

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: W40 NEMA Premium Efficiency Three-Phase	Product code :	13413434	
			Catalog # :	30018OT3G447/9TS-W40	
Frame		: 447/9TS	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 : 1915 lb		
Protection degree		: IP23	Moment of inertia (J) : 56.1 sq.ft.lb		
Design		: B			
Output [HP]	300	250	250	250	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	339	344	331	323	
L. R. Amperes [A]	2407	2236	2416	2519	
LRC [A]	7.1x(Code H)	6.5x(Code G)	7.3x(Code H)	7.8x(Code J)	
No load current [A]	105	103	113	120	
Rated speed [RPM]	1780	1475	1480	1480	
Slip [%]	1.11	1.67	1.33	1.33	
Rated torque [ft.lb]	885	890	887	887	
Locked rotor torque [%]	220	190	210	229	
Breakdown torque [%]	229	210	240	260	
Service factor	1.15	1.15	1.15	1.15	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	28s (cold) 16s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	
Noise level ²	77.0 dB(A)				
Efficiency (%)	25%	95.7	94.3	94.3	
	50%	95.8	95.0	95.0	
	75%	95.8	95.4	95.4	
	100%	95.8	96.0	96.0	
Power Factor	25%	0.52	0.52	0.48	
	50%	0.76	0.76	0.73	
	75%	0.83	0.83	0.81	
	100%	0.85	0.85	0.84	
Bearing type		Drive end : 6314 C3	Non drive end : 6314 C3	Foundation loads Max. traction : 5191 lb Max. compression : 7106 lb	
Sealing		: Without	: Without		
Lubrication interval		: 20000 h	: 20000 h		
Lubricant amount		: 27 g	: 27 g		
Lubricant type		: Mobil Polyrex EM			
Notes					
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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Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	155 °C

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TORQUE AND CURRENT VS SPEED CURVE



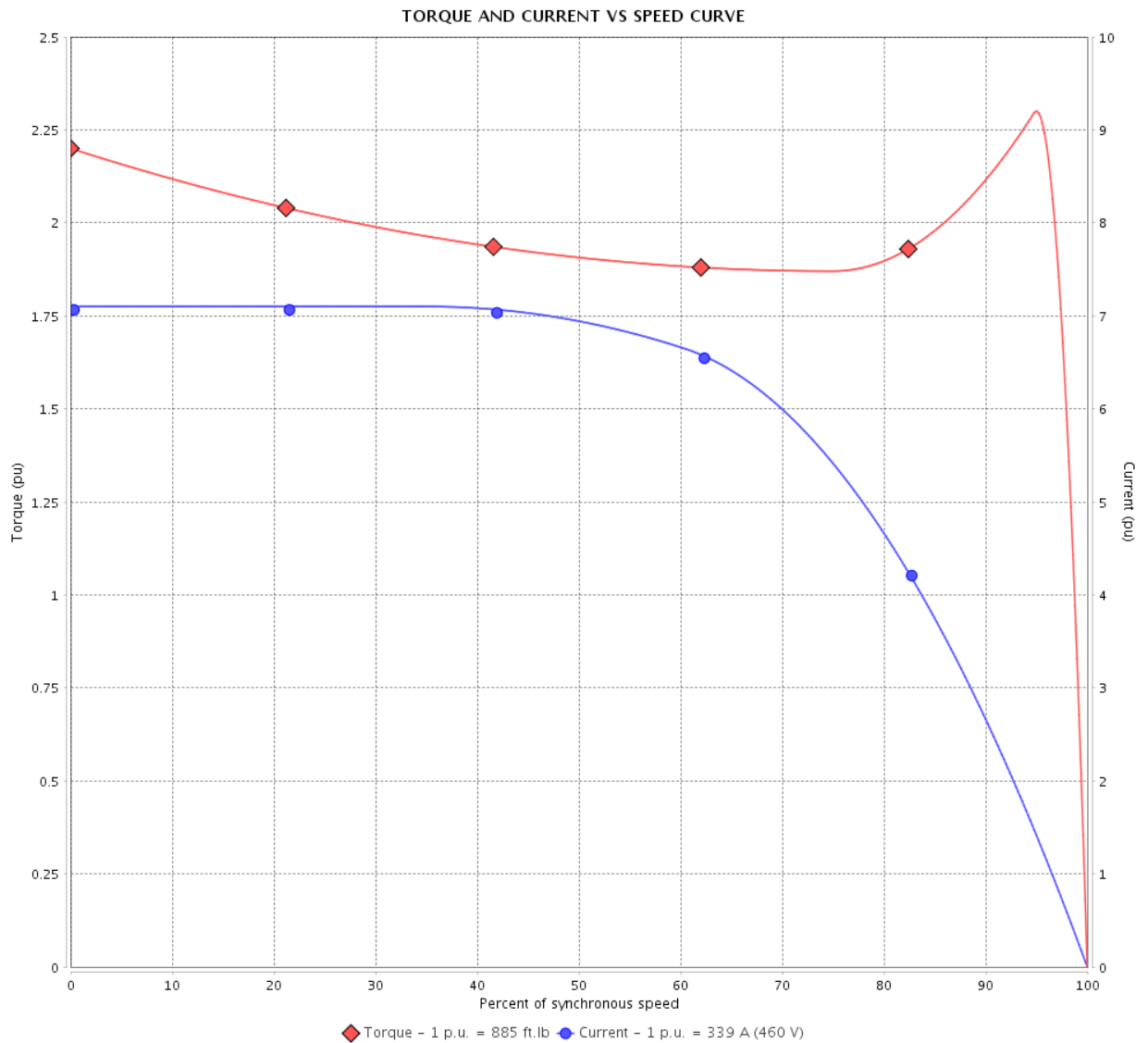
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 13413434

Catalog # : 30018OT3G447/9TS-W40



Performance : 460 V 60 Hz 4P

Rated current	: 339 A	Moment of inertia (J)	: 56.1 sq.ft.lb
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 885 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



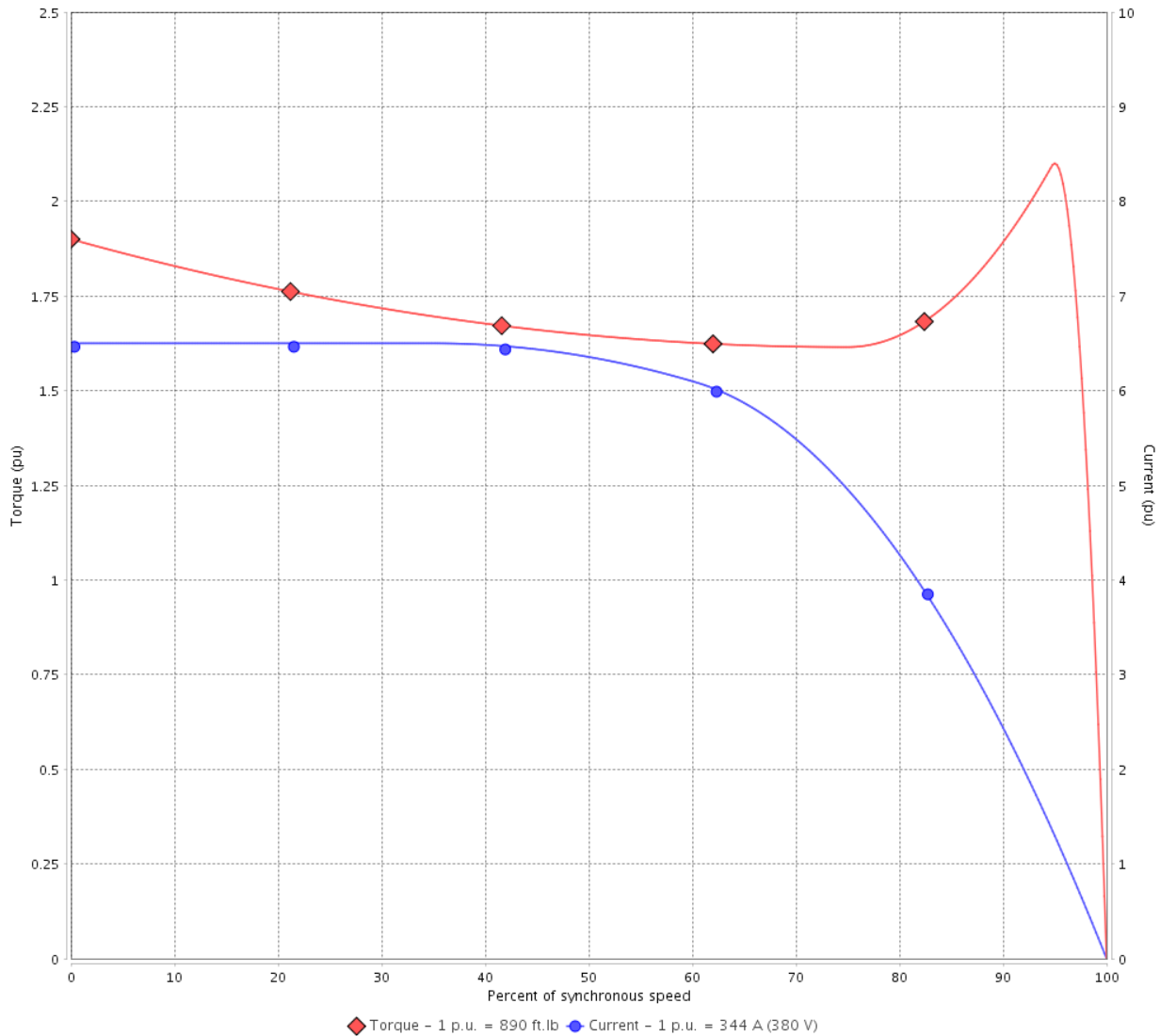
Customer :

