

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W40 JP Pump NEMA Premium Efficiency Three-Phase	Product code :	14836781		
		Catalog # :	04036OT3E286JPV-W40		
Frame	: 284/6JP	Cooling method	: IC01 - ODP		
Insulation class	: F	Mounting	: W-6		
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	: 360 lb		
Protection degree	: IP23	Moment of inertia (J)	: 2.02 sq.ft.lb		
Design	: B				
Output [HP]	40	30	30	30	
Poles	2	2	2	2	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	93.6/46.8	41.9	40.7	40.2	
L. R. Amperes [A]	608/304	302	309	310	
LRC [A]	6.5x(Code G)	7.2x(Code H)	7.6x(Code J)	7.7x(Code J)	
No load current [A]	29.8/14.9	14.3	15.8	17.0	
Rated speed [RPM]	3545	2950	2960	2960	
Slip [%]	1.53	1.67	1.33	1.33	
Rated torque [ft.lb]	59.3	53.4	53.2	53.2	
Locked rotor torque [%]	190	210	229	250	
Breakdown torque [%]	260	280	300	330	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	14s (cold) 8s (hot)	250s (cold) 139s (hot)	14s (cold) 8s (hot)	14s (cold) 8s (hot)	
Noise level ²	73.0 dB(A)				
Efficiency (%)	25%	91.5	88.6	88.7	88.9
	50%	91.7	90.0	90.1	90.2
	75%	92.4	91.4	91.4	91.5
	100%	92.4	92.8	92.8	92.8
Power Factor	25%	0.51	0.49	0.45	0.41
	50%	0.76	0.73	0.70	0.65
	75%	0.84	0.82	0.79	0.76
	100%	0.87	0.86	0.84	0.82
Bearing type	: Drive end : 6311 Z C3 Non drive end : 6211 Z C3	Foundation loads			
Sealing	: Without Bearing Seal Without Bearing Seal	Max. traction			
Lubrication interval	: 11517 h 14226 h	Max. compression			
Lubricant amount	: 18 g 11 g				
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 104A SF 1.15 SFA 119A					
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



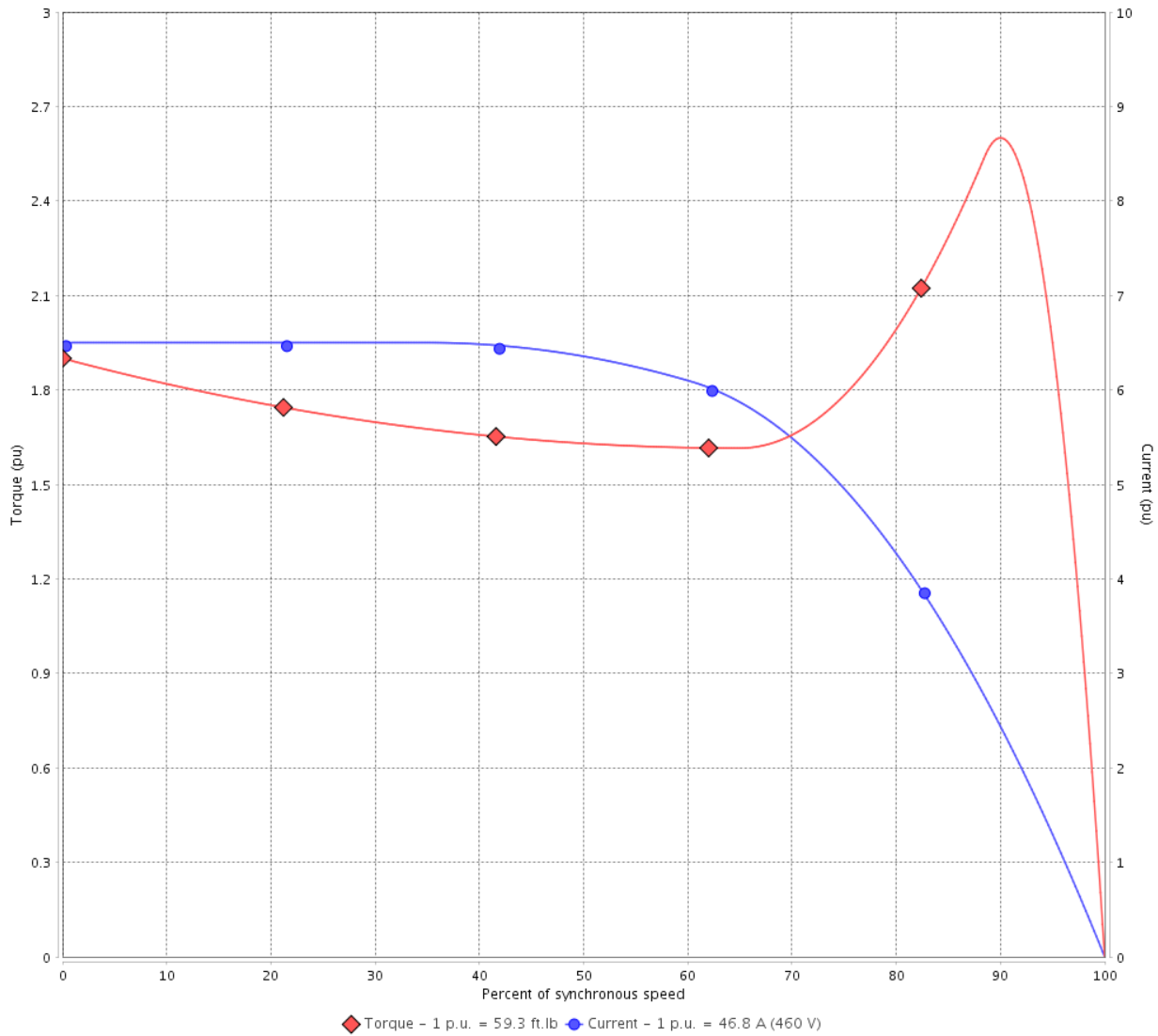
Customer :

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

Product code : 14836781

Catalog # : 04036OT3E286JPV-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 93.6/46.8 A	Moment of inertia (J)	: 2.02 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 59.3 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 3545 rpm	Design	: B

Locked rotor time : 14s (cold) 8s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



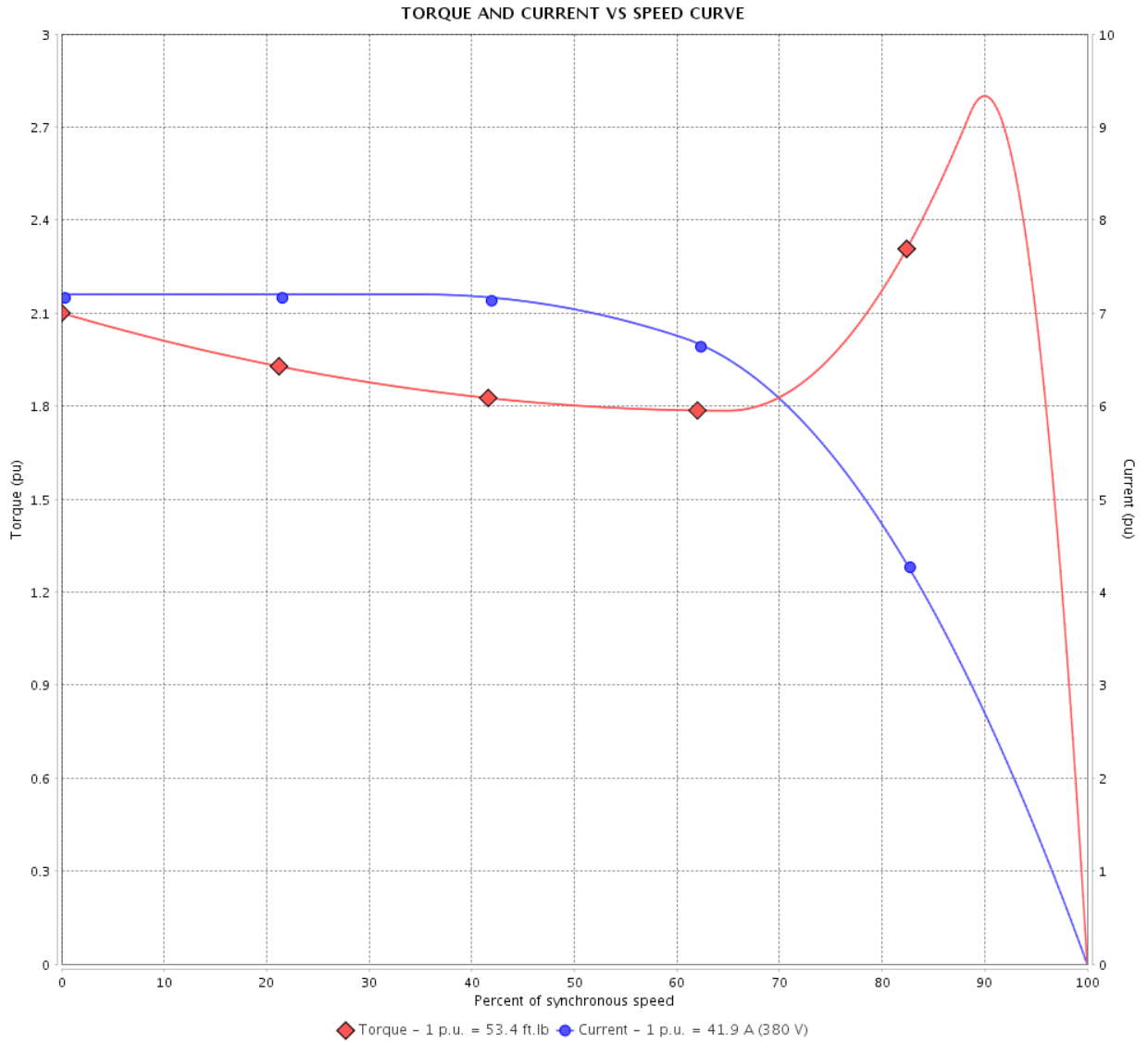
Three Phase Induction Motor - Squirrel Cage

