

# Product Information Packet

November 9, 2016

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

<b>Model Number:</b>	<b>5KS145SAA105D1</b>
<b>Catalog Number:</b>	<b>M490</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG3
<b>Outline Drawing:</b>	4002B5814PAP5201

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>5KS145SAA105D1</b>	<b>Estimated Weight:</b>	50 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>	14BD0076A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	60
<b>Frame:</b>	145T	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	85.5 %
<b>Output Power:</b>	2HP 1.5KW	<b>Guaranteed Efficiency:</b>	84.0
<b>RPM:</b>	3515	<b>3/4 Load Efficiency:</b>	85.5
<b>Voltage:</b>	230/460	<b>KVA Code:</b>	L
<b>Hertz:</b>	60	<b>Max KVAR:</b>	0.8
<b>Amps - FL:</b>	5.4/2.7	<b>Power Factor:</b>	81.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6205ZC3
<b>Alt Service Factor:</b>	1.00	<b>Bearing - ODE:</b>	6205ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS145SAA105D1 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 1.15SF ON SINE-WAVE PWR  
 OR 200C VT OR 200C CT OR 200C 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:**

2P - 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: 14BD0076A**

**Marks:**

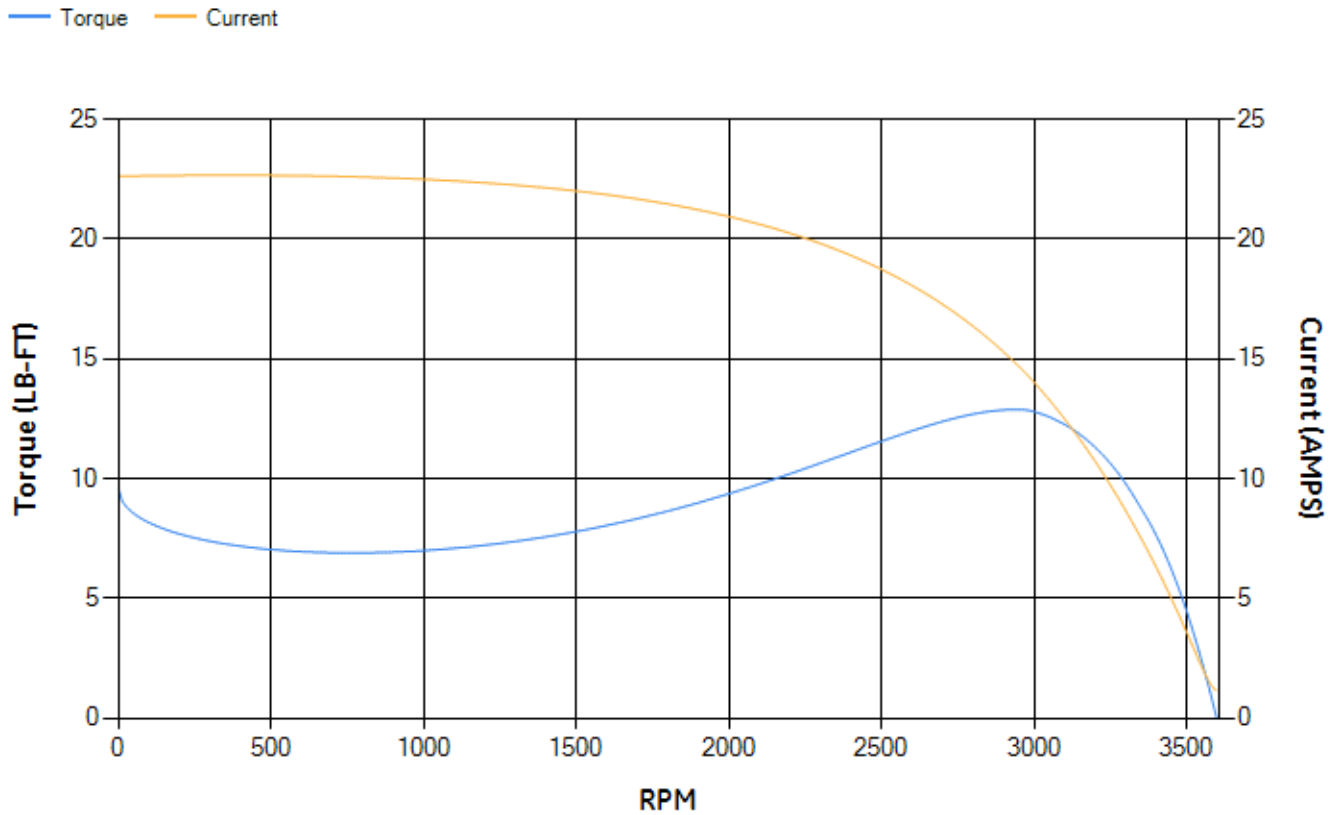
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	84.59	85.03	85.69	85.48	83.55	75.52	0.00
% PF	84.49	83.29	84.52	74.38	62.57	41.66	11.14
AMPS	3.27	3.04	2.56	2.21	1.79	1.49	1.14

TORQ(FL)#FT	2.99	TORQ(LR)%FL	321.02	TORQ(BD)%FL	419.81
AMPS(LR)	22.62	PF AT START	0.54		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 15 Lb-Ft Sq (0.63 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 23 seconds. Safe stall time at 100% voltage is 51 seconds cold, 35 seconds hot. Rotor inertia is 0.05 Lb-Ft Sq (0 Kg-meter Sq).

