

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W40 JM Pump NEMA Premium Efficiency Three-Phase	Product code :	14484692		
		Catalog # :	03012OT3E326JM-W40		
Frame	: 324/6JM	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	: 529 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	91.4
	50%	92.4	91.4	91.4	91.6
	75%	93.0	91.8	91.8	91.8
	100%	93.6	91.8	91.8	91.8
Power Factor	25%	0.44	0.44	0.40	0.38
	50%	0.70	0.70	0.66	0.63
	75%	0.79	0.80	0.77	0.75
	100%	0.82	0.84	0.82	0.81
Bearing type	: <u>Drive end</u> 6312 Z C3 <u>Non drive end</u> 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



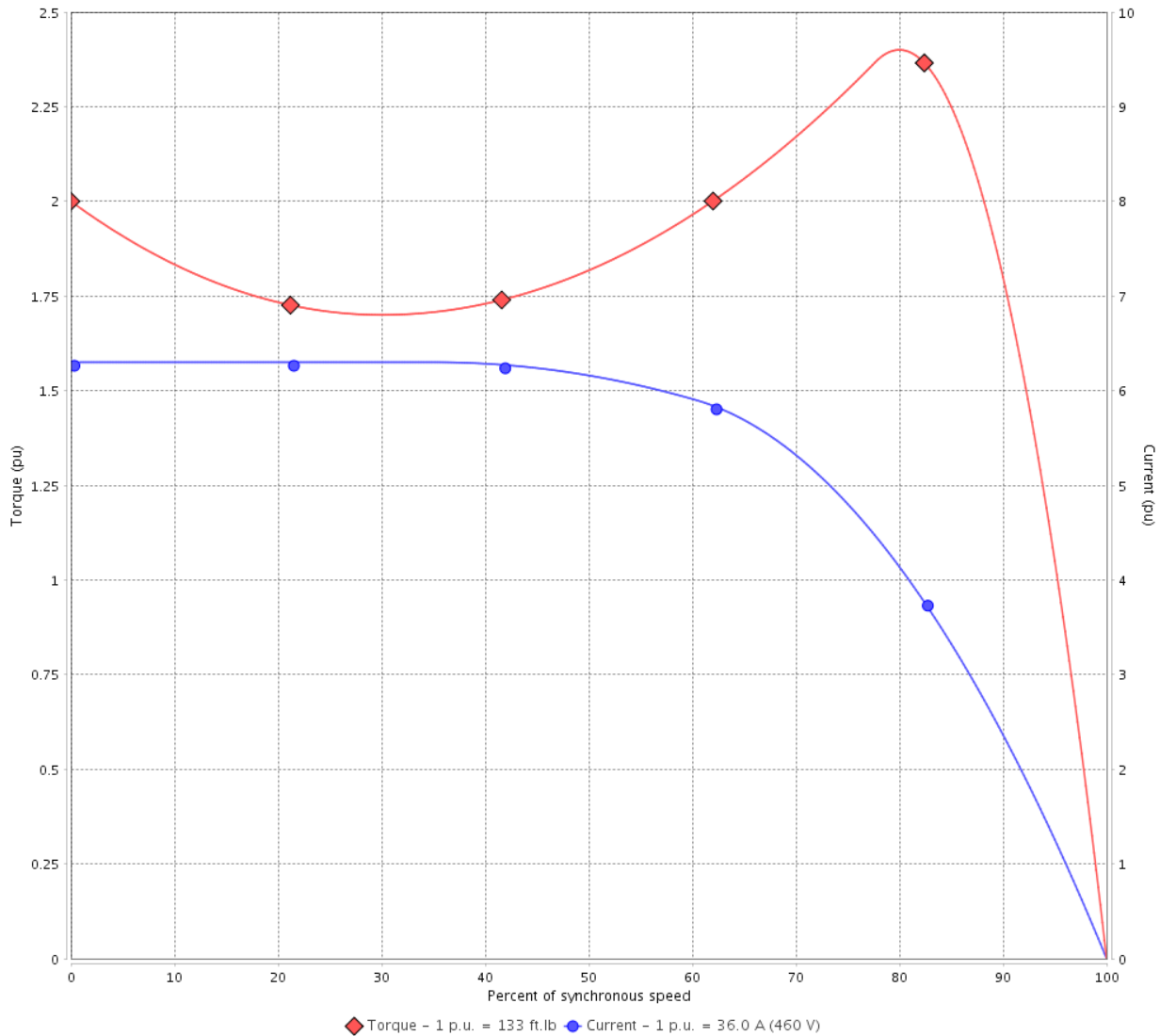
Customer :

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

Product code : 14484692

Catalog # : 03012OT3E326JM-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



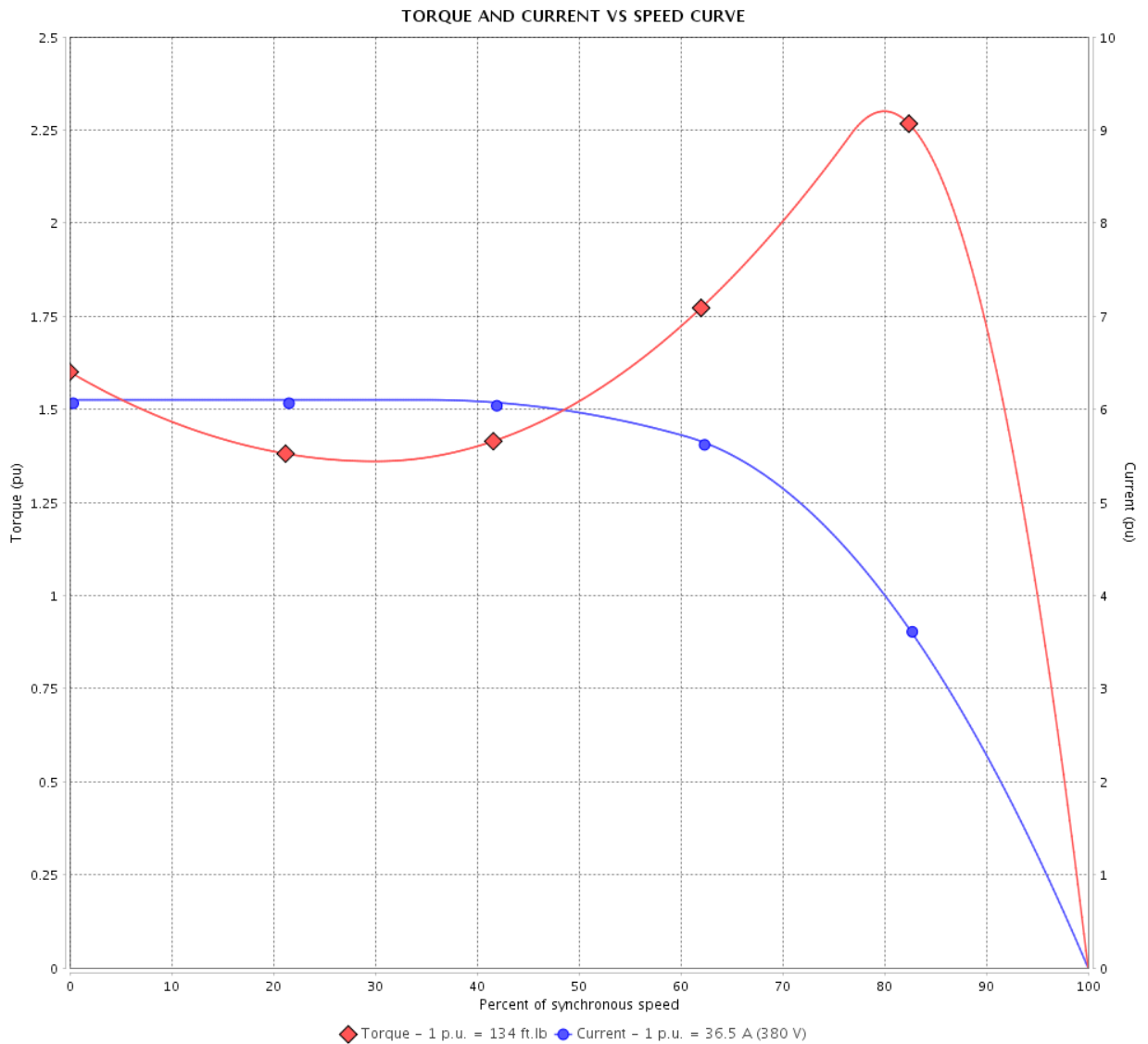
Three Phase Induction Motor - Squirrel Cage

Customer :

