



**GE INDUSTRIAL MOTORS**  
a **WOLONG** company

# Product Technical Information

April 24, 2021

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

<b>Model Number:</b>	<b>5KS213SAA108D2</b>
<b>Catalog Number:</b>	<b>M990</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG1
<b>Outline Drawing:</b>	4002B5821PAP5616

## 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:

**MODEL NUMBER:** 5KS213SAA108D2  
**Outline Drawing:** 4002B5821PAP5616  
**Connection Diagram:** GEM2034E-FIG1  
**Instruction Book:** GEI-56128  
**Design Code:** 21BD0225A  
**Type:** KS  
**Frame:** 213T  
**Phases:** 3  
**Poles:** 2  
**Output Power:** 7.5HP 5.6KW  
**RPM:** 3535  
**Voltage:** 460  
**Hertz:** 60  
**Amps - FL:** 9.1  
**Service Factor:** 1.15  
**Alt Service Factor:** --

**Estimated Weight:** 200 Lbs  
**Time Rating:** CONT  
**Enclosure:** TEFC  
**Encl Construction:** 841  
**Ambient Max(°C):** 40  
**Alt Ambient Max(°C):** --  
**Insulation Class:** H  
**NEMA Design:** B  
**Nominal Efficiency:** 89.5 %  
**Guaranteed Efficiency:** 88.5 %  
**3/4 Load Efficiency:** --  
**KVA Code:** H  
**Max KVAR:** 2.3  
**Power Factor:** 86.5  
**Bearing - DE:** 6208ZC3  
**Bearing - ODE:** 6208ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

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Stamped Nameplate Notes:

IEEE-STD-841-2009  
 DE BRG 40BC02JP30 ODE BRG 40BC02JP30  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS213SAA108D2 S/N: XXX  
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200C GC  
 CL 1 ZONE2 AEX NA IIC 200C;CL 1 DIV2 GRP ABCD 200C  
 IN -40C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR  
 SURF TEMP 200C AT 1.15SF ON SINE-WAVE PWR  
 OR 200C VT OR 200C CT OR 200C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB  
 VT 0 - 60 HZ, CT 3 - 60 HZ, CHP 60 - 90 HZ.



**Additional Information:**

2P - T EXTN  
STANDARD FLOOR MOUNT  
C/BOX 55 CU IN-1.00 NPT  
F1 CONDUIT BOX MOUNTING  
PAINTED FRAME ID & SHAFT,  
FAN COVER INSIDE & ODE E/S OUTSIDE  
ROUTINE AND 5 POINT VIBRATION TESTS INCL IN C/BOX  
GROUND SCREW ON FRAME  
SHAFT RUNOUT LIMIT .001" TIR  
OIL RESISTANT SLEEVING ON LEADS



