

Product Information Packet

May 26, 2017

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

Model Number:	5KAF444SAA220B
Catalog Number:	M9318
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG7
Outline Drawing:	239C5600AA

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

Table of Contents

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



Marks:

MODEL NUMBER:	5KAF444SAA220B		
Outline Drawing:	239C5600AA	Service Factor:	1.15
Connection Diagram:	GEM2034E-FIG7	Alt Service Factor:	--
Instruction Book:	GEI-56128	ASD Type:	PWM
Design Code:	44BD1149A	Time Rating:	CONT
Type:	KAF	Enclosure:	TEFC
Frame:	444T	Encl Construction:	A\$D
Phases:	3	Ambient Max (°C):	40
Poles:	4	Alt Ambient Max(°C):	--
Output Power:	125HP 92.5KW	Insulation Class:	H
Output Power (2):	125HP 92.5KW	NEMA Design:	-
Output Power (3):	0HP 0KW	Nominal Efficiency:	95.8 %
RPM:	2680	Guaranteed Efficiency:	95.0 %
RPM (2):	1785	3/4 Load Efficiency:	95.7 %
RPM (3):	0	KVA Code:	G
Voltage:	460	Max KVAR:	41.3
Voltage (2):	460	Power Factor:	84.5
Voltage (3):	8	Service Factor SINE:	1
Hertz:	90	Service Factor ASD:	1
Hertz – 2:	60	Min Supply Wires:	75 C
Hertz – 3:	0.4	IP:	55
Amps – FL:	137	Vibration Limit:	0.04 mm/s
Amps – FL- 2:	145.0	Bearing Lubrication:	NULL
Amps - FL- 3:	145.0	Bearing - DE:	6318ZC3
Speed Range RPM:	1-1785	Bearing - ODE:	6318ZC3-VL0241
Const HP RPM:	1785-2680	Estimated Weight:	1780 Lbs

Enclosure is Totally Enclosed Fan-Cooled**Stamped Nameplate Notes:**

ALTERNATE RATING FOR PWM CONTROL: 1.0SF 40C AMB
 INVERTER DUTY CONSTANT TORQUE RANGE: 0-60HZ
 THERMOSTAT LEADS TB1-TB2 TRIP
 IP 55
 CLASS H INS WITH CLASS F RISE AT 1.00SF,
 PWM OPERATION
 INVERTER DUTY
 ALTERNATE AMBIENT 65C DEG AMBIET @ 1.00 SF

Additional Information:

4P - T EXTN
 700 CU IN - 3.00" NPT
 E/S GROUND BOLT MTD ON DE C/BOX SIDE NEAR FOOT
 OIL RESISTANT SLEEVING ON LEADS



TACH PROVISION MOTOR
N.C. TRIP TSTAT LDS TO MAIN CONDUIT BOX
F1 MOUNTING
PAINTED ODE ACCESSORY RABBET
SHAFT GROUNDING RING MOUNTED ON DE BRG CAP
INSULATED BEARING AT ODE

Performance Characteristics

1st Winding 1st Connection

Design: 44BD1149A

Marks:

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.48	95.61	95.94	95.74	95.15	92.38	0.00
% PF	86.44	85.82	84.39	79.85	69.85	47.16	3.68
AMPS	177.19	163.97	144.51	114.76	88.01	67.12	57.46

TORQ(FL)#FT 367.21
AMPS(LR) 970.6

TORQ(LR)%FL 82.88
PF AT START 0.19

TORQ(BD)%FL 311.2

This motor is capable of two cold or one hot start with a maximum connected load inertia of 4081 Lb-Ft Sq (171.81 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 70 seconds. Safe stall time at 100% voltage is 161 seconds cold, 84 seconds hot. Rotor inertia is 44.5 Lb-Ft Sq (1.87 Kg-meter Sq).

