



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

# Product Technical Information

September 26, 2022

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

<b>Model Number:</b>	<b>5KS213XAA2049D</b>
<b>Catalog Number:</b>	<b>M9502</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	4002B5821PDP5447

## 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>5KS213XAA2049D</b>	<b>Estimated Weight:</b>	200 Lbs
<b>Outline Drawing:</b>	4002B5821PDP5447	<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>	--
<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

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Stamped Nameplate Notes:

IEEE-STD-841-2009

DE BRG 45BC03JP30 ODE BRG 40BC02JP30

STAMP NP249A5564P051 AS BELOW:

MODEL:5KS213XAA2049D 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 -25C <= 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:**

4P - T EXTN  
C/BOX 55 CU IN-1.00 NPT  
"C" FACE AT DE ENDSHIELD ROUND FRAME  
VERTICAL MOUNT SHAFT DOWN WITH DRIPCOVER  
INPRO SEAL BOTH ENDS  
BURNDY SERVIT POST ON FRAME  
SHAFT RUNOUT LIMIT .001" TIR  
OIL RESISTANT SLEEVING ON LEADS  
PAINTED FRAME ID & SHAFT,  
FAN COVER INSIDE & ODE E/S OUTSIDE  
ROUTINE AND 5 POINT VIBRATION TESTS INCL IN C/BOX  
ROTATE D.E. E/SHIELD 90 DEG. PER OUTLINE  
COPPER WASHER UNDER HEADS OF BEARING CAP BOLTS  
APPLY TITE-SEAL (A50CD427A) ON BEARING CAP SCREWS, RABBETS,  
AND PLUG THREADS



**Performance Characteristics**

1st Winding 1st Connection

**Design: 21BD1269A**

**Marks:**

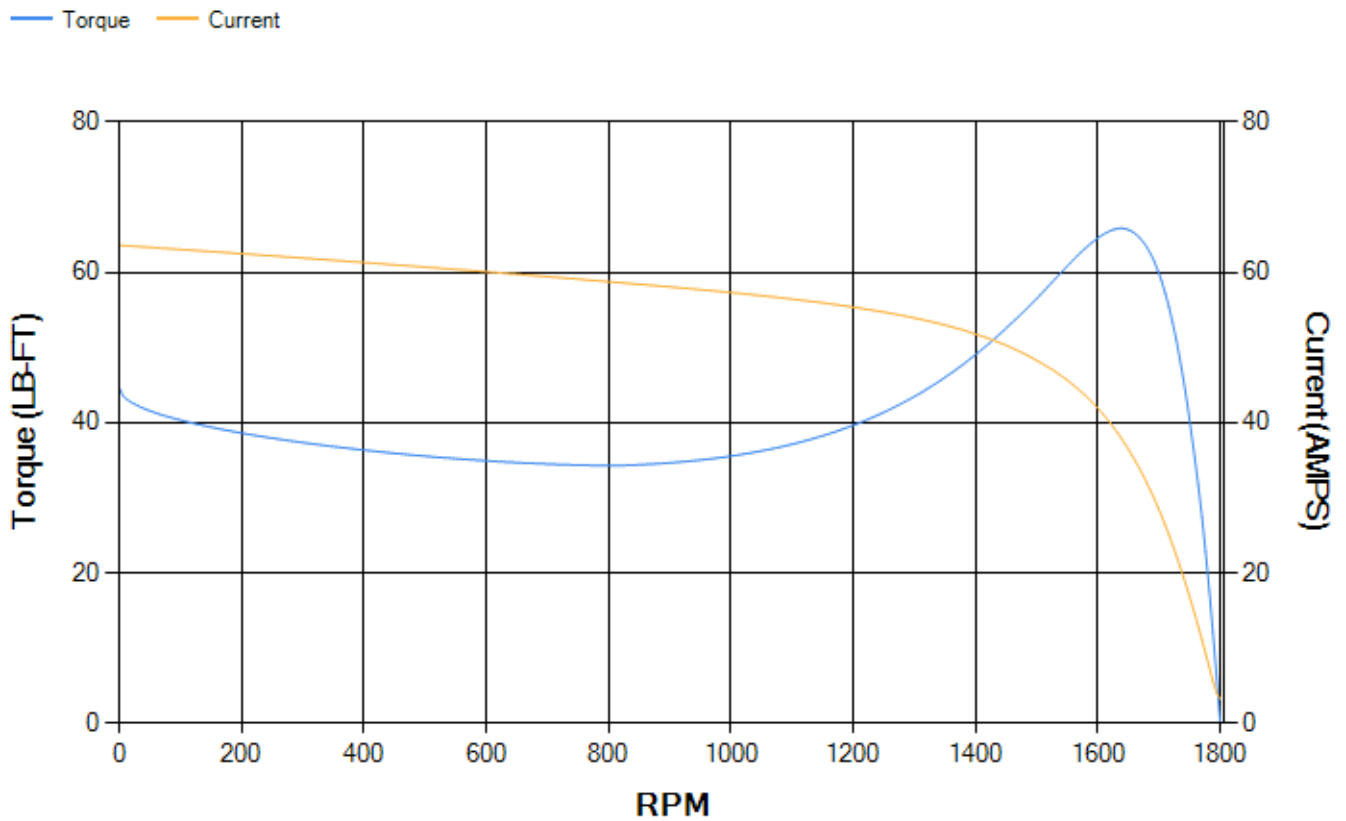
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	91.27	91.67	92.35	92.53	91.92	88	0.00
% PF	84.86	84.64	83.79	80.37	71.9	51.04	6.55
AMPS	11.33	10.4	9.07	7.08	5.31	3.91	3.19

