

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: W40 NEMA Premium Efficiency Three-Phase	Product code :	14495602	
			Catalog # :	03012OT3E326TC-W40	
Frame		: 324/6TC	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 : 532 lb		
Protection degree		: IP23	Moment of inertia (J) : 9.56 sq.ft.lb		
Design		: B			
Output [HP]	30	25	25	25	
Poles	6	6	6	6	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	72.0/36.0	36.5	35.5	34.6	
L. R. Amperes [A]	454/227	223	238	235	
LRC [A]	6.3x(Code G)	6.1x(Code G)	6.7x(Code H)	6.8x(Code H)	
No load current [A]	29.6/14.8	14.6	15.8	16.8	
Rated speed [RPM]	1182	980	980	980	
Slip [%]	1.50	2.00	2.00	2.00	
Rated torque [ft.lb]	133	134	134	134	
Locked rotor torque [%]	200	160	180	200	
Breakdown torque [%]	240	229	260	280	
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)	25s (cold) 14s (hot)	23s (cold) 13s (hot)	23s (cold) 13s (hot)	
Noise level ²	62.0 dB(A)				
Efficiency (%)	25%	91.7	91.2	91.2	
	50%	92.4	91.4	91.4	
	75%	93.0	91.8	91.8	
	100%	93.6	91.8	91.8	
Power Factor	25%	0.44	0.44	0.40	
	50%	0.70	0.70	0.66	
	75%	0.79	0.80	0.77	
	100%	0.82	0.84	0.82	
Bearing type	: Drive end : 6312 Z C3	Non drive end : 6211 Z C3	Foundation loads		
Sealing	: Without	Without	Max. traction		
	: Bearing Seal	Bearing Seal	Max. compression		
Lubrication interval	: 20000 h	20000 h			
Lubricant amount	: 21 g	11 g			
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 79.6A SF 1.15 SFA 91.6A					
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



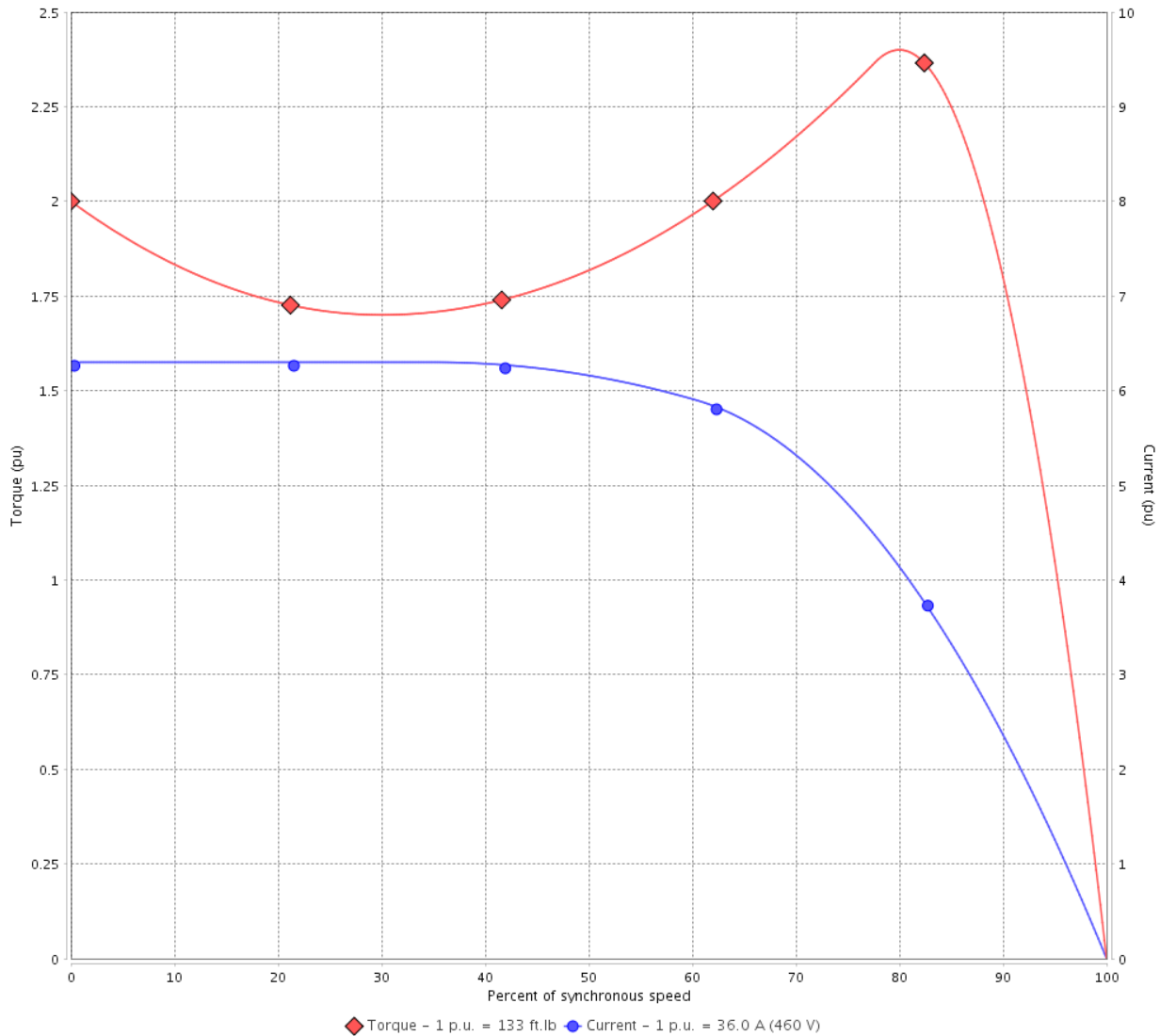
Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14495602

Catalog # : 030120T3E326TC-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 72.0/36.0 A
LRC : 6.3
Rated torque : 133 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 240 %
Rated speed : 1182 rpm

Moment of inertia (J) : 9.56 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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

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TORQUE AND CURRENT VS SPEED CURVE



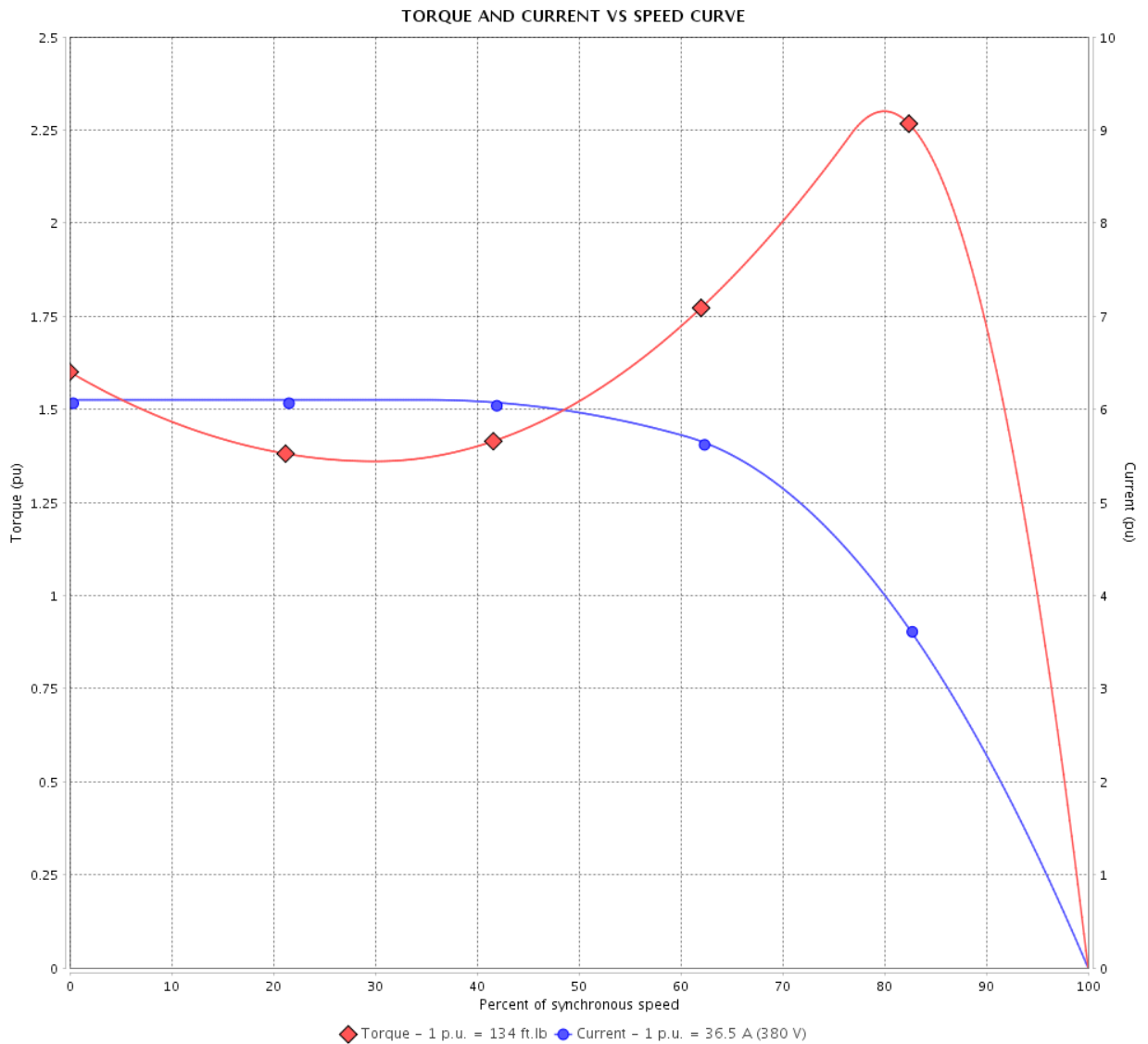
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14495602

