

Product Information Packet

January 12, 2017

Data shown is for the current revision model #. Ensure your nameplate model # matches.

Model Number:	5KS511SAA178A
Catalog Number:	Q542
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG20
Outline Drawing:	239C6B00MR

Accessory Connection Diagrams			
Bearing Thermocouple:	None	Heater:	3027JE-1C
RTD:	None	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	None		

Table of Contents	
Specification	01
Performance Characteristics	02
Outline Drawing	03
Connection Drawing(s)	04



Marks:

MODEL NUMBER:	5KS511SAA178A	Estimated Weight:	5393 Lbs
Outline Drawing:	239C6B00MR	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG20	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	SD
Design Code:	50BD0171A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	5011LS	Insulation Class:	F
Phases:	3	NEMA Design:	B
Poles:	2	Nominal Efficiency:	95.8 %
Output Power:	450HP 333KW	Guaranteed Efficiency:	95.0
RPM:	3570	3/4 Load Efficiency:	96.0
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	49.2
Amps - FL:	468.0	Power Factor:	94.0
Service Factor:	1.15	Bearing - DE:	6315ZC3
Alt Service Factor:	--	Bearing - ODE:	6315ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

HTR LDS HE1-HE2 115V 350W
 ROT CW FACING ODE LEAD/PH SEQUENCE 1-2-3/1-2-3
 INVERTER DUTY PER NEMA MG1 PART 31
 ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT
 VAR TORQUE RANGE 0-60 HZ
 FOR DIRECT COUPLED LOAD ONLY

Additional Information:

2P - LS EXTN - SPLIT LEAD
 2500 CU IN - 2(4.00" NPT)
 C/B GRD PLATE
 115V HTR LDS TO AUX BOX OPP MAIN CONDUIT BOX
 SPACE HEATER CAUTION NAMEPLATE
 NEMA TYPE GRD PAD
 F1 MOUNTING
 PROVISION FOR BTD ON BOTH ENDS PLUGGED

Performance Characteristics

1st Winding 1st Connection

Design: 50BD0171A

Marks:

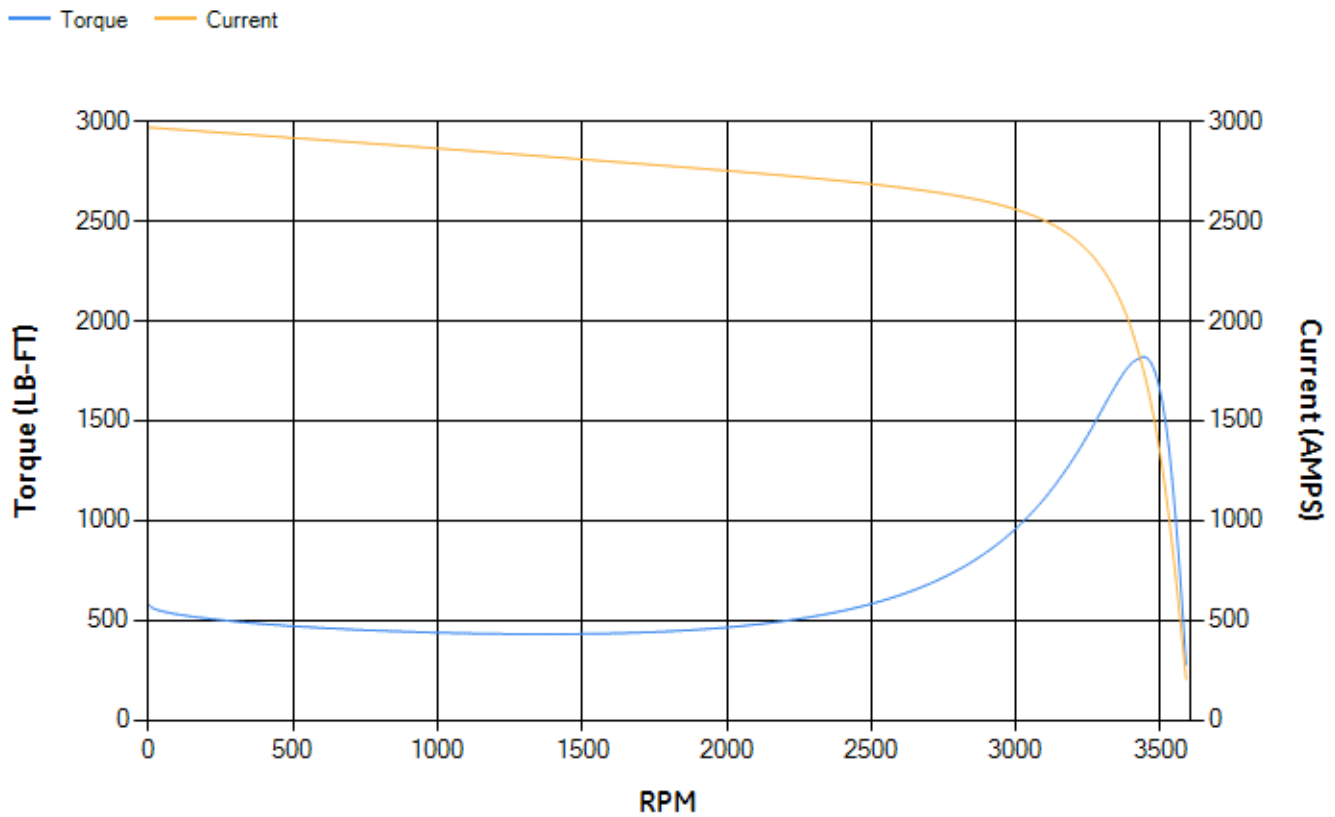
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.33	95.54	96	96.04	95.79	93.82	0.00
% PF	93.66	93.96	94.23	94.06	92.19	82.76	8.35
AMPS	589.63	539.58	464.93	349.69	238.46	135.61	68.67

