

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: NEMA Premium Efficiency Three-Phase	Product code :	14406913	
			Catalog # :	05018XT3E326T	
Frame	: 326T	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	: 693 lb		
Protection degree	: IP55	Moment of inertia (J)	: 9.16 sq.ft.lb		
Design	: B				
Output [HP]	50	40	40	40	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	121/60.6	60.1	58.6	58.7	
L. R. Amperes [A]	885/443	415	445	470	
LRC [A]	7.3x(Code H)	6.9x(Code H)	7.6x(Code J)	8.0x(Code K)	
No load current [A]	55.0/27.5	27.1	29.7	31.8	
Rated speed [RPM]	1775	1475	1480	1480	
Slip [%]	1.39	1.67	1.33	1.33	
Rated torque [ft.lb]	148	142	142	142	
Locked rotor torque [%]	260	240	260	280	
Breakdown torque [%]	280	260	290	310	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	36s (cold) 20s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	
Noise level ²	71.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)	
Efficiency (%)	25%				
	50%	93.6	93.0	93.0	
	75%	94.5	93.6	93.6	
	100%	94.5	93.6	93.6	
Power Factor	25%				
	50%	0.65	0.65	0.60	
	75%	0.76	0.76	0.73	
	100%	0.81	0.81	0.79	
		<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6312 C3	6212 C3		Max. traction : 1342 lb	
Sealing	: Oil Seal	Lip Seal		Max. compression : 2035 lb	
Lubrication interval	: 20000 h	20000 h			
Lubricant amount	: 21 g	13 g			
Lubricant type	: Mobil Polyrex EM				
Notes					
USABLE @208V 134A SF 1.00 SFA 134A					
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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DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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TORQUE AND CURRENT VS SPEED CURVE



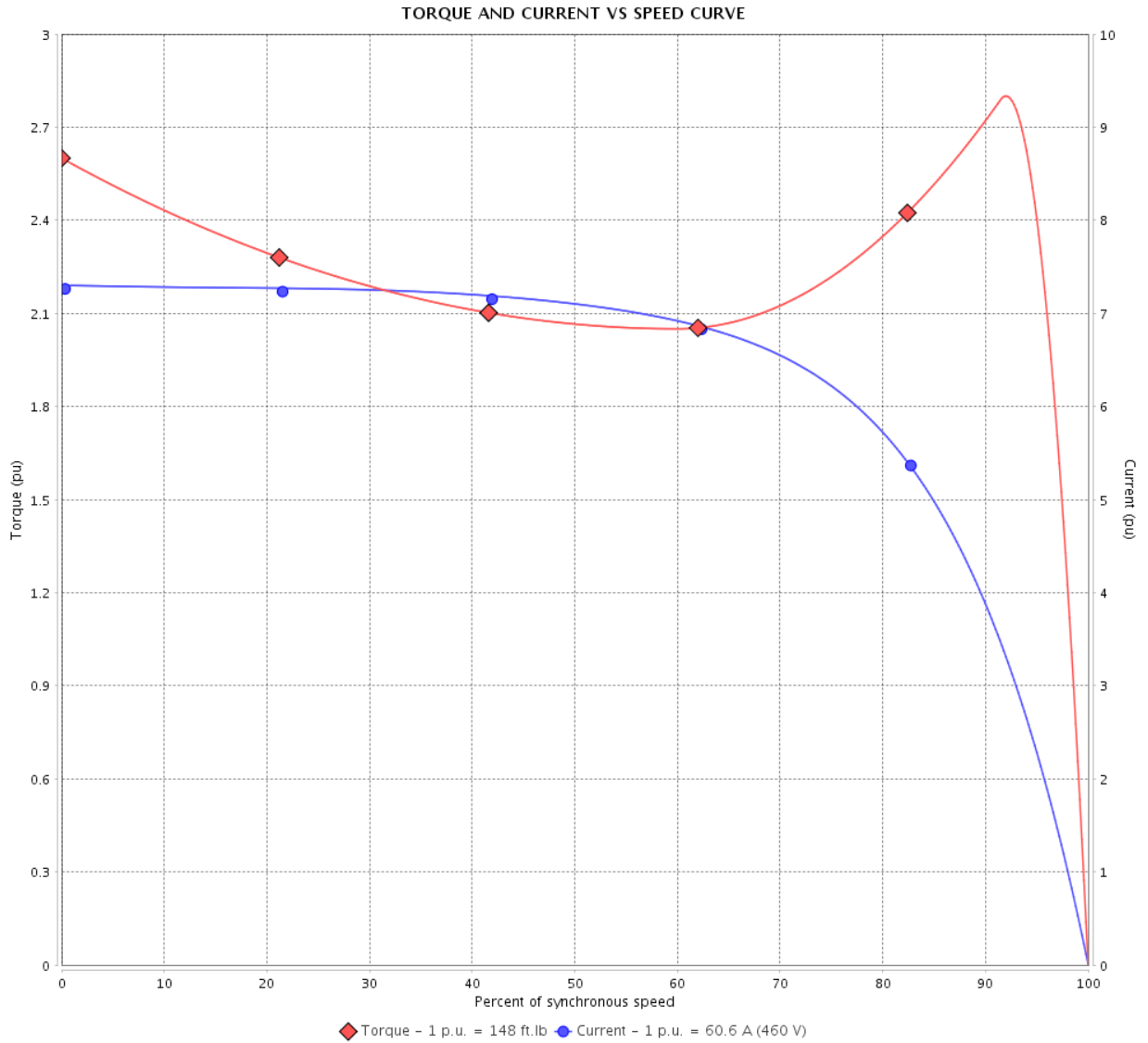
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14406913

Catalog # : 05018XT3E326T



Performance : 230/460 V 60 Hz 4P

Rated current : 121/60.6 A
 LRC : 7.3
 Rated torque : 148 ft.lb
 Locked rotor torque : 260 %
 Breakdown torque : 280 %
 Rated speed : 1775 rpm

Moment of inertia (J) : 9.16 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Locked rotor time : 36s (cold) 20s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



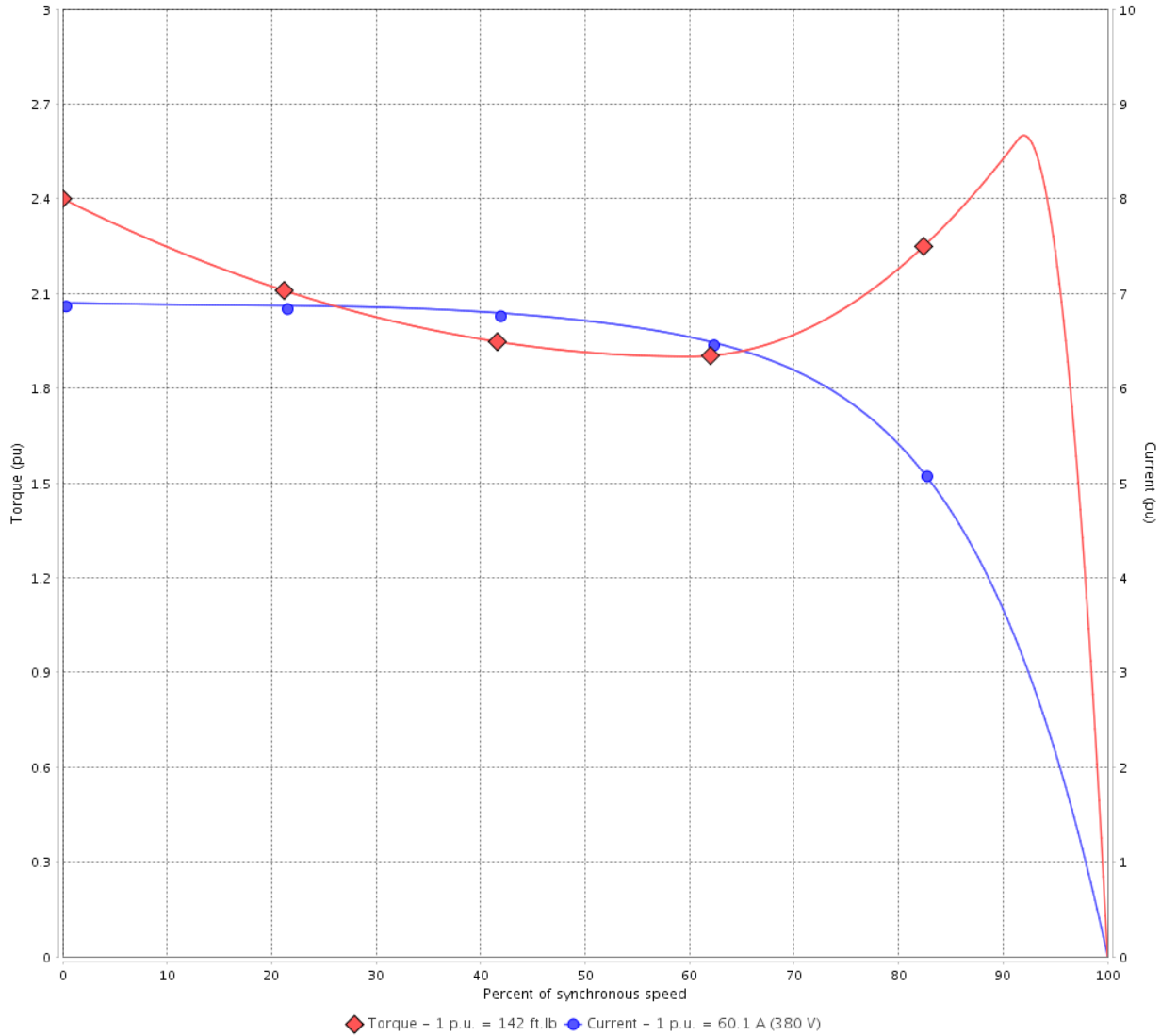
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14406913

