

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer					
Product line		: W40 NEMA Premium Efficiency Three-Phase		Product code : 14010960	
				Catalog # : 07536OT3E364TS-W40	
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	60
Poles	2	2	2	2	2
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	230/460	380	400	415	415
Rated current [A]	170/84.8	82.7	79.4	78.4	78.4
L. R. Amperes [A]	1119/560	579	588	588	588
LRC [A]	6.6x(Code G)	7.0x(Code H)	7.4x(Code H)	7.5x(Code H)	7.5x(Code H)
No load current [A]	43.0/21.5	20.7	22.7	25.0	25.0
Rated speed [RPM]	3555	2955	2963	2965	2965
Slip [%]	1.25	1.50	1.23	1.17	1.17
Rated torque [ft.lb]	111	107	106	106	106
Locked rotor torque [%]	200	190	220	220	220
Breakdown torque [%]	250	229	250	280	280
Service factor	1.25	1.00	1.00	1.00	1.00
Temperature rise	80 K	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)	27s (cold) 15s (hot)
Noise level ²	84.0 dB(A)				
Efficiency (%)	25%	91.0	90.5	90.2	89.7
	50%	91.7	91.7	91.4	91.0
	75%	93.0	92.9	92.8	92.7
	100%	93.6	94.0	94.0	94.0
Power Factor	25%	0.56	0.56	0.51	0.47
	50%	0.77	0.78	0.73	0.69
	75%	0.84	0.85	0.83	0.80
	100%	0.87	0.88	0.87	0.85
Bearing type	: Drive end 6314 C3	: Non drive end 6212 Z C3	Foundation loads		
Sealing	: Without	: Without	Max. traction	: 662 lb	
	: Bearing Seal	: Bearing Seal	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



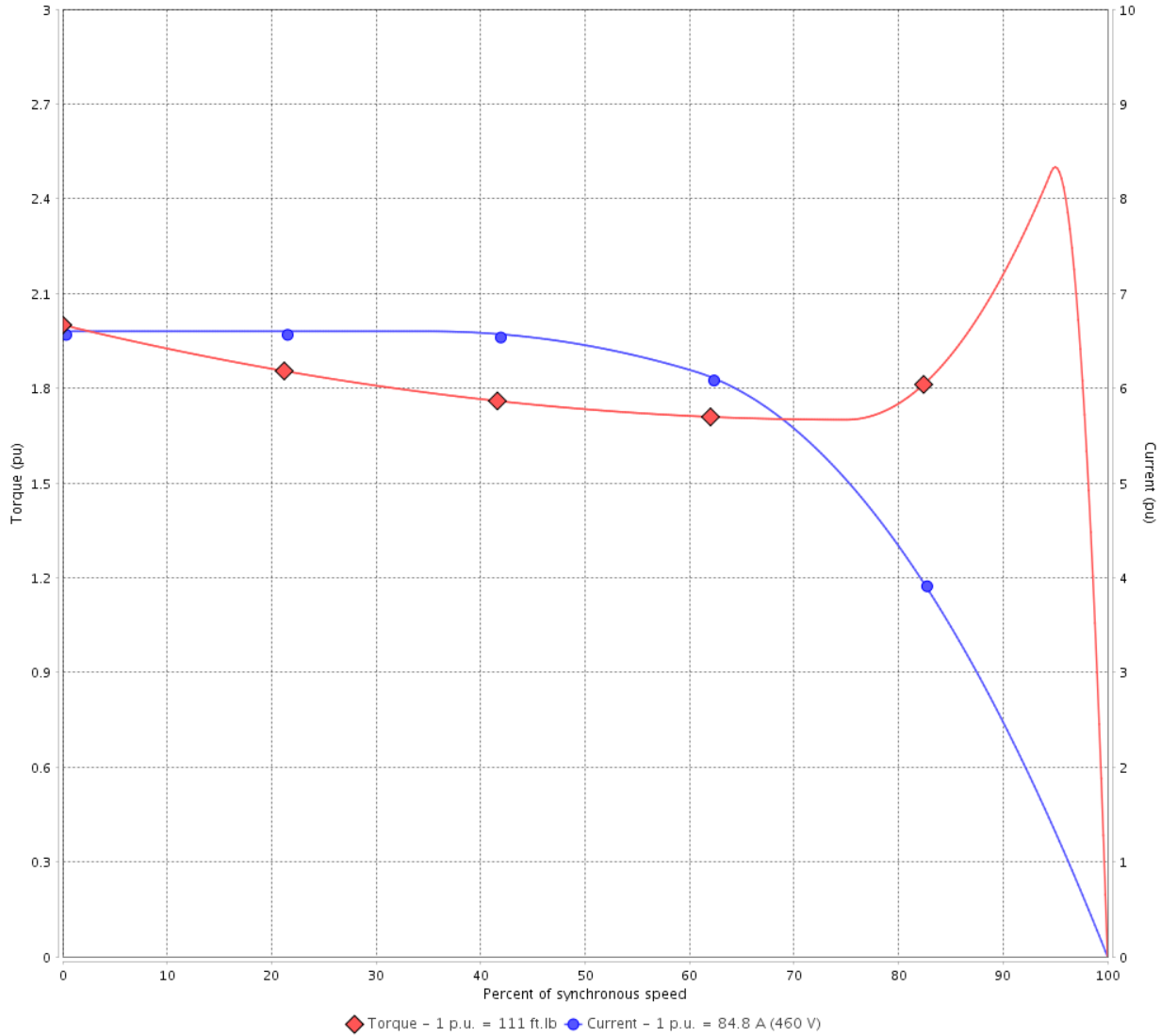
Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14010960

Catalog # : 07536OT3E364TS-W40

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



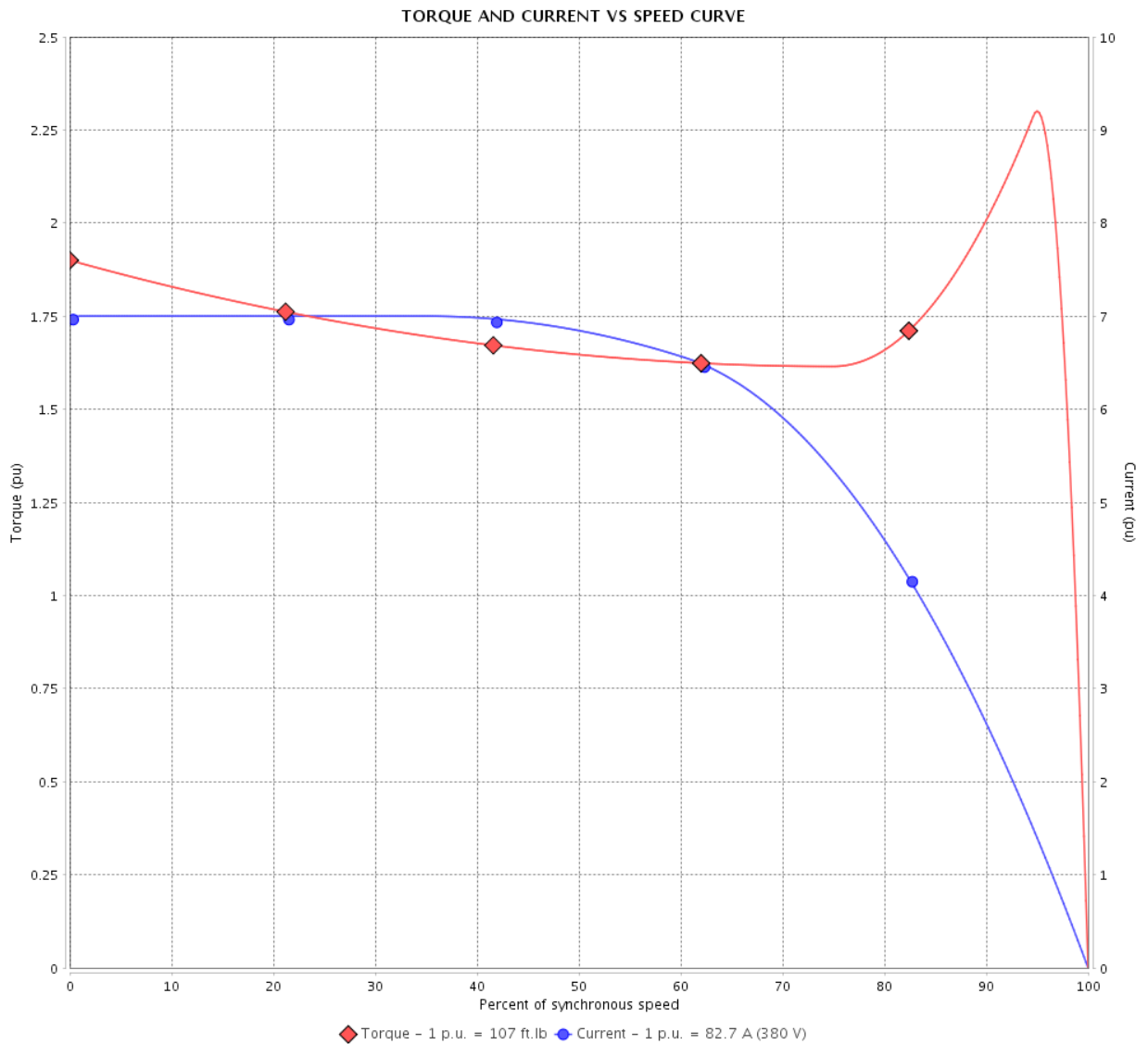
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14010960

