

# Product Information Packet

November 9, 2016

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

<b>Model Number:</b>	<b>5KS405LAA118D2</b>
<b>Catalog Number:</b>	<b>M7914</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	239CC400AB

<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		

<b>Table of Contents</b>	
Specification	01
Performance Characteristics	02
Outline Drawing	03
Connection Drawing(s)	04

**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS405LAA118D2</b>	<b>Estimated Weight:</b>	1430 Lbs
<b>Outline Drawing:</b>	239CC400AB	<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>	40BD0037A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	405TS	<b>Insulation Class:</b>	F
<b>Phases:</b>	3	<b>NEMA Design:</b>	A
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	95.0 %
<b>Output Power:</b>	100HP 74KW	<b>Guaranteed Efficiency:</b>	94.1
<b>RPM:</b>	3570	<b>3/4 Load Efficiency:</b>	95.2
<b>Voltage:</b>	460	<b>KVA Code:</b>	H
<b>Hertz:</b>	60	<b>Max KVAR:</b>	26.5
<b>Amps - FL:</b>	112.0	<b>Power Factor:</b>	88.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6213ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6213ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

---

**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:**

2P - TS 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: 40BD0037A**

**Marks:**

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.82	94.99	95.38	95.23	94.63	91.68	0.00
% PF	88.96	88.65	87.8	84.67	76.8	55.6	5.05
AMPS	138.7	127.81	111.76	87.06	64.39	45.9	36.84

**TORQ(FL)#FT** 147.05  
**AMPS(LR)** 831.9

**TORQ(LR)%FL** 162.87  
**PF AT START** 0.23

**TORQ(BD)%FL** 309.31

This motor is capable of two cold or one hot start with a maximum connected load inertia of 300 Lb-Ft Sq (12.63 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 51 seconds cold, 23 seconds hot. Rotor inertia is 11.6 Lb-Ft Sq (0.49 Kg-meter Sq).

**Open Circuit A-C:** 0.95

**Short Circuit D-C:** 0.026

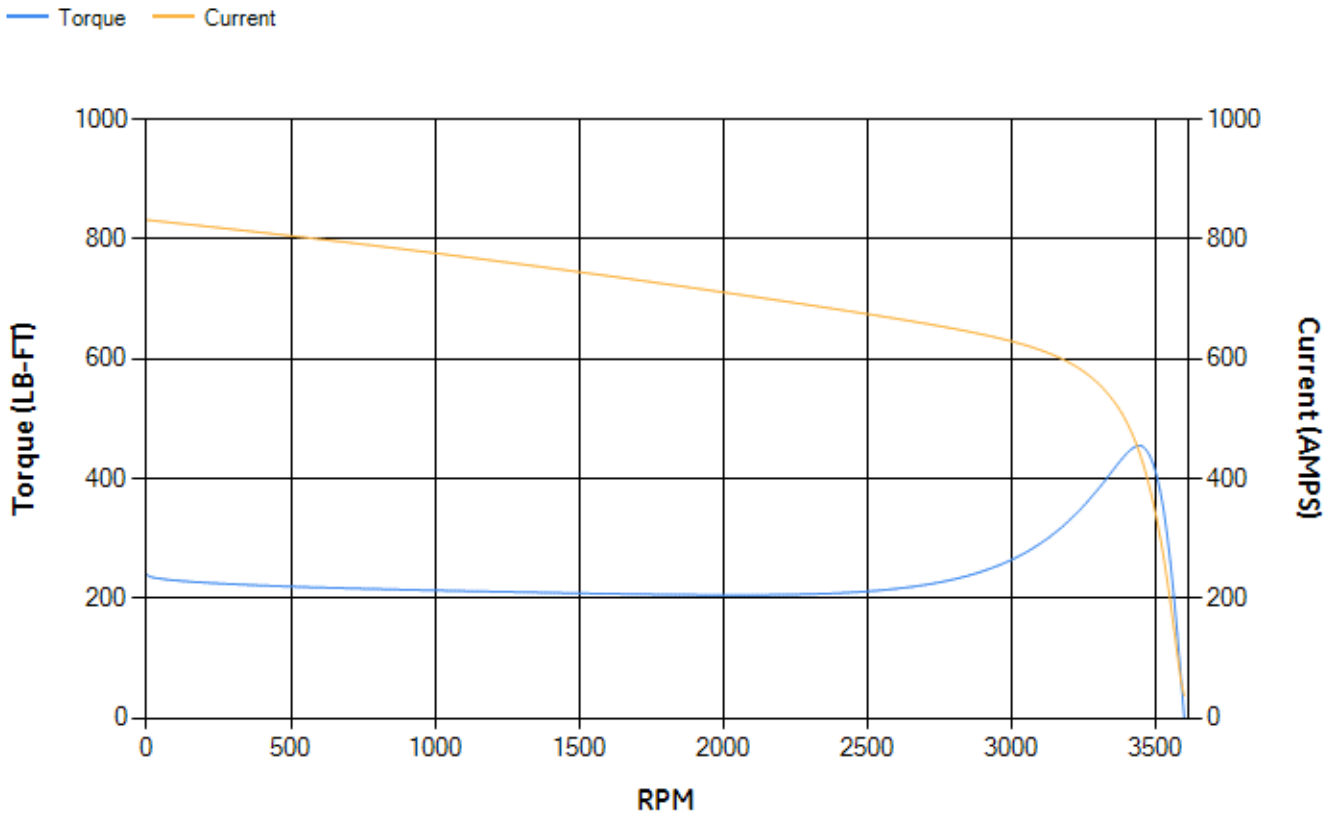
**Short Circuit A-C:** 0.046

**X/R Ratio:** 9.964

**Stator Slots:** 48

**Rotor Slots:** 38

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





Marks:

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

