

# Product Information Packet

November 8, 2016

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

<b>Model Number:</b>	<b>5KS286XAA181B</b>
<b>Catalog Number:</b>	<b>M9557</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	4002B5828PBP5313

<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		

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**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS286XAA181B</b>	<b>Estimated Weight:</b>	510 Lbs
<b>Outline Drawing:</b>	4002B5828PBP5313	<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>	28BD0153B	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	286TSC	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	92.4 %
<b>Output Power:</b>	30HP 22.2KW	<b>Guaranteed Efficiency:</b>	91.7
<b>RPM:</b>	3545	<b>3/4 Load Efficiency:</b>	93.4
<b>Voltage:</b>	575	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	4.2
<b>Amps - FL:</b>	26.1	<b>Power Factor:</b>	93.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6310ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6310ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

IEEE-STD-841-2009  
 DE BRG 50BC03JP30 ODE BRG 50BC03JP30  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS286XAA181B S/N: XXX  
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200 C GC  
 CL1 ZONE2 AEX NA IIC 200C; CL1 DIV2 GRP ABCD 200 C  
 IN -25C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR  
 SURF TEMP 260 C AT 1.15 SF ON SINE-WAVE PWR  
 OR 200 C VT OR 215 C CT OR 215 C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0 SF 40 C AMB  
 VT 0-60 HZ, CT 15-60 HZ, CHP 60-90 HZ.

**Additional Information:**

2P - TS EXTN  
 STANDARD FLOOR MOUNT  
 C/BOX 137 CU IN-1.50 NPT  
 F1 CONDUIT BOX MOUNTING  
 "C" FACE AT DE ENDSHIELD  
 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: 28BD0153B**

**Marks:**

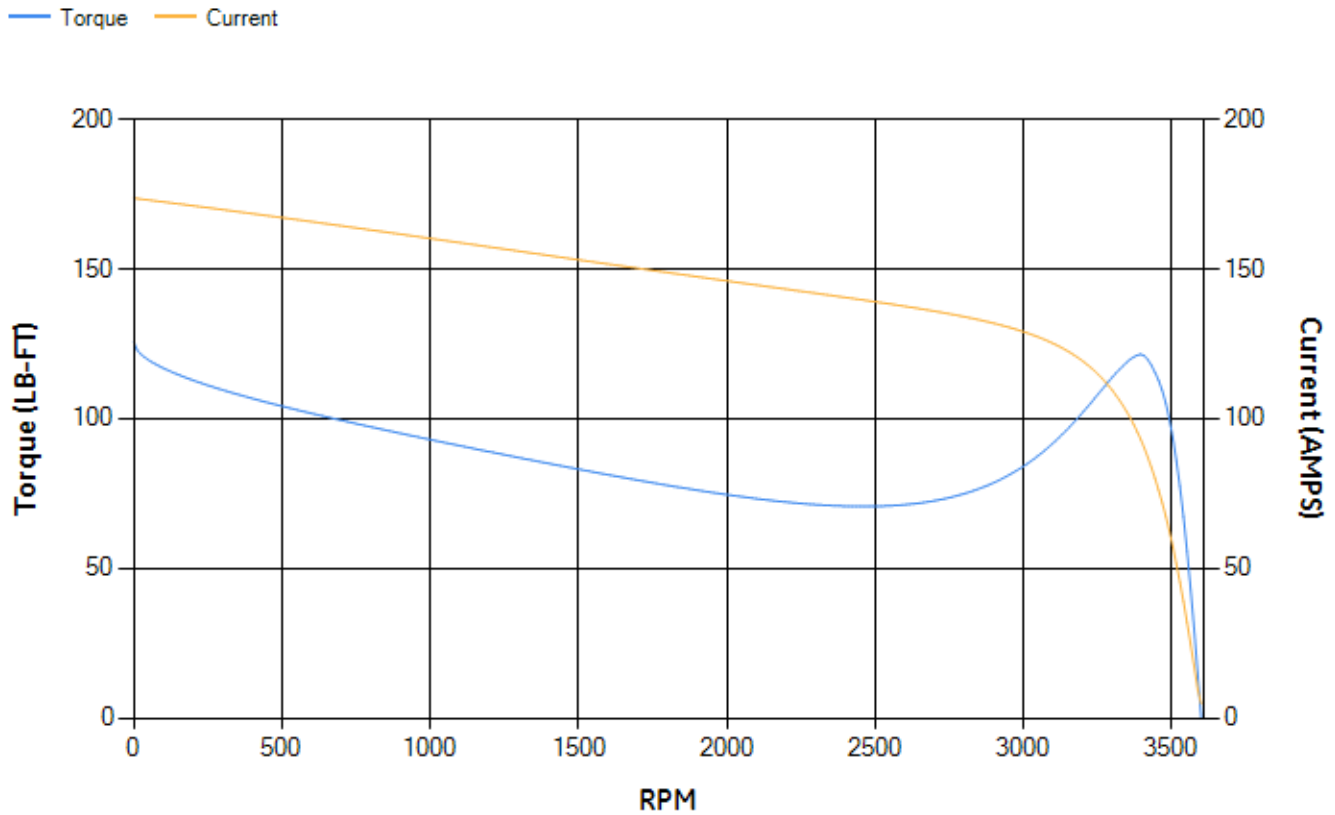
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	91.41	91.93	92.79	93.37	93.42	91.05	0.00
% PF	92.41	92.7	92.9	92.37	89.5	77.14	9.72
AMPS	33.24	30.31	26.06	19.53	13.43	8	4.7

