

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer					
Product line		: W40 JP Pump NEMA Premium Efficiency Three-Phase		Product code : 14436467	
				Catalog # : 01518OT3E254JP-W40	
Frame		: 254JP		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 : 269 lb	
Protection degree		: IP23		Moment of inertia (J) : 2.72 sq.ft.lb	
Design		: B			
Output [HP]	15	10	10	10	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	35.0/17.5	15.3	14.9	14.5	
L. R. Amperes [A]	224/112	101	101	102	
LRC [A]	6.4x(Code G)	6.6x(Code H)	6.8x(Code H)	7.0x(Code J)	
No load current [A]	14.4/7.20	7.22	7.71	8.12	
Rated speed [RPM]	1770	1470	1475	1477	
Slip [%]	1.67	2.00	1.67	1.53	
Rated torque [ft.lb]	44.4	35.6	35.5	35.5	
Locked rotor torque [%]	240	250	280	310	
Breakdown torque [%]	280	320	350	380	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	30s (cold) 17s (hot)	36s (cold) 20s (hot)	32s (cold) 18s (hot)	28s (cold) 16s (hot)	
Noise level ²	62.0 dB(A)				
Efficiency (%)	25%	91.0	88.9	88.9	88.9
	50%	91.7	89.2	89.2	89.2
	75%	92.4	91.0	91.0	91.0
	100%	93.0	91.0	91.0	91.0
Power Factor	25%	0.42	0.38	0.34	0.32
	50%	0.66	0.62	0.58	0.55
	75%	0.78	0.75	0.72	0.69
	100%	0.85	0.82	0.80	0.79
Bearing type	: Drive end : 6309 Z C3	: Non drive end : 6209 Z C3	Foundation loads		
Sealing	: Without	: Without	Max. traction		
	: Bearing Seal	: Bearing Seal	Max. compression		
Lubrication interval	: 20000 h	: 20000 h			
Lubricant amount	: 13 g	: 9 g			
Lubricant type	: Mobil Polyrex EM				
Notes					
USABLE @208V 38.7A SF 1.15 SFA 44.5A					
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



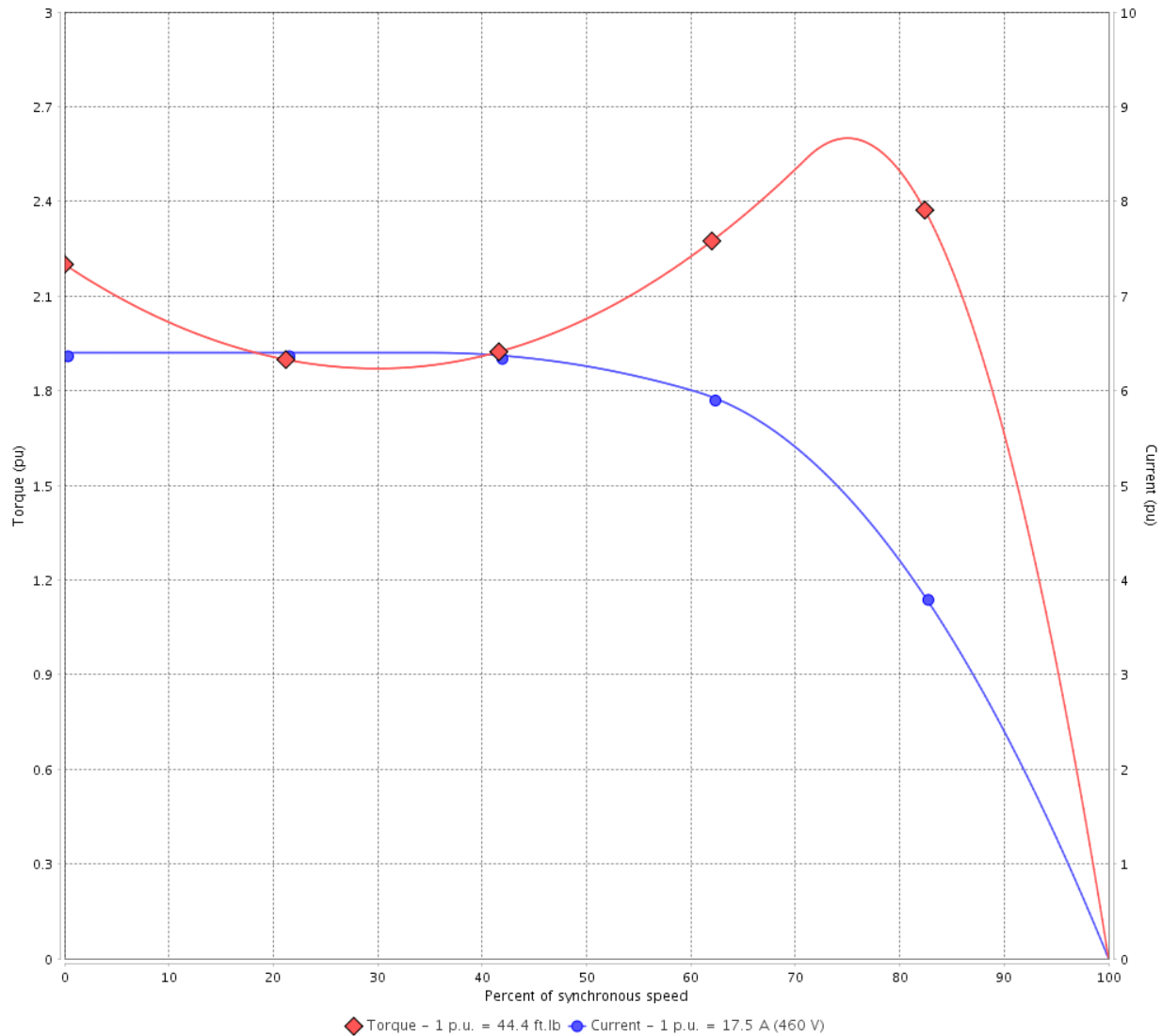
Customer :

Product line : W40 JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14436467

Catalog # : 01518OT3E254JP-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current	: 35.0/17.5 A	Moment of inertia (J)	: 2.72 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 44.4 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

Locked rotor time : 30s (cold) 17s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



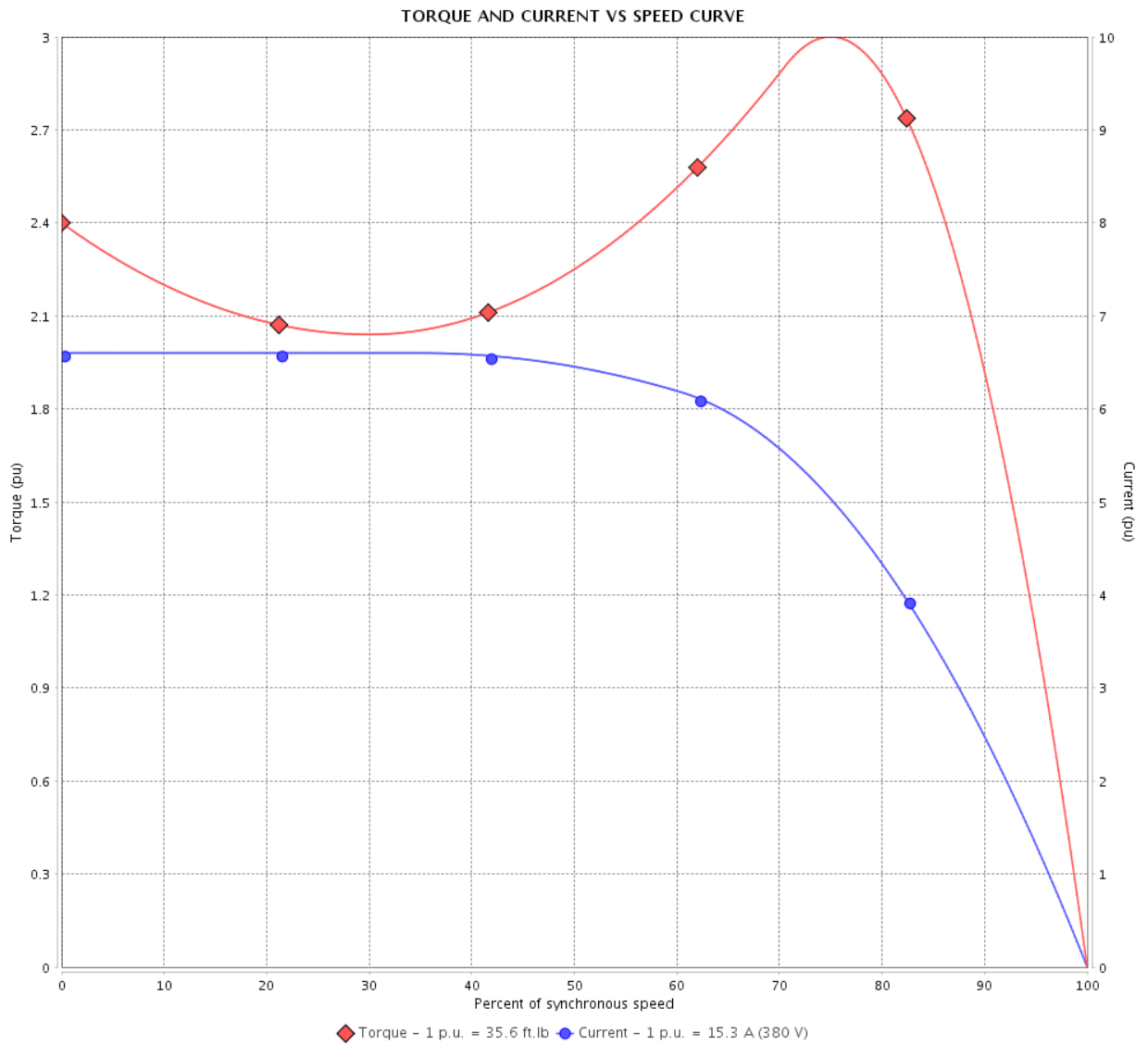
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 JP Pump NEMA Premium Efficiency Three-Phase

