

Product Information Packet

January 12, 2017

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

Model Number:	5KS509SAA347B
Catalog Number:	Q580
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG20
Outline Drawing:	239C6A00HF

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:	5KS509SAA347B	Estimated Weight:	4650 Lbs
Outline Drawing:	239C6A00HF	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG20	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	SD
Design Code:	50BD3231A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	509L	Insulation Class:	F
Phases:	3	NEMA Design:	B
Poles:	6	Nominal Efficiency:	95.8 %
Output Power:	300HP 222KW	Guaranteed Efficiency:	95.0
RPM:	1185	3/4 Load Efficiency:	95.9
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	90.9
Amps - FL:	349.0	Power Factor:	84.0
Service Factor:	1.15	Bearing - DE:	NU 320
Alt Service Factor:	--	Bearing - ODE:	6315ZC3

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
 ROLLER BEARING - FOR BELTED LOAD ONLY

Additional Information:

6P - L EXTN - SPLIT LEAD
 1260 CU IN - 2(4.00" NPT)
 C/B GRD PLATE
 B5F4C4 HIGH STRENGTH STEEL AISI 4142 SHAFT MATERIAL
 115V HTR LDS TO AUX BOX OPP MAIN CONDUIT BOX
 SPACE HEATER CAUTION NAMEPLATE
 NEMA TYPE GRD PAD
 F1 MOUNTING
 SHAFT BLOCKING FOR SHIPMENT
 PROVISION FOR BTD ON BOTH ENDS PLUGGED

Performance Characteristics

1st Winding 1st Connection

Design: 50BD3231A

Marks:

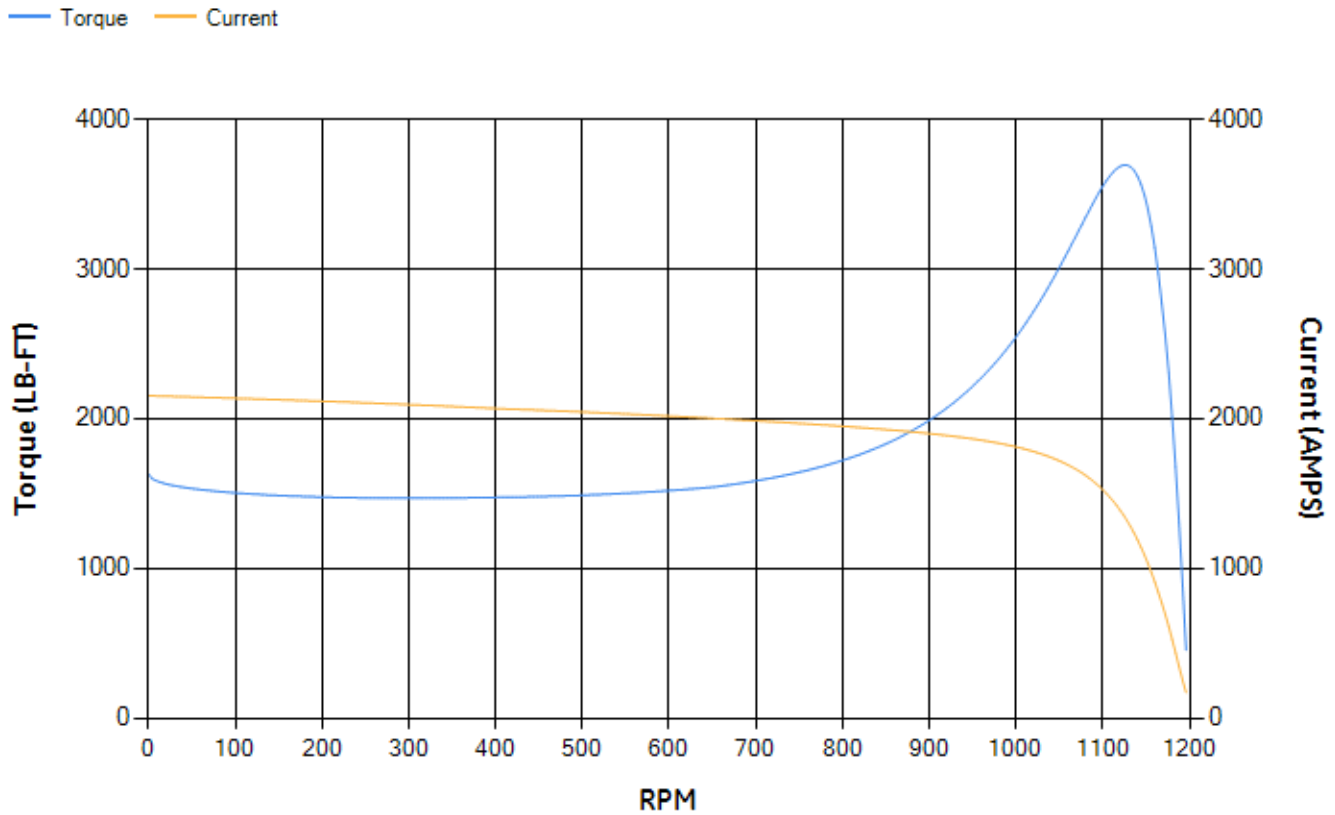
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.17	95.39	95.87	95.92	95.66	93.62	0.00
% PF	85.19	84.86	83.87	80.16	71.2	49.21	3.24
AMPS	432.89	398.9	349.4	273.89	206.1	152.36	126.76