Catalog # : 030120T3E326TC-W40



Performance : 380 V 50 Hz 6P IE3

Rated current	: 36.5 A	Moment of inertia (J)	: 9.56 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



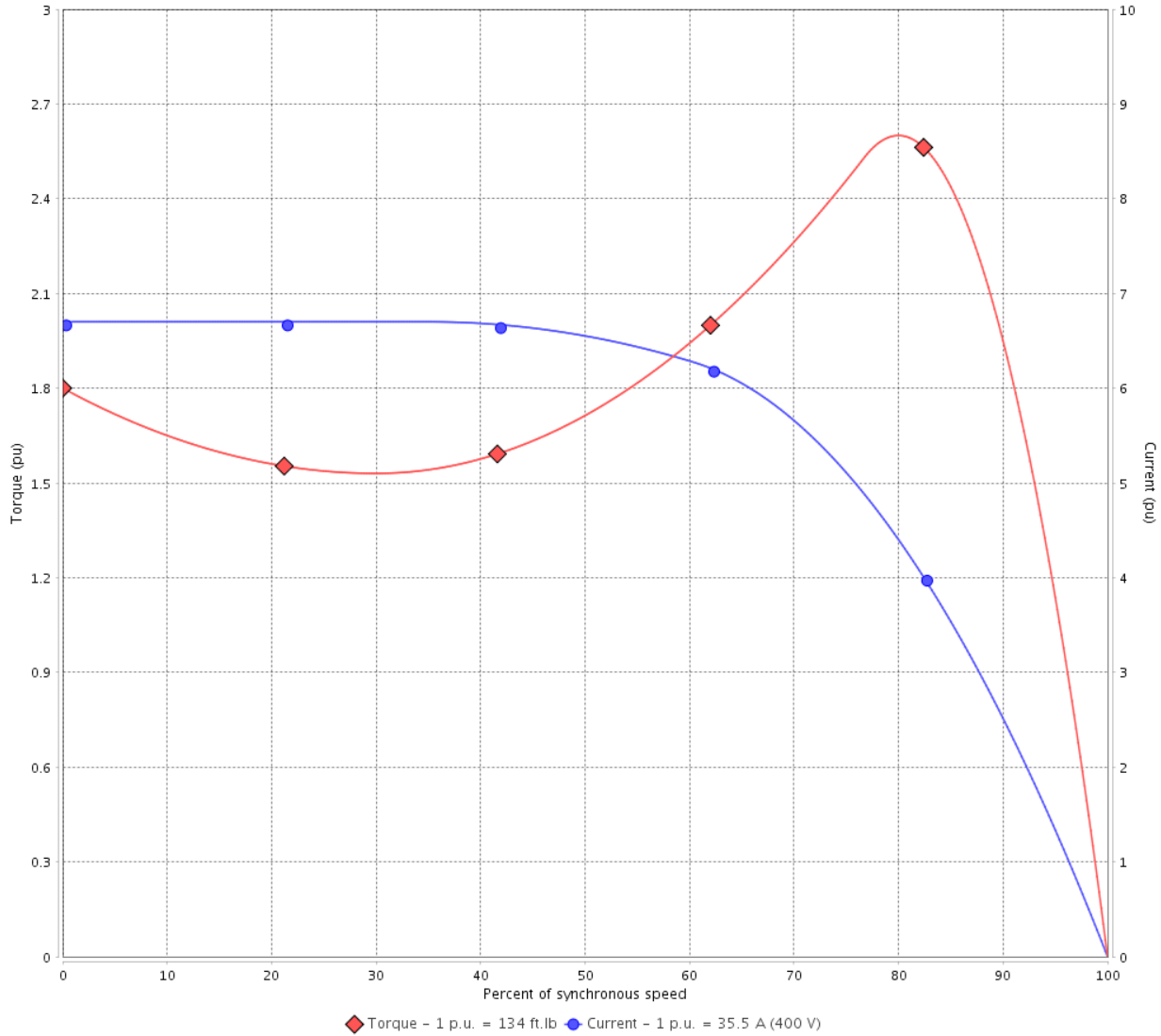
Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14495602

Catalog # : 030120T3E326TC-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 6P IE3

Rated current	: 35.5 A	Moment of inertia (J)	: 9.56 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Locked rotor time : 23s (cold) 13s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



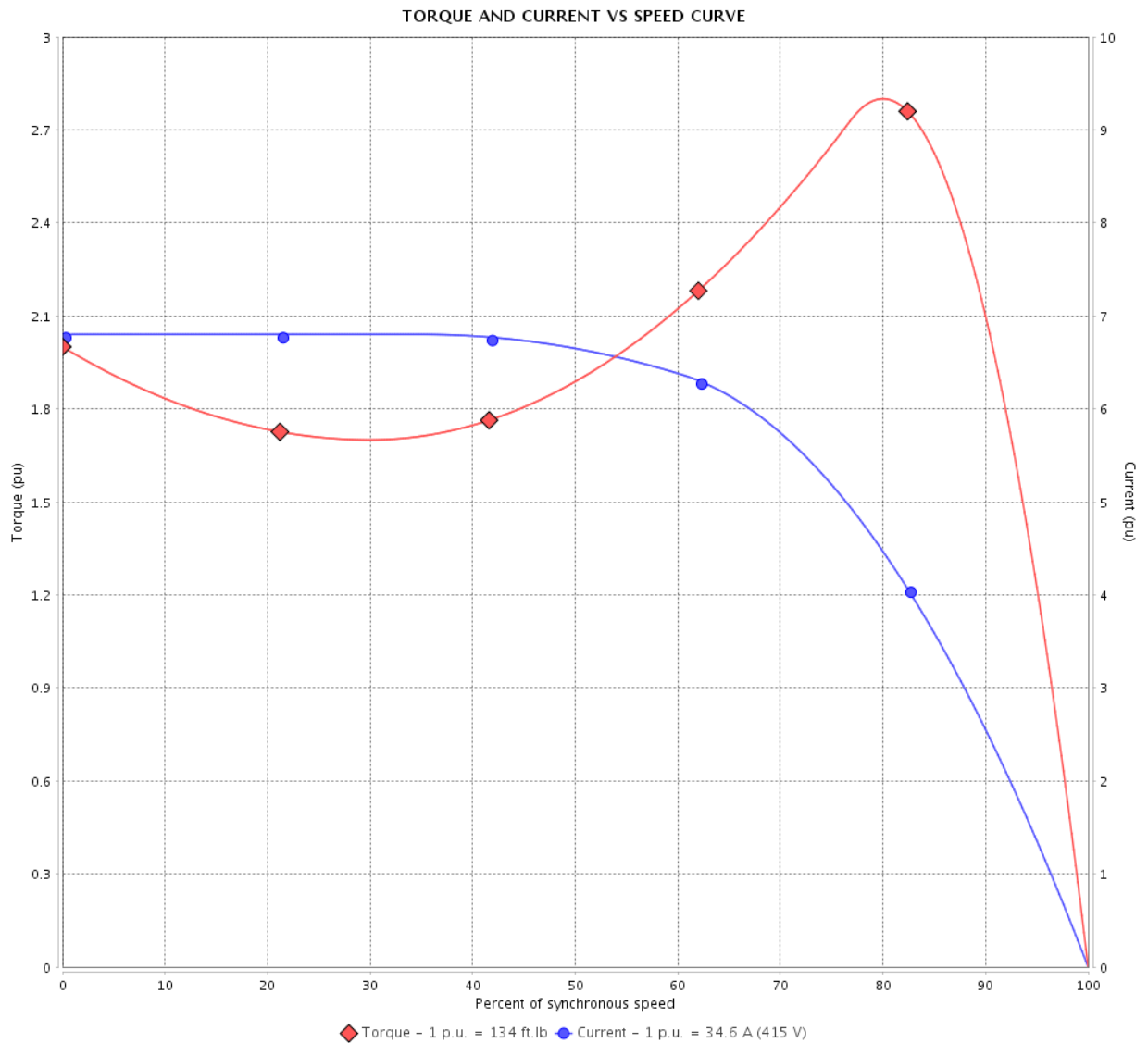
Three Phase Induction Motor - Squirrel Cage