Catalog # : 05018XT3E326T

TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 4P IE3

Rated current	: 60.1 A	Moment of inertia (J)	: 9.16 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 142 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE



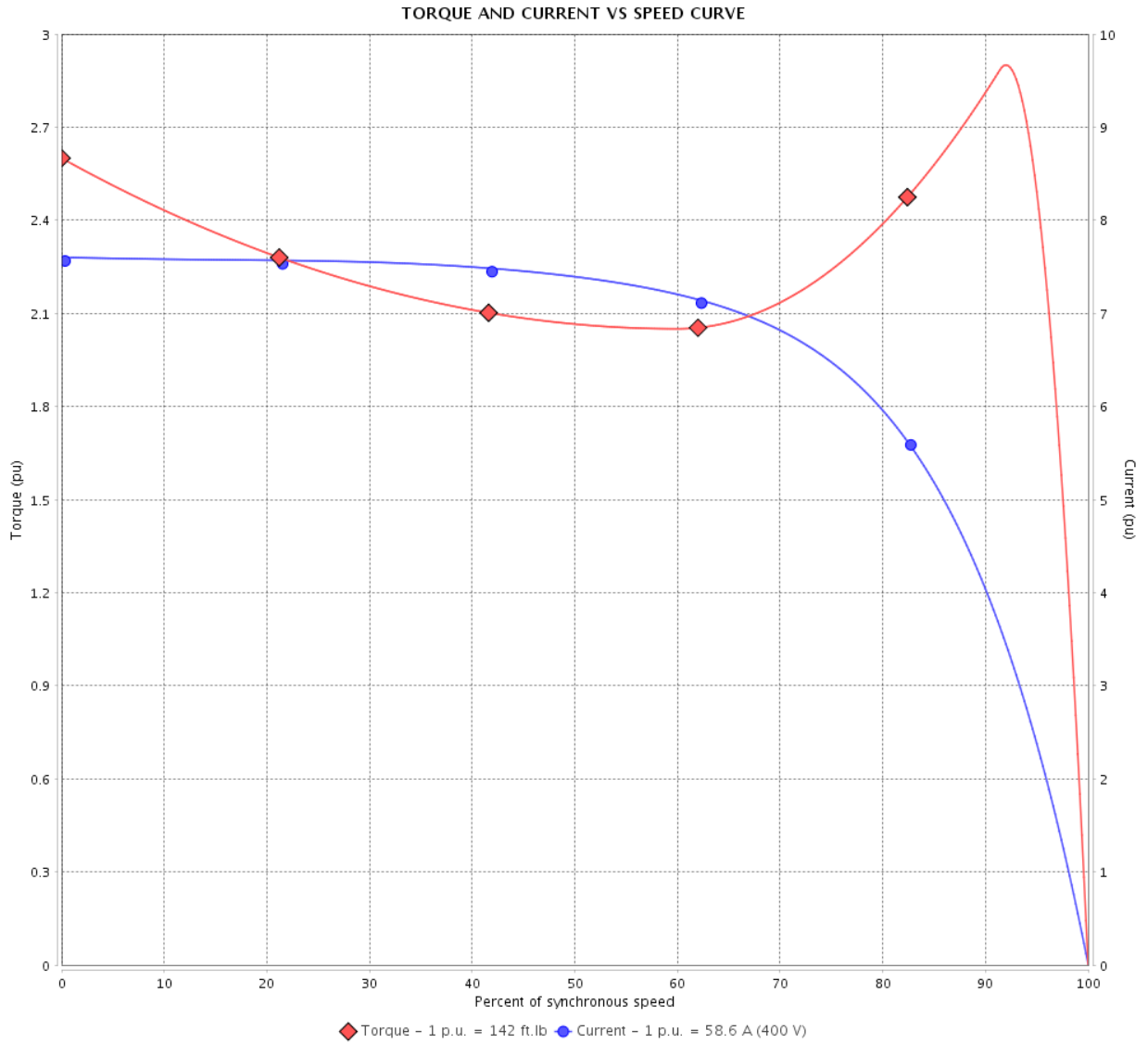
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14406913

Catalog # : 05018XT3E326T



Performance : 400 V 50 Hz 4P IE3

Rated current	: 58.6 A	Moment of inertia (J)	: 9.16 sq.ft.lb
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 142 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



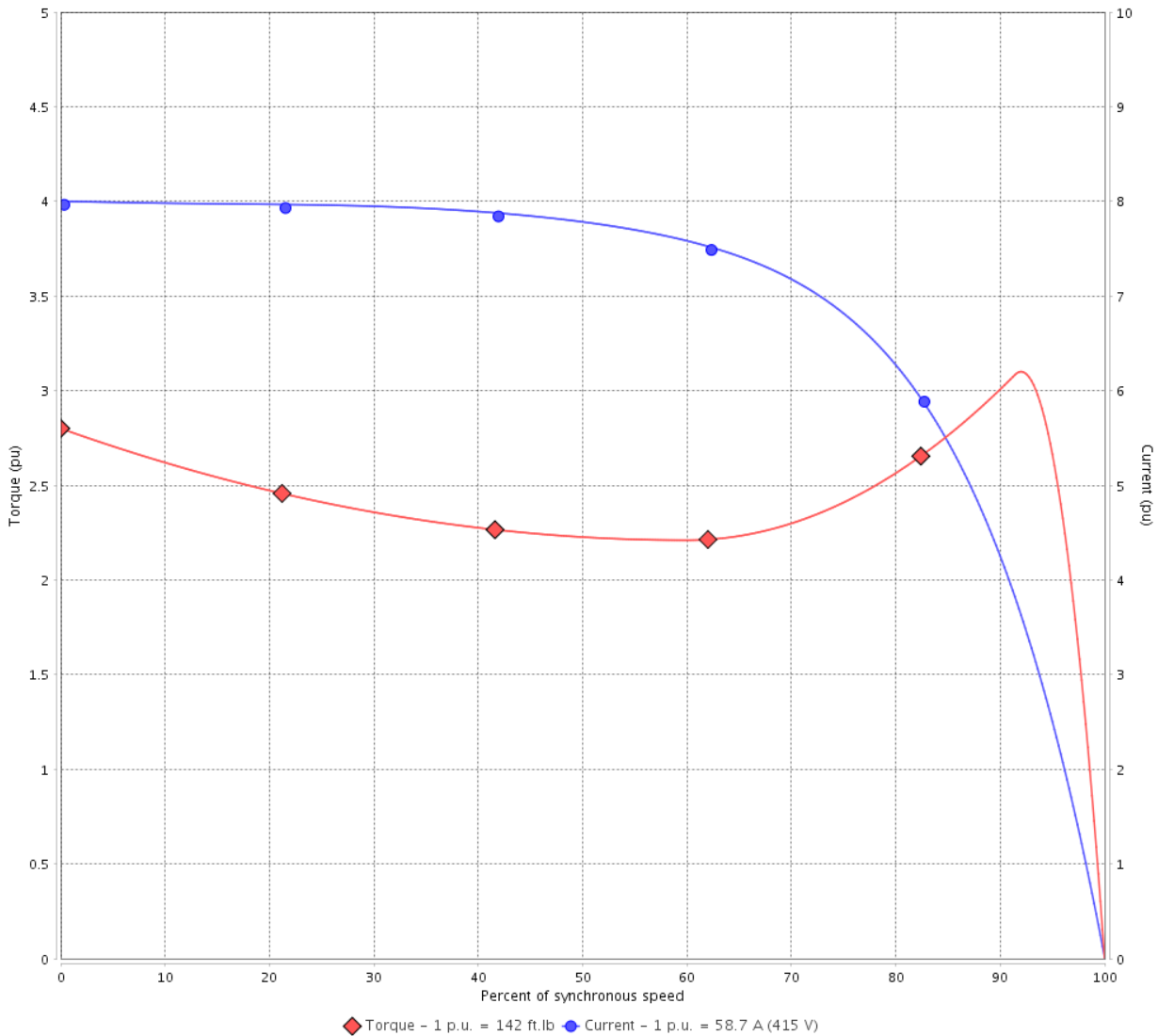
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Catalog # : 05018XT3E326T

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 4P IE3

Rated current	: 58.7 A	Moment of inertia (J)	: 9.16 sq.ft.lb
LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 142 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