Catalog # : 07536OT3E364TS-W40



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

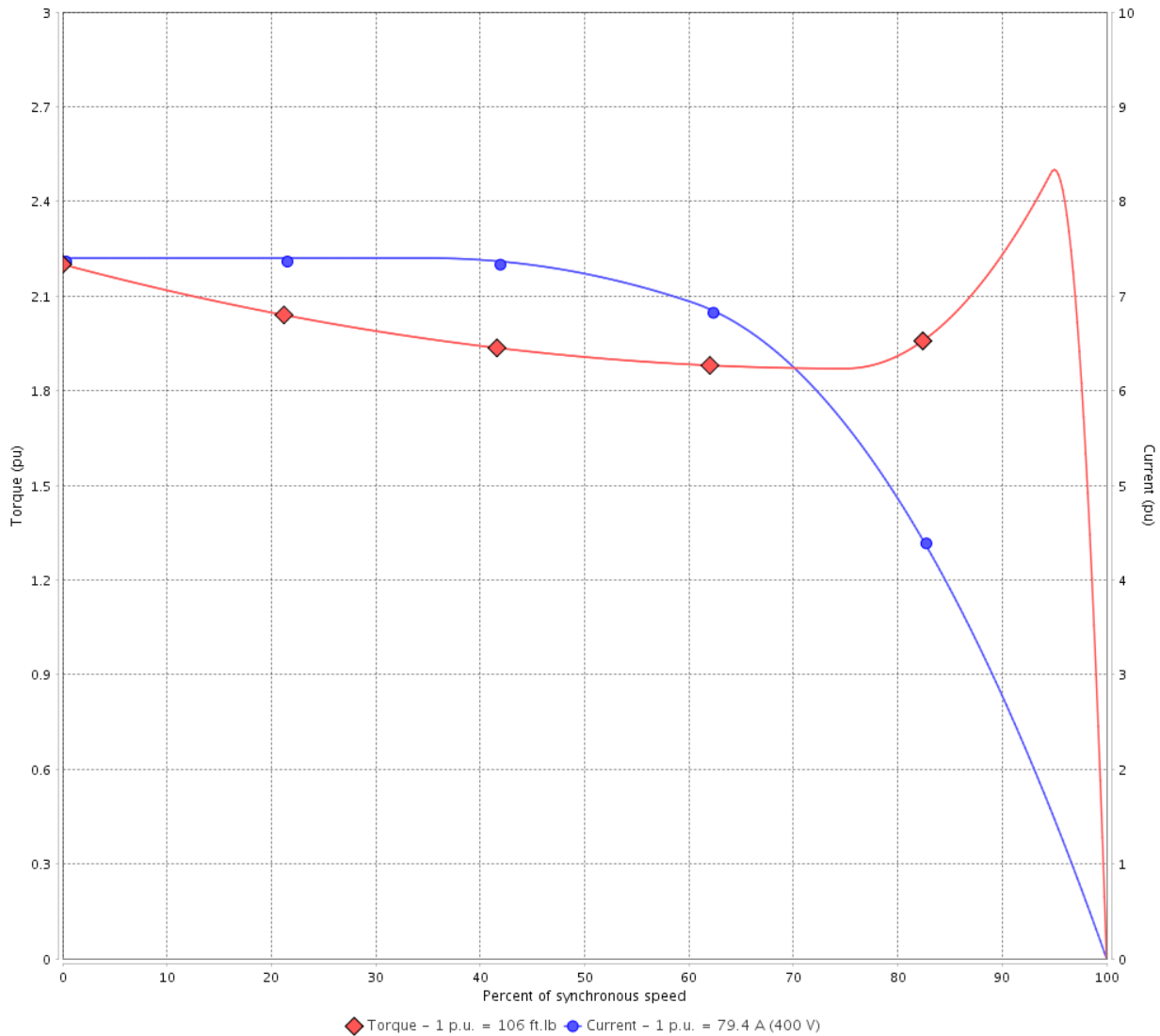
Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14010960

Catalog # : 07536OT3E364TS-W40

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



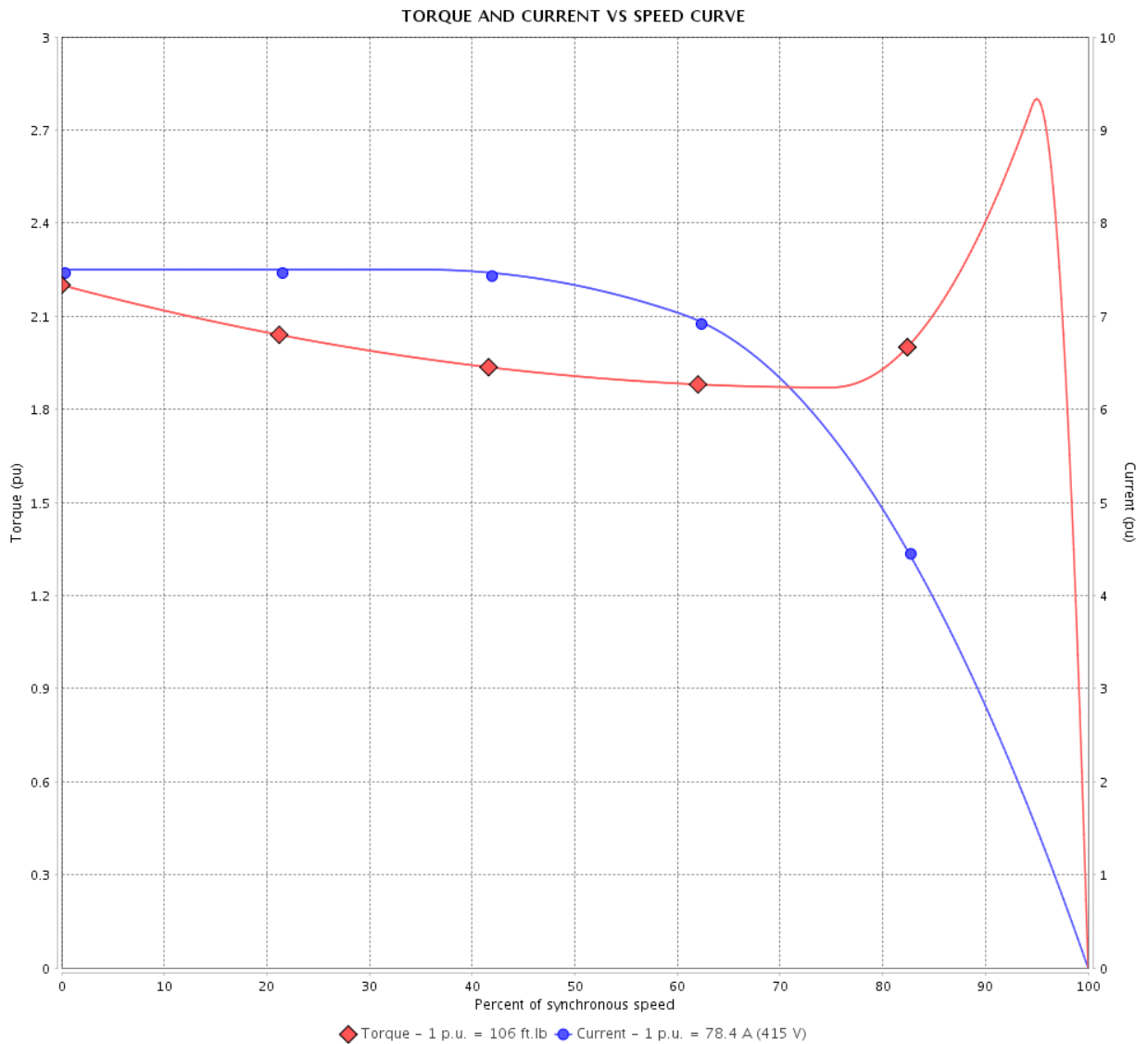
Three Phase Induction Motor - Squirrel Cage

Customer :

