

# Product Information Packet

January 12, 2017

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

<b>Model Number:</b>	<b>5KGS445SAA320D1</b>
<b>Catalog Number:</b>	<b>M8987</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	239C6600AA

Accessory Connection Diagrams			
<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	None
<b>RTD:</b>	None	<b>Thermistor:</b>	None
<b>Thermostat:</b>	3027JE-2A	<b>Winding Thermocouple:</b>	None
<b>Bearing RTD:</b>	None		

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**Marks:**

<b>MODEL NUMBER:</b>	<b>5KGS445SAA320D1</b>	<b>Estimated Weight:</b>	2060 Lbs
<b>Outline Drawing:</b>	239C6600AA	<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>	X\$D
<b>Design Code:</b>	44BD3083A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KGS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	445T	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	C
<b>Poles:</b>	6	<b>Nominal Efficiency:</b>	95.0 %
<b>Output Power:</b>	125HP 92.5KW	<b>Guaranteed Efficiency:</b>	94.5
<b>RPM:</b>	1190	<b>3/4 Load Efficiency:</b>	95.2
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	50.4
<b>Amps - FL:</b>	156.0	<b>Power Factor:</b>	79.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	NU 318
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	6318ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

400V, 50HZ 177.0 AMPS AT 1.0SF  
 ROLLER BEARING - FOR BELTED LOAD ONLY  
 THERMOSTAT LEADS TB1-TB2 TRIP  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KGS445SAA320D1 S/N: XXX  
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200 C GC  
 CL 1 ZONE2 AEX NA IIC 200C;CL 1 DIV2 GRP ABCD 200C  
 IN -40C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR  
 SURF TEMP 200C AT 1.15SF ON SINE-WAVE PWR  
 OR 200C VT OR 230C CT OR ---C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB  
 VT 0 - 60 HZ, CT 20-60 HZ, CHP -- HZ.

**Additional Information:**

6P - T EXTN  
 700 CU IN - 3.00" NPT  
 OIL RESISTANT SLEEVING ON LEADS  
 B5F4C4 HIGH FATIGUE STEEL AISI 4142 SHAFT MATERIAL  
 N.C. TRIP TSTAT LDS TO MAIN CONDUIT BOX  
 F1 MOUNTING  
 TEFC XSD ULTRA STOCK 09/21/2016  
 ENGINEERED BY: BALASUBRAMANIANH/BILURP

**Performance Characteristics**

1st Winding 1st Connection

**Design: 44BD3083A**

**Marks:**

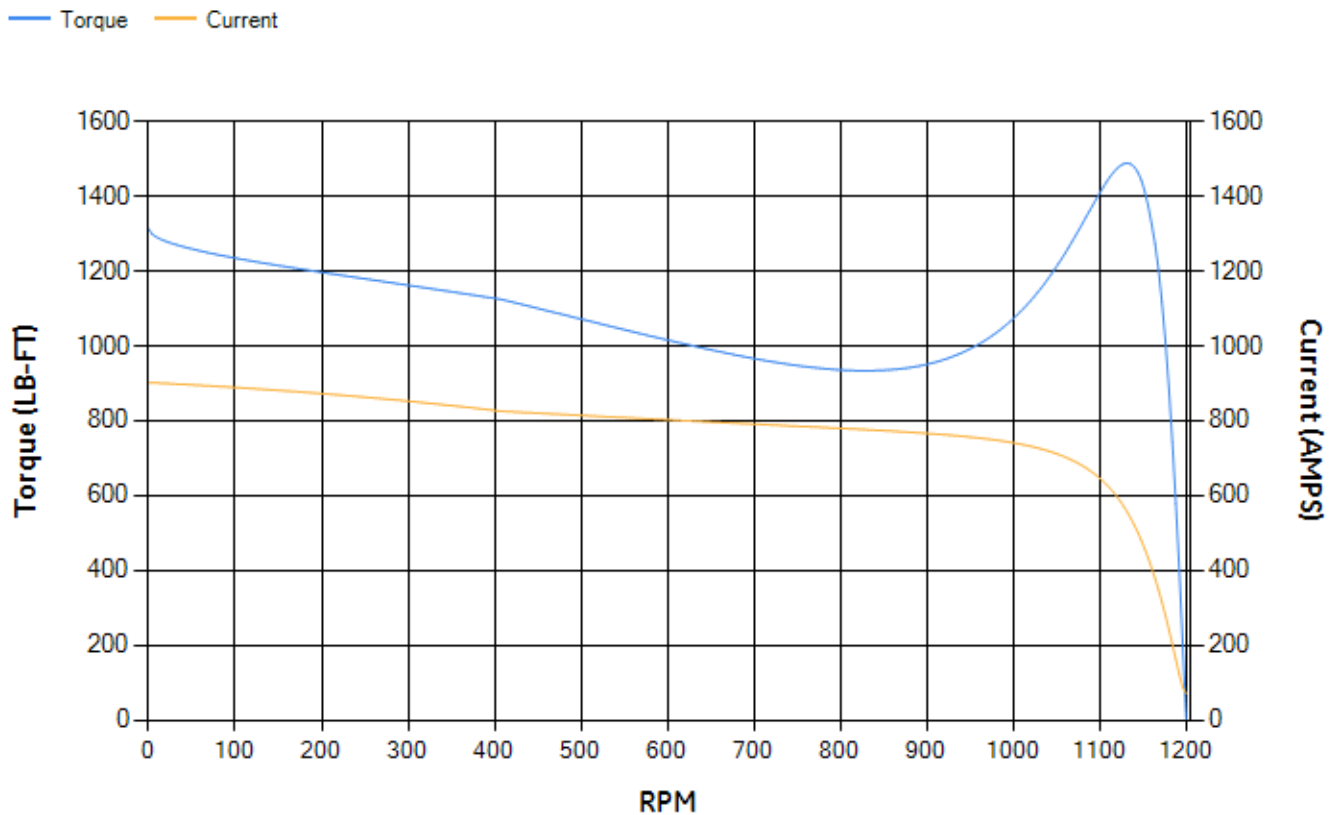
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.59	94.8	95.24	95.19	94.7	91.93	0.00
% PF	81.77	81.01	79.24	73.8	62.6	40.22	3.14
AMPS	189.07	175.19	155.01	124.9	98.68	79.09	70.29