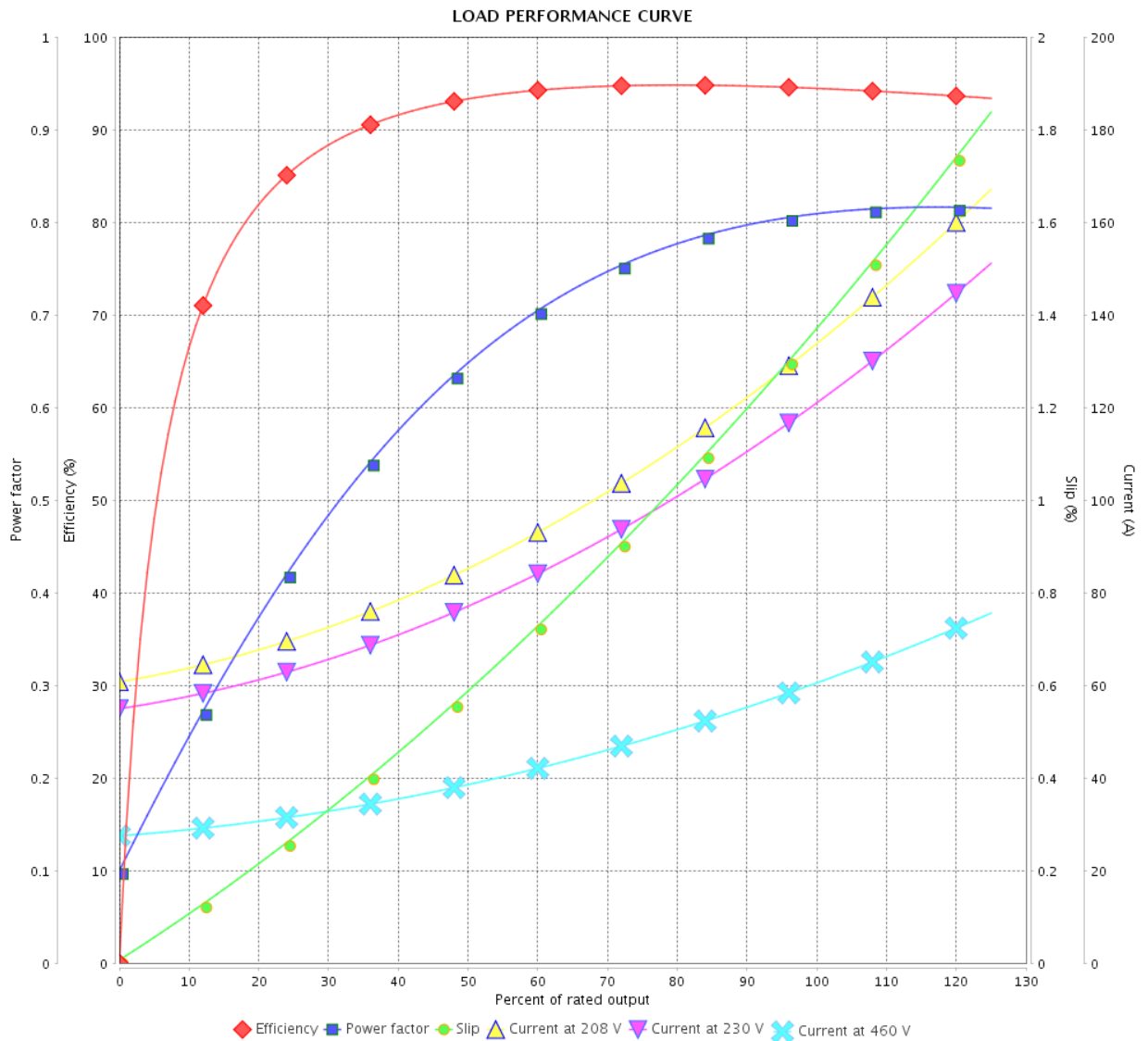


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Product line : NEMA Premium Efficiency Three-Phase

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Performance : 230/460 V 60 Hz 4P

Rated current : 121/60.6 A
 LRC : 7.3
 Rated torque : 148 ft.lb
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 Rated speed : 1775 rpm

Moment of inertia (J) : 9.16 sq.ft.lb
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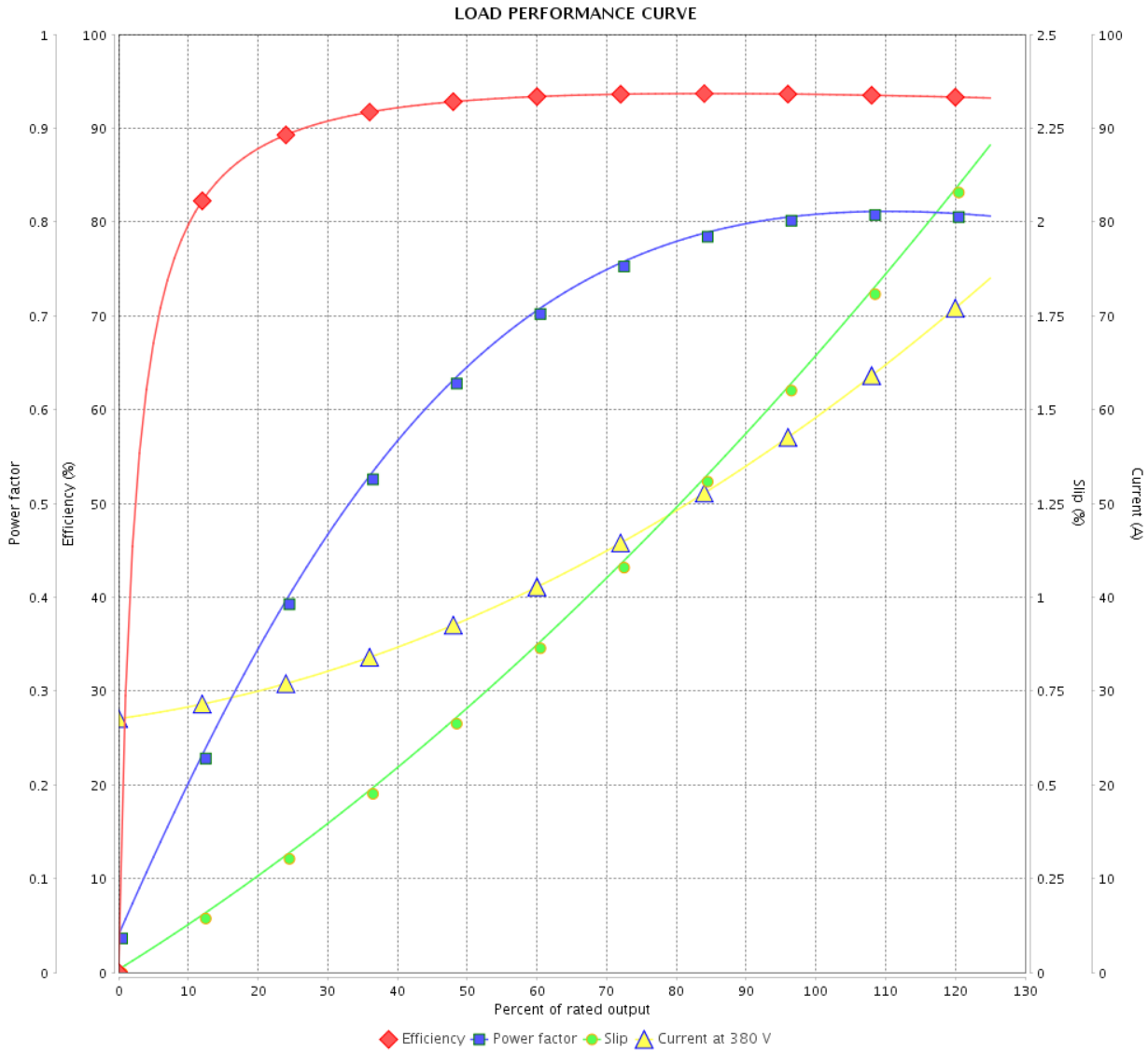


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Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

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Three Phase Induction Motor - Squirrel Cage

