

Product Information Packet

November 8, 2016

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

Model Number:	5KS286XAA204D2
Catalog Number:	M9580
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG7
Outline Drawing:	4002B5828PAP5311

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:	5KS286XAA204D2	Estimated Weight:	510 Lbs
Outline Drawing:	4002B5828PAP5311	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG7	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	841
Design Code:	28BD1157B	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	286T	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	93.6 %
Output Power:	30HP 22.2KW	Guaranteed Efficiency:	93.0
RPM:	1775	3/4 Load Efficiency:	94.1
Voltage:	575	KVA Code:	G
Hertz:	60	Max KVAR:	8.2
Amps - FL:	27.9	Power Factor:	86.0
Service Factor:	1.15	Bearing - DE:	6310ZC3
Alt Service Factor:	--	Bearing - ODE:	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:5KS286XAA204D2 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
 STANDARD FLOOR MOUNT
 C/BOX 137 CU IN-1.50 NPT
 F1 CONDUIT BOX MOUNTING
 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 .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: 28BD1157B

Marks:

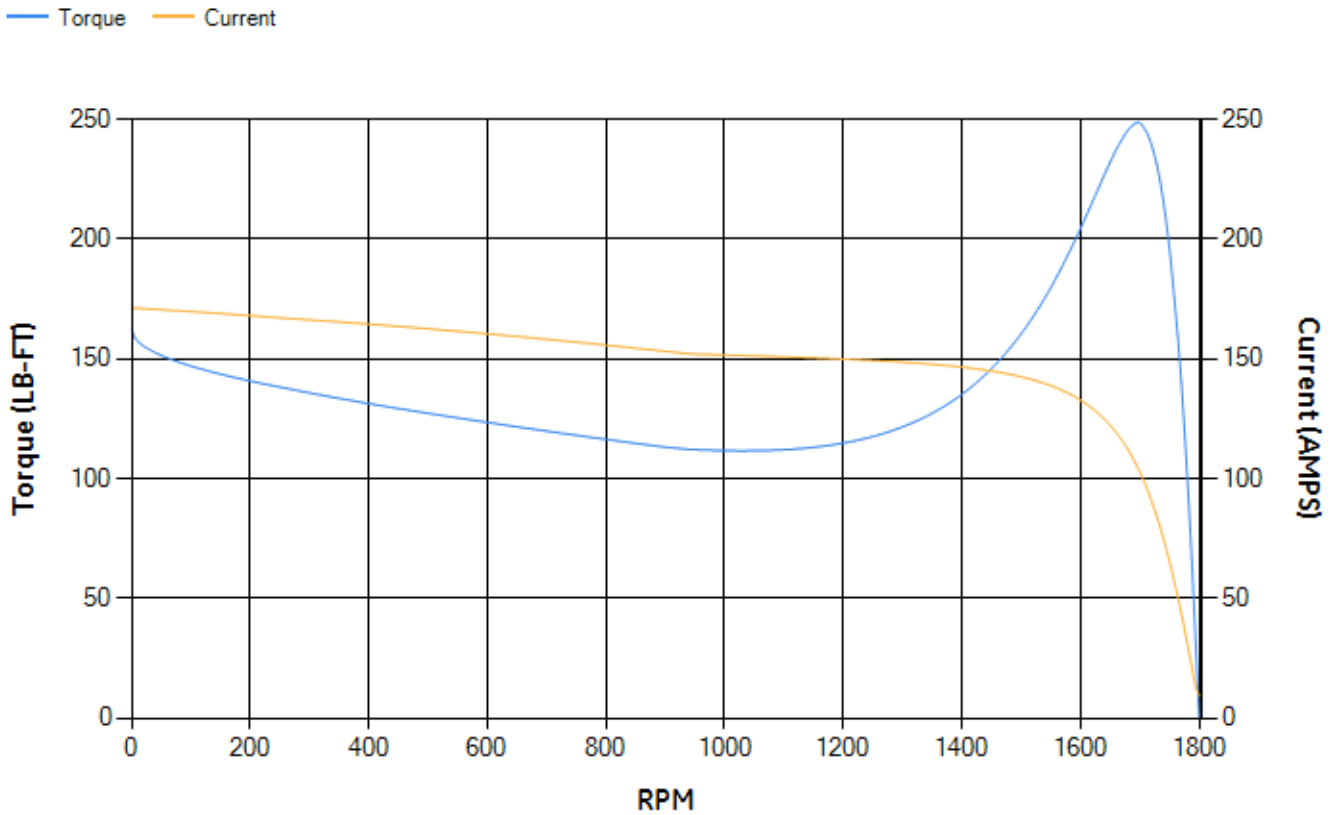
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	92.44	92.88	93.64	94.08	94.05	91.76	0.00
% PF	86.96	86.8	86.12	83.12	75.24	54.04	4.52
AMPS	34.93	32.04	27.84	21.54	15.87	11.32	9.11

TORQ(FL)#FT	88.63	TORQ(LR)%FL	183.04	TORQ(BD)%FL	279.67
AMPS(LR)	171.25	PF AT START	0.38		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 962 Lb-Ft Sq (40.5 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 91 seconds cold, 62 seconds hot. Rotor inertia is 5.44 Lb-Ft Sq (0.23 Kg-meter Sq).

