

# Product Information Packet

January 12, 2017

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

<b>Model Number:</b>	<b>5KS513SAA128A</b>
<b>Catalog Number:</b>	<b>Q531</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG20
<b>Outline Drawing:</b>	239C6C00HD

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

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**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS513SAA128A</b>	<b>Estimated Weight:</b>	6917 Lbs
<b>Outline Drawing:</b>	239C6C00HD	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG20	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	SD
<b>Design Code:</b>	50BD0087A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	5013ST	<b>Insulation Class:</b>	F
<b>Phases:</b>	3	<b>NEMA Design:</b>	--
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	96.2 %
<b>Output Power:</b>	600HP 444KW	<b>Guaranteed Efficiency:</b>	95.4
<b>RPM:</b>	3565	<b>3/4 Load Efficiency:</b>	96.3
<b>Voltage:</b>	460	<b>KVA Code:</b>	F
<b>Hertz:</b>	60	<b>Max KVAR:</b>	52.2
<b>Amps - FL:</b>	614.0	<b>Power Factor:</b>	95.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6315ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6315ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

HTR LDS HE1-HE2 115V 350W  
 ROT CCW FACING ODE LEAD/PH SEQUENCE 3-2-1/1-2-3  
 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 - ST EXTN - SPLIT LEAD  
 5700 CU IN - 3(3.00" 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: 50BD0087A**

**Marks:**

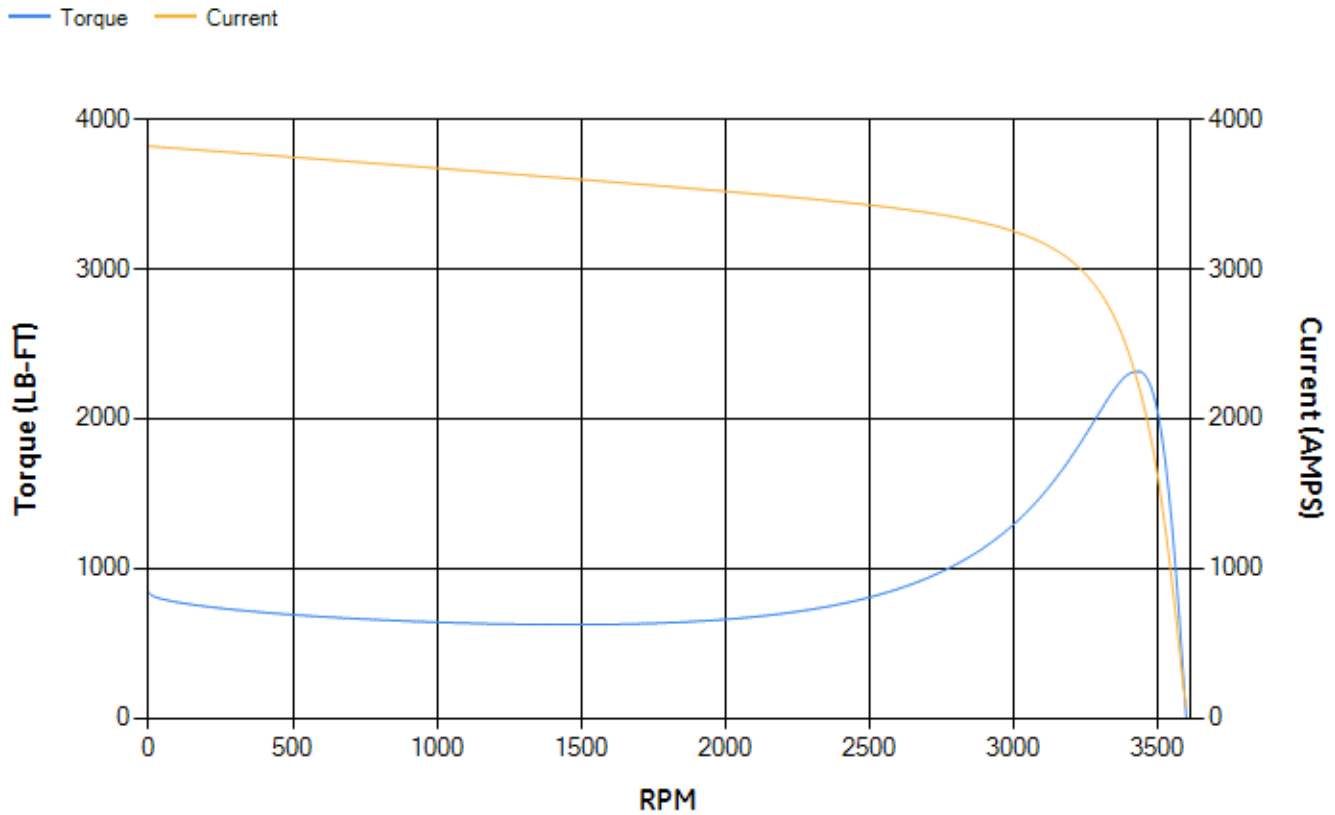
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.36	95.62	96.15	96.34	96.34	94.96	0.00
% PF	93.91	94.31	94.76	94.98	93.92	87.09	8.1
AMPS	783.83	716.12	615.44	460.27	310.34	169.76	72.84

