

Product Information Packet

November 8, 2016

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

Model Number:	5KS286XAA304D3
Catalog Number:	M9573
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:	5KS286XAA304D3	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:	28BD3094B	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	286T	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	6	Nominal Efficiency:	91.7 %
Output Power:	20HP 14.8KW	Guaranteed Efficiency:	91.0
RPM:	1180	3/4 Load Efficiency:	92.3
Voltage:	575	KVA Code:	G
Hertz:	60	Max KVAR:	9.0
Amps - FL:	21.1	Power Factor:	77.5
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:5KS286XAA304D3 S/N: XXX
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200C GC
 CL 1 ZONE2 AEX NA IIC 200C;CL 1 DIV2 GRP ABCD 200C
 IN -25C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR
 SURF TEMP 200C AT 1.15SF ON SINE-WAVE PWR
 OR 200 C VT OR 215 C CT OR 200 C CHP PWM CONTROL
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB
 VT 0-60 HZ, CT 7.5-60 HZ, CHP 60-90 HZ.

Additional Information:

6P - 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: 28BD3094B

Marks:

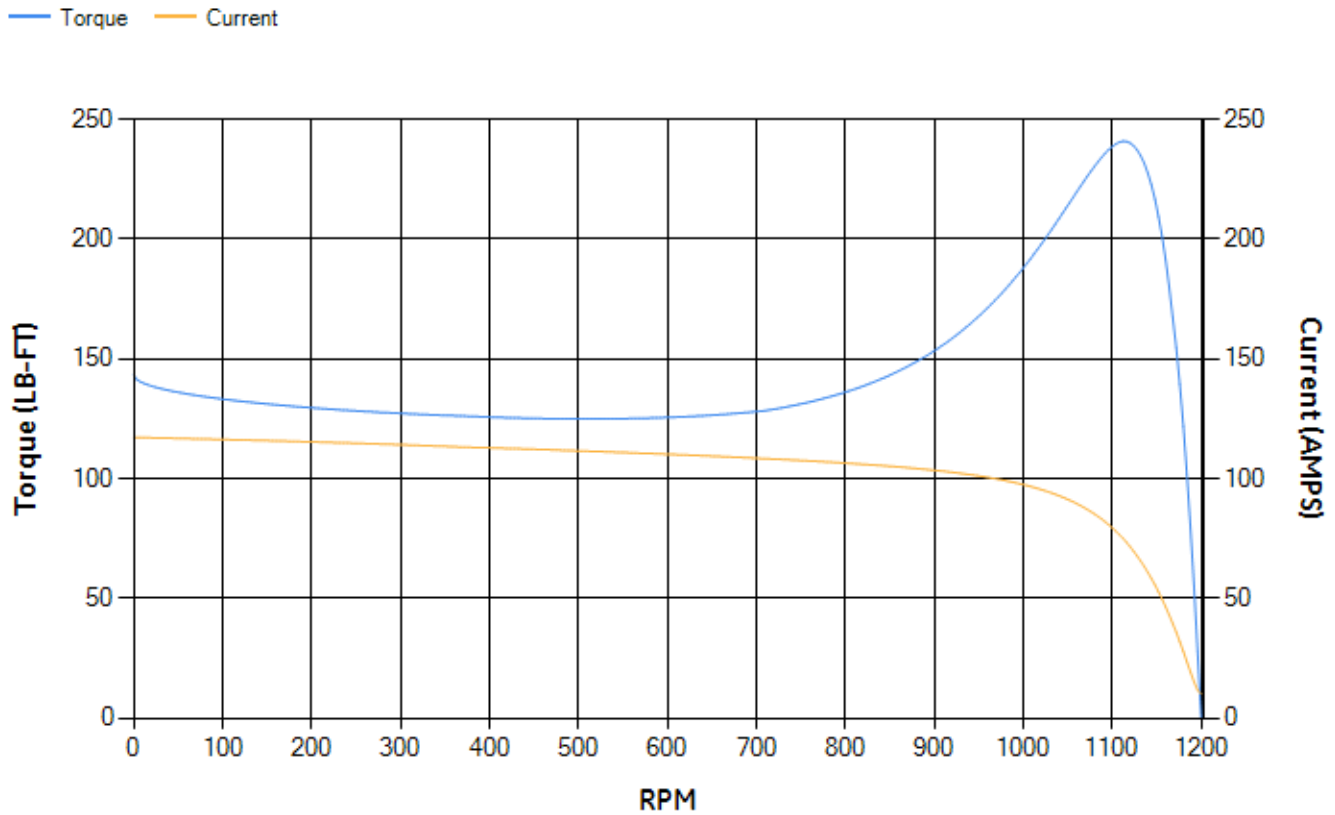
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	90.77	91.23	92	92.32	91.86	88.15	0.00
% PF	79.94	79.16	77.31	71.54	60.02	38.28	4.18
AMPS	25.8	23.85	21.07	17	13.58	11.1	10

TORQ(FL)#FT	88.87	TORQ(LR)%FL	161.3	TORQ(BD)%FL	270.35
AMPS(LR)	117.17	PF AT START	0.37		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 982 Lb-Ft Sq (41.34 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 33 seconds. Safe stall time at 100% voltage is 83 seconds cold, 48 seconds hot. Rotor inertia is 6.17 Lb-Ft Sq (0.26 Kg-meter Sq).