Product code : 14436467

Catalog # : 01518OT3E254JP-W40



Performance : 380 V 50 Hz 4P IE3

Rated current : 15.3 A
 LRC : 6.6
 Rated torque : 35.6 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 320 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 2.72 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 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



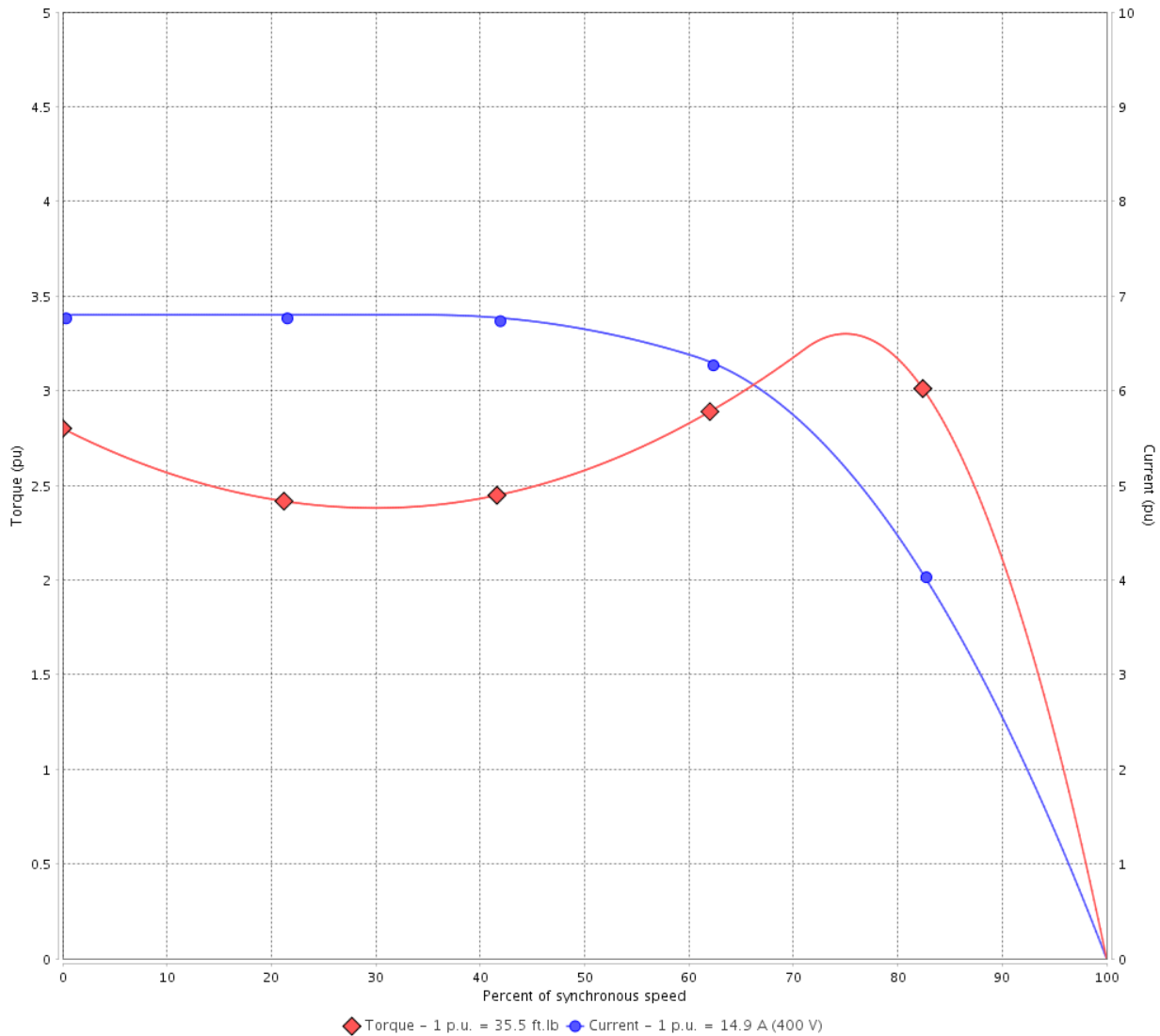
Customer :

Product line : W40 JP Pump NEMA Premium
Efficiency Three-Phase

Product code : 14436467

Catalog # : 01518OT3E254JP-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current	: 14.9 A	Moment of inertia (J)	: 2.72 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 35.5 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

Locked rotor time : 32s (cold) 18s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



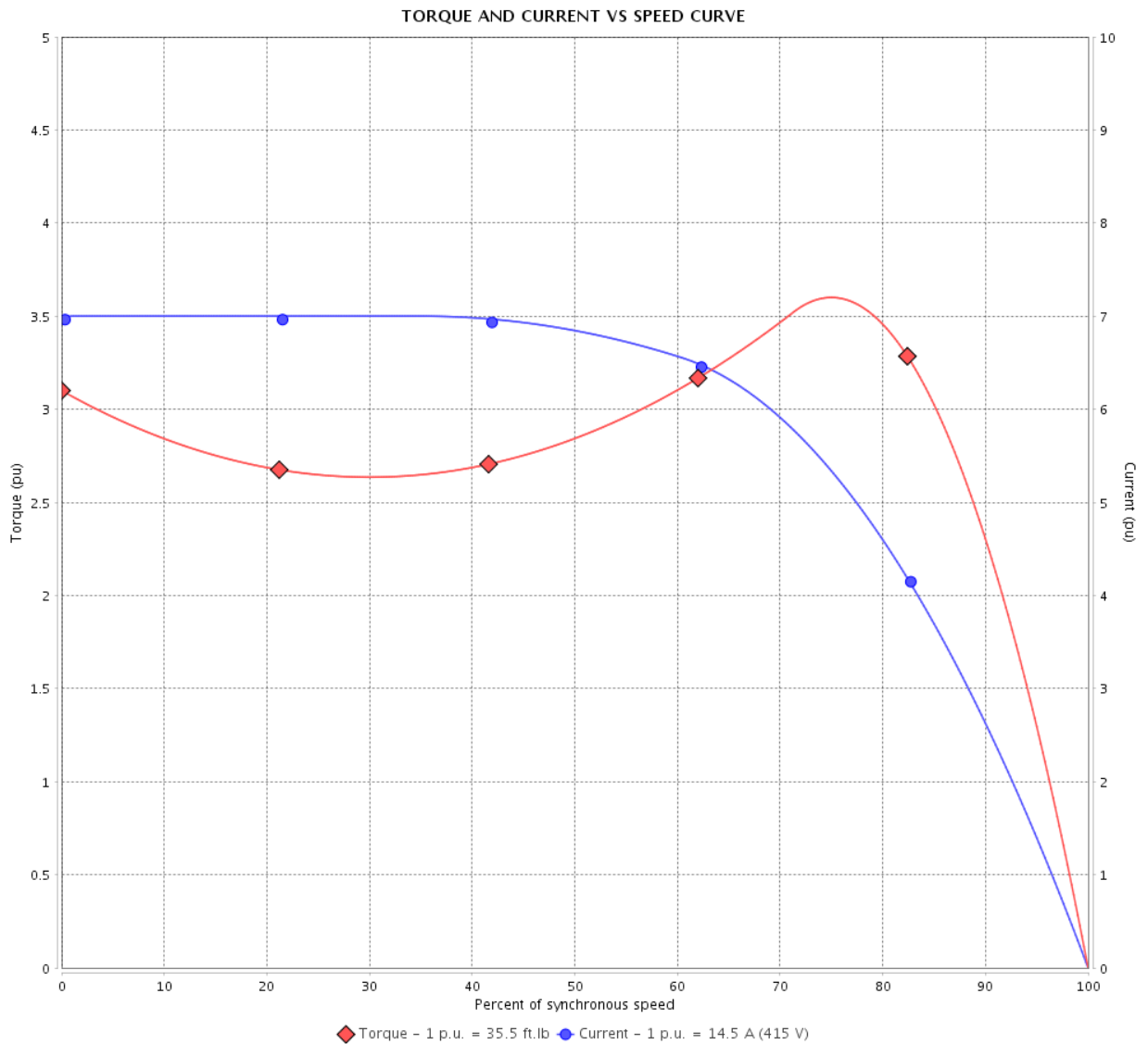
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Catalog # : 01518OT3E254JP-W40



