



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

# Product Technical Information

June 24, 2020

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

<b>Model Number:</b>	<b>5KS254XAA304D2</b>
<b>Catalog Number:</b>	<b>M9498</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG1
<b>Outline Drawing:</b>	4002B5825PAP5311

## 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:

<b>MODEL NUMBER:</b>	<b>5KS254XAA304D2</b>	<b>Estimated Weight:</b>	315 Lbs
<b>Outline Drawing:</b>	4002B5825PAP5311	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG1	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	841
<b>Design Code:</b>	25BD3062B	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	254T	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	6	<b>Nominal Efficiency:</b>	91 %
<b>Output Power:</b>	7.5HP 5.6KW	<b>Guaranteed Efficiency:</b>	90.2 %
<b>RPM:</b>	1175	<b>3/4 Load Efficiency:</b>	91.5 %
<b>Voltage:</b>	575	<b>KVA Code:</b>	H
<b>Hertz:</b>	60	<b>Max KVAR:</b>	3.0
<b>Amps - FL:</b>	7.8	<b>Power Factor:</b>	79.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6309ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6309ZC3

Enclosure is Totally Enclosed Fan-Cooled

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Stamped Nameplate Notes:

IEEE-STD-841-2009  
 DE BRG 45BC03JP30 ODE BRG 45BC03JP30  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS254XAA304D2 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 200 C VT OR 200 C CT OR 200 C 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:**

6P - T EXTN  
STANDARD FLOOR MOUNT  
C/BOX 137 CU IN-1.25 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  
INPRO SEAL BOTH ENDS  
GROUND SCREW ON FRAME  
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: 25BD3062B**

**Marks:**

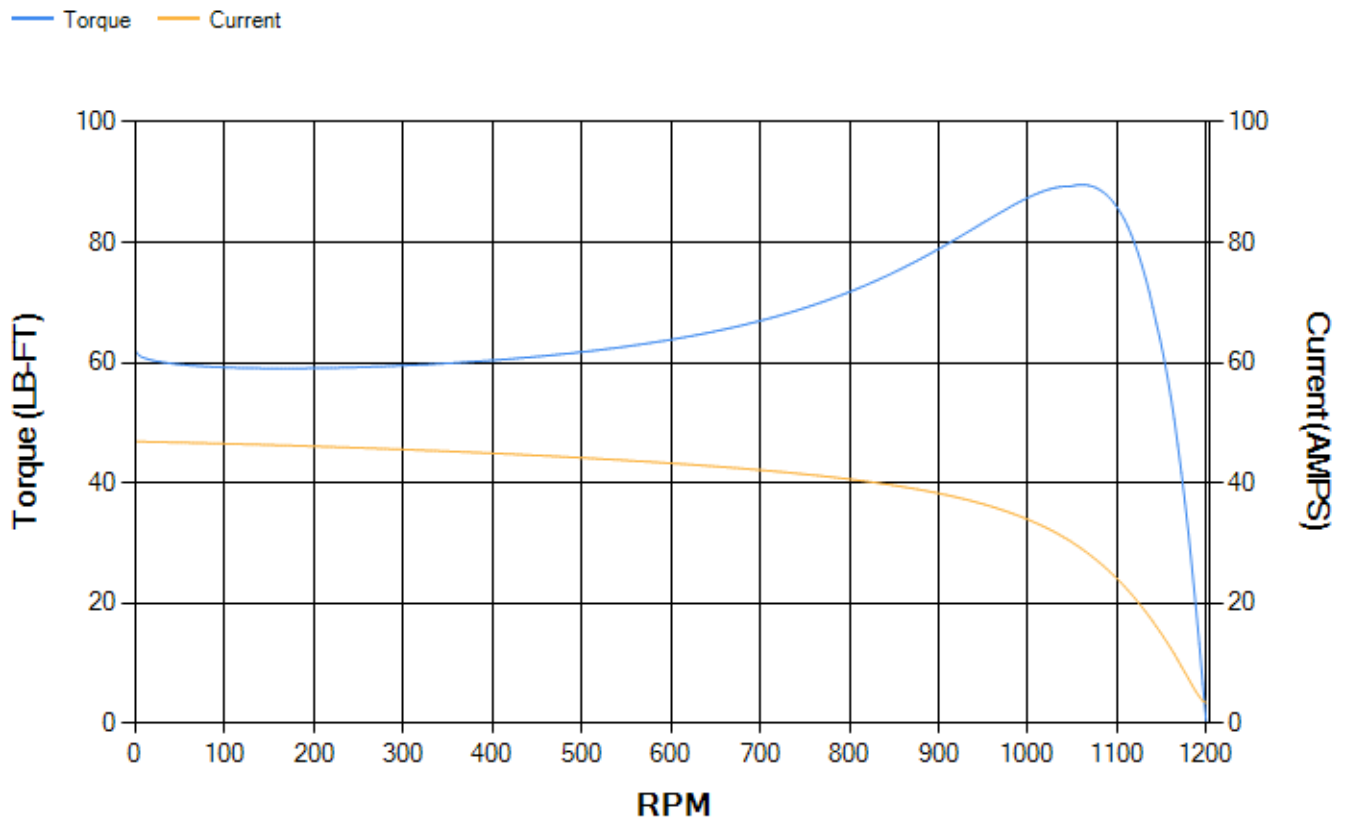
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	89.93	90.42	91.21	91.53	90.98	86.86	0.00
% PF	82	81.29	79.6	74.31	63.43	41.75	5.32
AMPS	9.52	8.79	7.74	6.19	4.86	3.87	3.39