Open Circuit A-C: 0.878

Short Circuit D-C: 0.03

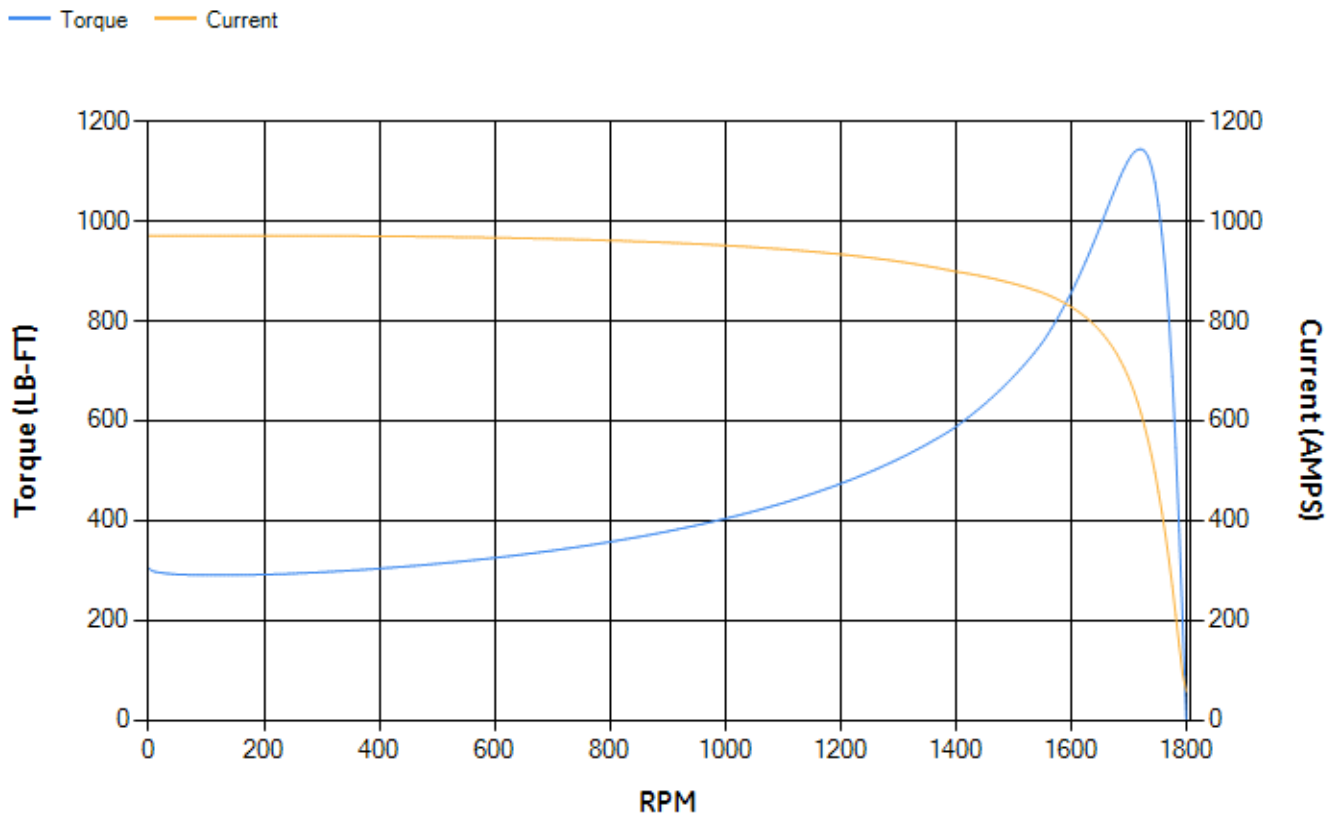
Short Circuit A-C: 0.049

X/R Ratio: 11.466

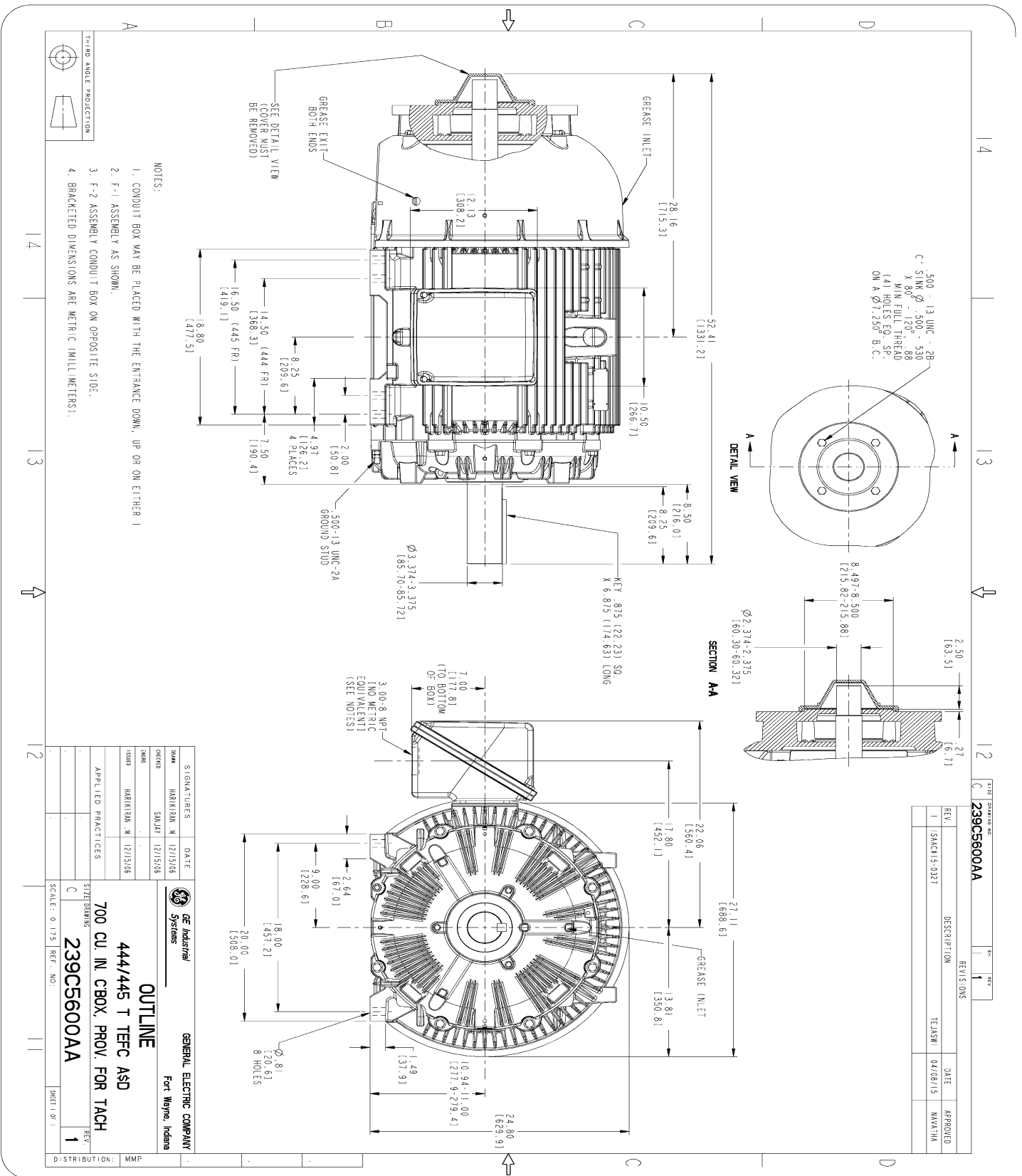
Stator Slots: 72

Rotor Slots: 58

Speed Torque Current Curve (First Connection, First Speed)

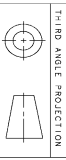


Marks:



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 CONDUIT BOX ON OPPOSITE SIDE.
4. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).



REV.	DESCRIPTION	DATE	APPROVED
1	5KAF15-0327	04/08/15	NAYATHA

GE Industrial Systems
GENERAL ELECTRIC COMPANY
Fort Wayne, Indiana

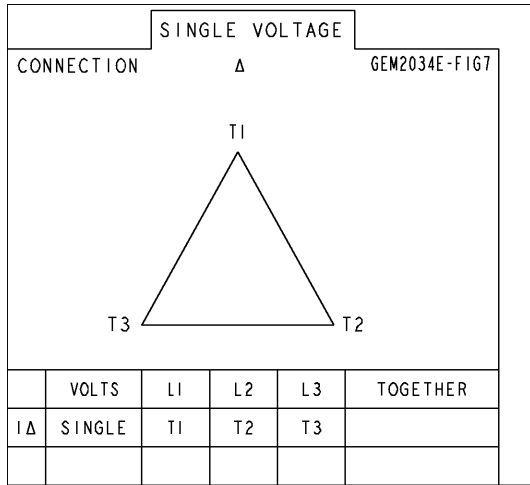
OUTLINE

444/445 T TEFC ASD
700 CU. IN. CBOX, PROV. FOR TACH
239C5600AA

DISTRIBUTION: MMP

Marks:

Connection Diagram
GEM2034E-FIG7



Thermostat Connection
3027JE-2A