Performance : 415 V 50 Hz 4P IE3

Rated current	: 14.5 A	Moment of inertia (J)	: 2.72 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 35.5 ft.lb	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.00
Breakdown torque	: 380 %	Temperature rise	: 80 K
Rated speed	: 1477 rpm	Design	: B

Locked rotor time : 28s (cold) 16s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



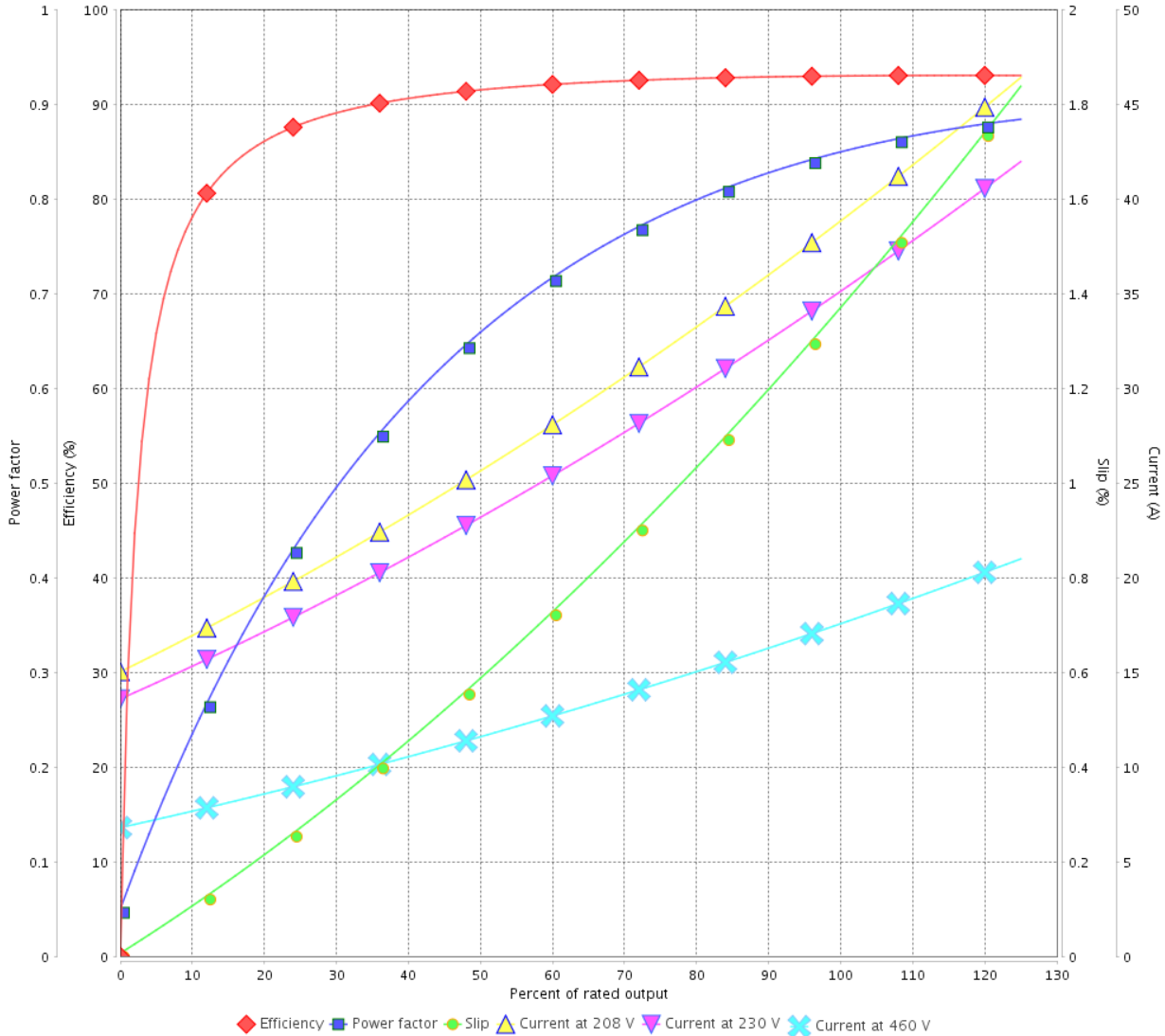
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Catalog # : 01518OT3E254JP-W40

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 35.0/17.5 A
 LRC : 6.4
 Rated torque : 44.4 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 280 %
 Rated speed : 1770 rpm

Moment of inertia (J) : 2.72 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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Three Phase Induction Motor - Squirrel Cage

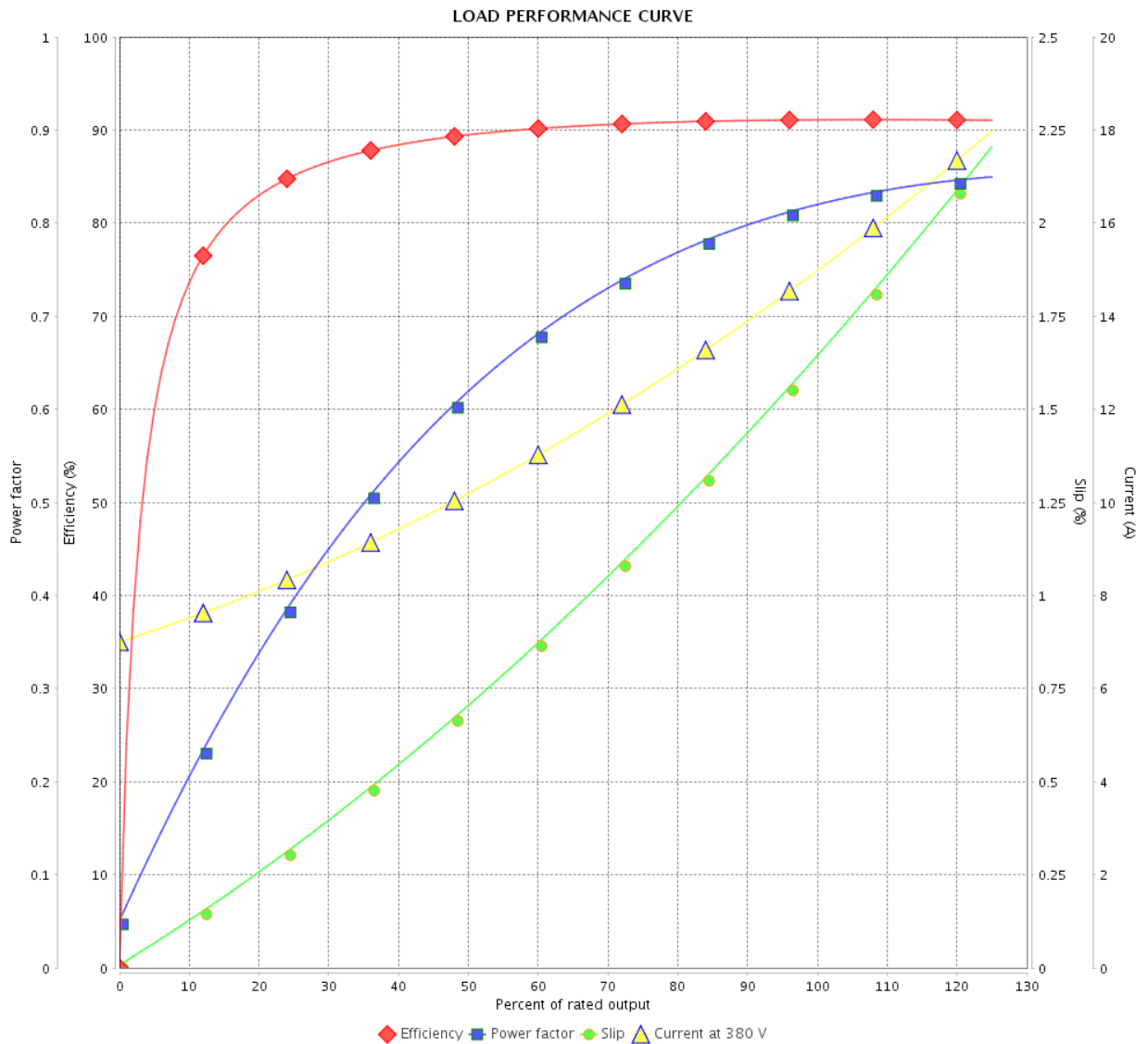


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Product code : 14436467

Catalog # : 01518OT3E254JP-W40



Performance : 380 V 50 Hz 4P IE3

Rated current : 15.3 A
 LRC : 6.6
 Rated torque : 35.6 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 320 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 2.72 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



