

# Product Information Packet

November 8, 2016

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

<b>Model Number:</b>	<b>5KS286SAA305D4</b>
<b>Catalog Number:</b>	<b>M9155</b>
<b>Instruction Manual:</b>	GEI-56128
<b>Connection Diagram:</b>	GEM2034E-FIG9
<b>Outline Drawing:</b>	4002B5828PAP5201

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>5KS286SAA305D4</b>	<b>Estimated Weight:</b>	510 Lbs
<b>Outline Drawing:</b>	4002B5828PAP5201	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG9	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEI-56128	<b>Encl Construction:</b>	X\$D
<b>Design Code:</b>	28BD3094A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	65
<b>Frame:</b>	286T	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	6	<b>Nominal Efficiency:</b>	91.7 %
<b>Output Power:</b>	20HP 14.8KW	<b>Guaranteed Efficiency:</b>	91.0
<b>RPM:</b>	1180	<b>3/4 Load Efficiency:</b>	92.4
<b>Voltage:</b>	230/460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	8.6
<b>Amps - FL:</b>	52.4/26.2	<b>Power Factor:</b>	78.0
<b>Service Factor:</b>	1.25	<b>Bearing - DE:</b>	6310ZC3
<b>Alt Service Factor:</b>	1.00	<b>Bearing - ODE:</b>	6310ZC3

**Enclosure is Totally Enclosed Fan-Cooled**

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**Stamped Nameplate Notes:**

SF AMPS 64.2/32.1  
 STAMP NP249A5564P051 AS BELOW:  
 MODEL:5KS286SAA305D4 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 260C AT 1.25SF ON SINE-WAVE PWR  
 OR 200C VT OR 215C CT OR 200C 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  
 OIL RESISTANT SLEEVING ON LEADS

**Performance Characteristics**

1st Winding 1st Connection

**Design: 28BD3094A**

**Marks:**

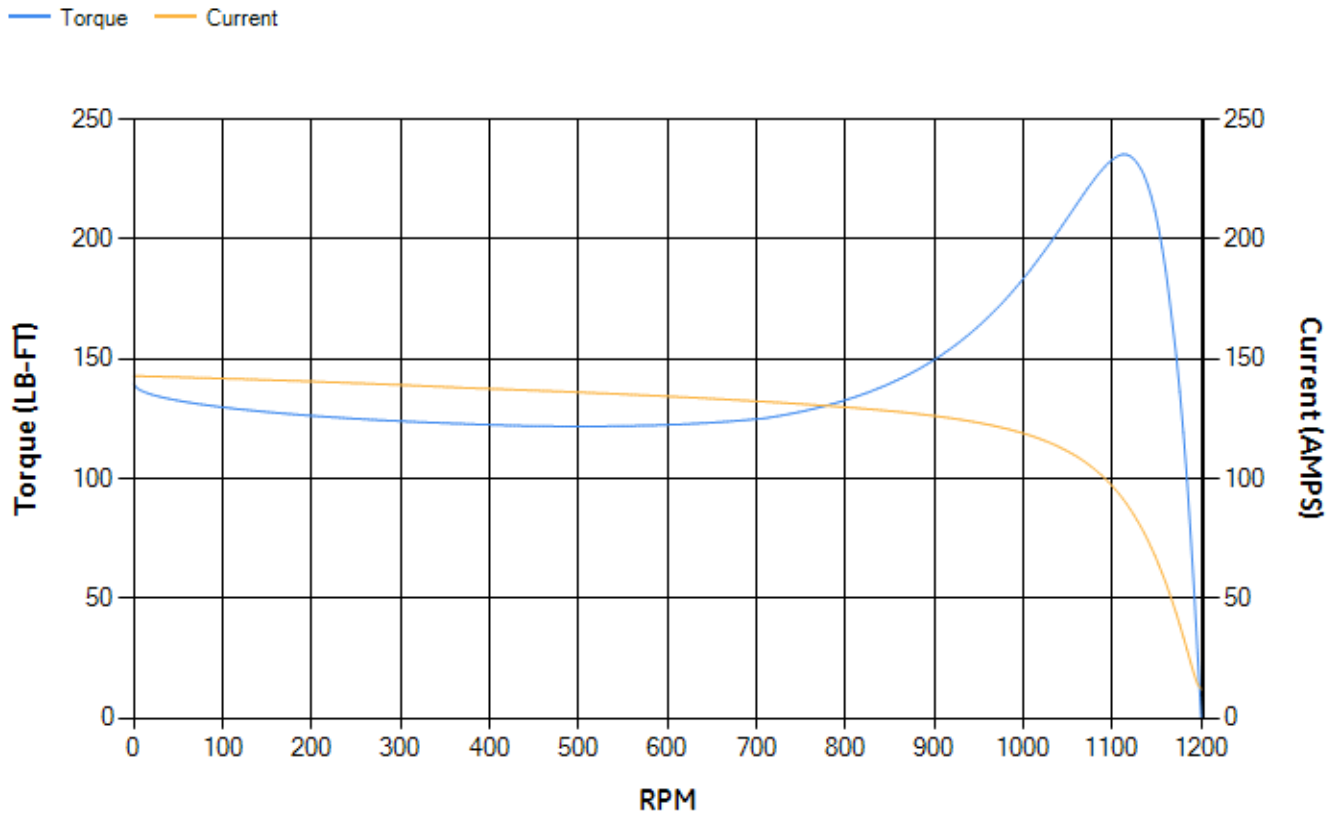
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	90.77	91.26	92.06	92.43	92.06	88.54	0.00
% PF	80.3	79.62	77.92	72.45	61.19	39.34	4.17
AMPS	32.1	29.63	26.12	20.97	16.61	13.44	12.03