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

Product code : 14484692

Catalog # : 03012OT3E326JM-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



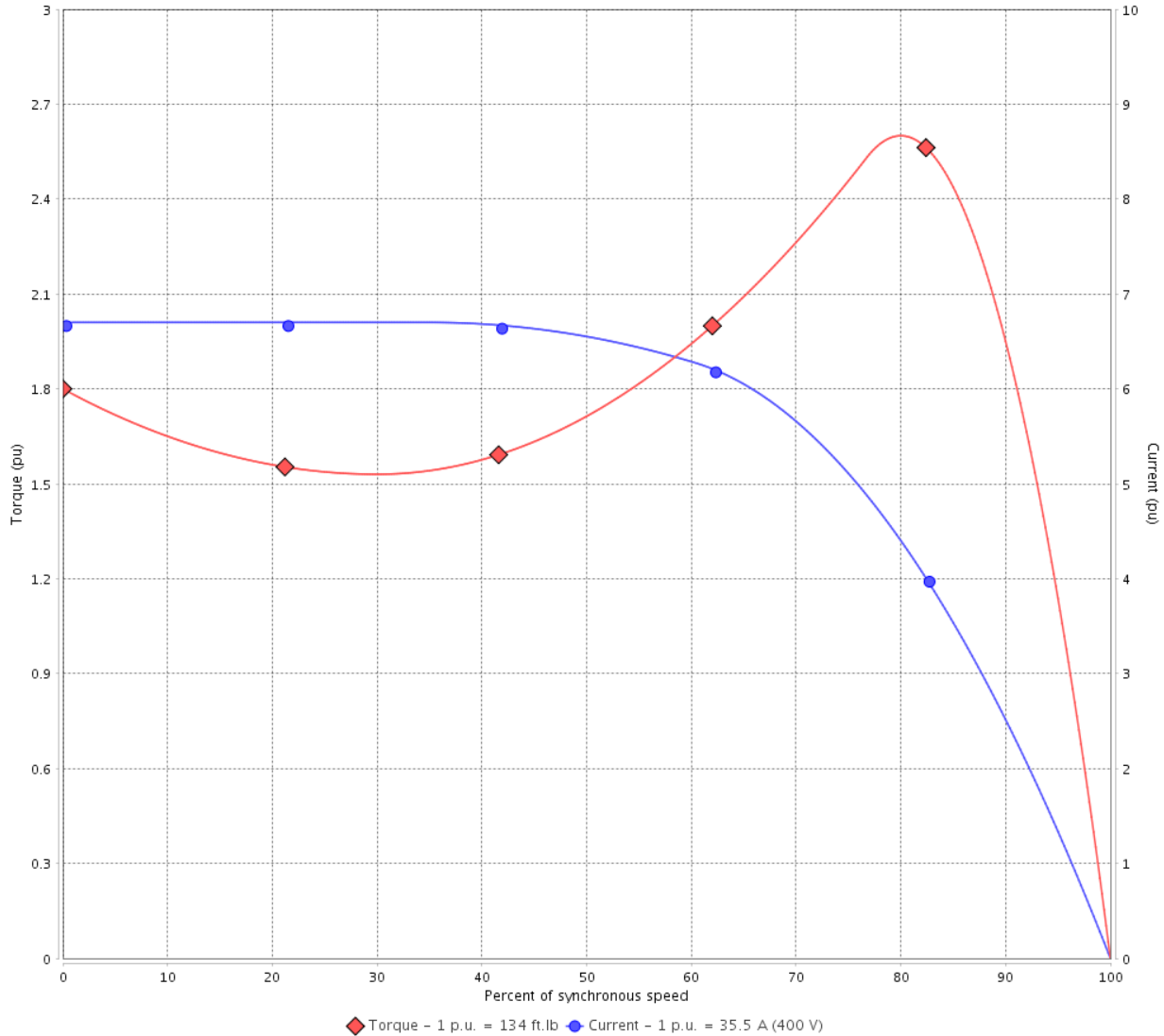
Customer :

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

Product code : 14484692

Catalog # : 03012OT3E326JM-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



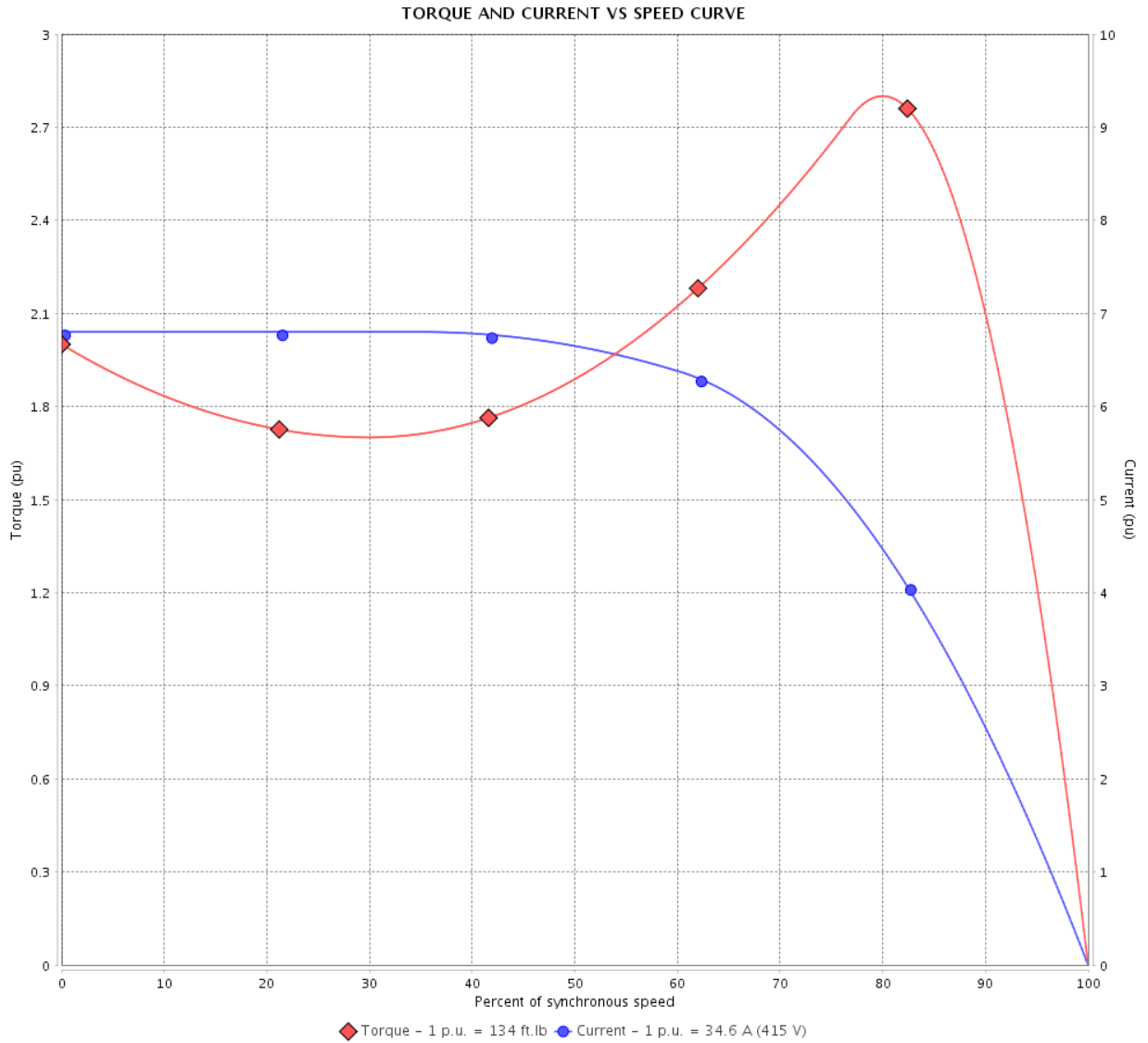
Three Phase Induction Motor - Squirrel Cage

Customer :