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Three-Phase

Product code : 14010960

Catalog # : 07536OT3E364TS-W40



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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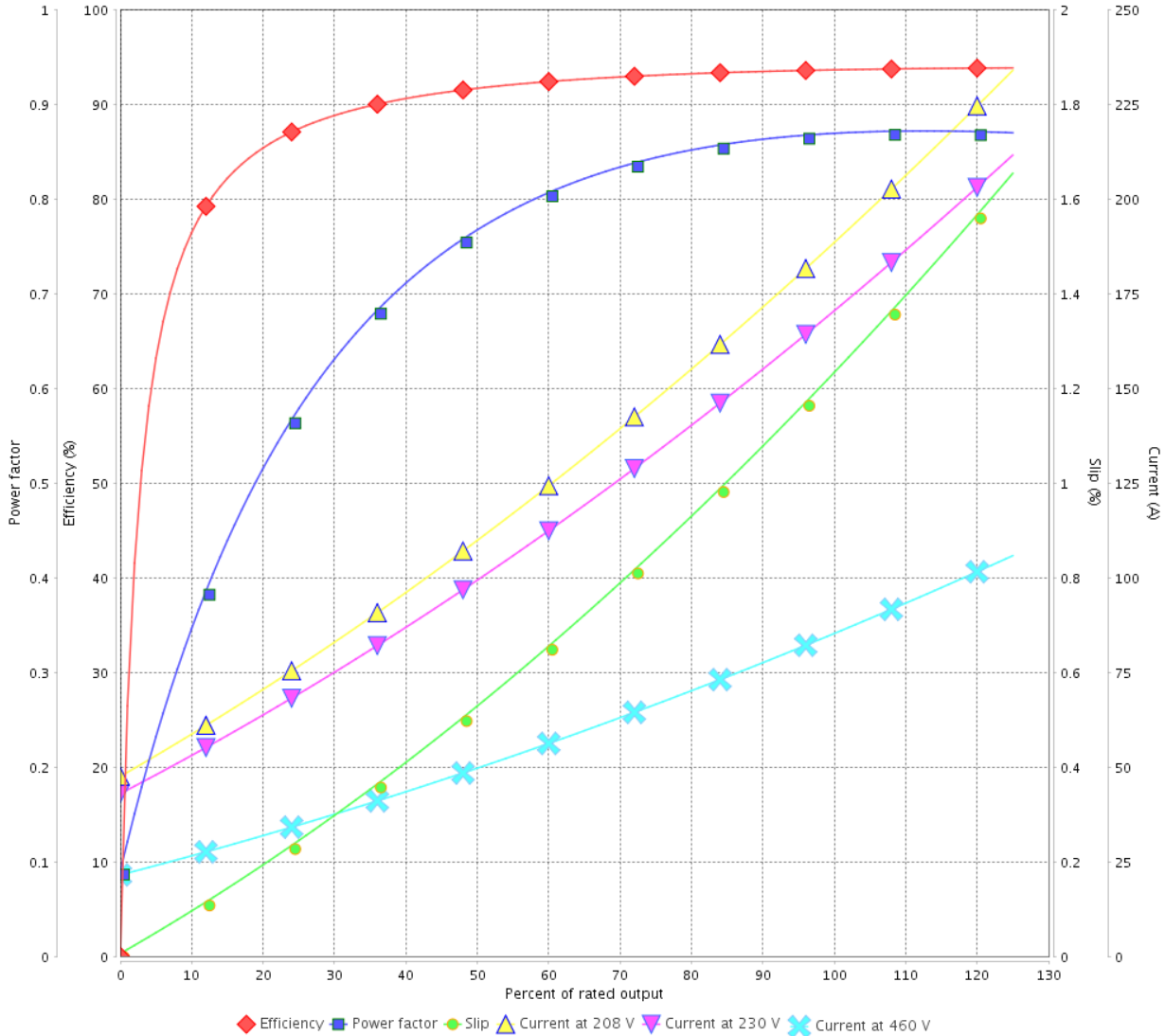
Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14010960

Catalog # : 07536OT3E364TS-W40

LOAD PERFORMANCE CURVE



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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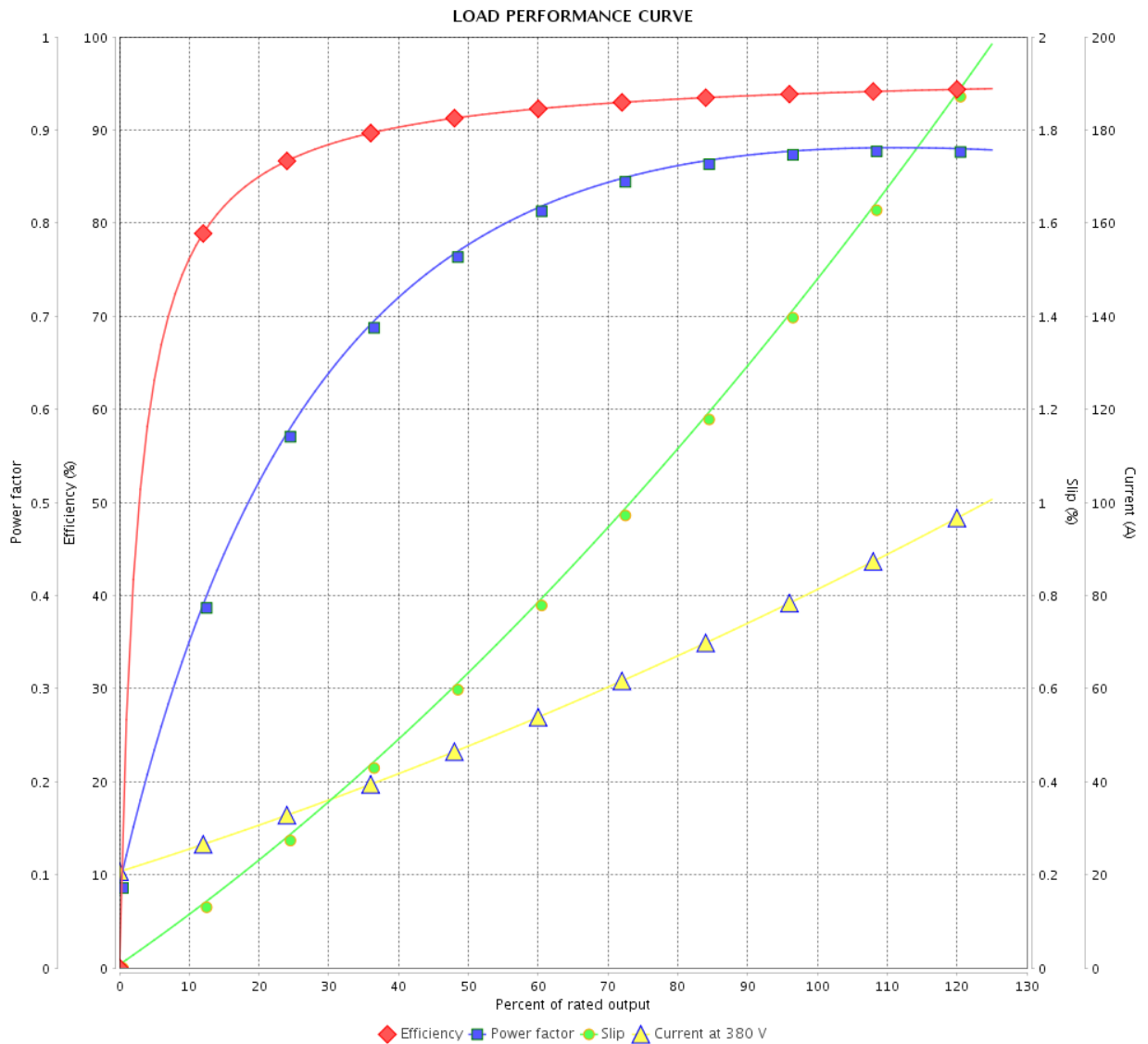


Customer :

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Product code : 14010960

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Performance : 380 V 50 Hz 2P IE3