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Product code : 13413434

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TORQUE AND CURRENT VS SPEED CURVE



Performance : 380 V 50 Hz 4P IE3

Rated current	: 344 A	Moment of inertia (J)	: 56.1 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 890 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.15
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



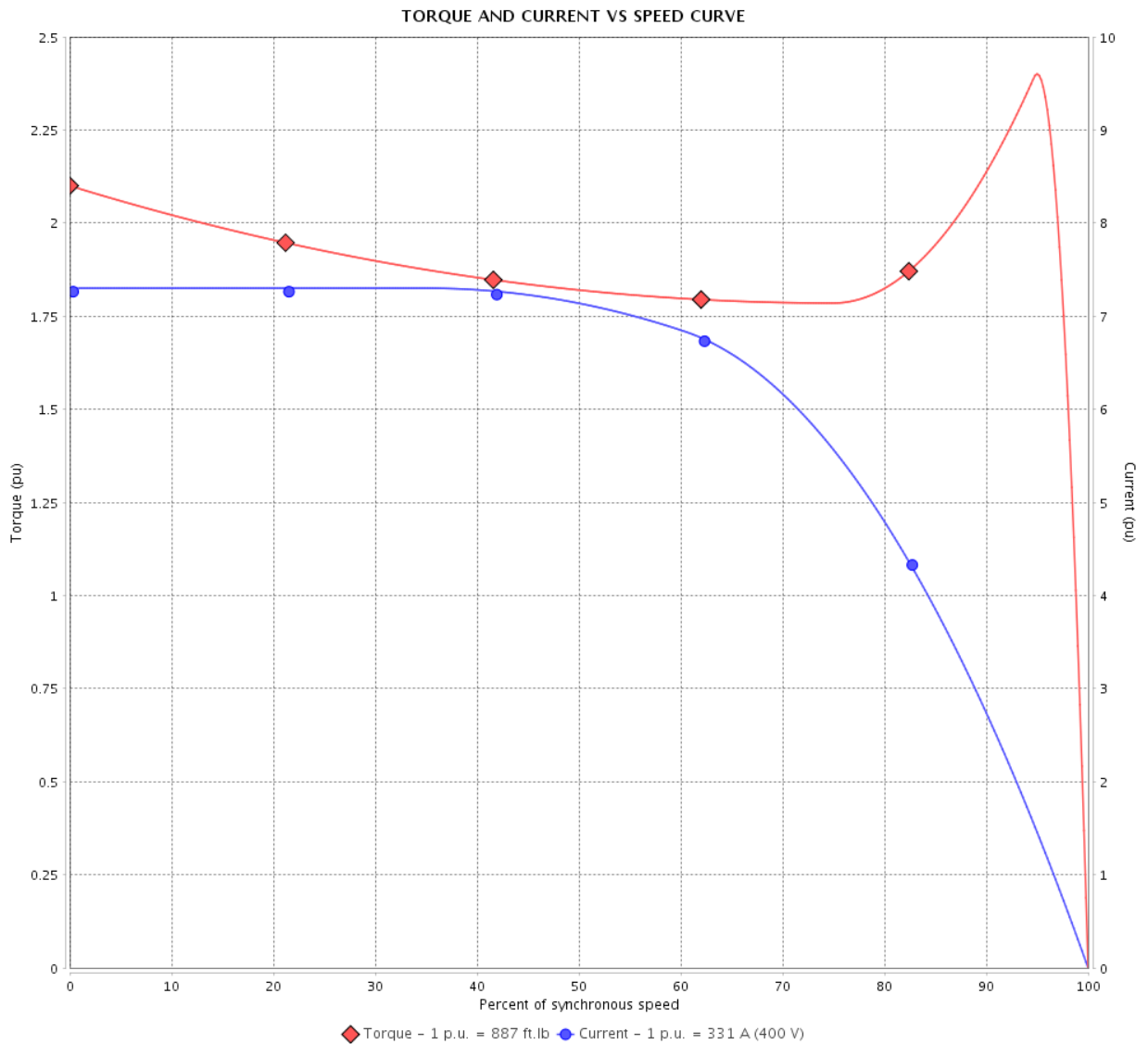
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 13413434

Catalog # : 30018OT3G447/9TS-W40



Performance : 400 V 50 Hz 4P IE3

Rated current	: 331 A	Moment of inertia (J)	: 56.1 sq.ft.lb
LRC	: 7.3	Duty cycle	: Cont.(S1)
Rated torque	: 887 ft.lb	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



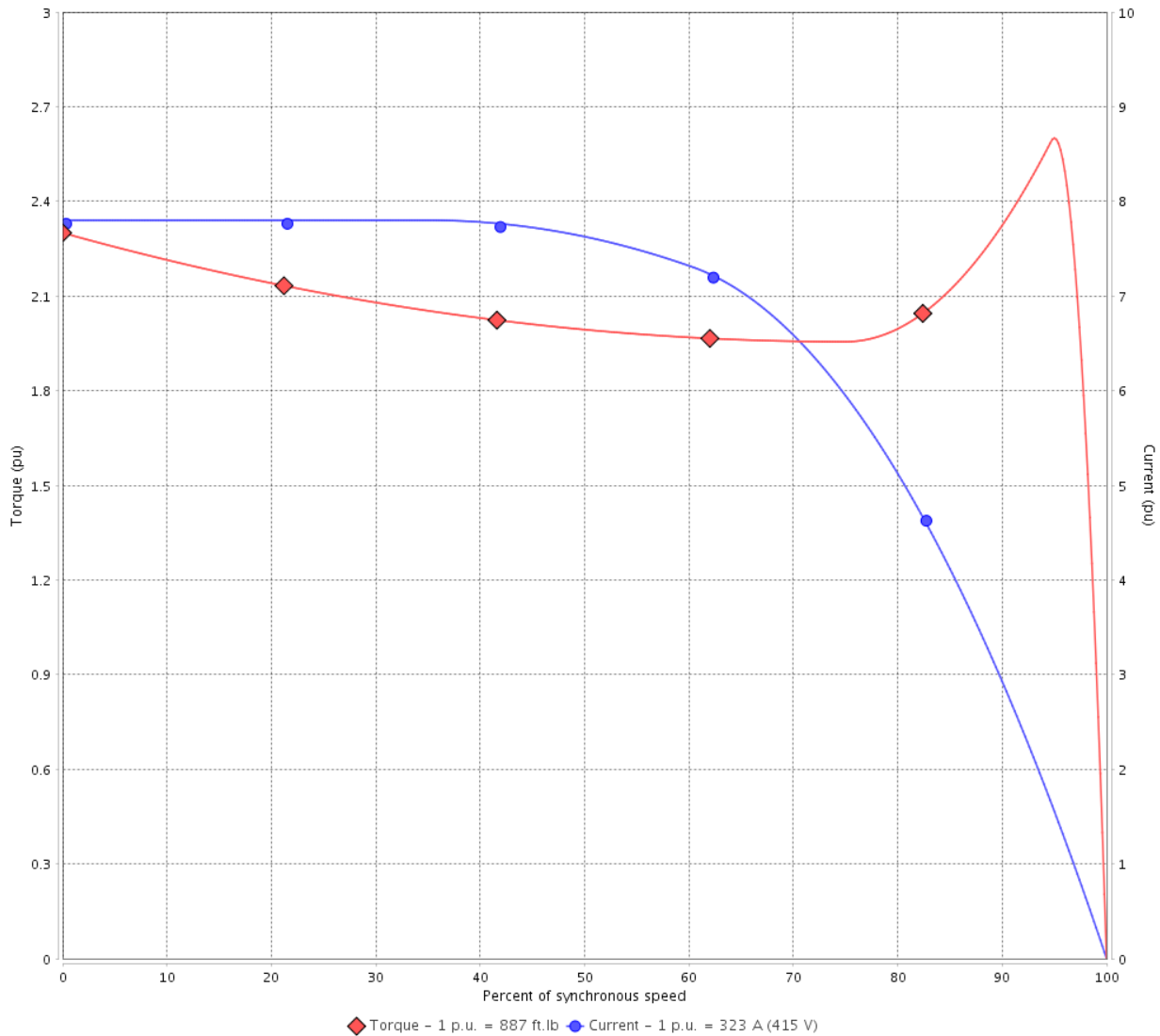
Customer :