<b>TORQ(FL)#FT</b>	33.53	<b>TORQ(LR)%FL</b>	184.7	<b>TORQ(BD)%FL</b>	265.25
<b>AMPS(LR)</b>	46.86	<b>PF AT START</b>	0.4		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 900 Lb-Ft Sq (37.89 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 62 seconds. Safe stall time at 100% voltage is 137 seconds cold, 103 seconds hot. Rotor inertia is 1.88 Lb-Ft Sq (0.08 Kg-meter Sq).

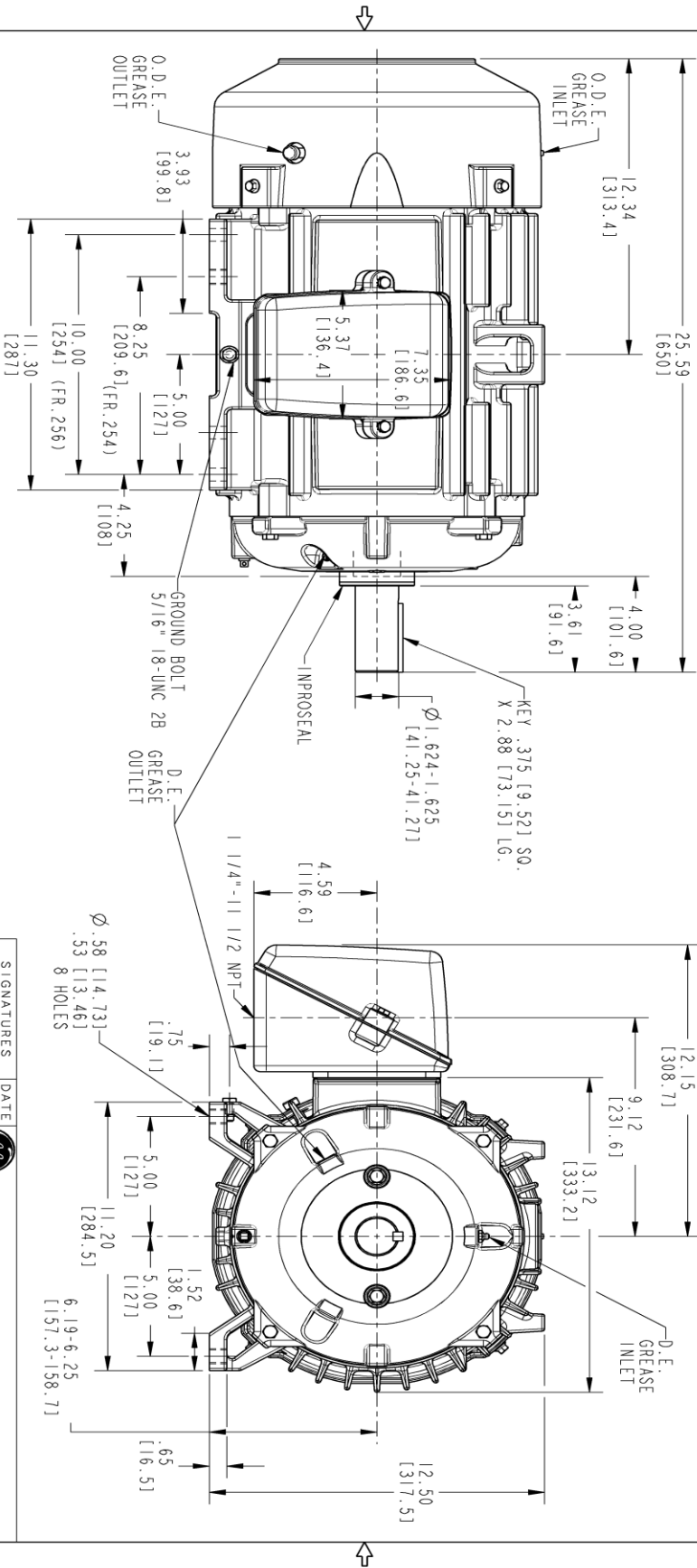
<b>Open Circuit A-C:</b>	0.272	<b>Short Circuit D-C:</b>	0.012
<b>Short Circuit A-C:</b>	0.017	<b>X/R Ratio:</b>	4.404
<b>Stator Slots:</b>	54	<b>Rotor Slots:</b>	42