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Product code : 14495602

Catalog # : 03012OT3E326TC-W40



Performance : 415 V 50 Hz 6P IE3

Rated current	: 34.6 A	Moment of inertia (J)	: 9.56 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Locked rotor time : 23s (cold) 13s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



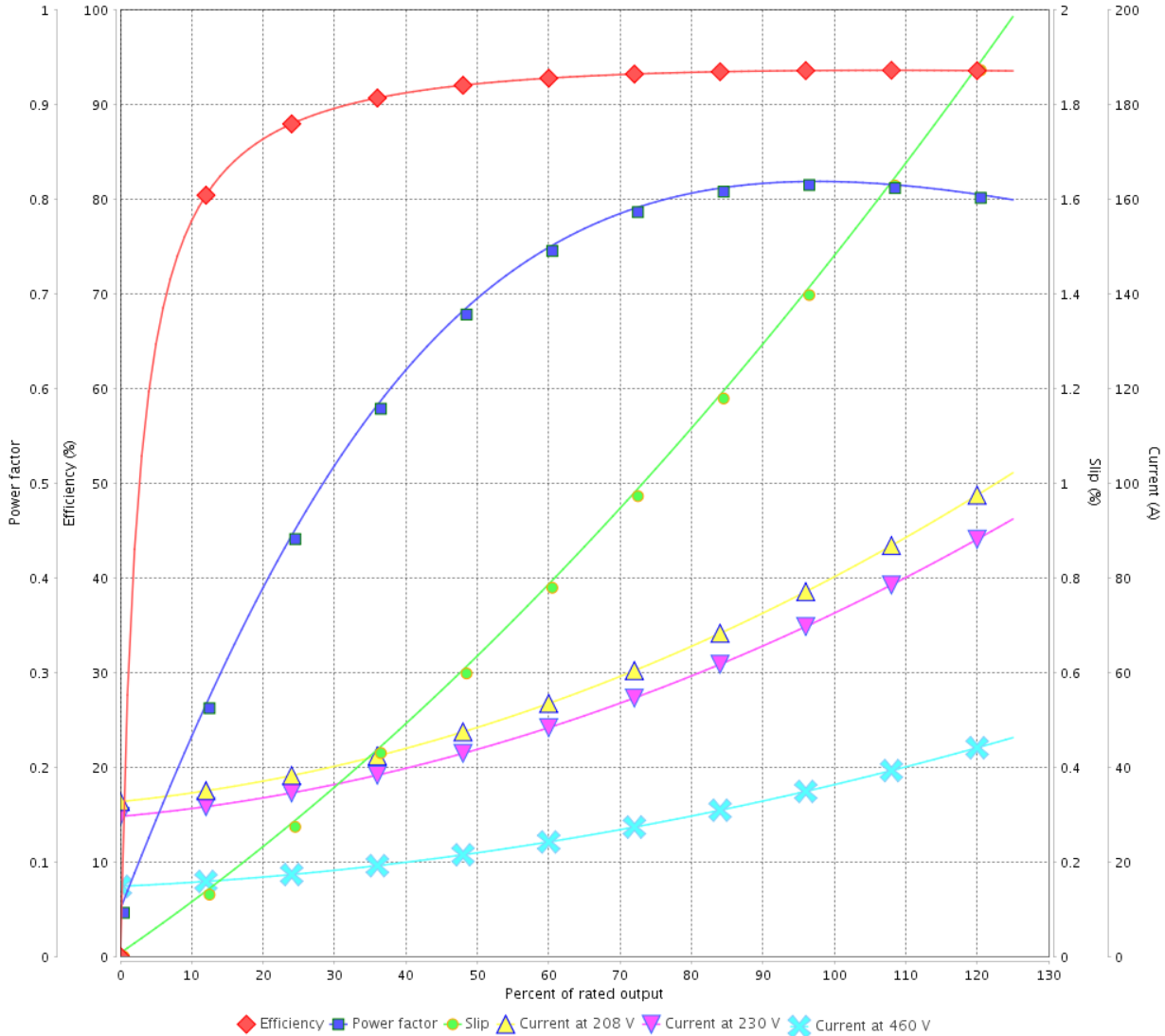
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Product line : W40 NEMA Premium Efficiency Three-Phase

Product code : 14495602

Catalog # : 030120T3E326TC-W40

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 72.0/36.0 A
 LRC : 6.3
 Rated torque : 133 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 1182 rpm

Moment of inertia (J) : 9.56 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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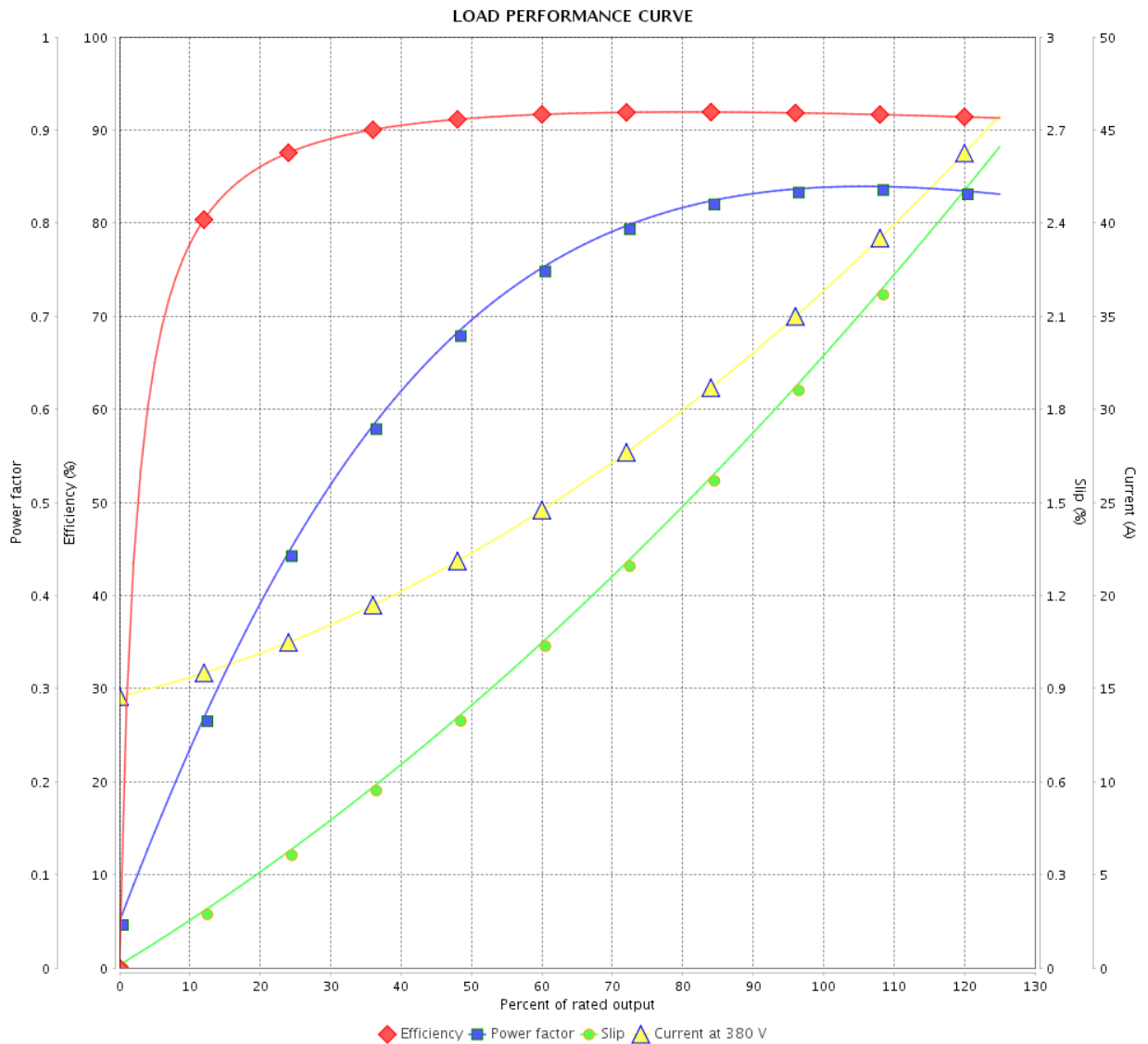


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Product code : 14495602

Catalog # : 03012OT3E326TC-W40



Performance : 380 V 50 Hz 6P IE3

Rated current : 36.5 A
 LRC : 6.1
 Rated torque : 134 ft.lb
 Locked rotor torque : 160 %
 Breakdown torque : 229 %
 Rated speed : 980 rpm

Moment of inertia (J) : 9.56 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



