

# Product Information Packet

November 8, 2016

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

<b>Model Number:</b>	<b>5KS256XAA198B</b>
<b>Catalog Number:</b>	<b>M9513</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	4002B5825PDP5310

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>5KS256XAA198B</b>	<b>Estimated Weight:</b>	350 Lbs
<b>Outline Drawing:</b>	4002B5825PDP5310	<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>	25BD0065A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	256TC	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	91 %
<b>Output Power:</b>	20HP 14.8KW	<b>Guaranteed Efficiency:</b>	90.2
<b>RPM:</b>	3540	<b>3/4 Load Efficiency:</b>	92.6
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	2.3
<b>Amps - FL:</b>	22.6	<b>Power Factor:</b>	91.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6310ZC3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6309ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

IEEE-STD-841-2009  
 DE BRG 50BC03JP30 ODE BRG 45BC03JP30  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS256XAA198B 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 300 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 15-60 HZ, CHP 60-90 HZ.

**Additional Information:**

2P - T EXTN  
 C/BOX 137 CU IN-1.25 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 .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: 25BD0065A**

**Marks:**

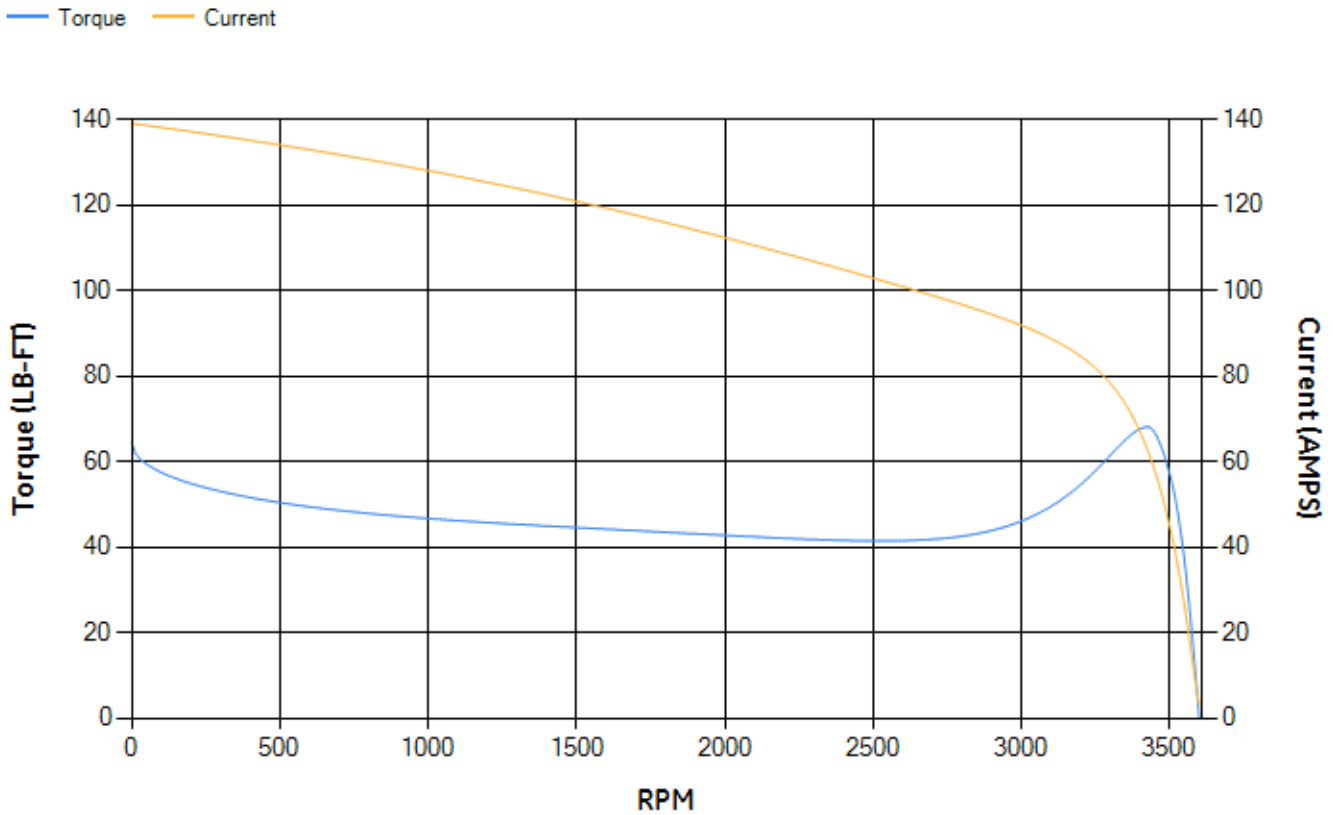
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	89.27	90.16	91.45	92.55	93.01	91.04	0.00
% PF	88.89	89.91	91.01	91.73	90.36	81.34	11.6
AMPS	29.49	26.56	22.49	16.54	11.14	6.32	3.17

