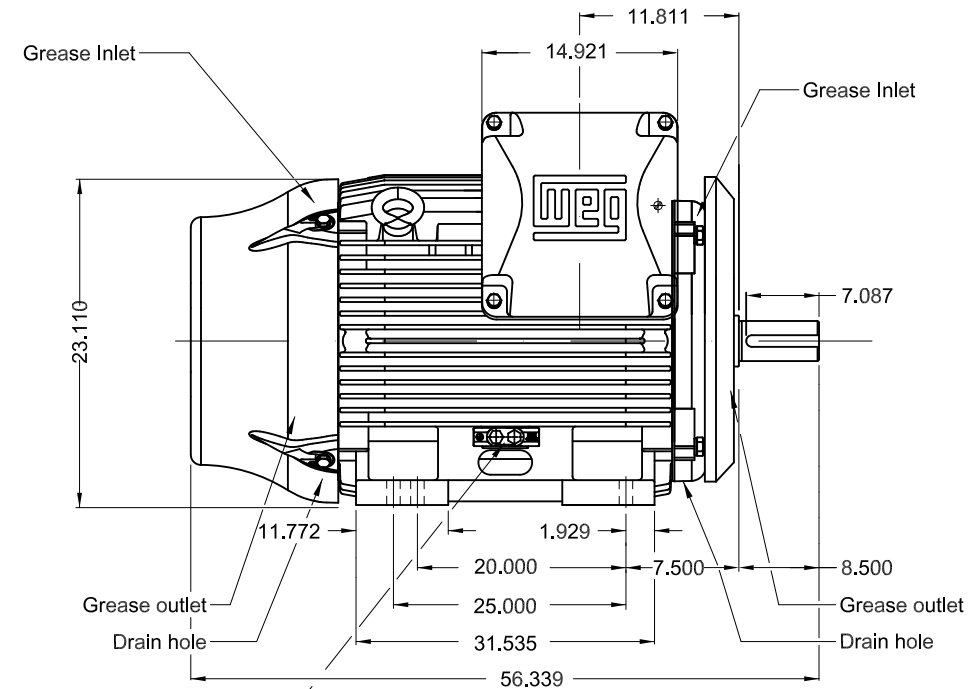
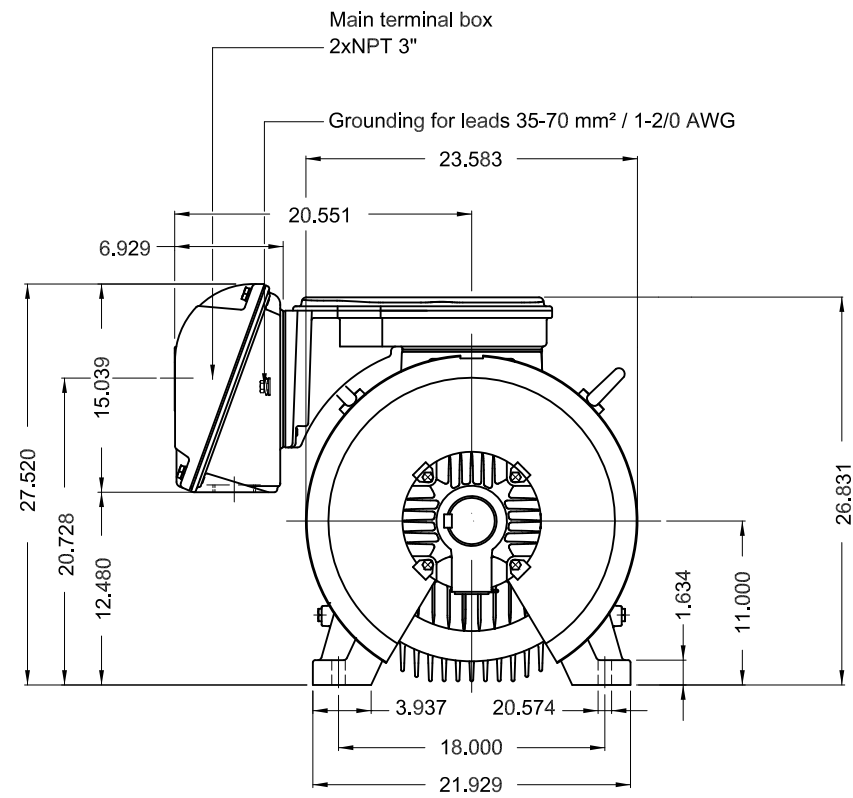
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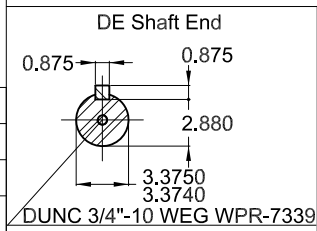


Grounding for leads 25-185 mm² / 3AWG-350MCM

350 HP 04 Poles 60 Hz

A

Drive-End Air Deflector
 Color RAL 5009
 Painting plan 203A
 Mounting B3R(D)



ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W22 PREM. EFF.					
CHECKED		FRAME 447/9T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
 WDD



SHEET 1 / 1

Dimensions in inches

XME A3

MADE IN MEXICO
11473721



FOR SAFE AREA
Mod.TE1BFOXON
CC029A

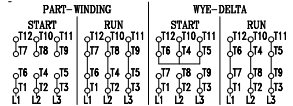




Class I, Div 2, Gr A, B, C and D - T3
Class I, Zone 2, IIC - T3
Class II, Div 2, Gr F and G - T3C
For use on PWM: Gr. A, B, C, D and F,
VT 1000:1, CT 6:1, 1.00SF - T3

MODEL 35018ET3G449T-W22

Inverter Duty Motor
Severe Duty

PH3	60Hz	Fr. 447/9T	1000m.a.s.l.	IP55	TEFC	3047lb
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		



-  → 6322-C3 (60g)
-  → 6319-C3 (45g)



MOBIL POLYREX EM (6000h)