TORQ(FL)#FT	1327.03	TORQ(LR)%FL	122.71	TORQ(BD)%FL	277.78
AMPS(LR)	2153.03	PF AT START	0.23		

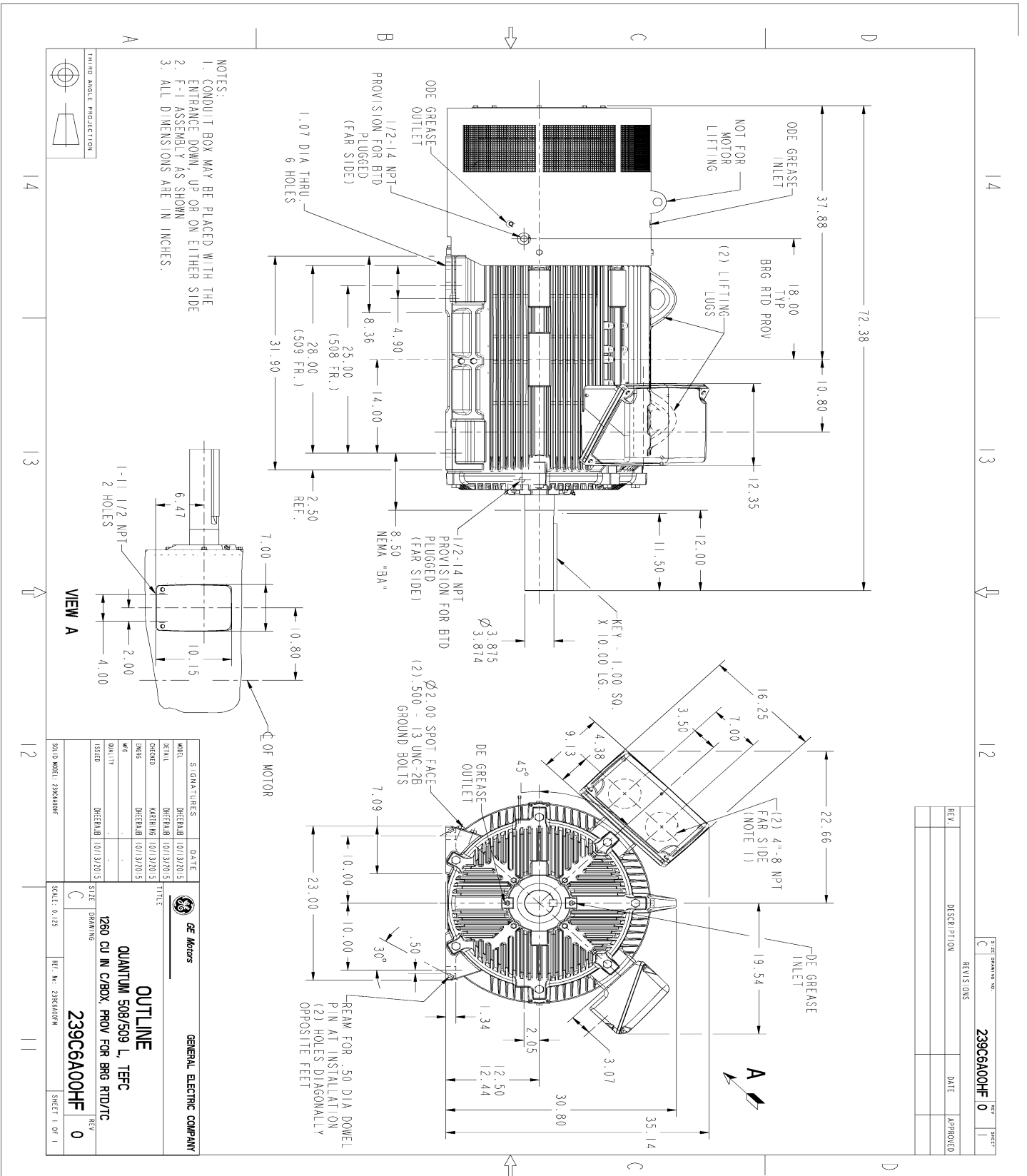
This motor is capable of two cold or one hot start with a maximum connected load inertia of 14226 Lb-Ft Sq (598.91 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 40 seconds. Safe stall time at 100% voltage is 81 seconds cold, 48 seconds hot. Rotor inertia is 184.76 Lb-Ft Sq (7.78 Kg-meter Sq).

Open Circuit A-C:	0.647	Short Circuit D-C:	0.042
Short Circuit A-C:	0.036	X/R Ratio:	15.709
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)



Marks:



REV.	DESCRIPTION	DATE	APPROVED

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Marks:

Connection Diagram
GEM2034E-FIG20



Heater Connection
3027JE-1C



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E5202AC1	115E5200AD1
Bearing	235A2528AA01	235A2513AG01
Slinger/Inproseal	149C4399G11	149C4399G10

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	148C8074AA1
Fan Cover	119D3661AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	179B9058G03

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	