

# Product Information Packet

November 9, 2016

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

<b>Model Number:</b>	<b>5KS449XAA408D</b>
<b>Catalog Number:</b>	<b>M8937</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	239C6800VW

<b>Accessory Connection Diagrams</b>			
<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		

## Table of Contents

Specification	01
Performance Characteristics	02
Outline Drawing	03
Connection Drawing(s)	04
Spare parts	05



**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS449XAA408D</b>	<b>Estimated Weight:</b>	2660 Lbs
<b>Outline Drawing:</b>	239C6800VW	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG7	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	841
<b>Design Code:</b>	49BD4025A	<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>	8	<b>Nominal Efficiency:</b>	94.5 %
<b>Output Power:</b>	150HP 111KW	<b>Guaranteed Efficiency:</b>	94.1
<b>RPM:</b>	890	<b>3/4 Load Efficiency:</b>	95.3
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	53.1
<b>Amps - FL:</b>	187.0	<b>Power Factor:</b>	79.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6318ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6318ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

IEEE-STD-841-2009  
 DE BRG 90BC03JP3, ODE BRG 90BC03JP3  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS449XAA408D 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 280C AT 1.15SF ON SINE-WAVE PWR  
 OR 215C VT OR 215C CT OR 215C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB  
 VT 0 - 60 HZ, CT 45-60 HZ, CHP 60-90 HZ.

**Additional Information:**

8P - T EXTN  
 PAINTED FRAME ID & SHAFT,  
 FAN COVER INSIDE & ODE E/S OUTSIDE  
 700 CU IN - 3.00" NPT WITH DRAIN HOLES  
 INPRO SEAL BOTH ENDS  
 OIL RESISTANT SLEEVING ON LEADS  
 .0015" 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.  
 GROUND PAD  
 F1 MOUNTING



**Performance Characteristics**

1st Winding 1st Connection

**Design: 49BD4025A**

Marks:

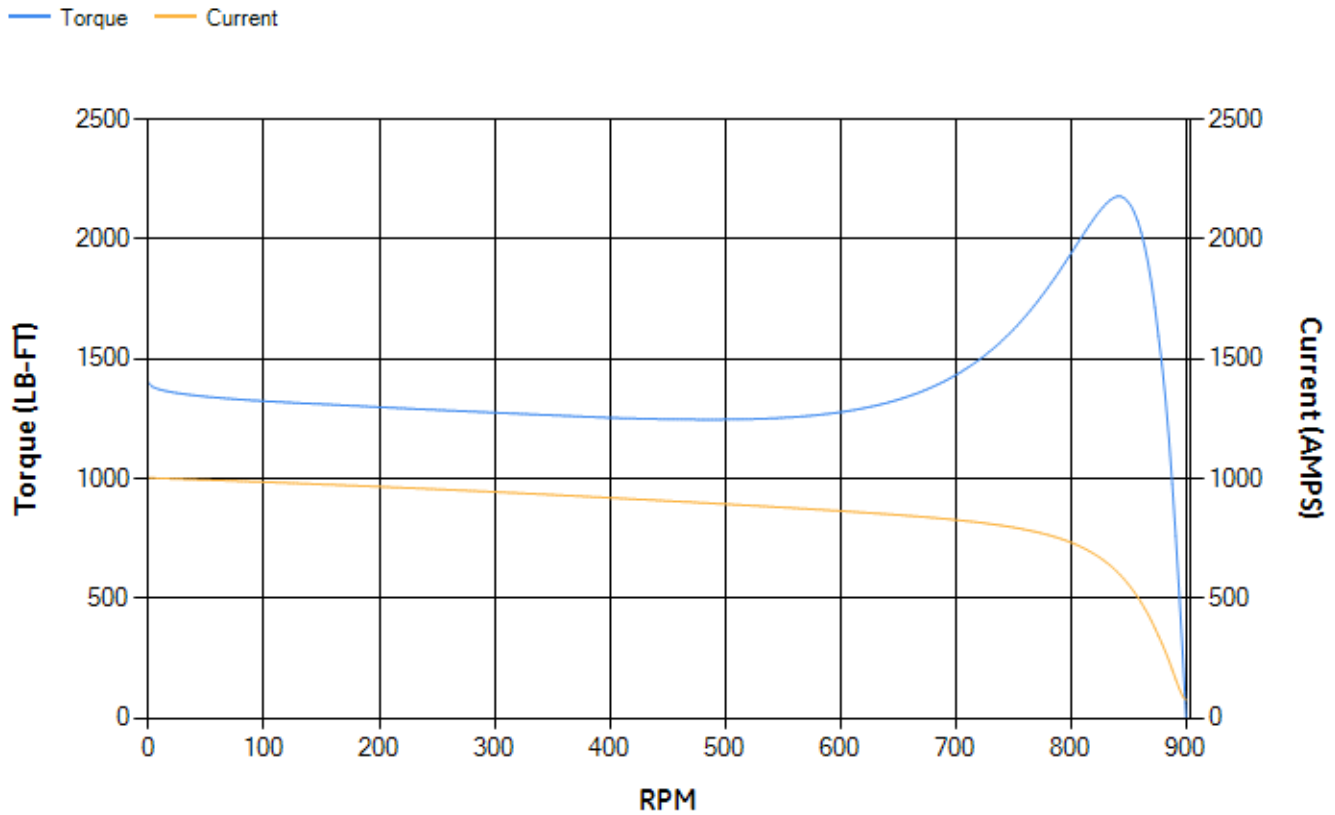
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.08	94.42	95.05	95.3	95.2	93.19	0.00
% PF	80.97	80.71	79.71	75.62	65.86	43.82	2.84
AMPS	230.39	211.85	185.31	146.11	111.96	85.94	74.01