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Product code : 13413434

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TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 4P IE3

Rated current	: 323 A	Moment of inertia (J)	: 56.1 sq.ft.lb
LRC	: 7.8	Duty cycle	: Cont.(S1)
Rated torque	: 887 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

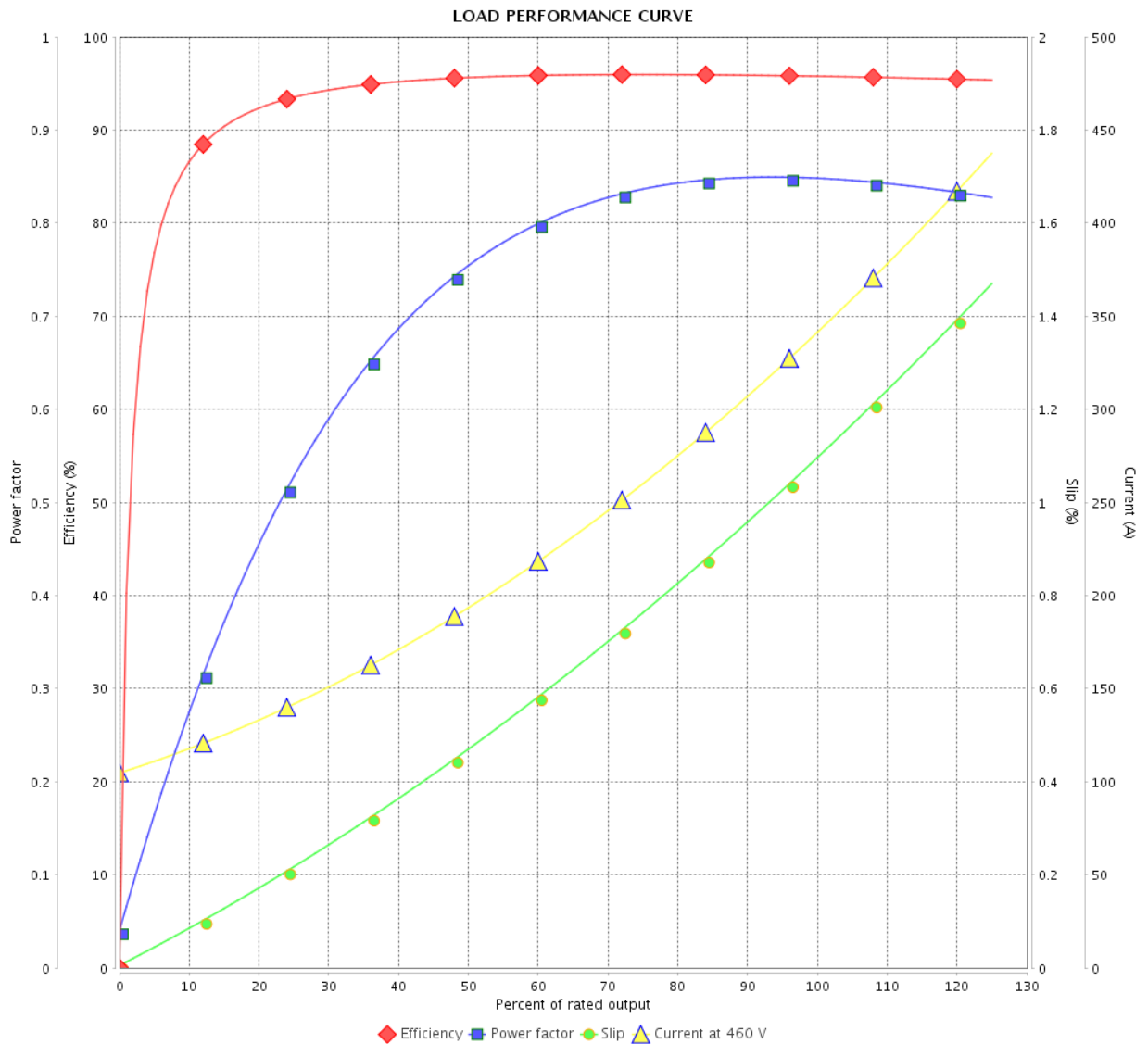


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Performance : 460 V 60 Hz 4P

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 Rated speed : 1780 rpm

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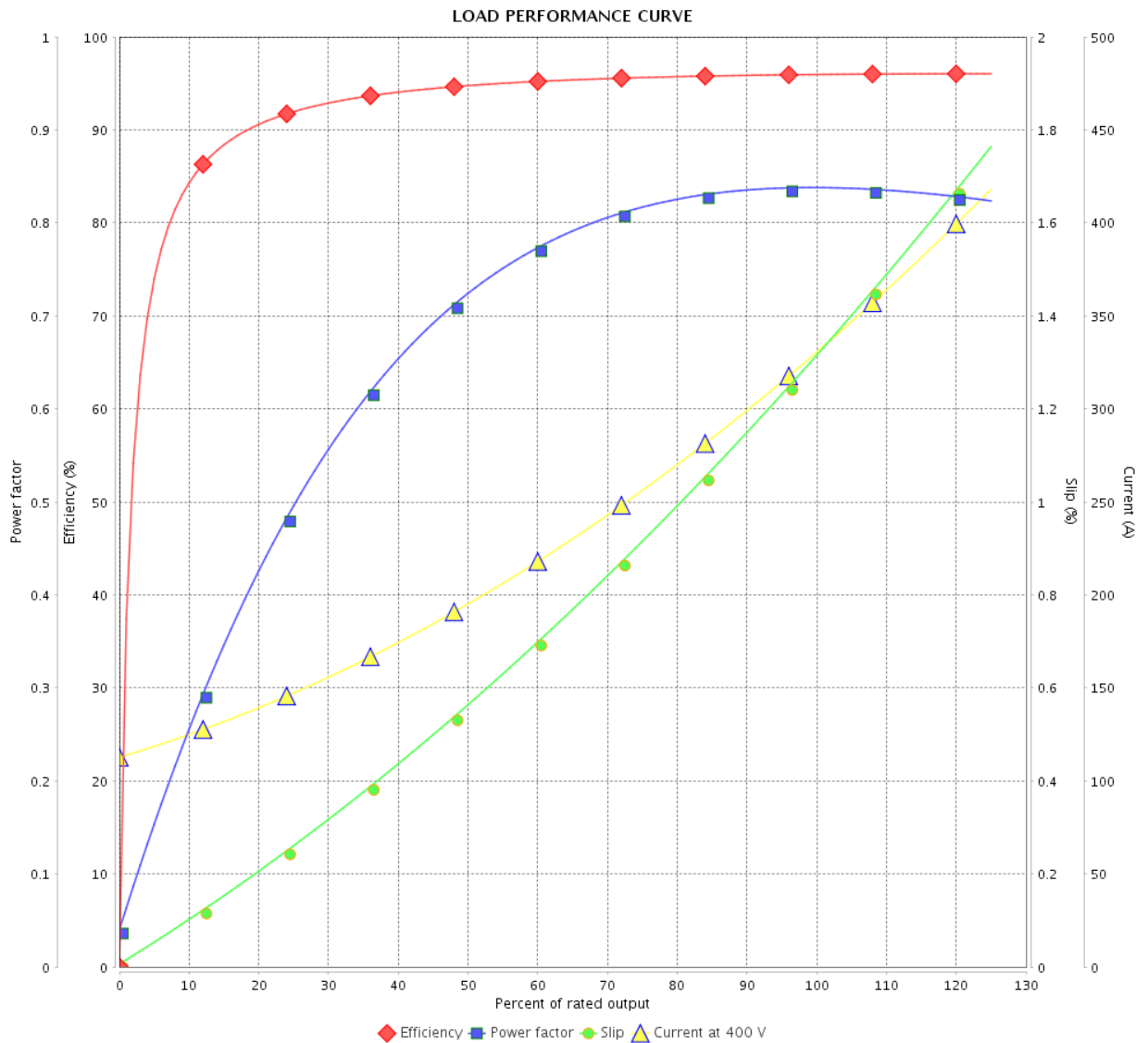


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Performance : 400 V 50 Hz 4P IE3