<b>TORQ(FL)#FT</b>	883.71	<b>TORQ(LR)%FL</b>	94.95	<b>TORQ(BD)%FL</b>	261.63
<b>AMPS(LR)</b>	3820.56	<b>PF AT START</b>	0.16		

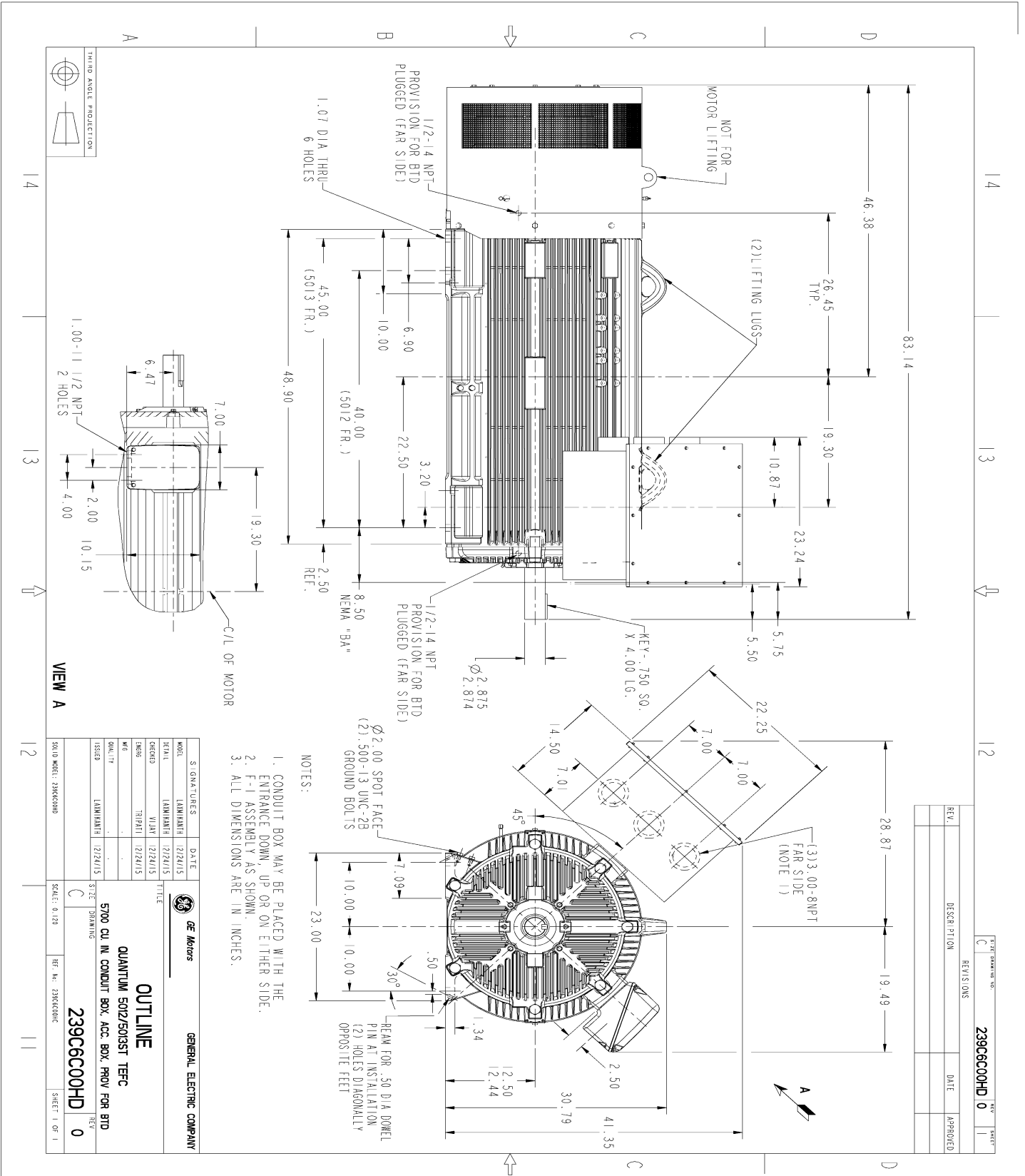
This motor is capable of two cold or one hot start with a maximum connected load inertia of 1268 Lb-Ft Sq (53.38 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 27 seconds. Safe stall time at 100% voltage is 59 seconds cold, 33 seconds hot. Rotor inertia is 158.26 Lb-Ft Sq (6.66 Kg-meter Sq).

