

# Product Information Packet

November 8, 2016

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

<b>Model Number:</b>	<b>5KS254XAA2102B</b>
<b>Catalog Number:</b>	<b>M9552</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	4002B5825PBP5311

<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>5KS254XAA2102B</b>	<b>Estimated Weight:</b>	315 Lbs
<b>Outline Drawing:</b>	4002B5825PBP5311	<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>	25BD1258B	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	254TC	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	92.4 %
<b>Output Power:</b>	15HP 11.1KW	<b>Guaranteed Efficiency:</b>	91.7
<b>RPM:</b>	1775	<b>3/4 Load Efficiency:</b>	93.3
<b>Voltage:</b>	575	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	5.3
<b>Amps - FL:</b>	14.6	<b>Power Factor:</b>	83.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6310ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6309ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

IEEE-STD-841-2009  
 DE BRG 50BC03JP30 ODE BRG 45BC03JP30  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS254XAA2102B 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 137 CU IN-1.25 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: 25BD1258B**

**Marks:**

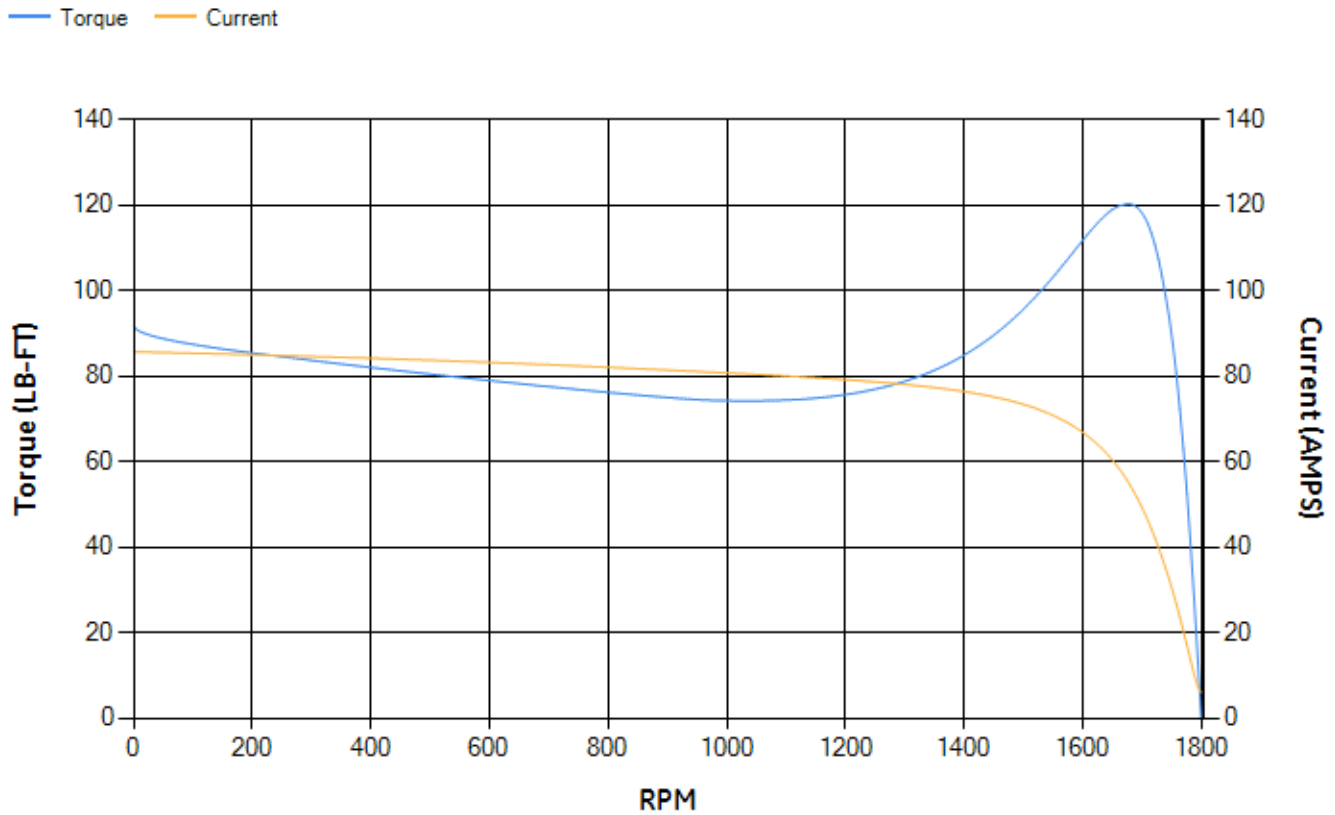
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	92.1	92.46	93.12	93.34	92.93	89.67	0.00
% PF	85.03	84.43	82.99	78.31	68.05	45.63	4.62
AMPS	17.93	16.54	14.53	11.53	8.88	6.86	5.93

<b>TORQ(FL)#FT</b>	44.36	<b>TORQ(LR)%FL</b>	206.94	<b>TORQ(BD)%FL</b>	269.83
<b>AMPS(LR)</b>	85.61	<b>PF AT START</b>	0.45		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 567 Lb-Ft Sq (23.87 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 48 seconds. Safe stall time at 100% voltage is 106 seconds cold, 72 seconds hot. Rotor inertia is 2.31 Lb-Ft Sq (0.1 Kg-meter Sq).