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

Product code : 14484692

Catalog # : 03012OT3E326JM-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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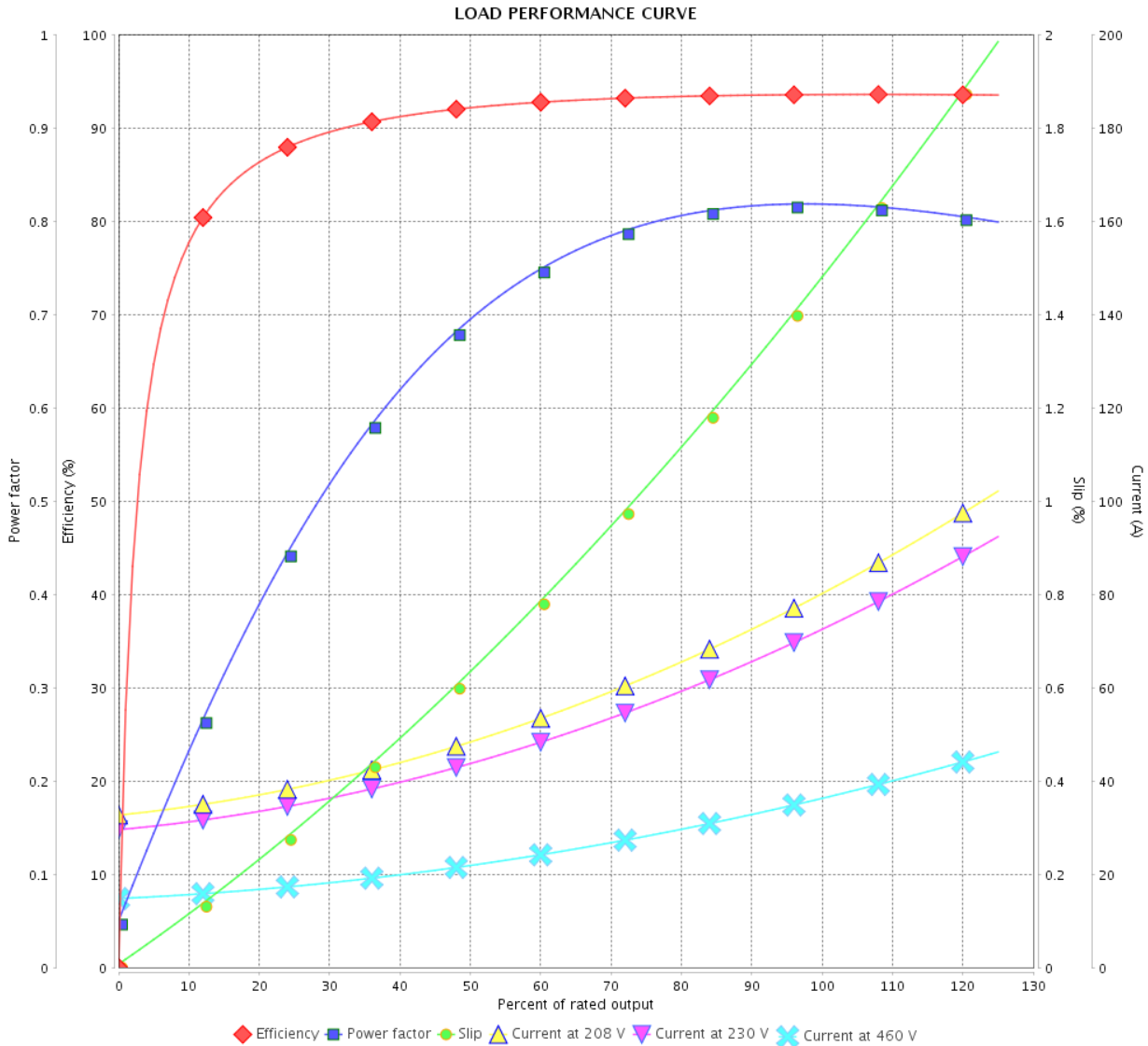


Customer :

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

Product code : 14484692

Catalog # : 030120T3E326JM-W40



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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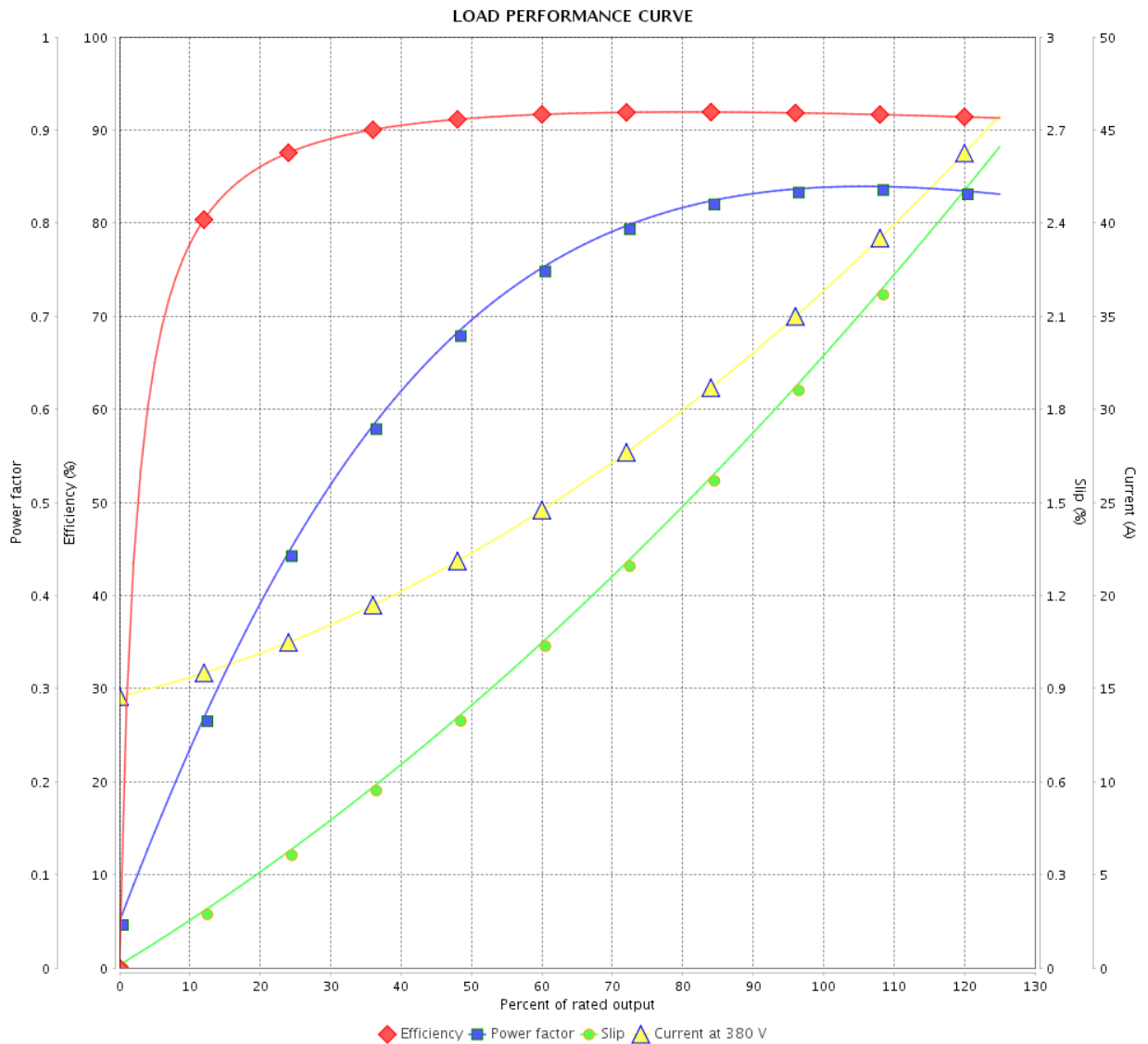


Customer :

