

# Product Information Packet

November 8, 2016

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

<b>Model Number:</b>	<b>5KS286XAA2010C</b>
<b>Catalog Number:</b>	<b>M9523</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	4002B5828PDP5310

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>5KS286XAA2010C</b>	<b>Estimated Weight:</b>	510 Lbs
<b>Outline Drawing:</b>	4002B5828PDP5310	<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>	28BD1157A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	286TC	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	93.6 %
<b>Output Power:</b>	30HP 22.2KW	<b>Guaranteed Efficiency:</b>	93.0
<b>RPM:</b>	1775	<b>3/4 Load Efficiency:</b>	94.1
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	8.2
<b>Amps - FL:</b>	34.9	<b>Power Factor:</b>	86.0
<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:5KS286XAA2010C 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 6-60 HZ, CHP 60-90 HZ.

**Additional Information:**

4P - T EXTN  
 C/BOX 137 CU IN-1.50 NPT  
 "C" FACE AT DE ENDSHIELD ROUND FRAME  
 VERTICAL MOUNT SHAFT DOWN WITH DRIPCOVER  
 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 NEAR FOOT  
 ROTATE D.E. E/SHIELD 90 DEG. PER OUTLINE  
 SHAFT RUNOUT LIMIT .0015" 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: 28BD1157A**

**Marks:**

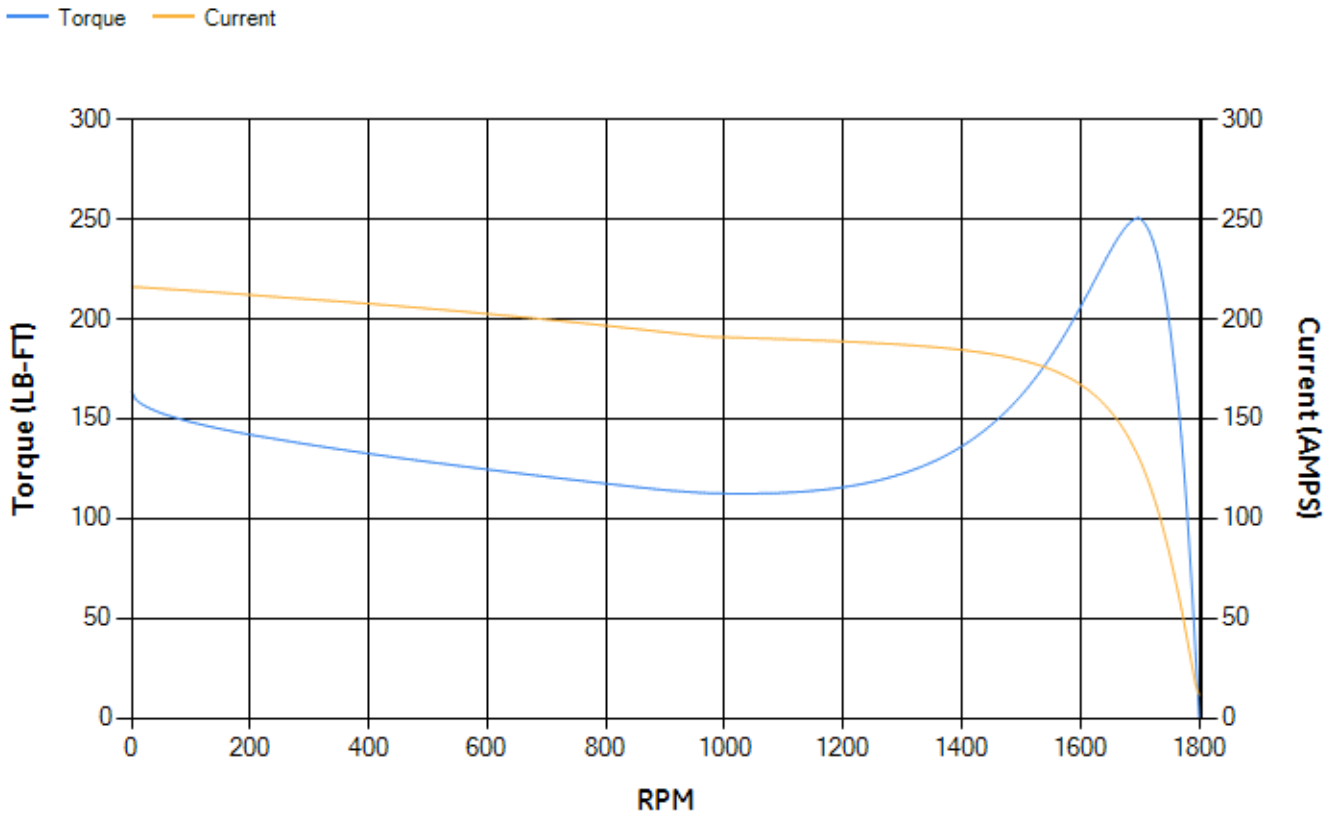
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	92.5	92.93	93.68	94.1	94.05	91.75	0.00
% PF	86.93	86.75	86.04	82.98	75.01	53.73	4.5
AMPS	43.65	40.05	34.82	26.97	19.9	14.24	11.48