Customer :

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

Product code : 14836781

Catalog # : 04036OT3E286JPV-W40



Performance : 380 V 50 Hz 2P IE3

Rated current : 41.9 A
 LRC : 7.2
 Rated torque : 53.4 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 280 %
 Rated speed : 2950 rpm

Moment of inertia (J) : 2.02 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Locked rotor time : 250s (cold) 139s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



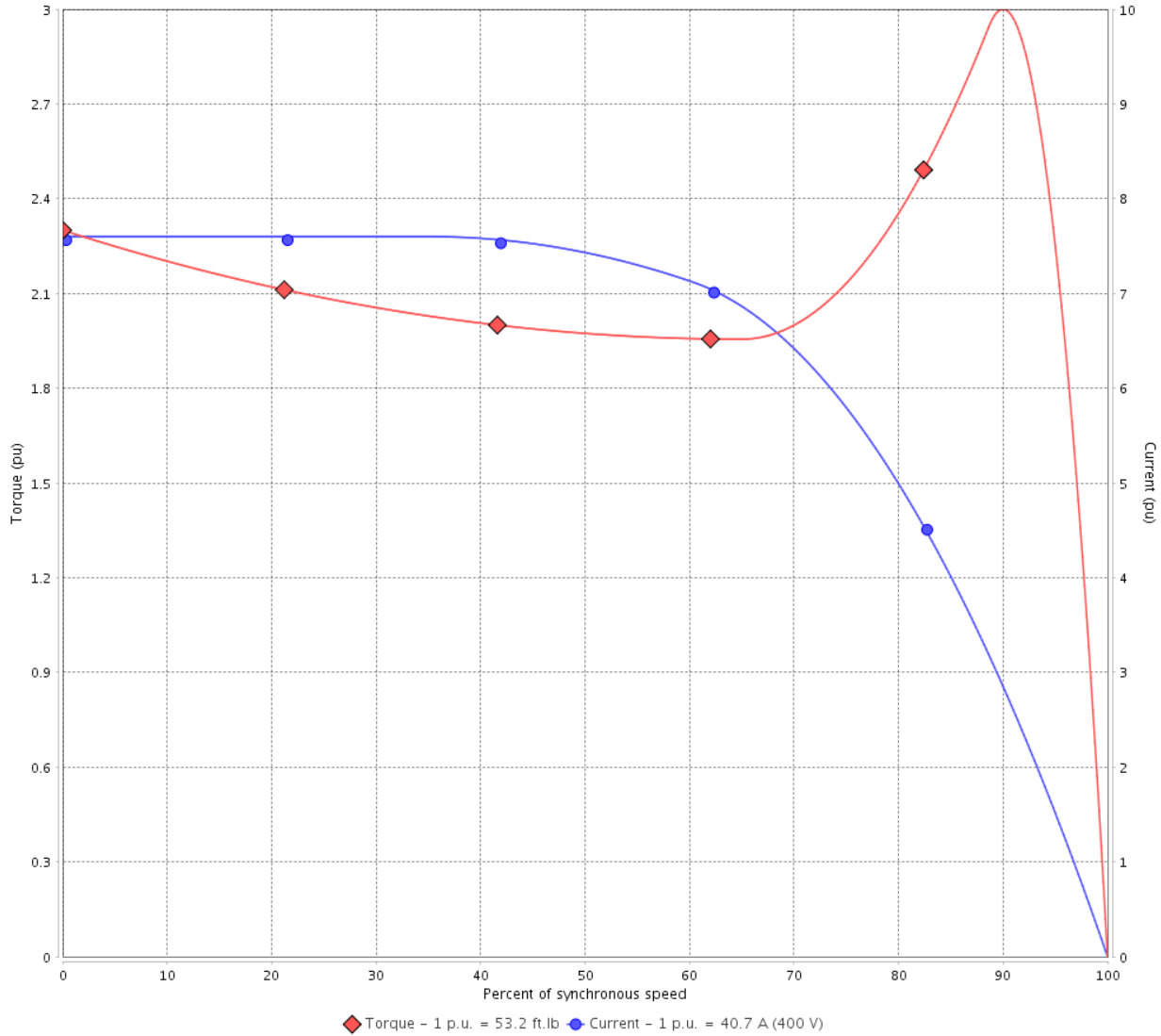
Customer :

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

Product code : 14836781

Catalog # : 04036OT3E286JPV-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 2P IE3

Rated current	: 40.7 A	Moment of inertia (J)	: 2.02 sq.ft.lb
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 53.2 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 2960 rpm	Design	: B

Locked rotor time : 14s (cold) 8s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



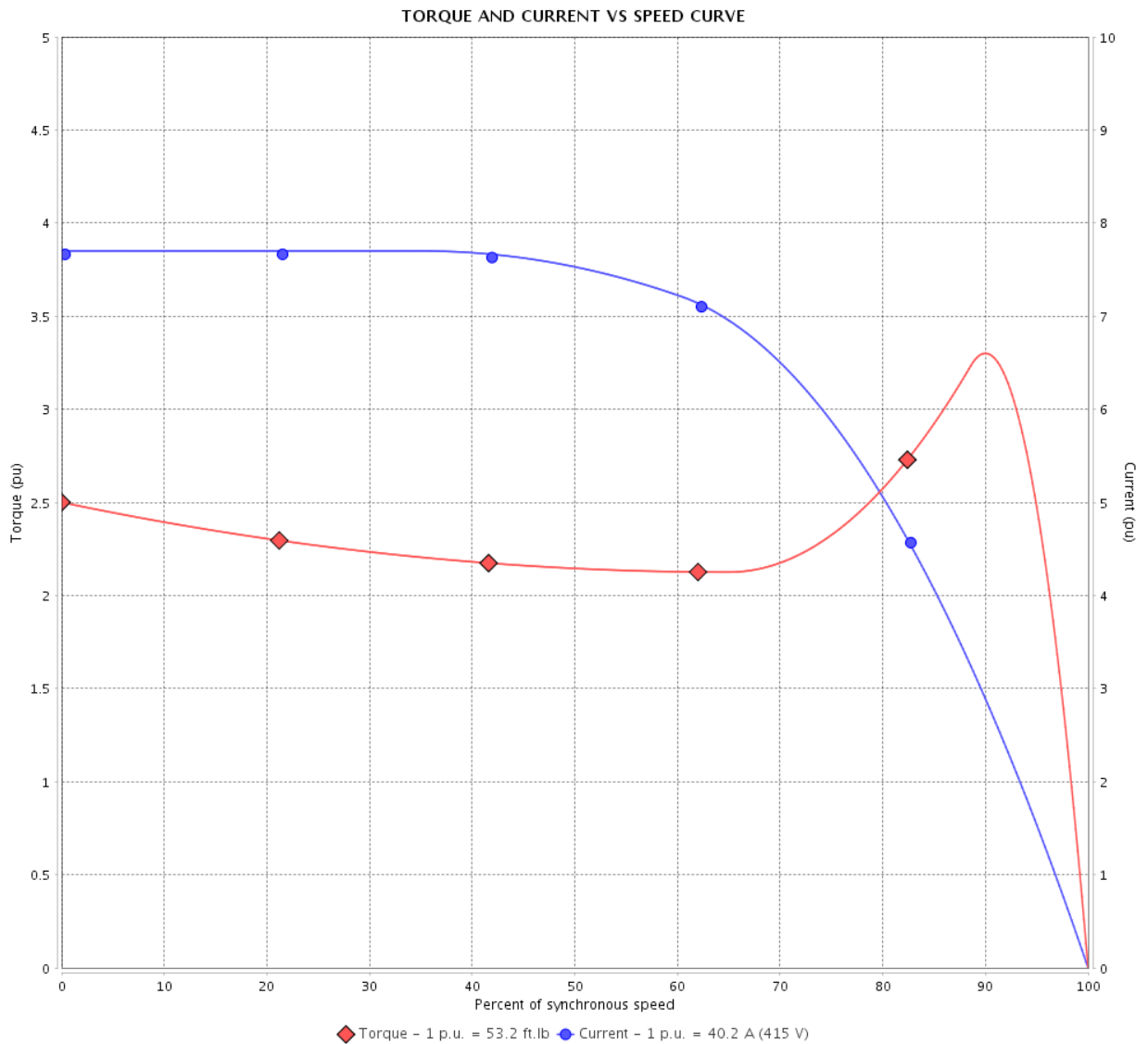
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Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 2960 rpm	Design	: B

