

# Product Information Packet

November 8, 2016

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

<b>Model Number:</b>	<b>5KS449LAA210C</b>
<b>Catalog Number:</b>	<b>M7160</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG25
<b>Outline Drawing:</b>	239CC800AG

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>5KS449LAA210C</b>	<b>Estimated Weight:</b>	2800 Lbs
<b>Outline Drawing:</b>	239CC800AG	<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>	SD
<b>Design Code:</b>	49BD1245A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	449T	<b>Insulation Class:</b>	F
<b>Phases:</b>	3	<b>NEMA Design:</b>	A
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	96.2 %
<b>Output Power:</b>	250HP 185KW	<b>Guaranteed Efficiency:</b>	95.4
<b>RPM:</b>	1795	<b>3/4 Load Efficiency:</b>	96.1
<b>Voltage:</b>	460	<b>KVA Code:</b>	J
<b>Hertz:</b>	60	<b>Max KVAR:</b>	82.0
<b>Amps - FL:</b>	288.0	<b>Power Factor:</b>	84.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6318ZC3S0
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6318ZC3S0

**Enclosure is Totally Enclosed Fan-Cooled**

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**Stamped Nameplate Notes:**

FOR DIRECT COUPLED LOAD ONLY  
 INVERTER DUTY PER NEMA MG1 PART 31  
 ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT  
 VAR TORQUE RANGE 0-60 HZ

**Additional Information:**

4P - T EXTN - SPLIT LEAD  
 1260 CU IN - 2(4.00" NPT)  
 C/B GRD PLATE  
 OIL RESISTANT SLEEVING ON LEADS  
 F1 MOUNTING  
 VIBRATION LIMIT 0.15 INCH PER SEC

**Performance Characteristics**

1st Winding 1st Connection

**Design: 49BD1245A**

**Marks:**

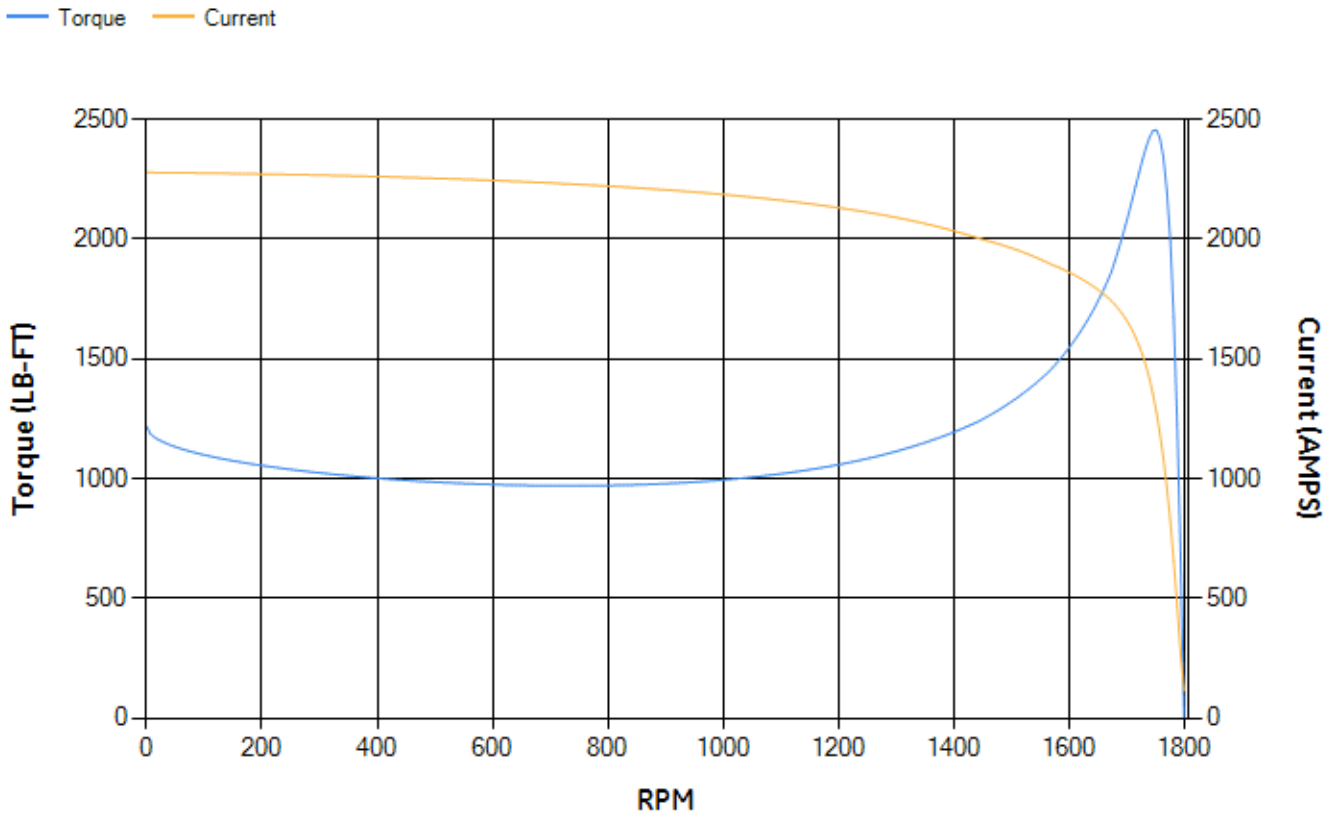
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.86	95.97	96.28	96.06	95.49	92.87	0.00
% PF	86.67	86.01	84.53	79.92	69.84	47.07	3.46
AMPS	352.01	325.96	287.5	228.58	175.43	133.81	114.39