Rated current : 331 A
 LRC : 7.3
 Rated torque : 887 ft.lb
 Locked rotor torque : 210 %
 Breakdown torque : 240 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 56.1 sq.ft.lb
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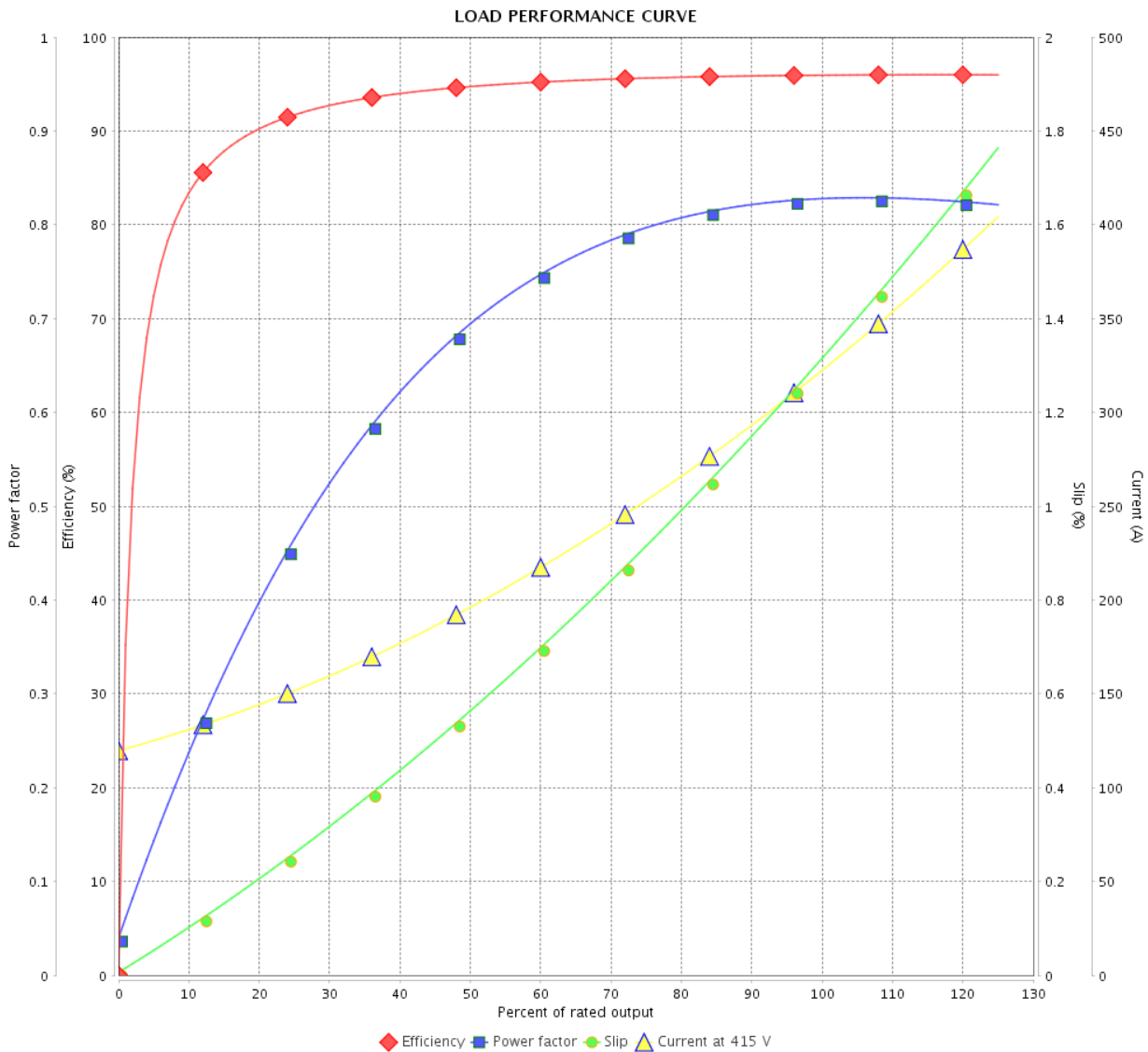


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Rated speed	: 1480 rpm	Design	: B

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THERMAL LIMIT CURVE



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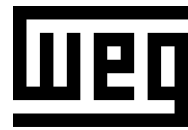
Heating constant