Locked rotor time : 14s (cold) 8s (hot)

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LOAD PERFORMANCE CURVE

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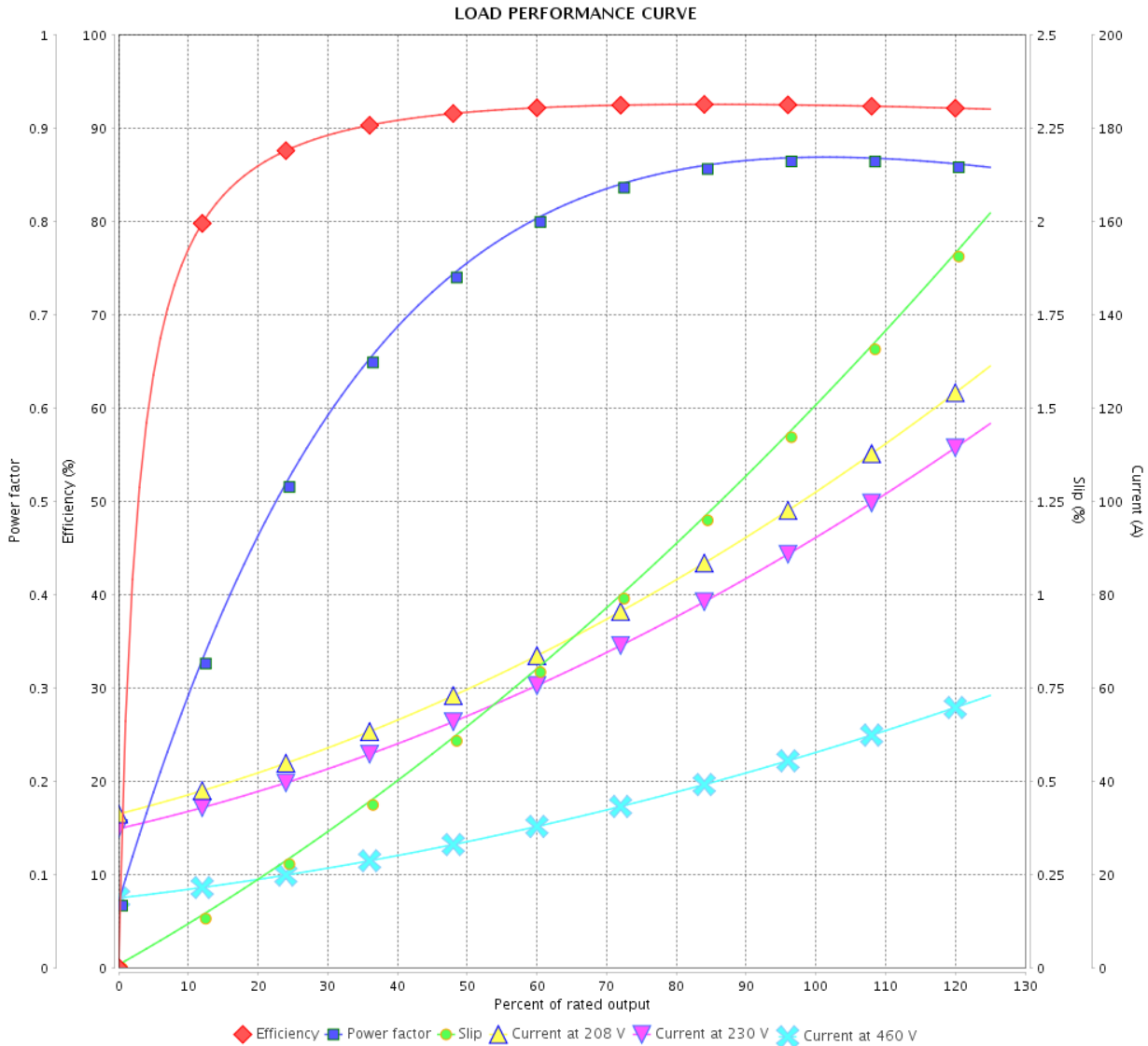


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Performance : 230/460 V 60 Hz 2P

Rated current : 93.6/46.8 A
 LRC : 6.5
 Rated torque : 59.3 ft.lb
 Locked rotor torque : 190 %
 Breakdown torque : 260 %
 Rated speed : 3545 rpm

Moment of inertia (J) : 2.02 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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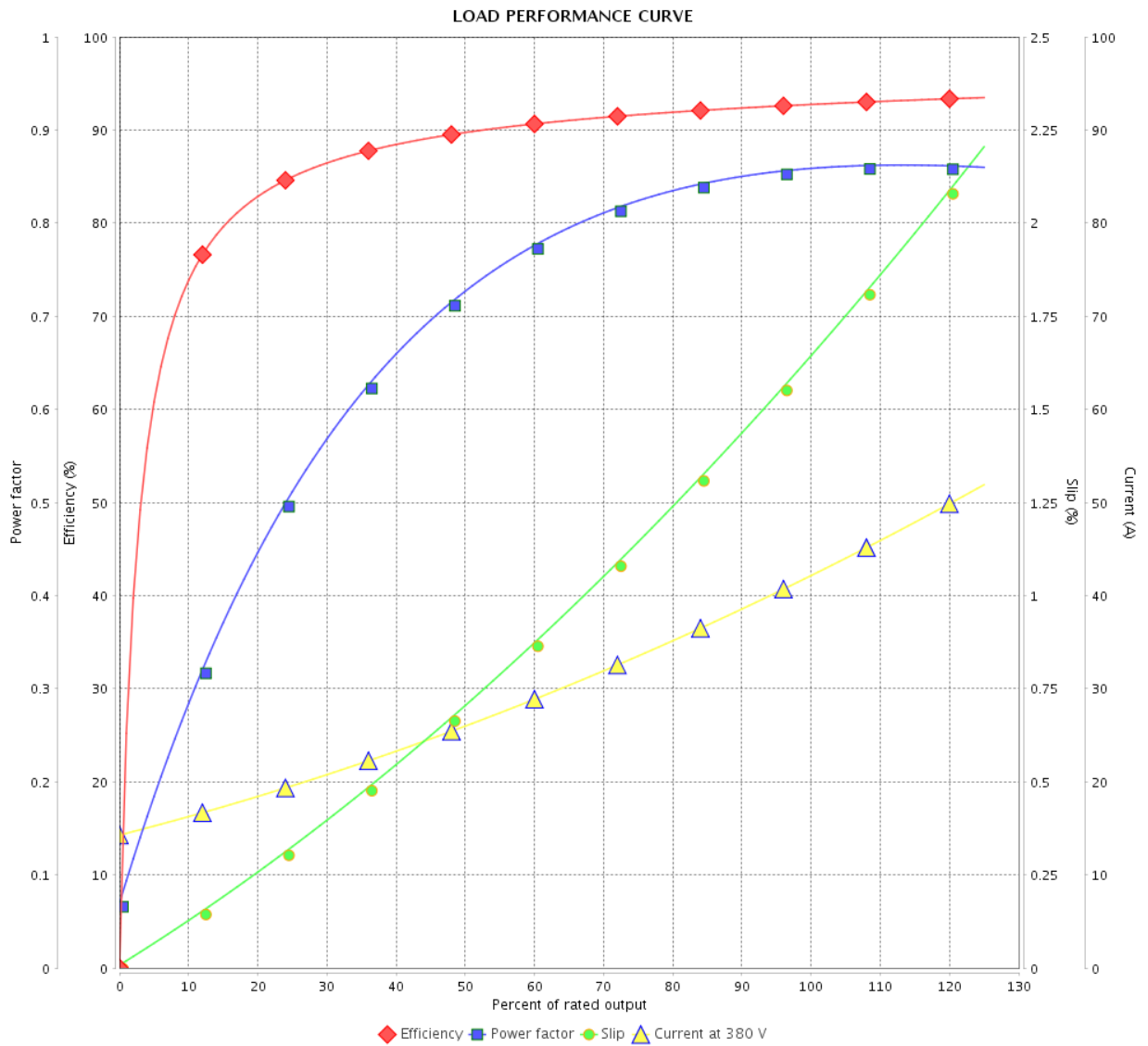


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Performance : 380 V 50 Hz 2P IE3