Rated current : 82.7 A
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 Rated torque : 107 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 229 %
 Rated speed : 2955 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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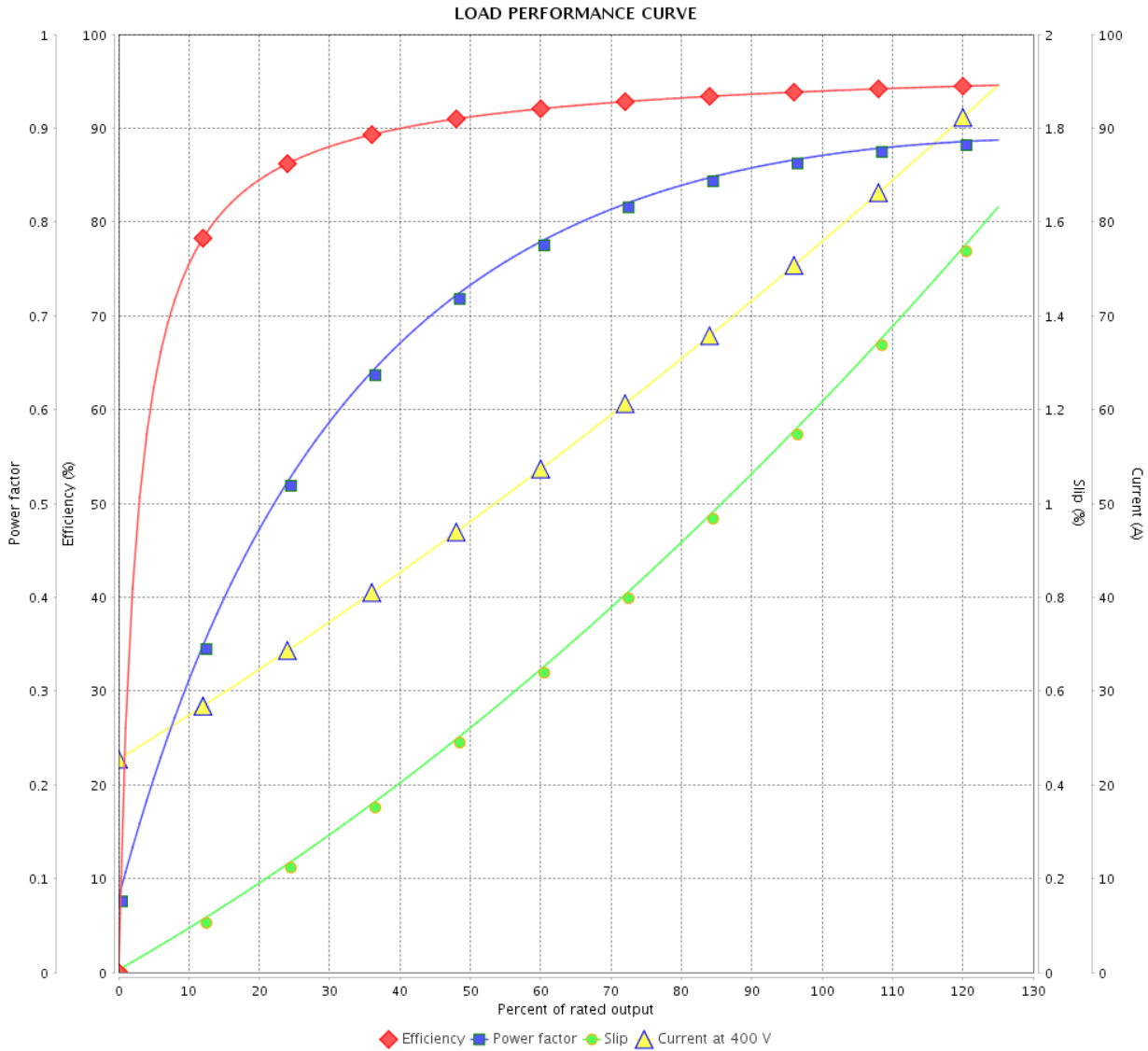


Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14010960

Catalog # : 075360T3E364TS-W40



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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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

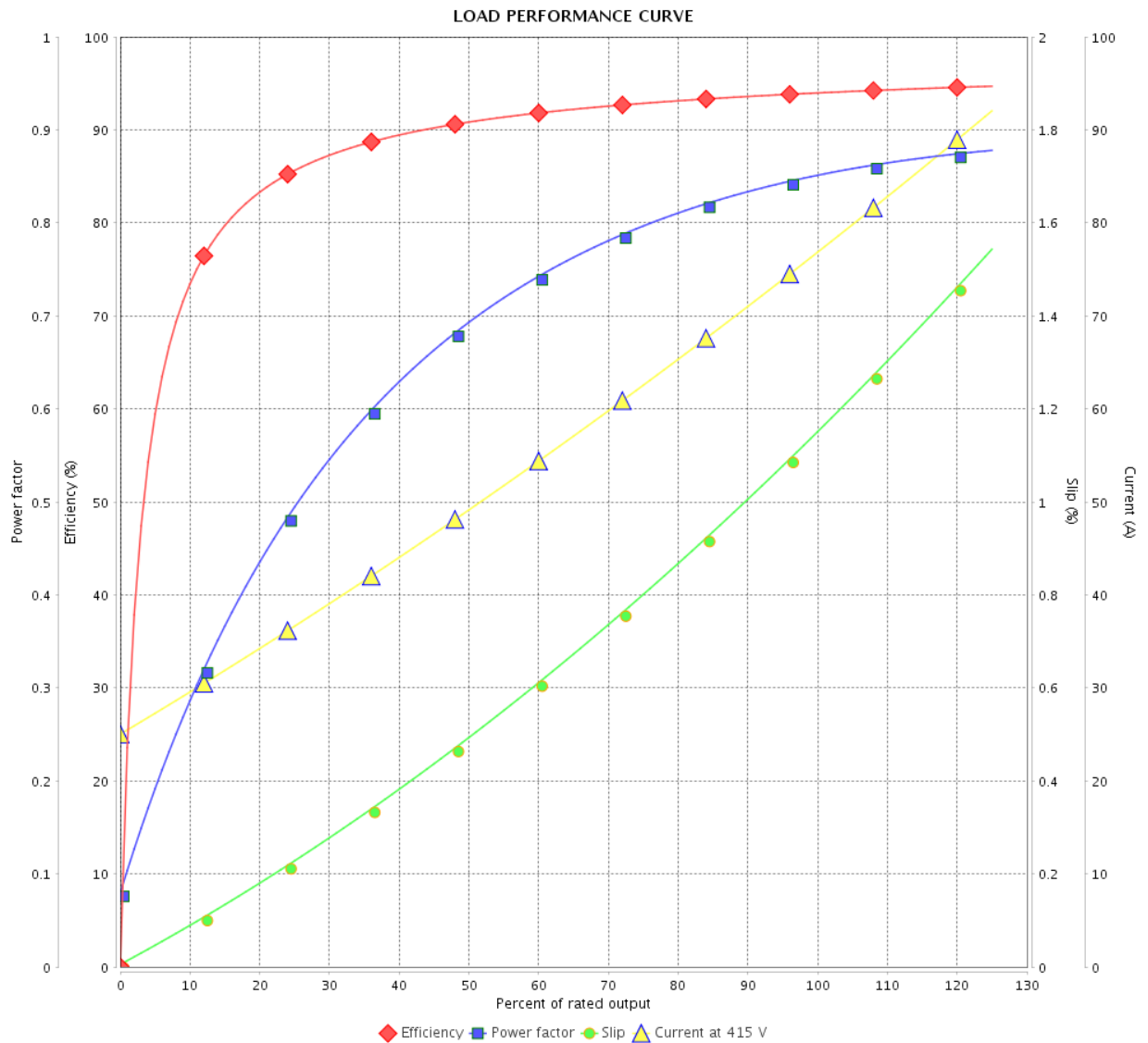


Customer : _____

Product line : W40 NEMA Premium Efficiency
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Product code : 14010960

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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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Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