Cooling constant

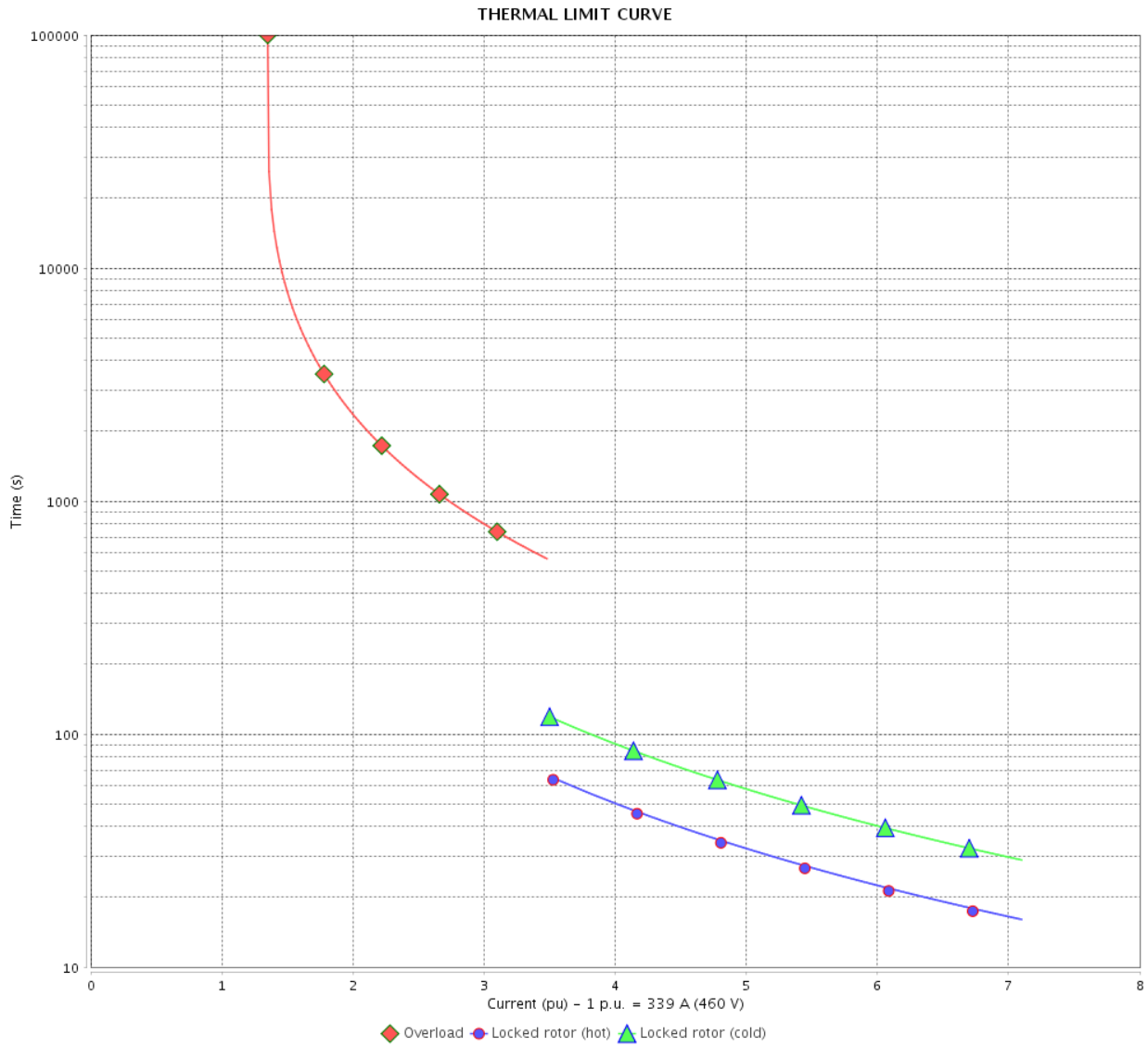
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LRC : 6.5	Duty cycle : Cont.(S1)
Rated torque : 890 ft.lb	Insulation class : F
Locked rotor torque : 190 %	Service factor : 1.15
Breakdown torque : 210 %	Temperature rise : 80 K
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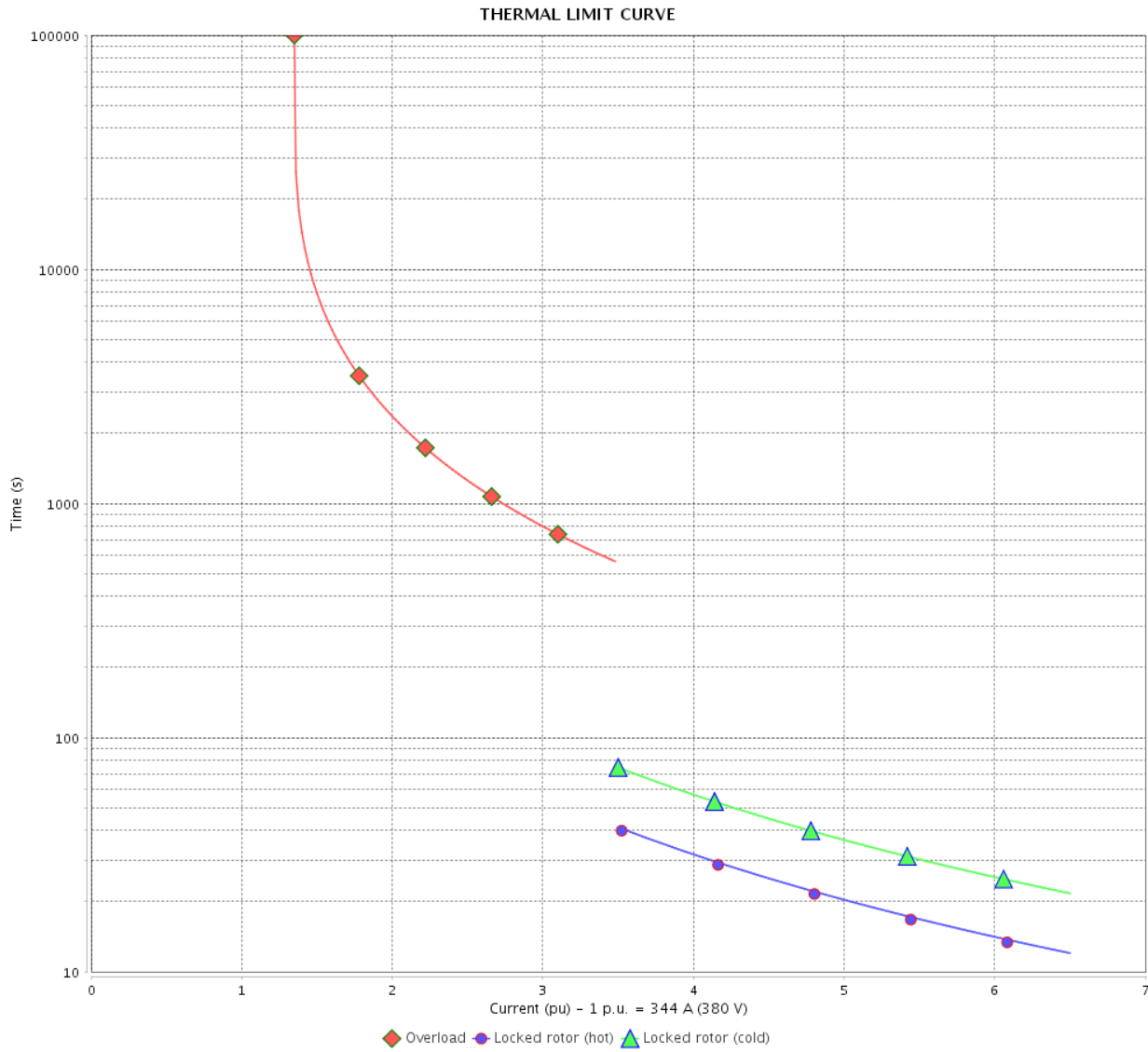
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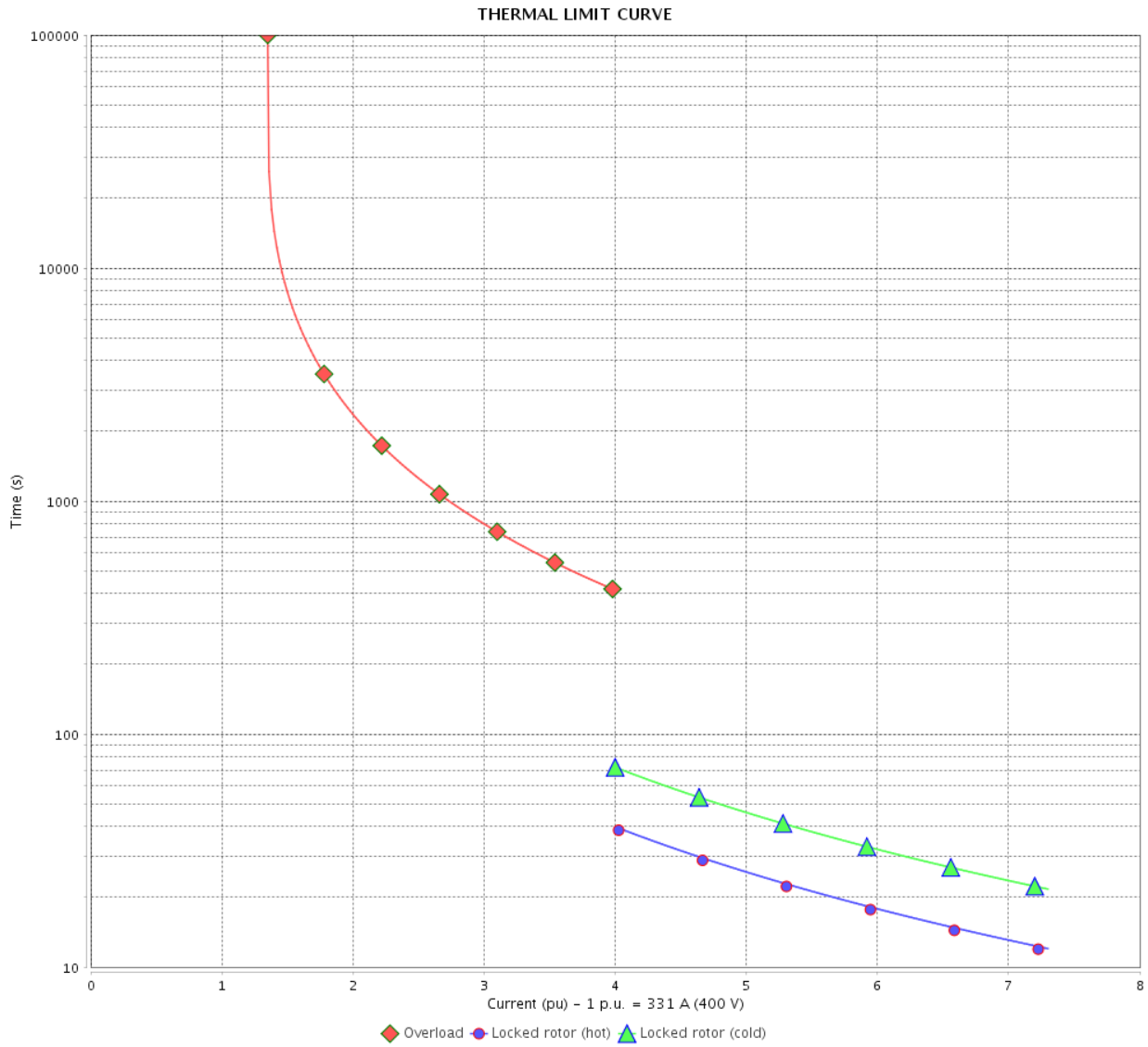
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Cooling constant