Rated current : 41.9 A
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 Locked rotor torque : 210 %
 Breakdown torque : 280 %
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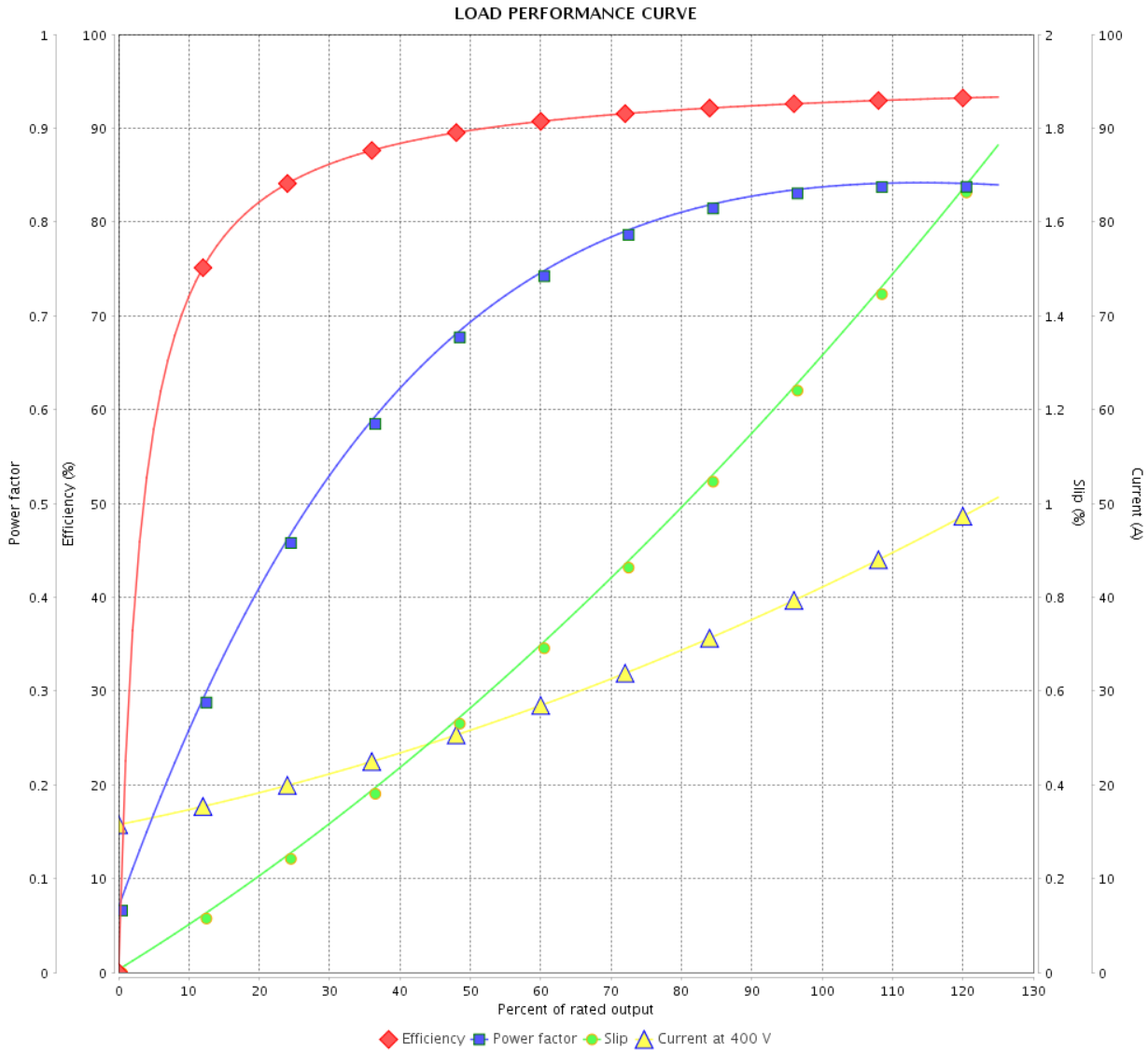


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LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 53.2 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 2960 rpm	Design	: B

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Three Phase Induction Motor - Squirrel Cage

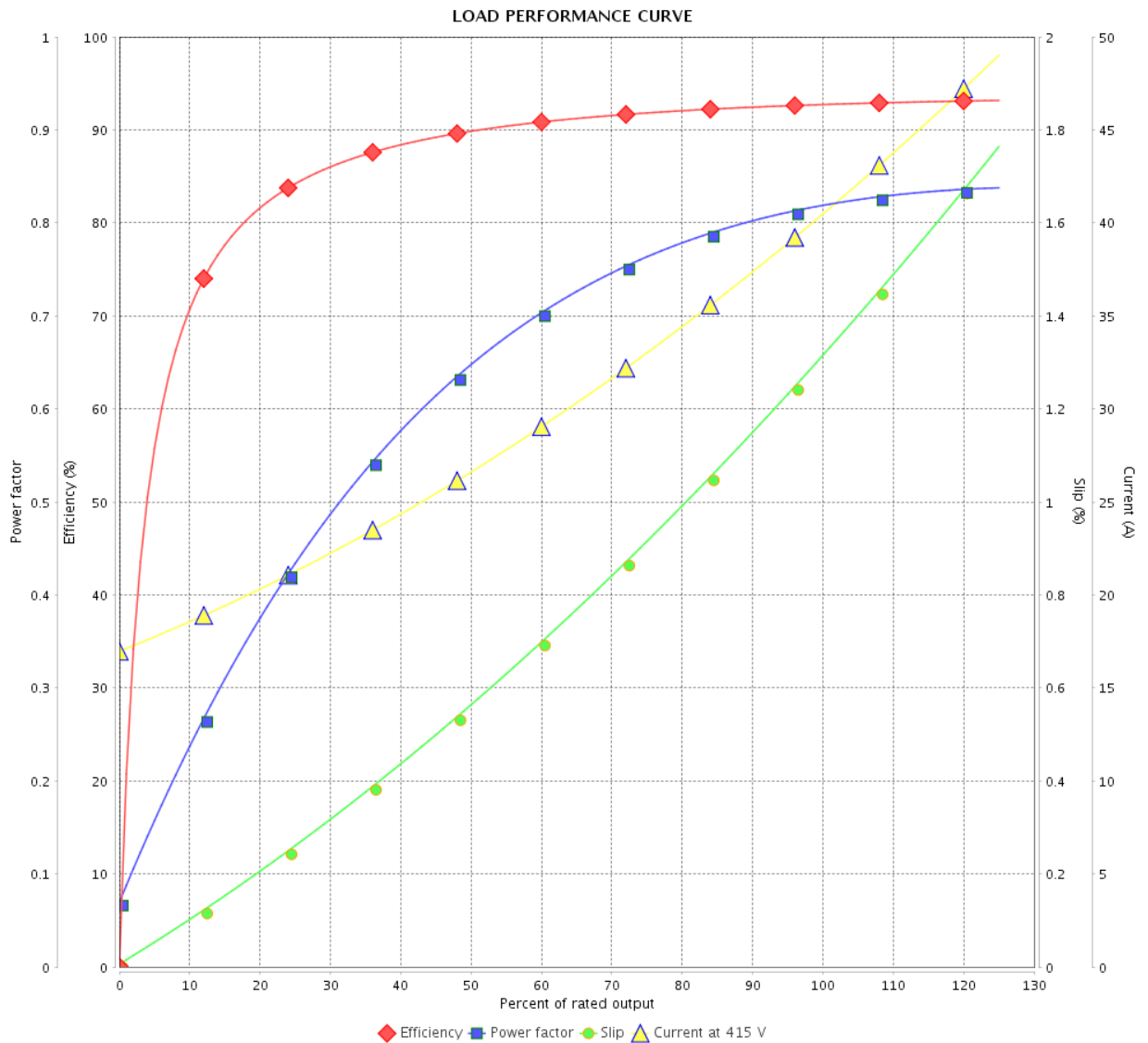


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Product code : 14836781

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Performance : 415 V 50 Hz 2P IE3

Rated current : 40.2 A
 LRC : 7.7
 Rated torque : 53.2 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 330 %
 Rated speed : 2960 rpm

Moment of inertia (J) : 2.02 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

