

# Product Information Packet

November 8, 2016

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

<b>Model Number:</b>	<b>5KS143SAA405C</b>
<b>Catalog Number:</b>	<b>M9166</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG3
<b>Outline Drawing:</b>	4002B5814PAP5201

<b>Accessory Connection Diagrams</b>			
<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>5KS143SAA405C</b>	<b>Estimated Weight:</b>	43 Lbs
<b>Outline Drawing:</b>	4002B5814PAP5201	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG3	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	X\$D
<b>Design Code:</b>	14BD4007AA	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	65
<b>Frame:</b>	143T	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	--
<b>Poles:</b>	8	<b>Nominal Efficiency:</b>	66 %
<b>Output Power:</b>	0.5HP 0.4KW	<b>Guaranteed Efficiency:</b>	64.0
<b>RPM:</b>	845	<b>3/4 Load Efficiency:</b>	69.1
<b>Voltage:</b>	230/460	<b>KVA Code:</b>	R
<b>Hertz:</b>	60	<b>Max KVAR:</b>	0.7
<b>Amps - FL:</b>	2.6/1.3	<b>Power Factor:</b>	55.5
<b>Service Factor:</b>	1.25	<b>Bearing - DE:</b>	6205ZC3
<b>Alt Service Factor:</b>	1.00	<b>Bearing - ODE:</b>	6205ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

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**Stamped Nameplate Notes:**

SF AMPS 2.7/1.4  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS143SAA405C 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 -40C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR  
 SURF TEMP 200C AT 1.25SF ON SINE-WAVE PWR  
 OR 200 C VT OR 200 C CT OR 200 C CHP PWM CONTROL  
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB  
 VT 0-60 HZ, CT 3-60 HZ , CHP 60-90 HZ.

**Additional Information:**

8P - T EXTN  
 STANDARD FLOOR MOUNT  
 C/BOX 30 CU IN-0.75 NPT  
 F1 CONDUIT BOX MOUNTING  
 OIL RESISTANT SLEEVING ON LEADS

**Performance Characteristics**

1st Winding 1st Connection

**Design: 14BD4007AA**

**Marks:**

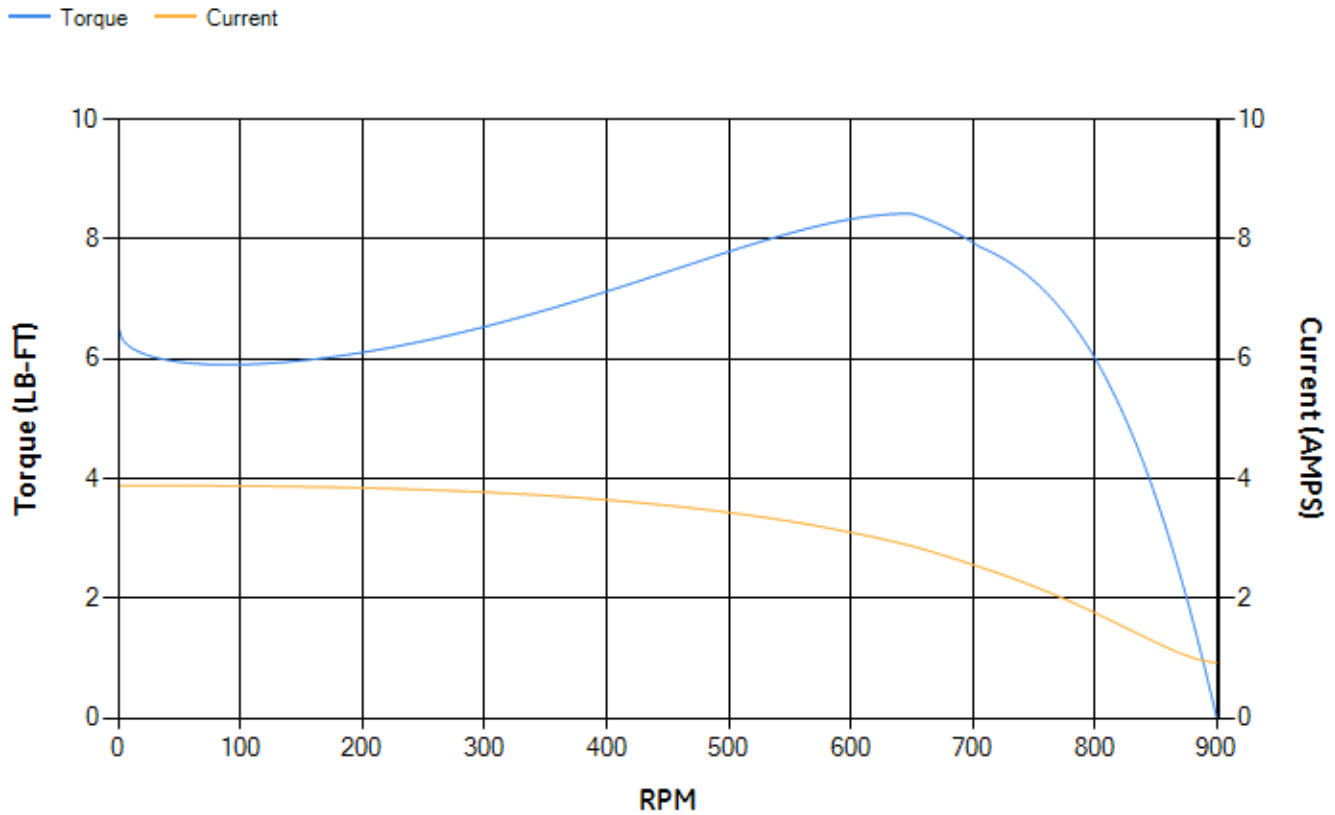
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	68.32	69.22	70.12	69.1	64.42	50.73	0.00
% PF	62.84	60.05	57.24	46.22	35.56	23.8	10.95
AMPS	1.36	1.29	1.18	1.1	1.02	0.97	0.92