<b>Open Circuit A-C:</b>	2.344	<b>Short Circuit D-C:</b>	0.044
<b>Short Circuit A-C:</b>	0.047	<b>X/R Ratio:</b>	16.529
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	40

**Speed Torque Current Curve (First Connection, First Speed)**

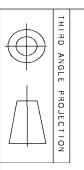


Marks:



- 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.

REV.	DESCRIPTION	DATE	APPROVED



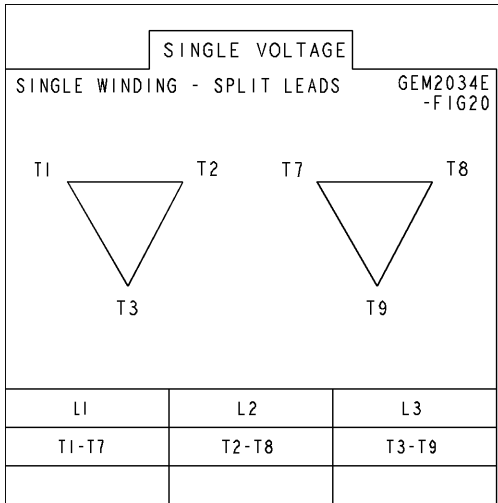
THIRD ANGLE PRODUCTION

VIEW A

MODEL	SIGNATURES	DATE	<p><b>GENERAL ELECTRIC COMPANY</b></p> <p><b>OUTLINE</b></p> <p><b>QUANTUM 502/503ST TFC</b></p> <p><b>5700 CU IN CONDUIT BOX, ACC. BOX, PROV FOR BTD</b></p> <p><b>239C6C00HD</b></p>
SERIAL	LAMINATOR	12/24/15	
ORDER	PLAN	12/24/15	
DESIG	TRIPART	12/24/15	
QUALITY	LAMINATOR	12/24/15	
ISSUED			
SCALE: 0.125			REV 0
SHEET NO. 239C6C00HD			SHEET 1 OF 1

Marks:

**Connection Diagram**  
GEM2034E-FIG20



**Heater Connection**  
3027JE-1C

