

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: W40 NEMA Premium Efficiency Three-Phase	Product code :	14285002	
			Catalog # :	07536OT3E364TS-W40G	
Frame		: 364/5TS	Cooling method	: IC01 - ODP	
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	: 715 lb	
Protection degree		: IP23	Moment of inertia (J)	: 6.40 sq.ft.lb	
Design		: B			
Output [HP]	75	60	60	60	
Poles	2	2	2	2	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	170/84.8	82.7	79.4	78.4	
L. R. Amperes [A]	1119/560	579	588	588	
LRC [A]	6.6x(Code G)	7.0x(Code H)	7.4x(Code H)	7.5x(Code H)	
No load current [A]	43.0/21.5	20.7	22.7	25.0	
Rated speed [RPM]	3555	2955	2963	2965	
Slip [%]	1.25	1.50	1.23	1.17	
Rated torque [ft.lb]	111	107	106	106	
Locked rotor torque [%]	200	190	220	220	
Breakdown torque [%]	250	229	250	280	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	34s (cold) 19s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	
Noise level ²	84.0 dB(A)				
Efficiency (%)	25%	91.0	90.5	90.2	
	50%	91.7	91.7	91.4	
	75%	93.0	92.9	92.8	
	100%	93.6	94.0	94.0	
Power Factor	25%	0.56	0.56	0.51	
	50%	0.77	0.78	0.73	
	75%	0.84	0.85	0.83	
	100%	0.87	0.88	0.87	
Bearing type		Drive end : 6314 C3 Non drive end : 6212 Z C3	Foundation loads		
Sealing		Without Bearing Seal	Max. traction : 662 lb Max. compression : 1377 lb		
Lubrication interval		14418 h 20000 h			
Lubricant amount		27 g 13 g			
Lubricant type		Mobil Polyrex EM			
Notes USABLE @208V 188A SF 1.15 SFA 216A					
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



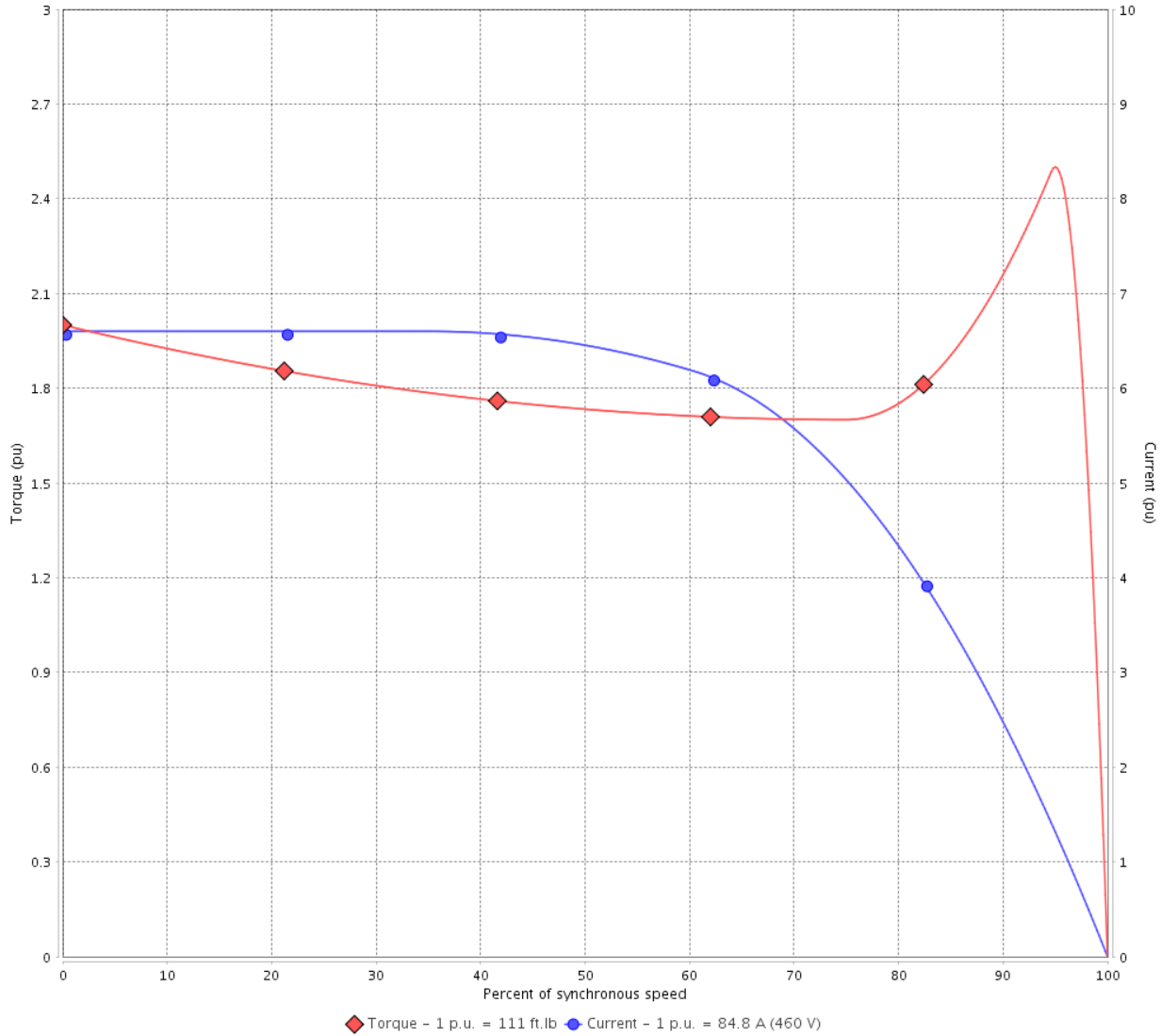
Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14285002

Catalog # : 07536OT3E364TS-W40G

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 170/84.8 A	Moment of inertia (J)	: 6.40 sq.ft.lb
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 111 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 3555 rpm	Design	: B

Locked rotor time : 34s (cold) 19s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



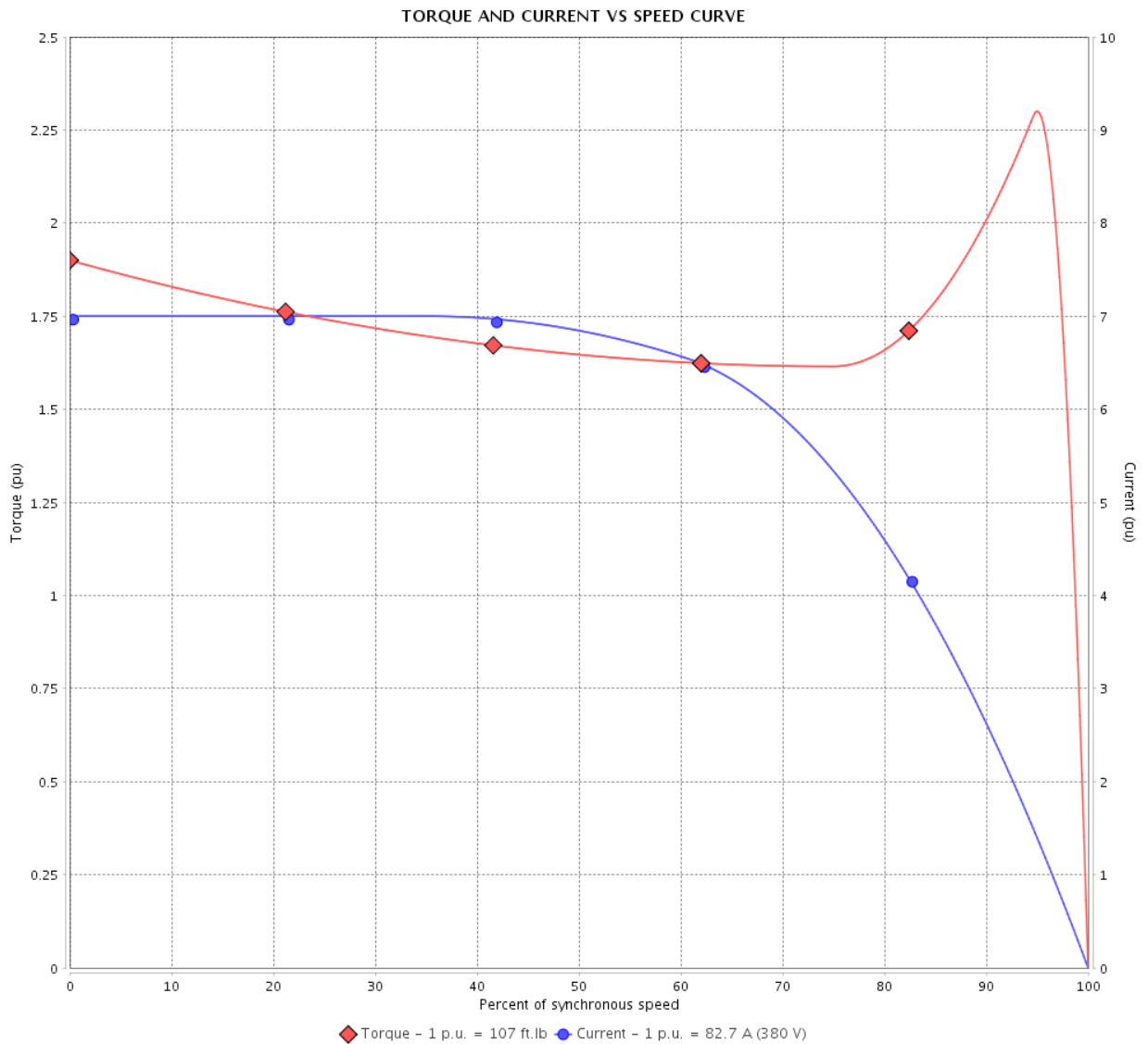
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14285002