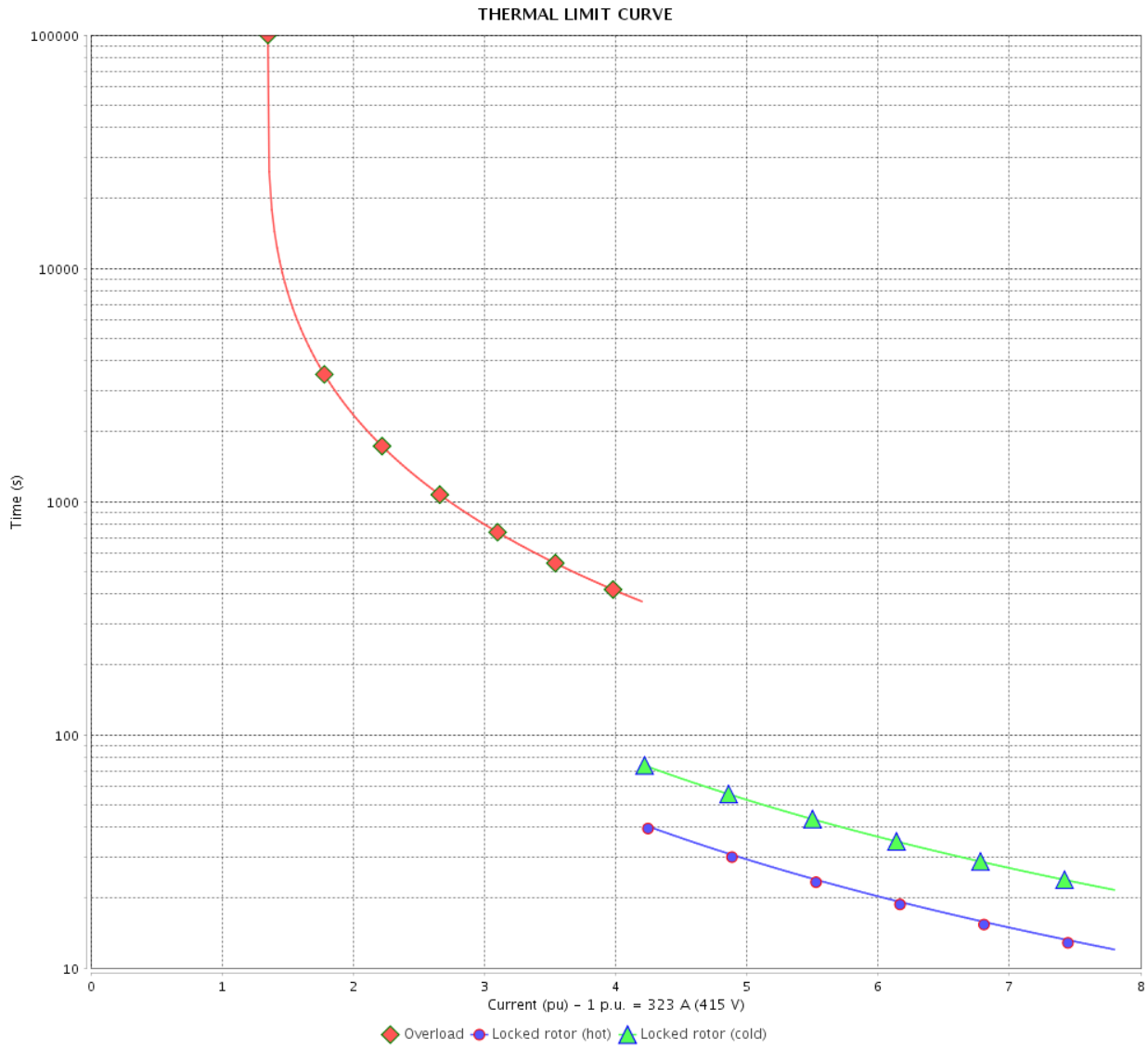
Rev.	Changes Summary	Performed	Checked	Date
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Date	12/04/2022			

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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date		12/04/2022		

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

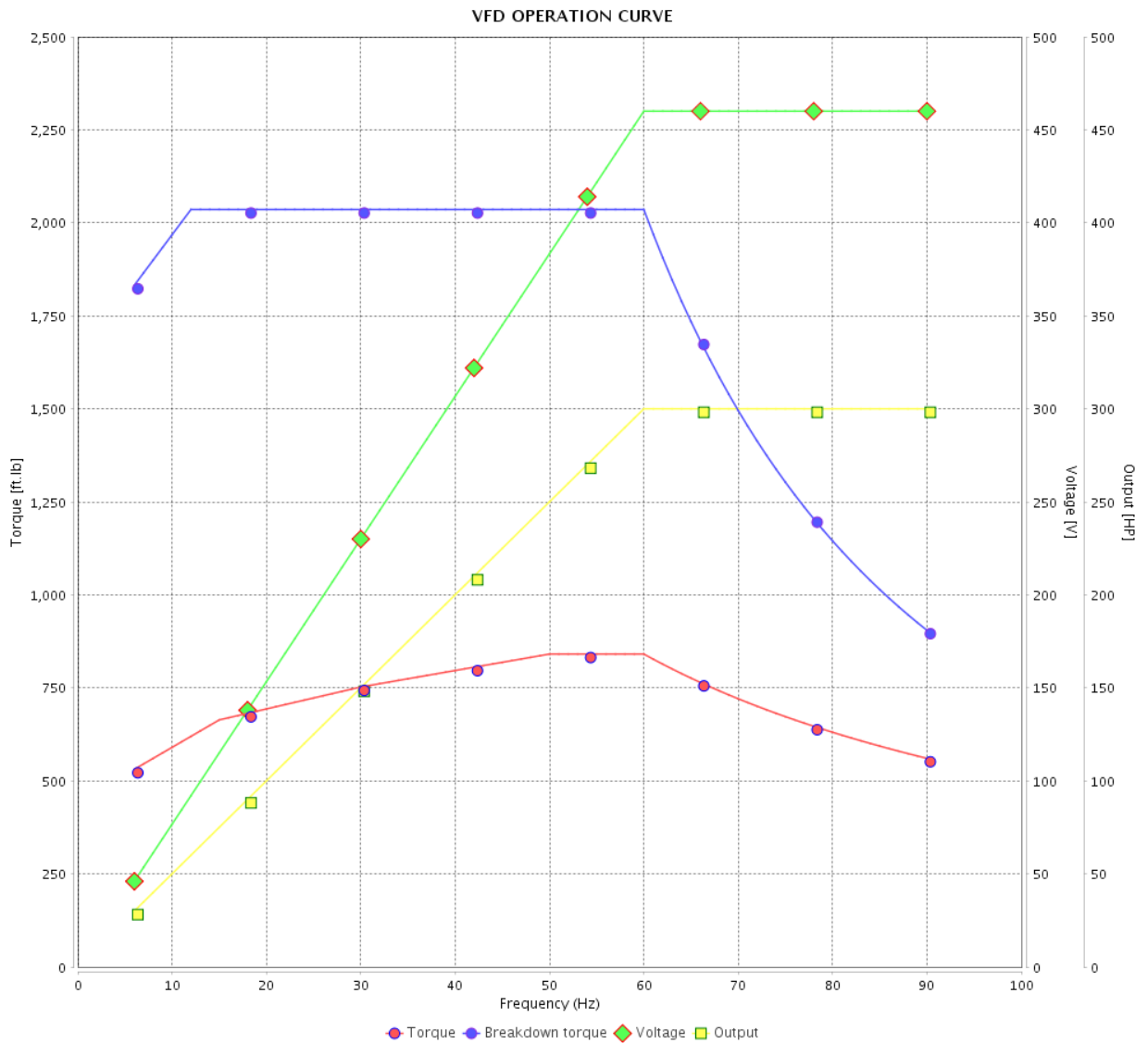


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Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
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Design : B

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VFD OPERATION CURVE

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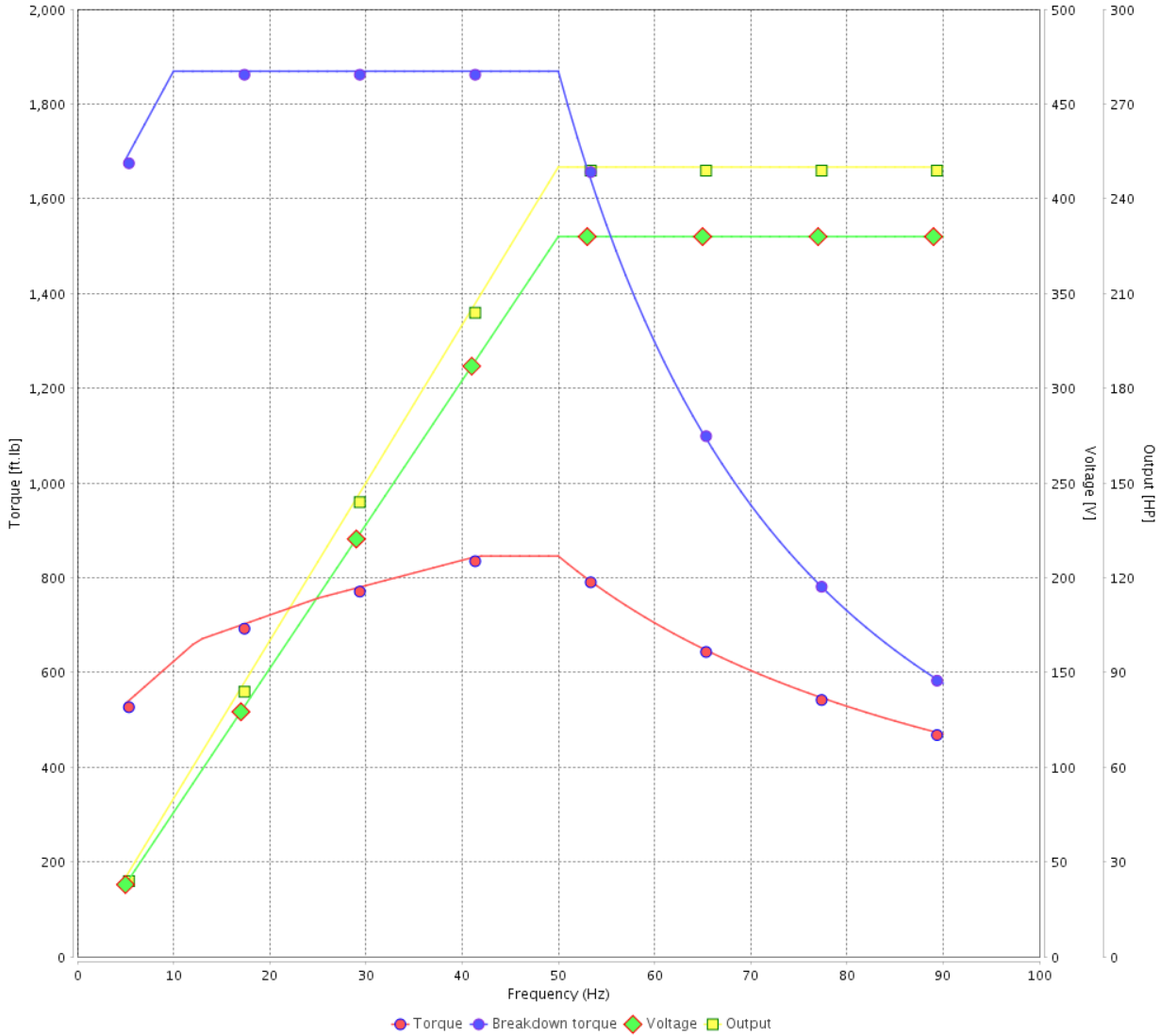
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

