

Product Information Packet

November 8, 2016

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

Model Number:	5KS254XAA221BW8
Catalog Number:	M6624
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG7
Outline Drawing:	4002B5825PAP5311

Accessory Connection Diagrams			
Bearing Thermocouple:	None	Heater:	None
RTD:	None	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	None		

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Marks:

MODEL NUMBER:	5KS254XAA221BW8	Estimated Weight:	315 Lbs
Outline Drawing:	4002B5825PAP5311	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG7	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	661
Design Code:	25BD1258A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	254T	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	92.4 %
Output Power:	15HP 11.1KW	Guaranteed Efficiency:	91.7
RPM:	1775	3/4 Load Efficiency:	93.3
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	5.4
Amps - FL:	18.3	Power Factor:	83.0
Service Factor:	1.15	Bearing - DE:	NU309ECJ/C3
Alt Service Factor:	--	Bearing - ODE:	6309ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

API-STD-661
 DE BRG 45RU03X3 ODE BRG 45BC03JP30
 IP 56
 ROLLER BEARING - FOR BELTED LOAD ONLY
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KS254XAA221BW8 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 WALL MOUNT SHAFT UP
 C/BOX 137 CU IN-1.25 NPT
 VERTICAL MOUNT SHAFT UP
 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
B5F4C4 HIGH FATIGUE STEEL AISI 4142 SHAFT MATERIAL

Performance Characteristics

1st Winding 1st Connection

Design: 25BD1258A

Marks:

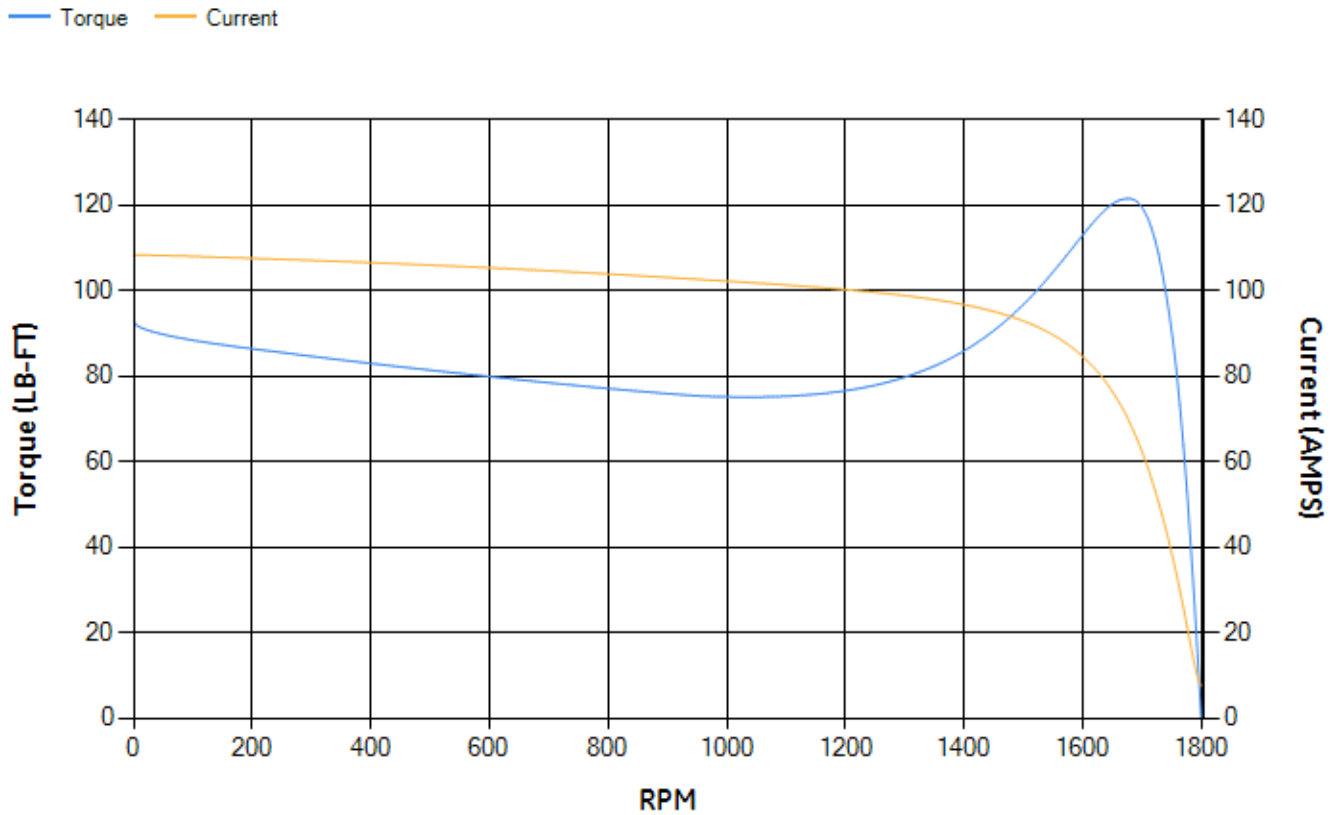
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	92.03	92.4	93.05	93.25	92.82	89.49	0.00
% PF	84.92	84.29	82.78	77.96	67.53	45.06	4.62
AMPS	22.45	20.73	18.23	14.48	11.2	8.7	7.55

TORQ(FL)#FT	44.35	TORQ(LR)%FL	209.27	TORQ(BD)%FL	272.81
AMPS(LR)	108.35	PF AT START	0.45		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 532 Lb-Ft Sq (22.4 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 44 seconds. Safe stall time at 100% voltage is 98 seconds cold, 67 seconds hot. Rotor inertia is 2.31 Lb-Ft Sq (0.1 Kg-meter Sq).

