

# Product Information Packet

November 8, 2016

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

<b>Model Number:</b>	<b>5KS213XAA2049B</b>
<b>Catalog Number:</b>	<b>M9502</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	4002B5821PDP5310

<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		

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**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS213XAA2049B</b>	<b>Estimated Weight:</b>	200 Lbs
<b>Outline Drawing:</b>	4002B5821PDP5310	<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>	21BD1269A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	213TC	<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>	7.5HP 5.6KW	<b>Guaranteed Efficiency:</b>	91.0
<b>RPM:</b>	1770	<b>3/4 Load Efficiency:</b>	92.5
<b>Voltage:</b>	460	<b>KVA Code:</b>	H
<b>Hertz:</b>	60	<b>Max KVAR:</b>	2.3
<b>Amps - FL:</b>	9.1	<b>Power Factor:</b>	84.0
<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:5KS213XAA2049B 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  
 C/BOX 55 CU IN-1.00 NPT  
 "C" FACE AT DE ENDSHIELD ROUND FRAME  
 VERTICAL MOUNT SHAFT DOWN WITH DRIPCOVER  
 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  
 E/SHLD GROUND STUD MTD ON DE C/BOX SIDE NEAR FOOT  
 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: 21BD1269A**

**Marks:**

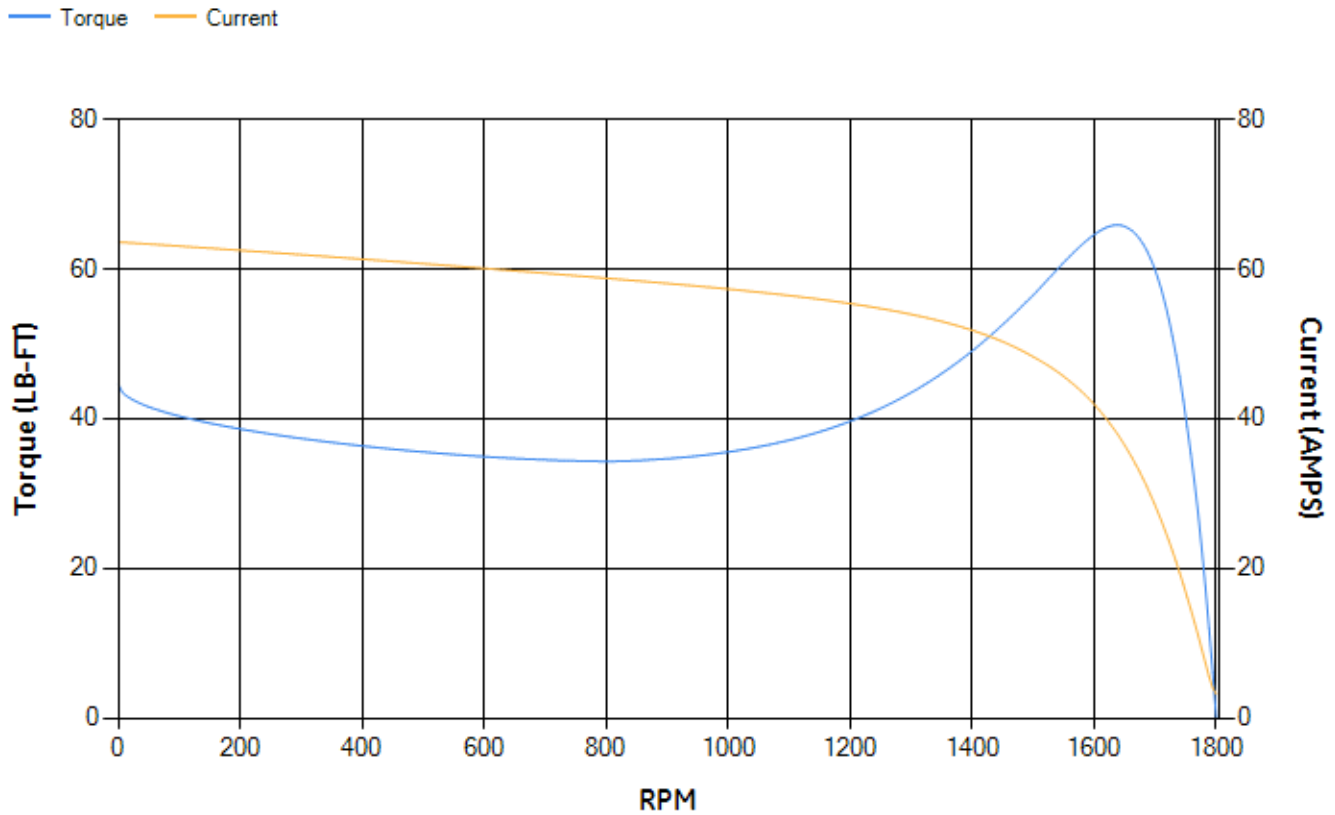
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	91.27	91.68	92.36	92.53	91.92	88	0.00
% PF	84.88	84.66	83.82	80.41	71.96	51.11	6.56
AMPS	11.33	10.4	9.07	7.08	5.31	3.9	3.19

