

Product Information Packet

January 12, 2017

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

Model Number:	5KS513SAA357A
Catalog Number:	Q5011
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG20
Outline Drawing:	239C6C00HE

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

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Marks:

MODEL NUMBER:	5KS513SAA357A	Estimated Weight:	6859 Lbs
Outline Drawing:	239C6C00HE	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG20	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	SD
Design Code:	50BD3181A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	5013S	Insulation Class:	F
Phases:	3	NEMA Design:	--
Poles:	6	Nominal Efficiency:	96.2 %
Output Power:	500HP 370KW	Guaranteed Efficiency:	95.4
RPM:	1190	3/4 Load Efficiency:	96.5
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	112.2
Amps - FL:	559.0	Power Factor:	87.0
Service Factor:	1.15	Bearing - DE:	6320ZC3
Alt Service Factor:	--	Bearing - ODE:	6320ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

HTR LDS HE1-HE2 115V 350W
 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:

6P - S 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: 50BD3181A

Marks:

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.48	95.76	96.32	96.54	96.61	95.44	0.00
% PF	87.21	87.33	87.11	85.15	78.9	59.25	2.88
AMPS	702.46	643.52	557.99	426.93	306.96	206.88	156.53

TORQ(FL)#FT 2207.64
AMPS(LR) 3382.54

TORQ(LR)%FL 108.5
PF AT START 0.22

TORQ(BD)%FL 248.35

This motor is capable of two cold or one hot start with a maximum connected load inertia of 23430 Lb-Ft Sq (986.4 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 49 seconds. Safe stall time at 100% voltage is 107 seconds cold, 61 seconds hot. Rotor inertia is 340.65 Lb-Ft Sq (14.34 Kg-meter Sq).

Open Circuit A-C: 1.042

Short Circuit D-C: 0.038

Short Circuit A-C: 0.046

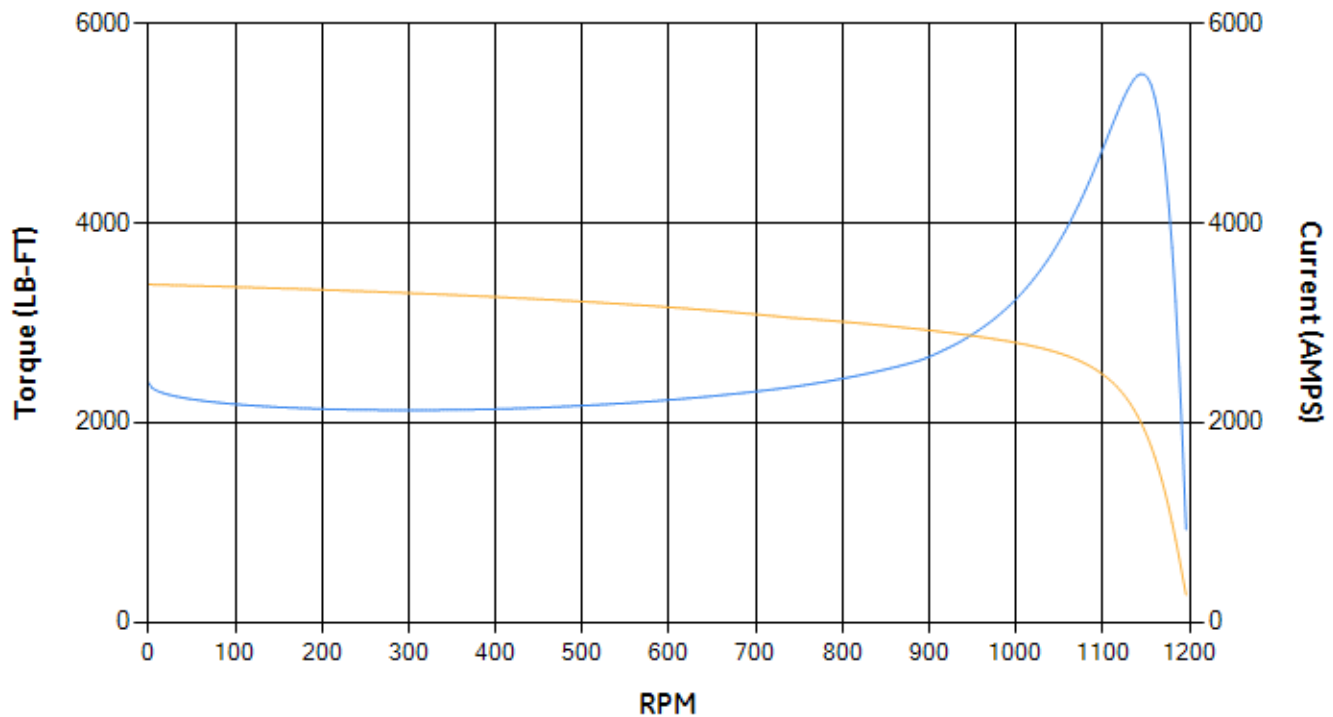
X/R Ratio: 14.434

Stator Slots: 72

Rotor Slots: 58

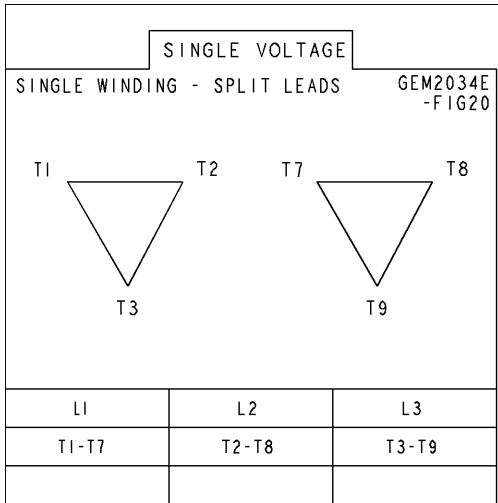
Speed Torque Current Curve (First Connection, First Speed)

— Torque — Current



Marks:

Connection Diagram
GEM2034E-FIG20



Heater Connection
3027JE-1C