<b>TORQ(FL)#FT</b>	88.9	<b>TORQ(LR)%FL</b>	157.12	<b>TORQ(BD)%FL</b>	264.09
<b>AMPS(LR)</b>	142.83	<b>PF AT START</b>	0.36		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 1029 Lb-Ft Sq (43.32 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 35 seconds. Safe stall time at 100% voltage is 89 seconds cold, 52 seconds hot. Rotor inertia is 6.17 Lb-Ft Sq (0.26 Kg-meter Sq).

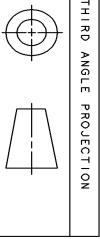
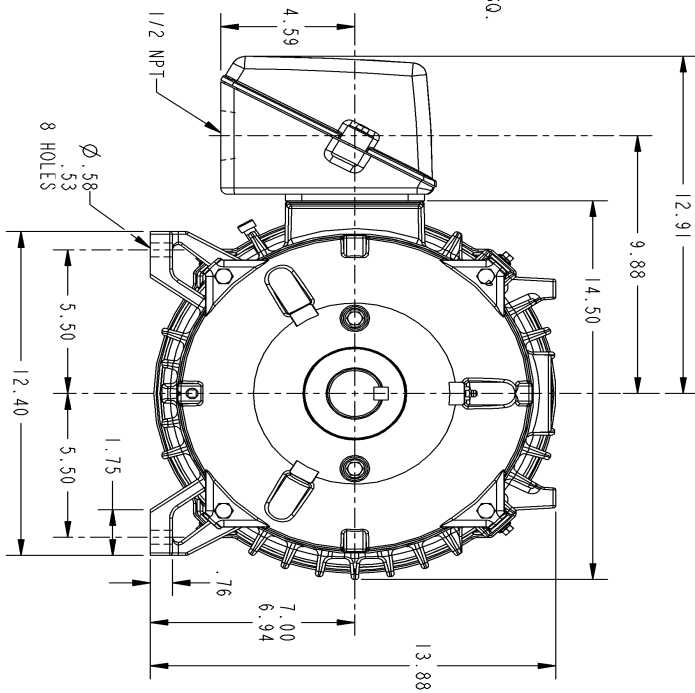
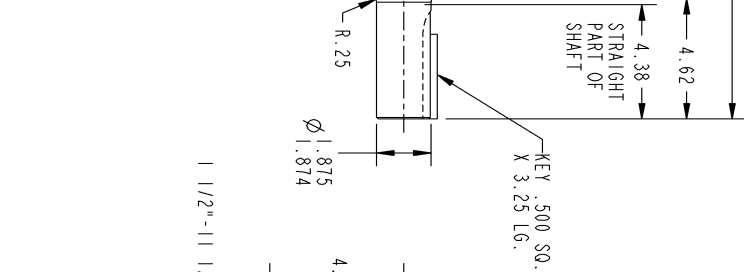
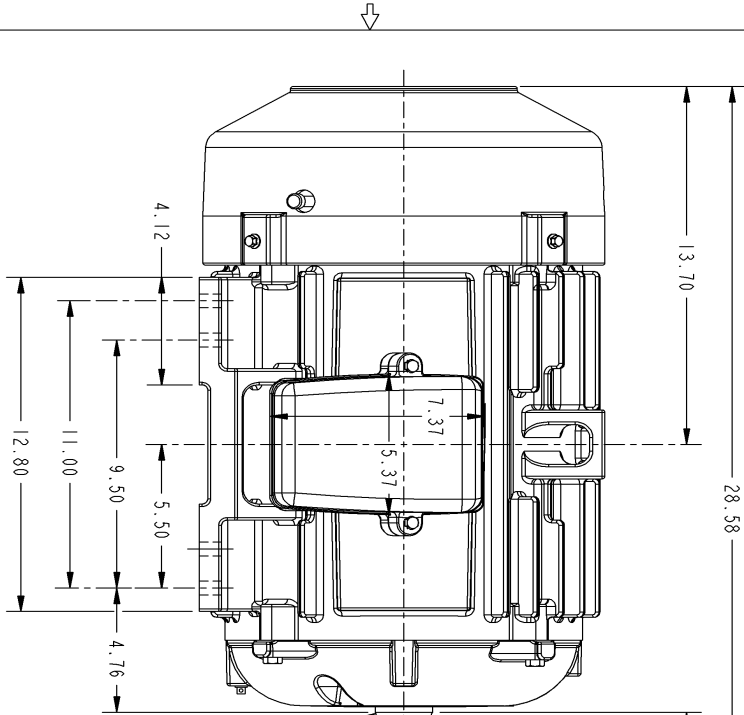
<b>Open Circuit A-C:</b>	0.346	<b>Short Circuit D-C:</b>	0.013
<b>Short Circuit A-C:</b>	0.026	<b>X/R Ratio:</b>	4.937
<b>Stator Slots:</b>	54	<b>Rotor Slots:</b>	42

**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.



SIZE 0  