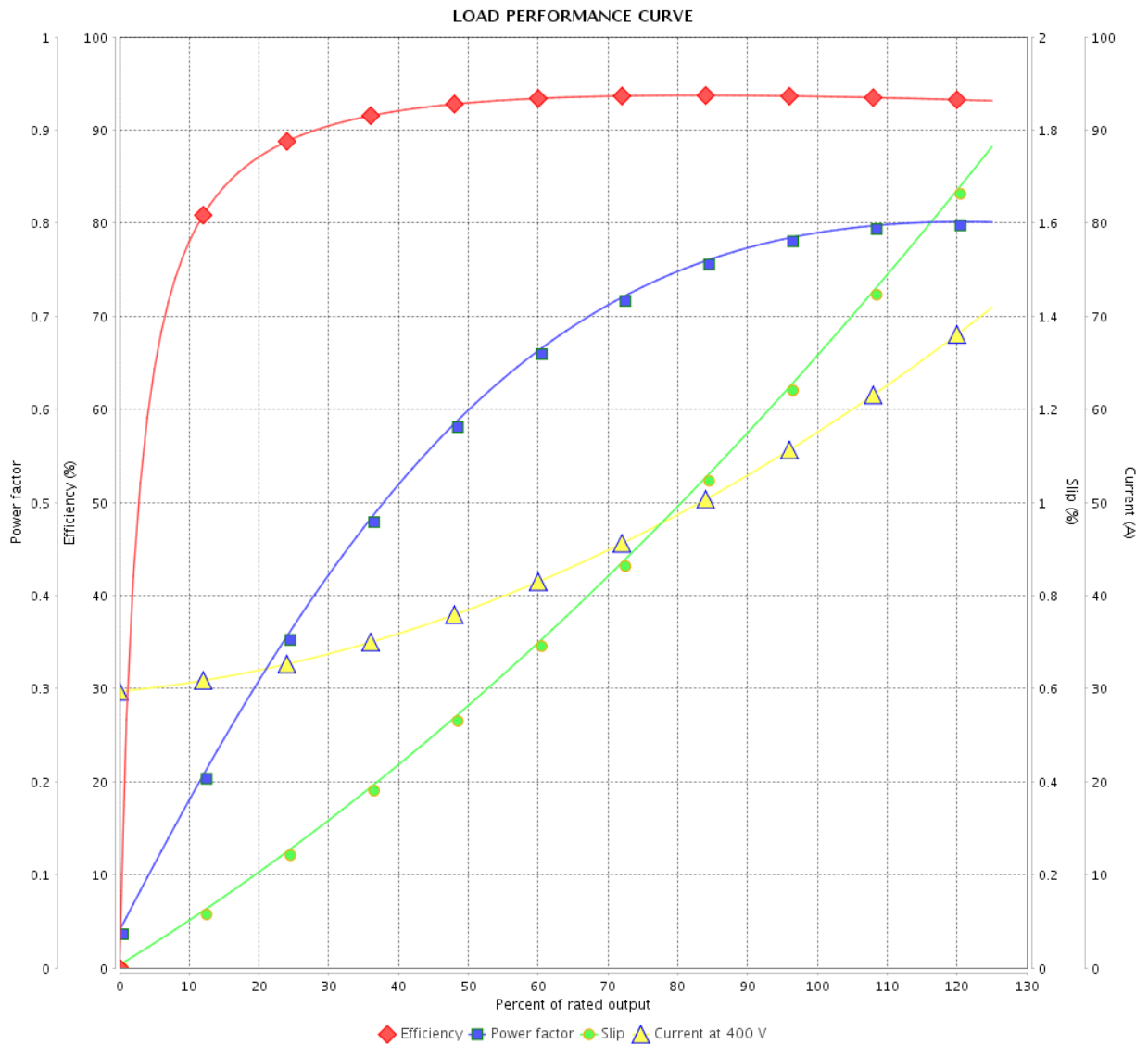


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Performance : 400 V 50 Hz 4P IE3

Rated current : 58.6 A
 LRC : 7.6
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 Breakdown torque : 290 %
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Moment of inertia (J) : 9.16 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
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Three Phase Induction Motor - Squirrel Cage



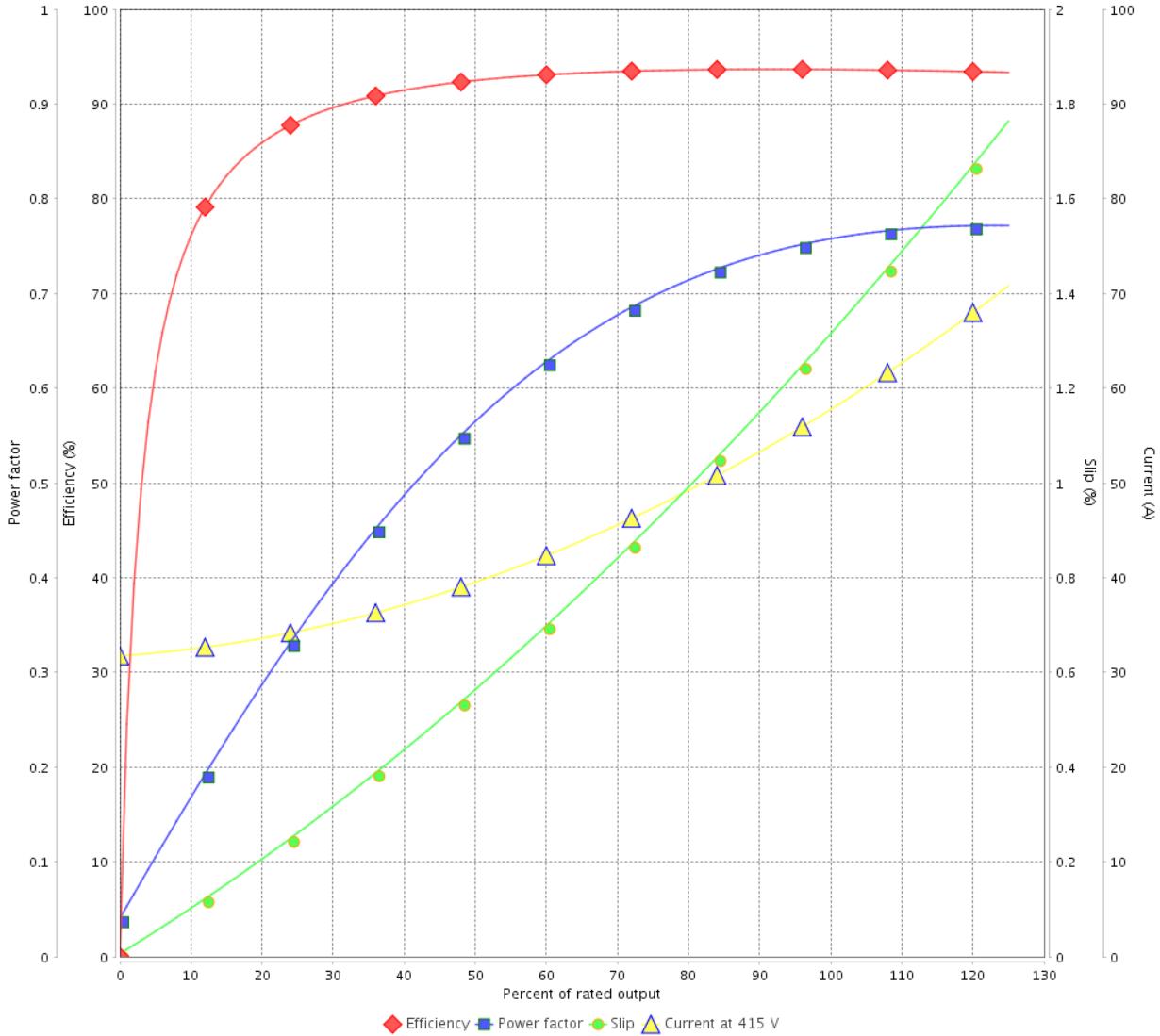
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Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

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THERMAL LIMIT CURVE



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Rated speed : 1775 rpm	Design : B

Heating constant

Cooling constant

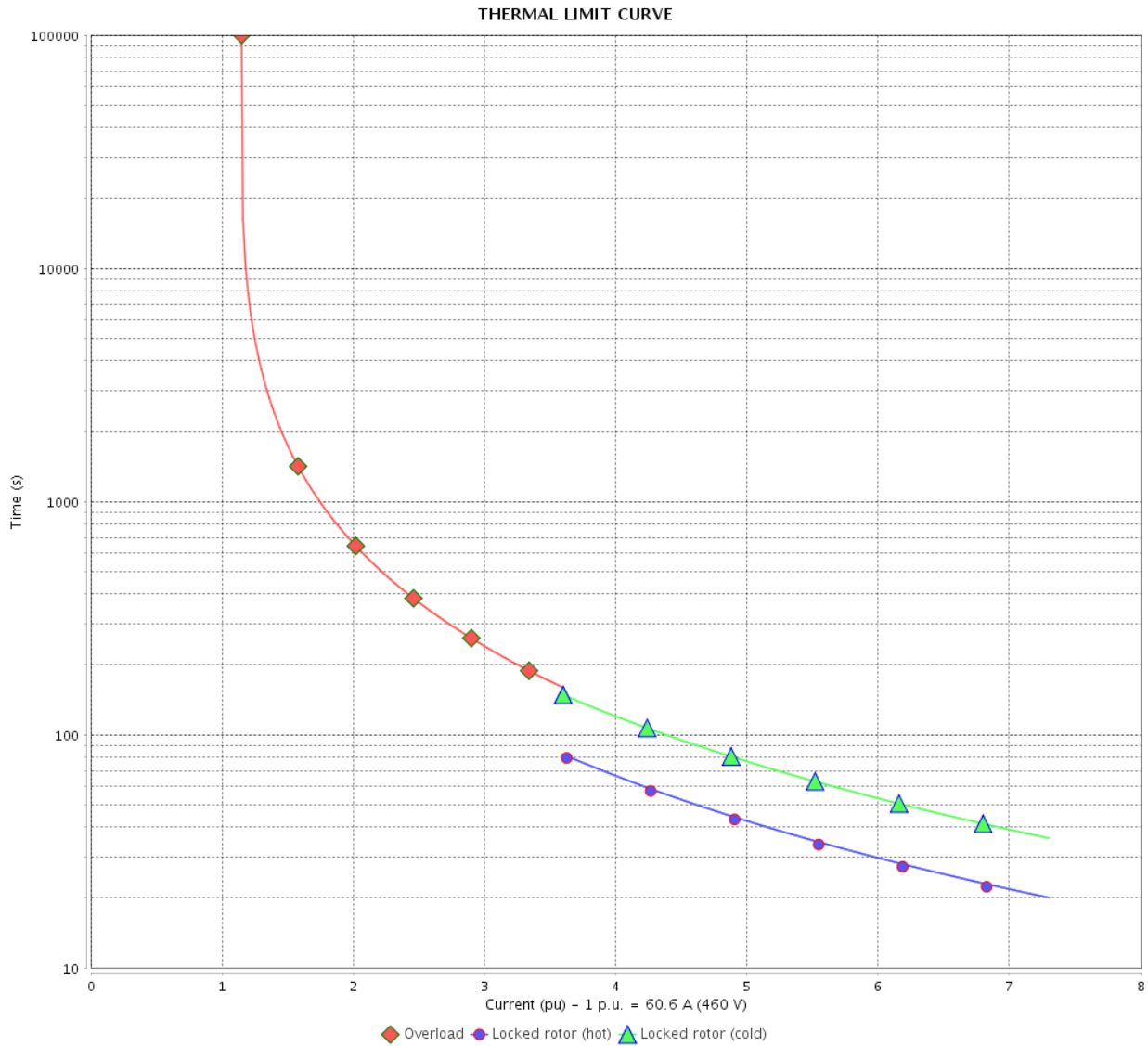
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Locked rotor torque : 240 %	Service factor : 1.00
Breakdown torque : 260 %	Temperature rise : 80 K
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Cooling constant