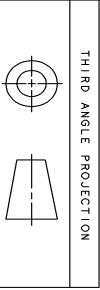
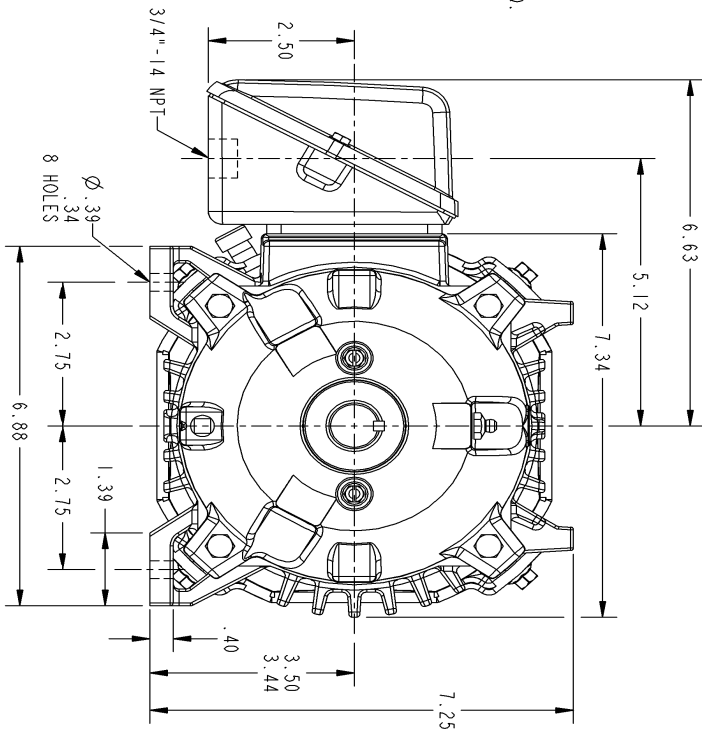
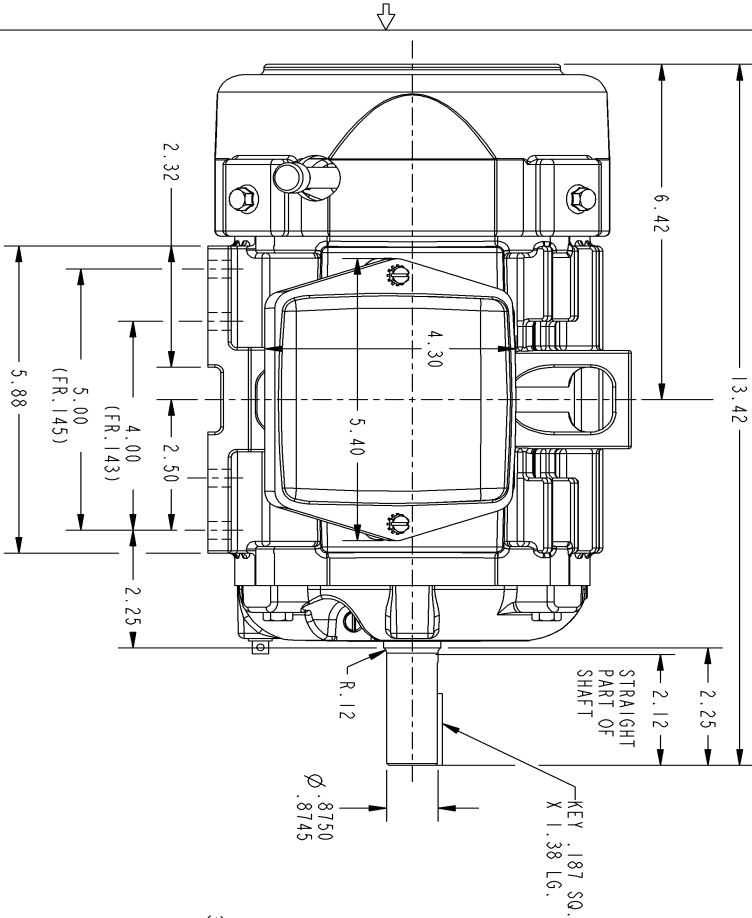
Open Circuit A-C:	0.244	Short Circuit D-C:	0.005
Short Circuit A-C:	0.009	X/R Ratio:	1.917
Stator Slots:	24	Rotor Slots:	34

**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

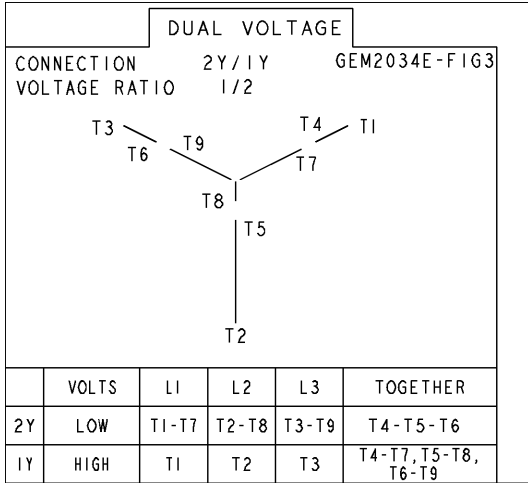
SIGNATURES	DATE	 <b>GE Industrial Systems</b> GENERAL ELECTRIC COMPANY Fort Wayne, Indiana	
DRWN	GARY WARDNER		OCT 24/01
CHECKED	GARY WARDNER		MAY 22/02
ENGRS			
ISSUED	GARY WARDNER		JUN 05/02
APPLIED PRACTICES		SIZE DRAWING	
		<b>B</b>	
SCALE: 0.500 REF. NO.: 4002B5814PAP5201		SHEET 1 OF 1	

**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	