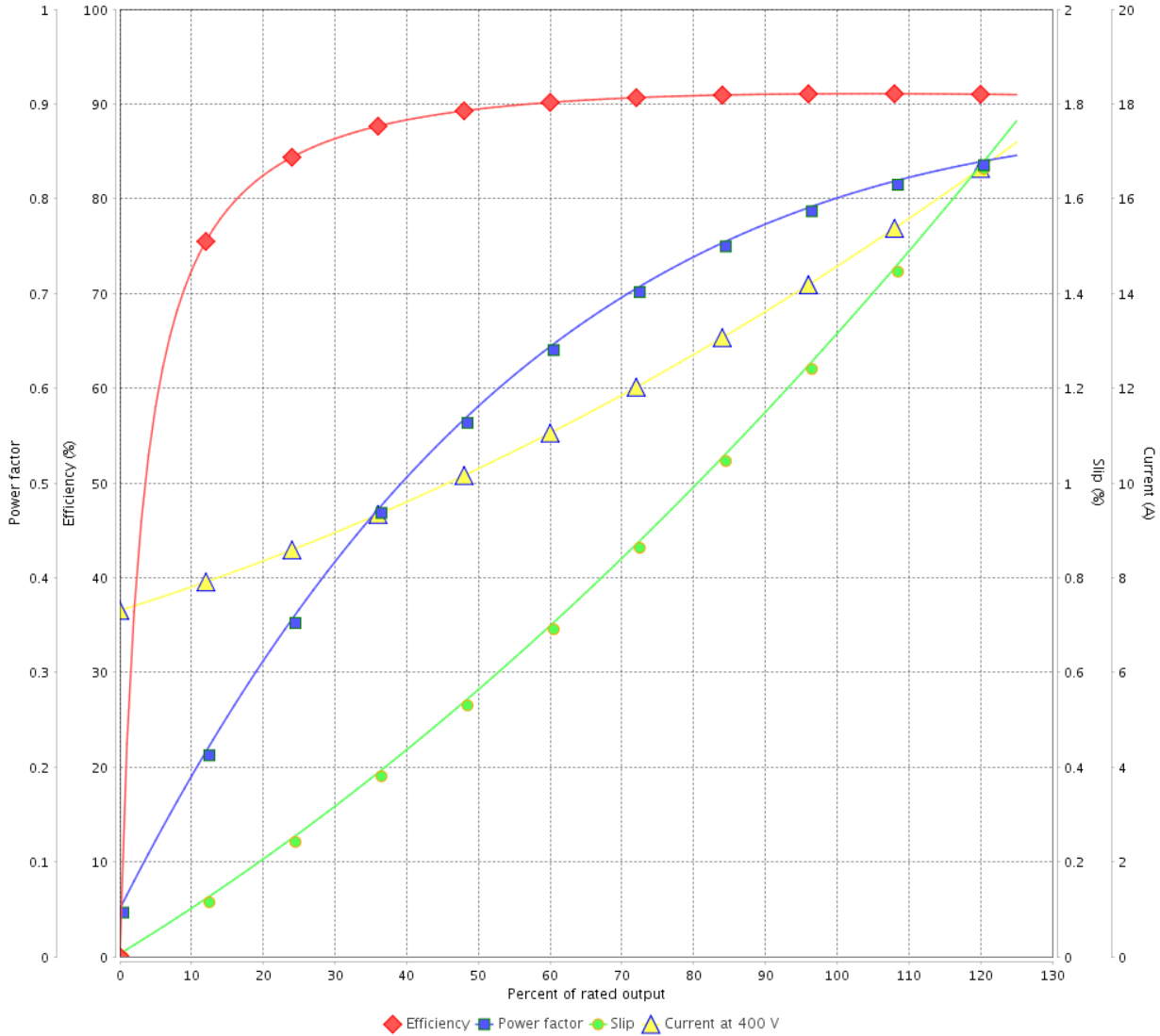
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Performance : 400 V 50 Hz 4P IE3

Rated current : 14.9 A
LRC : 6.8
Rated torque : 35.5 ft.lb
Locked rotor torque : 280 %
Breakdown torque : 350 %
Rated speed : 1475 rpm

Moment of inertia (J) : 2.72 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

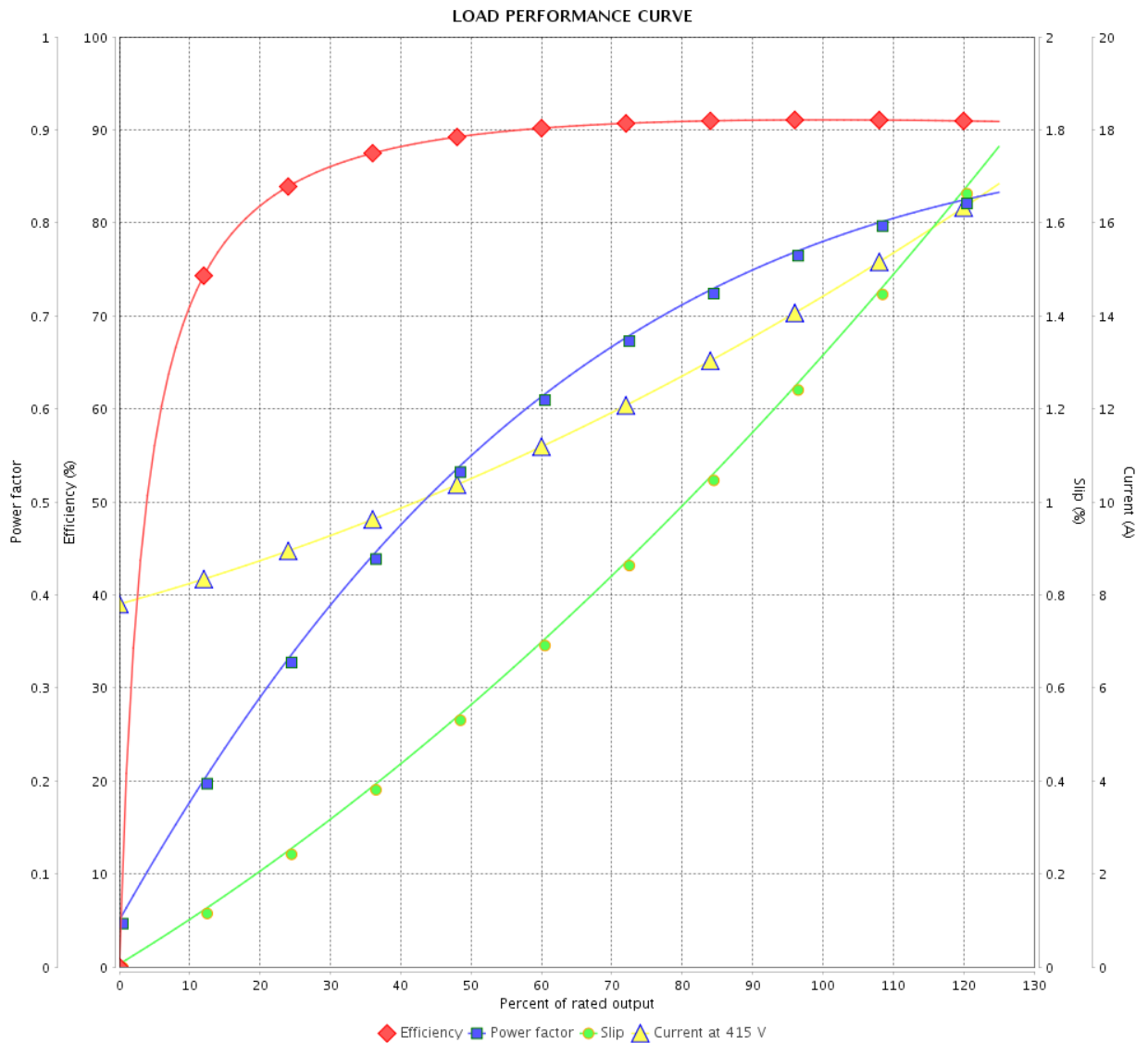


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 Service factor : 1.00
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THERMAL LIMIT CURVE



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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