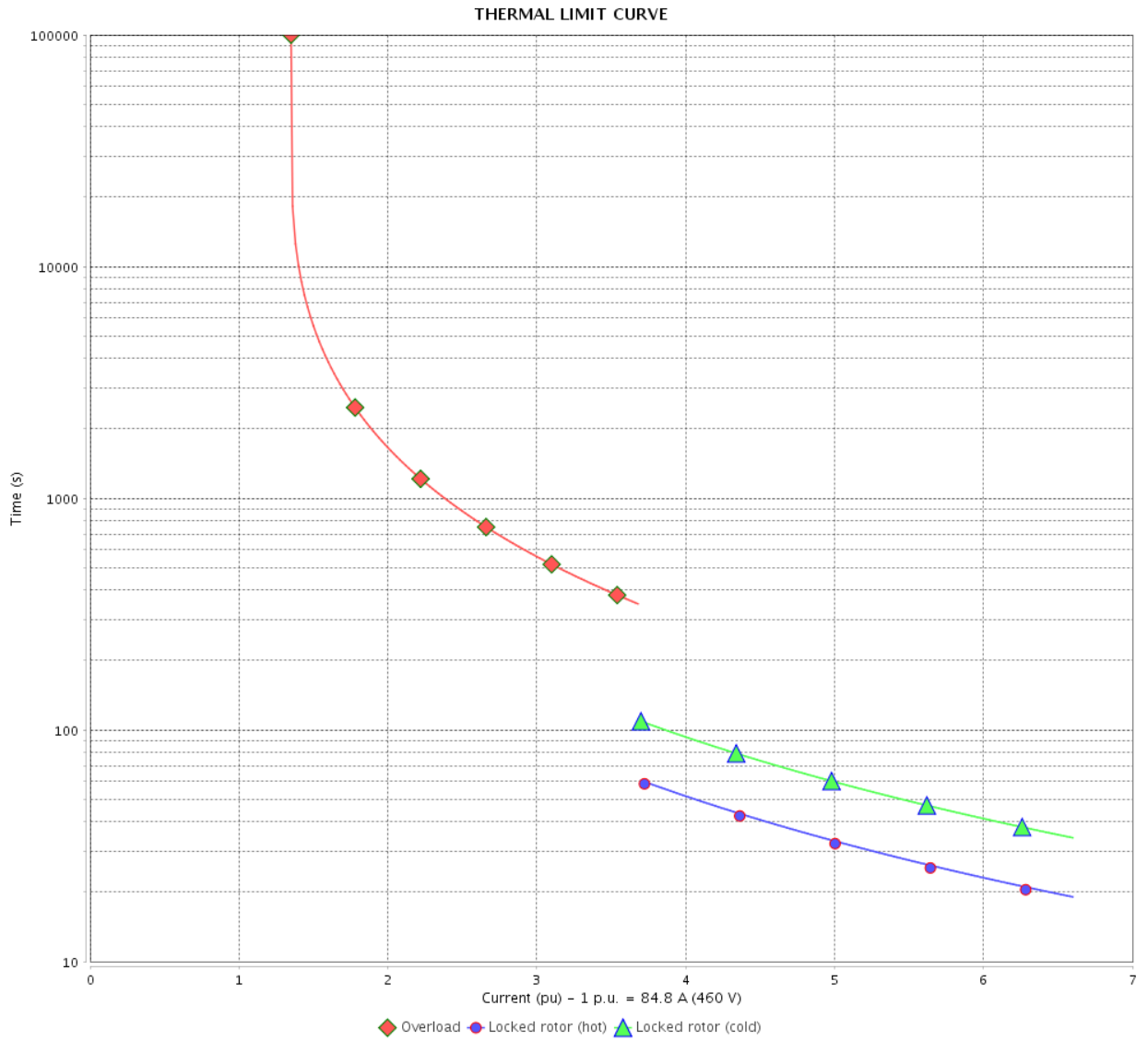
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Cooling constant

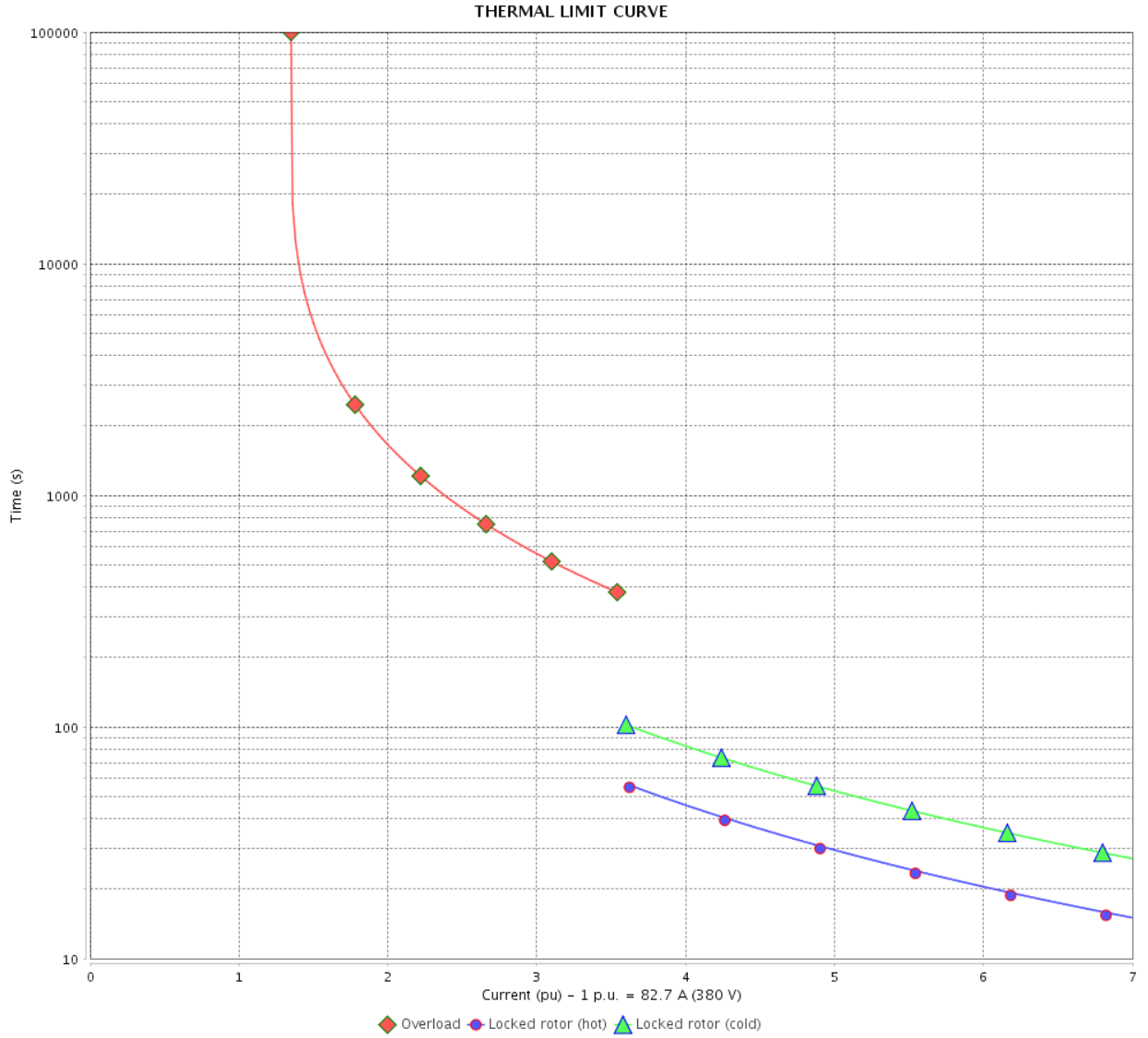
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Three Phase Induction Motor - Squirrel Cage



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LRC	: 7.4	Duty cycle	: Cont.(S1)
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Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 2963 rpm	Design	: B

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Cooling constant

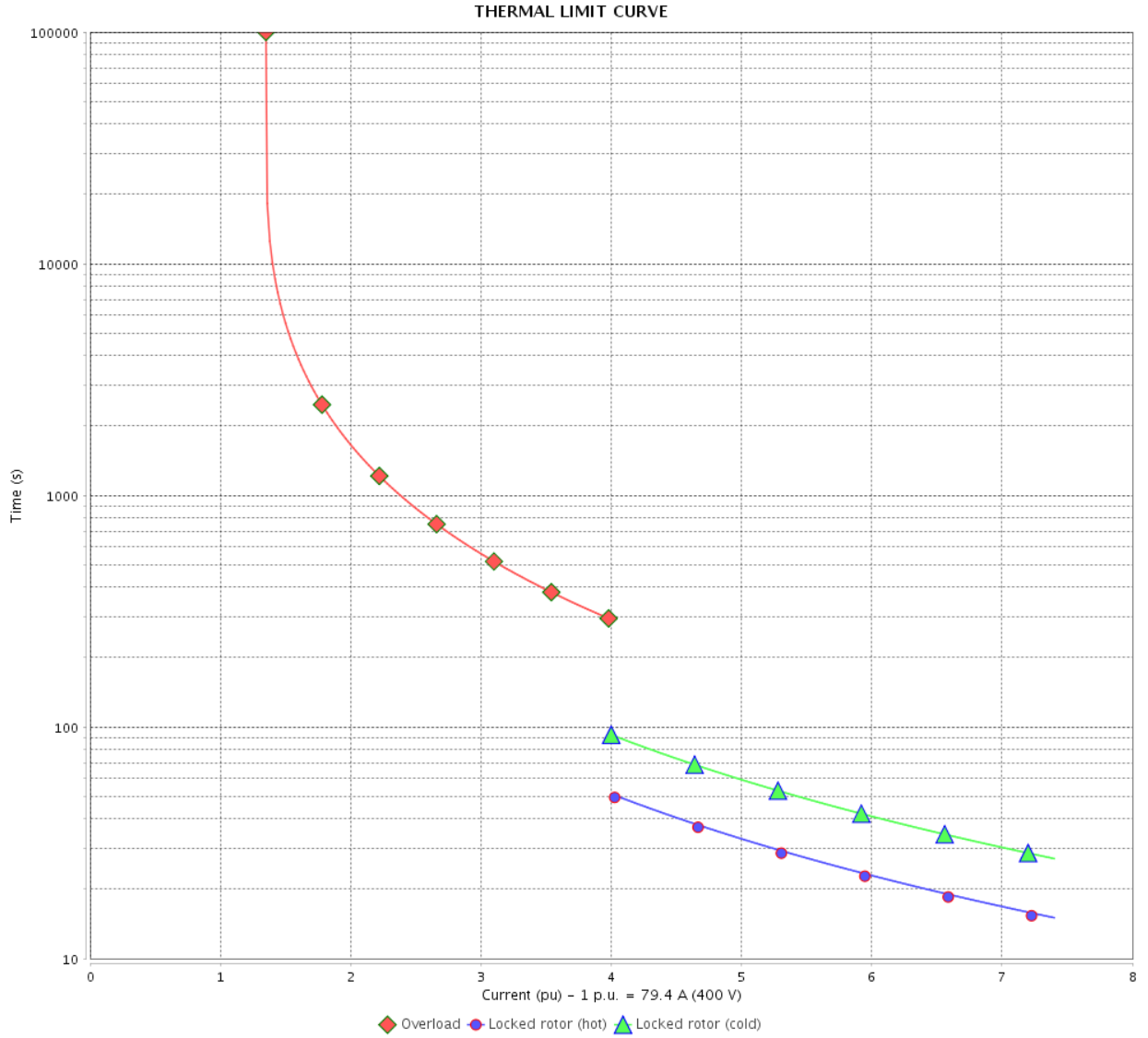
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