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



Marks:

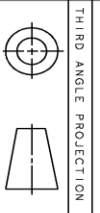
NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP, DOWN OR TO EITHER SIDE.  
 NOTE 2: F1 ASSEMBLY AS SHOWN. F2 ASSEMBLY CONDUIT BOX ON OPPOSITE SIDE FROM SHOWN LOCATION.  
 NOTE 3: SHAFT RUNOUT WILL NOT EXCEED .001 T. I. R.



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REV.	DESCRIPTION	DATE	APPROVED
1	ISAC# 18-0869	11/05/18	PRASHANTH

SIZE	DRAWING NO.	REV	SHEET
B	4002B5825PAP5311	001	1



THIRD ANGLE PROJECTION

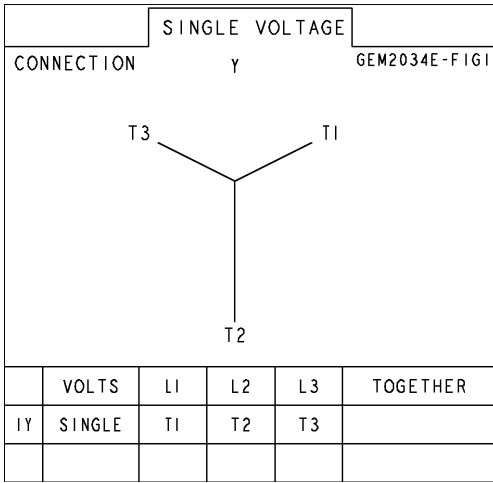
SIGNATURES		DATE	
MODEL	TEJASNI	05/18/15	
DETAIL	TEJASNI	05/18/15	
DESIGN	KARTHIK	05/18/15	
ENGR	SRIVANTHI	05/18/15	
QC			
QUALITY	TEJASNI	05/18/15	
ISSUED	B		
SOLID MODEL:	4002B5825PAP5311	SCALE:	0.250
TITLE		REV	
INDUCTION MOTOR OUTLINE		4002B5825PAP5311	
STANDARD CONSTRUCTION FOR IEEE-941 SPEC.		001	
FMR FR250T TERC X8D ULTRA		SHEET 1 OF 1	



GE INDUSTRIAL MOTORS  
 INDUCTION MOTOR OUTLINE  
 STANDARD CONSTRUCTION FOR IEEE-941 SPEC.  
 FMR FR250T TERC X8D ULTRA

Marks:

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5283PB1	4004D5283SE1
Bearing	235A2507EB01	235A2507EB01
Slinger/Inproseal	4002B5914AF4	4002B5914AG4

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6800G01
Fan Cover	4003C5788PA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

