GE
Power Conversion

Product Information Packet

November 9, 2016

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

Model Number:	**5KS215XAE5421B**
Catalog Number:	**V856**
Instruction Manual:	GEK-95351
Connection Diagram:	GEM2034E-FIG1
Outline Drawing:	4002B5821PNP5310

Accessory Connection Diagrams

Bearing Thermocouple:	None	**Heater:**	None
RTD:	None	**Thermistor:**	None
Thermostat:	None	**Winding Thermocouple:**	None
Bearing RTD:	None		

Table of Contents

imagination at work

Marks:

MODEL NUMBER:	**5KS215XAE5421B**	**Estimated Weight:**	220 Lbs
Outline Drawing:	4002B5821PNP5310	**Time Rating:**	CONT
Connection Diagram:	GEM2034E-FIG1	**Enclosure:**	TEFC
Instruction Book:	GEK-95351	**Encl Construction:**	841
Design Code:	21BD0121A	**Ambient Max(°C):**	40
Type:	KS	**Alt Ambient Max(°C):**	--
Frame:	L215VP10	**Insulation Class:**	H
Phases:	3	**NEMA Design:**	B
Poles:	2	**Nominal Efficiency:**	90.2 %
Output Power:	10HP 7.4KW	**Guaranteed Efficiency:**	88.5
RPM:	3520	**3/4 Load Efficiency:**	91.0
Voltage:	460	**KVA Code:**	H
Hertz:	60	**Max KVAR:**	2.2
Amps - FL:	11.5	**Power Factor:**	90.0
Service Factor:	1.15	**Bearing - DE:**	7308
Alt Service Factor:	--	**Bearing - ODE:**	6208-2ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

VERTICAL-841
PREMIUM EFFICIENT MOTOR
DE BRG 40BT03XP3 ODE BRG 40BC02JP3
SEVERE DUTY
EXCEPTION TO IEEE-STD-841-2009:THRUST BRG ON DE
INVERTER DUTY PER NEMA MG1 PART 31
ALTERNATE RATING FOR PWM CONTROL:
1.0 SF VAR TORQUE RANGE 0-60 HZ
MAX EXPOSED INTERNAL AND EXTERNAL SURFACE
TEMPERATURES UNDER USUAL SERVICE CONDITIONS
AT 1.00 S.F. DO NOT EXCEED 200 DEG C
STAMP NP249A5499AP AS BELOW:
MODEL:5KS215XAE5421B S/N: XXX
EX NA IIC T3 GC CSA.09.2216219
CLASS I, ZONE 2, AEX NA IIC T3
CLASS I, DIV 2, GROUPS A, B, C, D T3
-25C <= TAMB <= 40C

Additional Information:

2P - VP EXTN
C/BOX 55 CU IN-1.00 NPT
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
E/SHLD GROUND STUD MTD ON DE C/BOX SIDE
SHAFT RUNOUT LIMIT .001" TIR

RCF 5000 CPM, STATIC DEFLECTION .0014 INCHES &
CENTER OF GRAVITY 8.59 INCHES
SOLID SHAFT HIGH THRUST
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
BEARING LIFE 26280 HOURS AT 1134 LB THRUST

