

# Product Information Packet

November 8, 2016

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

<b>Model Number:</b>	<b>5KS405XAA408D6</b>
<b>Catalog Number:</b>	<b>M9461</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	239C6400PZ

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		

## Table of Contents

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



**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS405XAA408D6</b>	<b>Estimated Weight:</b>	1440 Lbs
<b>Outline Drawing:</b>	239C6400PZ	<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>	40BD4038A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	405T	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	8	<b>Nominal Efficiency:</b>	93.0 %
<b>Output Power:</b>	60HP 44.4KW	<b>Guaranteed Efficiency:</b>	92.4
<b>RPM:</b>	890	<b>3/4 Load Efficiency:</b>	93.5
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	37.0
<b>Amps - FL:</b>	88.2	<b>Power Factor:</b>	68.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6316ZC3S0
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6316ZC3S0

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

IEEE-STD-841-2009  
 DE BRG 80BC03JP3026, ODE BRG 80BC03JP3026  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS405XAA408D6 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 230C AT 1.15SF ON SINE-WAVE PWR  
 OR 200C VT OR 230C CT OR 200C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB  
 VT 0 - 60 HZ, CT 15-60 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  
 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: 40BD4038A**

Marks:

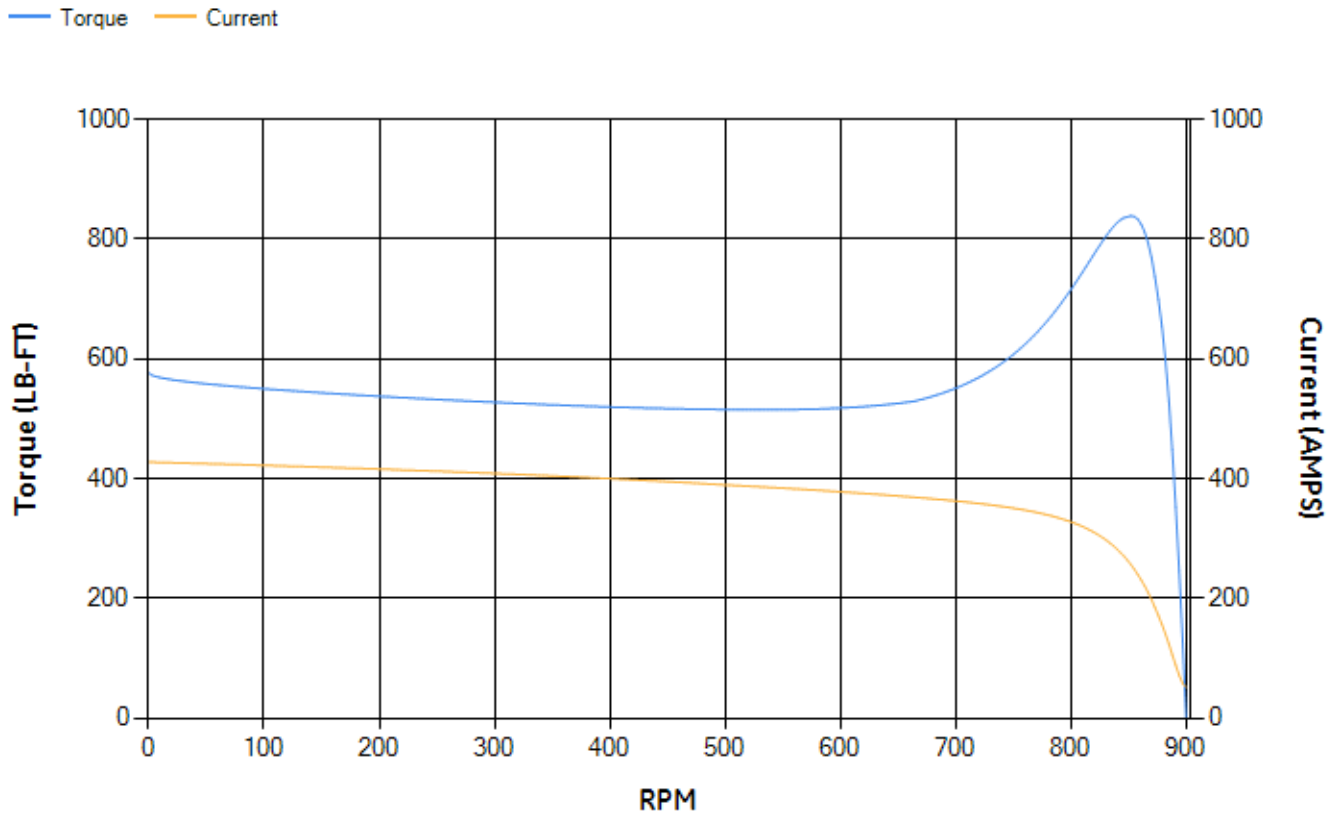
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	92.85	93.12	93.6	93.5	92.68	88.7	0.00
% PF	72.37	71.04	68.27	60.84	48.29	28.79	2.82
AMPS	104.46	97.62	87.83	74.04	62.73	54.98	51.58

<b>TORQ(FL)#FT</b>	353.95	<b>TORQ(LR)%FL</b>	162.88	<b>TORQ(BD)%FL</b>	236.25
<b>AMPS(LR)</b>	427.51	<b>PF AT START</b>	0.36		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 5754 Lb-Ft Sq (242.24 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 112 seconds cold, 58 seconds hot. Rotor inertia is 32.14 Lb-Ft Sq (1.35 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.349	<b>Short Circuit D-C:</b>	0.021
<b>Short Circuit A-C:</b>	0.038	<b>X/R Ratio:</b>	7.935
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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





Marks:

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4304AA1	115E4304LL1
Bearing	235A2618AA04	235A2618AA04
Slinger/Inproseal	235A4575GS4	235A4575GS4

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100G02
Fan Cover	128D6832AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	118D4408AD2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	