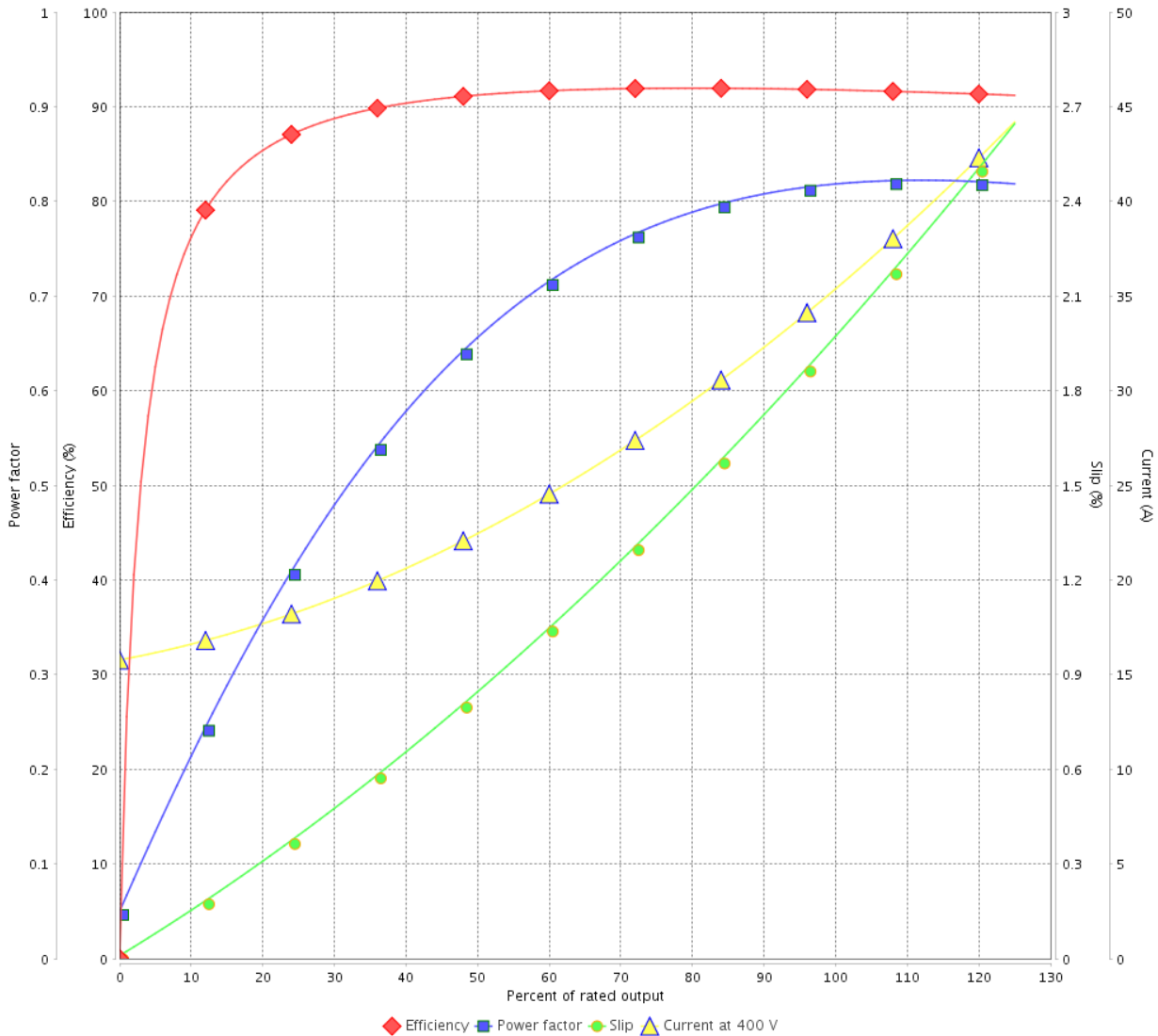
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LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 6P IE3

Rated current	: 35.5 A	Moment of inertia (J)	: 9.56 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

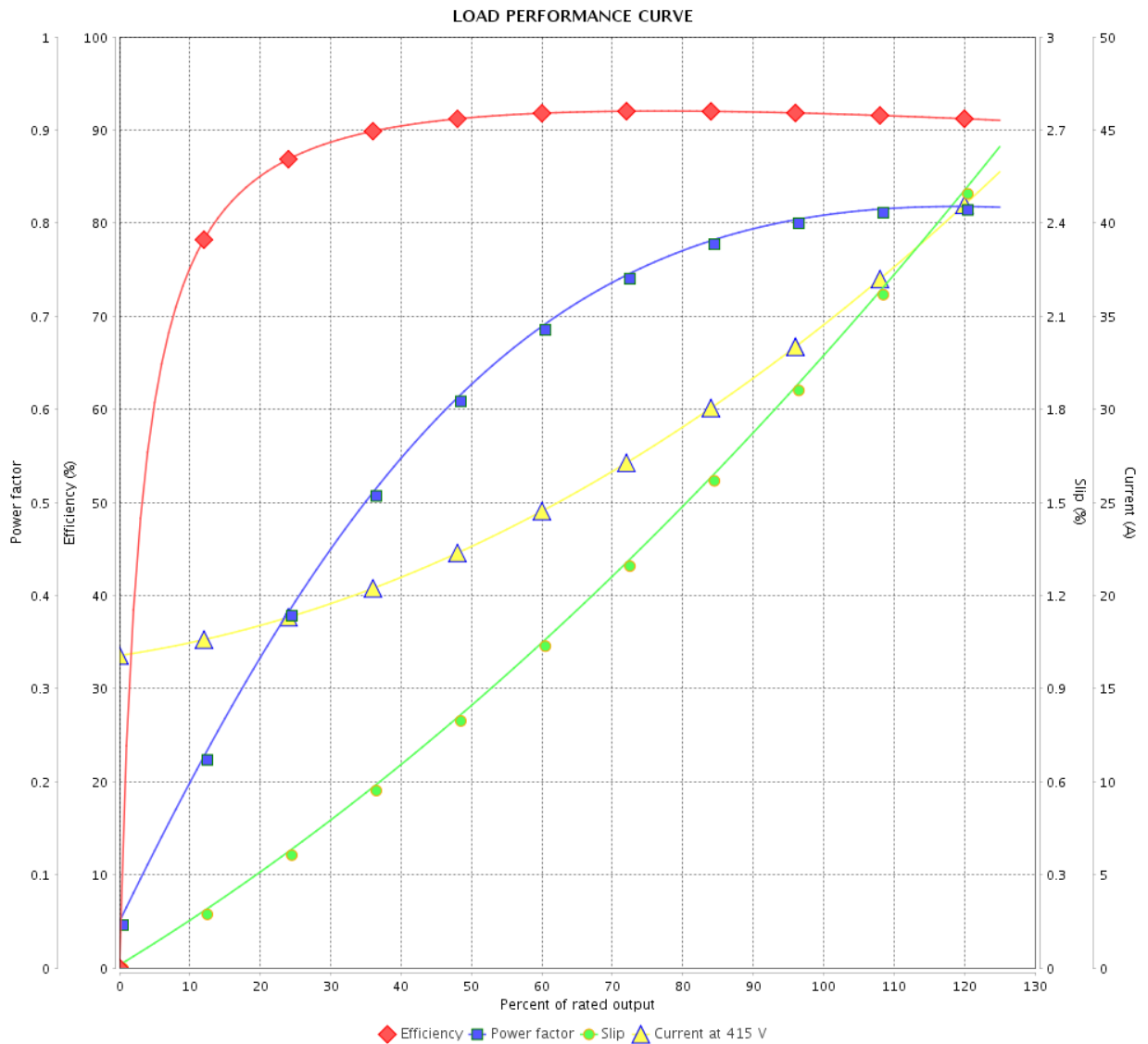


Customer :

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Product code : 14495602

Catalog # : 03012OT3E326TC-W40



Performance : 415 V 50 Hz 6P IE3

Rated current : 34.6 A
 LRC : 6.8
 Rated torque : 134 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 280 %
 Rated speed : 980 rpm

Moment of inertia (J) : 9.56 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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Service factor : 1.25
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