 4002B5828PAP5201

REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES	DATE	REV.
DRAWN	DEC 13/01	0
CHECKED	FEB 28/02	
ISSUED	MAR 03/02	

APPLIED PRACTICES

SCALE: 0.250 REF. NO: 4002B5828PAP5201 SHEET 1 OF 1

**GE Industrial Systems**  
**GENERAL ELECTRIC COMPANY**  
 Fort Wayne, Indiana

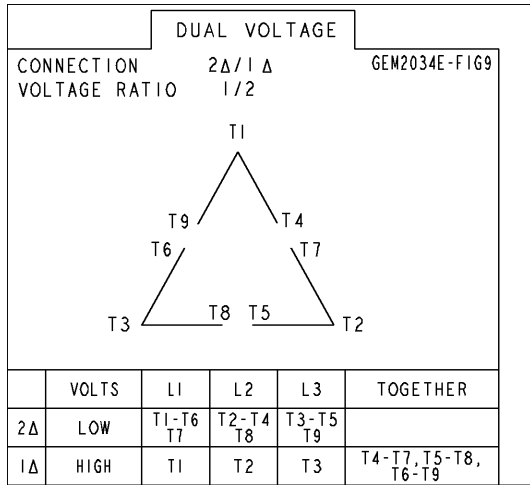
**INDUCTION MOTOR OUTLINE**  
 STANDARD CONSTRUCTION  
 FME: FR280T TFC XSD ULTRA

SIZE DRAWING  
**4002B5828PAP5201**  
 REV. 0

DISTRIBUTION: PMP-18K15

Marks:

**Connection Diagram**  
**GEM2034E-FIG9**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	4004D5284PB1	4004D5284SE1
Bearing	235A2608AA01	235A2608AA01
Slinger/Inproseal	149C4399G03	149C4399G03

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	