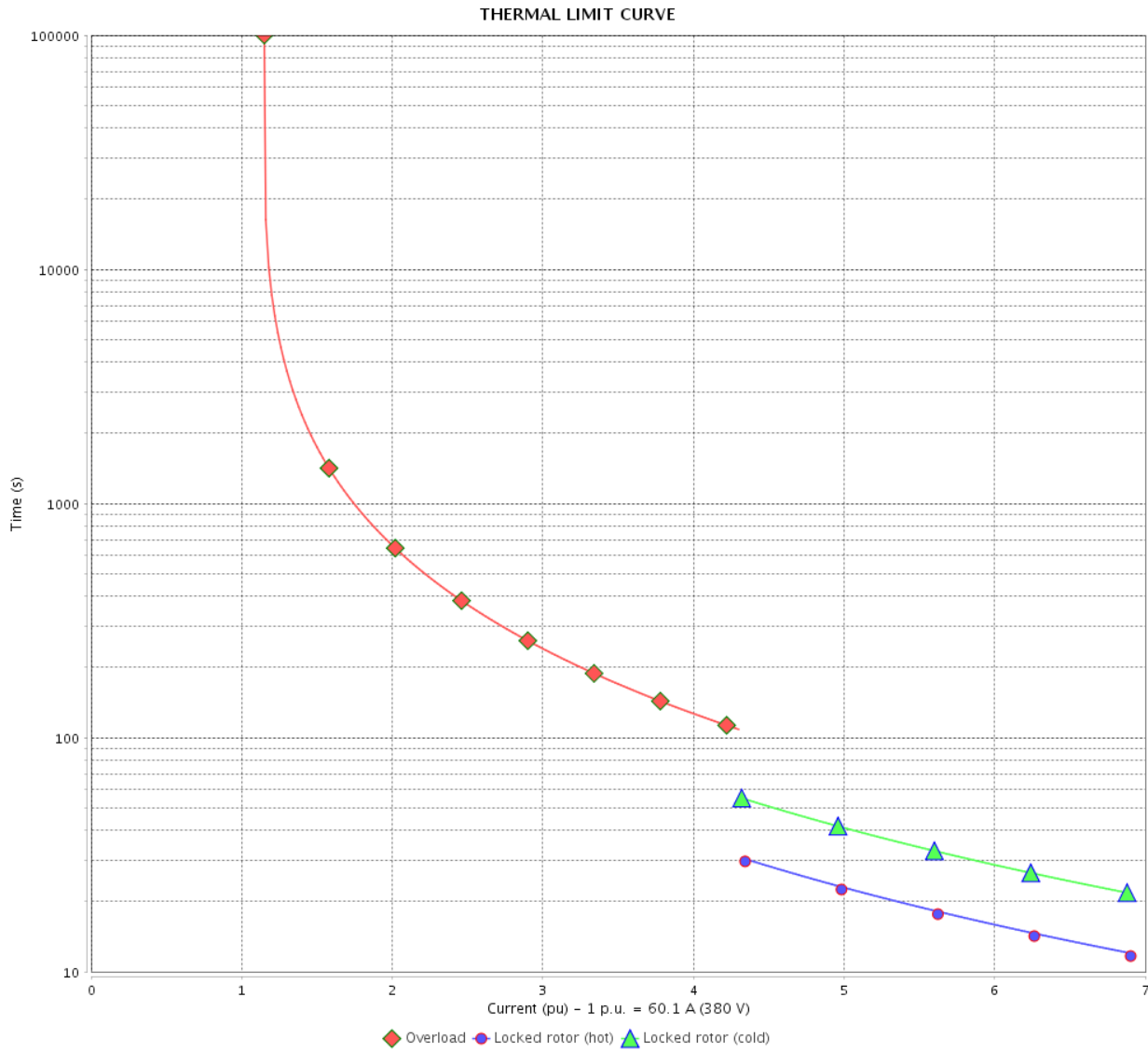
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LRC : 7.6	Duty cycle : Cont.(S1)
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Locked rotor torque : 260 %	Service factor : 1.00
Breakdown torque : 290 %	Temperature rise : 80 K
Rated speed : 1480 rpm	Design : B

Heating constant

Cooling constant

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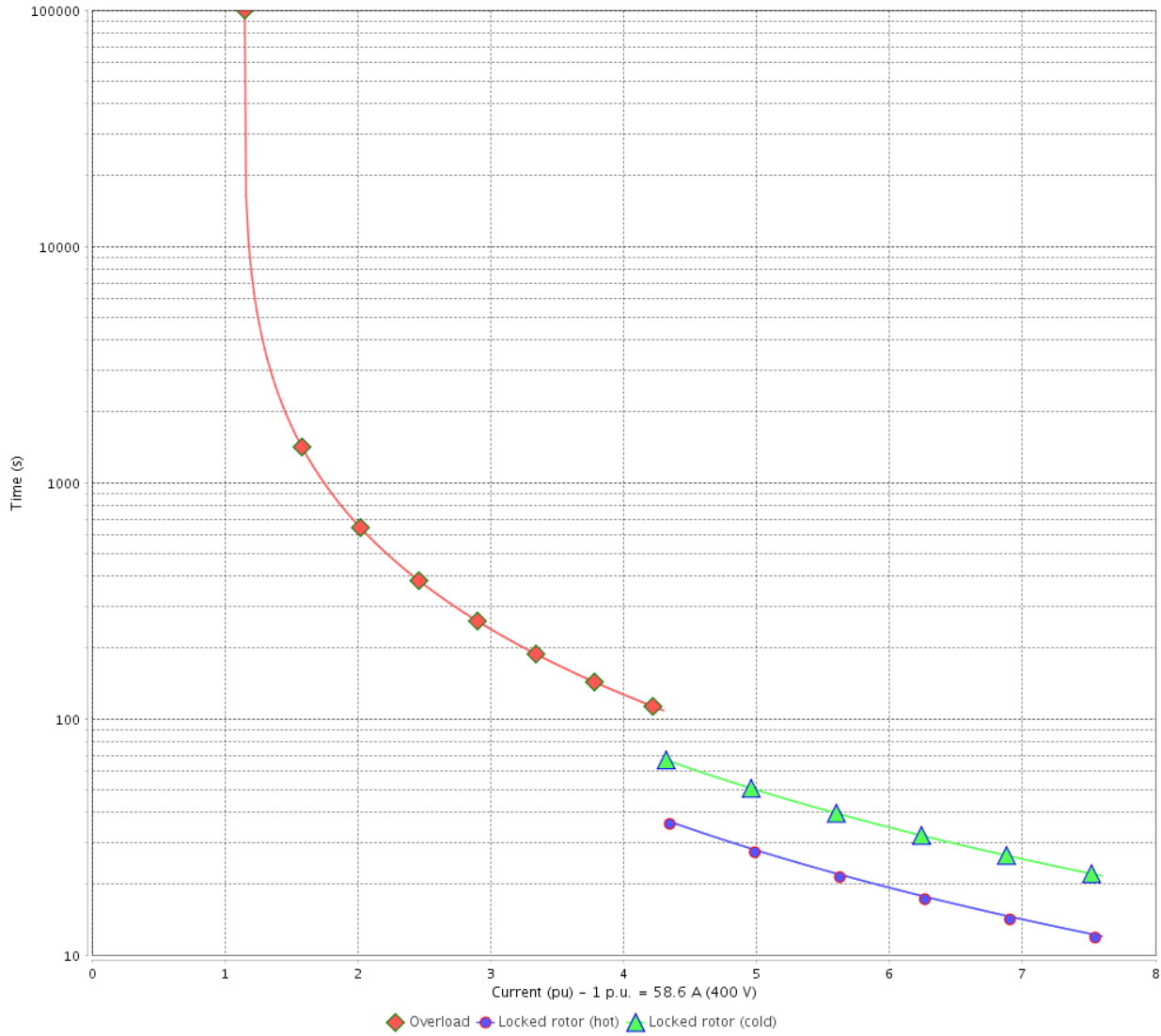
THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

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THERMAL LIMIT CURVE



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Rated current : 58.7 A	Moment of inertia (J) : 9.16 sq.ft.lb
LRC : 8.0	Duty cycle : Cont.(S1)
Rated torque : 142 ft.lb	Insulation class : F
Locked rotor torque : 280 %	Service factor : 1.00
Breakdown torque : 310 %	Temperature rise : 80 K
Rated speed : 1480 rpm	Design : B