TORQ(FL)#FT	44.4	TORQ(LR)%FL	283.26	TORQ(BD)%FL	272.51
AMPS(LR)	173.68	PF AT START	0.43		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 111 Lb-Ft Sq (4.67 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 18 seconds. Safe stall time at 100% voltage is 38 seconds cold, 21 seconds hot. Rotor inertia is 3.25 Lb-Ft Sq (0.14 Kg-meter Sq).

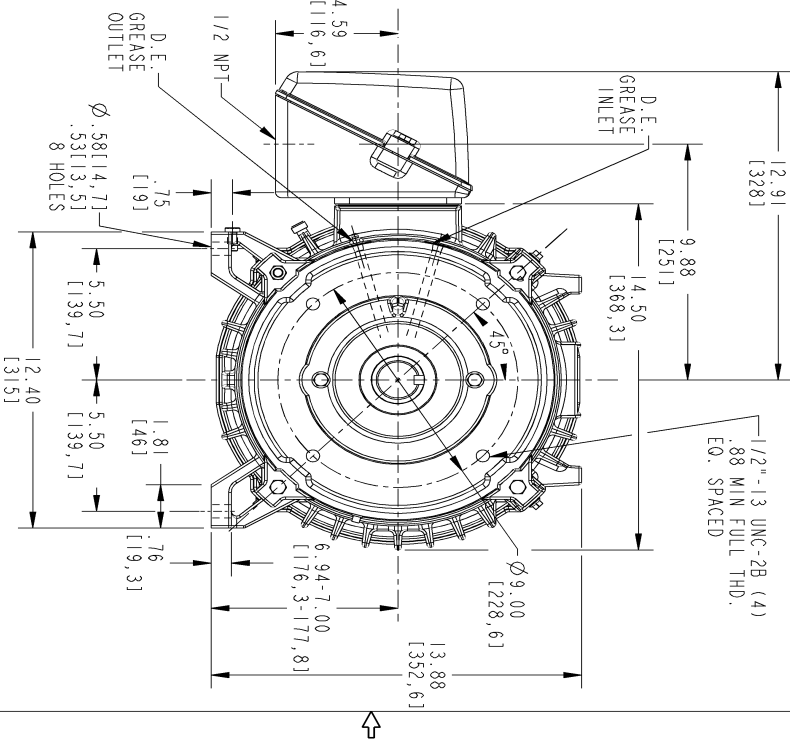
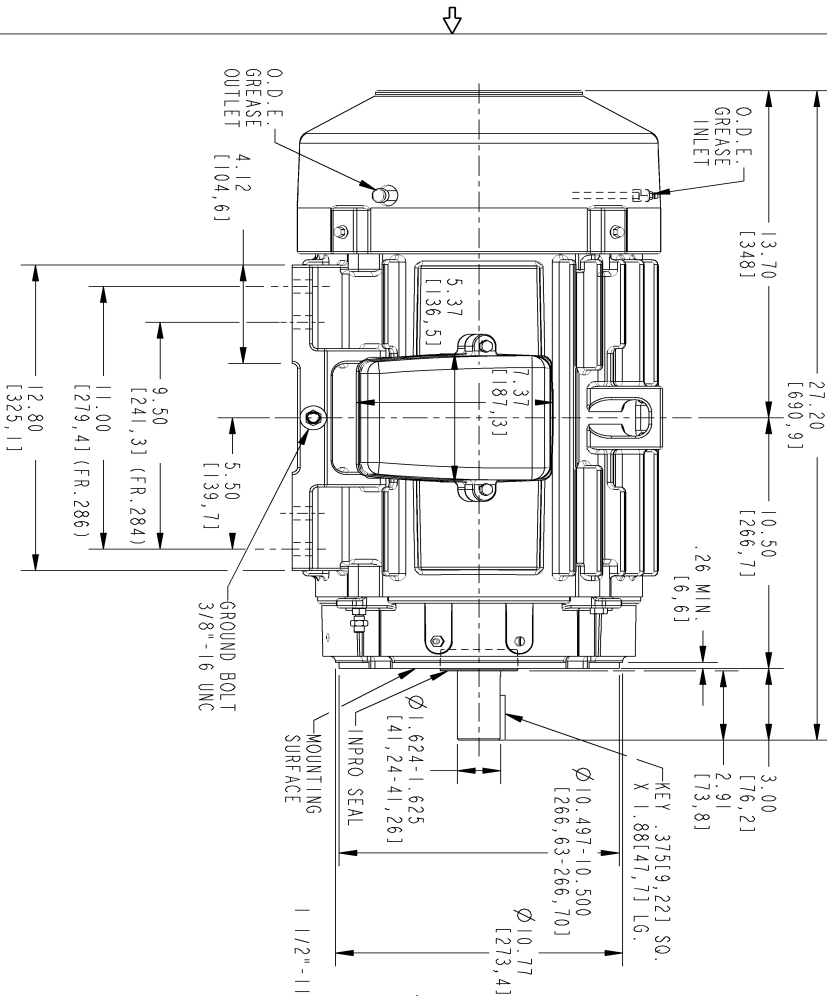
Open Circuit A-C:	1.041	Short Circuit D-C:	0.013
Short Circuit A-C:	0.025	X/R Ratio:	5.016
Stator Slots:	48	Rotor Slots:	38