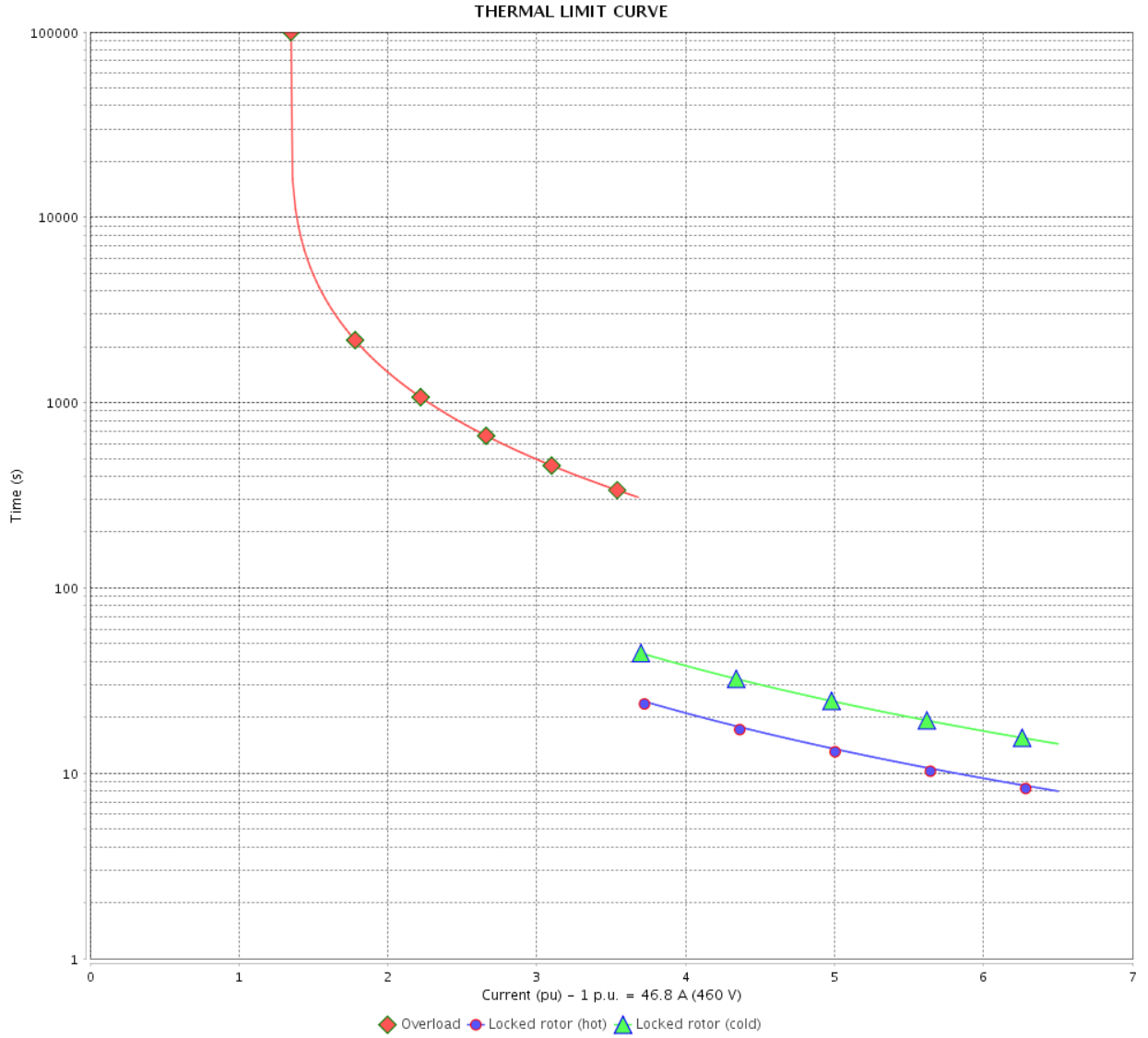
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Catalog # : 04036OT3E286JPV-W40

Performance : 380 V 50 Hz 2P IE3

Rated current : 41.9 A	Moment of inertia (J) : 2.02 sq.ft.lb
LRC : 7.2	Duty cycle : Cont.(S1)
Rated torque : 53.4 ft.lb	Insulation class : F
Locked rotor torque : 210 %	Service factor : 1.00
Breakdown torque : 280 %	Temperature rise : 80 K
Rated speed : 2950 rpm	Design : B

Heating constant

Cooling constant

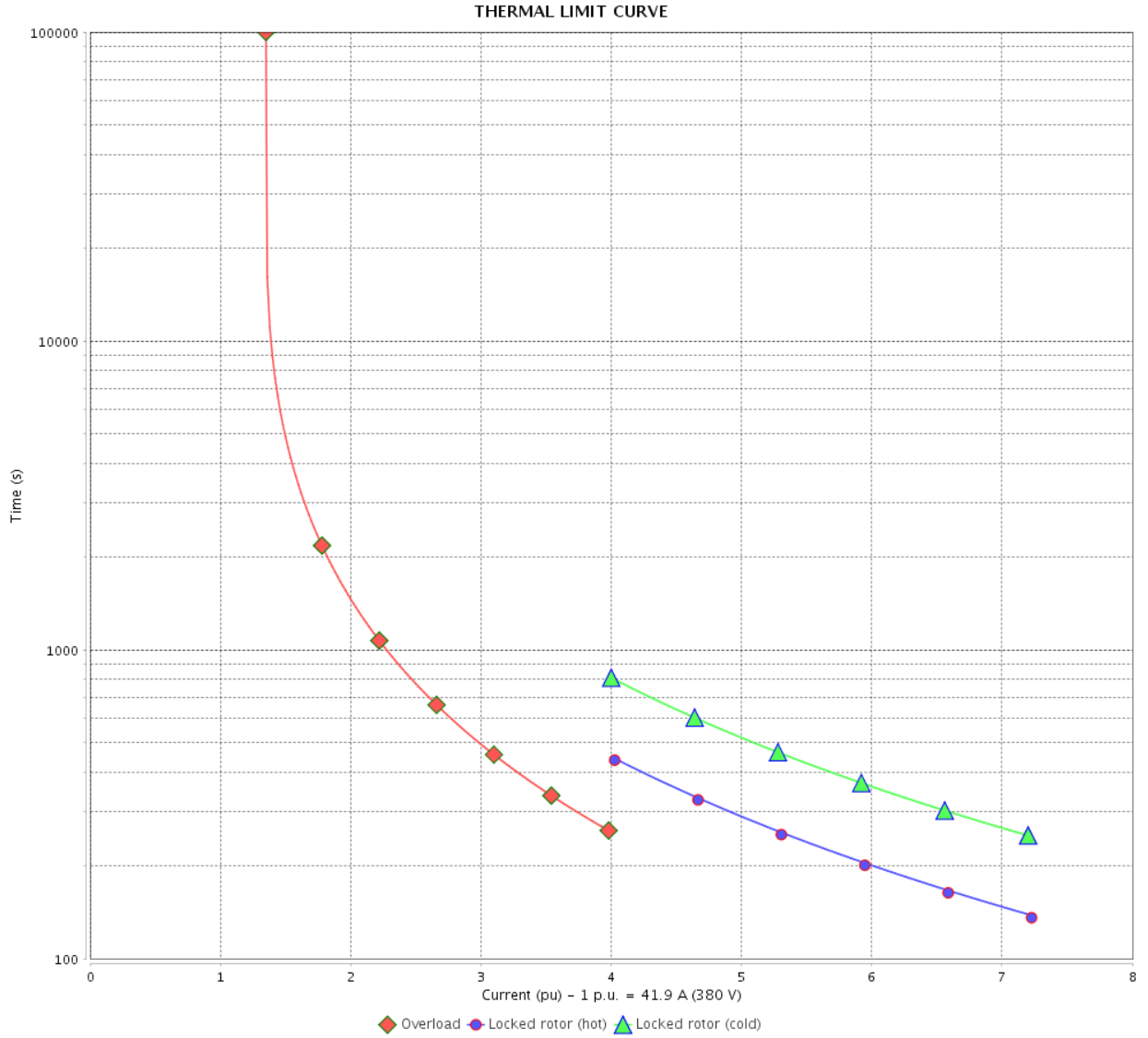
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LRC : 7.6	Duty cycle : Cont.(S1)
Rated torque : 53.2 ft.lb	Insulation class : F
Locked rotor torque : 229 %	Service factor : 1.00
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 2960 rpm	Design : B

Heating constant

Cooling constant

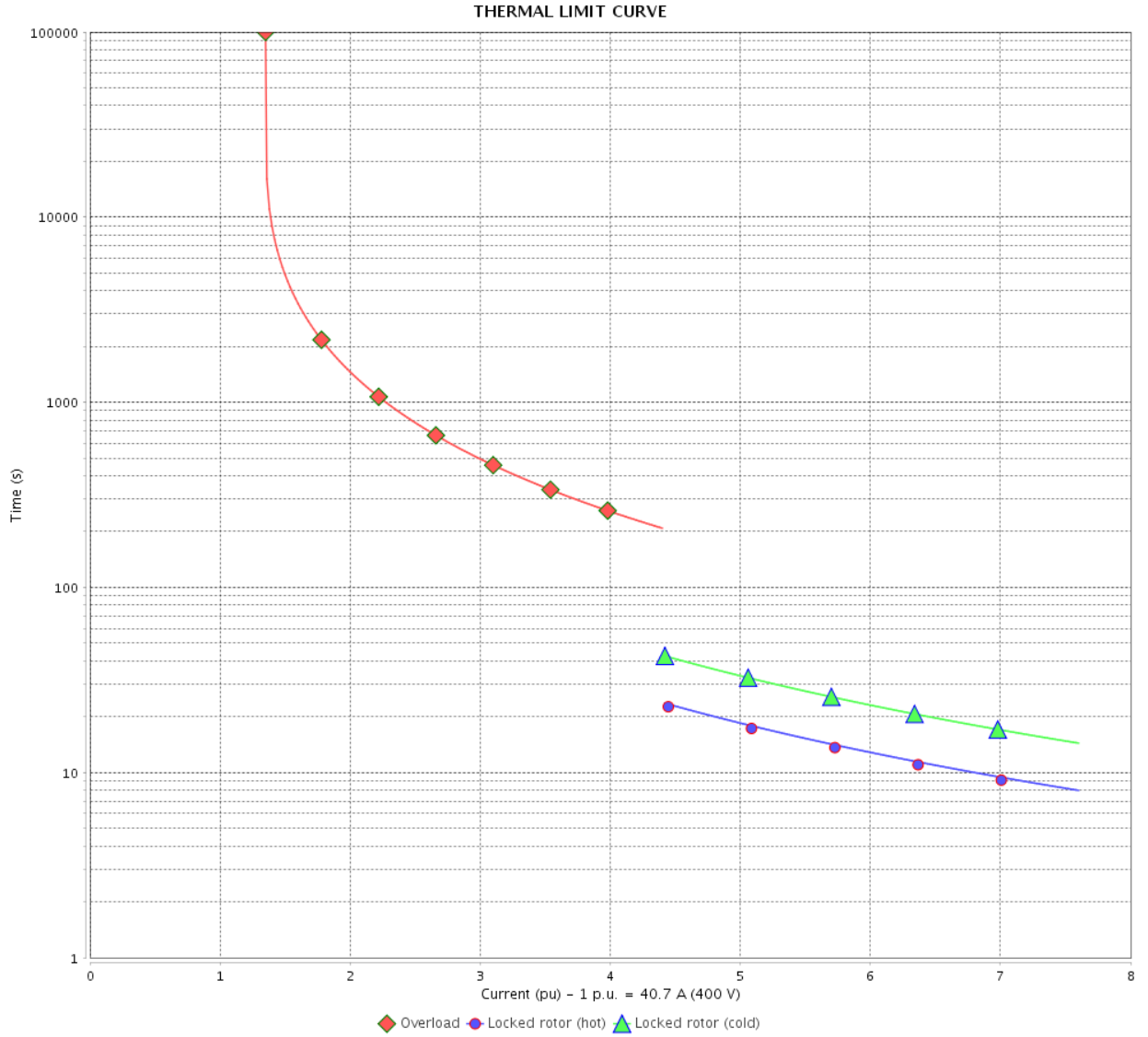
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THERMAL LIMIT CURVE