**Performance Characteristics**

1st Winding 1st Connection

**Design: 21BD0225A**

**Marks:**

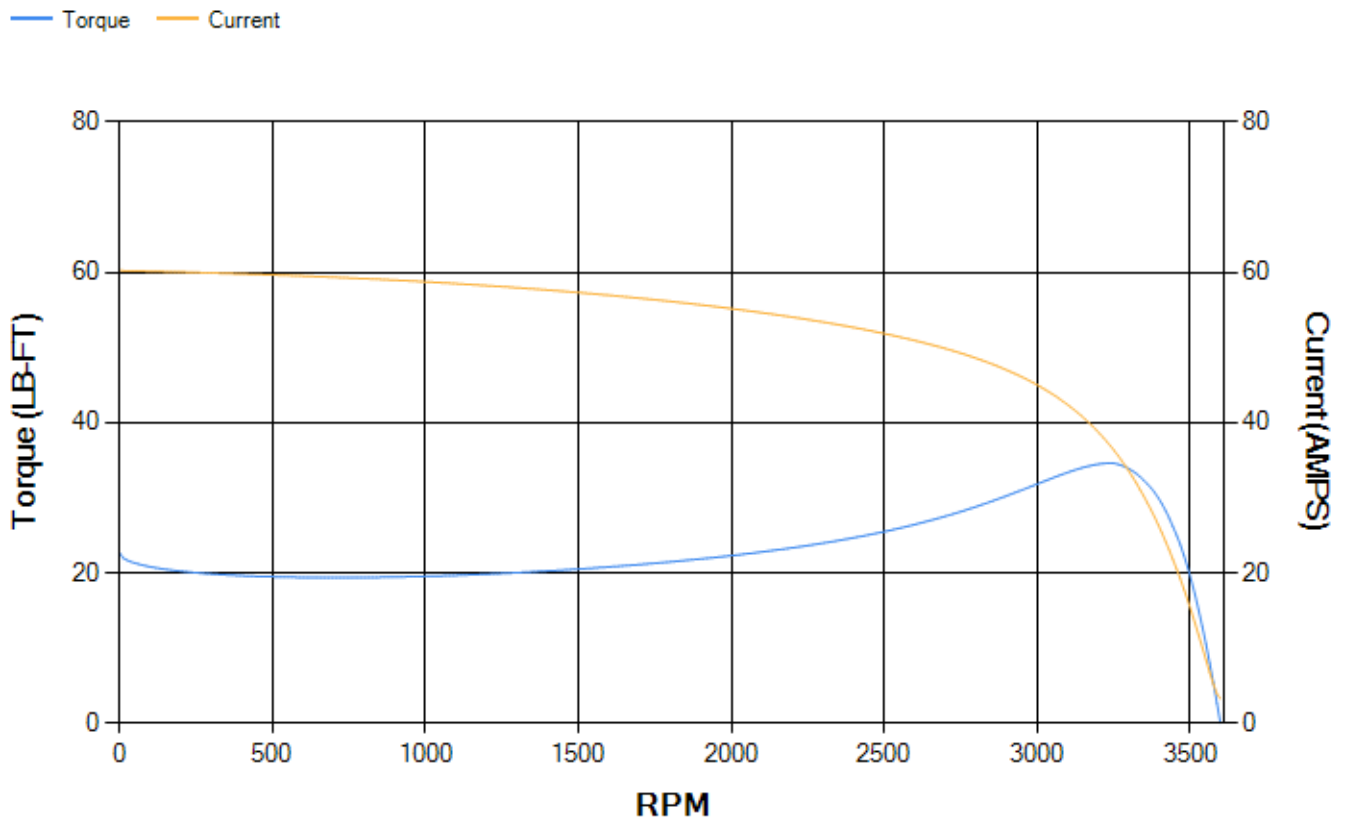
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	88.69	89.16	89.91	90.08	89.17	83.96	0.00
% PF	87.94	87.53	86.44	82.69	73.94	52.88	8.85
AMPS	11.25	10.34	9.02	7.07	5.32	3.95	3.25

<b>TORQ(FL)#FT</b>	11.15	<b>TORQ(LR)%FL</b>	203.68	<b>TORQ(BD)%FL</b>	308.31
<b>AMPS(LR)</b>	60.24	<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 80 Lb-Ft Sq (3.37 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 47 seconds. Safe stall time at 100% voltage is 82 seconds cold, 58 seconds hot. Rotor inertia is 0.31 Lb-Ft Sq (0.01 Kg-meter Sq).