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

Product code : 14484692

Catalog # : 03012OT3E326JM-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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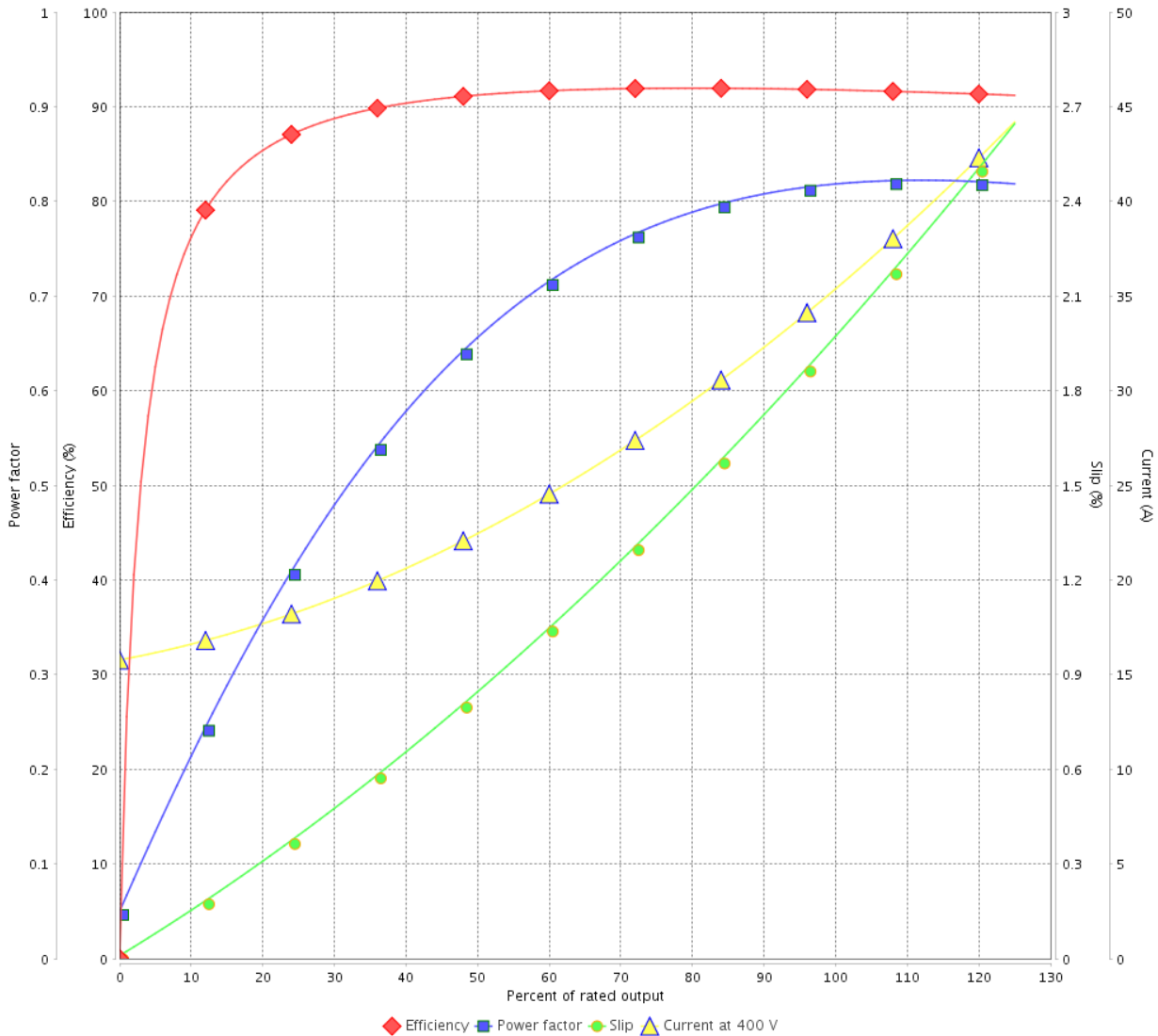
Customer :

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Product code : 14484692

Catalog # : 03012OT3E326JM-W40

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 6P IE3

Rated current : 35.5 A
 LRC : 6.7
 Rated torque : 134 ft.lb
 Locked rotor torque : 180 %
 Breakdown torque : 260 %
 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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Three Phase Induction Motor - Squirrel Cage

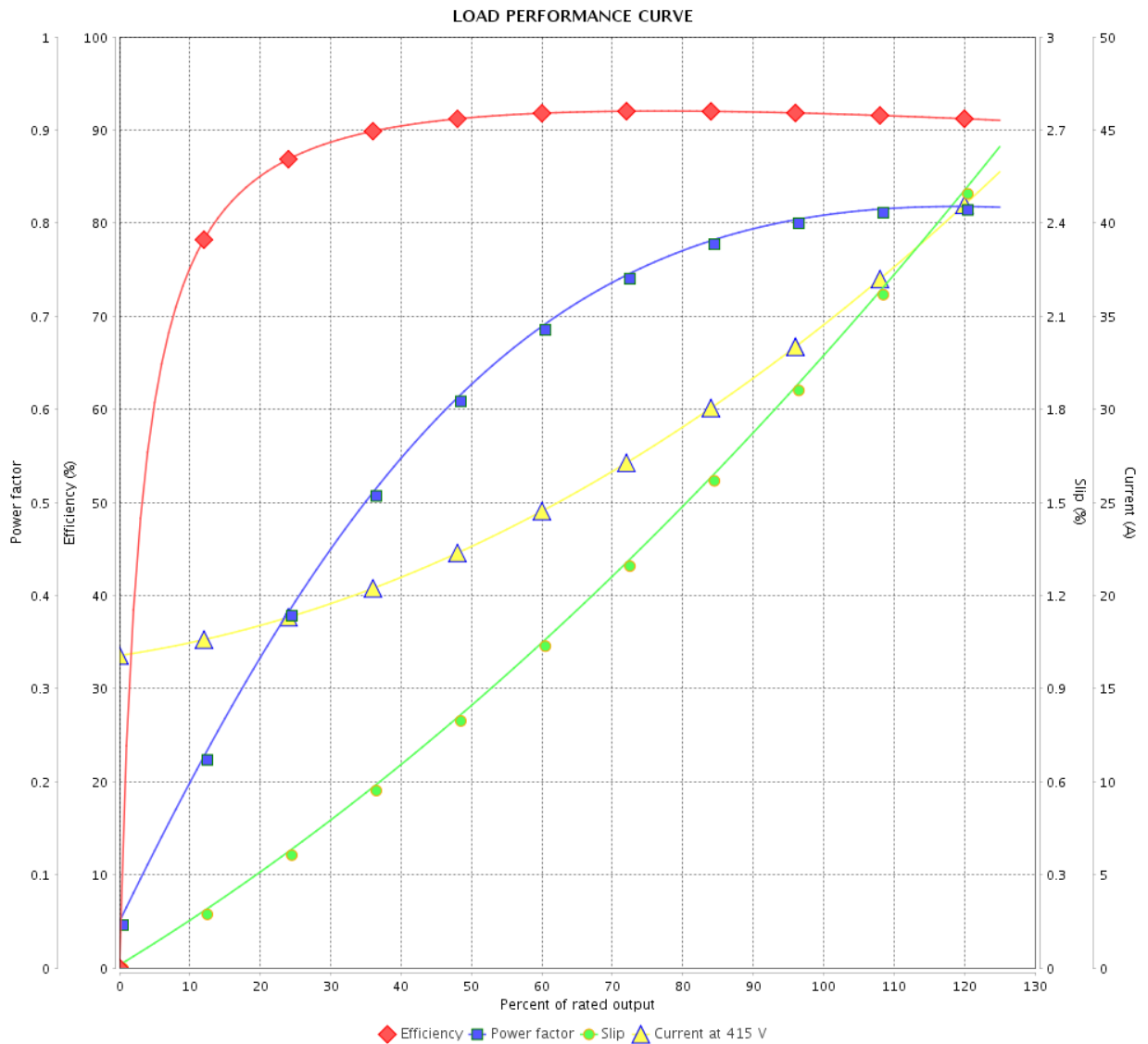


Customer :

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

Product code : 14484692

Catalog # : 03012OT3E326JM-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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Duty cycle : Cont.(S1)
Insulation class : F
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Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

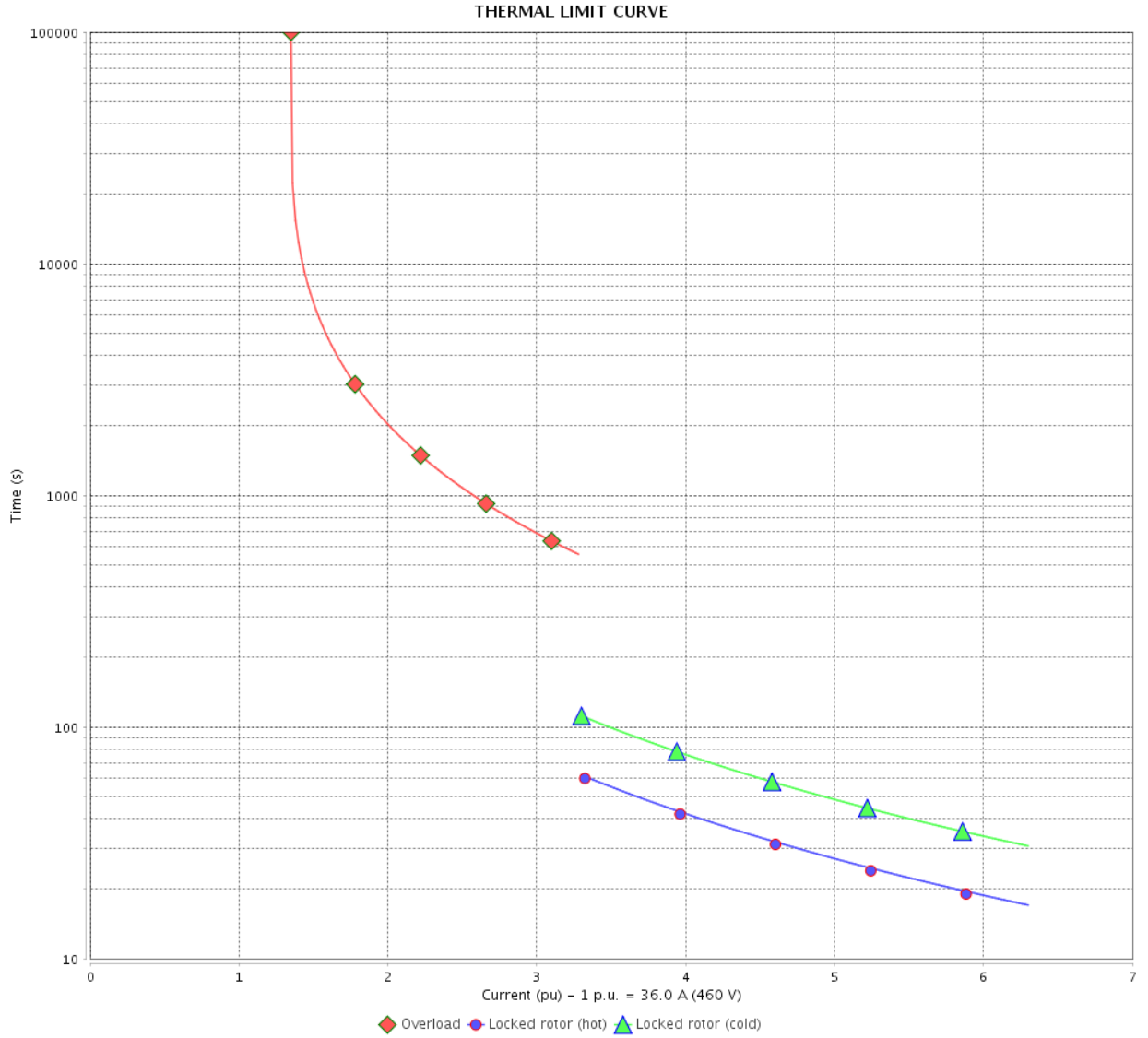
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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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