Heating constant

Cooling constant

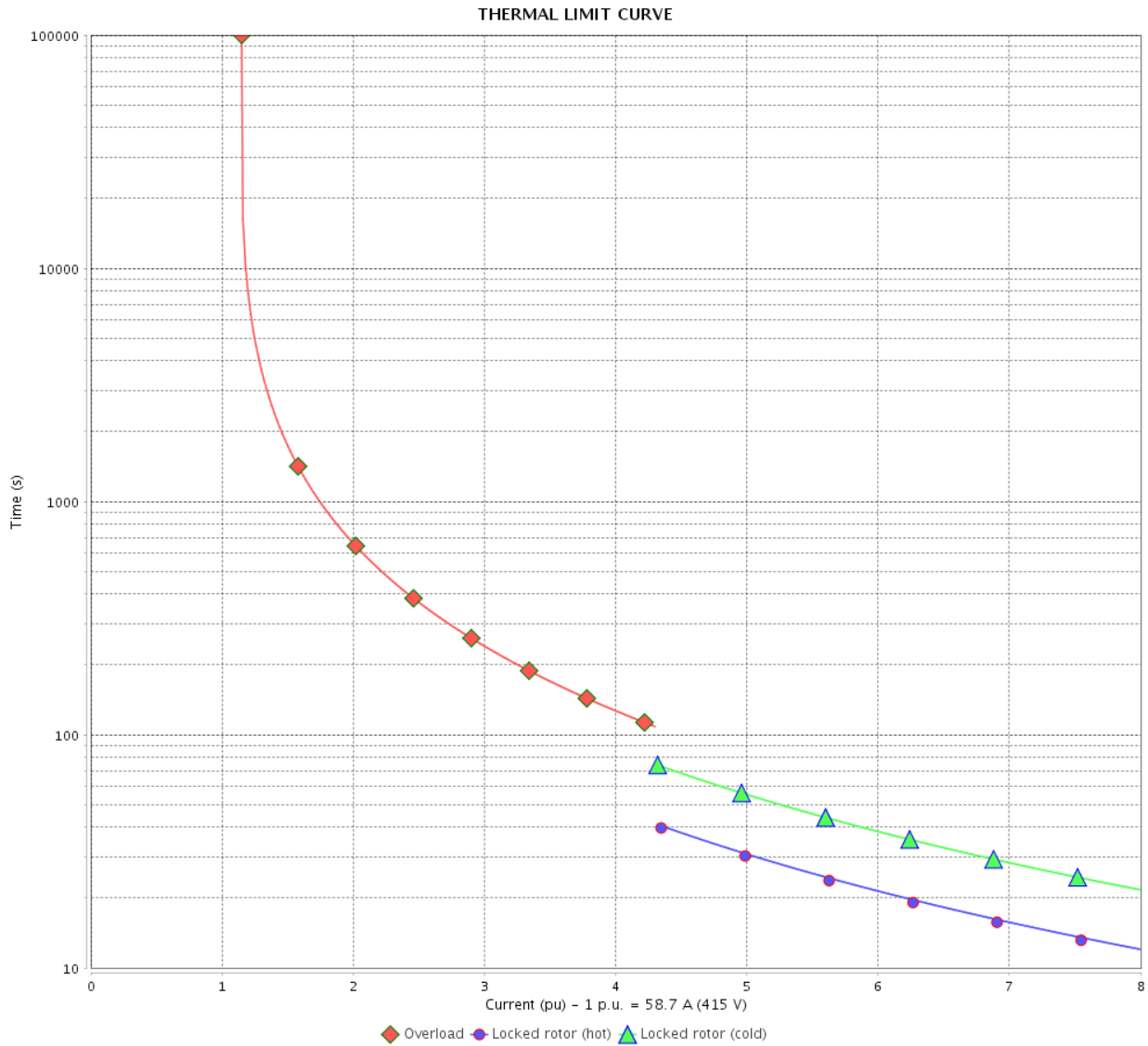
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

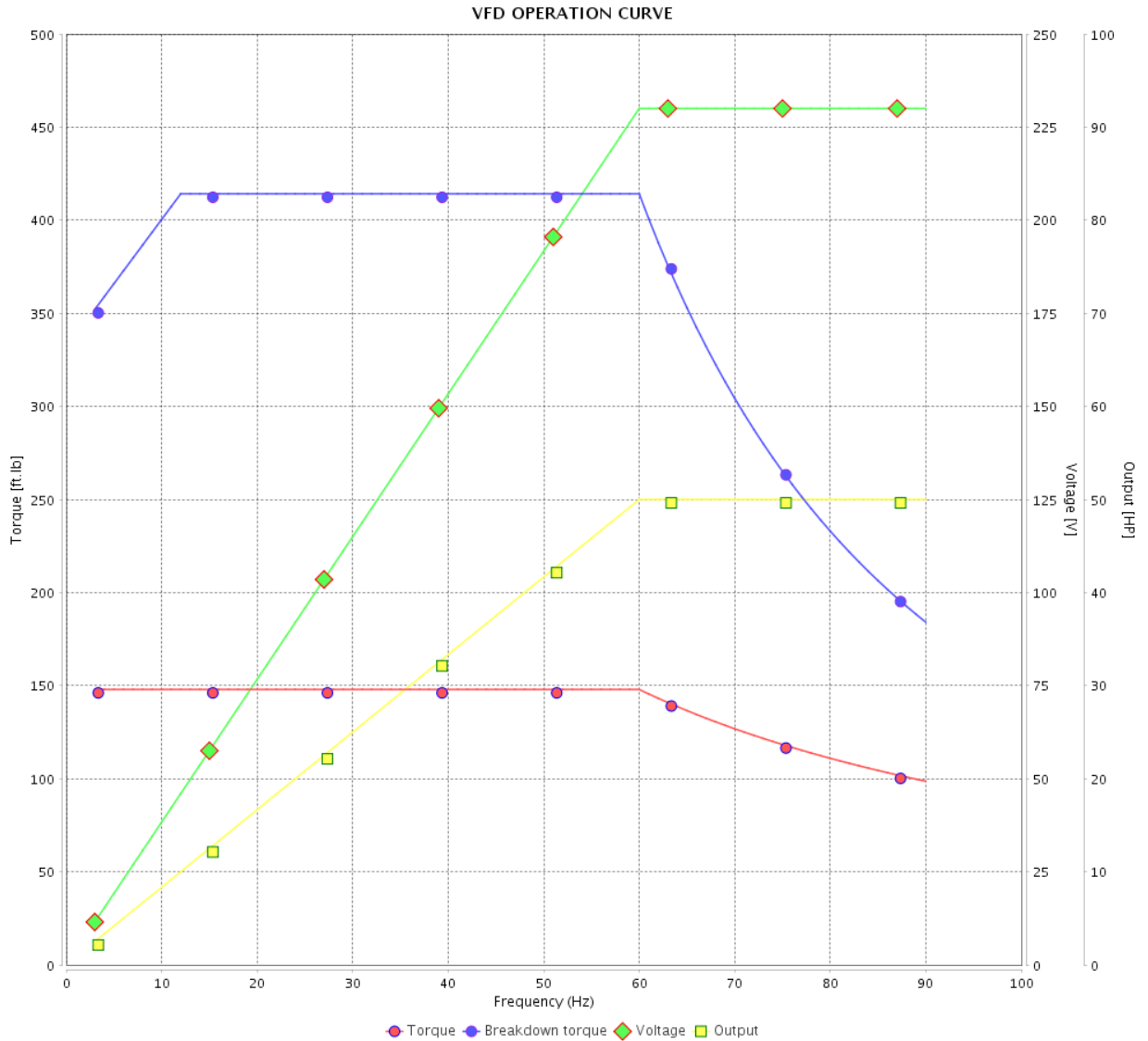


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Performance : 230/460 V 60 Hz 4P

Rated current : 121/60.6 A
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 Insulation class : F
 Service factor : 1.15
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