<b>TORQ(FL)#FT</b>	22.22	<b>TORQ(LR)%FL</b>	200.61	<b>TORQ(BD)%FL</b>	294.69
<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 1.12 Lb-Ft Sq (0.05 Kg-meter Sq).

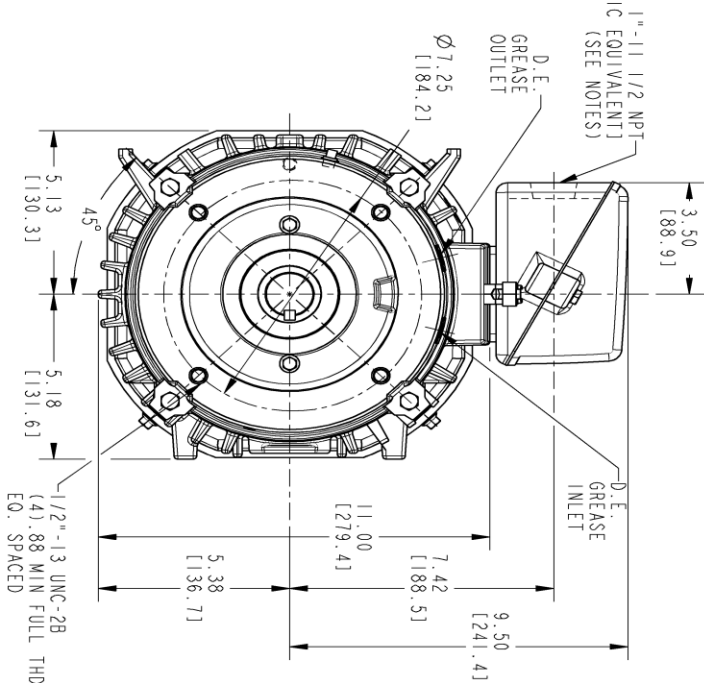
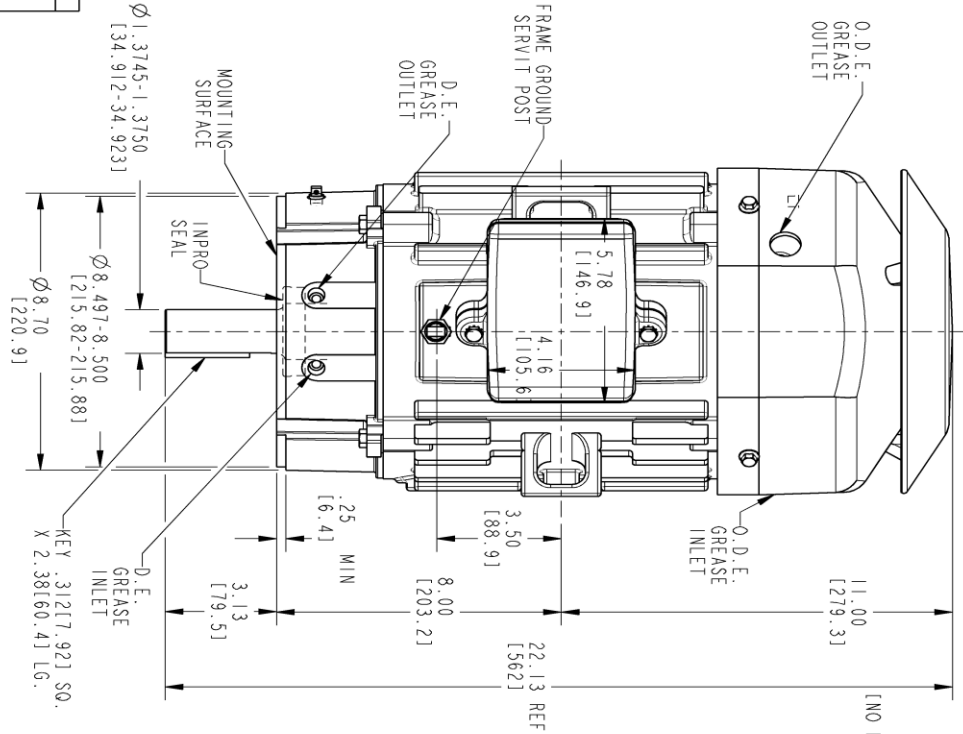
<b>Open Circuit A-C:</b>	0.485	<b>Short Circuit D-C:</b>	0.014
<b>Short Circuit A-C:</b>	0.022	<b>X/R Ratio:</b>	5.426
<b>Stator Slots:</b>	36	<b>Rotor Slots:</b>	28

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



Marks:

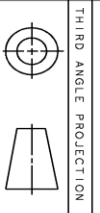
- NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP OR ON EITHER SIDE.
- NOTE 2: FOR SHAFT DOWN MOUNTING.
- NOTE 3: MOUNTING SURFACES WILL BE SQUARE AND CONCENTRIC WITH SHAFT WITHIN .004 T.I.R.
- NOTE 4: SHAFT RUNOUT NOT TO EXCEED .001 T.I.R.
- NOTE 5: D.E. ENDSHIELD ROTATED 90° COUNTER CLOCKWISE.
- NOTE 6: ALL DIMENSIONS ARE IN INCHES. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).



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REV.	DESCRIPTION	DATE	APPROVED
001	ISAC #20-0713	SANTOSHCH/11/07/2020	VIJAY
2	DIM CHANGED FROM .21 MAX TO .25 MIN	DEEPMANI 05/06/22	SAGAR

4002B5821PDP5447	002	REV	SHEET
REVISIONS		DATE	APPROVED



SIGNATURES	DATE	TITLE
HAHEBHARAN	11/9/2017	ENGINEER
HAHEBHARAN	11/9/2017	DESIGNER
HAHEBHARAN	11/9/2017	DRP
HAHEBHARAN	11/9/2017	ISSUED

**GE INDUSTRIAL MOTORS**  
 a Wolog company

**OUTLINE**  
 FR 213/216 TC TFC, IEEE 941 (C-FACE AK-B501)  
 55 CU IN C/BOX, SERVICIT POST, DRP COVER

**4002B5821PDP5447**

SCALE: 0.300 REF. No.: 4002B5821PDP5433

**Marks:**

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6006RF1	4004D5282SJ1
Bearing	235A2607AA01	235A2603AA01
Slinger/Inproseal	4002B5914GF3	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	