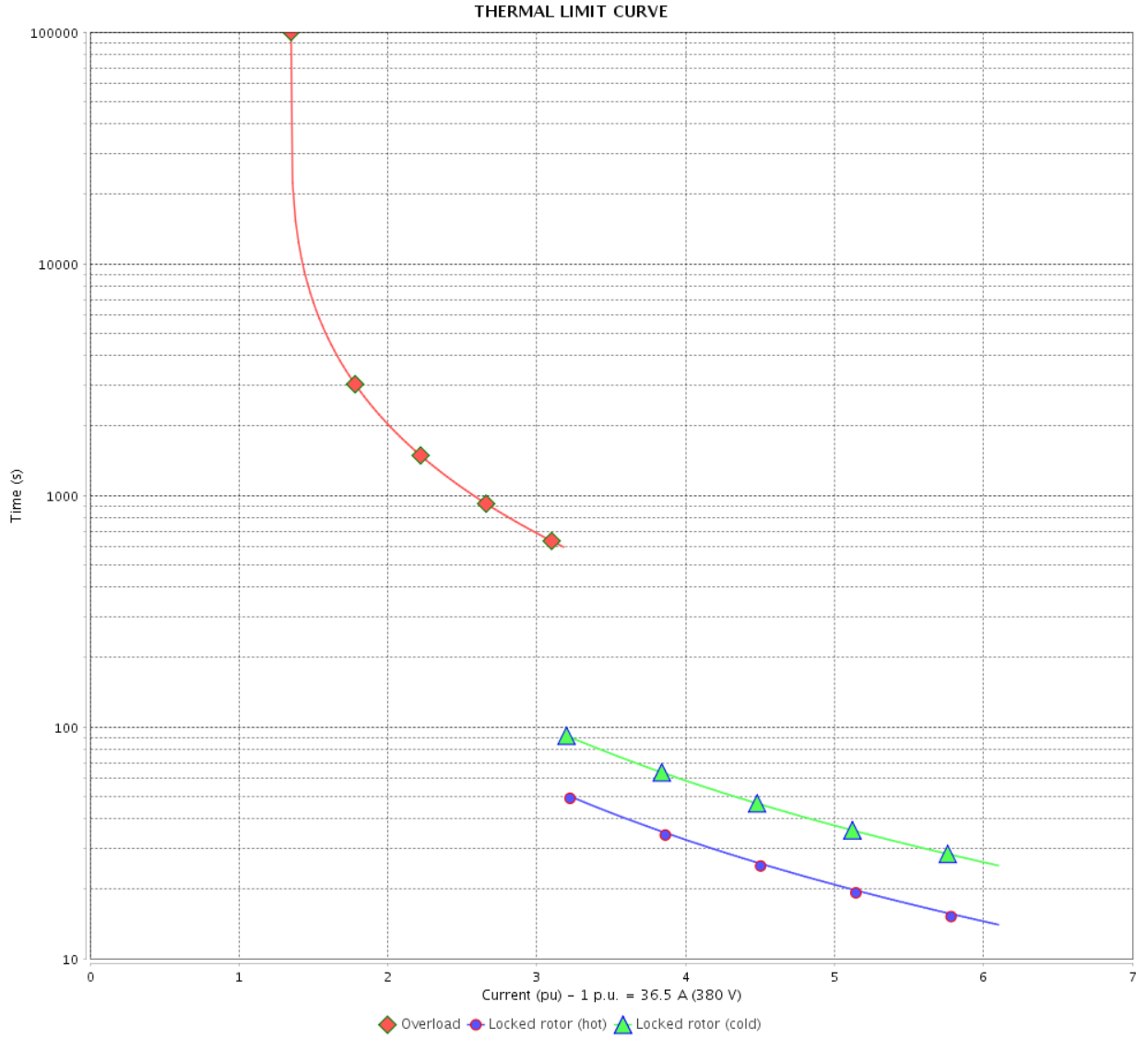
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Three Phase Induction Motor - Squirrel Cage

Customer :

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Product code : 14484692

Catalog # : 03012OT3E326JM-W40

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

Heating constant

Cooling constant

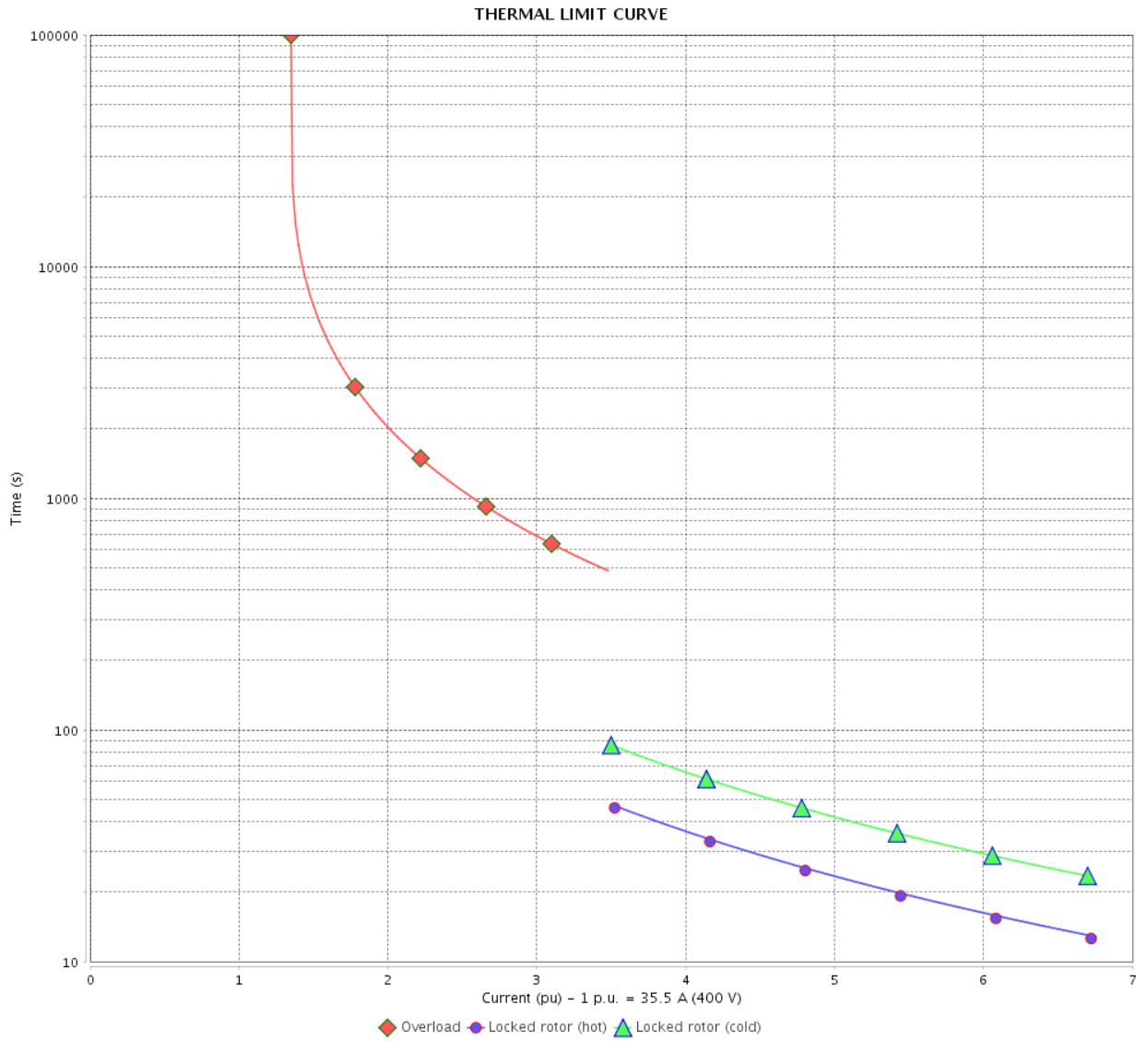
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 14484692