TORQ(FL)#FT	29.65	TORQ(LR)%FL	217.28	TORQ(BD)%FL	228.31
AMPS(LR)	139.04	PF AT START	0.33		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 143 Lb-Ft Sq (6.02 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 94 seconds cold, 55 seconds hot. Rotor inertia is 1.9 Lb-Ft Sq (0.08 Kg-meter Sq).

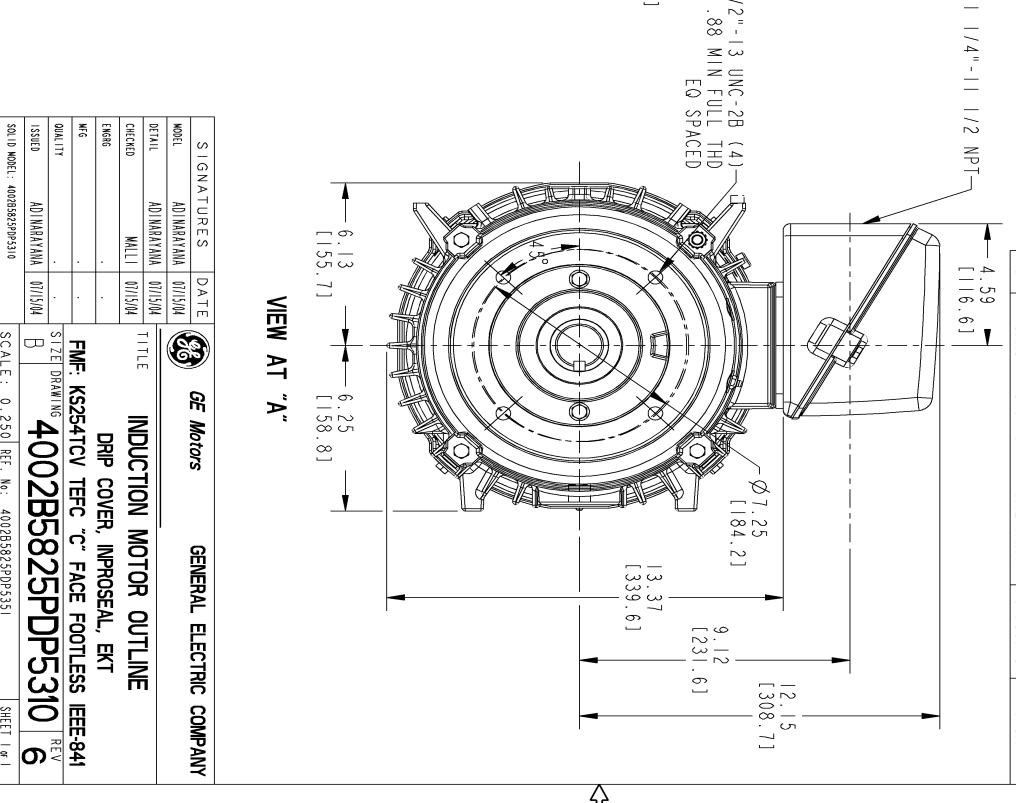
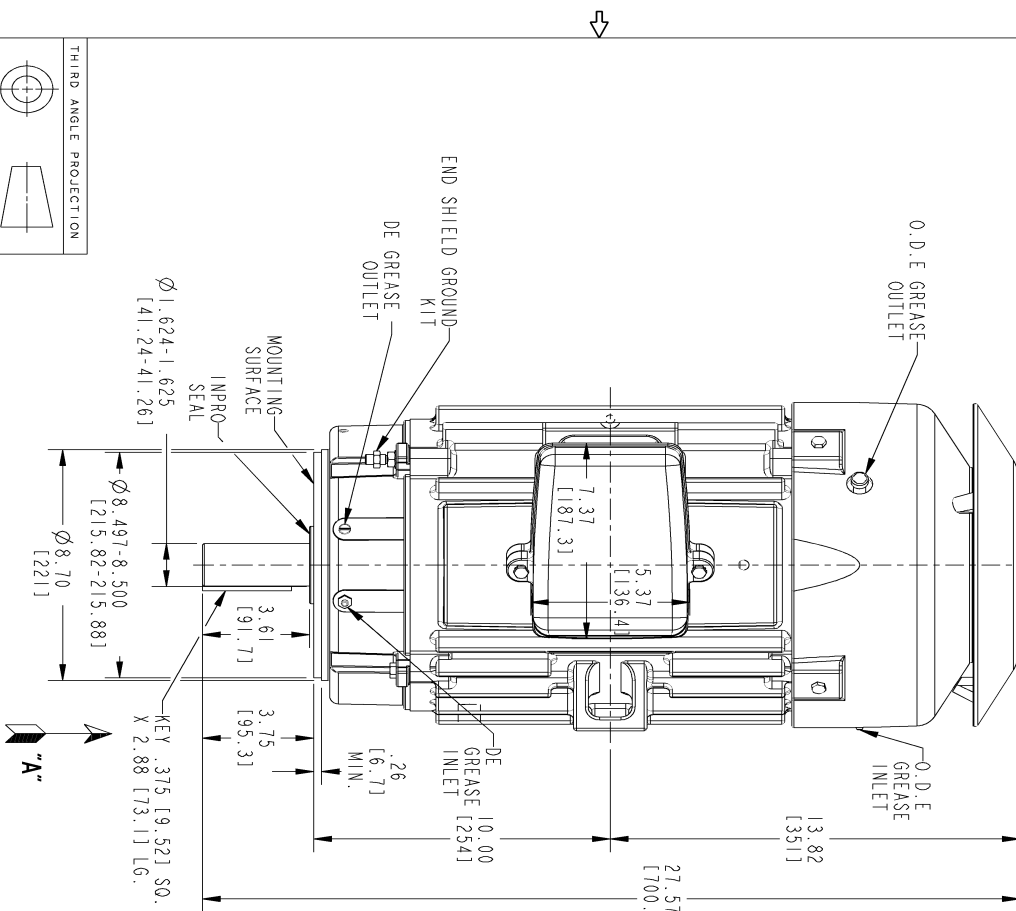
Open Circuit A-C:	1.254	Short Circuit D-C:	0.013
Short Circuit A-C:	0.028	X/R Ratio:	4.893
Stator Slots:	36	Rotor Slots:	26