<b>TORQ(FL)#FT</b>	22.22	<b>TORQ(LR)%FL</b>	200.62	<b>TORQ(BD)%FL</b>	294.72
<b>AMPS(LR)</b>	63.61	<b>PF AT START</b>	0.39		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 372 Lb-Ft Sq (15.66 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 63 seconds. Safe stall time at 100% voltage is 141 seconds cold, 108 seconds hot. Rotor inertia is 1.13 Lb-Ft Sq (0.05 Kg-meter Sq).

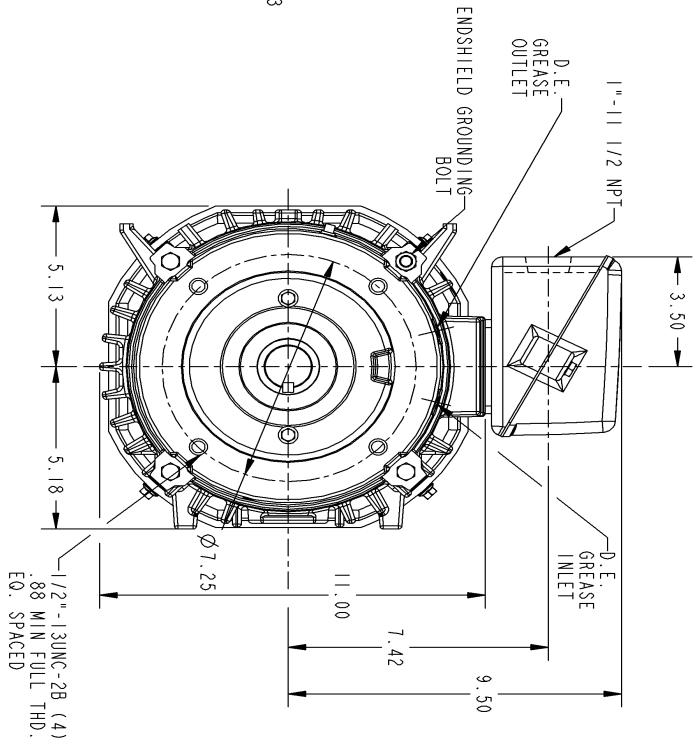
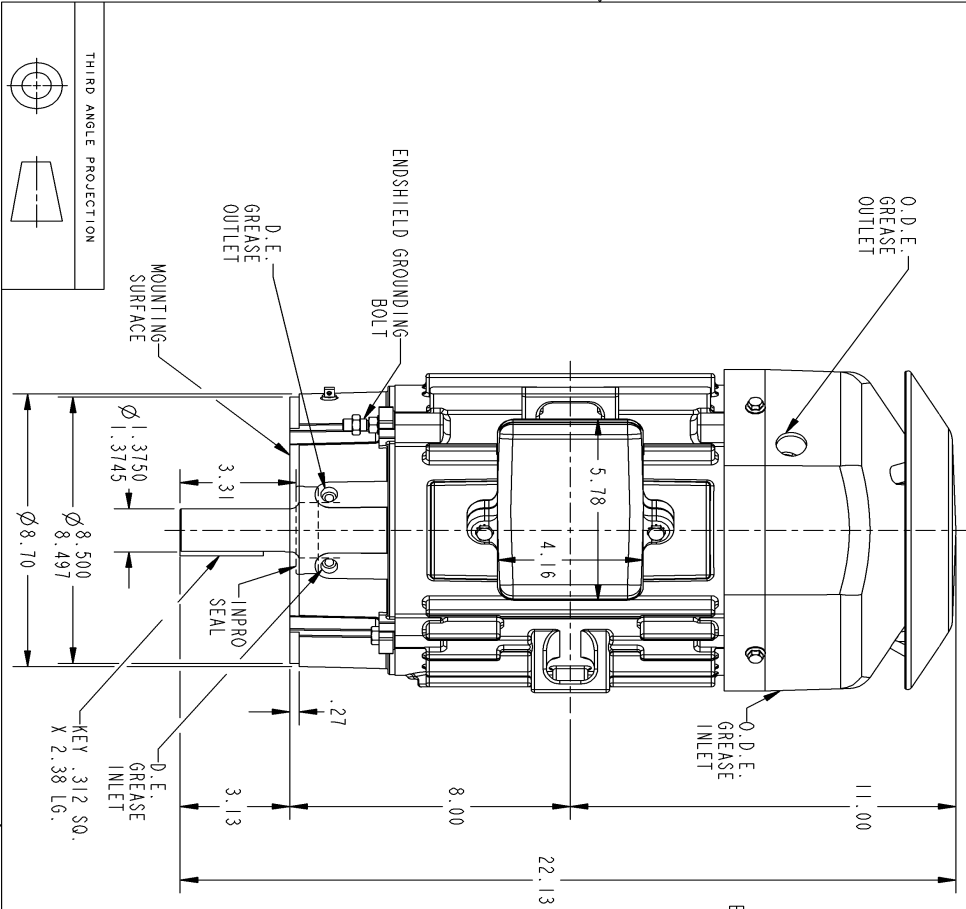
<b>Open Circuit A-C:</b>	0.486	<b>Short Circuit D-C:</b>	0.014
<b>Short Circuit A-C:</b>	0.022	<b>X/R Ratio:</b>	5.426
<b>Stator Slots:</b>	36	<b>Rotor Slots:</b>	28