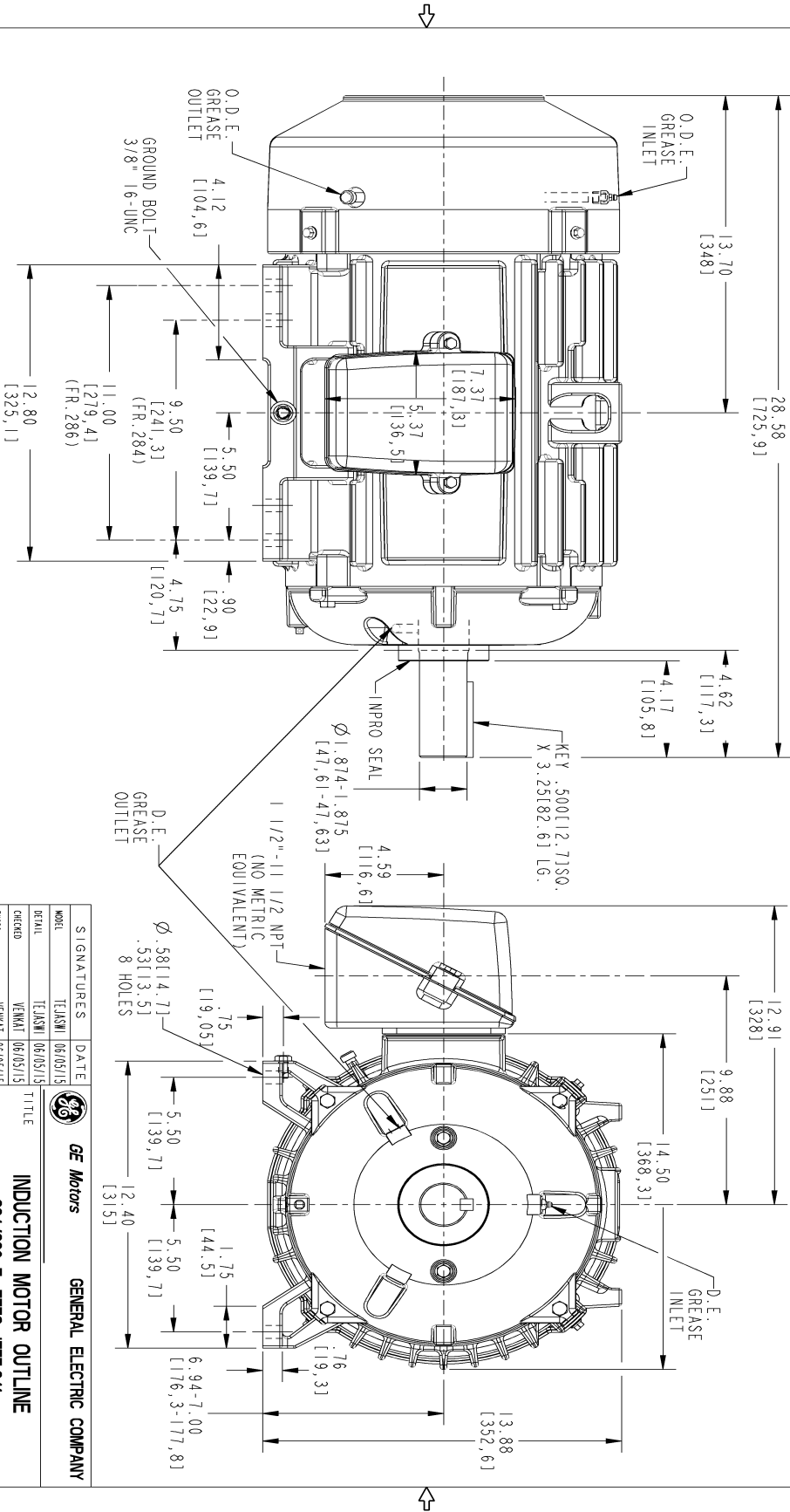
Open Circuit A-C:	0.341	Short Circuit D-C:	0.013
Short Circuit A-C:	0.026	X/R Ratio:	4.82
Stator Slots:	54	Rotor Slots:	42

Speed Torque Current Curve (First Connection, First Speed)



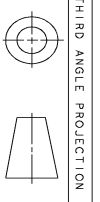
Marks:

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. **4002B5828PAP5311 0**

REV.	DESCRIPTION	DATE	APPROVED



SIGNATURES	DATE	REV	SHEET
TEJASWI	06/05/15	0	1
TEJASWI	06/05/15		
VENKAT	06/05/15		
VENKAT	06/05/15		
TEJASWI	06/05/15		

GE Motors GENERAL ELECTRIC COMPANY

TITLE: **INDUCTION MOTOR OUTLINE**
 284/286 T, TEFC, IEEE-841

CB0X 137 CUL - 150 NPT, IMPRO SEAL, GROUND PAD

SIZE DRAWING: **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	