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



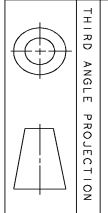
Marks:

- 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. **4002B5828PBP5313 2**

REV.	DESCRIPTION	DATE	APPROVED
1	ISAAC #15-0870	08/26/15	VENKAT J
2	ISAAC#15-1066	11/03/15	HAREHARAN



SIGNATURES	DATE
MODEL: TEJASWI	06/10/15
DETAIL: TEJASWI	06/10/15
CHECKED: VIJAY	06/10/15
ENGR: VENKAT	06/10/15
ISSUED: TEJASWI	06/10/15
SOLD MODEL: 4002B5828PBP5313	

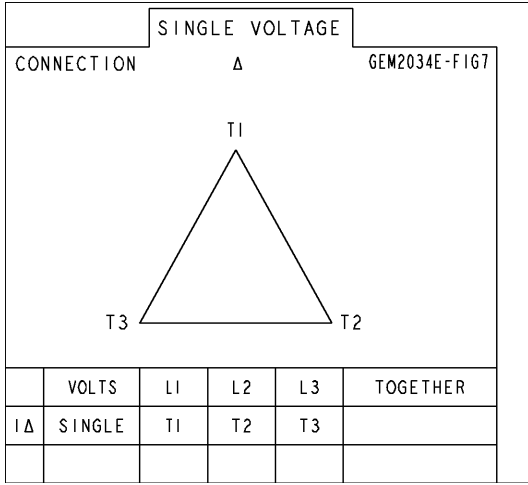
TITLE	GENERAL ELECTRIC COMPANY
<b>INDUCTION MOTOR OUTLINE</b>	
IEEE-841 SPECIFICATION (050° RABBET)	
FR. 284/286TSC TEFC	

SCALE:	REV
0.225 REF. No.: 4002B5828PBP5302	2

Marks:

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6206PL1	4004D5284SE1
Bearing	235A2608AA01	235A2608AA01
Slinger/Inproseal	235A4575GC20	4002B5914AG5

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6704G02
Fan Cover	4003C5789PA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	4002B5728PA-G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	