Catalog # : 07536OT3E364TS-W40G



Performance : 380 V 50 Hz 2P IE3

Rated current	: 82.7 A	Moment of inertia (J)	: 6.40 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 107 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 2955 rpm	Design	: B

Locked rotor time : 27s (cold) 15s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



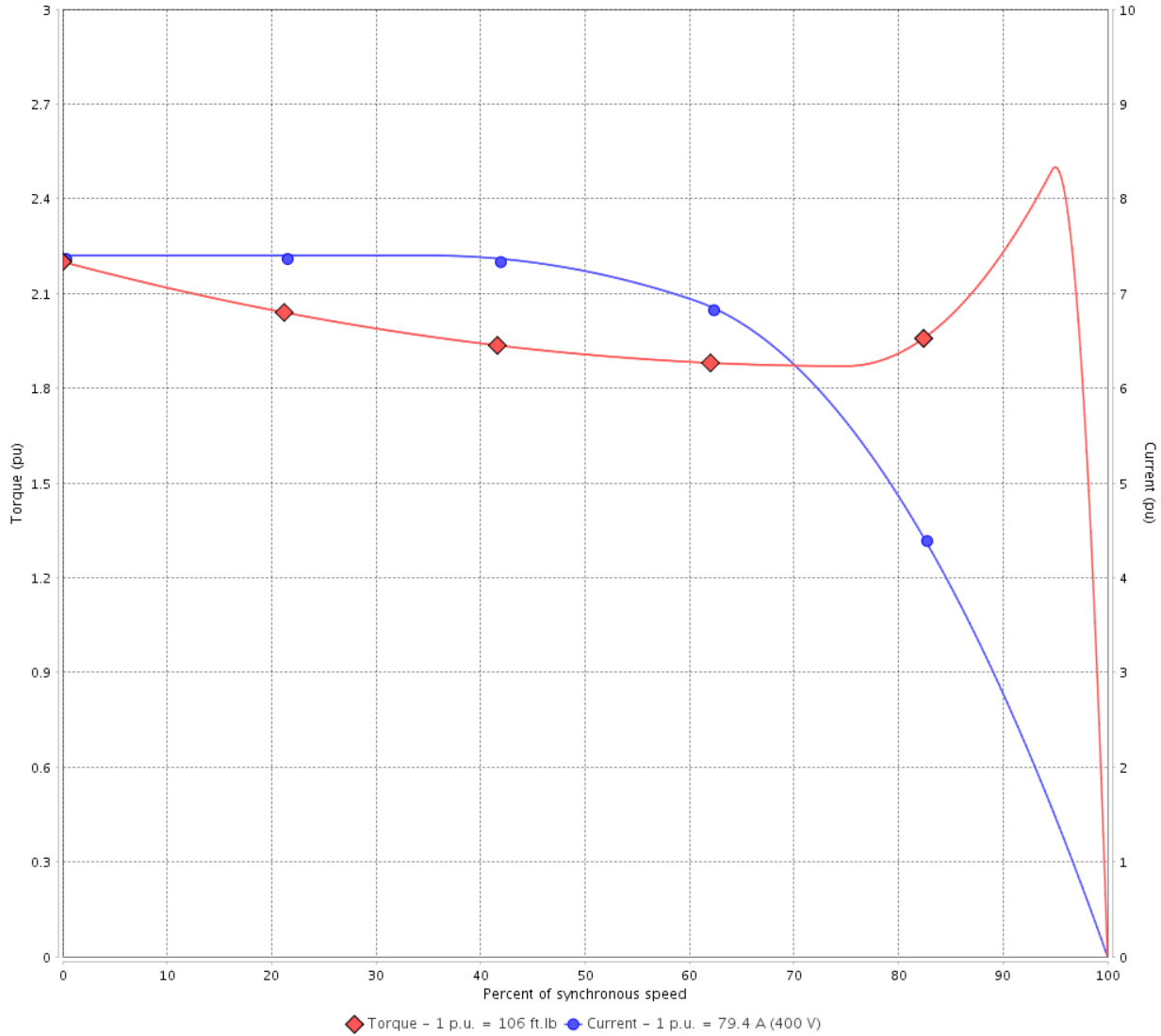
Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14285002

Catalog # : 075360T3E364TS-W40G

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 2P IE3

Rated current	: 79.4 A	Moment of inertia (J)	: 6.40 sq.ft.lb
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 106 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 2963 rpm	Design	: B

Locked rotor time : 27s (cold) 15s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



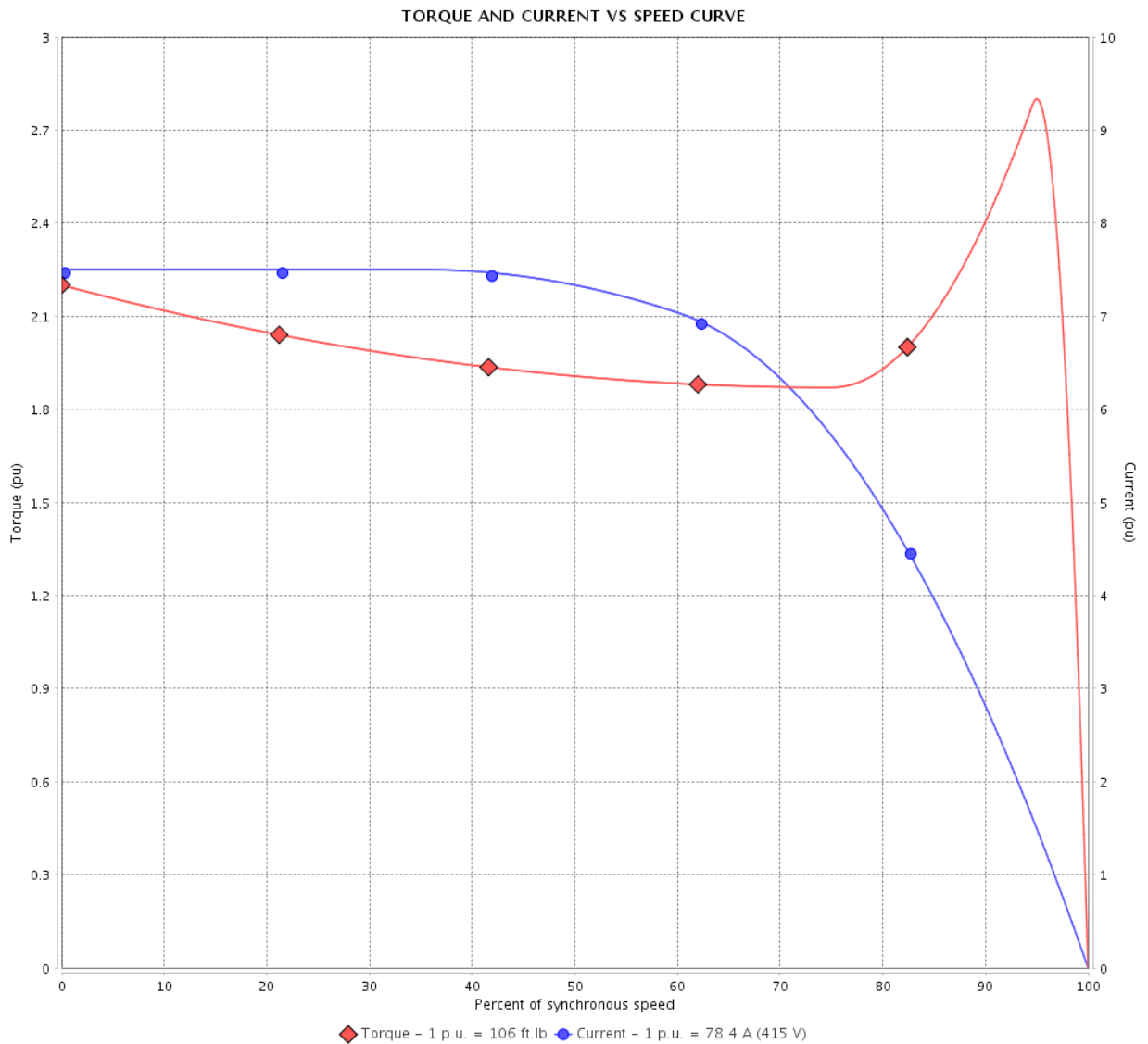
Three Phase Induction Motor - Squirrel Cage