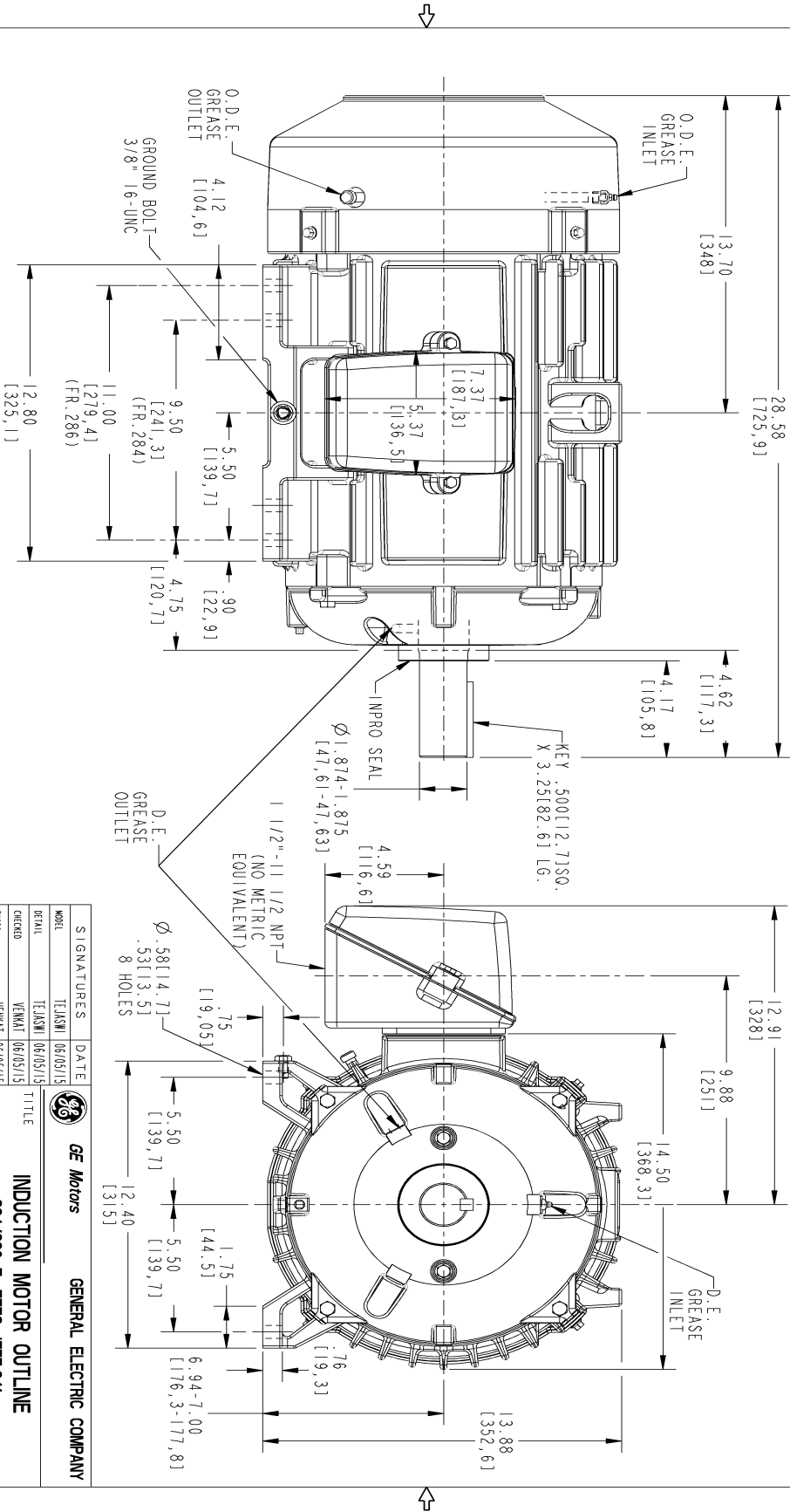
Open Circuit A-C:	0.635	Short Circuit D-C:	0.016
Short Circuit A-C:	0.027	X/R Ratio:	5.902
Stator Slots:	48	Rotor Slots:	40

Speed Torque Current Curve (First Connection, First Speed)



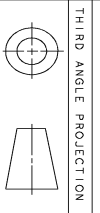
Marks:

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 .0015 T.I.R.
 NOTE 4: ALL DIMENSIONS ARE IN INCHES, BRACKETED DIMENSIONS ARE IN METRIC (MILLIMETERS).



SIZE	DRAWING NO.	REV	SHEET
B	4002B5828PAP5311	0	1

REV.	DESCRIPTION	DATE	APPROVED



SIGNATURES		DATE	
MODEL	TEJASNI	06/05/15	
DETAIL	TEJASNI	06/05/15	
CHECKED	VENKAT	06/05/15	
ENGR	VENKAT	06/05/15	
QUALITY	TEJASNI	06/05/15	
ISSUED			
SOLID MODEL: 4002B5828PAP5311			
TITLE		GENERAL ELECTRIC COMPANY	
INDUCTION MOTOR OUTLINE			
284/286 T, TEFC, IEEE-841			
CBOX 137 CUL - 150 NPT, IMPRO SEAL, GROUND PAD			
SIZE	DRAWING	REV	
B	4002B5828PAP5311	0	
SCALE: 0.250		REF. No.	4002B5828PAP5301
		SHEET	1 of 1

Marks:

Connection Diagram
GEM2034E-FIG7



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5284PB1	4004D5284SE1
Bearing	235A2608AA01	235A2608AA01
Slinger/Inproseal	4002B5914AF5	4002B5914AG5

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C6900G01
Fan Cover	4003C5789PA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	