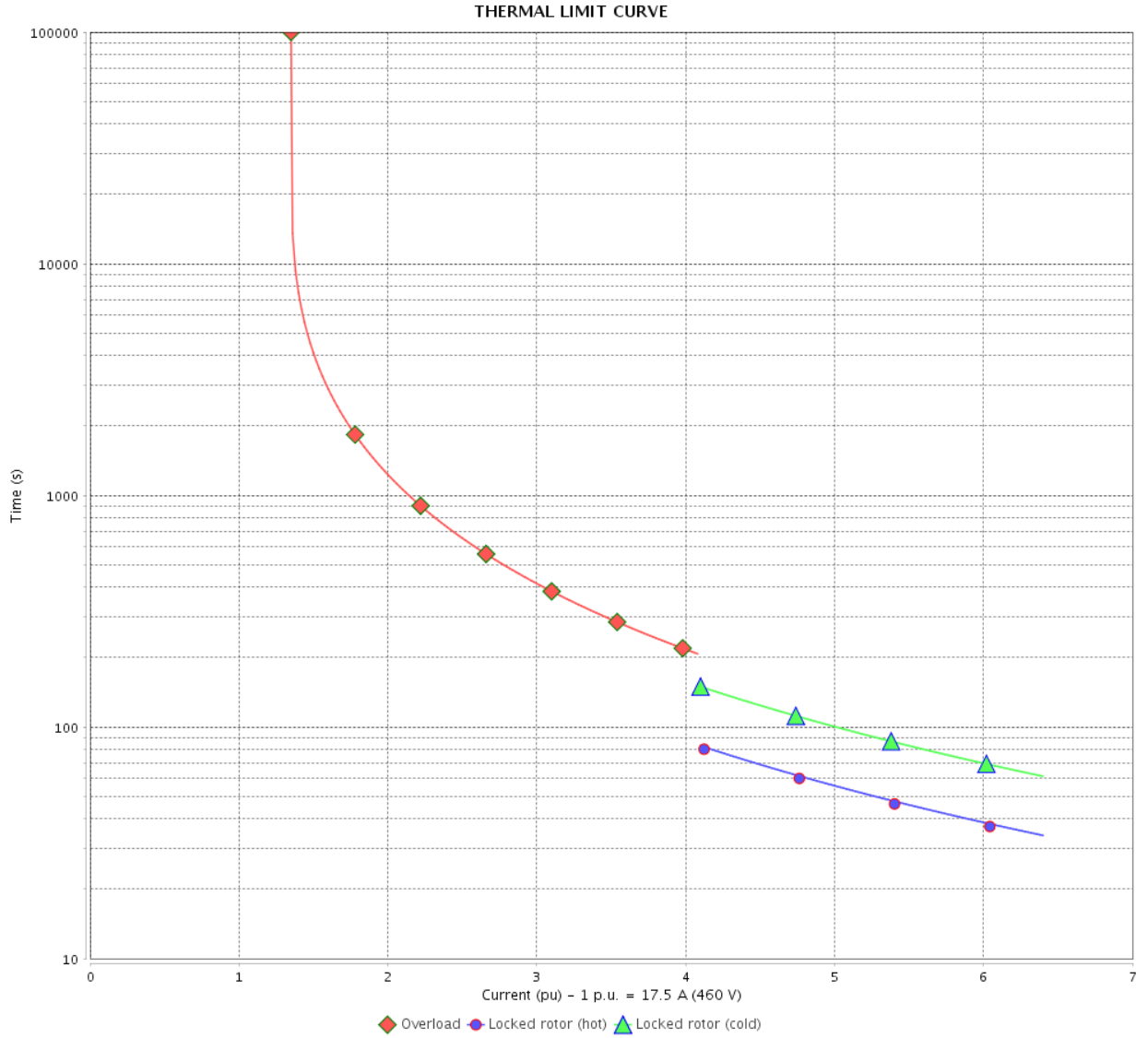
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Performance : 380 V 50 Hz 4P IE3

Rated current	: 15.3 A	Moment of inertia (J)	: 2.72 sq.ft.lb
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 35.6 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1470 rpm	Design	: B

Heating constant

Cooling constant

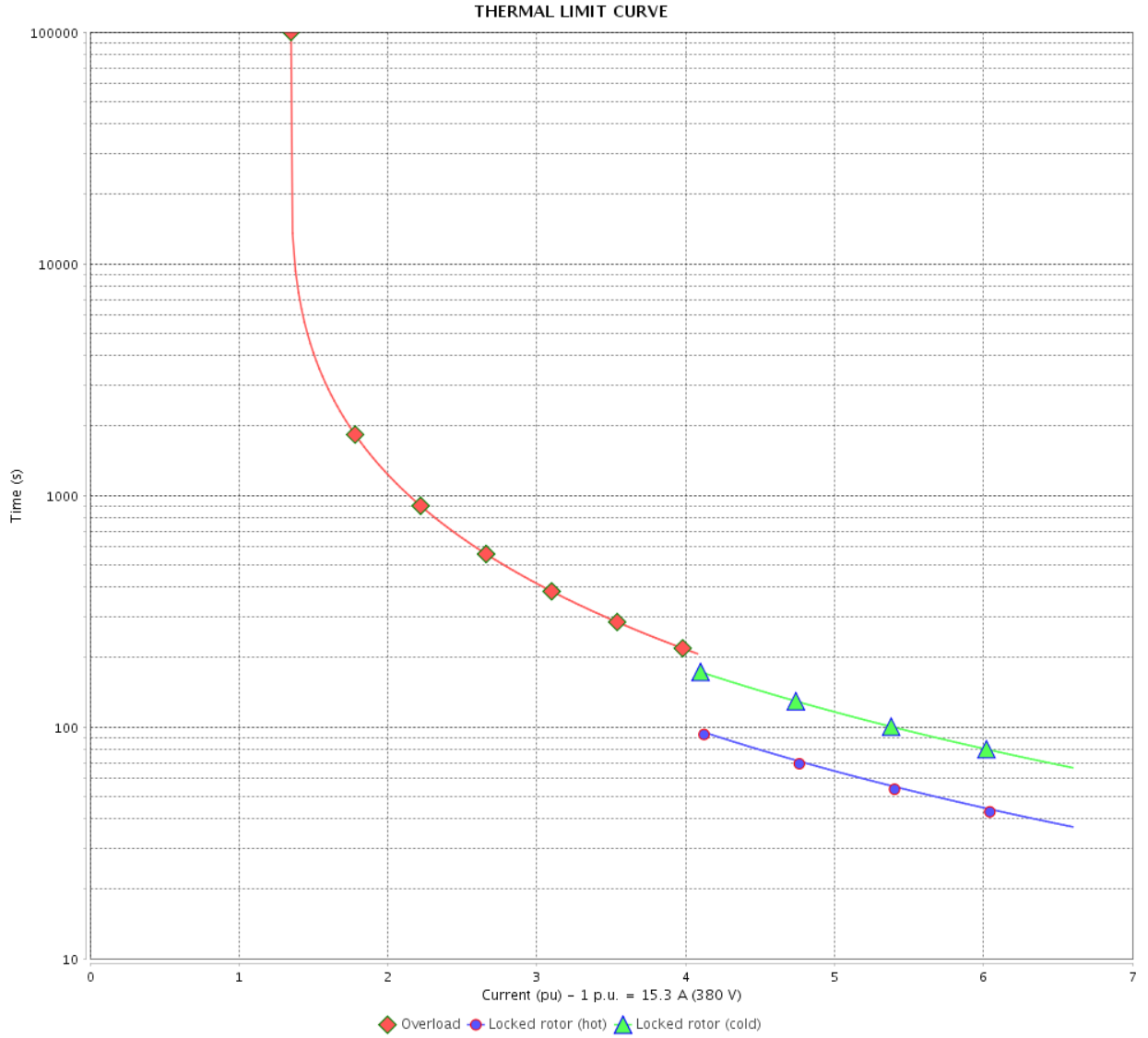
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LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 35.5 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

Heating constant

Cooling constant

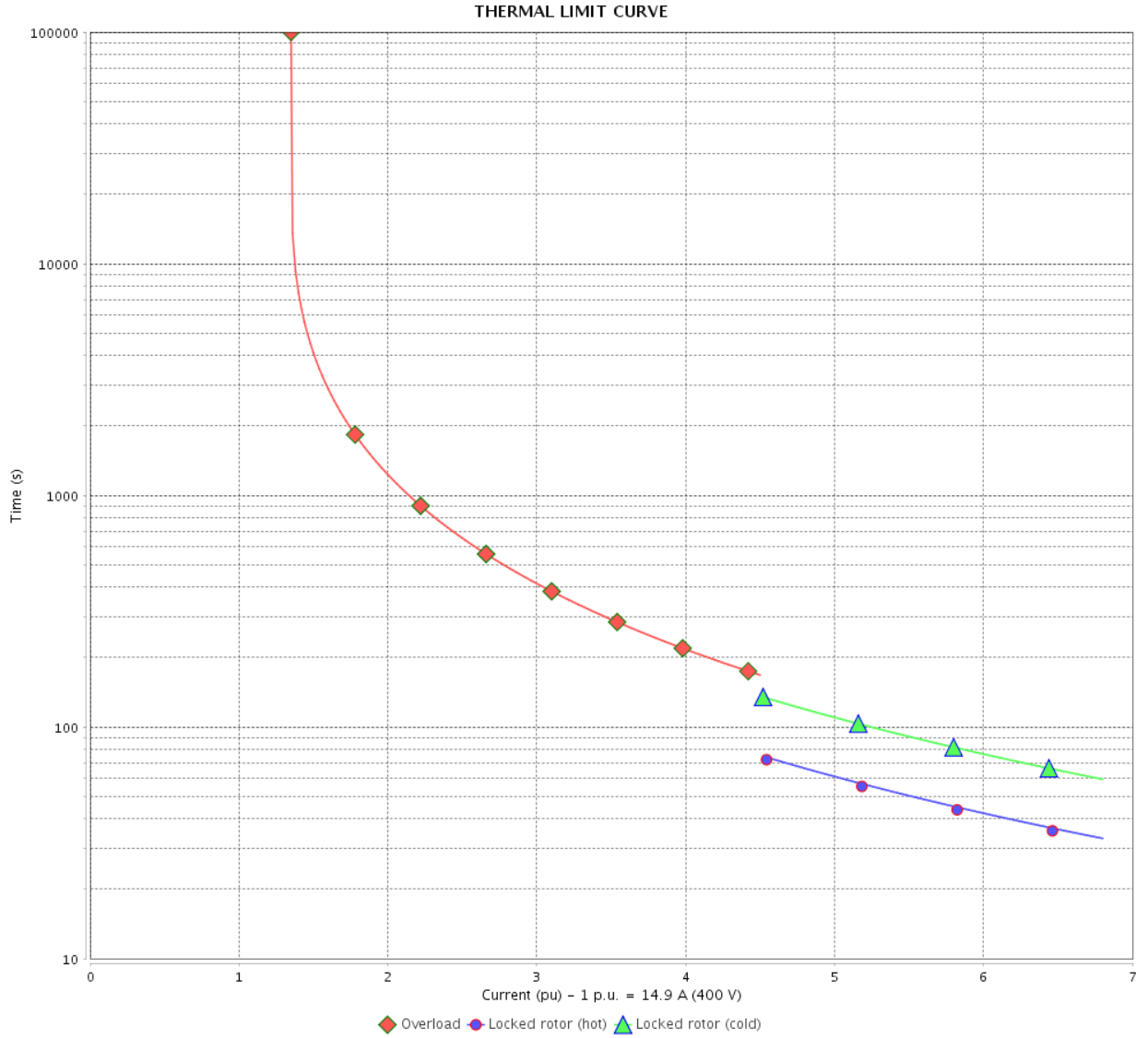
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Three Phase Induction Motor - Squirrel Cage



