

# Product Information Packet

January 12, 2017

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

<b>Model Number:</b>	<b>5KGS449SAA224D2</b>
<b>Catalog Number:</b>	<b>M8999</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG25
<b>Outline Drawing:</b>	239C6800FR

Accessory Connection Diagrams			
<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	None
<b>RTD:</b>	None	<b>Thermistor:</b>	None
<b>Thermostat:</b>	3027JE-2A	<b>Winding Thermocouple:</b>	None
<b>Bearing RTD:</b>	None		

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**Marks:**

<b>MODEL NUMBER:</b>	<b>5KGS449SAA224D2</b>	<b>Estimated Weight:</b>	3100 Lbs
<b>Outline Drawing:</b>	239C6800FR	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG25	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	X\$D
<b>Design Code:</b>	49BD1267A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KGS	<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>	1780	<b>3/4 Load Efficiency:</b>	96.4
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	79.2
<b>Amps - FL:</b>	335.0	<b>Power Factor:</b>	87.0
<b>Service Factor:</b>	1.00	<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  
 THERMOSTAT LEADS TB1-TB2 TRIP  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KGS449SAA224D2 S/N: XXX  
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 230 C GC  
 CL 1 ZONE2 AEX NA IIC ---C;CL 1 DIV2 GRP ABCD 230C  
 IN -40C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR  
 SURF TEMP ---C AT 1.00SF ON SINE-WAVE PWR  
 OR ---C VT OR ---C CT OR ---C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB  
 VT 0 - 60 HZ, CT -- HZ, CHP -- HZ.

**Additional Information:**

4P - T EXTN - SPLIT LEAD  
 1260 CU IN - 2(4.00" NPT)  
 C/B GRD PLATE  
 OIL RESISTANT SLEEVING ON LEADS  
 B5F4C4 HIGH FATIGUE STEEL AISI 4142 SHAFT MATERIAL  
 N.C. TRIP TSTAT LDS TO MAIN CONDUIT BOX  
 F1 MOUNTING  
 CLASS F TEMP RISE @ 1.0 S.F  
 TEFC XSD ULTRA STOCK 10/05/2016  
 ENGINEERED BY: BALASUBRAMANIANH/BILURP

**Performance Characteristics**

1st Winding 1st Connection

**Design: 49BD1267A**

**Marks:**

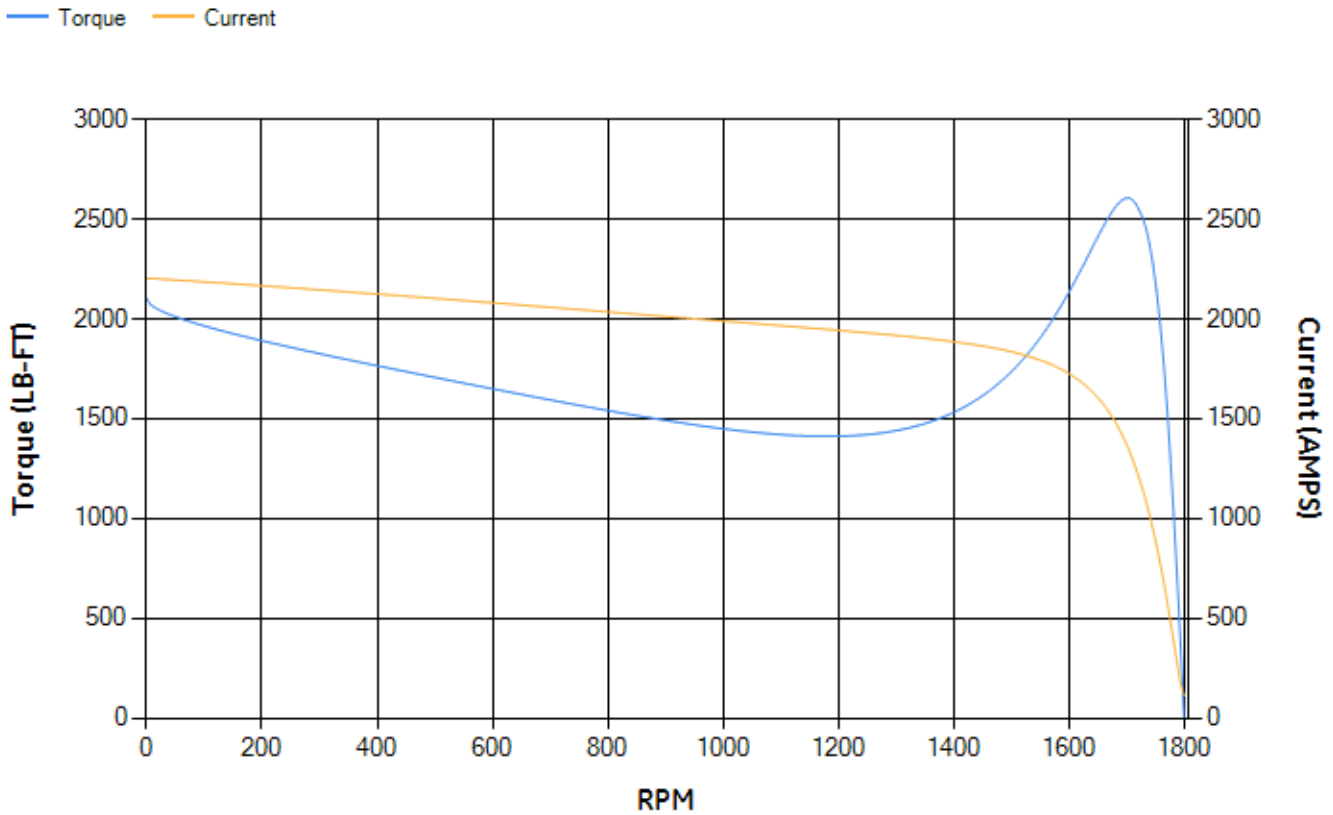
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.63	95.85	96.32	96.42	96.31	94.75	0.00
% PF	88.23	87.93	87.07	83.86	75.79	54.09	2.92
AMPS	415.96	383.14	334.79	260.43	192.32	136.95	110.4