<b>TORQ(FL)#FT</b>	88.62	<b>TORQ(LR)%FL</b>	184.78	<b>TORQ(BD)%FL</b>	281.75
<b>AMPS(LR)</b>	216.09	<b>PF AT START</b>	0.38		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 969 Lb-Ft Sq (40.79 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 51 seconds. Safe stall time at 100% voltage is 90 seconds cold, 61 seconds hot. Rotor inertia is 5.44 Lb-Ft Sq (0.23 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.635	<b>Short Circuit D-C:</b>	0.016
<b>Short Circuit A-C:</b>	0.027	<b>X/R Ratio:</b>	5.921
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	40

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



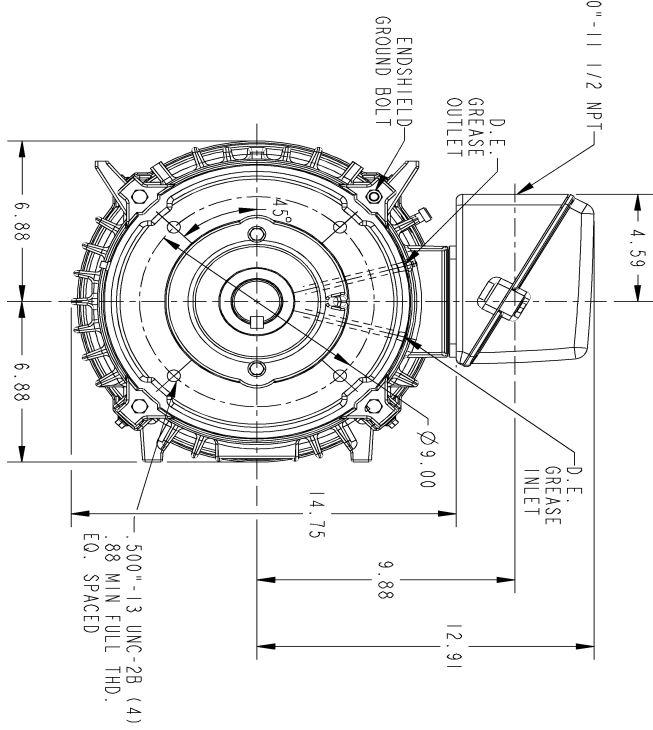
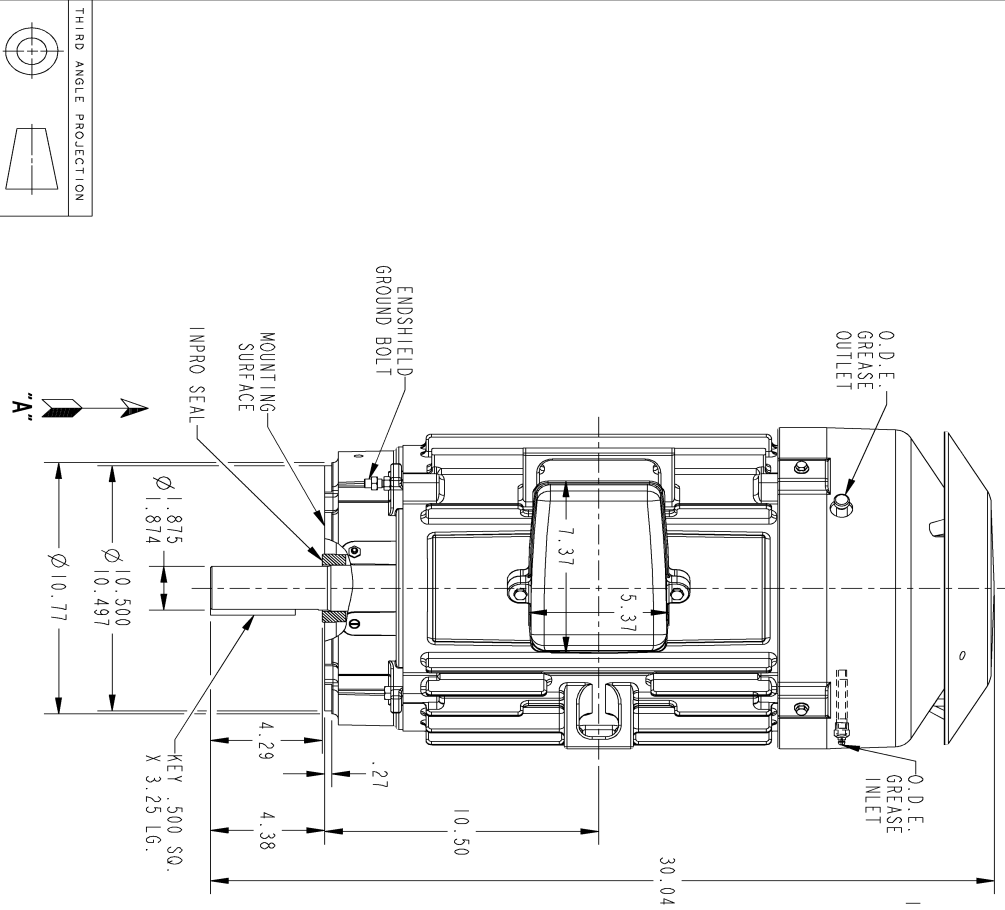
Marks:

- 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 TO BE SQUARE AND CONCENTRIC WITH SHAFT WITHIN .004 T.I.R.
- NOTE 4: SHAFT RUNOUT WILL NOT EXCEED .0015 T.I.R.
- NOTE 5: DE ENDSHIELD ROTATED 90° COUNTER CLOCKWISE.

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ISAAC #11-0438	06/27/11	T VIJAYA KUMAR
2	ISAAC # 15-0485	05/14/2015	V. JAY
3	ISAAC#15-1066	11/03/15	HAREHARAN

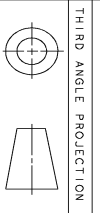


VIEW AT "A"

SIGNATURES	DATE	TITLE	
AMAND	06/10/10	INDUCTION MOTOR OUTLINE	
AMAND	06/10/10	IEEE-84I SPEC AND DRIP COVER (1050° RABBIT)	
AMARAYANA	06/10/10	FME: KS284TCV TEC 'C' FACE FOOTLESS	
AMARAYANA	06/10/10	4002B5828PDP5310	
AMARAYANA	06/10/10	3	

GE Motors GENERAL ELECTRIC COMPANY

SCALE: 0.220 REF. No.: 4002B5828PDP-302



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	235A4575GC7	4002B5914AG5

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6900G01
Fan Cover	4003C5528BN-G01

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	