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THERMAL LIMIT CURVE



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Product code : 14436467

Catalog # : 01518OT3E254JP-W40

Performance : 415 V 50 Hz 4P IE3

Rated current	: 14.5 A	Moment of inertia (J)	: 2.72 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 35.5 ft.lb	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.00
Breakdown torque	: 380 %	Temperature rise	: 80 K
Rated speed	: 1477 rpm	Design	: B

Heating constant

Cooling constant

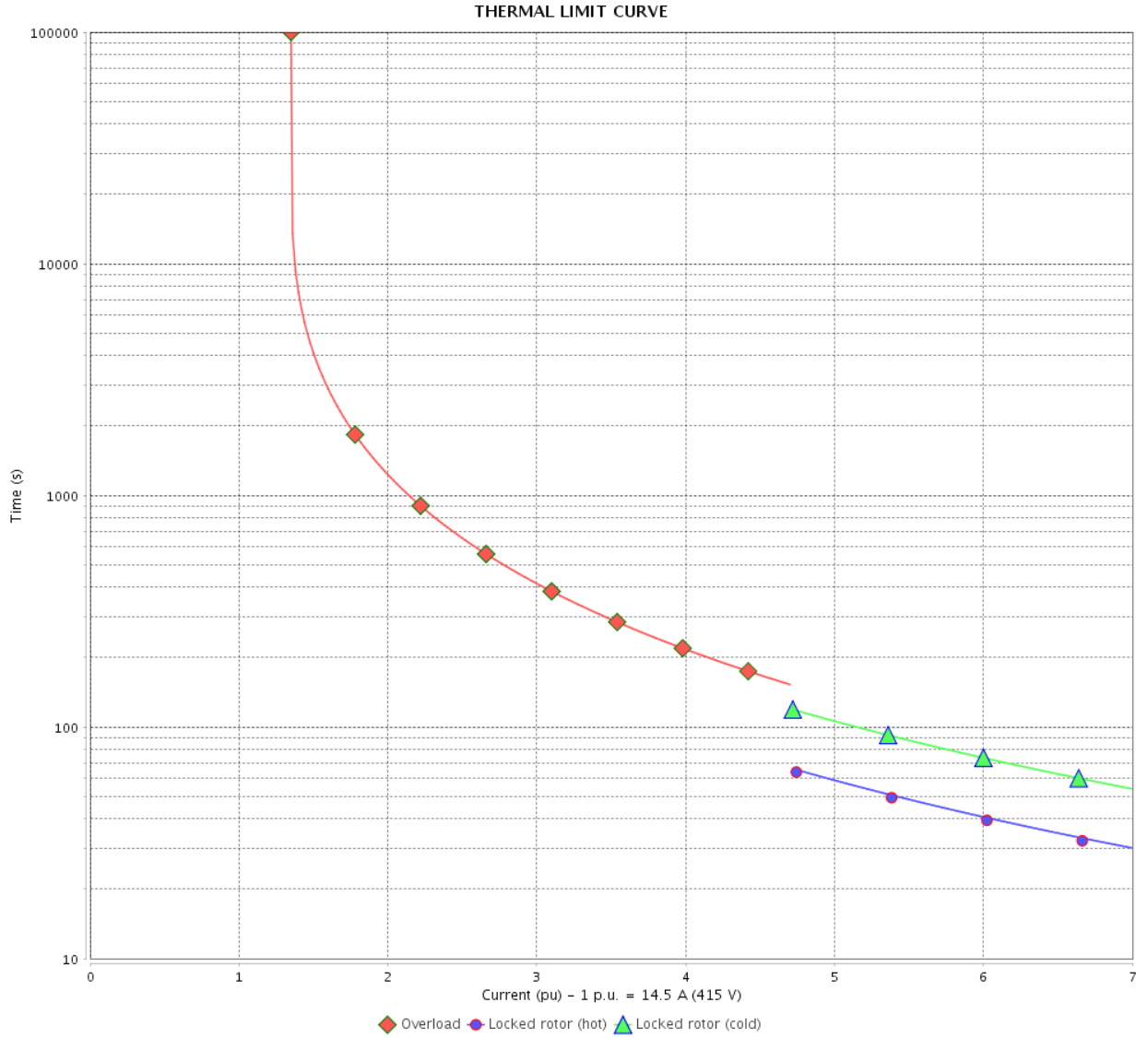
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Performed by				
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



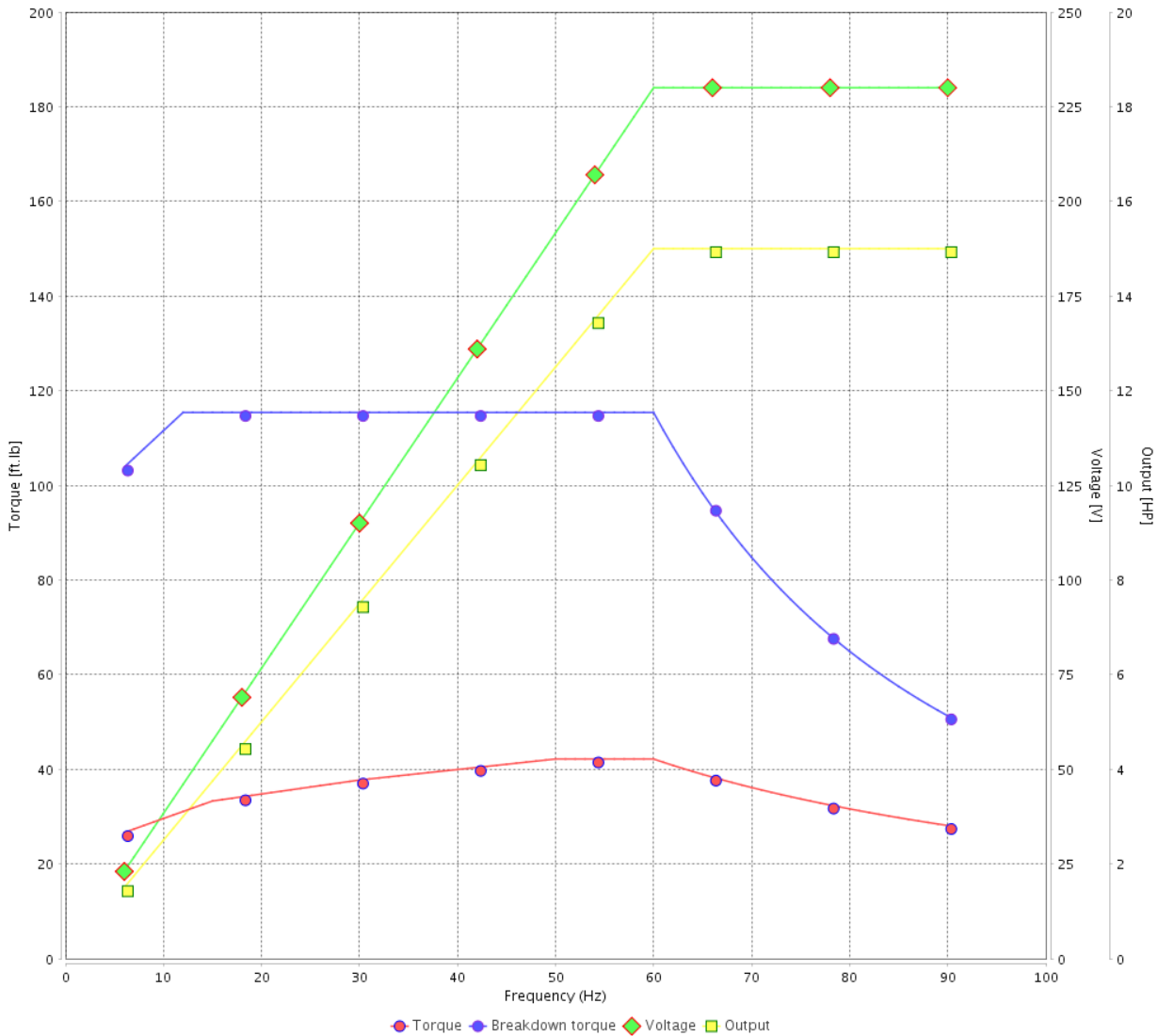
Customer :

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VFD OPERATION CURVE



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 Breakdown torque : 280 %
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Moment of inertia (J) : 2.72 sq.ft.lb
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 Insulation class : F
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Rev.	Changes Summary	Performed	Checked	Date
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