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Performance : 415 V 50 Hz 2P IE3

Rated current	: 40.2 A	Moment of inertia (J)	: 2.02 sq.ft.lb
LRC	: 7.7	Duty cycle	: Cont.(S1)
Rated torque	: 53.2 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 2960 rpm	Design	: B

Heating constant

Cooling constant

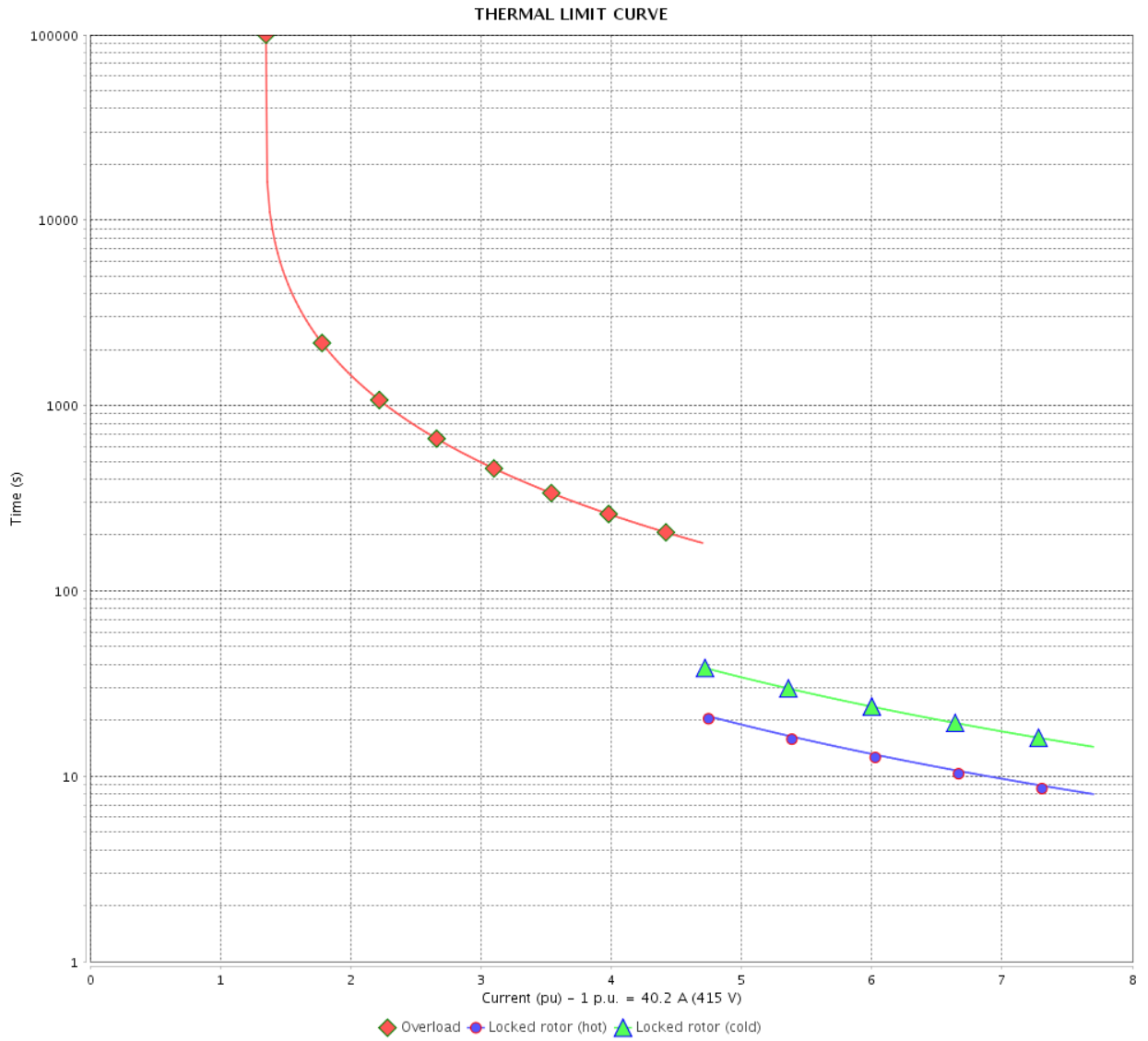
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



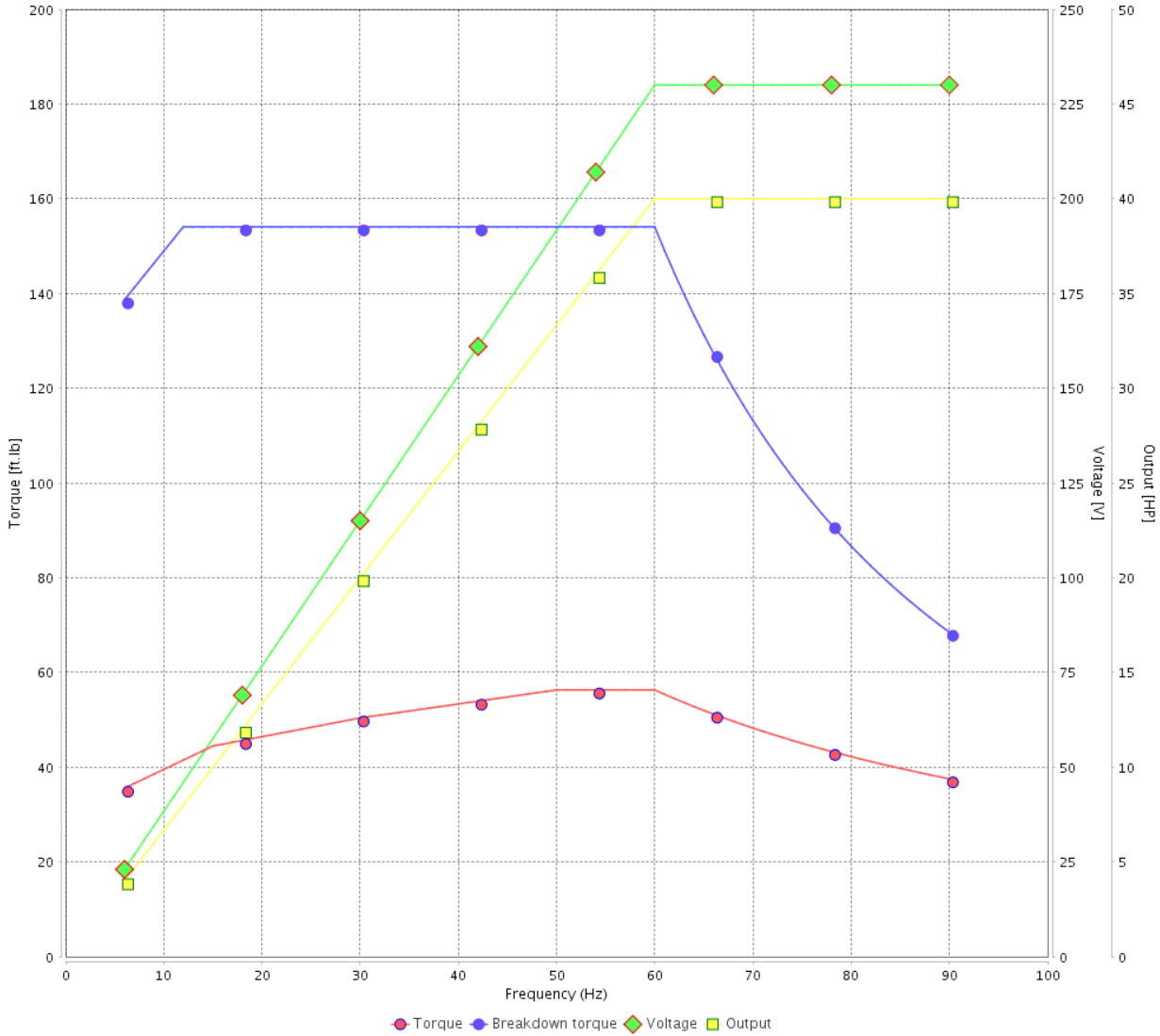
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VFD OPERATION CURVE