TORQ(FL)#FT	887.22	TORQ(LR)%FL	157.76	TORQ(BD)%FL	245.16
AMPS(LR)	1002.71	PF AT START	0.33		

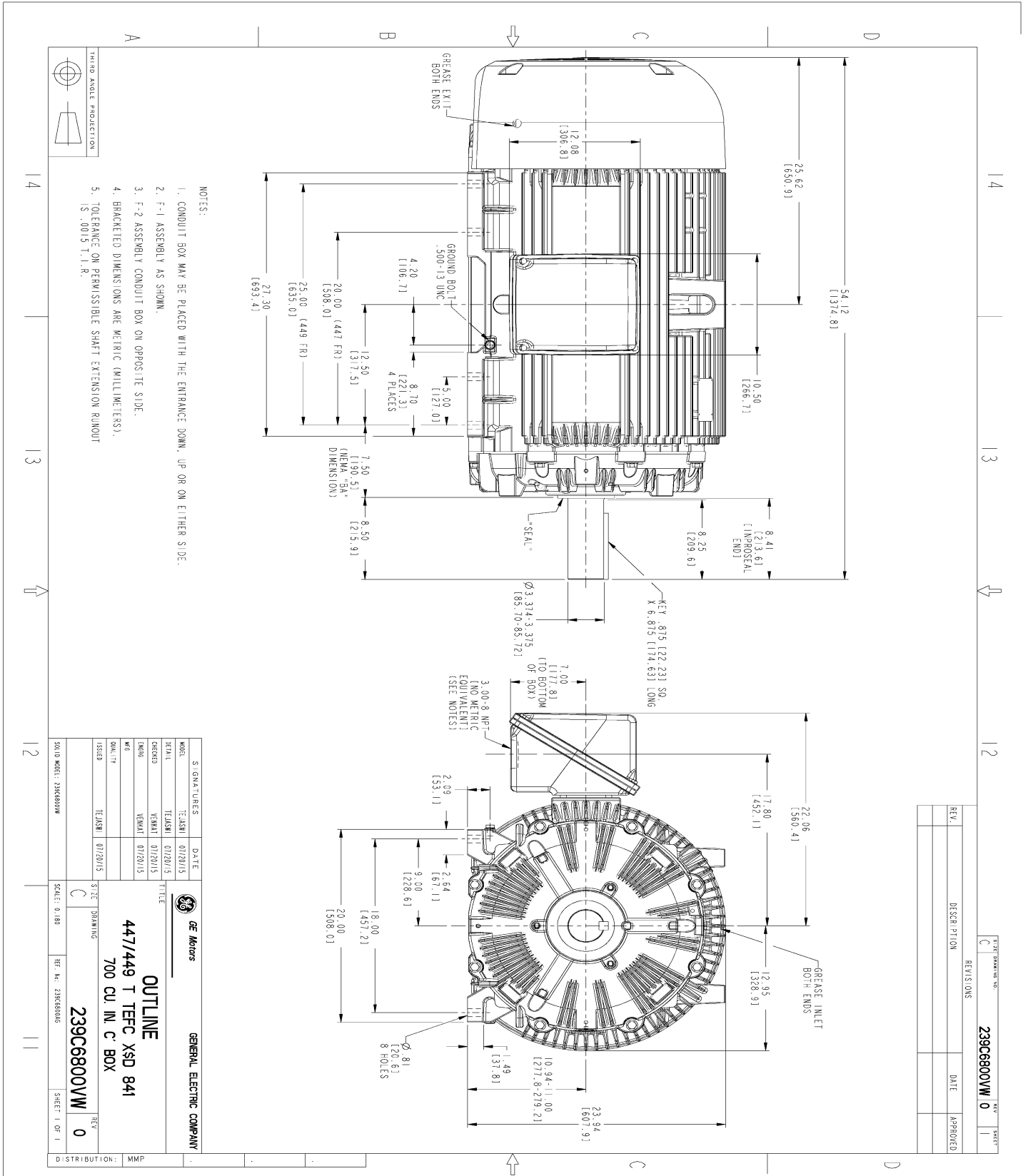
This motor is capable of two cold or one hot start with a maximum connected load inertia of 17458 Lb-Ft Sq (734.98 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 46 seconds. Safe stall time at 100% voltage is 113 seconds cold, 56 seconds hot. Rotor inertia is 138.53 Lb-Ft Sq (5.83 Kg-meter Sq).