TORQ(FL)#FT	662.01	TORQ(LR)%FL	87.38	TORQ(BD)%FL	274.65
AMPS(LR)	2969.37	PF AT START	0.15		

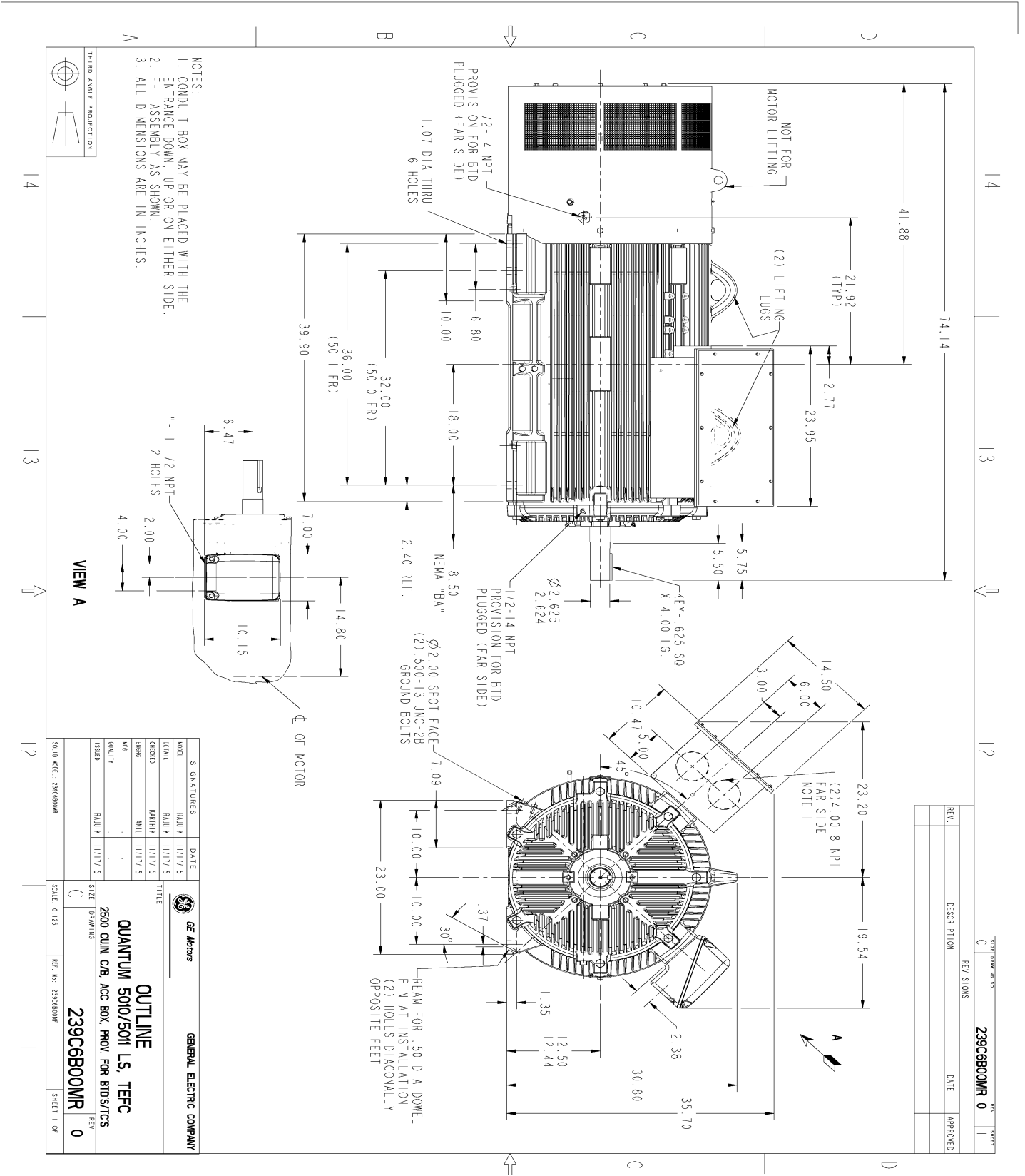
This motor is capable of two cold or one hot start with a maximum connected load inertia of 1069 Lb-Ft Sq (45 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 32 seconds. Safe stall time at 100% voltage is 62 seconds cold, 38 seconds hot. Rotor inertia is 108.15 Lb-Ft Sq (4.55 Kg-meter Sq).

Open Circuit A-C:	2.112	Short Circuit D-C:	0.043
Short Circuit A-C:	0.052	X/R Ratio:	16.148
Stator Slots:	48	Rotor Slots:	40

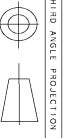
Speed Torque Current Curve (First Connection, First Speed)



Marks:



NOTES:
 1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
 2. F-1 ASSEMBLY AS SHOWN.
 3. ALL DIMENSIONS ARE IN INCHES.



VIEW A

REV.	DESCRIPTION	DATE	APPROVED

MODEL	SIGNATURES	DATE	<p>GENERAL ELECTRIC COMPANY</p> <p>OUTLINE</p> <p>QUANTUM 5010/5011 LS, TEFC</p> <p>2500 CUIN C/B, ACC BOX, PROV. FOR BTDS/TCS</p> <p>239C6B00MR</p> <p>SCALE: 0.125 REF. NO. 239C6B00MR SHEET 1 OF 1</p>
REV. A	RAJUL K	11/17/15	
DESIGN	MARINK	11/17/15	
CHKD	ANIL	11/17/15	
ISSUED	RAJUL K	11/17/15	
SIZE	C		

Marks:

Connection Diagram
GEM2034E-FIG20



Heater Connection
3027JE-1C