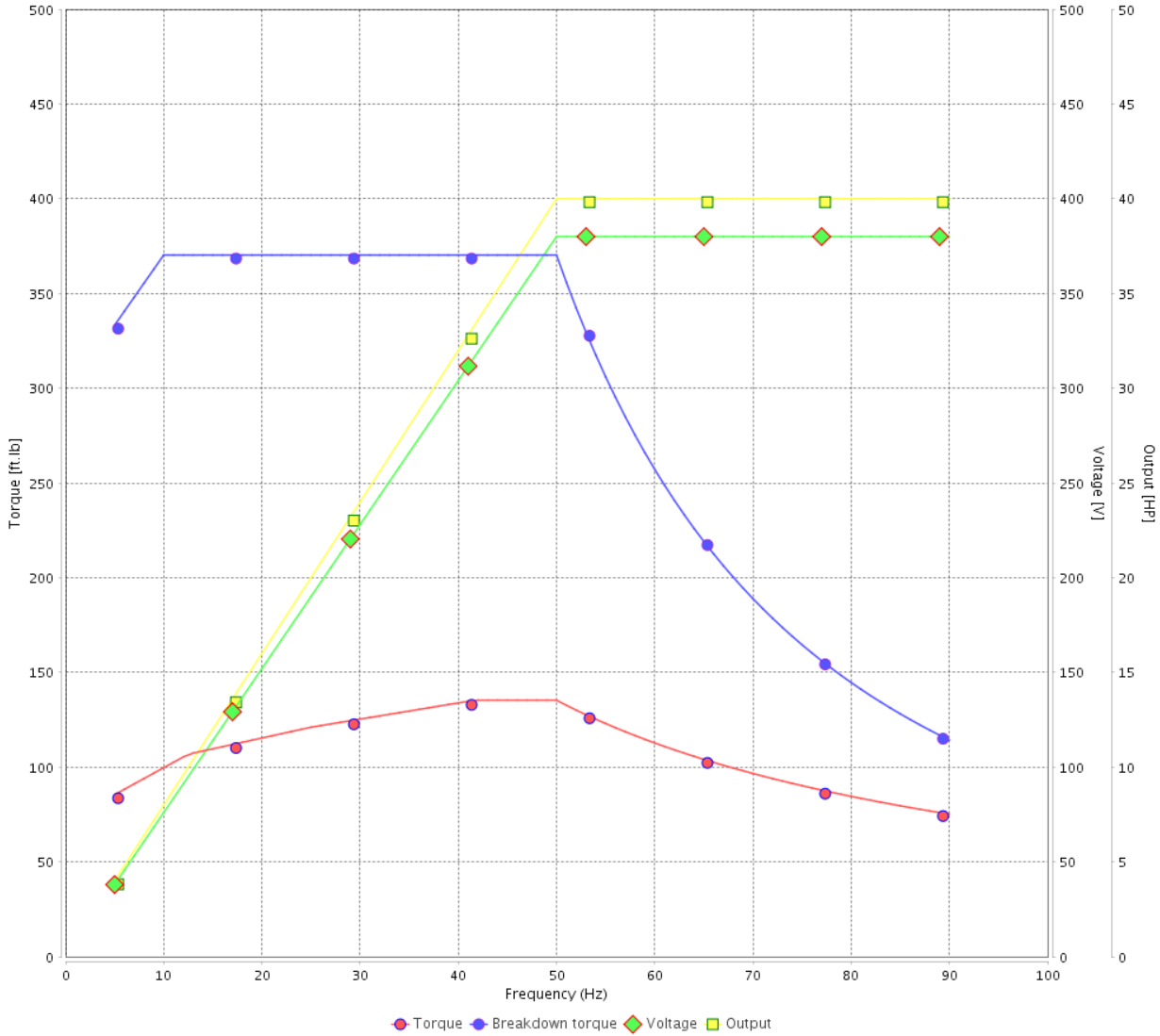
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VFD OPERATION CURVE



Performance : 380 V 50 Hz 4P IE3

Rated current	: 60.1 A	Moment of inertia (J)	: 9.16 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 142 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

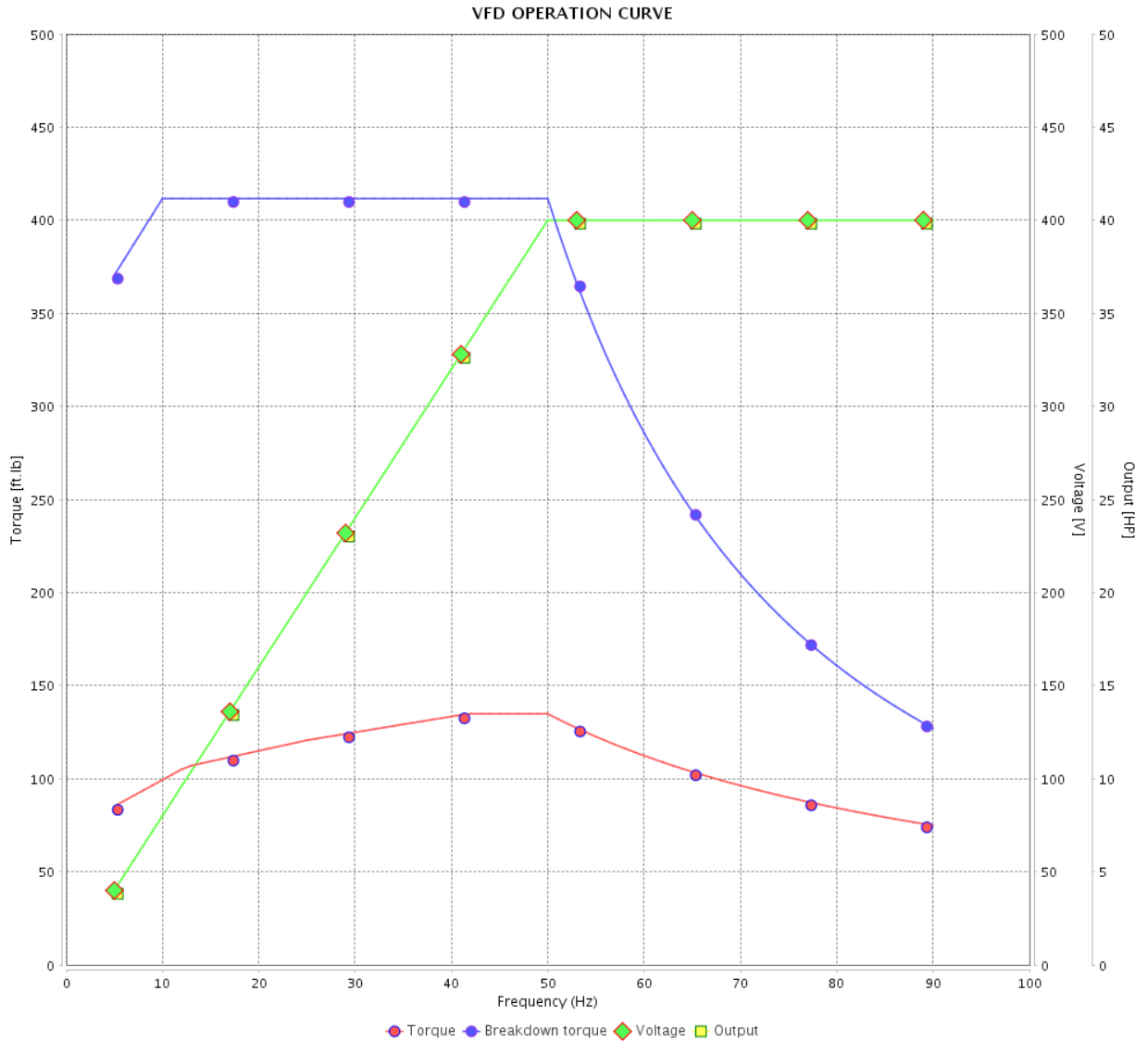


Customer :

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Performance : 400 V 50 Hz 4P IE3

Rated current : 58.6 A
 LRC : 7.6
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 Service factor : 1.00
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