THERMAL LIMIT CURVE

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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)
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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

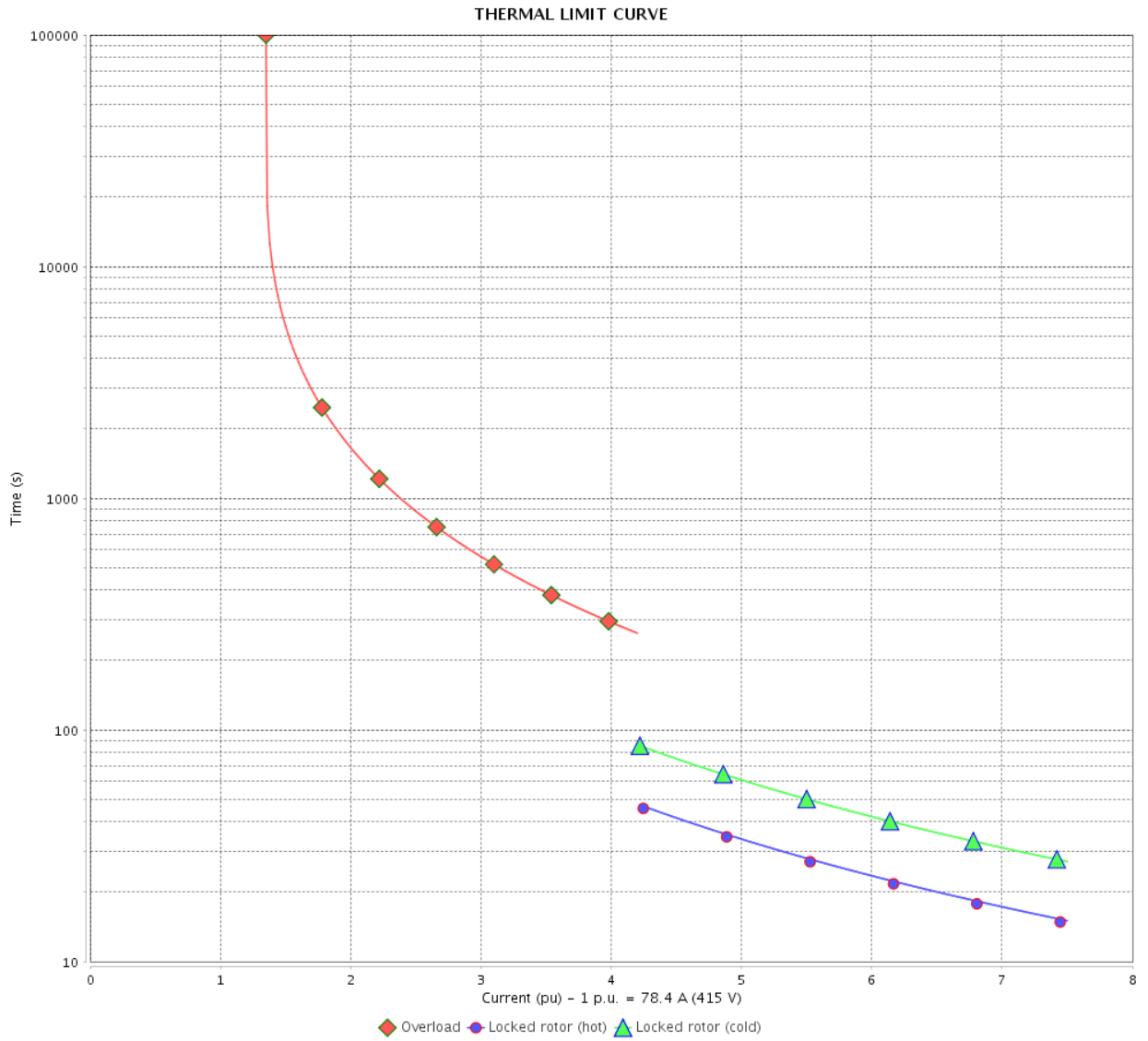
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



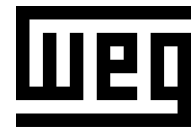
Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

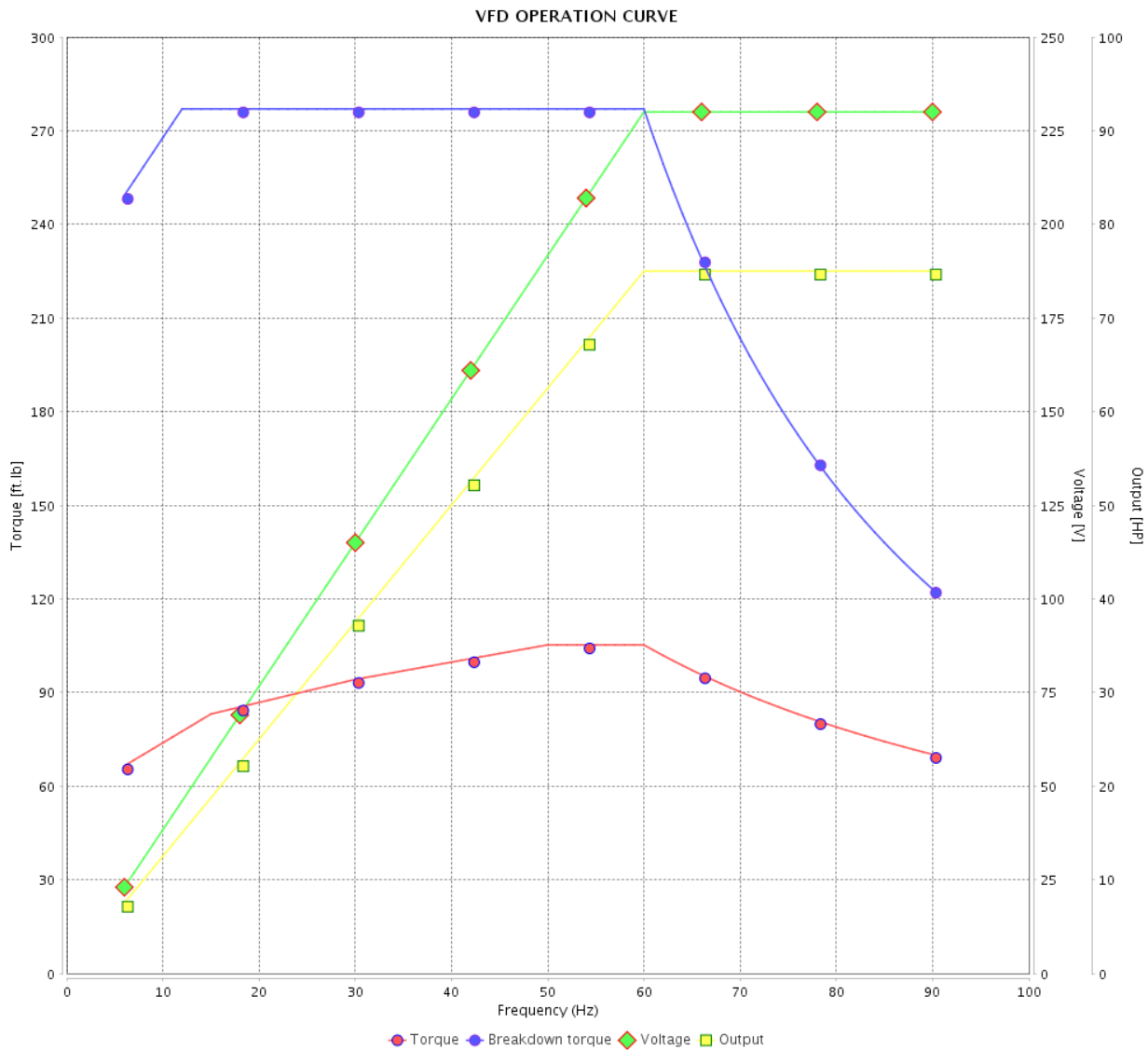


Customer :