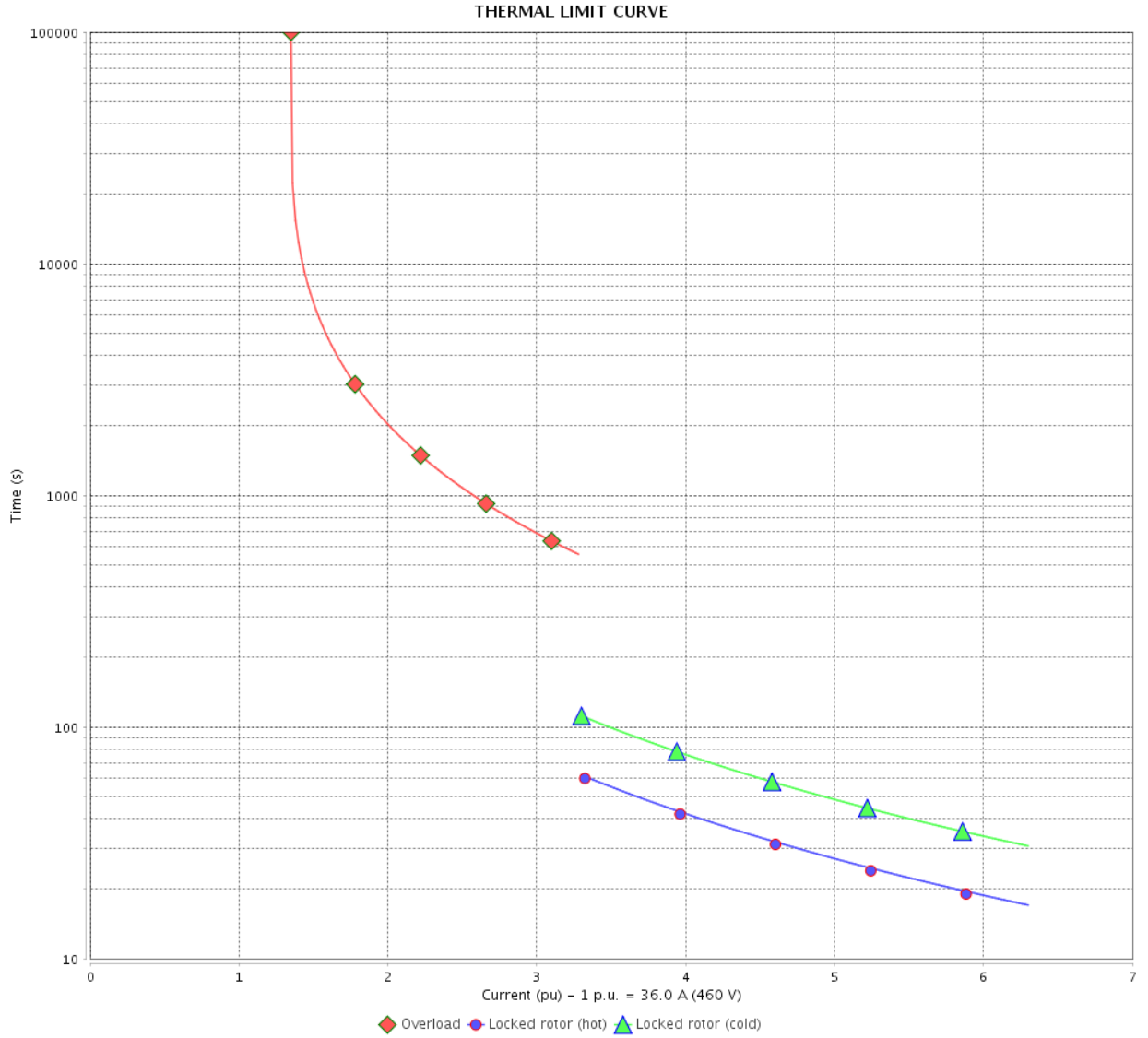
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Heating constant

Cooling constant

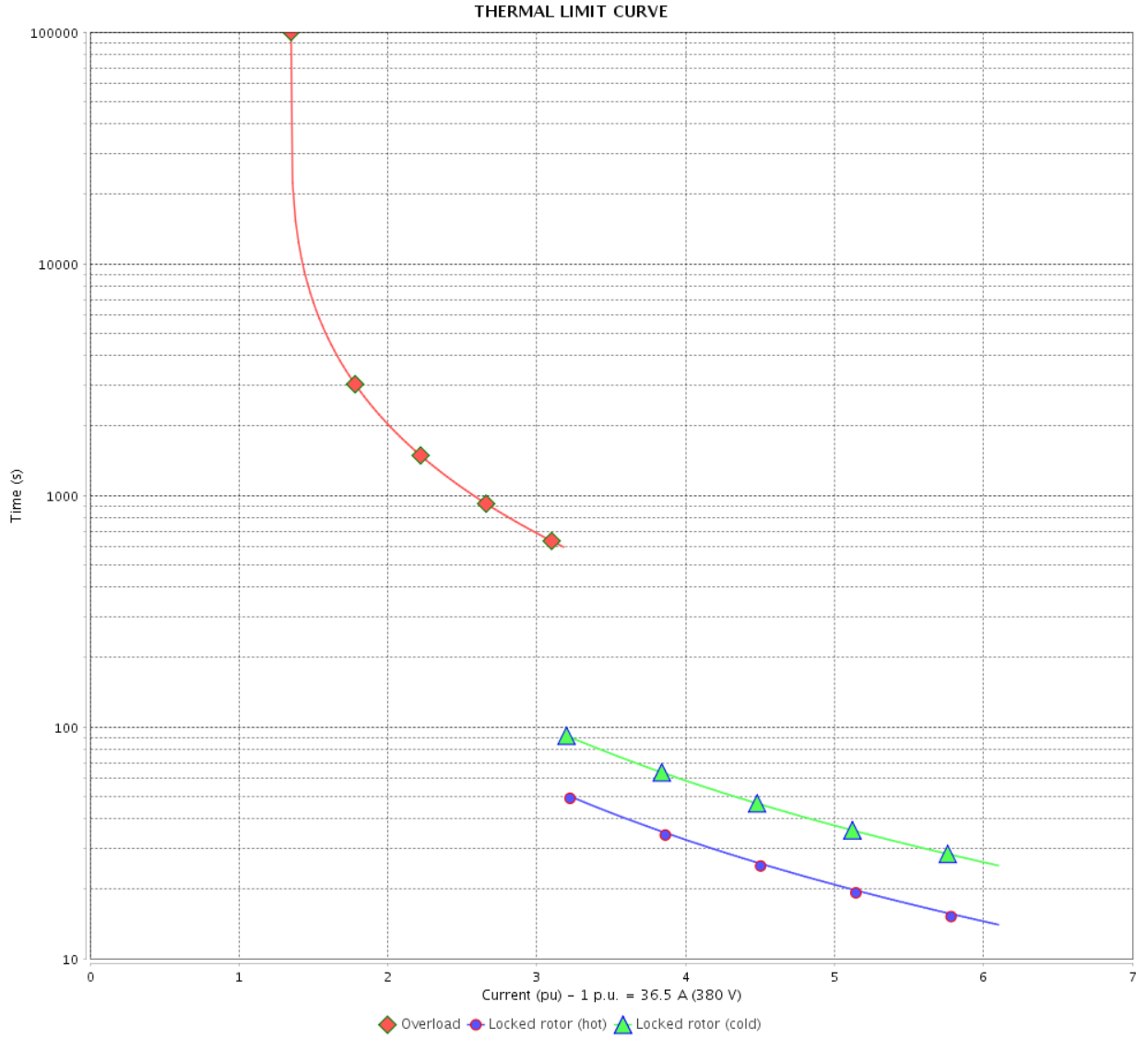
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Rated current	: 35.5 A	Moment of inertia (J)	: 9.56 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Heating constant

Cooling constant

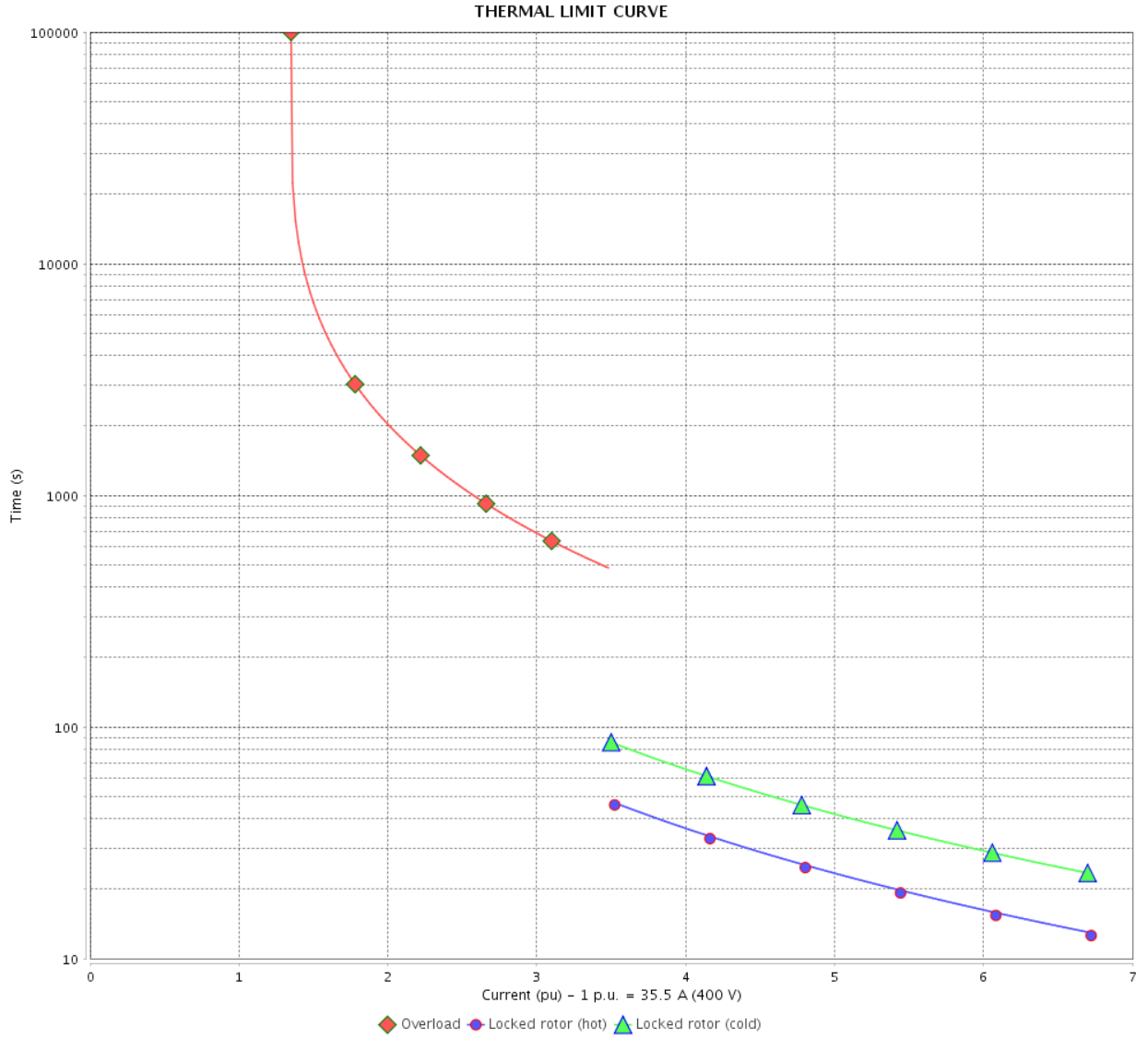
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14495602