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Performance : 415 V 50 Hz 2P IE3

Rated current	: 78.4 A	Moment of inertia (J)	: 6.40 sq.ft.lb
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 106 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2965 rpm	Design	: B

Locked rotor time : 27s (cold) 15s (hot)

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LOAD PERFORMANCE CURVE

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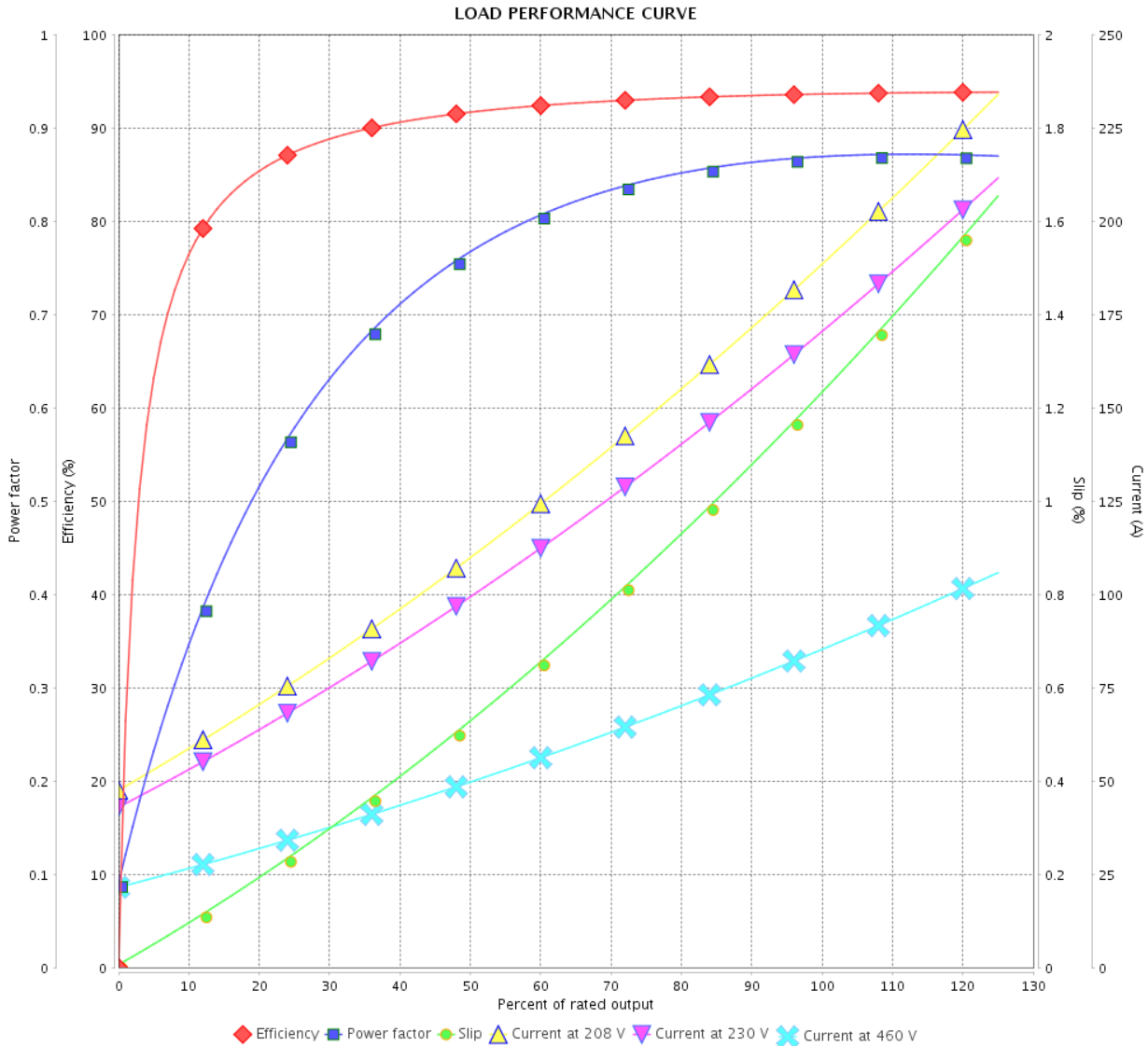


Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14285002

Catalog # : 075360T3E364TS-W40G



Performance : 230/460 V 60 Hz 2P

Rated current : 170/84.8 A
 LRC : 6.6
 Rated torque : 111 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 250 %
 Rated speed : 3555 rpm

Moment of inertia (J) : 6.40 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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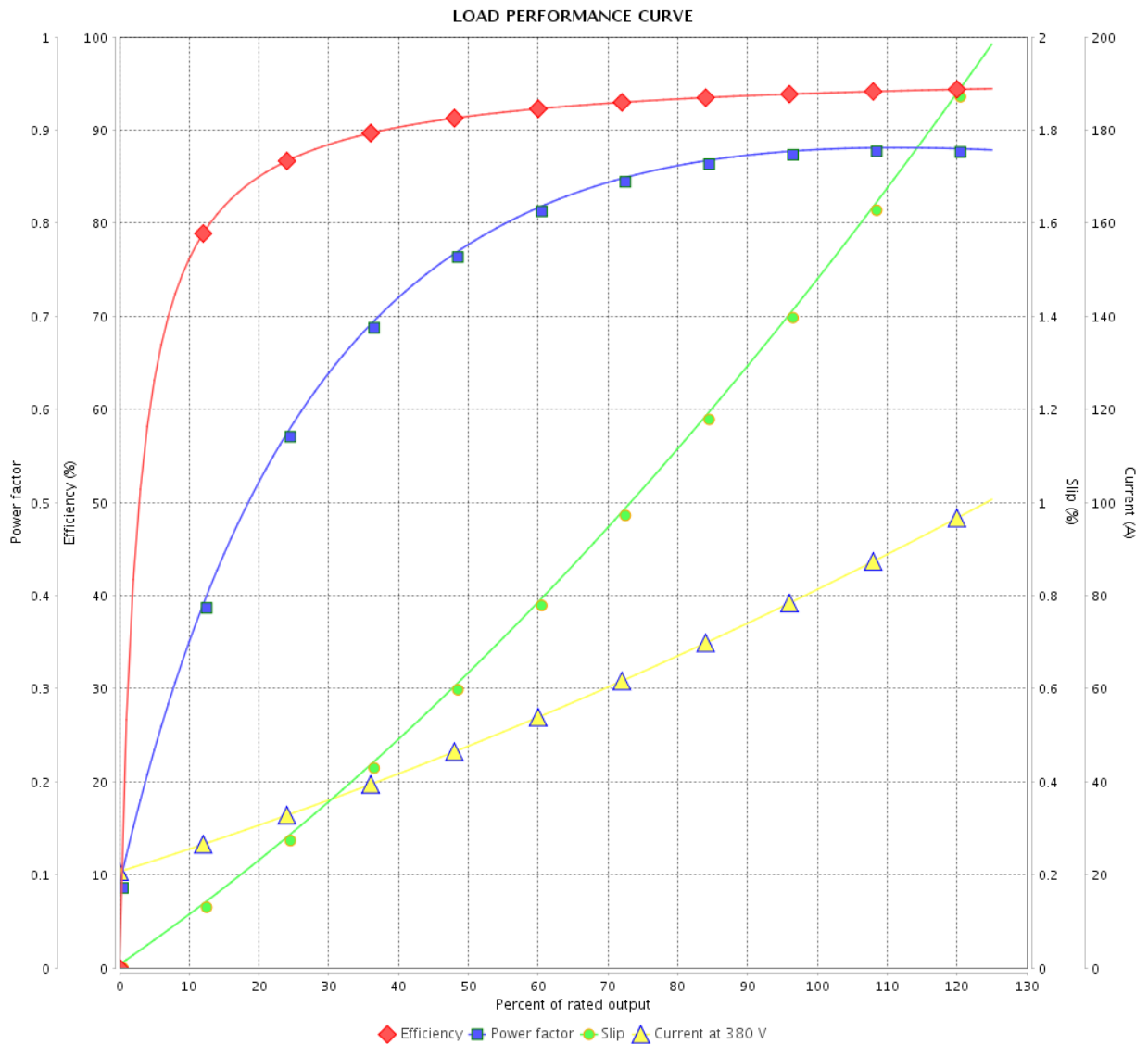


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Performance : 380 V 50 Hz 2P IE3

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 Breakdown torque : 229 %
 Rated speed : 2955 rpm