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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

Rev.	Changes Summary	Performed	Checked	Date
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

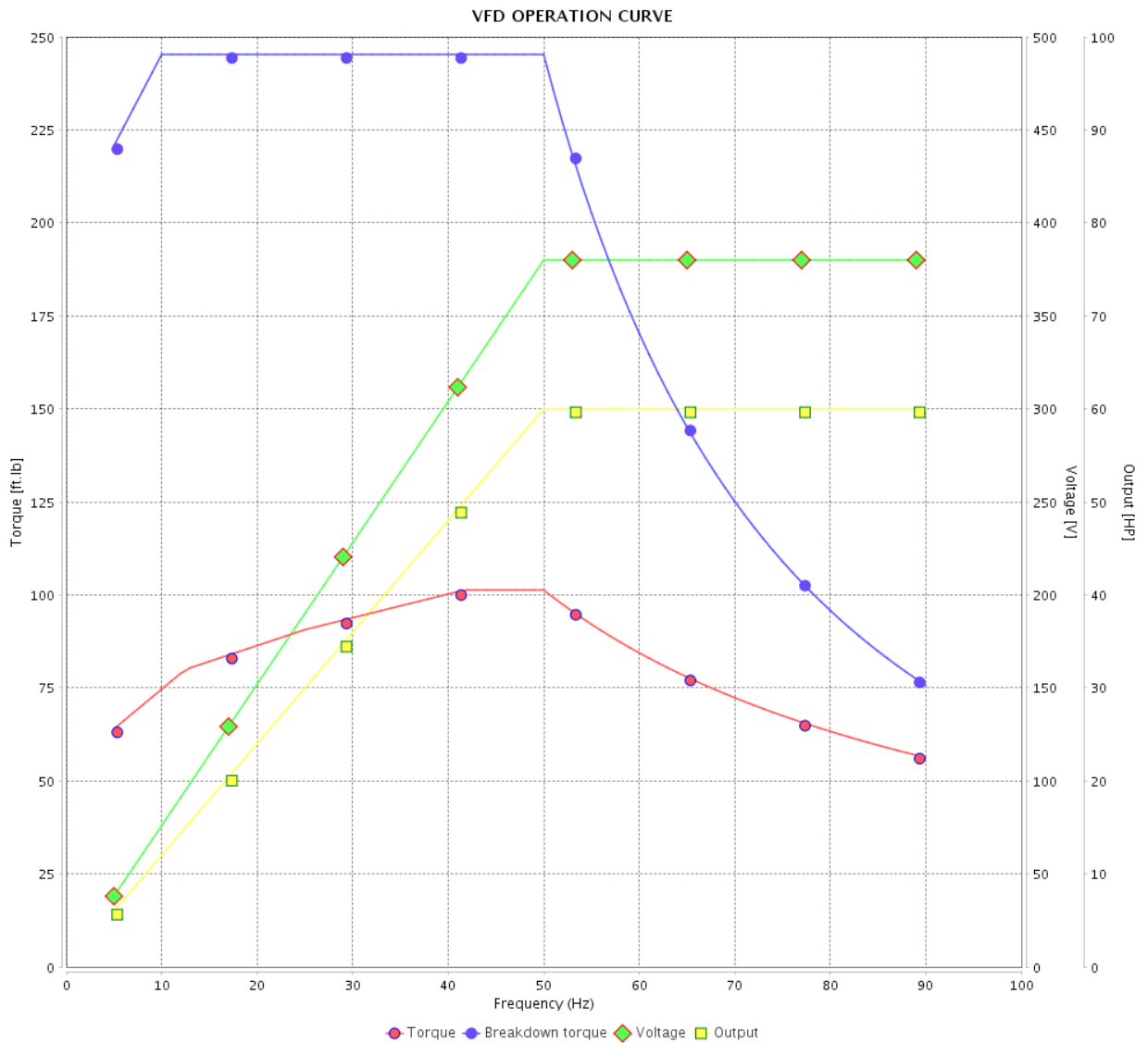


Customer :

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Performance : 380 V 50 Hz 2P IE3

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Breakdown torque : 229 %
Rated speed : 2955 rpm

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

Rev.	Changes Summary	Performed	Checked	Date
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

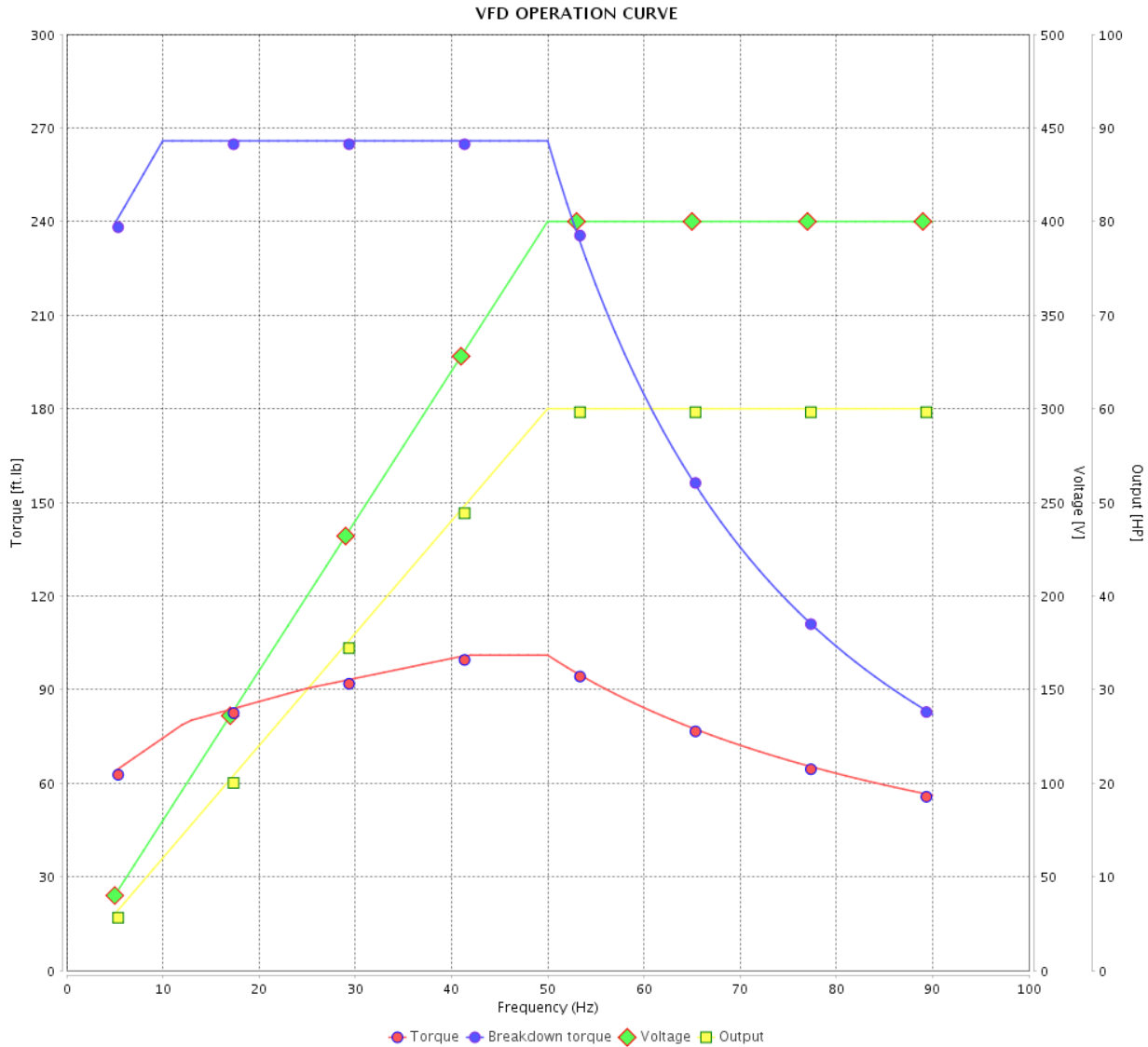


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Rev.	Changes Summary	Performed	Checked	Date
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