<b>TORQ(FL)#FT</b>	884.73	<b>TORQ(LR)%FL</b>	237.59	<b>TORQ(BD)%FL</b>	294.03
<b>AMPS(LR)</b>	2204.11	<b>PF AT START</b>	0.34		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 3452 Lb-Ft Sq (145.33 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 15 seconds. Safe stall time at 100% voltage is 49 seconds cold, 18 seconds hot. Rotor inertia is 138.63 Lb-Ft Sq (5.84 Kg-meter Sq).

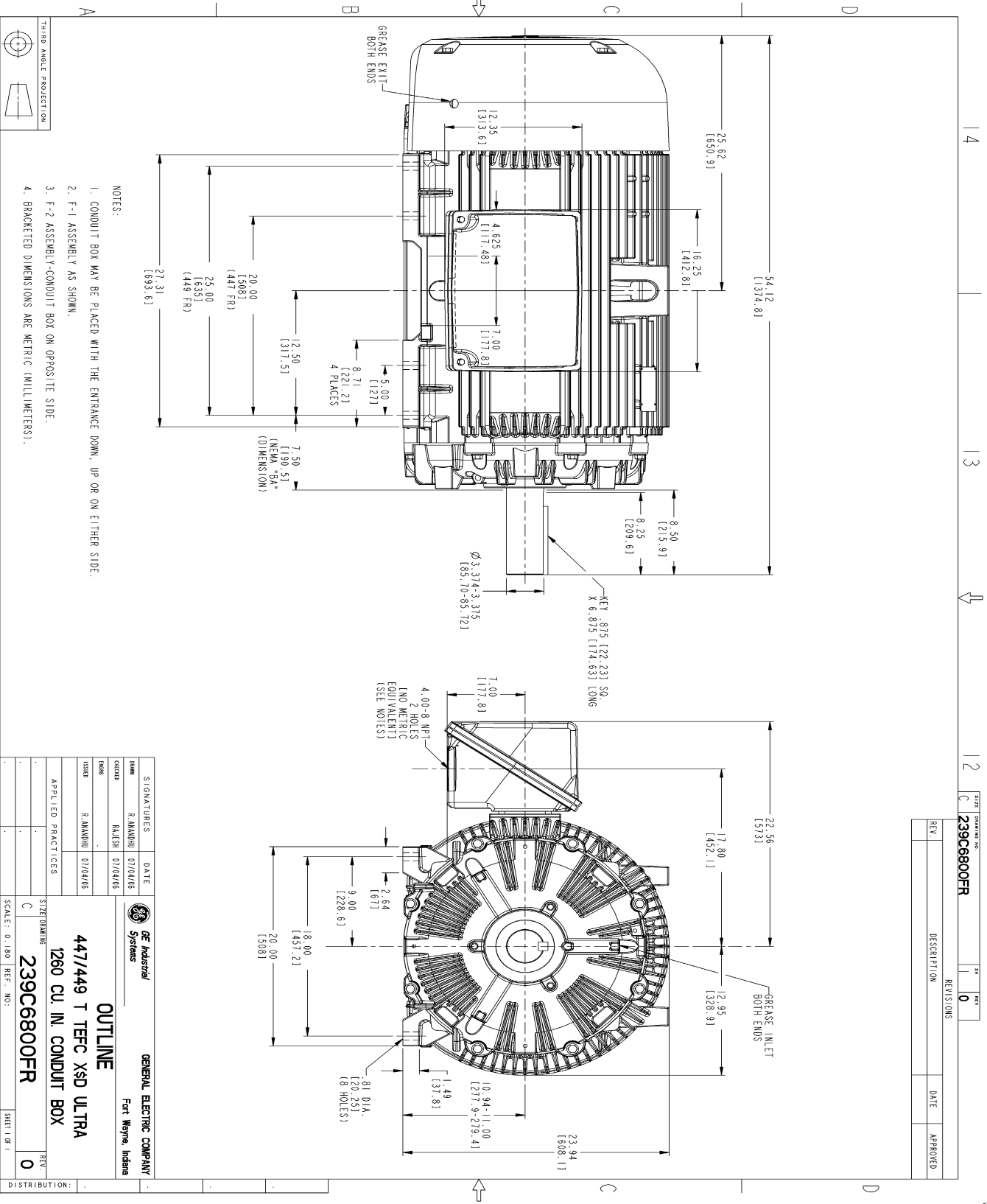
<b>Open Circuit A-C:</b>	0.711	<b>Short Circuit D-C:</b>	0.042
<b>Short Circuit A-C:</b>	0.031	<b>X/R Ratio:</b>	15.935
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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