<b>TORQ(FL)#FT</b>	552.53	<b>TORQ(LR)%FL</b>	237.59	<b>TORQ(BD)%FL</b>	268.72
<b>AMPS(LR)</b>	901.97	<b>PF AT START</b>	0.41		

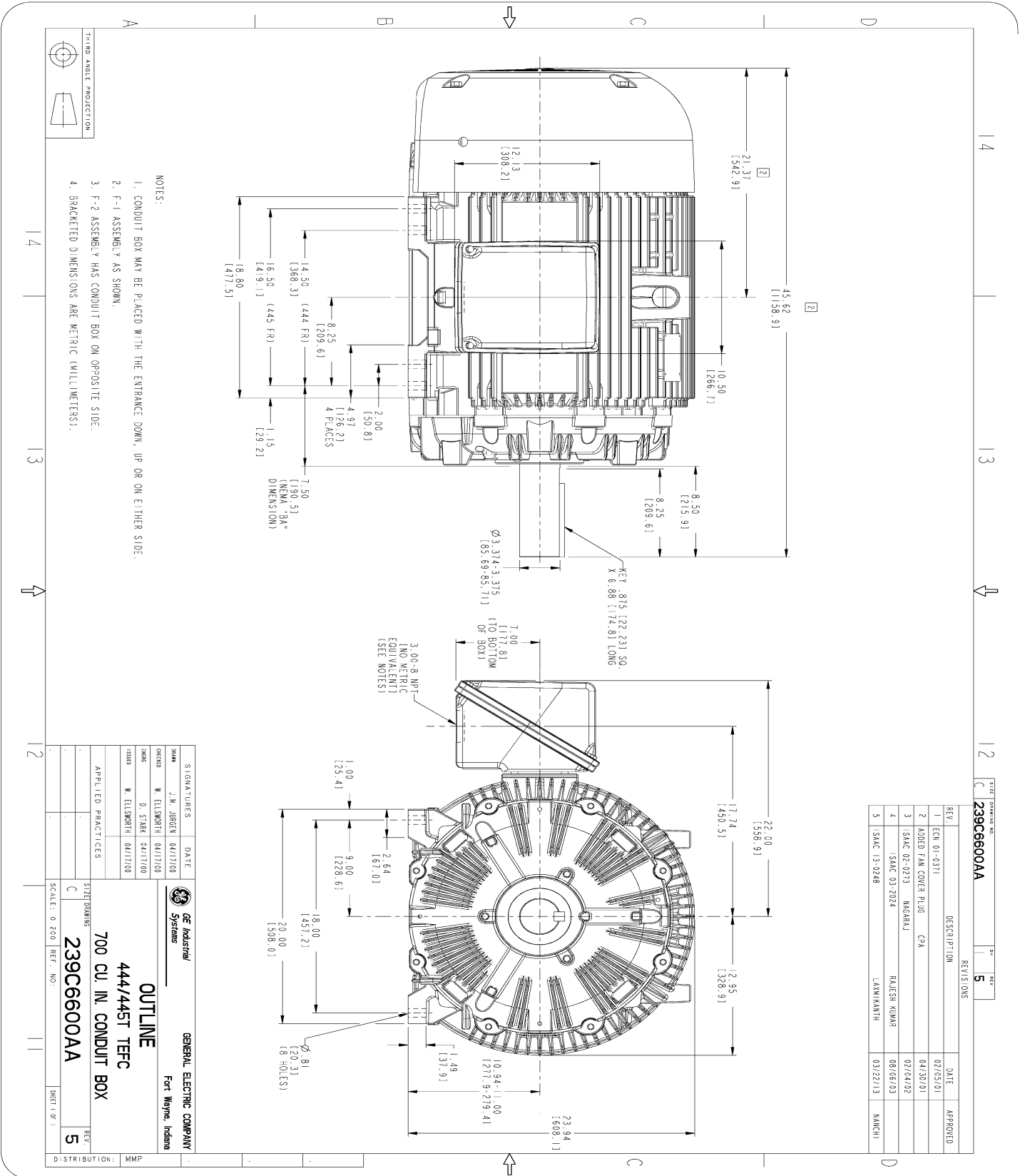
This motor is capable of two cold or one hot start with a maximum connected load inertia of 6539 Lb-Ft Sq (275.29 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 28 seconds. Safe stall time at 100% voltage is 58 seconds cold, 33 seconds hot. Rotor inertia is 103.34 Lb-Ft Sq (4.35 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.53	<b>Short Circuit D-C:</b>	0.027
<b>Short Circuit A-C:</b>	0.032	<b>X/R Ratio:</b>	10.034
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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