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 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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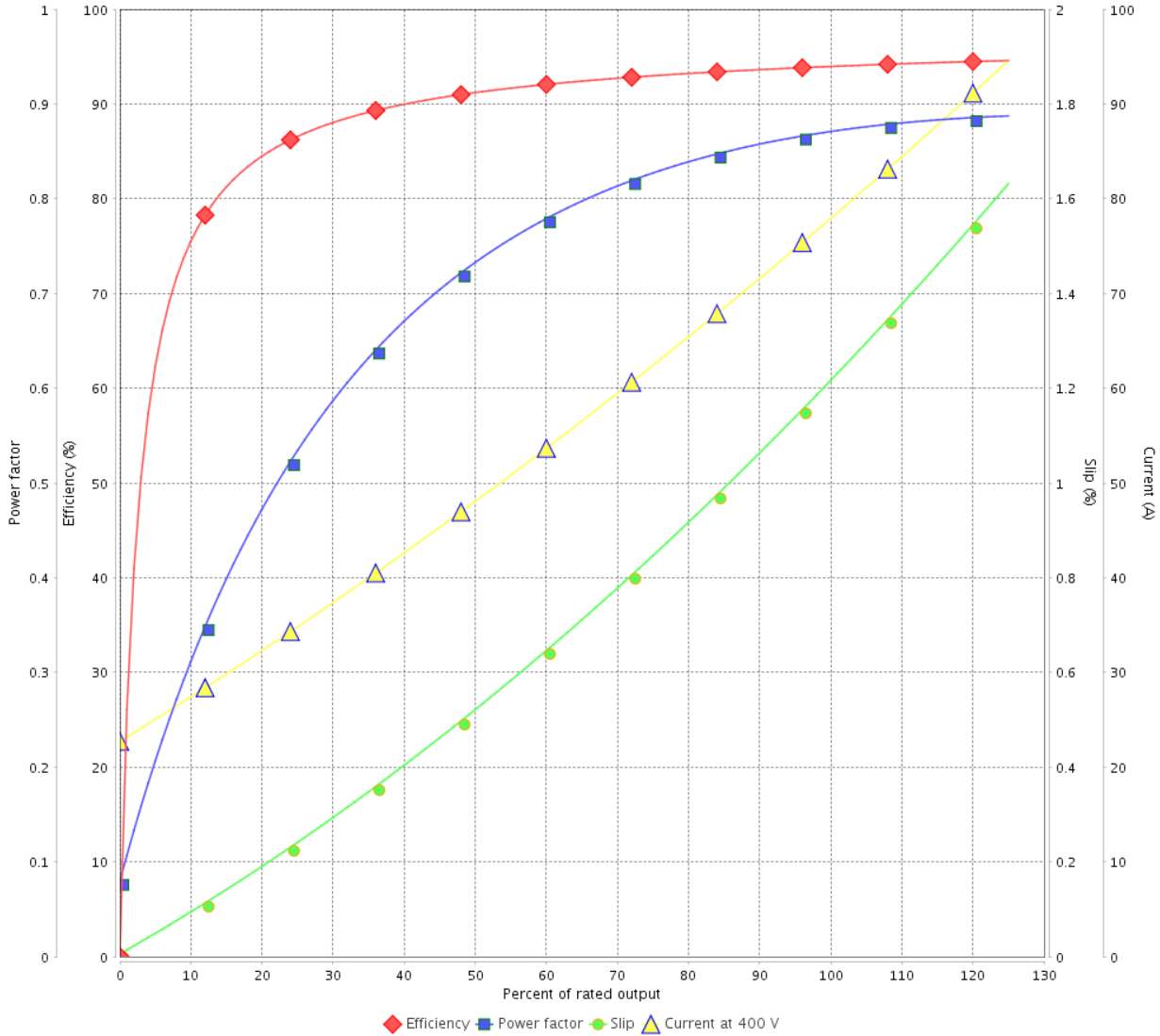
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Performance : 400 V 50 Hz 2P IE3

Rated current : 79.4 A
 LRC : 7.4
 Rated torque : 106 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 250 %
 Rated speed : 2963 rpm

Moment of inertia (J) : 6.40 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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Three Phase Induction Motor - Squirrel Cage

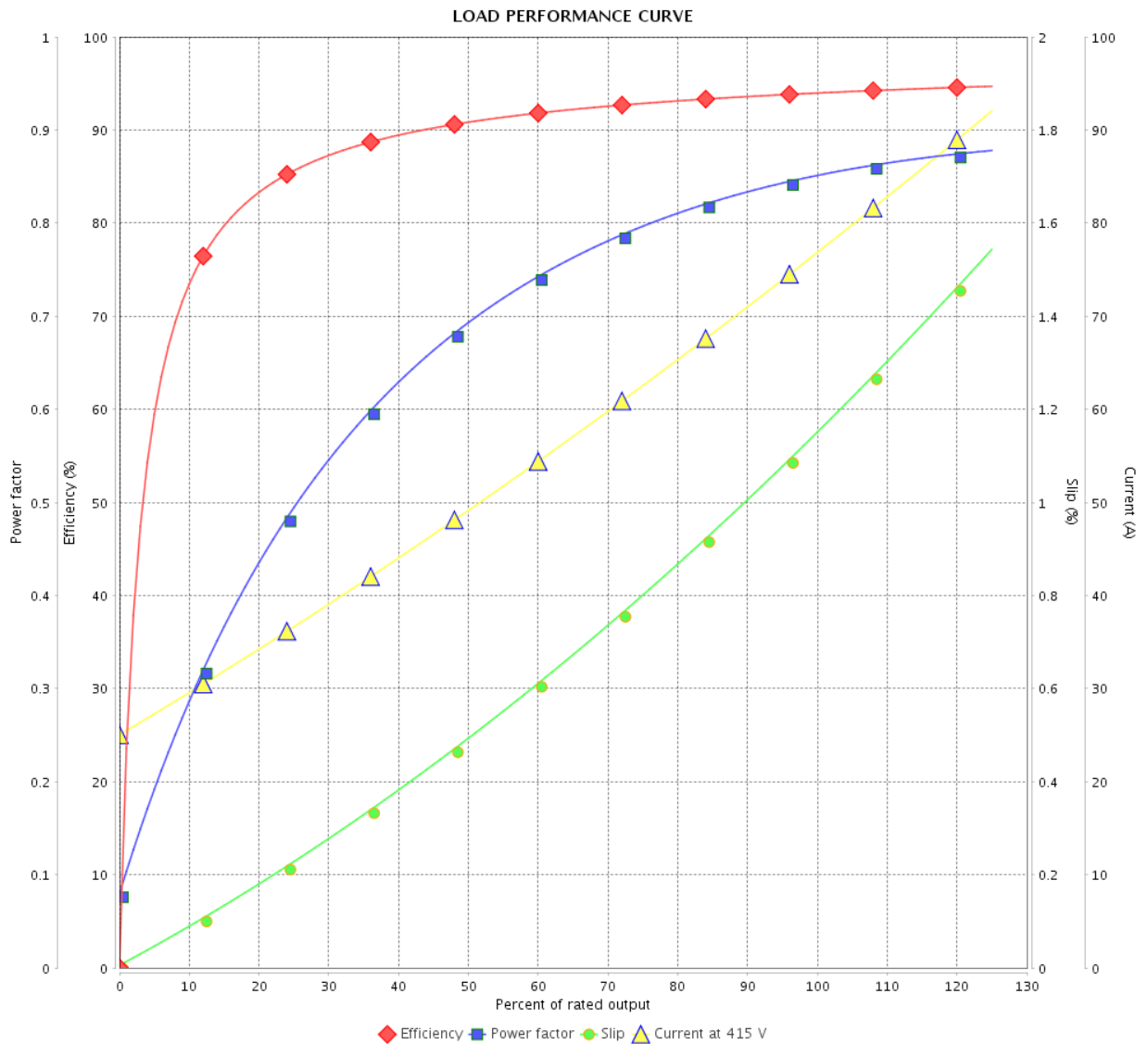


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Performance : 415 V 50 Hz 2P IE3

Rated current : 78.4 A
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 Rated torque : 106 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 280 %
 Rated speed : 2965 rpm

Moment of inertia (J) : 6.40 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE



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Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