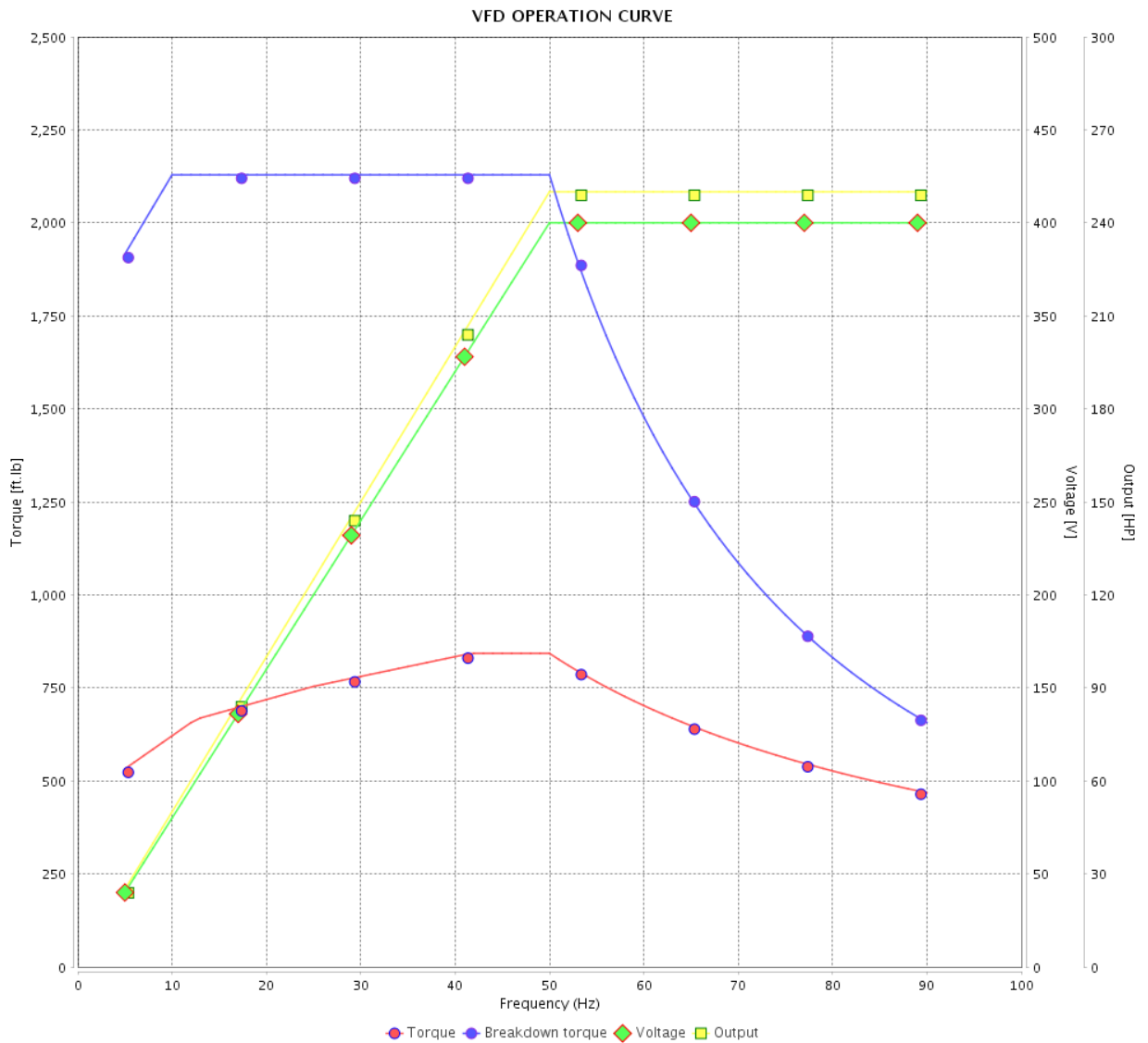


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Catalog # : 30018OT3G447/9TS-W40



Performance : 400 V 50 Hz 4P IE3

Rated current : 331 A
LRC : 7.3
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Locked rotor torque : 210 %
Breakdown torque : 240 %
Rated speed : 1480 rpm

Moment of inertia (J) : 56.1 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



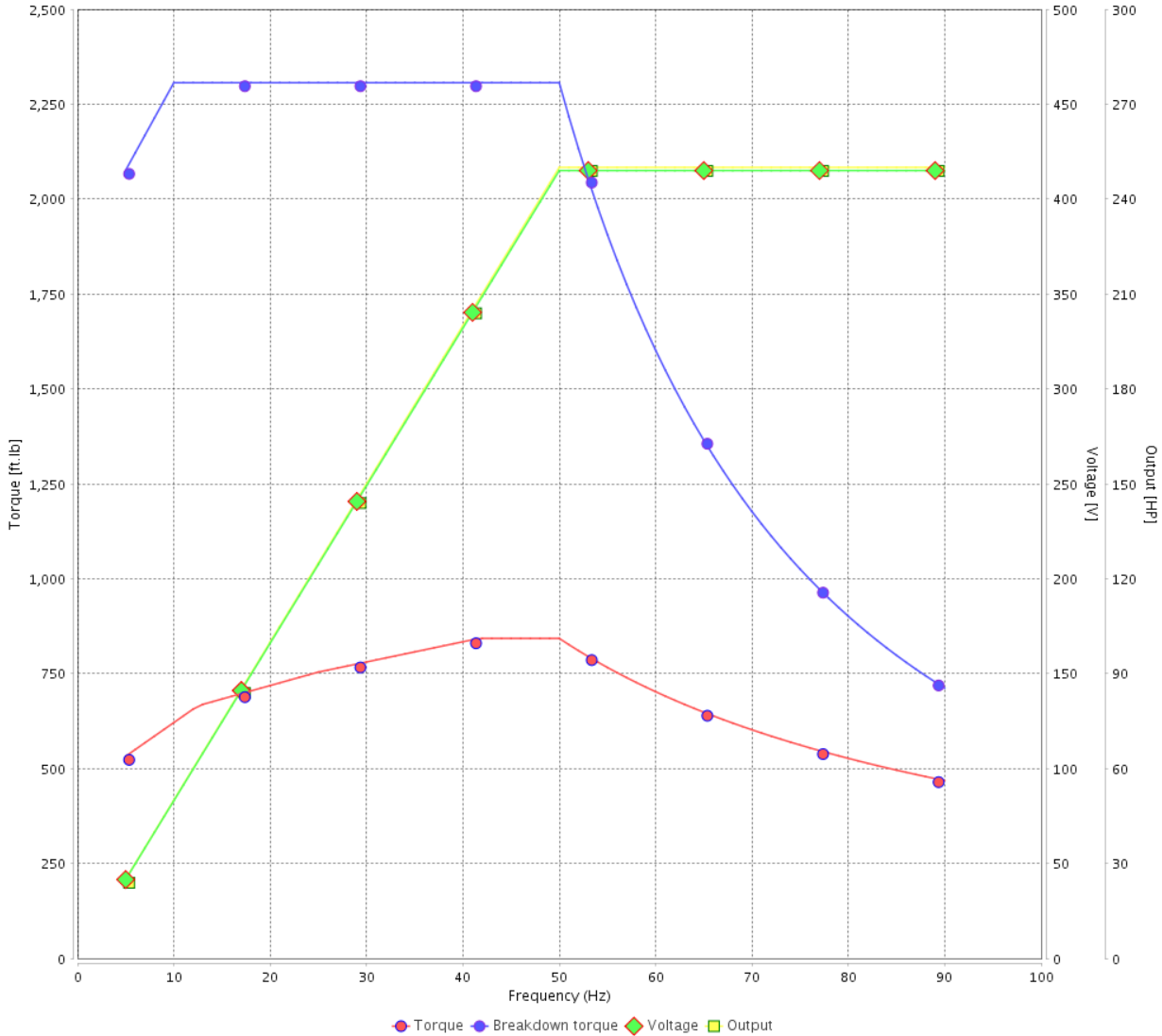
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VFD OPERATION CURVE