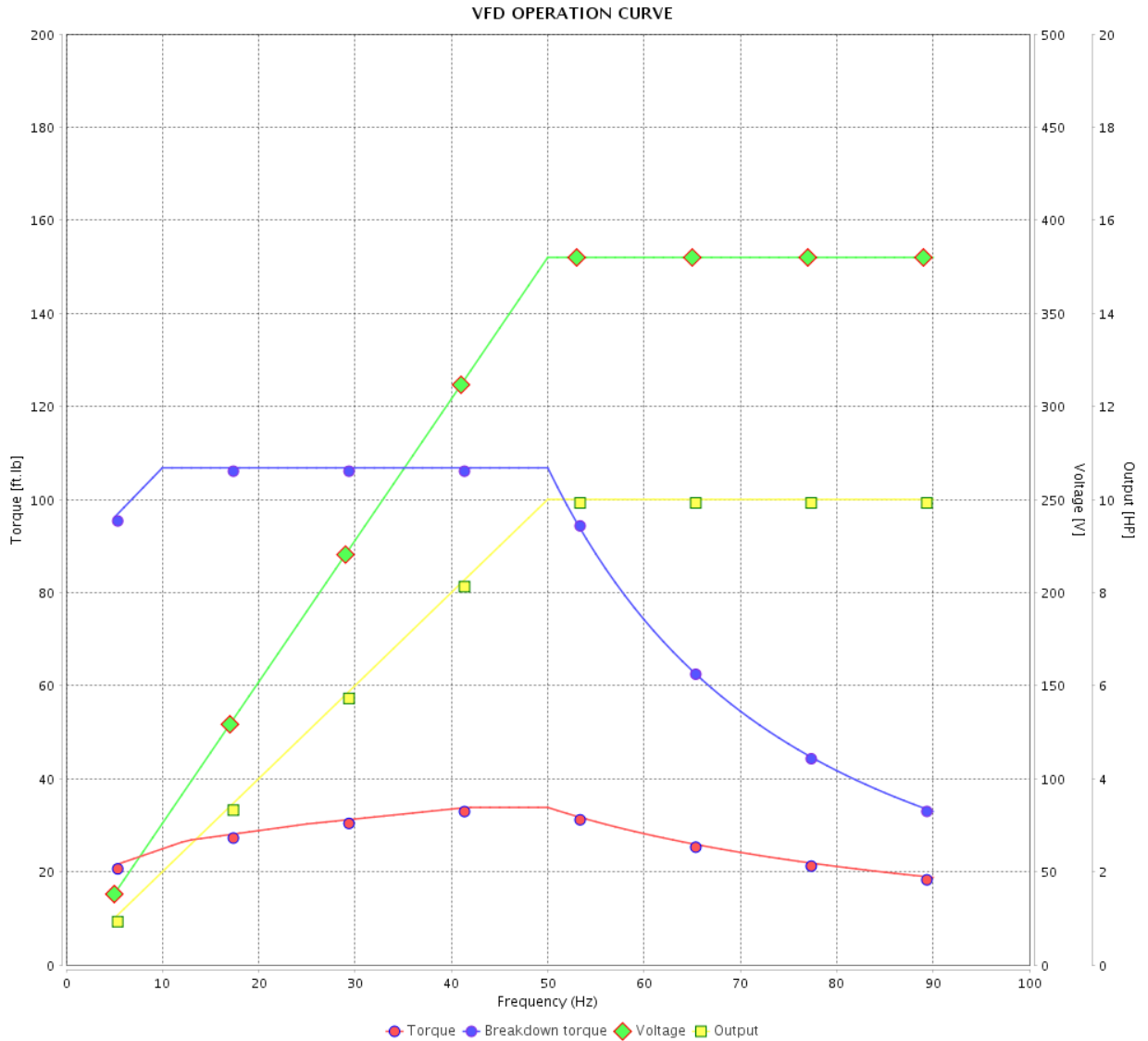


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 Breakdown torque : 320 %
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Rev.	Changes Summary	Performed	Checked	Date
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				Revision

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



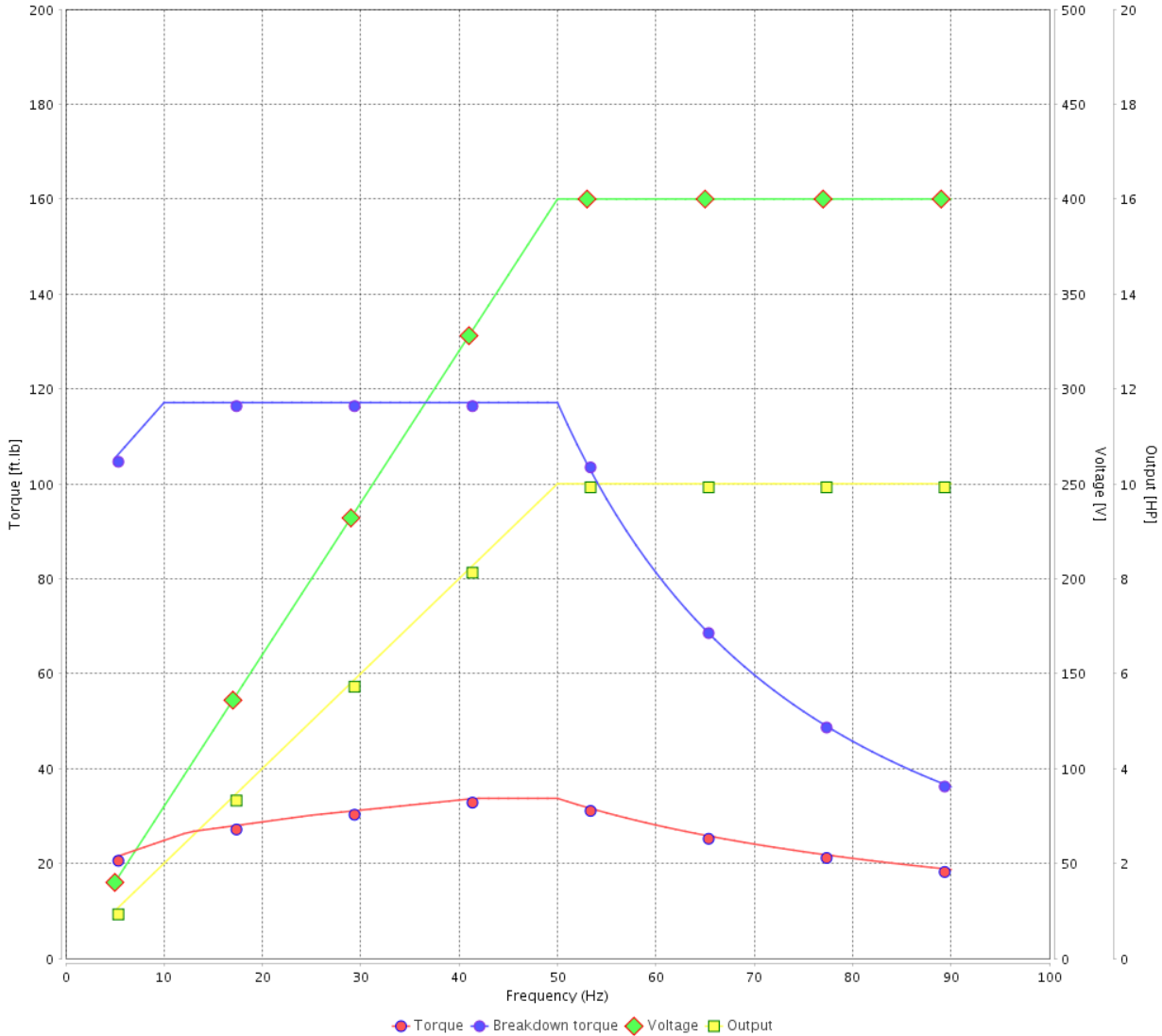
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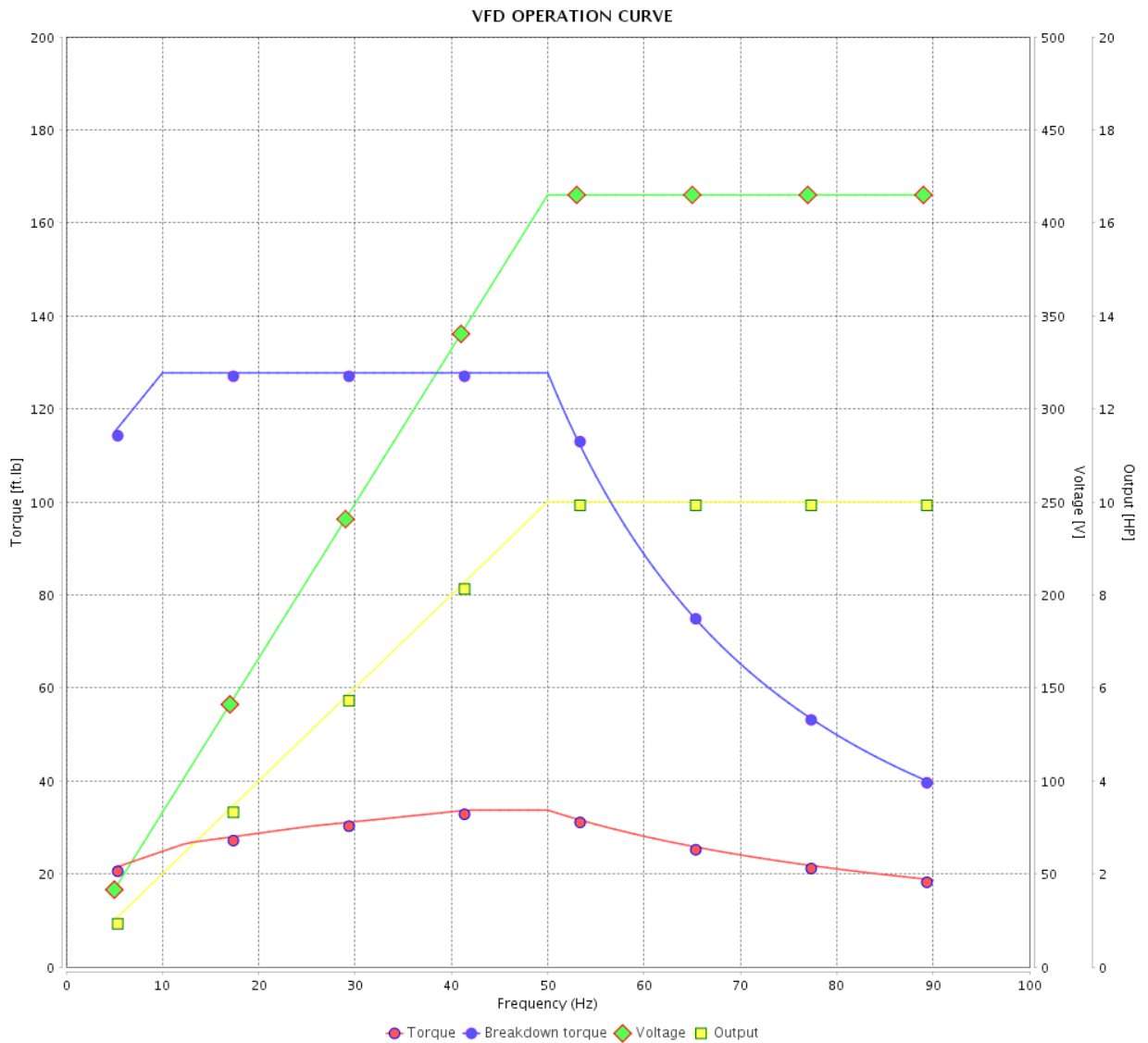