Open Circuit A-C:	0.467	Short Circuit D-C:	0.031
Short Circuit A-C:	0.031	X/R Ratio:	11.647
Stator Slots:	72	Rotor Slots:	58

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



Marks:



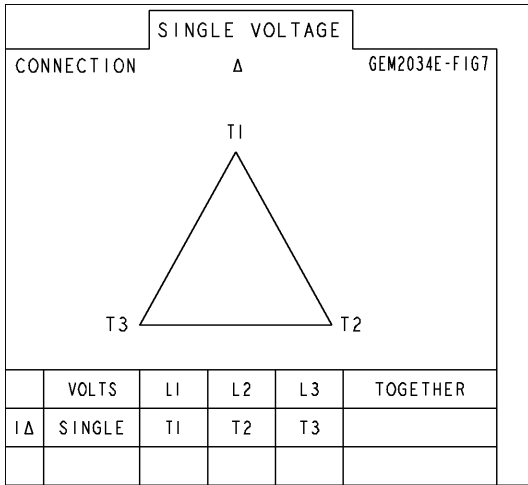
- NOTES:
- CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
  - F-1 ASSEMBLY AS SHOWN.
  - F-2 ASSEMBLY CONDUIT BOX ON OPPOSITE SIDE.
  - BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).
  - TOLERANCE ON PERMISSIBLE SHAFT EXTENSION ROUNDOFF IS .0015 T.I.R.

REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES	DATE	<p><b>GENERAL ELECTRIC COMPANY</b></p>
DESIGNER	DATE	
CHECKED	DATE	<p><b>OUTLINE</b></p> <p><b>447/449 T TFC XSD 841</b></p> <p><b>700 CU. IN. C. BOX</b></p> <p><b>239C6800VW</b></p>
DATE	DATE	
SCALE: 0.180	SCALE: 0.180	REF. NO. 239C6800G6
SHEET 1 OF 1	SHEET 1 OF 1	DISTRIBUTION: MMP

Marks:

**Connection Diagram**  
**GEM2034E-FIG7**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4355AA1	115E4355LM1
Bearing	235A2514AG01	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	118D4408DG2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	