

# Product Information Packet

November 8, 2016

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

<b>Model Number:</b>	<b>5KS449XAA290B</b>
<b>Catalog Number:</b>	<b>M9376</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG20
<b>Outline Drawing:</b>	239C6800ZE

Accessory Connection Diagrams			
<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	None
<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>5KS449XAA290B</b>	<b>Estimated Weight:</b>	2990 Lbs
<b>Outline Drawing:</b>	239C6800ZE	<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>	841
<b>Design Code:</b>	49BD1181B	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	449T	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	96.2 %
<b>Output Power:</b>	300HP 222KW	<b>Guaranteed Efficiency:</b>	95.8
<b>RPM:</b>	1790	<b>3/4 Load Efficiency:</b>	96.2
<b>Voltage:</b>	575	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	67.5
<b>Amps - FL:</b>	265.0	<b>Power Factor:</b>	88.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	NU 318
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6318ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

ROLLER BEARING - FOR BELTED LOAD ONLY  
 DE BRG 90RU03M, ODE BRG 90BC03JP3  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS449XAA290B S/N: XXX  
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200 C GC  
 CL 1 ZONE2 AEX NA IIC 200C;CL 1 DIV2 GRP ABCD 200C  
 IN -25C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR  
 SURF TEMP 260C AT 1.15SF ON SINE-WAVE PWR  
 OR 200 C VT OR 215 C CT OR 200 C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB  
 VT 0-60 HZ, CT 45-60 HZ, CHP 60-75 HZ.  
 EXCEPTION TO IEEE-STD-841-2009:SOUND POWER 99 DBA

**Additional Information:**

4P - T EXTN - SPLIT LEAD  
 PAINTED FRAME ID & SHAFT,  
 FAN COVER INSIDE & ODE E/S OUTSIDE  
 1260 CU IN - 2(4.00" NPT) WITH DRAIN HOLES  
 C/B GRD PLATE  
 INPRO SEAL BOTH ENDS  
 OIL RESISTANT SLEEVING ON LEADS  
 .002" TIR SHAFT RUNOUT  
 ROUTINE TEST REPORT AND 5 POINT VIBRATION TEST  
 REPORT INCLUDED IN C/B  
 COPPER WASHER UNDER HEADS OF BEARING CAP BOLTS,  
 APPLY TITE-SEAL (A50CD427A) ON BEARING CAP SCREWS,  
 RABBETS AND PLUG THREADS.



B5F4C4 HIGH FATIGUE STEEL AISI 4142 SHAFT MATERIAL  
GROUND PAD  
F1 MOUNTING

**Performance Characteristics**

1st Winding 1st Connection

**Design: 49BD1181B**

Marks:

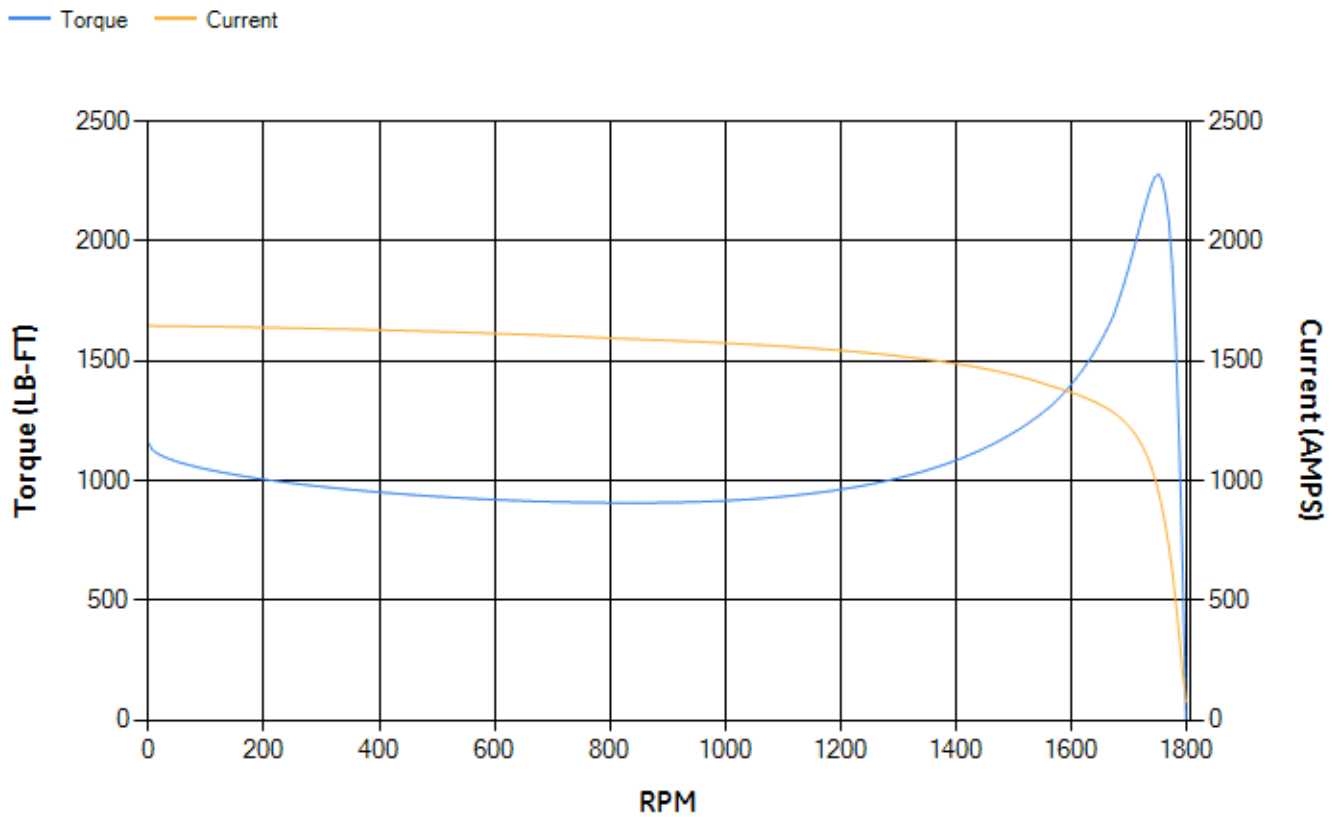
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.7	95.88	96.28	96.23	95.89	93.79	0.00
% PF	88.54	88.51	88.12	85.95	79.59	60.08	4.28
AMPS	331.38	304.39	264.77	203.68	147.15	99.66	75.25

<b>TORQ(FL)#FT</b>	879.73	<b>TORQ(LR)%FL</b>	131.39	<b>TORQ(BD)%FL</b>	258.81
<b>AMPS(LR)</b>	1646.1	<b>PF AT START</b>	0.23		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 8348 Lb-Ft Sq (351.45 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 63 seconds. Safe stall time at 100% voltage is 142 seconds cold, 76 seconds hot. Rotor inertia is 128.36 Lb-Ft Sq (5.4 Kg-meter Sq).

<b>Open Circuit A-C:</b>	1.728	<b>Short Circuit D-C:</b>	0.037
<b>Short Circuit A-C:</b>	0.072	<b>X/R Ratio:</b>	14.078
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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



Marks:

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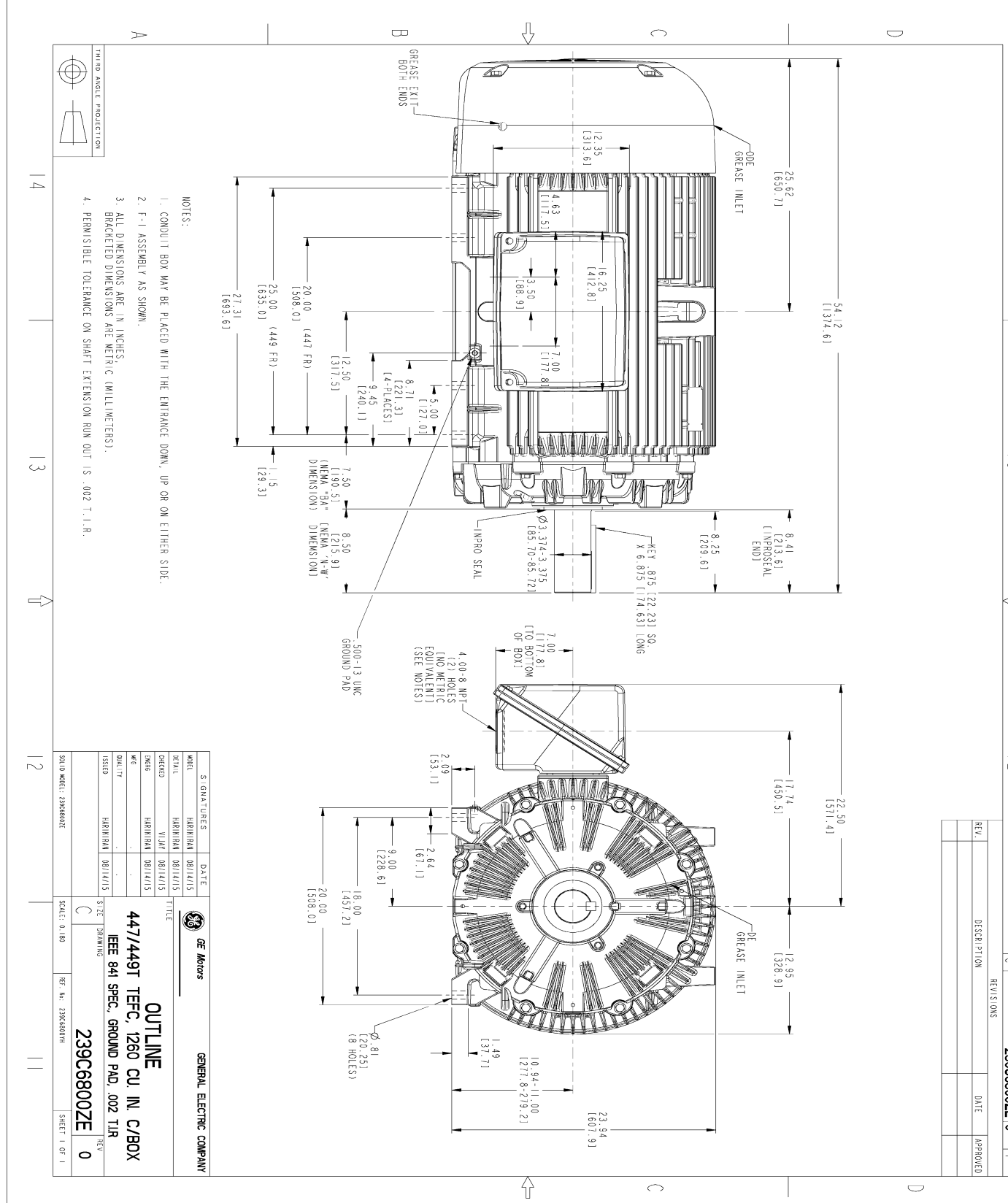
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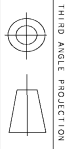
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REV.	DESCRIPTION	DATE	APPROVED

SHEET DRAWING NO.	239C6800ZE 0
REV'S/DNS	0



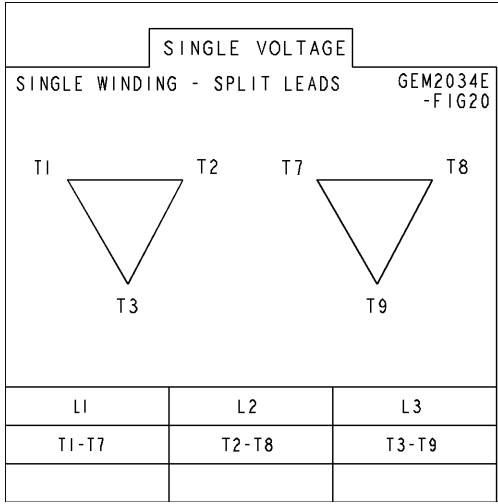
- NOTES:
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
  2. F-1 ASSEMBLY AS SHOWN.
  3. ALL DIMENSIONS ARE IN INCHES. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).
  4. PERMISSIBLE TOLERANCE ON SHAFT EXTENSION RUN OUT IS .002 T.I.R.



SIGNATURES		DATE		<p>GENERAL ELECTRIC COMPANY</p> <p><b>OUTLINE</b></p> <p>447/449T TEFC, 1260 CU IN C/BOX</p> <p>IEEE 94 SPEC, GROUND PAD, .002 TIR</p> <p><b>239C6800ZE</b></p> <p>SCALE: 0.180 REF. NO. 239C680000H SHEET 1 OF 1</p>
MODEL	HARIBAN	08/14/15	08/14/15	
DRAWN	HARIBAN	08/14/15	08/14/15	
CHECKED	HARIBAN	08/14/15	08/14/15	
DATE	HARIBAN	08/14/15	08/14/15	
ISSUED	HARIBAN	08/14/15	08/14/15	
TITLE SIZE DRAWING SCALE: 0.180 REF. NO. 239C680000H SHEET 1 OF 1				

Marks:

**Connection Diagram**  
**GEM2034E-FIG20**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4355AA1	115E4355LL1
Bearing	235A2519AA01	235A2514AG01
Slinger/Inproseal	235A4575GS5	235A4575GS5

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100G03
Fan Cover	128D6841AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	179B9058AA-G02

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

