

# Product Information Packet

November 8, 2016

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

<b>Model Number:</b>	<b>5KS215XAA2070B</b>
<b>Catalog Number:</b>	<b>M9550</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	4002B5821PBP5311

<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		

## Table of Contents

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



**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS215XAA2070B</b>	<b>Estimated Weight:</b>	220 Lbs
<b>Outline Drawing:</b>	4002B5821PBP5311	<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>	21BD1267B	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	215TC	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	91.7 %
<b>Output Power:</b>	10HP 7.4KW	<b>Guaranteed Efficiency:</b>	91.0
<b>RPM:</b>	1770	<b>3/4 Load Efficiency:</b>	92.3
<b>Voltage:</b>	575	<b>KVA Code:</b>	H
<b>Hertz:</b>	60	<b>Max KVAR:</b>	3.2
<b>Amps - FL:</b>	9.8	<b>Power Factor:</b>	83.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6309ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6208ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

IEEE-STD-841-2009  
 DE BRG 45BC03JP30 ODE BRG 40BC02JP30  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS215XAA2070B S/N: XXX  
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200 C GC  
 CL1ZONE2 AEXNAIIC 200 C; CL1DIV2 GRP ABCD 200 C  
 IN -25C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR  
 SURF TEMP 200 C AT 1.15 SF ON SINE-WAVE PWR  
 OR 200 C VT OR 200 C CT OR 200 C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0 SF 40 C AMB  
 VT 0-60 HZ, CT 3-60 HZ, CHP 60-90 HZ.

**Additional Information:**

4P - T EXTN  
 STANDARD FLOOR MOUNT  
 C/BOX 55 CU IN-1.00 NPT  
 F1 CONDUIT BOX MOUNTING  
 "C" FACE AT DE ENDSHIELD AK=8 1/2"  
 PAINTED FRAME ID & SHAFT,  
 FAN COVER INSIDE & ODE E/S OUTSIDE  
 ROUTINE AND 5 POINT VIBRATION TESTS INCL IN C/BOX  
 INPRO SEAL BOTH ENDS  
 GROUND SCREW ON FRAME  
 ROTATE D.E. E/SHIELD 90 DEG. PER OUTLINE  
 SHAFT RUNOUT LIMIT .001" TIR  
 COPPER WASHER UNDER HEADS OF BEARING CAP BOLTS  
 APPLY TITE-SEAL (A50CD427A) ON BEARING CAP SCREWS, RABBETS,

AND PLUG THREADS  
OIL RESISTANT SLEEVING ON LEADS

**Performance Characteristics**

1st Winding 1st Connection

**Design: 21BD1267B**

**Marks:**

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	90.57	91.09	91.92	92.33	91.99	88.48	0.00
% PF	84.07	83.83	82.92	79.24	70.26	48.86	5.72
AMPS	12.29	11.28	9.82	7.68	5.79	4.33	3.62

**TORQ(FL)#FT** 29.68  
**AMPS(LR)** 67.22

**TORQ(LR)%FL** 204  
**PF AT START** 0.41

**TORQ(BD)%FL** 290.25

This motor is capable of two cold or one hot start with a maximum connected load inertia of 318 Lb-Ft Sq (13.39 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 40 seconds. Safe stall time at 100% voltage is 89 seconds cold, 60 seconds hot. Rotor inertia is 1.13 Lb-Ft Sq (0.05 Kg-meter Sq).

**Open Circuit A-C:** 0.413

**Short Circuit D-C:** 0.012

**Short Circuit A-C:** 0.02

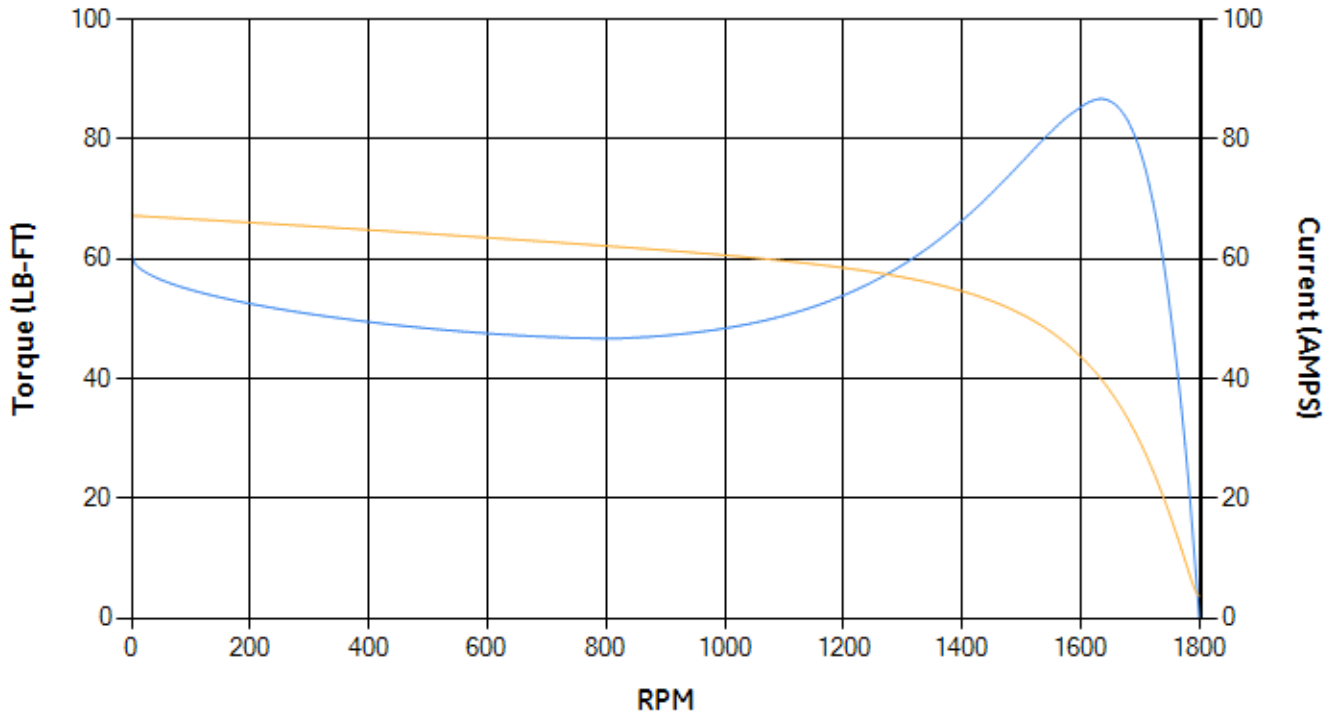
**X/R Ratio:** 4.709

**Stator Slots:** 36

**Rotor Slots:** 28

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

— Torque — Current





Marks:

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6006PJ1	4004D5282SJ1
Bearing	235A2607AA01	235A2603AA01
Slinger/Inproseal	235A4575GC6	4002B5914AG3

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6700G01
Fan Cover	4003C5787PA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	4002B5721PA-G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	