Catalog # : 03012OT3E326TC-W40

Performance : 415 V 50 Hz 6P IE3

Rated current	: 34.6 A	Moment of inertia (J)	: 9.56 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 134 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 980 rpm	Design	: B

Heating constant

Cooling constant

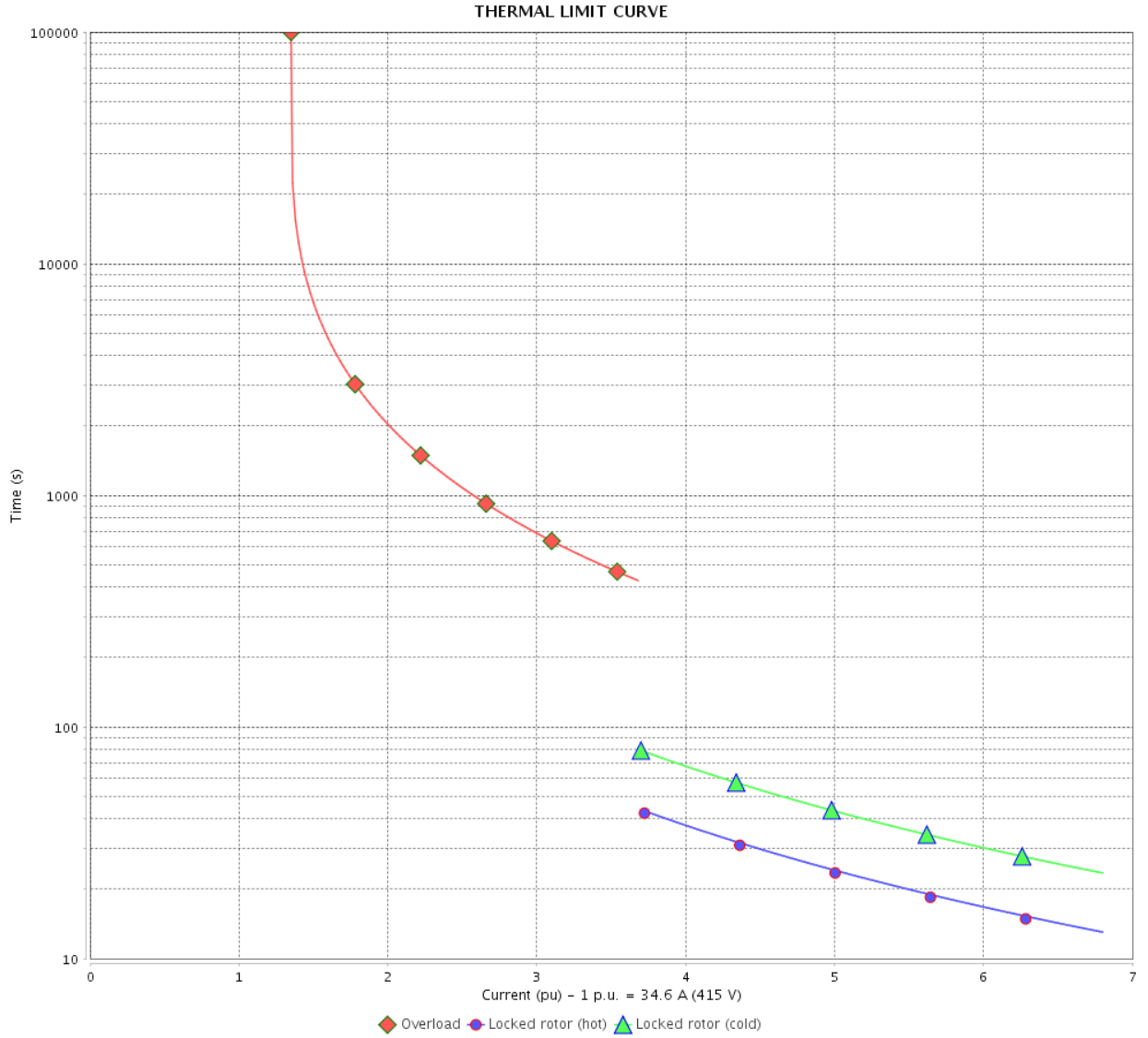
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



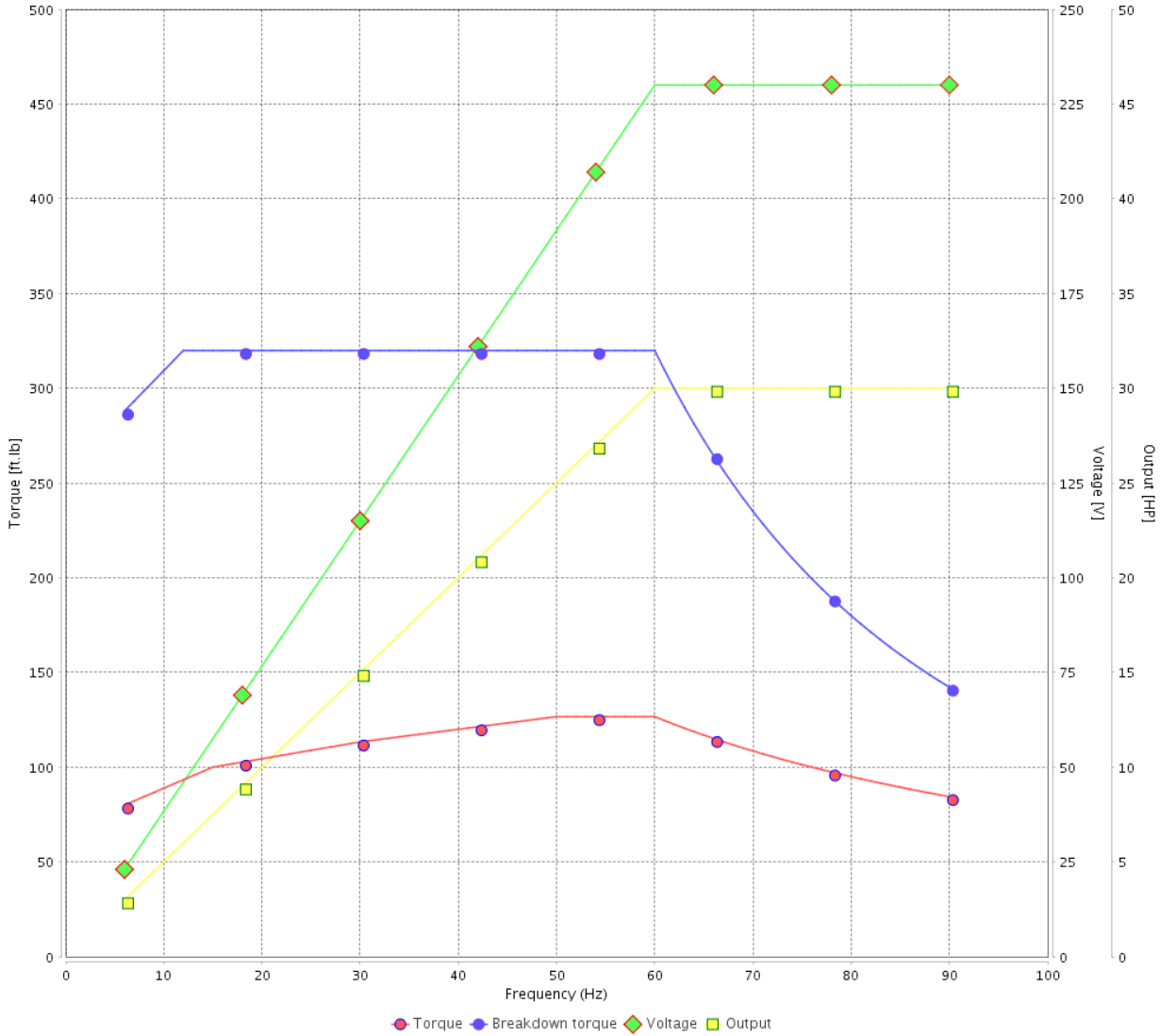
Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase