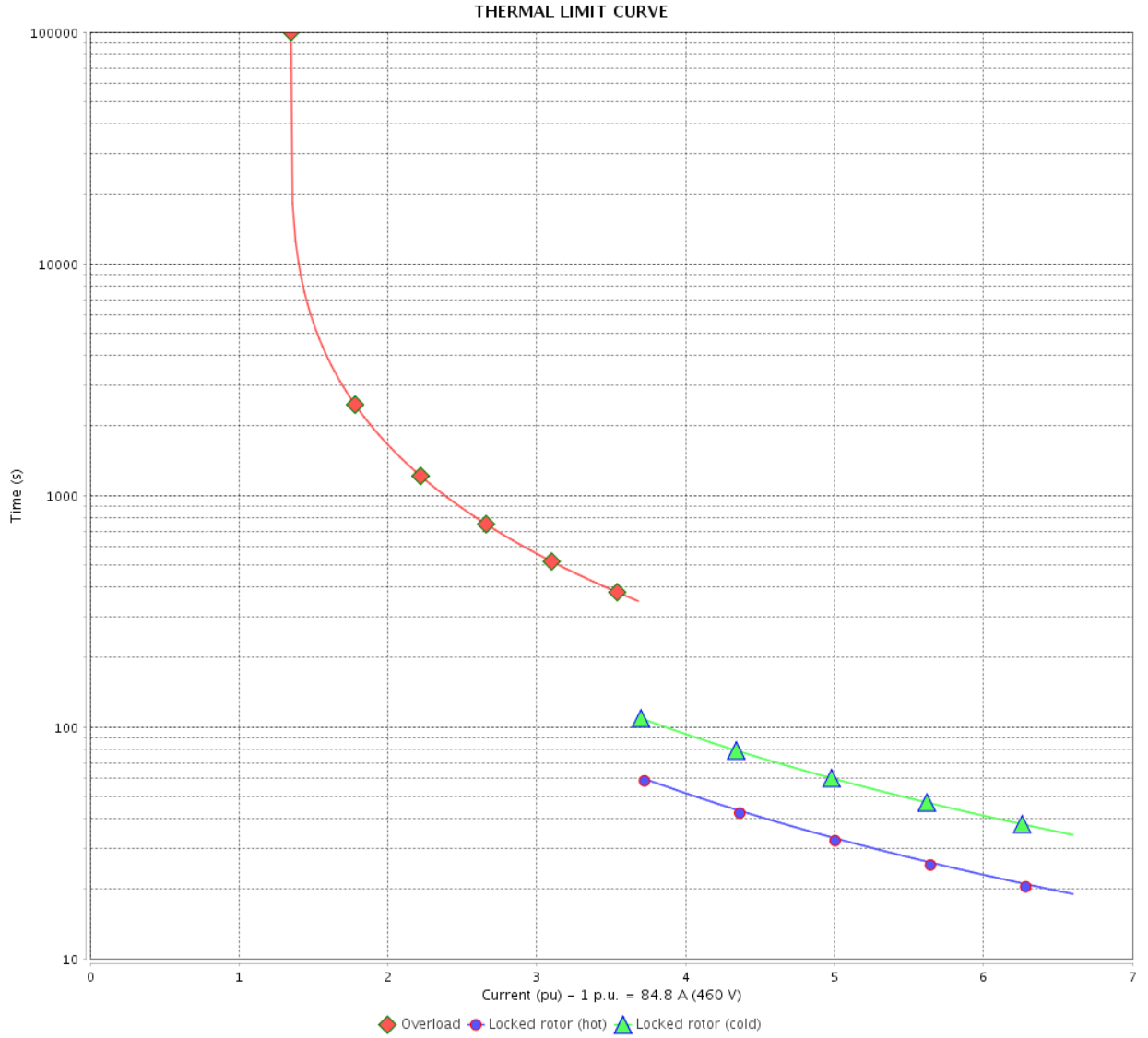
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Heating constant

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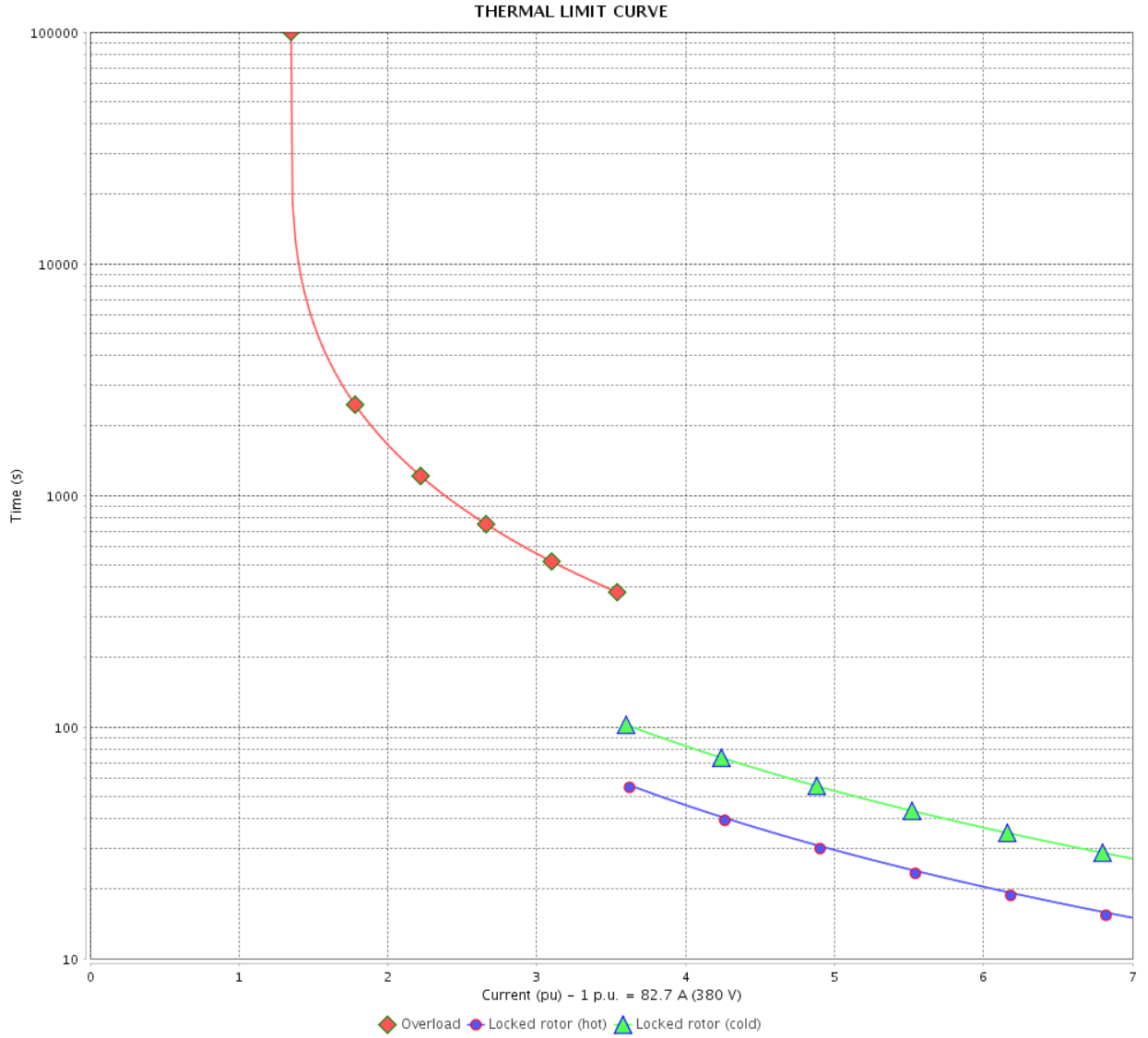
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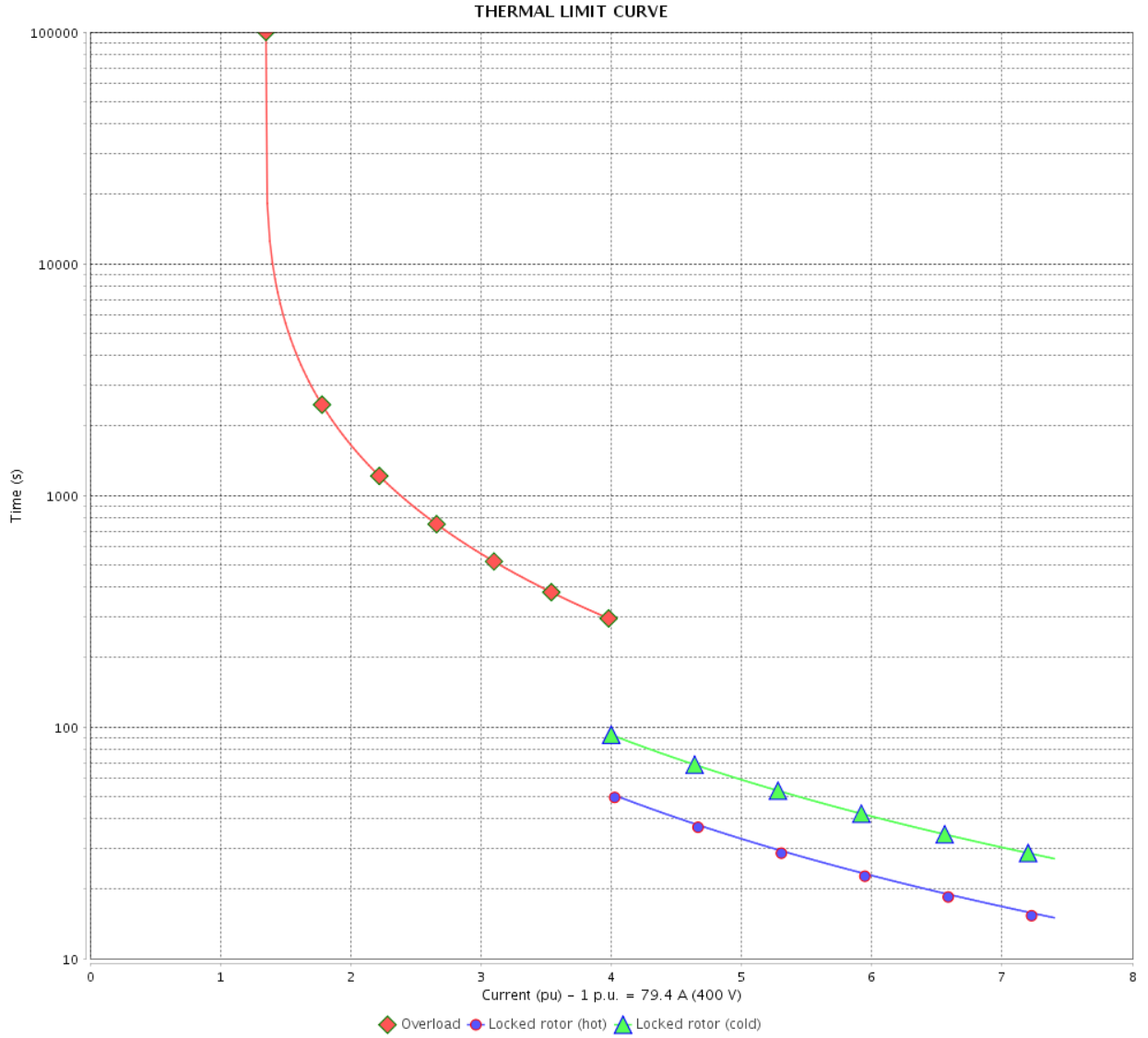
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

