

Product Information Packet

November 9, 2016

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

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

Accessory Connection Diagrams			
Bearing Thermocouple:	None	Heater:	None
RTD:	None	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	None		

Table of Contents

Specification	01
Performance Characteristics	02
Outline Drawing	03
Connection Drawing(s)	04
Spare parts	05



Marks:

MODEL NUMBER:	5KS145SAA105D1	Estimated Weight:	50 Lbs
Outline Drawing:	4002B5814PAP5201	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG3	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	X\$D
Design Code:	14BD0076A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	60
Frame:	145T	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	2	Nominal Efficiency:	85.5 %
Output Power:	2HP 1.5KW	Guaranteed Efficiency:	84.0
RPM:	3515	3/4 Load Efficiency:	85.5
Voltage:	230/460	KVA Code:	L
Hertz:	60	Max KVAR:	0.8
Amps - FL:	5.4/2.7	Power Factor:	81.0
Service Factor:	1.15	Bearing - DE:	6205ZC3
Alt Service Factor:	1.00	Bearing - ODE:	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:

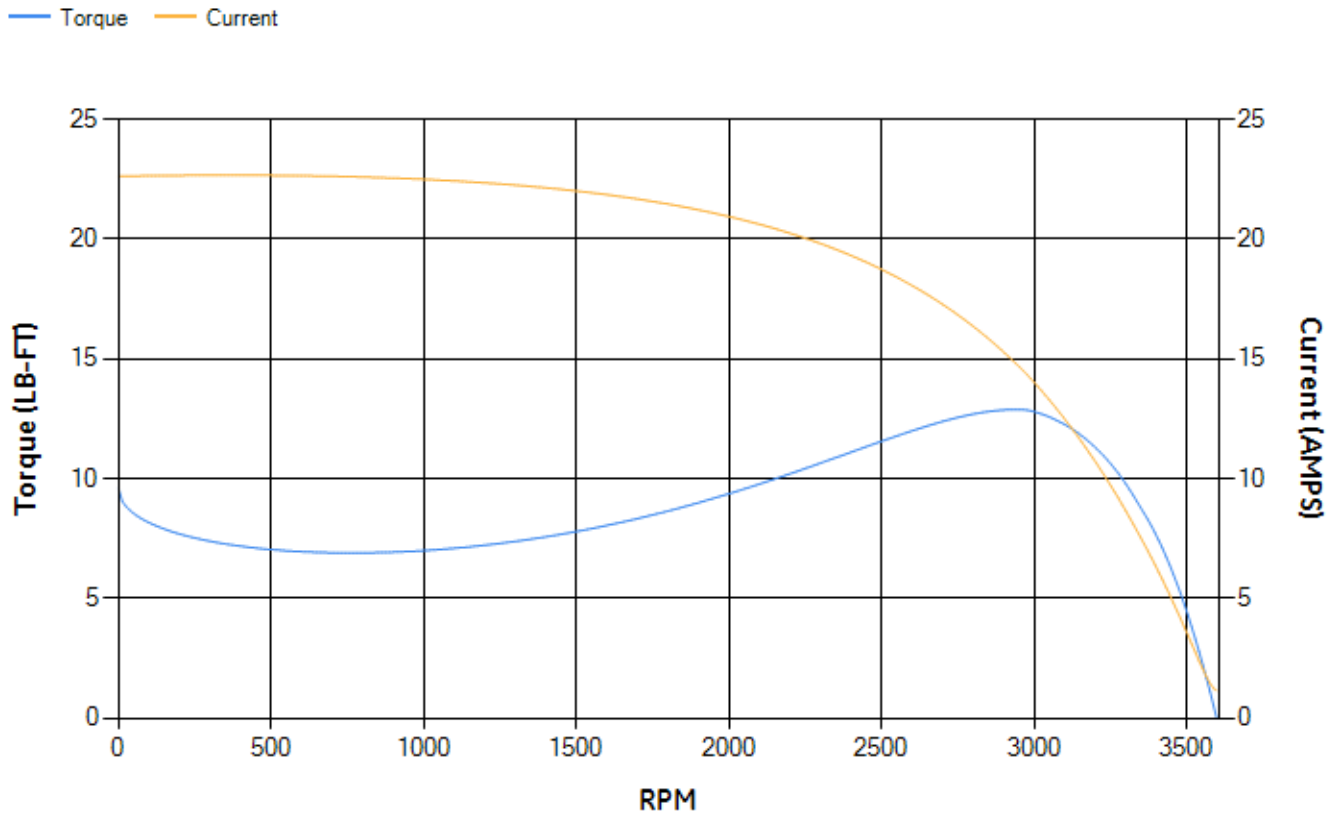
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	84.59	85.03	85.69	85.48	83.55	75.52	0.00
% PF	84.49	83.29	84.52	74.38	62.57	41.66	11.14
AMPS	3.27	3.04	2.56	2.21	1.79	1.49	1.14

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).