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Rated current : 323 A
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Rated speed : 1480 rpm

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Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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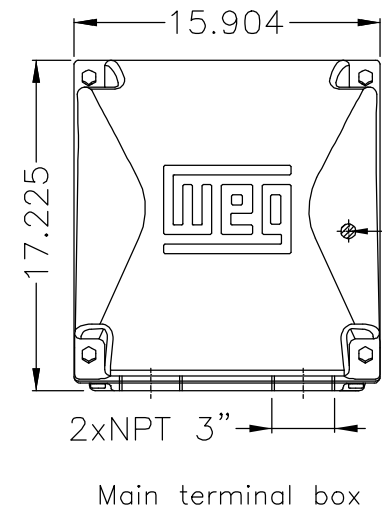
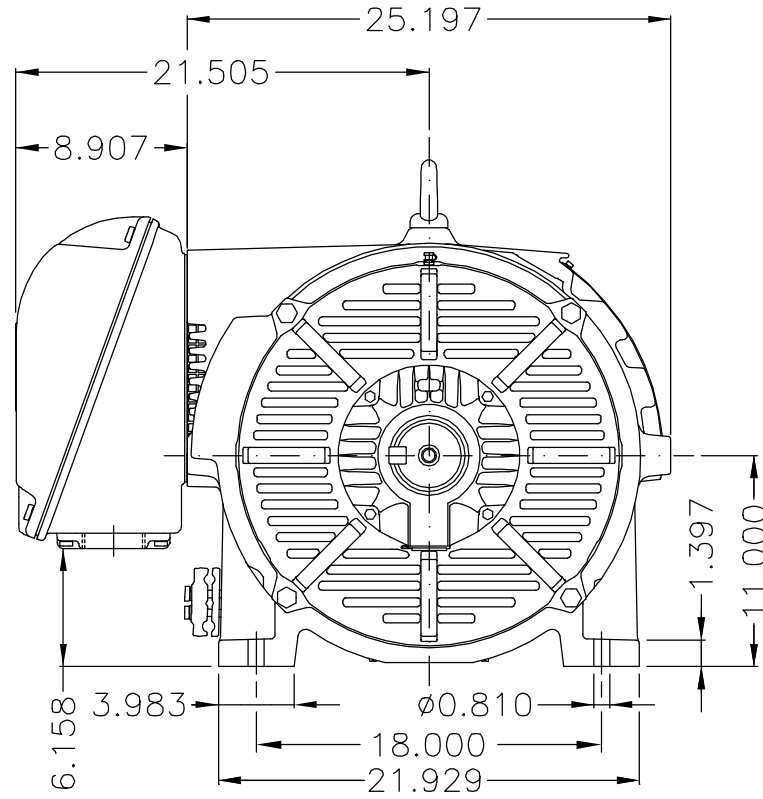
EIXO/SHAFT	
PADRÃO/STANDARD	
OPCIONAL/OPTIONAL	
ESPECIAL/SPECIAL	X

Dimensões em polegada
Dimensions in inches

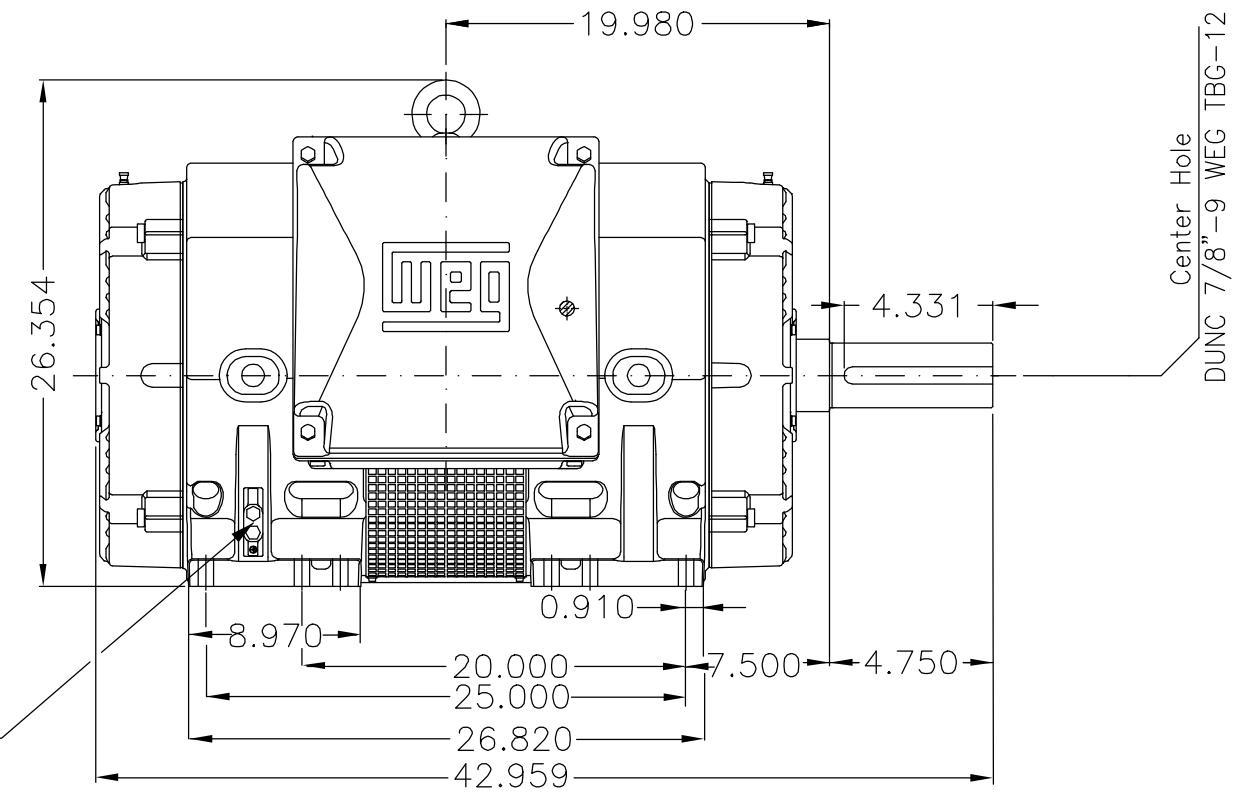
CERTIFIED WEG MOTORES
Certified document.
Not subject to changes.

THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.

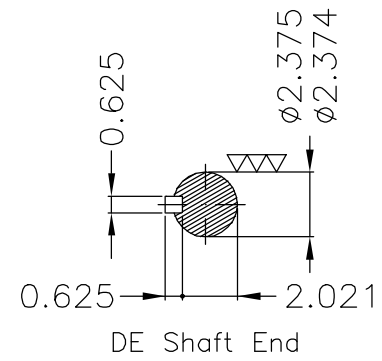
A
B
C
D
E



Grounding for leads 35–120mm²



Grounding for leads 25–185mm²



Rolamento dianteiro de esferas 6314 C3 / 6314 C3 DE ball bearing						
Plano de pintura 203A / Painting plan 203A						
Forma construtiva NEMA F-1 / Mounting NEMA F-1						
Forma construtiva B3D / Mounting B3R(D)						
WEG ELECTRIC CORPORATION - WEC						
					SCALE	
500001549643		ALTERADO CONFORME CLAIM 415219992	RICLAV	DALTONR	DALTONR	06.03.2019 02
500001300923		ALT. CONFORME NOTA 414627713	AFILHO	MENSOR	MENSOR	24.04.2017 01
ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE VER
EXECUTED	NSCHMIDT	THREE PHASE W40 MOTOR NEMA PREMIUM EFF FRAME 447/9TS IP23			10003884421	
CHECKED	CVITORINO				000 02	
RELEASED	CVITORINO					
REL DT	14.10.2015	WMO	Jaragua do Sul	Product Engineering	SHEET	1 /

300 HP 04 Poles 60Hz 414037716/0-MEC.

A

UNCONTROLLED COPY RELEASED ZME A3



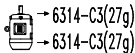
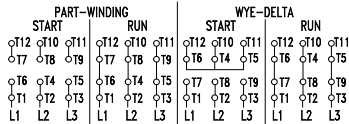
MODEL 300180T3G447/9TS-W40
MADE IN BRAZIL
13413434



MOD.T01#FOXON



PH 3	FR 447/9TS	HP(kW) 300(220)	Hz 60
V 460	A 339	IP23	
NEMA NOM EFF	95.8 %	RPM 1780	
ENCL ODP	DUTY CONT.	INS. CL. F ΔT 80 K	
PF 0.85	DES B	CODE H	AMB. 40°C
SF 1.15	SFA 390	ALT 1000 m.a.s.l.	



MOBIL POLYREX EM
20000 h

1916 Lbs