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Rated current	: 78.4 A	Moment of inertia (J)	: 6.40 sq.ft.lb
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 106 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2965 rpm	Design	: B

Heating constant

Cooling constant

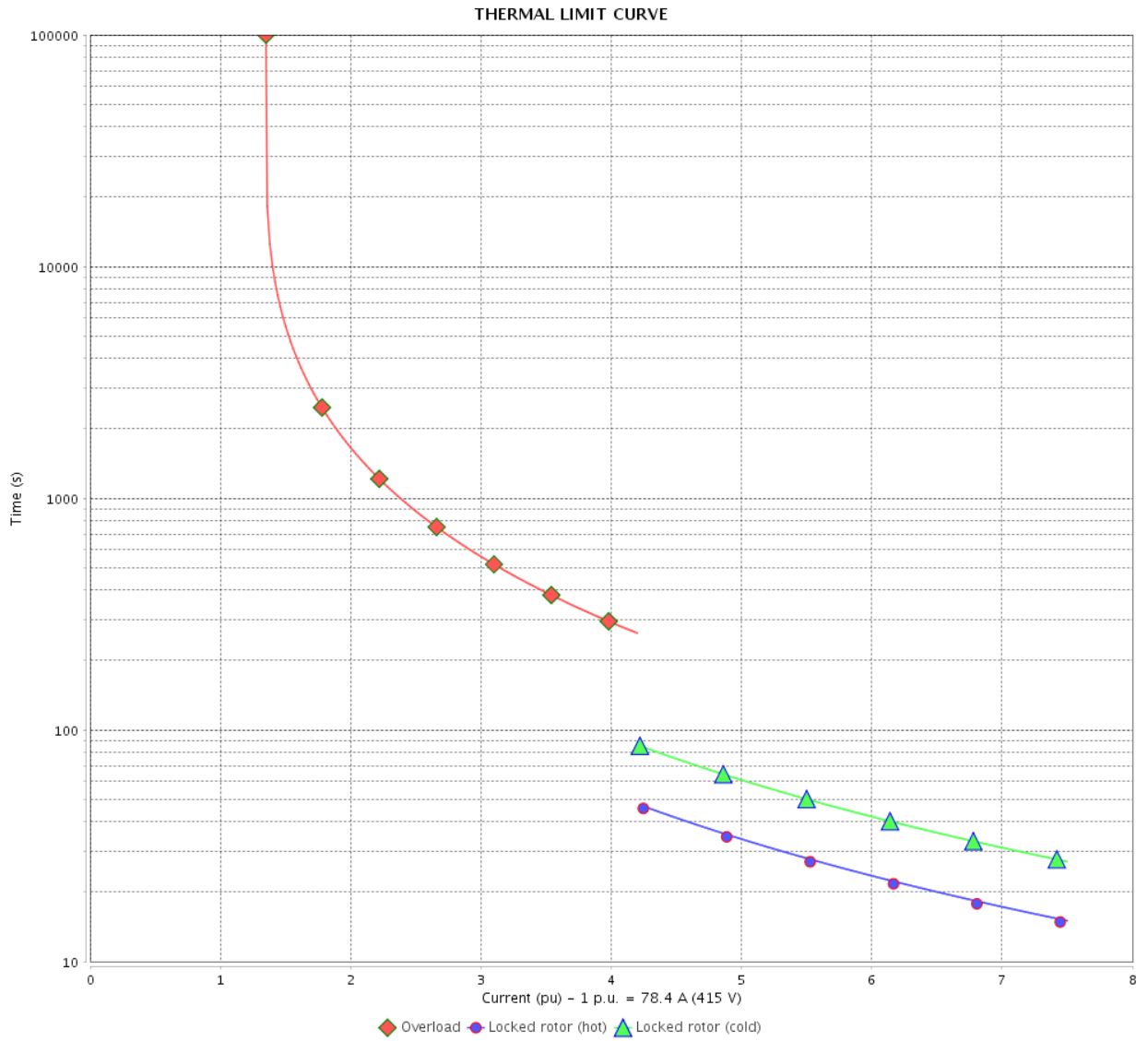
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

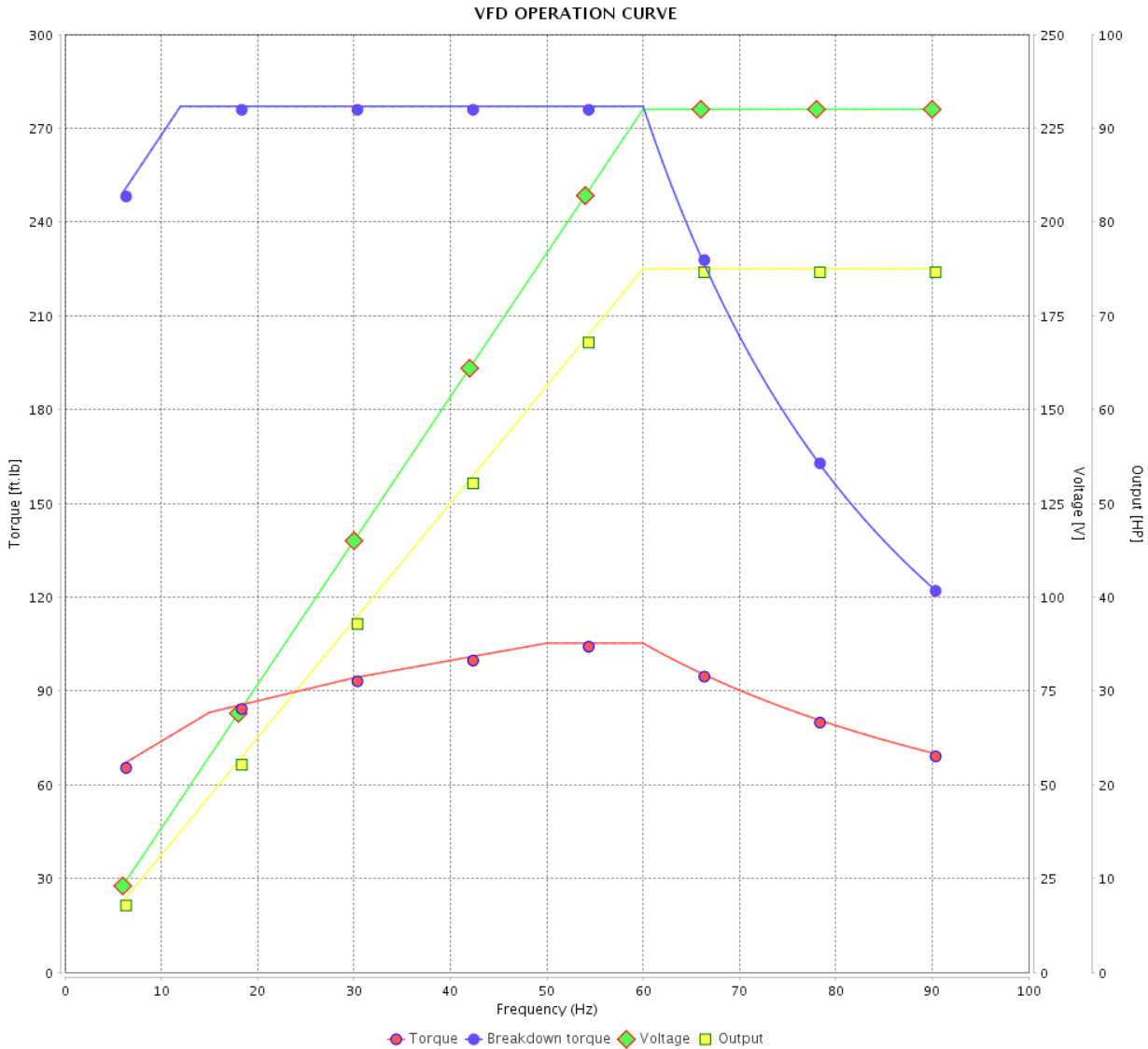


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 Rated speed : 3555 rpm

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 Insulation class : F
 Service factor : 1.25
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