Catalog # : 03012OT3E326JM-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

Heating constant

Cooling constant

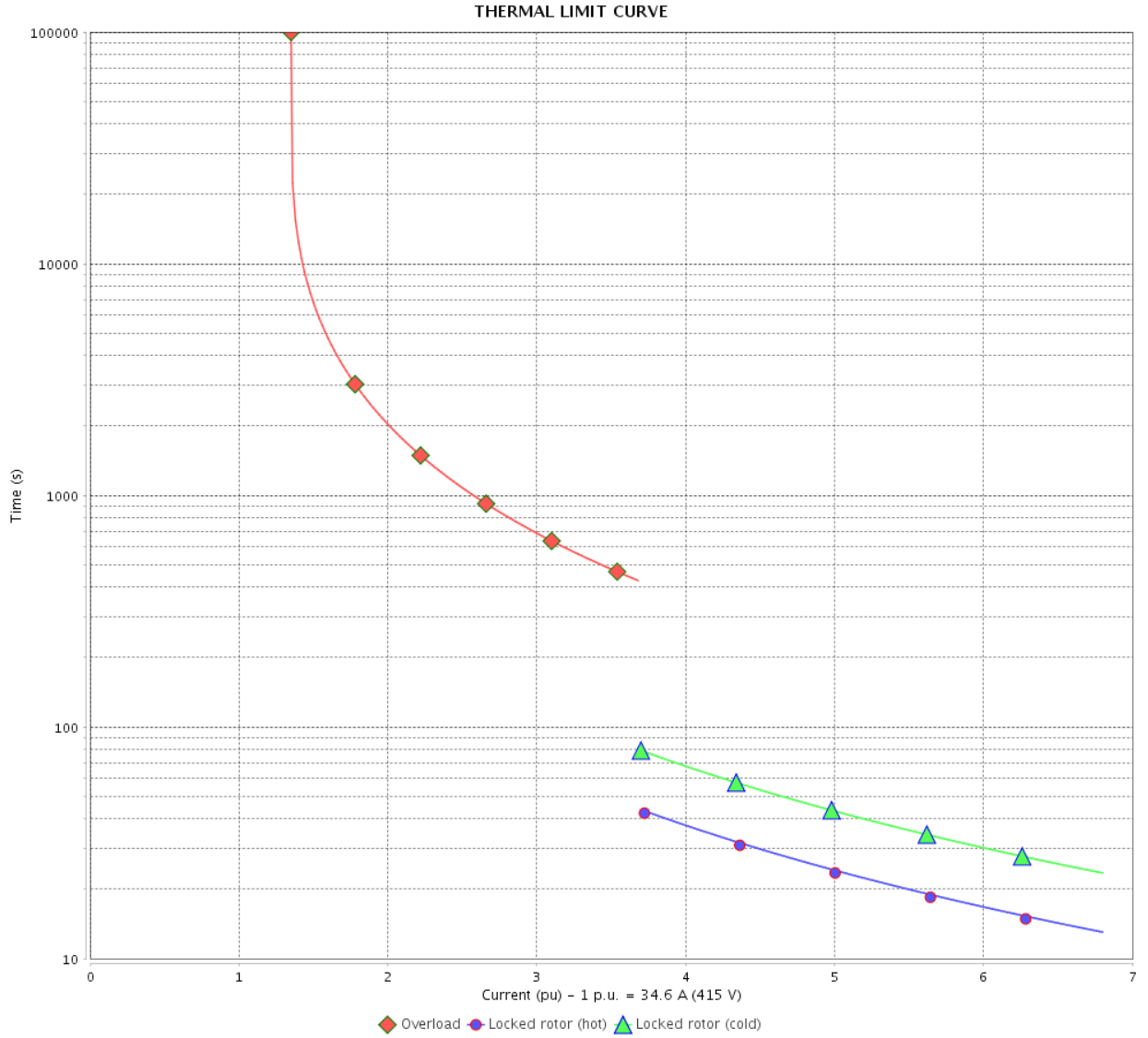
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



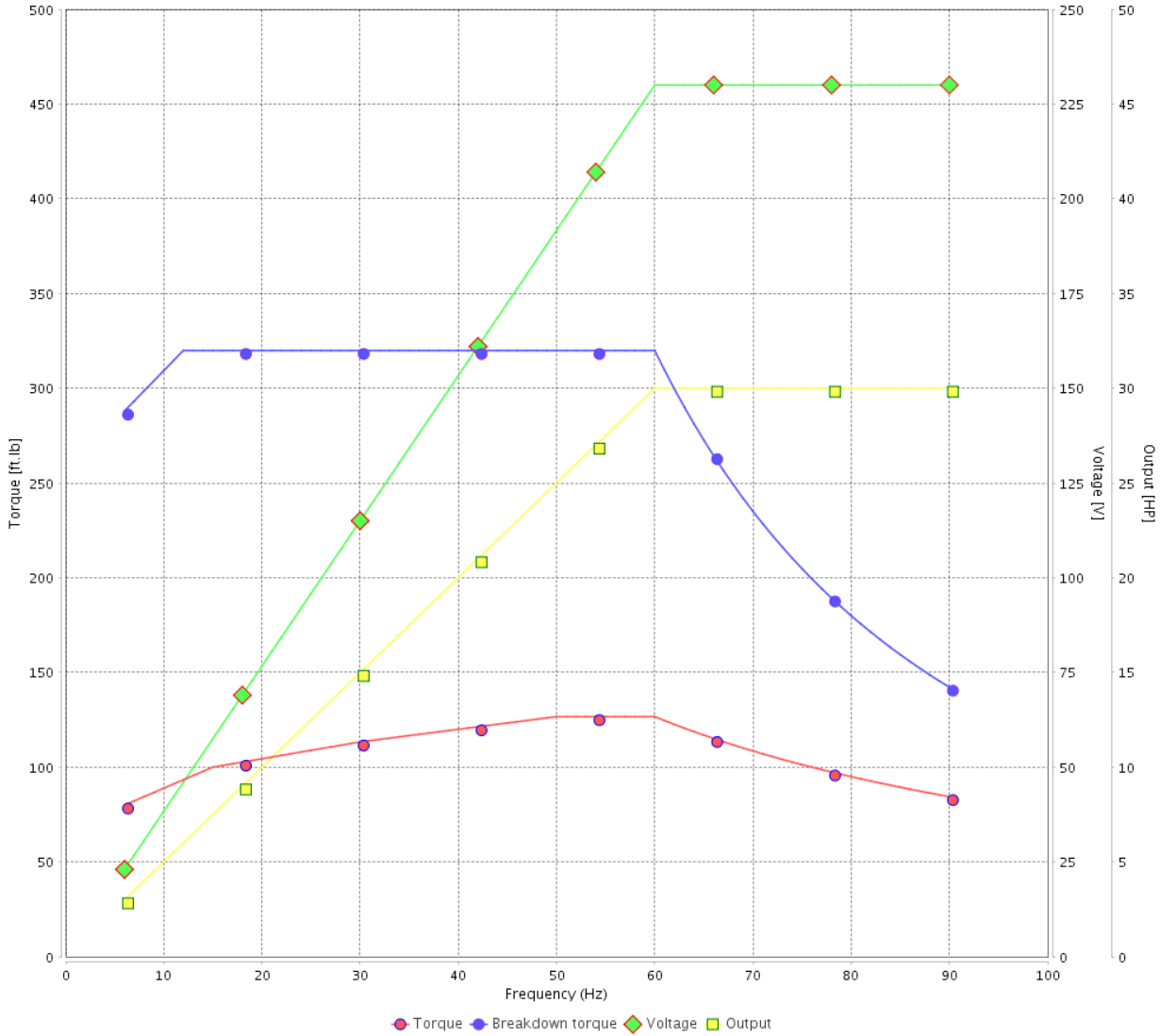
Customer :

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Catalog # : 03012OT3E326JM-W40

VFD OPERATION CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 72.0/36.0 A
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 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