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Catalog # : 030120T3E326TC-W40

VFD OPERATION CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 72.0/36.0 A
 LRC : 6.3
 Rated torque : 133 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 1182 rpm

Moment of inertia (J) : 9.56 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

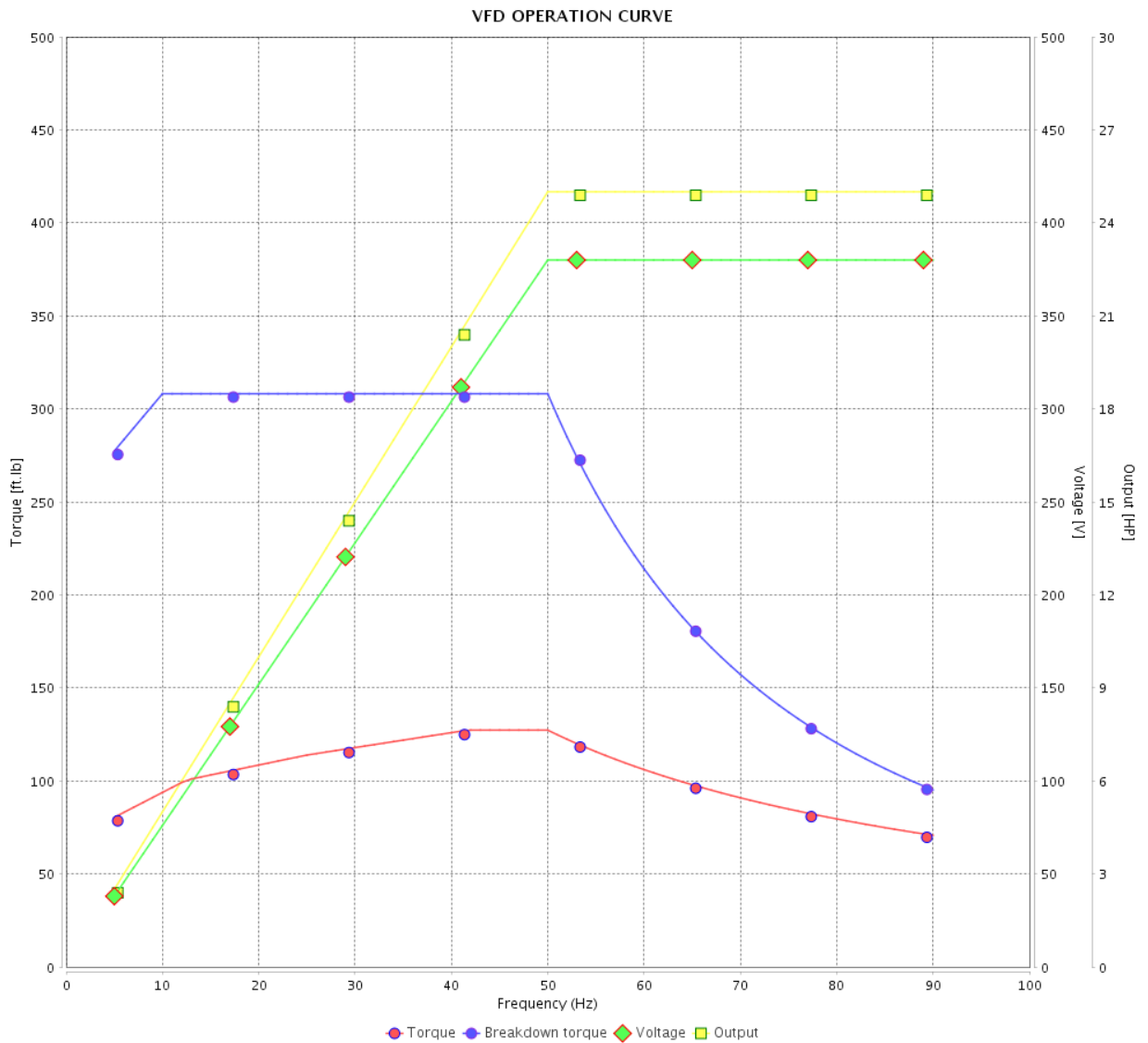


Customer :

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Rated speed : 980 rpm

Moment of inertia (J) : 9.56 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



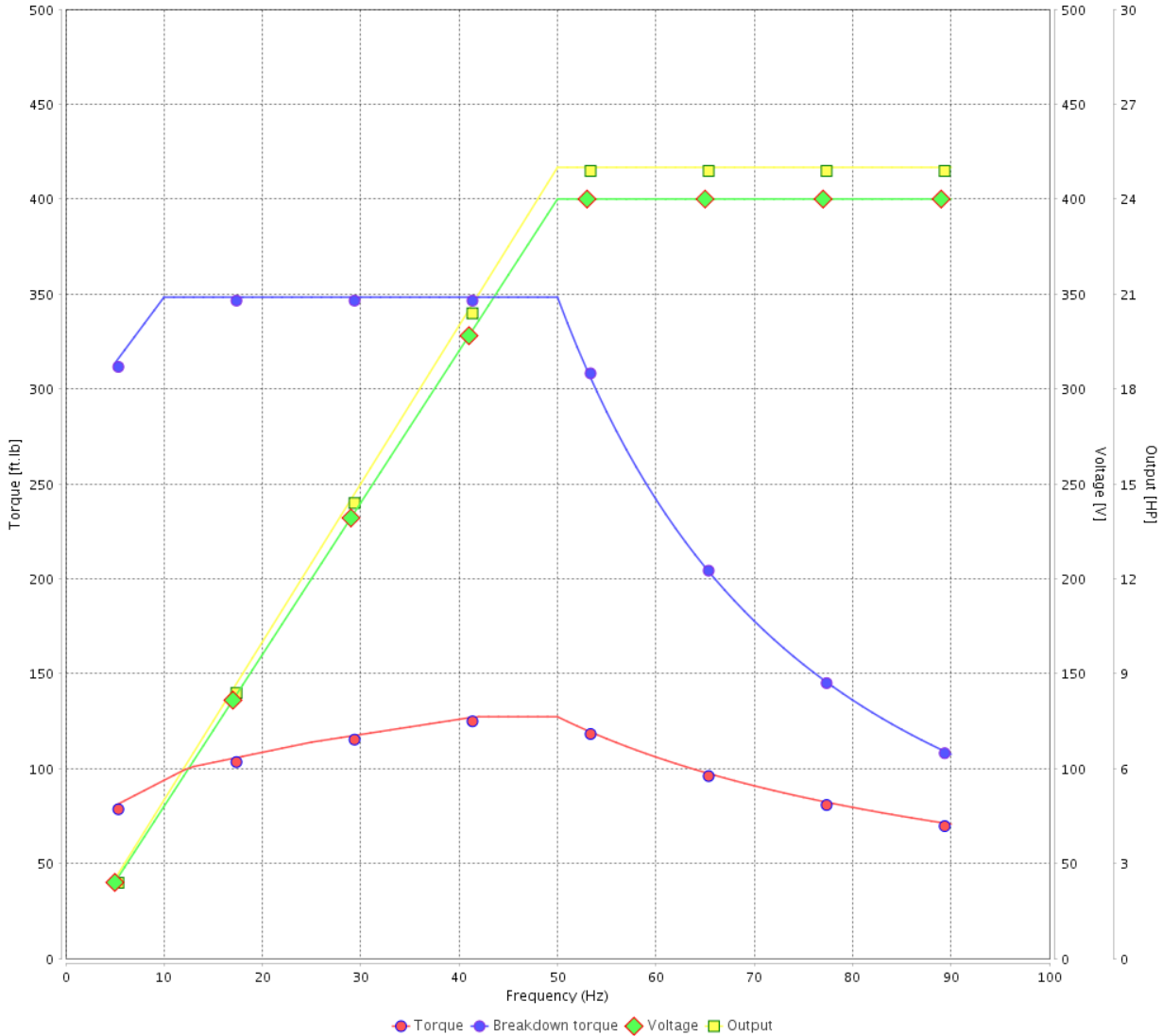
Customer :

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VFD OPERATION CURVE



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 Insulation class : F
 Service factor : 1.00
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Rev.	Changes Summary	Performed	Checked	Date
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