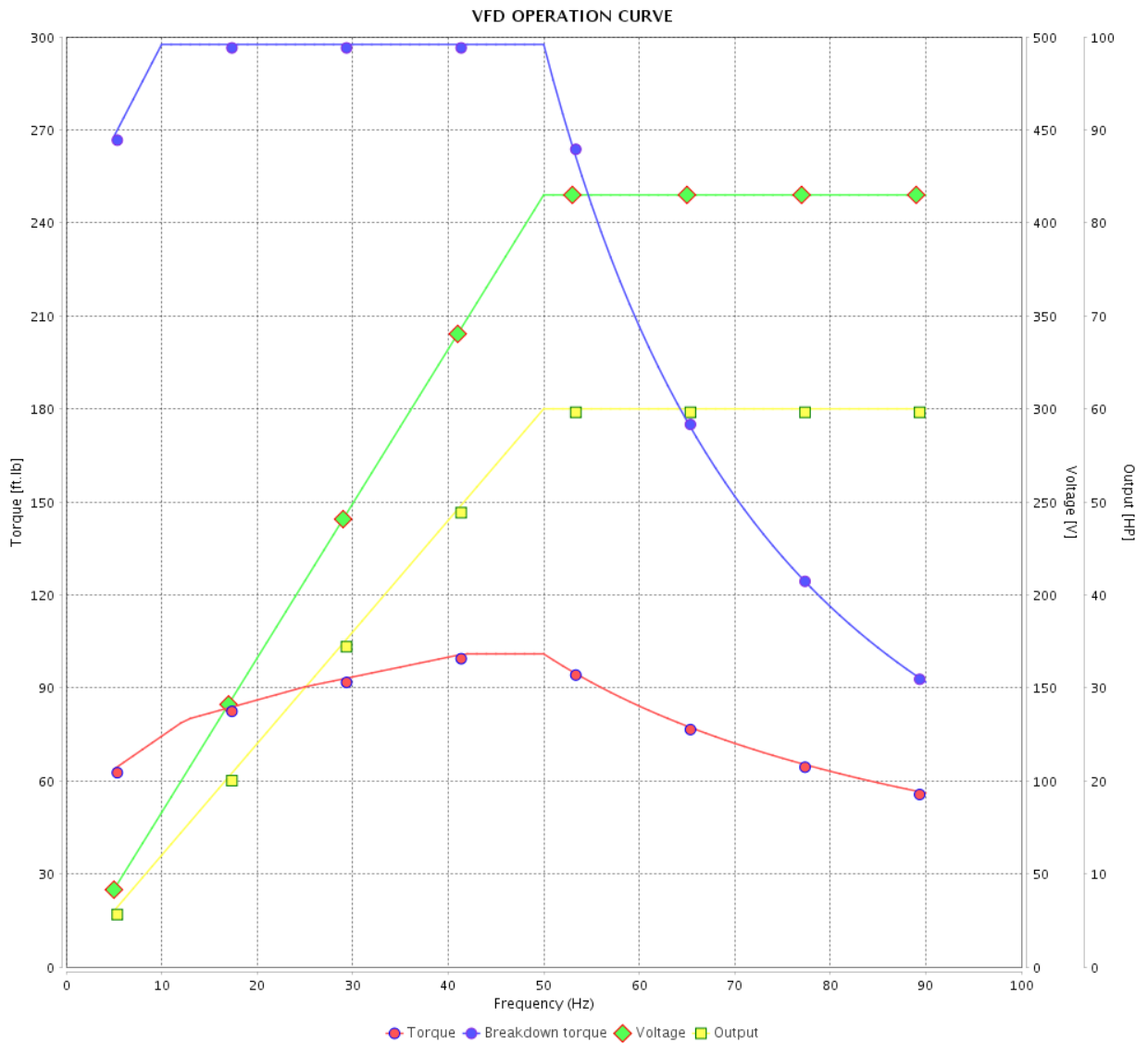


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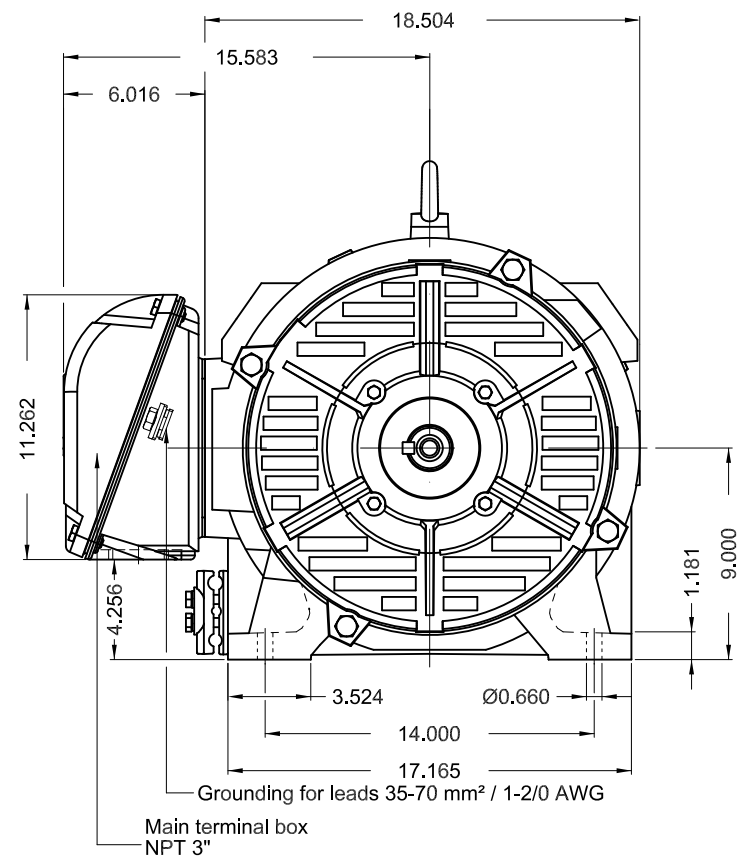


Performance : 415 V 50 Hz 2P IE3

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Rated speed : 2965 rpm

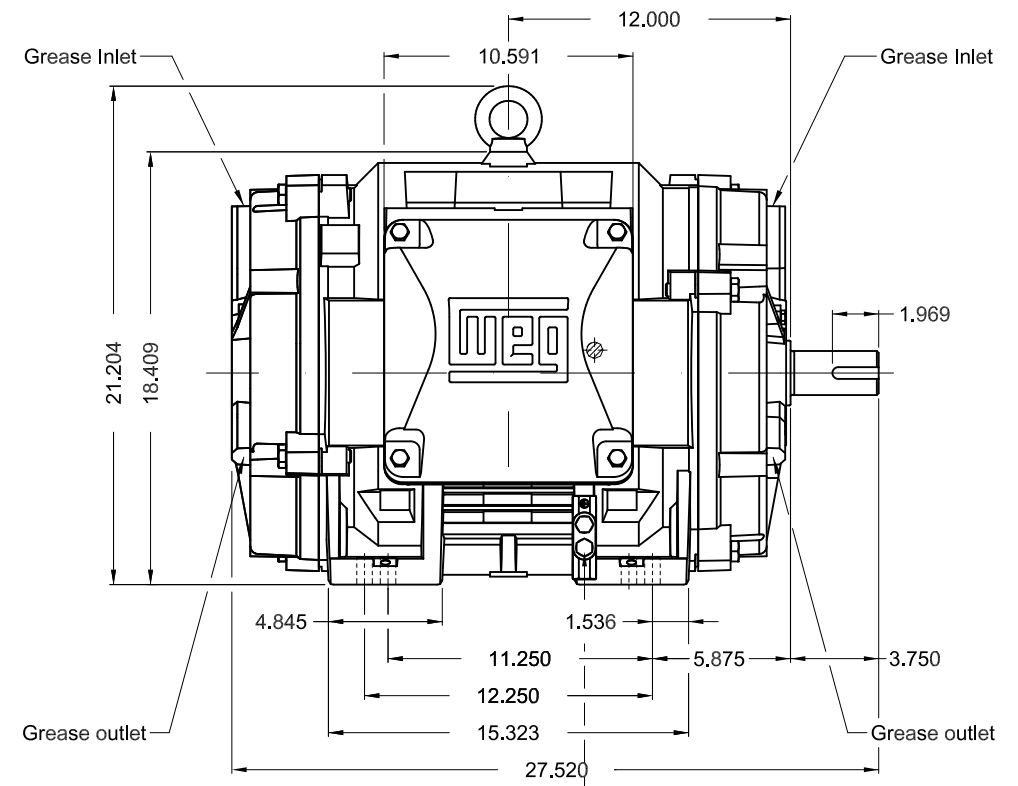
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Main terminal box
NPT 3"

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

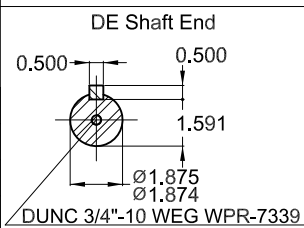
ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 PREM. EFF.					
CHECKED		FRAME 364/5TS IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
WDD



SHEET 1 / 1

Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B3R(D)



DUNC 3/4"-10 WEG WPR-7339

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



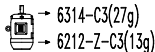
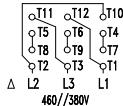
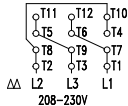
IEC 60034-1
 MOD.T01#FOXON



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

MODEL 075360T3E364TS-W40
 MADE IN BRAZIL
 14010960

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 ΔT 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.		



MOBIL POLYREX EM
 14418 h