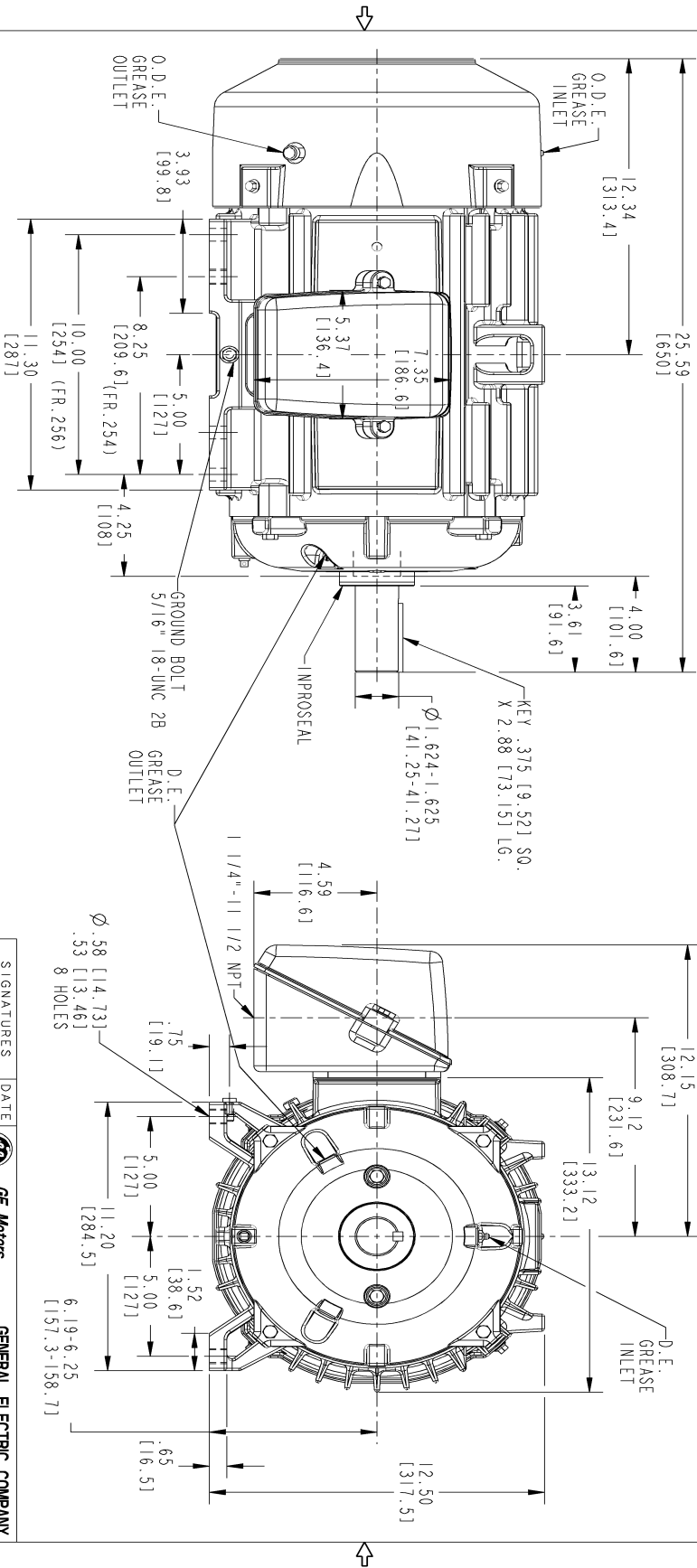
Open Circuit A-C:	0.453	Short Circuit D-C:	0.013
Short Circuit A-C:	0.025	X/R Ratio:	4.808
Stator Slots:	48	Rotor Slots:	40

Speed Torque Current Curve (First Connection, First Speed)



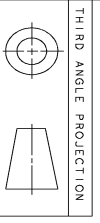
Marks:

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: SHAFT RUNOUT WILL NOT EXCEED .001" I. P.R.



SIZE	DRAWING NO.	REV	SHEET
B	4002B5825PAP5311	0	1

REV.	DESCRIPTION	DATE	APPROVED



SIGNATURES		DATE	
MODEL	TEJASNI	05/18/15	
DETAIL	TEJASNI	05/18/15	
CHECKED	KARTHIK	05/18/15	
ENGR	SHAMANTHI	05/18/15	
QC			
ISSUED	TEJASNI	05/18/15	
SOLID MODEL	4002B5825PAP5311		

TITLE	
INDUCTION MOTOR OUTLINE	
STANDARD CONSTRUCTION FOR IEEE-841 SPEC.	
FMR: FR250T	TEFC XSD ULTRA
SIZE DRAWING	4002B5825PAP5311
SCALE: 0.250	REV 0
REF. No.: 4002B5825PAP301	SHEET 1 of 1

GE Motors
 GENERAL ELECTRIC COMPANY

Marks:

Connection Diagram
GEM2034E-FIG7



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5283PB1	4004D5283SE1
Bearing	235A2527AA01	235A2607AA01
Slinger/Inproseal	4002B5914AF4	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	