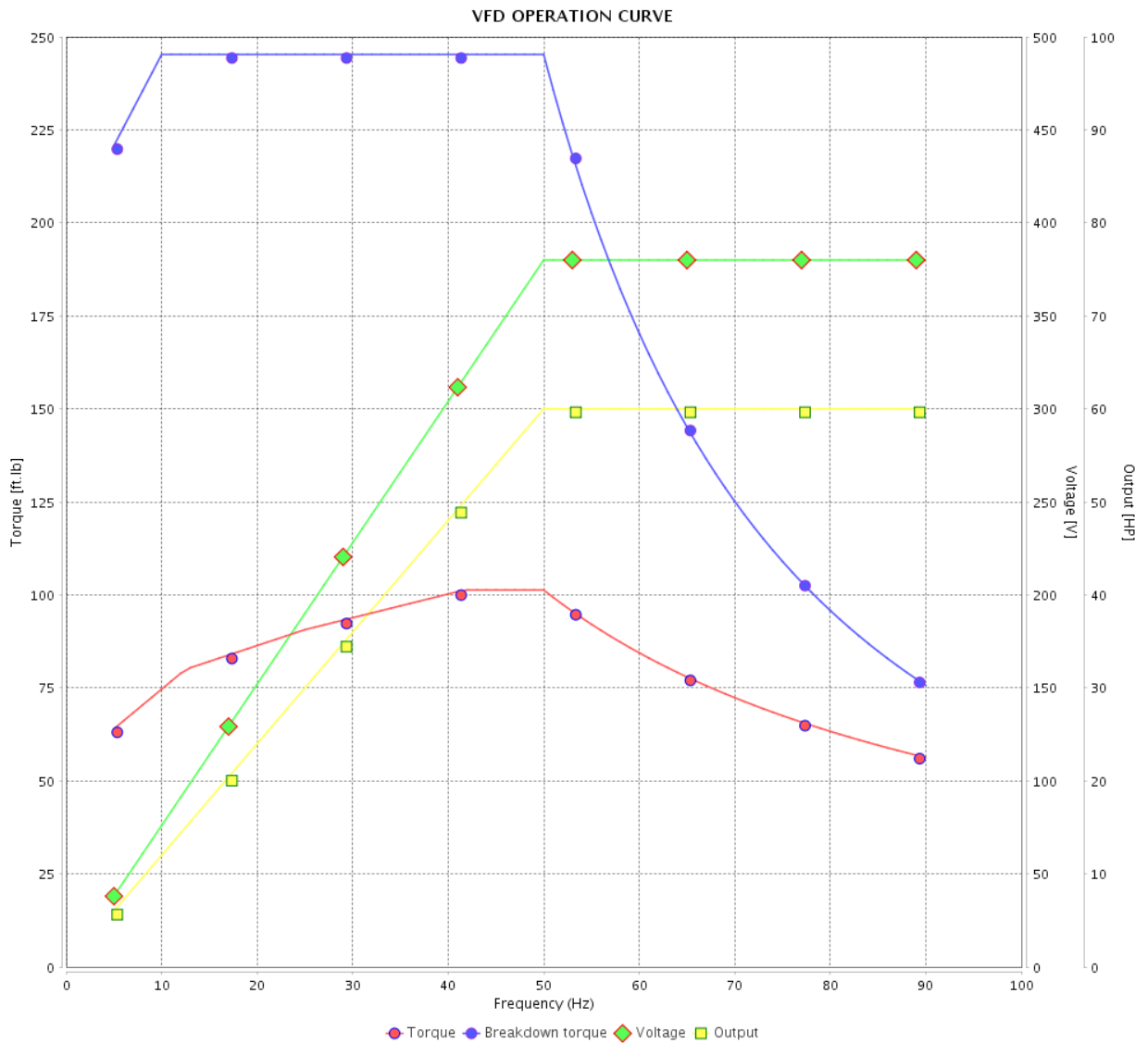


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Moment of inertia (J) : 6.40 sq.ft.lb
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Service factor : 1.00
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



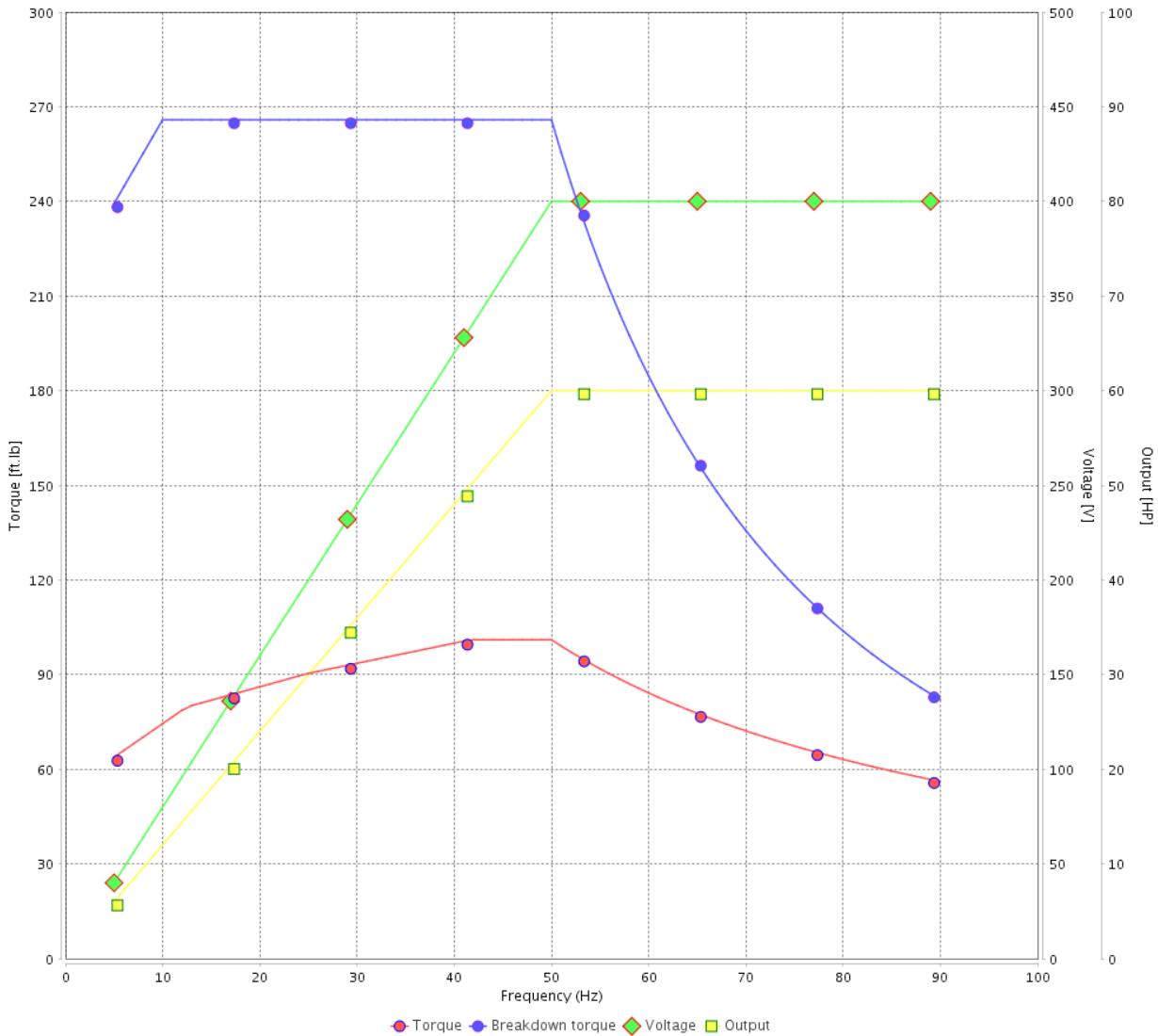
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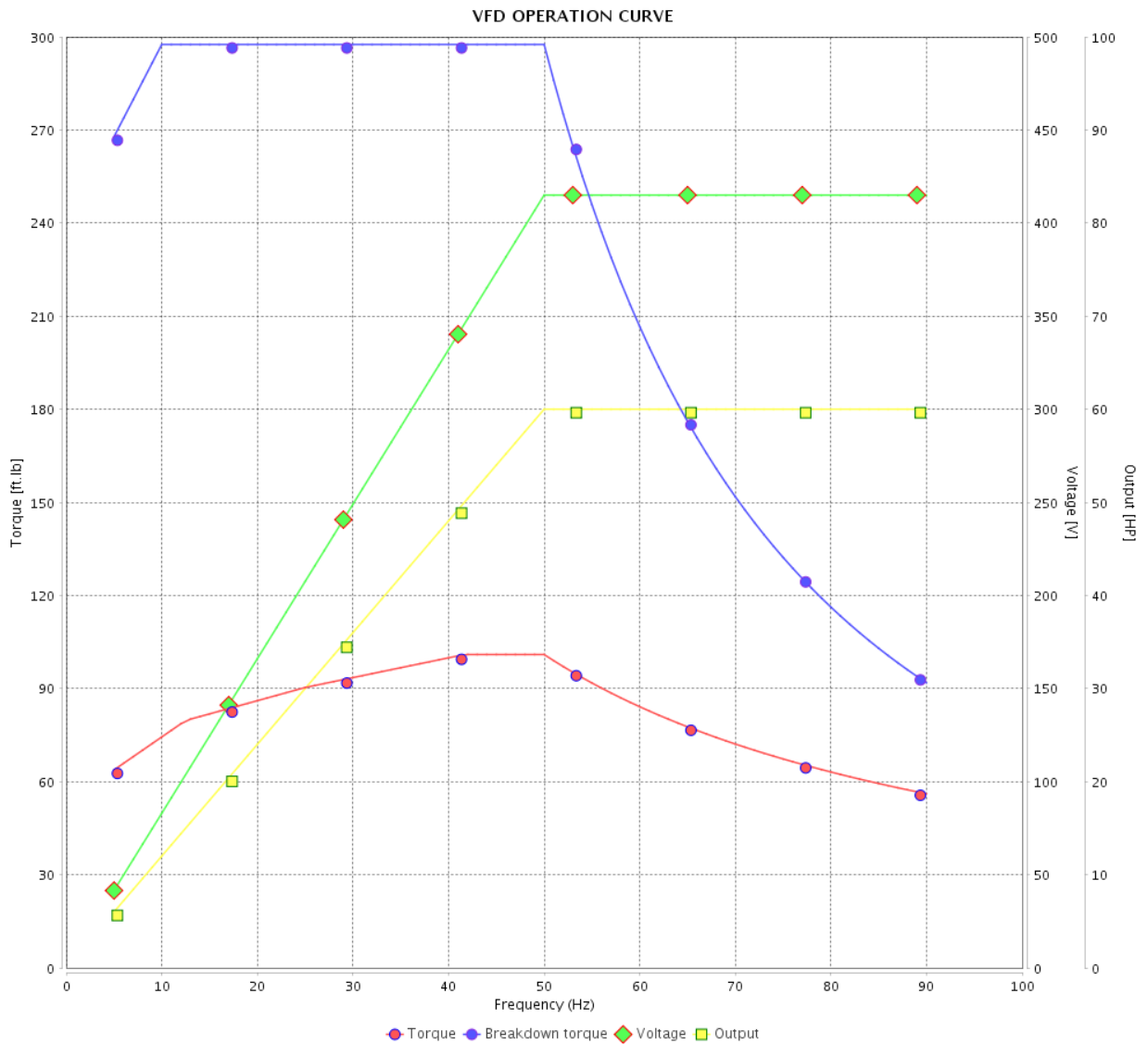