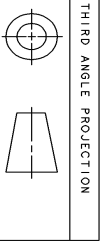
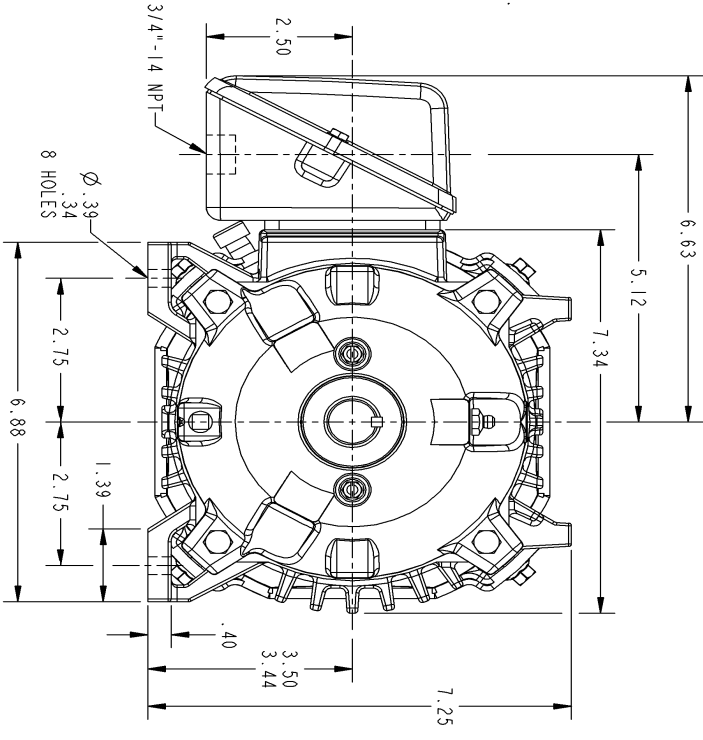
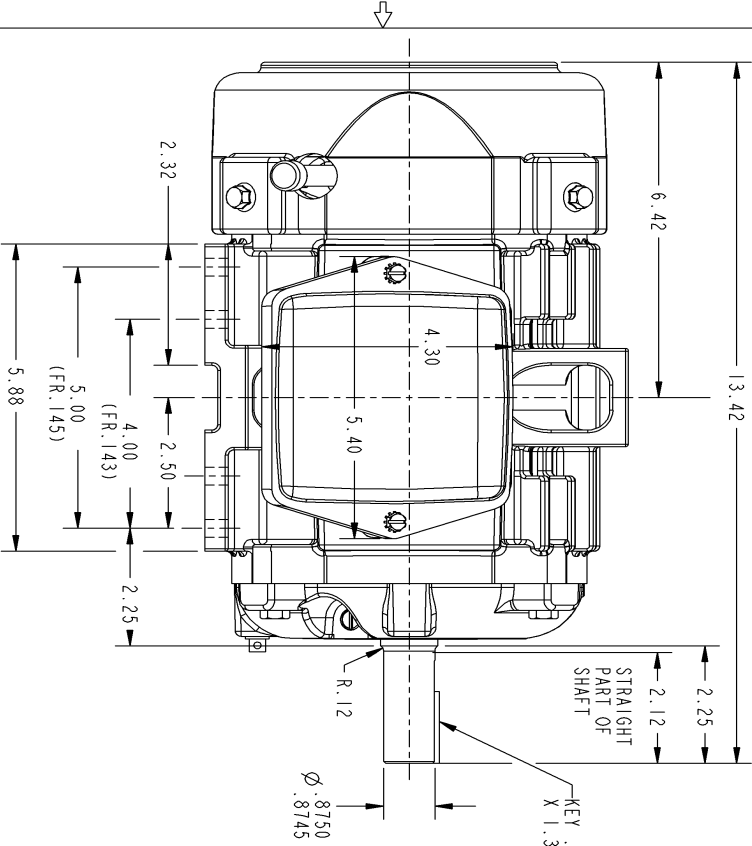
Open Circuit A-C:	0.244	Short Circuit D-C:	0.005
Short Circuit A-C:	0.009	X/R Ratio:	1.917
Stator Slots:	24	Rotor Slots:	34

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. 4002B5814PAP5201

SM REV 1

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

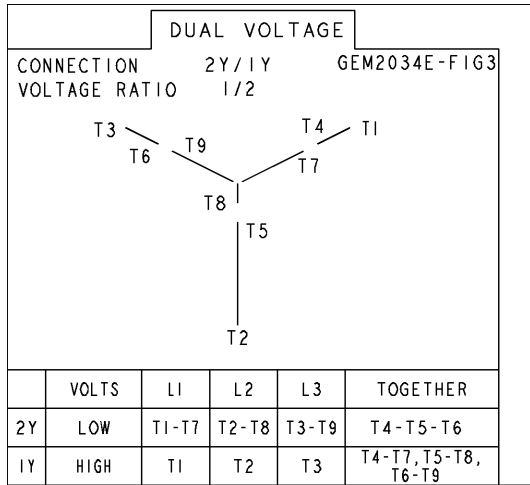
SIGNATURES	DATE	GE Logo	GENERAL ELECTRIC COMPANY
DRWN: GART WARRINE	OCT 24/01	Systems	Fort Wayne, Indiana
CHECKED: GART WARRINE	MAY 22/02	INDUCTION MOTOR OUTLINE STANDARD CONSTRUCTION FWF: FR140T TEFC	
ISSUED: GART WARRINE	JUN 05/02		
APPLIED PRACTICES			

SIZE DRAWING B
 SCALE: 0.500 REF. NO.: 4002B5814PAP5201 SHEET 1 OF 1

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	