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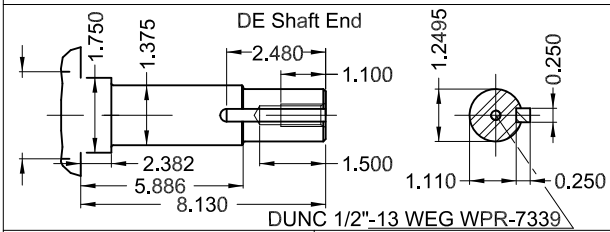
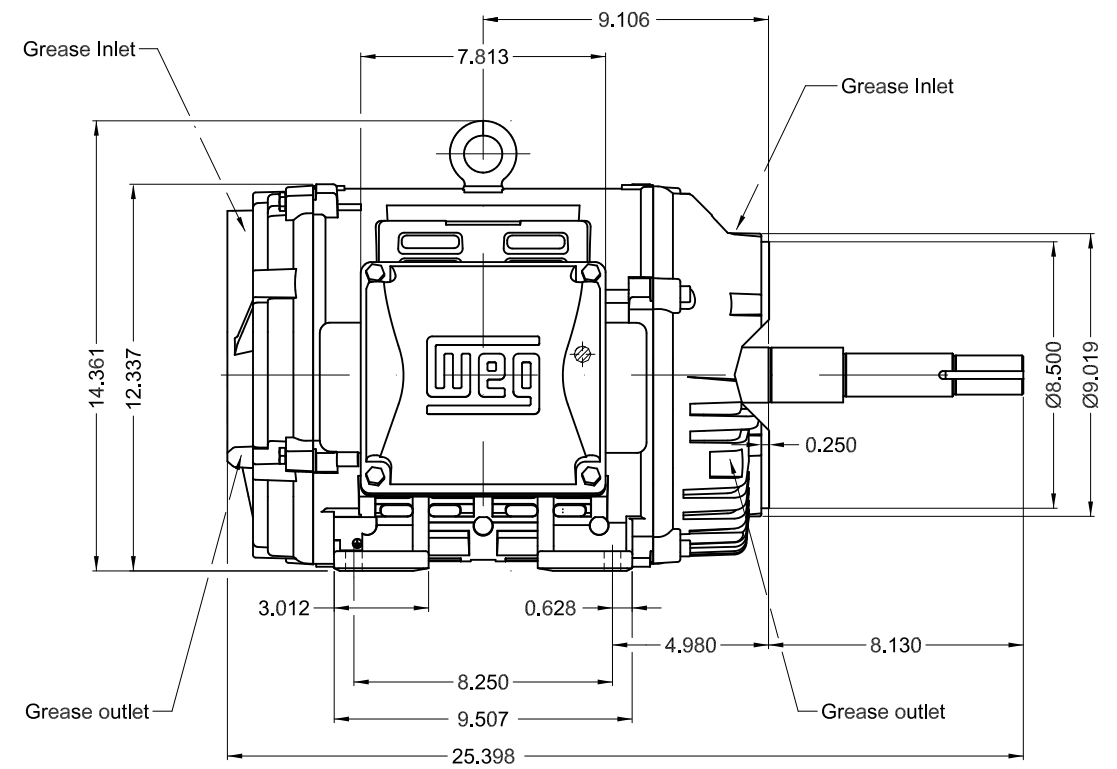
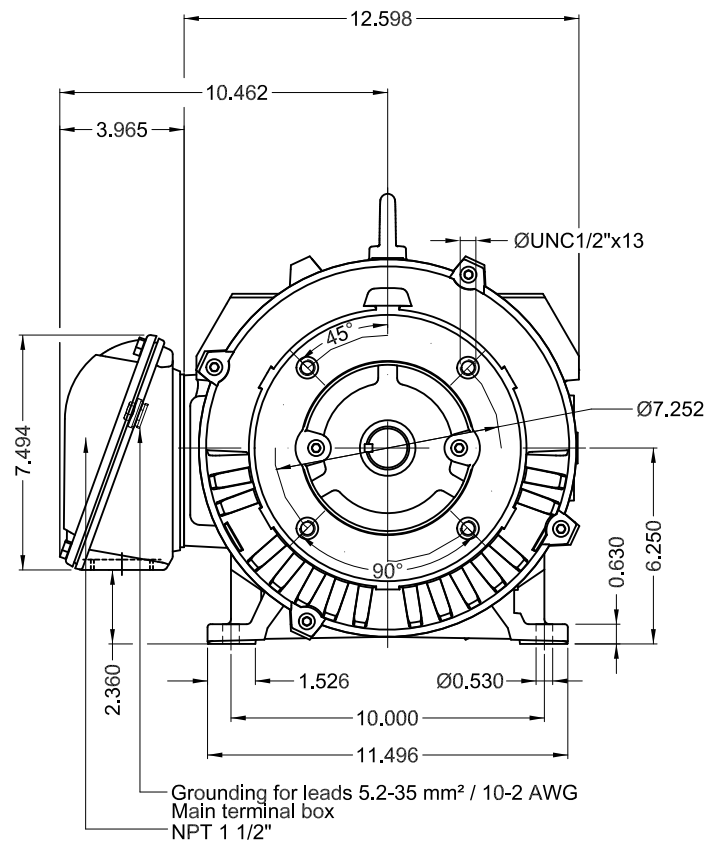


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 Design : B

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15 HP 04 Poles 60 Hz

A

1:6

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 CLOSE COUPLED PUMP JP TYPE PREM. FT. FRAME 254JP IP23 ODP					
CHECKED							
RELEASED							
REL DT.		WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1		

Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B34R(D)

PREVIEW
WDD



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



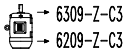
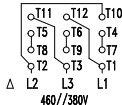
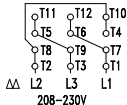
IEC 60034-1
 MOD.T01#FOXON



For 60Hz use on PWM, VT 1000:1, CT 3:1, 1.0SF

MODEL 015180T3E254JP-W40
 MADE IN BRAZIL
 14436467

PH 3	FR 254JP	HP(kW) 15.0(11.0)	Hz 60
V 230/460	A 35.0/17.5	RPM 1775	DES B
NEMA NOM EFF 93.0 %	INS. CL. F Δ T 80 K	IP23	
ENCL ODP	DUTY CONT.	AMB. 40°C	
CODE G	PF 0.85	SF 1.25	SFA 43.8/21.9
USABLE @208V	38.7 A	SF 1.15	SFA 44.5
10HP 7.5kW 50Hz 380V 15.3A 1475RPM SF1.00 EFF 91.0% (IE3)	ALT 1000 m.a.s.l.		



MOBIL POLYREX EM
 13 g 20000 h

ALT 1000 m.a.s.l. 254 Lbs