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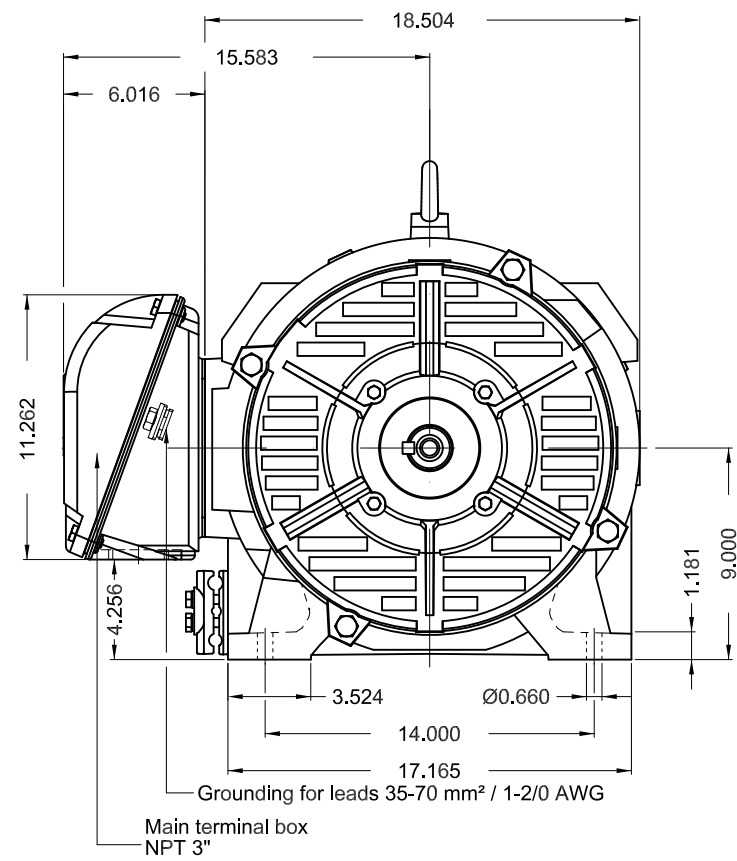


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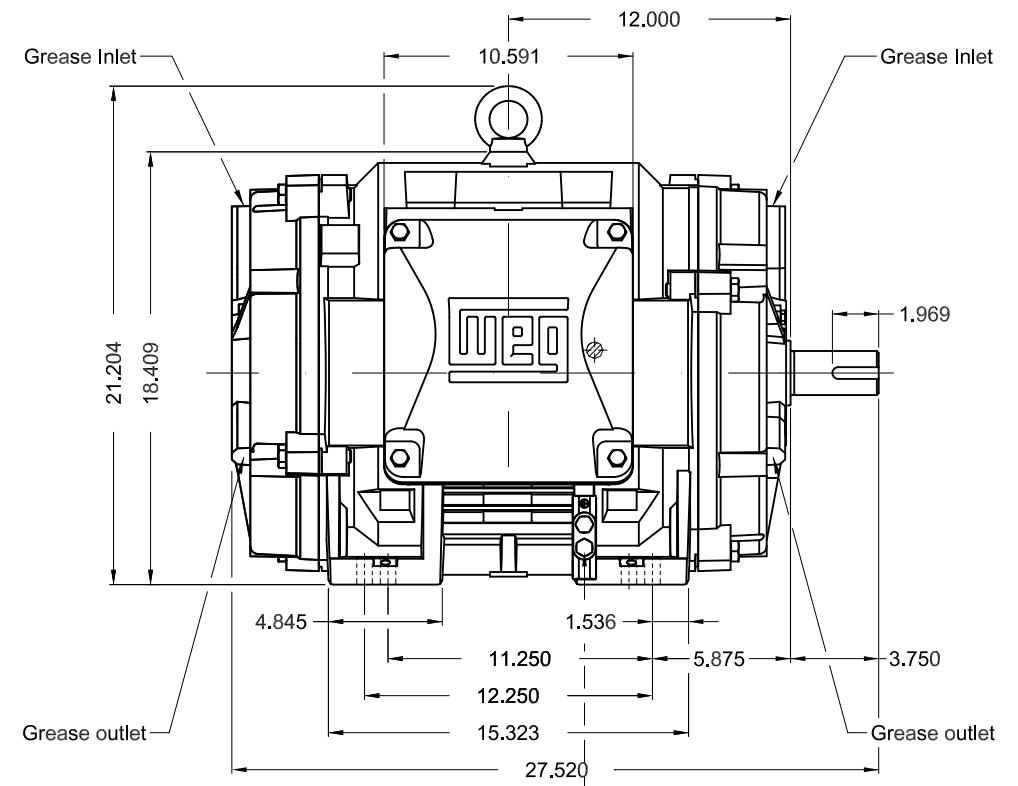
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Main terminal box
NPT 3"

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



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

75 HP 02 Poles 60 Hz

A

1:8

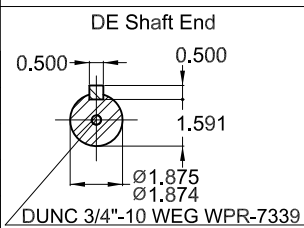
Internal AEGIS ground ring on the DE

Color RAL 5009

Painting plan 203A

Mounting NEMA F-1

Mounting B3R(D)



DUNC 3/4"-10 WEG WPR-7339

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 PREM. EFF.					
CHECKED		FRAME 364/5TS IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW

WDD



SHEET 1 / 1

WEG **W40 NEMA**
CC029A Premium
Inverter Duty Motor



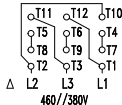
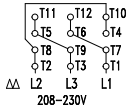
IEC 60034-1
 MOD.T01#FOXON



For 60Hz use on PWM, VT 1000:1, CT 2:1, 1.0SF

MODEL 075360T3E364TS-W40G
 MADE IN BRAZIL
 14285002

PH 3	FR 364/5TS	HP(kW) 75.0(55.0)	Hz 60
V 230/460	A 170/84.8	RPM 3555	DES B
NEMA NOM EFF 93.6 %	INS. CL. F Δ T 80 K	IP23	
ENCL ODP	DUTY CONT.	AMB. 40°C	
CODE G	PF 0.87	SF 1.25	SFA 213/106
USABLE @208V	188 A	SF 1.15	SFA 216
60HP 45kW 50Hz 380V 82.7A 2955RPM SF1.00 EFF 94.0% (IE3)	ALT 1000 m.a.s.l.		



- 6314-C3(27g)
- 6212-Z-C3(13g)

MOBIL POLYREX EM
 14418 h