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 Breakdown torque : 260 %
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Moment of inertia (J) : 2.02 sq.ft.lb
 Duty cycle : Cont.(S1)
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 Service factor : 1.25
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 Design : B

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

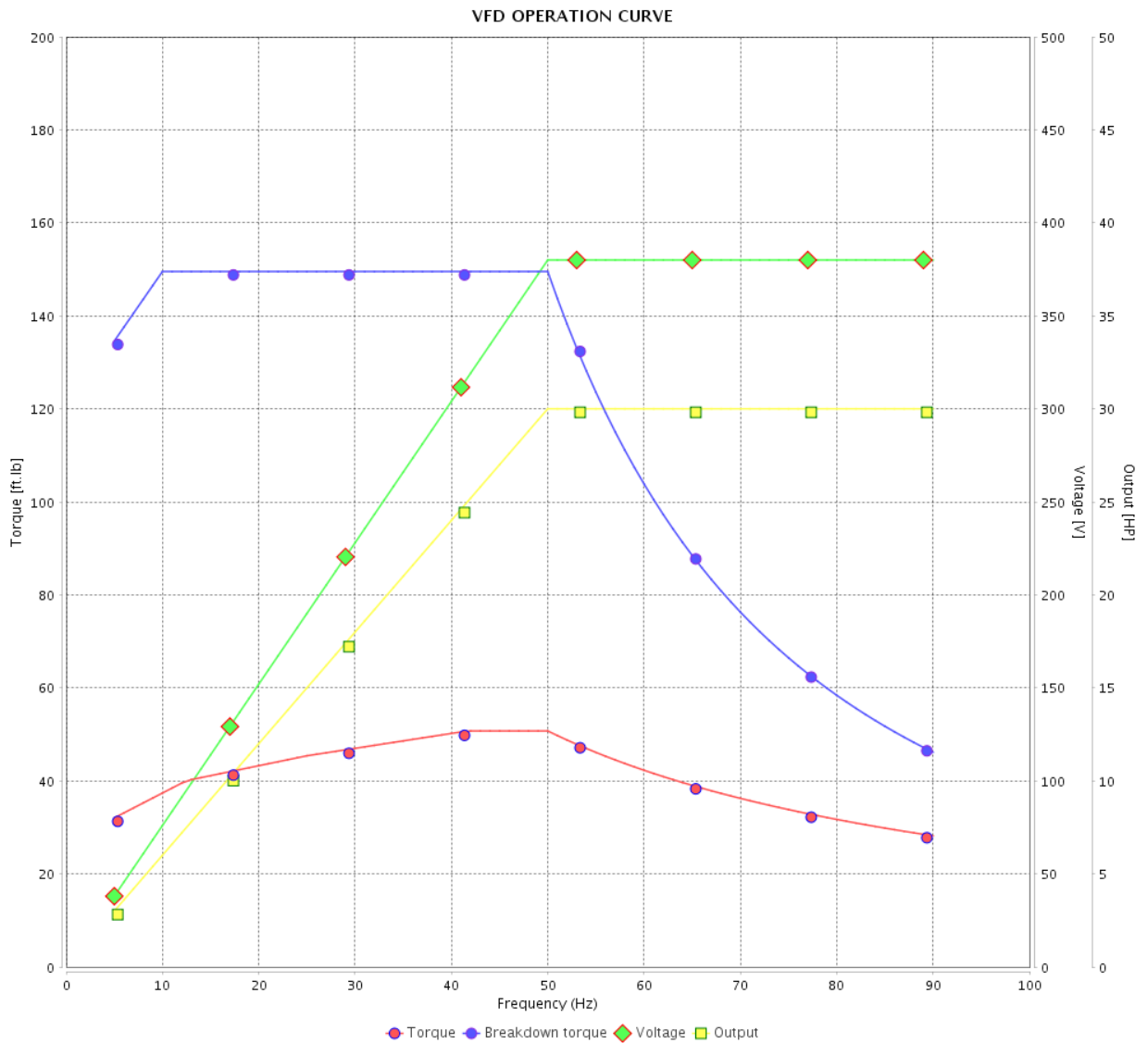


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Performance : 380 V 50 Hz 2P IE3

Rated current : 41.9 A
 LRC : 7.2
 Rated torque : 53.4 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 280 %
 Rated speed : 2950 rpm

Moment of inertia (J) : 2.02 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



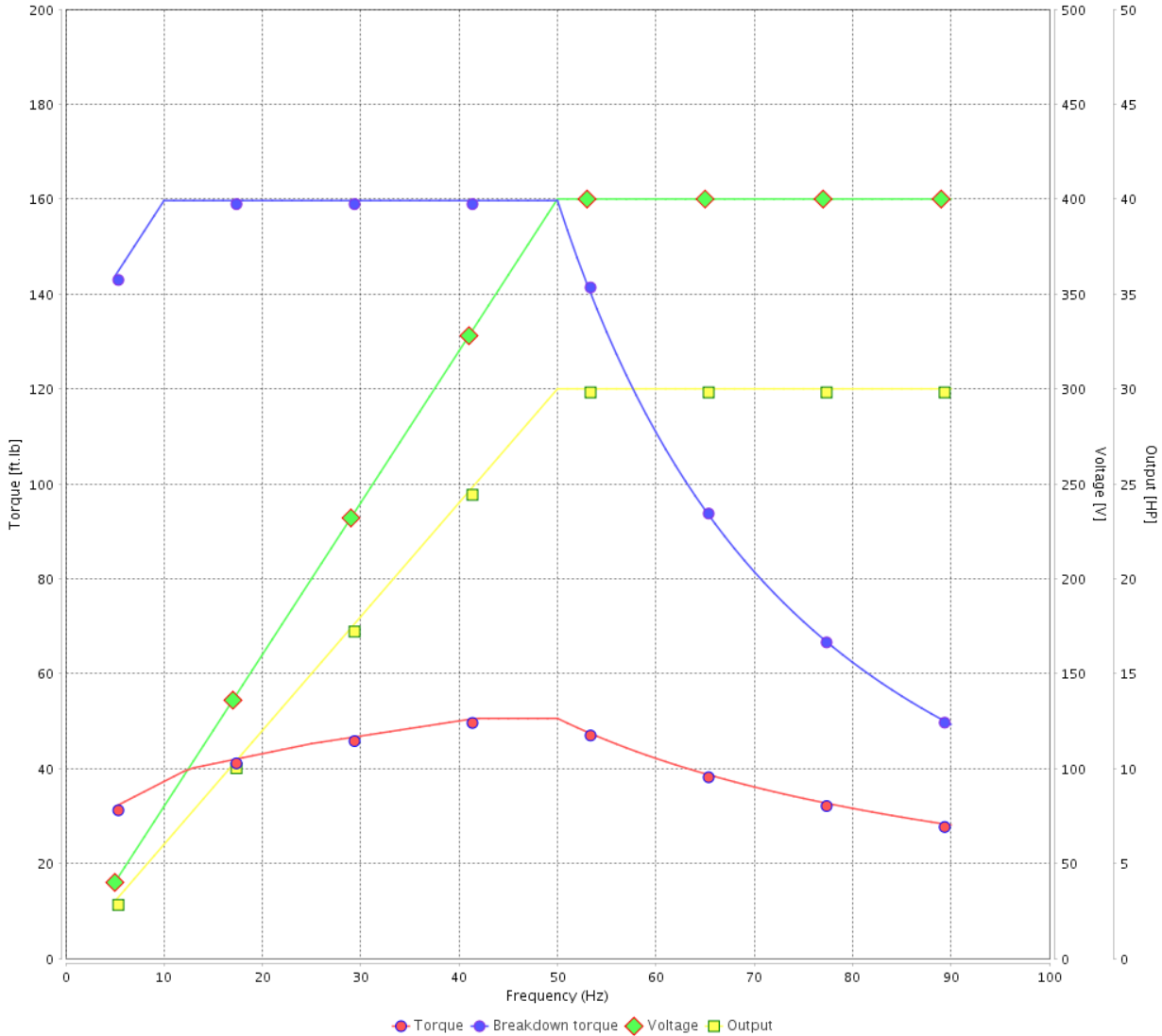
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VFD OPERATION CURVE