NAME: 501073830 OBJECT: 239C6800FR DATE: 05-Jul-06 15:15:17

Marks:



NOTES:

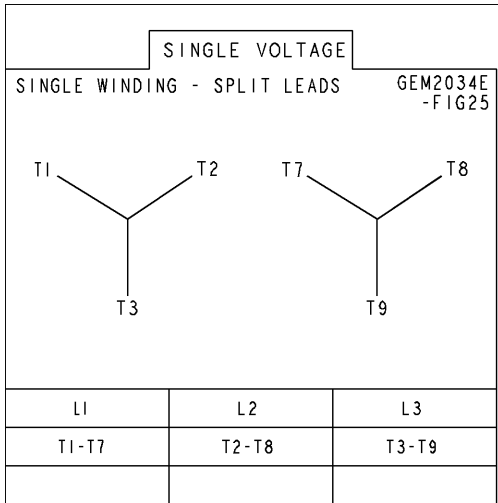
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
2. F-1 ASSEMBLY AS SHOWN.
3. F-2 ASSEMBLY-CONDUIT BOX ON OPPOSITE SIDE.
4. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).

REV.	DESCRIPTION	DATE	APPROVED
0			

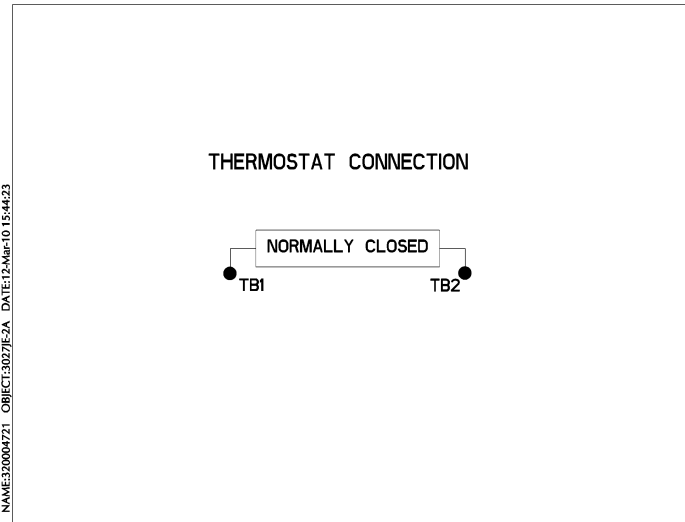
SIGNATURES	DATE	GENERAL ELECTRIC COMPANY
DESIGNER: R. AMANDI	07/24/05	Fort Wayne, Indiana
CHECKED: R. AMANDI	07/24/05	
DATE: 07/24/05		
APPLIED PRACTICES		
SCALE: 0.180	REF. NO.:	
<p><b>OUTLINE</b></p> <p>447/449 T TEFC XSD ULTRA</p> <p>1260 CU. IN. CONDUIT BOX</p> <p>239C6800FR</p>		

Marks:

**Connection Diagram**  
**GEM2034E-FIG25**



**Thermostat Connection**  
**3027JE-2A**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4355AA1	115E4355LL1
Bearing	235A2519AA01	235A2514AG01
Slinger/Inproseal	149C4399G07	149C4399G07

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100AA2
Fan Cover	128D6841AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	