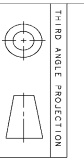
Marks:



REV.	DESCRIPTION	DATE	APPROVED
1	ECH 01-0311	02/05/01	
2	ADDED FAN COVER FLUG CPA	04/30/01	
3	SAC 02-0273 MARGAJ	02/04/02	
4	SAC 03-2024	08/06/03	
5	SAC 13-0248	03/22/13	MANCHI

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- NOTES:
1. CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
  2. F-1 ASSEMBLY AS SHOWN.
  3. F-2 ASSEMBLY HAS CONDUIT BOX ON OPPOSITE SIDE.
  4. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).



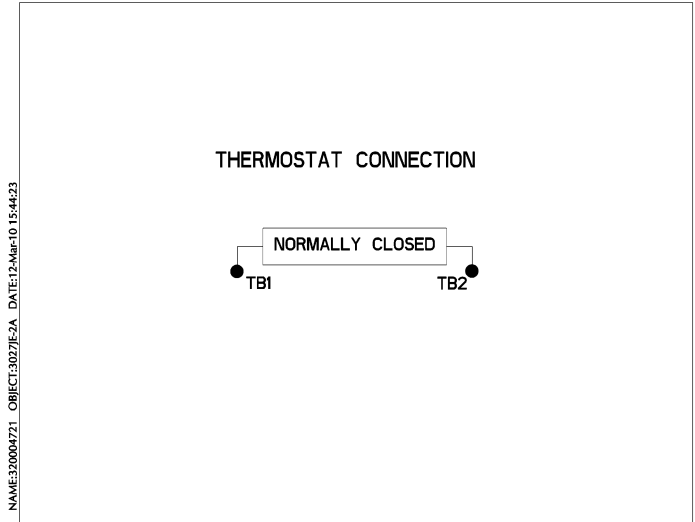
SIGNATURES	DATE	GE Industrial Systems	GENERAL ELECTRIC COMPANY
SALES J.M. JUREN	04/17/00		Fort Wayne, Indiana
ORDER W. ELSWORTH	04/17/00		
SALES D. STARK	04/17/00		
ORDER W. ELSWORTH	04/17/00		
APPLIED PRACTICES		SIZE DRAWING	
		C	
SCALE: 0.200		REF. NO.: 239C6600AA	
DISTRIBUTION: MMP		SHEET 1 OF 5	

Marks:

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



**Thermostat Connection**  
**3027JE-2A**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4355AA1	115E4355LL1
Bearing	235A2519AA01	235A2514AG01
Slinger/Inproseal	149C4399G07	149C4399G07

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100G03
Fan Cover	128D6841AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	118D4408AD2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	