

# Product Information Packet

November 9, 2016

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

<b>Model Number:</b>	<b>5KS445LAA208D1</b>
<b>Catalog Number:</b>	<b>M7940</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	239CC600AA

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>5KS445LAA208D1</b>	<b>Estimated Weight:</b>	1880 Lbs
<b>Outline Drawing:</b>	239CC600AA	<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>	SD
<b>Design Code:</b>	44BD1117A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	445T	<b>Insulation Class:</b>	F
<b>Phases:</b>	3	<b>NEMA Design:</b>	A
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	95.8 %
<b>Output Power:</b>	150HP 111KW	<b>Guaranteed Efficiency:</b>	95.0
<b>RPM:</b>	1785	<b>3/4 Load Efficiency:</b>	95.9
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	48.6
<b>Amps - FL:</b>	173.0	<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:**

INVERTER DUTY PER NEMA MG1 PART 31  
ALTERNATE RATING FOR PWM CONTROL:  
1.0 SF VAR TORQUE RANGE 0-60 HZ

**Additional Information:**

4P - T EXTN  
700 CU IN - 3.00" NPT  
OIL RESISTANT SLEEVING ON LEADS  
F1 MOUNTING  
VIBRATION LIMIT 0.15 INCH PER SEC

**Performance Characteristics**

1st Winding 1st Connection

**Design: 44BD1117A**

**Marks:**

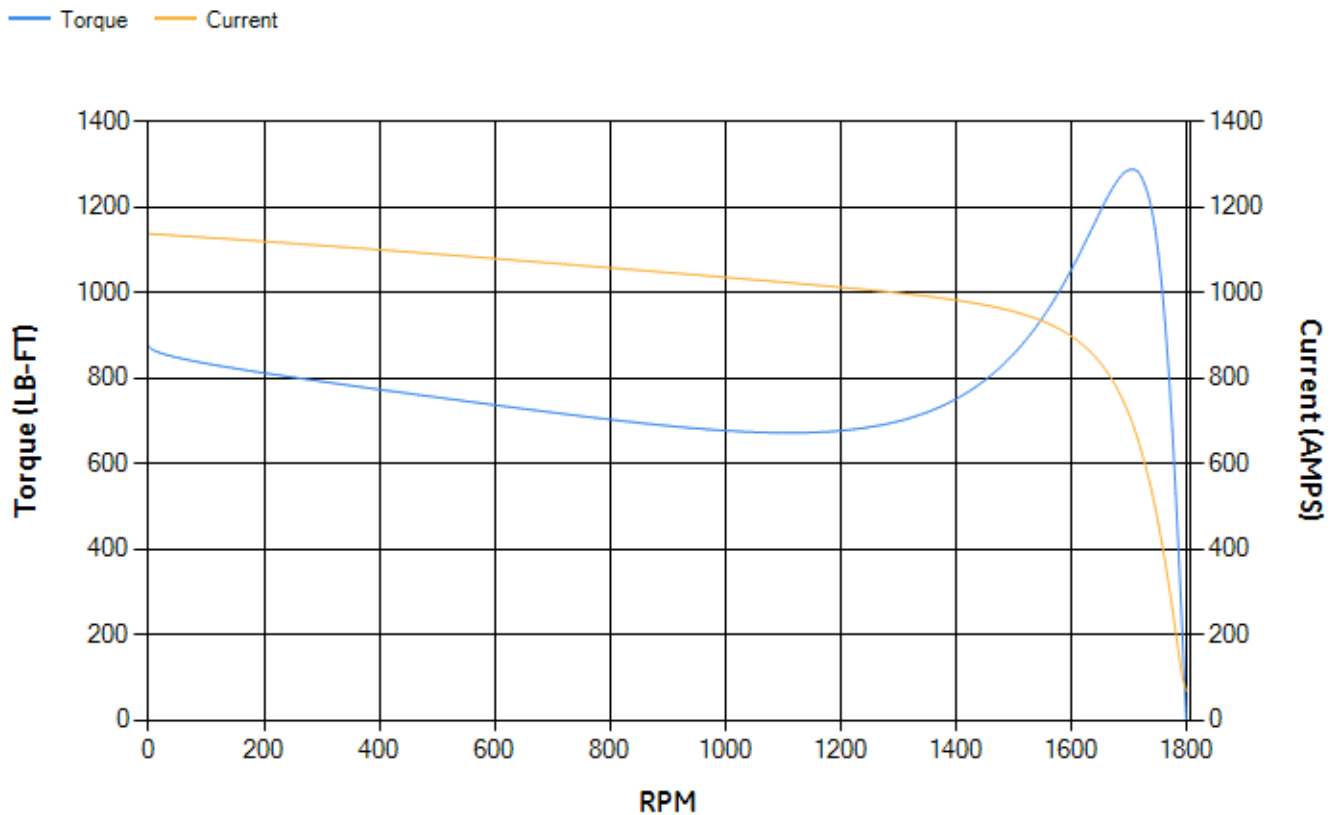
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.25	95.44	95.88	95.86	95.54	93.34	0.00
% PF	86.49	85.92	84.58	80.22	70.36	47.54	3.13
AMPS	213.02	196.87	173.12	136.93	104.43	79.1	67.56

<b>TORQ(FL)#FT</b>	441.7	<b>TORQ(LR)%FL</b>	198	<b>TORQ(BD)%FL</b>	291.08
<b>AMPS(LR)</b>	1137.13	<b>PF AT START</b>	0.32		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 1998 Lb-Ft Sq (84.12 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 19 seconds. Safe stall time at 100% voltage is 48 seconds cold, 22 seconds hot. Rotor inertia is 54.77 Lb-Ft Sq (2.31 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.678	<b>Short Circuit D-C:</b>	0.028
<b>Short Circuit A-C:</b>	0.037	<b>X/R Ratio:</b>	10.493
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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





Marks:

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