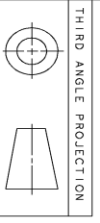
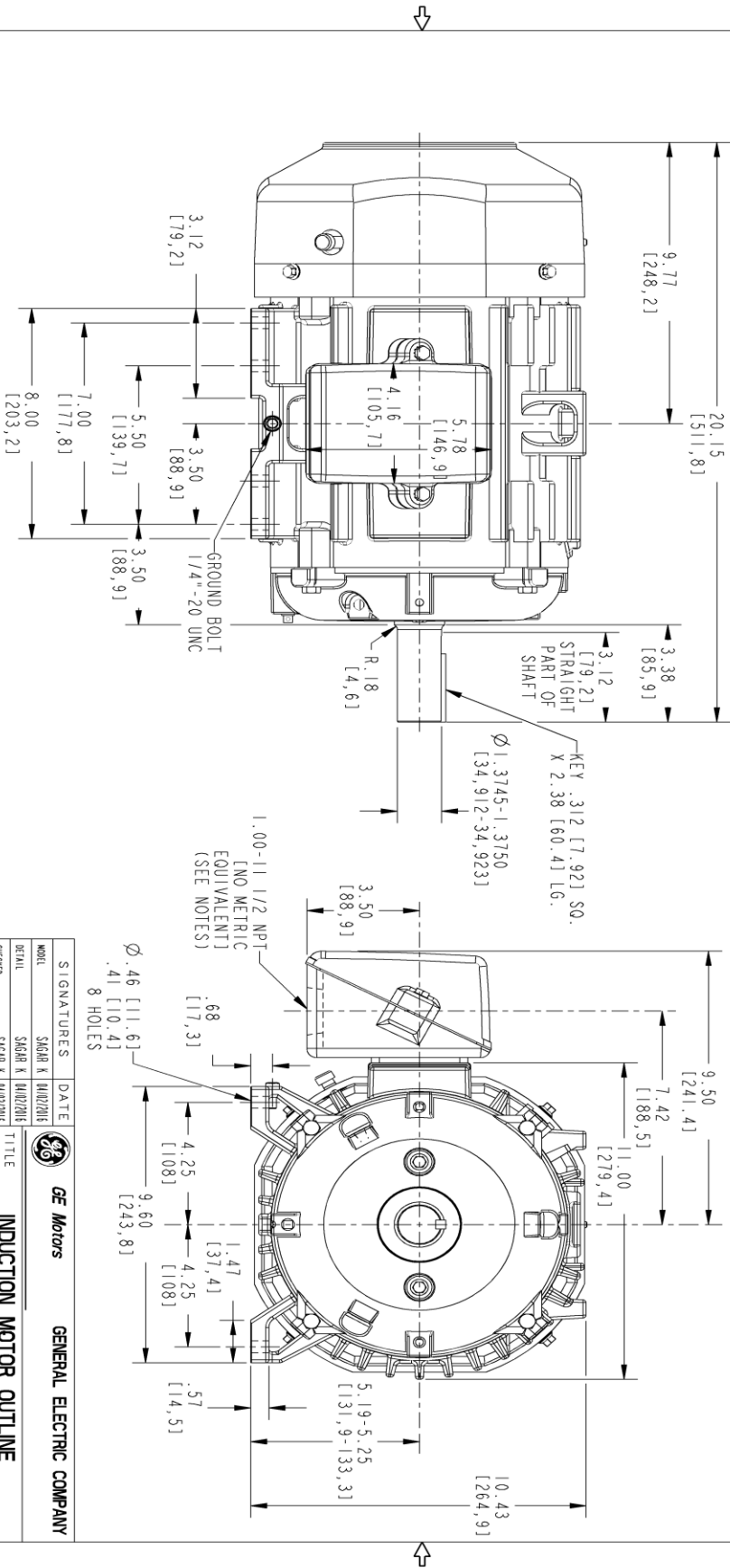
<b>Open Circuit A-C:</b>	0.387	<b>Short Circuit D-C:</b>	0.01
<b>Short Circuit A-C:</b>	0.018	<b>X/R Ratio:</b>	3.797
<b>Stator Slots:</b>	36	<b>Rotor Slots:</b>	26

**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: ALL DIMENSIONS ARE IN INCHES AND BRACKETED DIMENSIONS ARE IN METRIC (MILLIMETERS).



THIRD ANGLE PROJECTION

SIZE DRAWING NO. B

4002B5821PAP5616 0

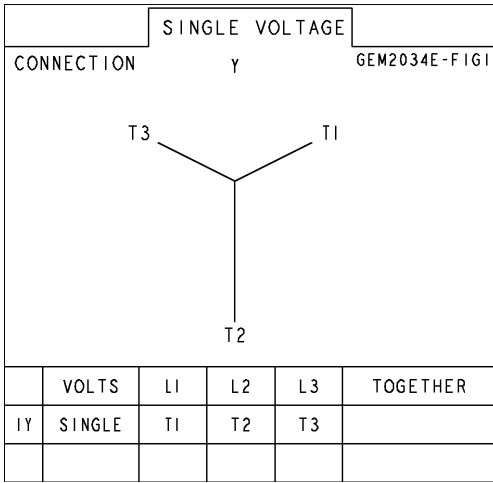
REV SHEET 1

REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES		DATE	<b>GE Motors</b> GENERAL ELECTRIC COMPANY
MOBL	SAGAR K. [44022016]	[44022016]	
DETAIL	SAGAR K. [44022016]	[44022016]	TITLE <b>INDUCTION MOTOR OUTLINE</b> STANDARD CONSTRUCTION WITH GROUND PAD FR213/215 T TEFC <b>4002B5821PAP5616</b>
DESIGN	SAGAR K. [44022016]	[44022016]	
ENGR	-	-	
WEC	-	-	
QUALITY	SAGAR K. [44022016]	[44022016]	SIZE DRAWING B
ISSUED	SAGAR K. [44022016]	[44022016]	SCALE: 0.300 REF. No. 4002B5821PAP5311 REV 0
SOLD MODEL	4002B5821PAP5616		SHEET 1 of 1

**Marks:**

**Connection Diagram**  
**GEM2034E-FIG1**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5282PB1	4004D5282SJ1
Bearing	235A2503AE01	235A2503AE01
Slinger/Inproseal	149C4399G01	149C4399G01

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6704G01
Fan Cover	4003C5787PA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