TORQ(FL)#FT	3.11	TORQ(LR)%FL	210.09	TORQ(BD)%FL	260.16
AMPS(LR)	3.88	PF AT START	0.62		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 163 Lb-Ft Sq (6.86 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 78 seconds. Safe stall time at 100% voltage is 173 seconds cold, 118 seconds hot. Rotor inertia is 0.07 Lb-Ft Sq (0 Kg-meter Sq).

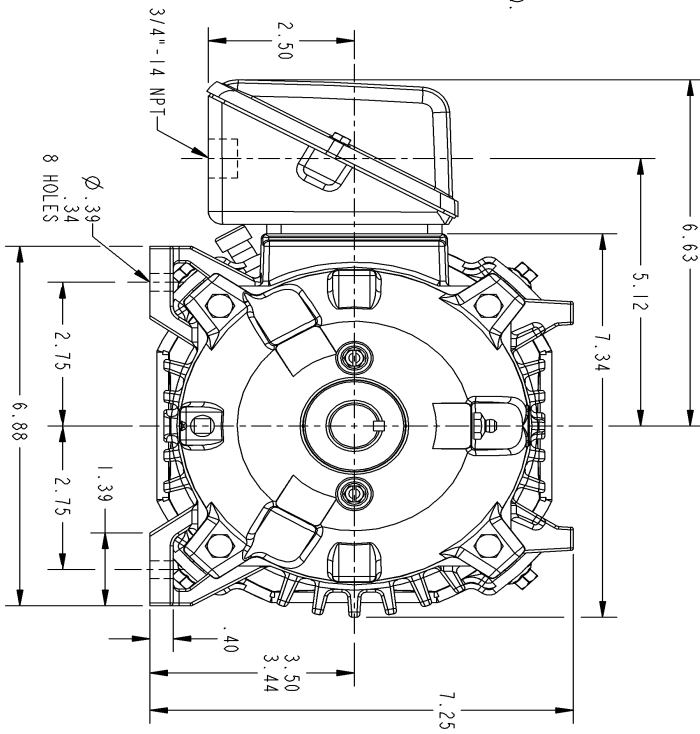
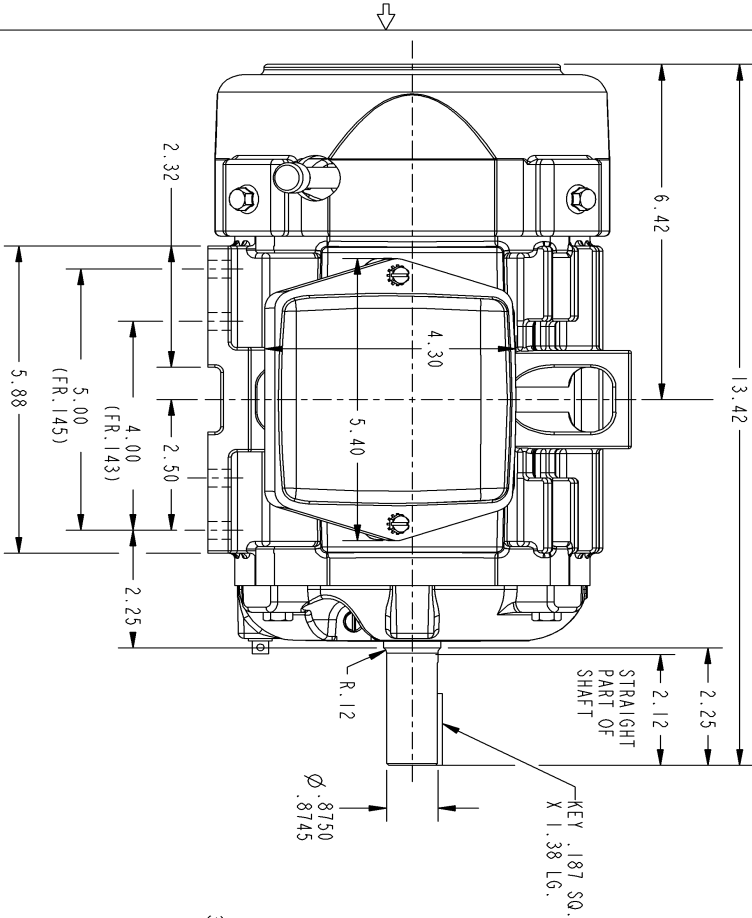
Open Circuit A-C:	0.044	Short Circuit D-C:	0.005
Short Circuit A-C:	0.007	X/R Ratio:	1.814
Stator Slots:	36	Rotor Slots:	48