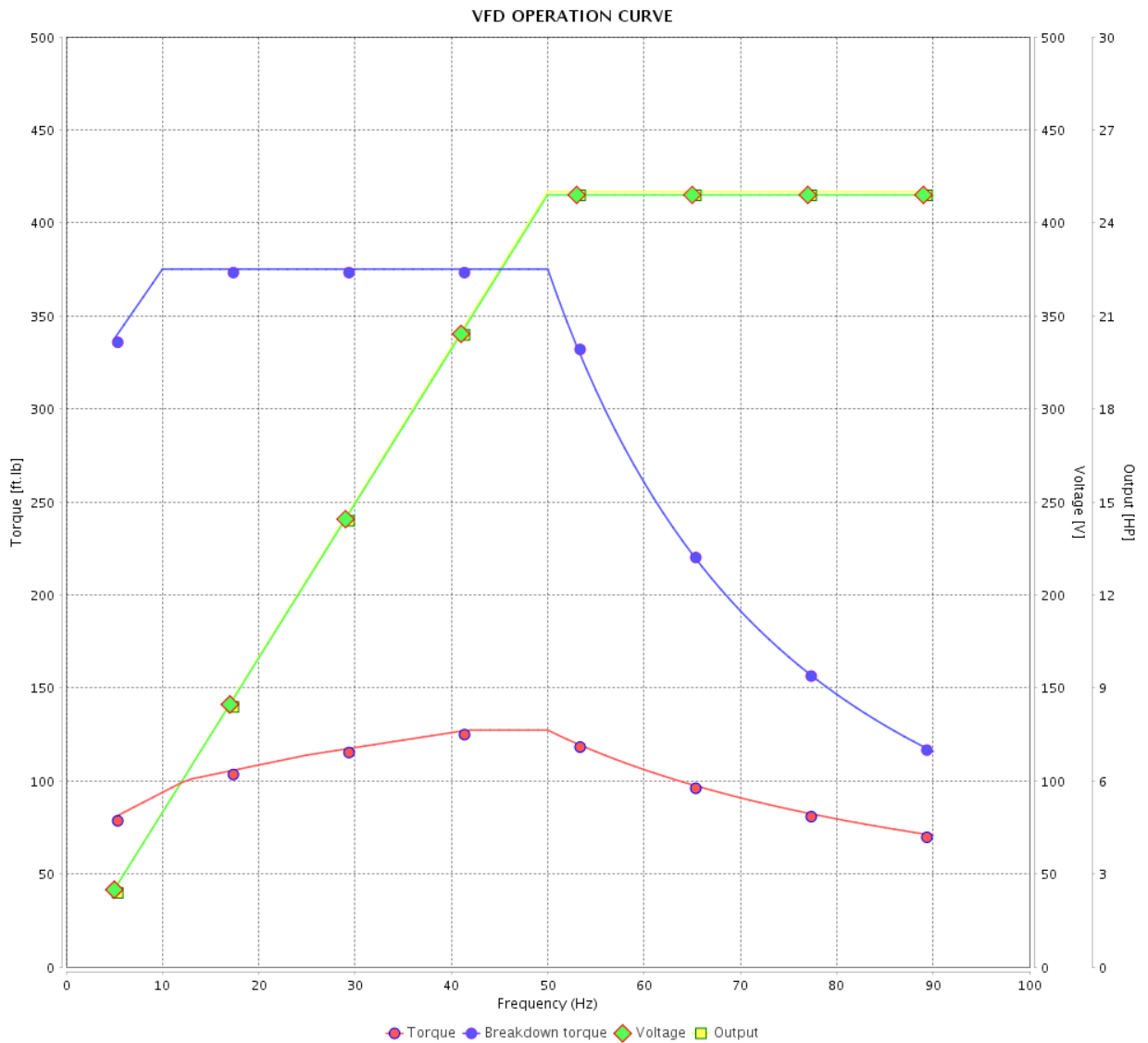


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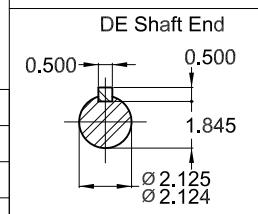
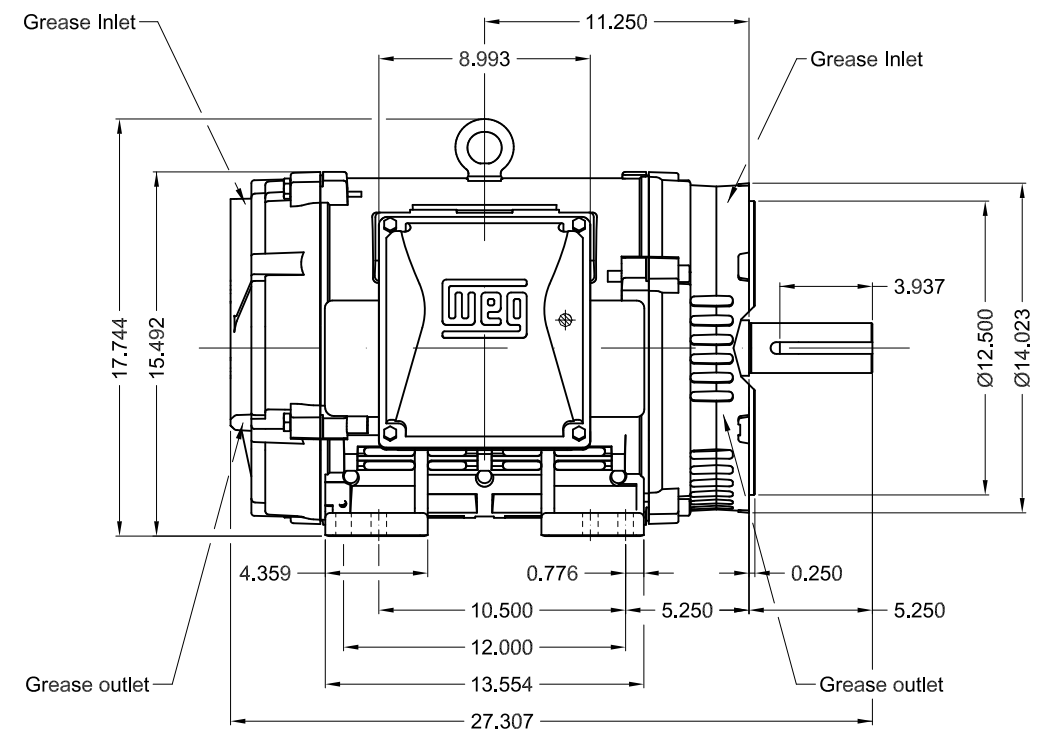
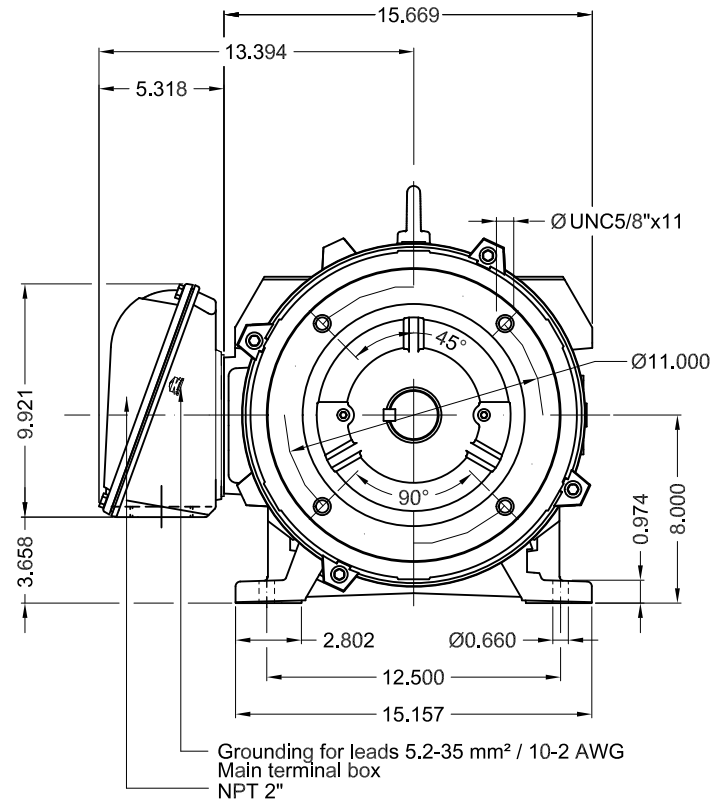


Performance : 415 V 50 Hz 6P IE3

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Design : B

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

30 HP 06 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 324/6TC IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
WDD



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



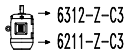
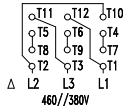
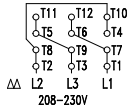
IEC 60034-1
 MOD.T01#FOXON



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

MODEL 030120T3E326TC-W40
 MADE IN BRAZIL
 14495602

PH 3	FR 324/6TC	HP(kW) 30.0(22.0)	Hz 60
V 230/460	A 72.0/36.0	RPM 1182	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 0.82	SF 1.25	SFA 90.0/45.0
USABLE @208V 79.6 A	SF 1.15	SFA 91.5	
25HP 18.5kW 50Hz 380V 36.5A 980RPM SF1.00 EFF 91.8% (IE3)	ALT 1000 m.a.s.l.	531 Lbs	



MOBIL POLYREX EM
 21 g 20000 h