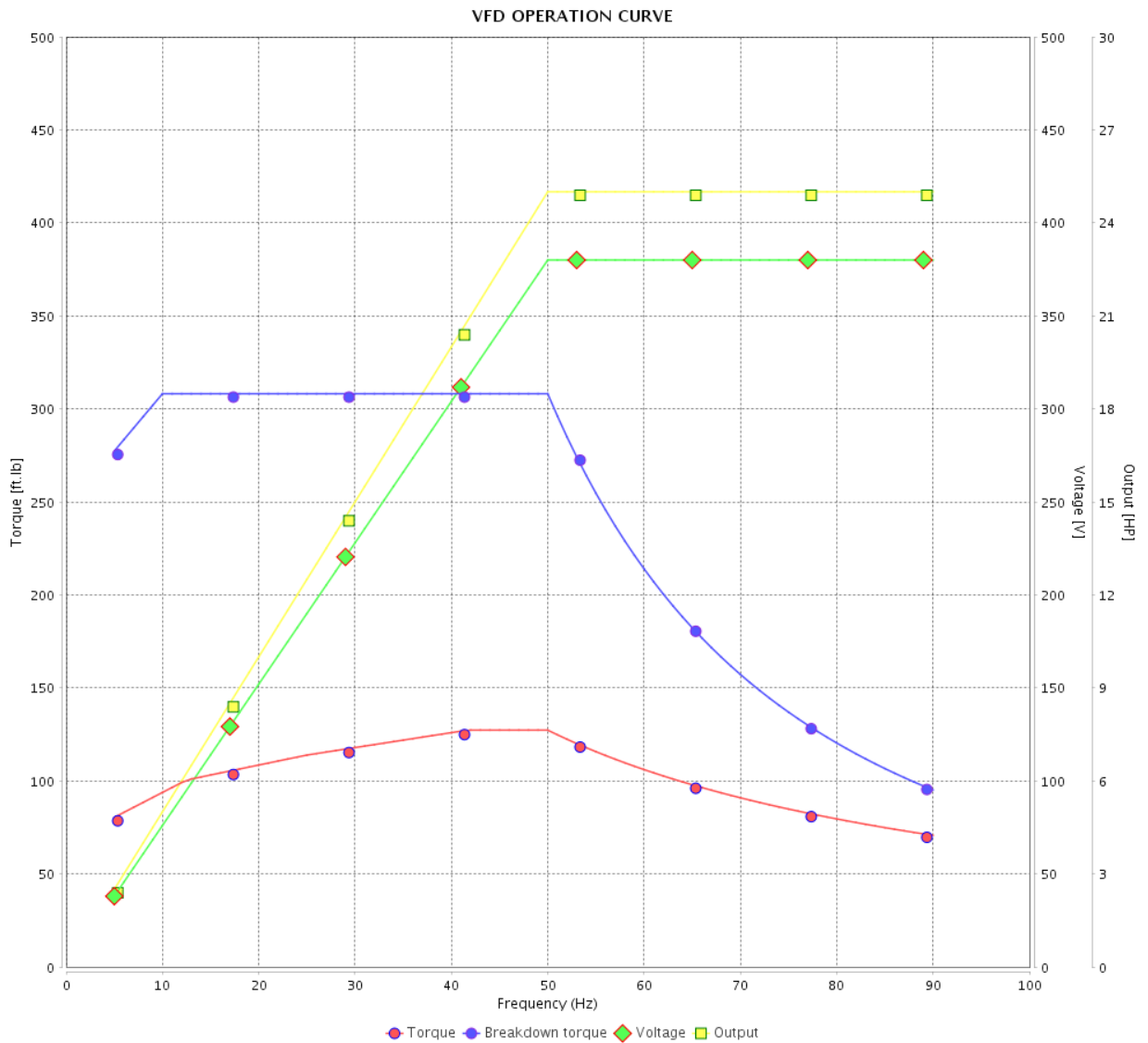


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Catalog # : 03012OT3E326JM-W40



Performance : 380 V 50 Hz 6P IE3

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 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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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



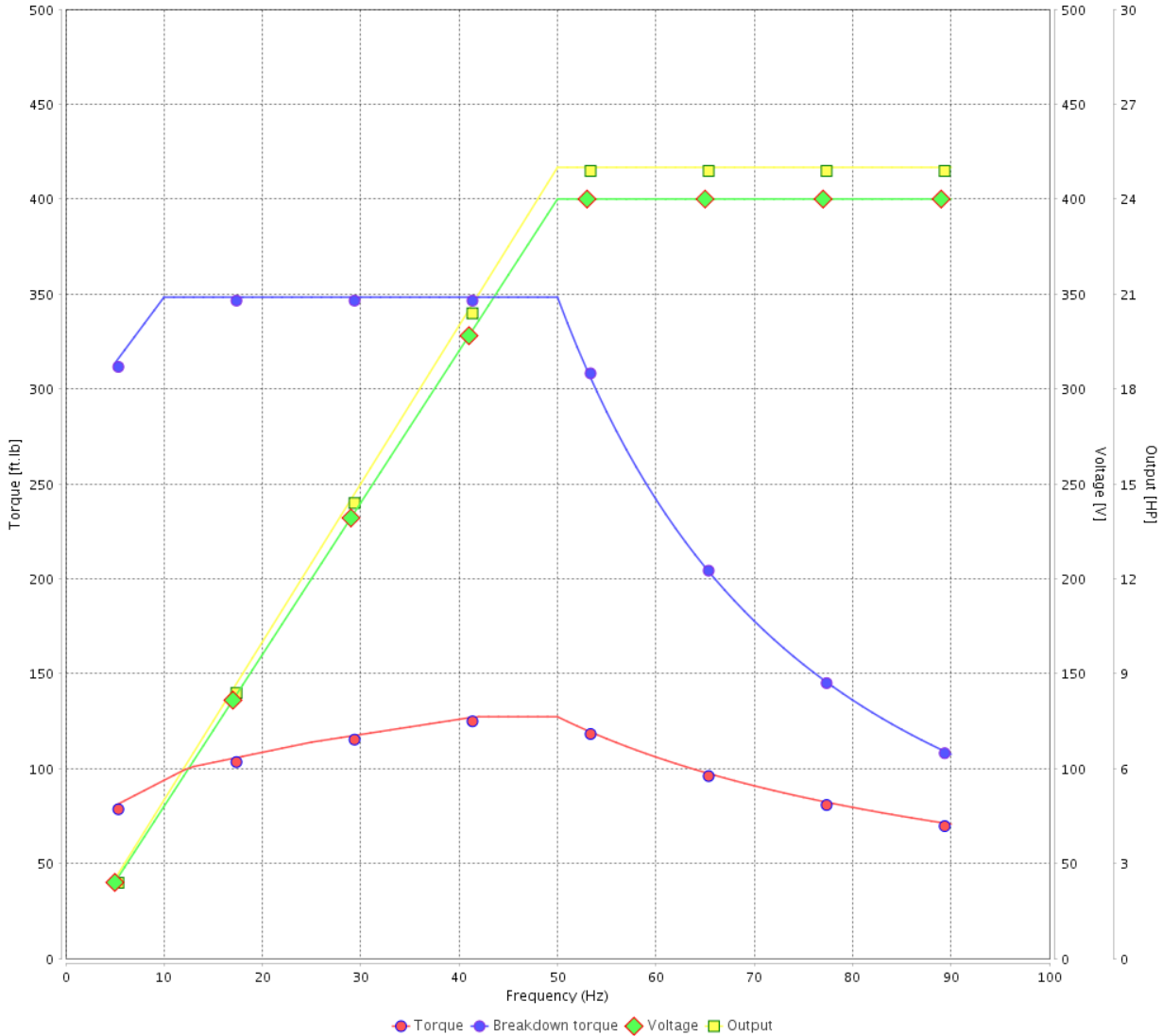
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VFD OPERATION CURVE



Performance : 400 V 50 Hz 6P IE3

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 Service factor : 1.00
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