Performance Characteristics 1st Winding 1st Connection **Design: 21BD0121A**

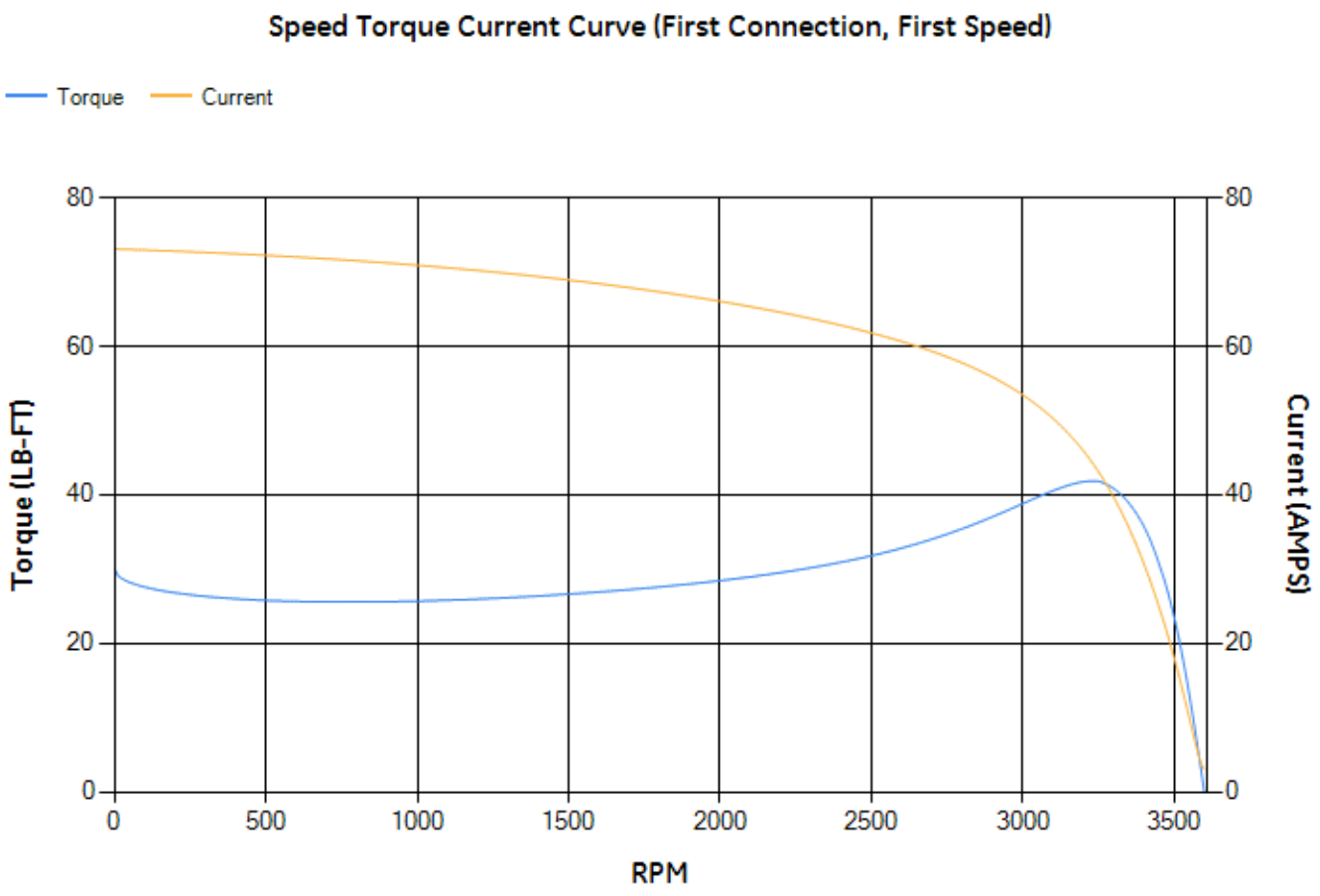
Marks:

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	88.61	89.27	90.32	91.04	90.92	87.4	0.00
% PF	90.02	90.09	89.84	88.02	82.4	64.49	9.22
AMPS	14.67	13.38	11.52	8.76	6.25	4.15	3.01

TORQ(FL)#FT	14.91	**TORQ(LR)%FL**	201.12	**TORQ(BD)%FL**	278.54
AMPS(LR)	73.1	**PF AT START**	0.36		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 75 Lb-Ft Sq (3.16 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 35 seconds. Safe stall time at 100% voltage is 67 seconds cold, 42 seconds hot. Rotor inertia is 0.39 Lb-Ft Sq (0.02 Kg-meter Sq).

Open Circuit A-C:	0.47	**Short Circuit D-C:**	0.01
Short Circuit A-C:	0.017	**X/R Ratio:**	3.896
Stator Slots:	36	**Rotor Slots:**	26



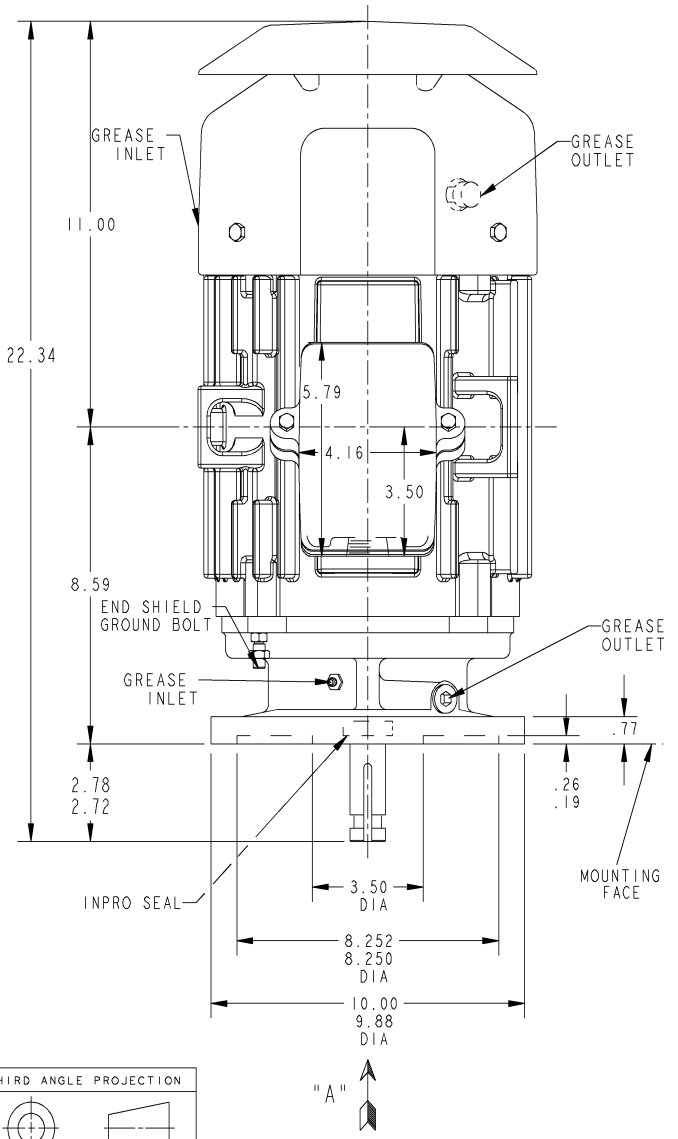
Marks:

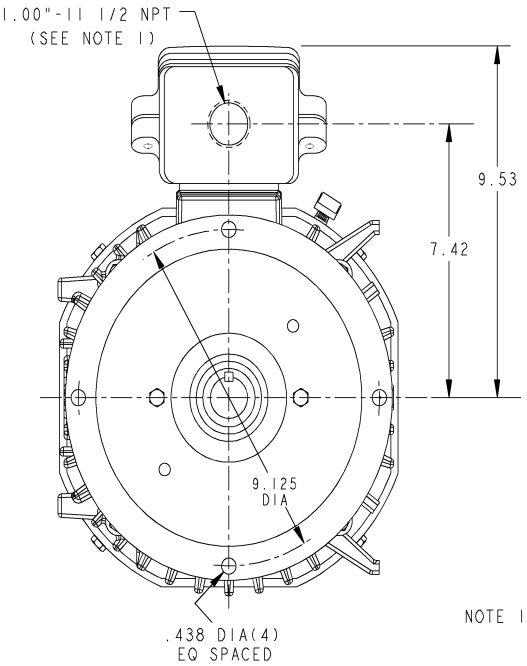
Model Number: 5KS215XAE5421B

November 9, 2016

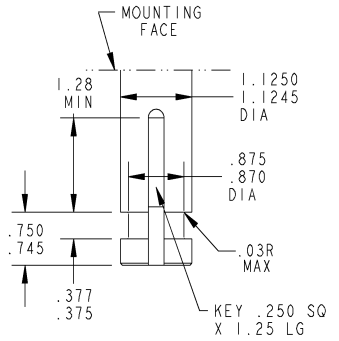
SIZE	DRAWING NO.	SH	REV
B	4002B5821PNP5310	1	3

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	10-0160 SRAVANTHI	3/10/2010	03/10/2010
2	GREASE OUTLET SHOWN ON FAR SIDE SRAVANTHI	09/09/2011	ADI
3	ISAAC# 13-0177 LAXMIKANTH	02/27/2013	NANCHI





VIEW AT ARROW "A"



ENLARGED VIEW OF SHAFT EXTENSION

NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP, DOWN OR TO EITHER SIDE.

NOTE 2: SHAFT RUN OUT NOT TO EXCEED .001 T.I.R

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED:	SIGNATURES		DATE
DIMENSIONS ARE IN INCHES	DRAWN	N PRASAD	08/16/06
TOLERANCE ON:	CHECKED	ROOPA	08/16/06
2 PL DECIMALS ± 0.02	ENGRG		
3 PL DECIMALS ± 0.005	ISSUED	N PRASAD	08/16/06
ANGLES ± 0.5			
MATERIAL:	APPLIED PRACTICES		

GE Industrial Systems

GENERAL ELECTRIC COMPANY
Fort Wayne, Indiana

INDUCTION MOTOR OUTLINE

FR210 TEFC STD "P" BASE VERTICAL C.I.R.

SOLID SHAFT - HIGH THRUST IEEE - 841 FEATURES (BD:10)

SIZE	DRAWING	REV.
B	4002B5821PNP5310	3

SCALE: .3 | REF: 4002B5821PNP5210 | SHEET 1 OF 1

DISTRIBUTION:

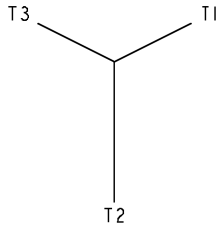
Marks:

Connection Diagram

GEM2034E-FIG1

SINGLE VOLTAGE

CONNECTION Y GEM2034E-FIGI



	VOLTS	LI	L2	L3	TOGETHER
IY	SINGLE	TI	T2	T3	

End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6027PJ1	4004D5282SL1
Bearing		
Slinger/Inproseal		

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

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	