<b>TORQ(FL)#FT</b>	732.09	<b>TORQ(LR)%FL</b>	166.29	<b>TORQ(BD)%FL</b>	335.43
<b>AMPS(LR)</b>	2278.06	<b>PF AT START</b>	0.25		

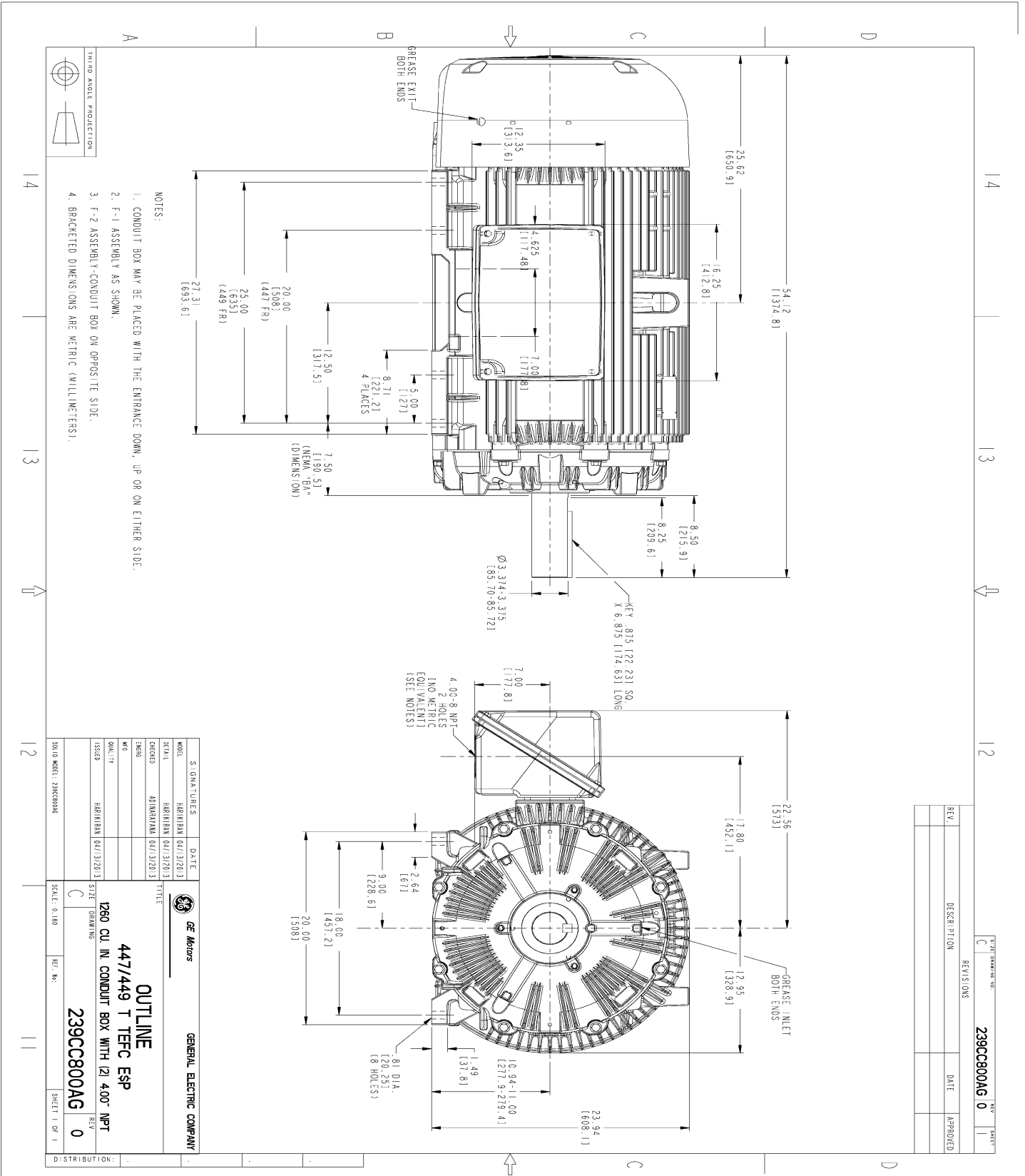
This motor is capable of two cold or one hot start with a maximum connected load inertia of 5760 Lb-Ft Sq (242.5 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 38 seconds. Safe stall time at 100% voltage is 92 seconds cold, 55 seconds hot. Rotor inertia is 109.54 Lb-Ft Sq (4.61 Kg-meter Sq).

<b>Open Circuit A-C:</b>	1.575	<b>Short Circuit D-C:</b>	0.027
<b>Short Circuit A-C:</b>	0.071	<b>X/R Ratio:</b>	10.23
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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

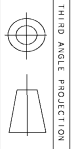


Marks:



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

MODEL	SIGNATURES	DATE	<p><b>GENERAL ELECTRIC COMPANY</b></p> <p><b>OUTLINE</b></p> <p><b>447/449 T TEFC ESP</b></p> <p><b>1260 CU IN CONDUIT BOX WITH 121 400" NPT</b></p> <p><b>239CC800AG</b></p>
SCALE	HARRISAN (04/3/2013)	(04/3/2013)	
DESIGN	HARRISAN (04/3/2013)	(04/3/2013)	
ISSUED	HARRISAN (04/3/2013)	(04/3/2013)	
SCALE: 0.180	REF. NO.		<p>SIZE: C</p> <p>DRAWING: 0</p> <p>SHEET 1 OF 1</p>

Marks:

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