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



Marks:

- NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP, DOWN OR TO EITHER SIDE.
- NOTE 2: F1 ASSEMBLY AS SHOWN. F2 ASSEMBLY CONDUIT BOX ON OPPOSITE SIDE FROM SHOWN LOCATION.
- NOTE 3: MOUNTING SURFACES WILL BE SQUARE AND CONCENTRIC WITH SHAFT WITHIN .004 T.I.R.
- NOTE 4: SHAFT RUNOUT NOT TO EXCEED .001 T.I.R.
- NOTE 5: D.E. ENDSHIELD ROTATED 90°



SIZE DRAWING NO. 4002B5821PDP5310

REV.	DESCRIPTION	DATE	APPROVED
1	FRAME SIZE DESCRIPTION CHANGED TO 210C - N FRAM	06/06/05	TAMMY

SIGNATURES	DATE	REV.
DRAM P. RAJU	10/13/03	1
CHECKED SHIVA	10/13/03	
ISSUED P. RAJU	10/13/03	
APPLIED PRACTICES		

**GE Industrial Systems**  
**GENERAL ELECTRIC COMPANY**  
 Fort Wayne, Indiana

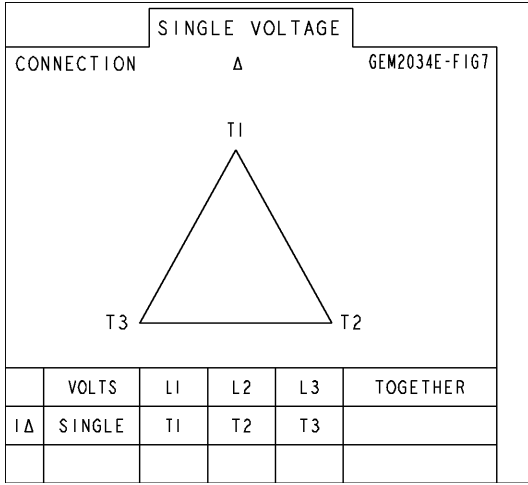
**INDUCTION MOTOR OUTLINE**  
 IEEE-941 SPEC. "C" FACE AT DE FTLS WITH DRIP COVER  
 FME: KS210TC TERC "C" FACE (850V RABBET)

SIZE DRAWING: 4002B5821PDP5310  
 SCALE: 0.300 REF. NO.: 4002B5821PDP5310 SHEET 1 OF 1

DISTRIBUTION: PMP-18K15

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	4003C5521BN-G01

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	