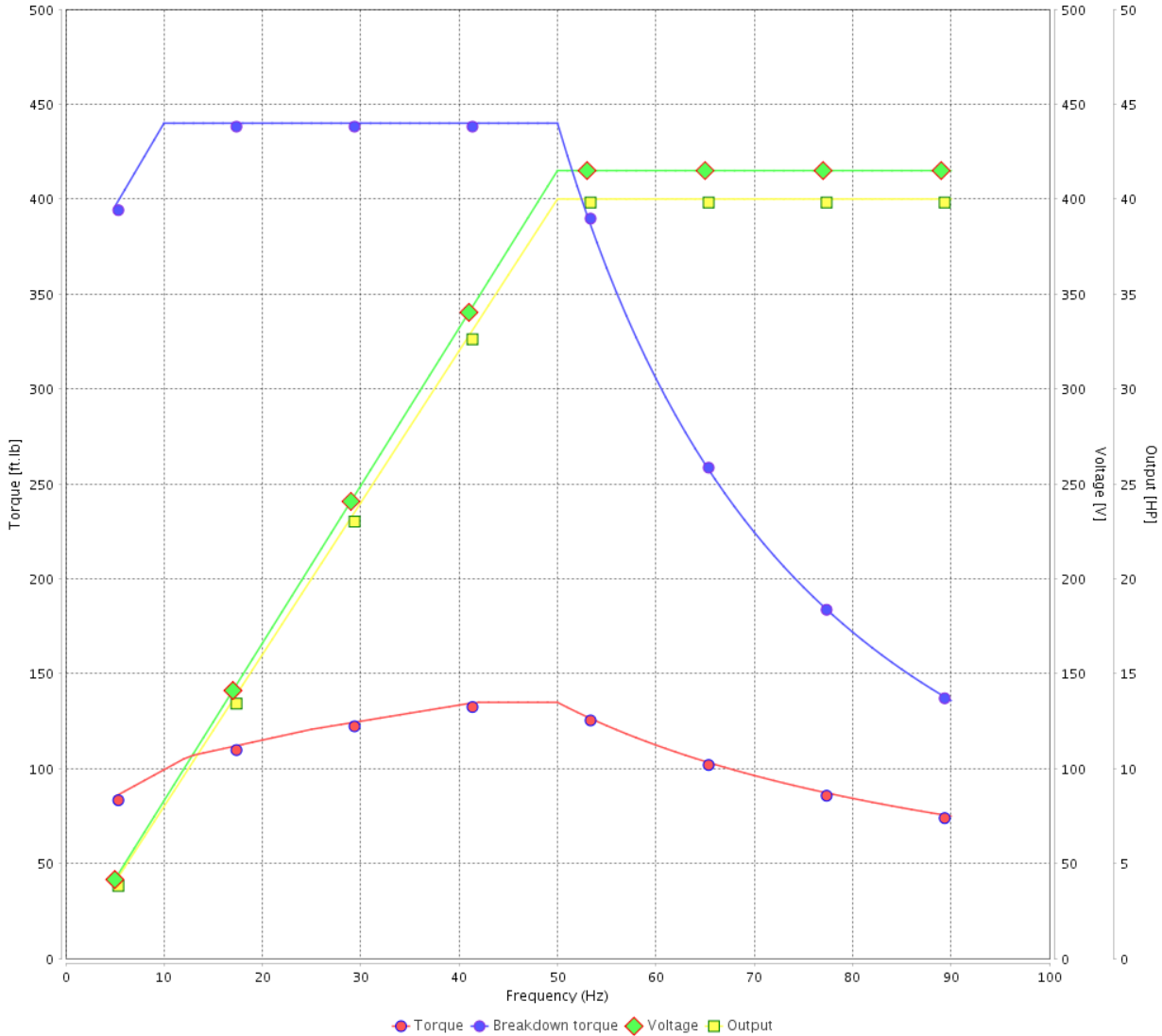
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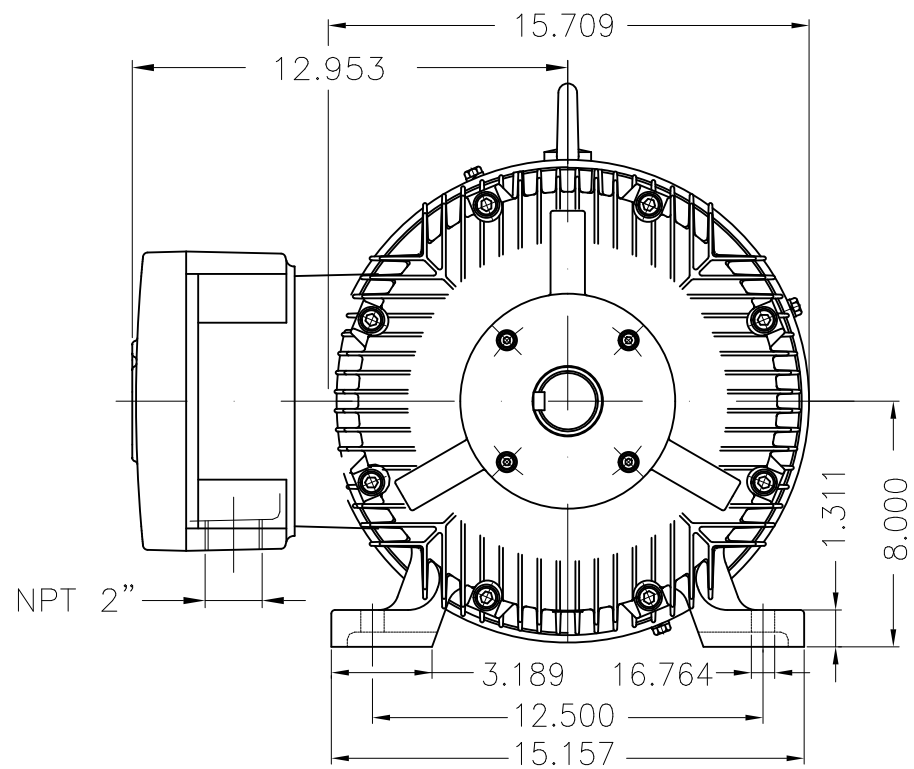
VFD OPERATION CURVE



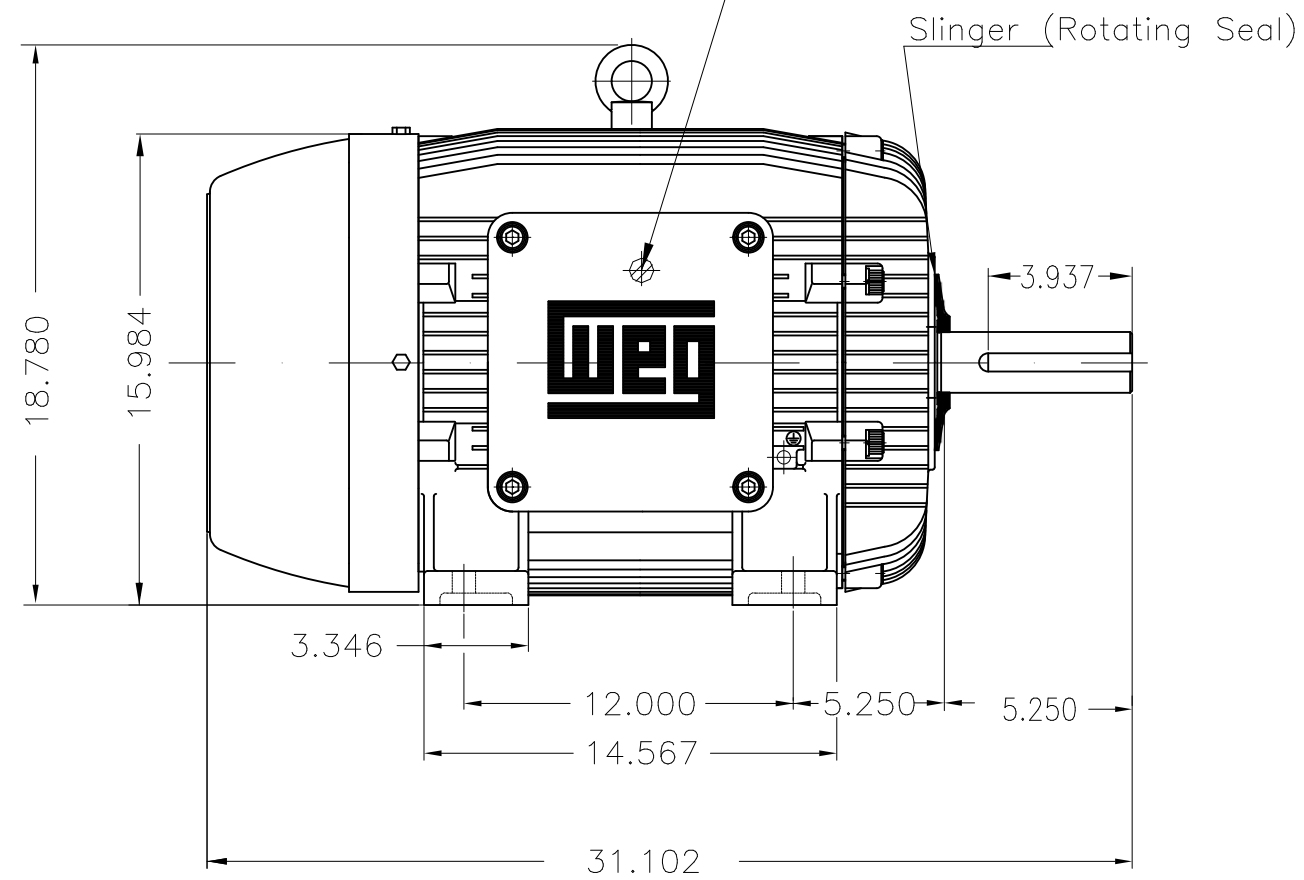
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Locked rotor torque	: 280 %	Service factor	: 1.00
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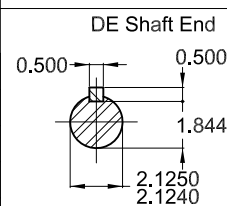
Grounding for leads 5.2–35 mm² / 10–2 AWG



50 HP 04 Poles 60 Hz

A

- With grease fitting
- Color RAL 5009
- Painting plan 202P
- Mounting NEMA F-1
- Mounting B3R(D)



ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR EXPLOSION PROOF PREM. EFF.					
CHECKED		FRAME 326T IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
WDD



MADE IN BRAZIL


W21X NEMA
Premium

14406913



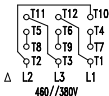
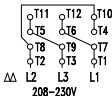
LISTED

CC029A

Inverter Duty Motor
Severe Duty

MODEL 05018XT3E326T

PH 3	FR 326T		
HP(kW) 50.0(37.0)		HZ 60	IP55
V 230/460		A 121/60.6	
RPM 1775		NEMA NOM EFF 94.5%	
PF 0.81		SFA 139/69.7	DES B
INS CL F Δ T 80 K		SF 1.15	ENCL TEFC
DUTY CONT.		CODE H	ALT 1000 m.a.s.l.
AMB 40°C	USABLE @208V	134 A	SF 1.00
AMB 55°C SF1.0			
40HP 30kW 50Hz 380V 60.1A 1475RPM SF1.00 EFF 93.6% (IE3)			



→ 6312-C3 MOBIL POLYREX EM
 → 6212-C3 21 g 20000 h

692 Lbs



TEMP CODE T3C
 CSA/UL: Class I - Div. 1 - Groups C and D
 CSA: Class II - Div. 1 - Groups F and G
 CSA: Class I - Zone 1 - IIB

EXPLOSION PROOF MOTOR

FOR USE ON VPWM VFD 1000:1VT, 6:1CT, 1.0SF, T3C, AMB 40°C.