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



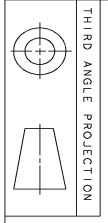
Marks:

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 .001 T.I.R.  
 NOTE 5: DE ENDSHIELD ROTATED 90 DEG COUNTER CLOCKWISE



REV.	DESCRIPTION	DATE	APPROVED
1	ISAAC 09-0652 ATUL	07/17/09	PANKAJ
2	ISAAC 10-0181 MANCHI	03/18/10	RAGHUNATH
3	ISAAC# 12-0047 GIREESH	01/16/12	RAGHUNATH
4	ISAAC# 14-0656 TEJASWI	08/28/14	HARI KIRAN
5	ISAAC # 14-0739 HAREHARAN	09/19/14	MANCHI
6	ISAAC # 15-0417	04/30/15	V.JAY

SIGNATURES		DATE	
ADIMARAYANA	DESIGN		
ADIMARAYANA	DRAWN		
MALLI	DESIGN		
TITLE <b>INDUCTION MOTOR OUTLINE</b> DRIP COVER, IMPROSEAL, EKT FME: KS254TCV TFC "C" FACE FOOTLESS IEEE-841 4002B5825PDP5310 SCALE: 0.250 REF. No.: 4002B5825PDP5310			
QUALITY		REV	
ADIMARAYANA		6	
SHEET 1 OF 1			



Marks:

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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	128D6106PM1	4004D5283SE1
Bearing	235A2608AA01	235A2607AA01
Slinger/Inproseal	235A4575GC20	4002B5914AG4

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6704G02
Fan Cover	4003C5525BN-G01

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	