Performance : 400 V 50 Hz 2P IE3

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VFD OPERATION CURVE



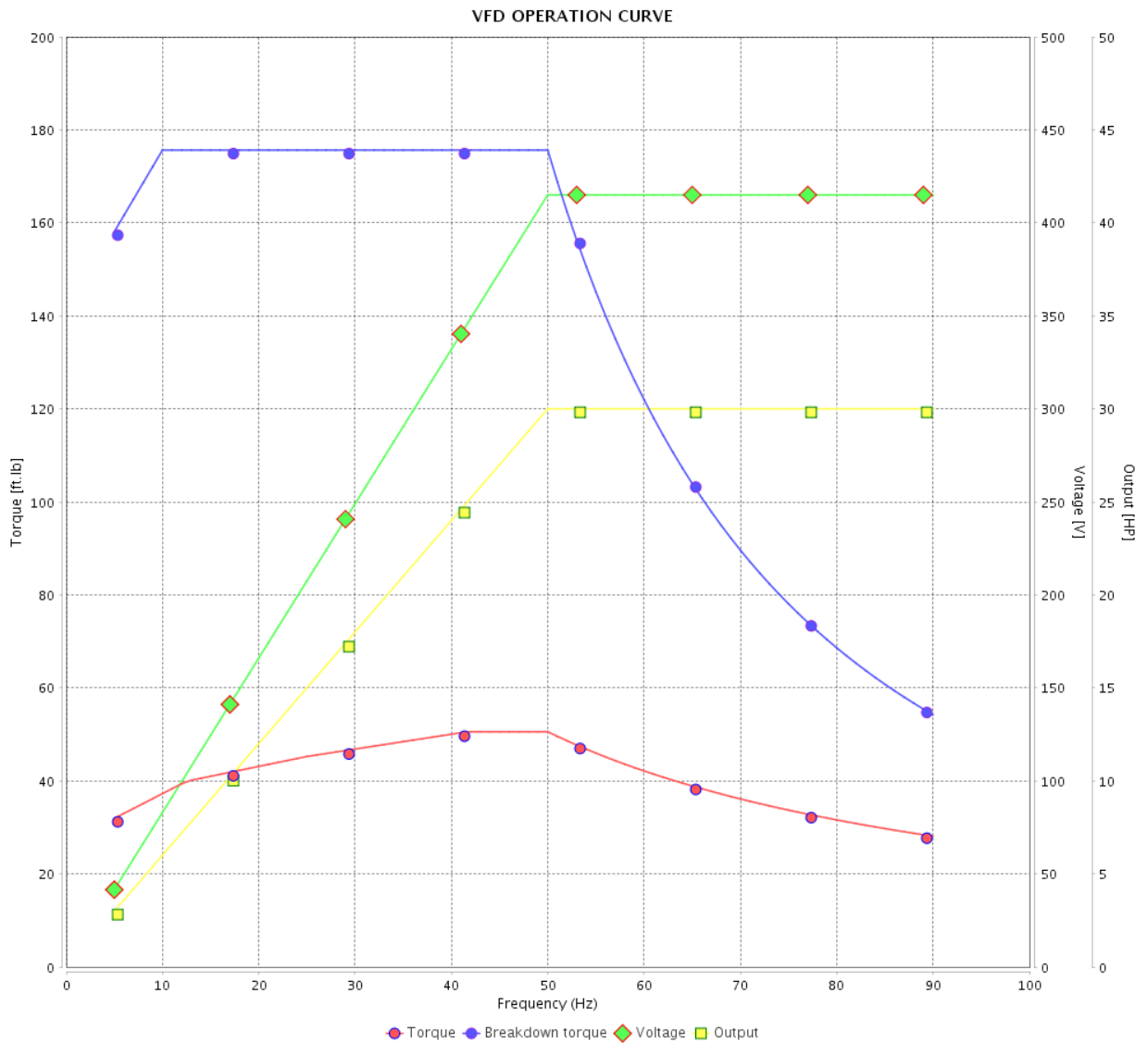
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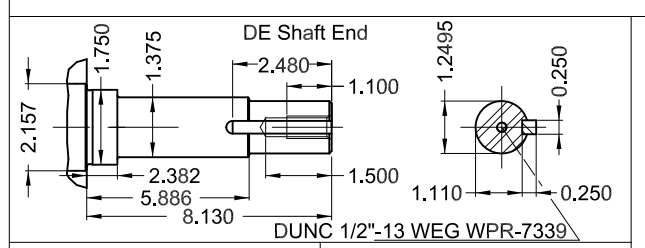
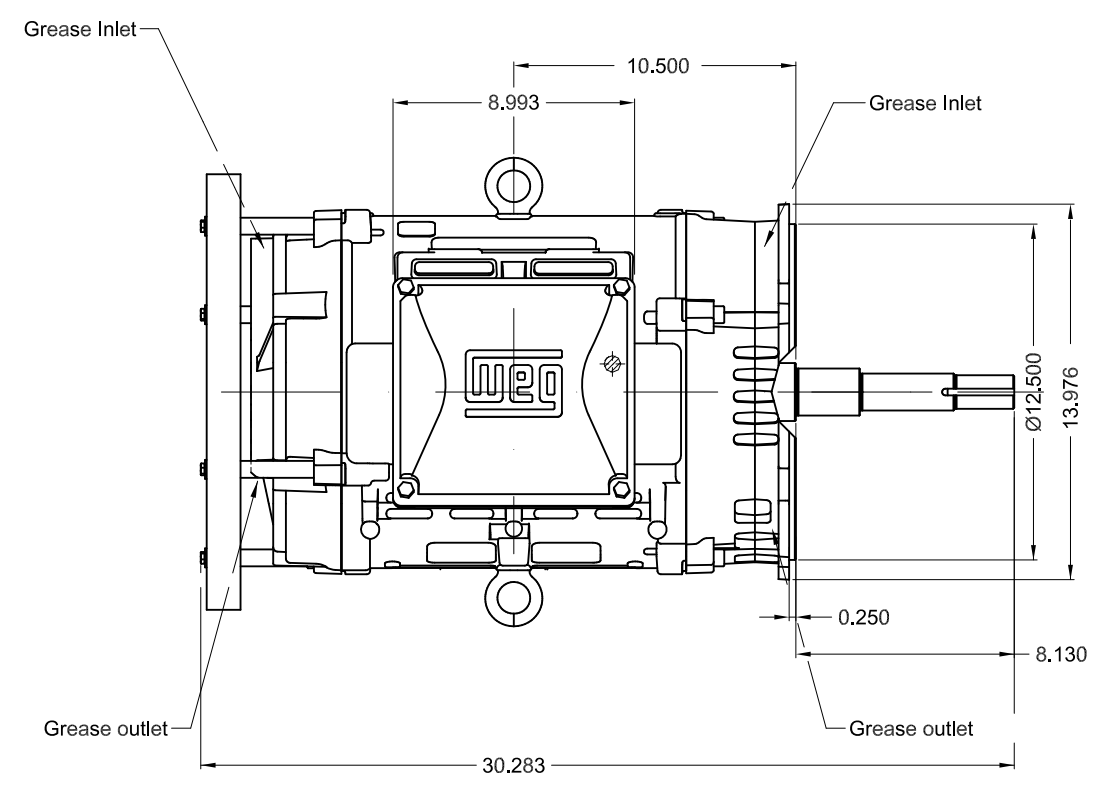
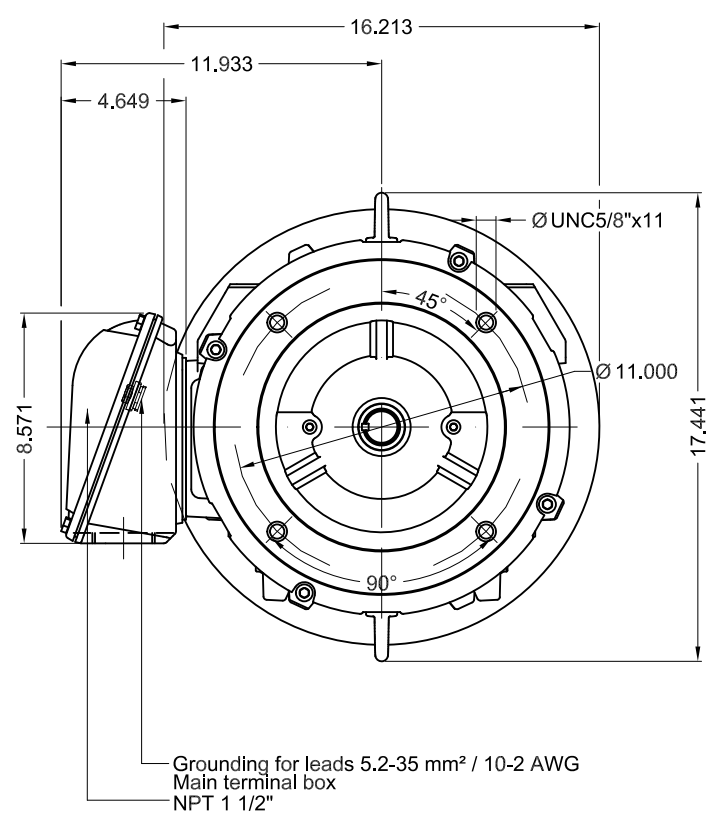


Performance : 415 V 50 Hz 2P IE3

Rated current : 40.2 A
 LRC : 7.7
 Rated torque : 53.2 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 330 %
 Rated speed : 2960 rpm

Moment of inertia (J) : 2.02 sq.ft.lb
 Duty cycle : Cont.(S1)
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40 HP 02 Poles 60 Hz A

1:7

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 CLOSE COUPLED PUMP JP TYPE PREM 1/2					
CHECKED		FRAME 284/6JP IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

- Color RAL 5009
- Painting plan 203A
- Mounting NEMA W-6
- Mounting V18

PREVIEW
WDD