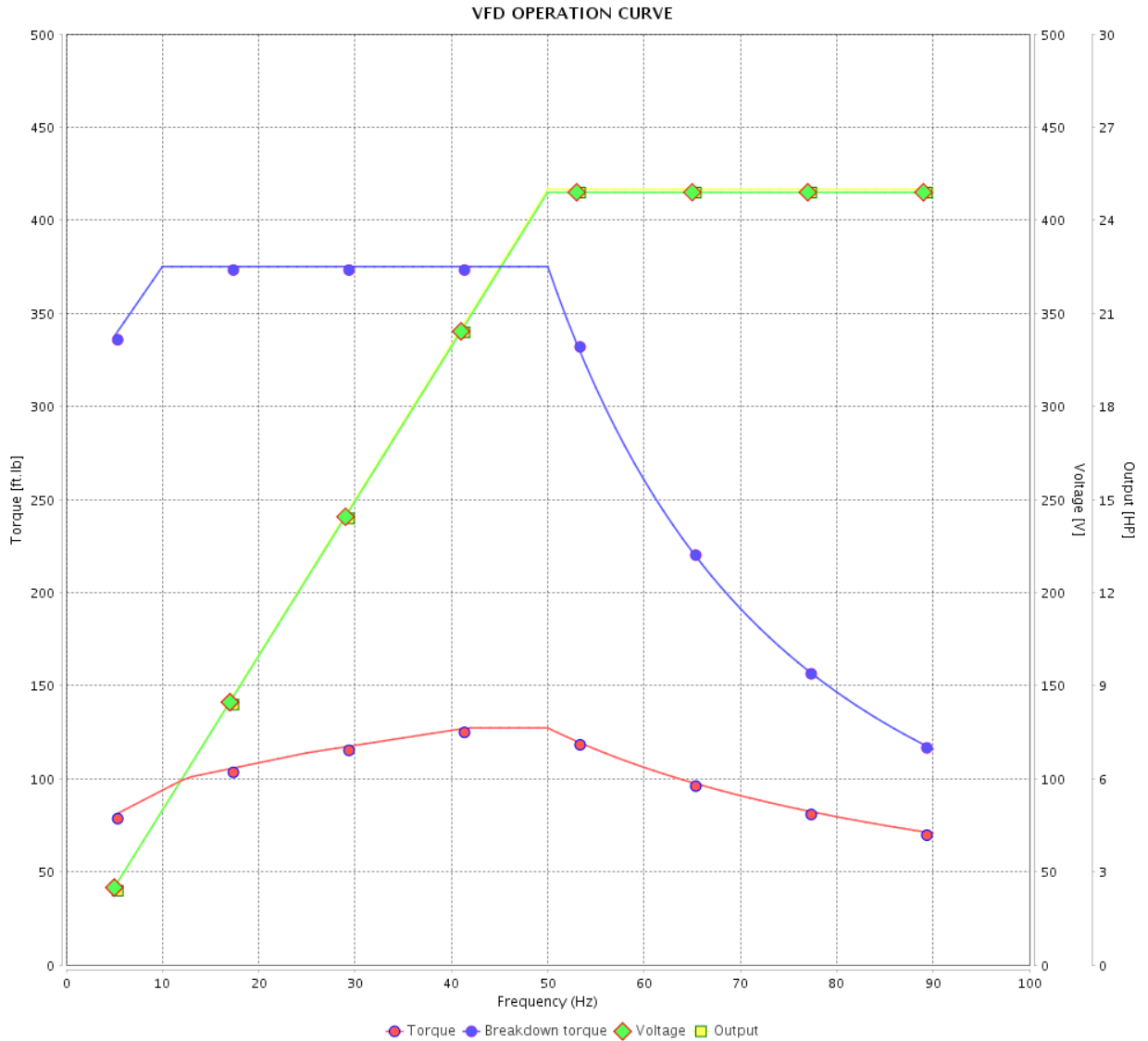


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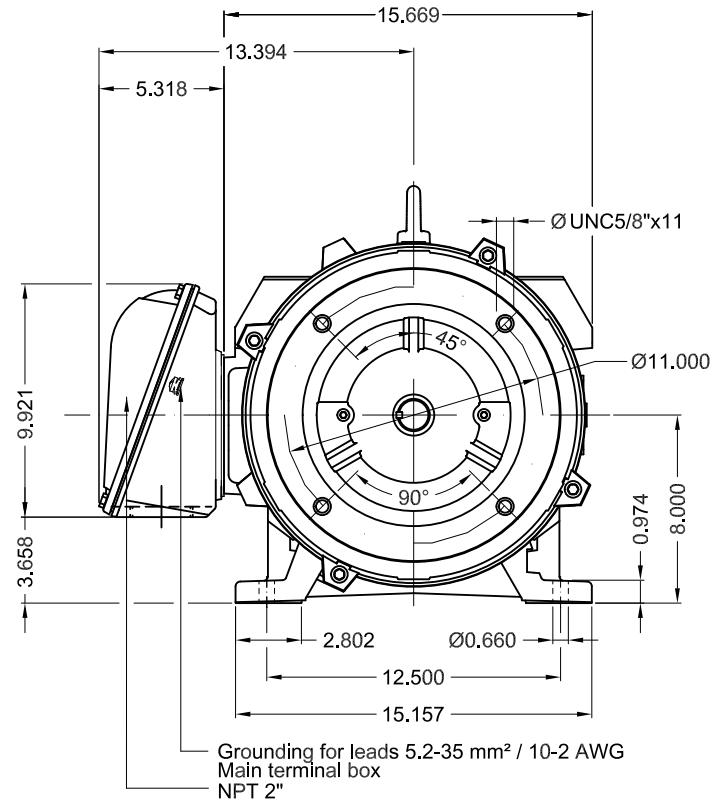


Performance : 415 V 50 Hz 6P IE3

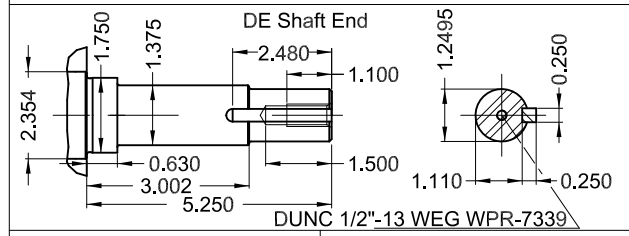
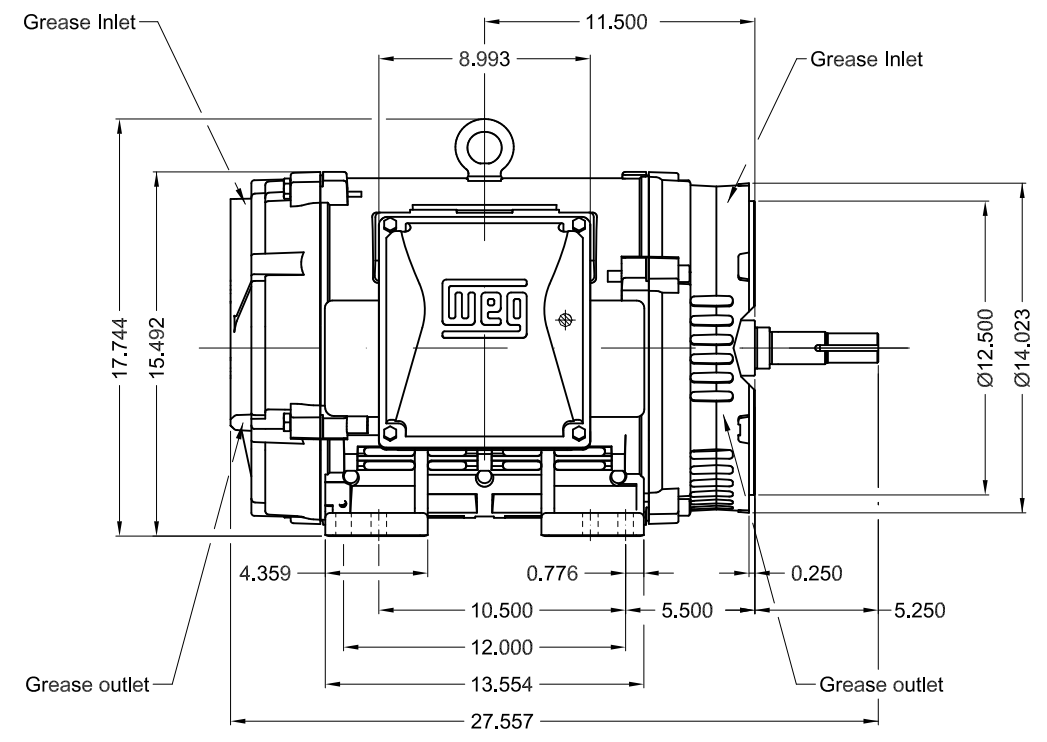
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 Service factor : 1.00
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Grounding for leads 5.2-35 mm² / 10-2 AWG
Main terminal box
NPT 2"



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 CLOSE COUPLED PUMP JM TYPE PREM-EST.					
CHECKED		FRAME 324/6JM IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

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

PREVIEW



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



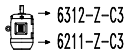
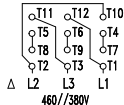
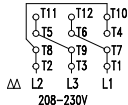
IEC 60034-1
 MOD.T01#FOXON



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

MODEL 030120T3E326JM-W40
 MADE IN BRAZIL
 14484692

PH 3	FR 324/6JM	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.	529 Lbs	



MOBIL POLYREX EM
 21 g 20000 h