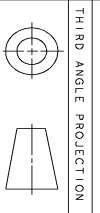
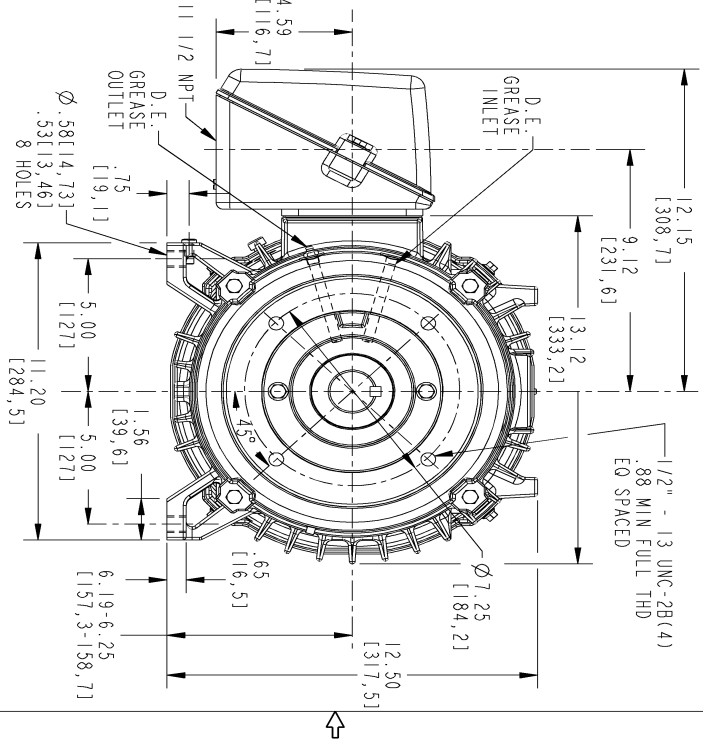
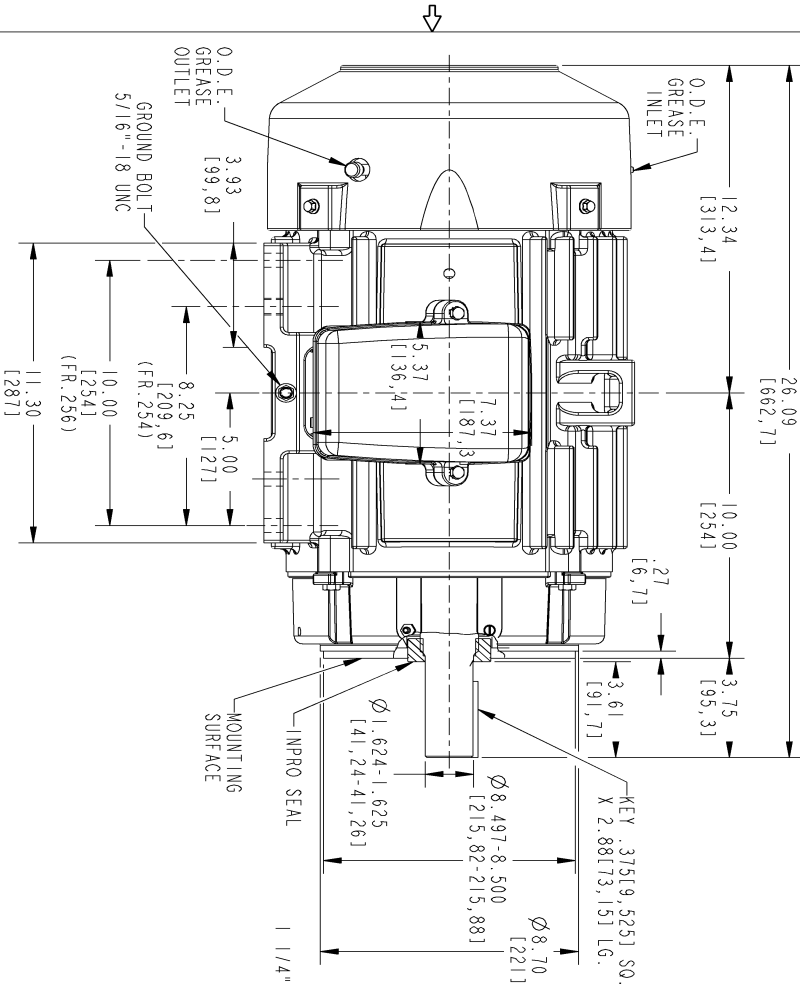
<b>Open Circuit A-C:</b>	0.456	<b>Short Circuit D-C:</b>	0.013
<b>Short Circuit A-C:</b>	0.025	<b>X/R Ratio:</b>	4.97
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	40

**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 WILL NOT EXCEED .001 T.I.R.
- NOTE 5: DE ENDSHIELD ROTATED 90° COUNTER CLOCKWISE
- NOTE 6: ALL DIMENSIONS ARE IN INCHES, BRACKETED DIMENSIONS ARE IN METRIC (MILLIMETERS)



SIZE	DRAWING NO.	REV	SHEET
B	4002B5825PBP5311	0	1

REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES		DATE
MODEL	TEJASNI	06/10/15
DETAIL	TEJASNI	06/10/15
CHECKED	AOI	06/10/15
ENGR	VENKAT	06/10/15
QC		
ISSUED	TEJASNI	06/10/15
SOLD MODEL	4002B5825PBP5311	

GE Motors	GENERAL ELECTRIC COMPANY
TITLE	
INDUCTION MOTOR OUTLINE	
IEEE-841 SPEC. "C" FACE AT DRIVE END (85° RABBIT)	
FR: 254/256TC TFC	
SIZE DRAWING	4002B5825PBP5311
QUALITY	
SCALE:	0.250 REF. No.: 4002B5825PBP5301
	SHEET 1 of 1

Marks:

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6106PM1	4004D5283SE1
Bearing	235A2608AA01	235A2607AA01
Slinger/Inproseal	235A4575GC20	4002B5914AG4

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6700G02
Fan Cover	4003C5788PA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	4002B5728PA-G04

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	