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



Marks:

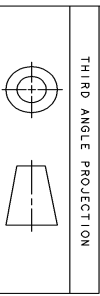
NOTE 1: CONDUIT BOX MAY BE ASSEMBLED WITH ENTRANCE UP, DOWN OR TO EITHER SIDE.  
 NOTE 2: F1 ASSEMBLY AS SHOWN. F2 ASSEMBLY CONDUIT BOX ON OPPOSITE SIDE FROM SHOWN LOCATION.



SIZE DRAWING NO.  
**B 4002B5814PAP5201**

SM REV  
**1 1**

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1.	REMOVED - ULTRA - FROM DESCRIPTION	05/21/03	DCMOHAN



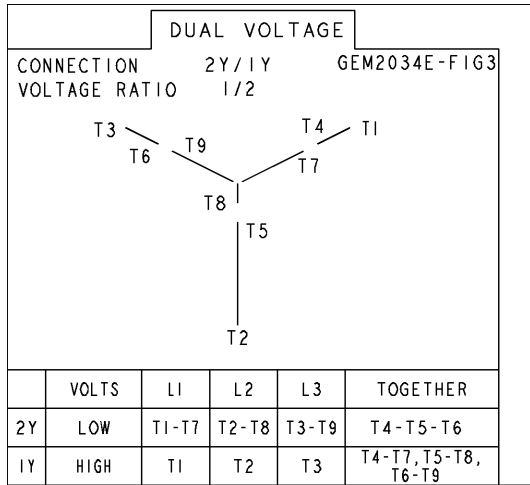
SIGNATURES	DATE	<b>GE Industrial Systems</b> GENERAL ELECTRIC COMPANY Fort Wayne, Indiana
DRWN	GART WARRINE OCT 24/01	
CHECKED	GART WARRINE MAY 22/02	
ENGRS		
ISSUED	GART WARRINE JUN 05/02	
APPLIED PRACTICES		SIZE DRAWING <b>B 4002B5814PAP5201</b> SCALE: 0.500 REF. NO.: 4002B5814PAP5201 SHEET 1 OF 1

**INDUCTION MOTOR OUTLINE**  
 STANDARD CONSTRUCTION  
 FWF: FR1AOT TEFC

DISTRIBUTION: PMP-18K15

Marks:

**Connection Diagram**  
**GEM2034E-FIG3**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5280PB1	4004D5280SG1
Bearing	235A2600AA01	235A2600AA01
Slinger/Inproseal	149C4399G15	149C4399G15

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	4001A5914AM-G01
Fan Cover	4003C5785PA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	4002B5718PA-G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	