

Product Information Packet

November 28, 2018

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

Model Number:	5KGS405SAA321D1
Catalog Number:	M8985
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG7
Outline Drawing:	239C6400AA

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

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Marks:

MODEL NUMBER:	5KGS405SAA321D1	Estimated Weight:	1600 Lbs
Outline Drawing:	239C6400AA	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG7	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	X\$D
Design Code:	40BD3074A	Ambient Max(°C):	40
Type:	KGS	Alt Ambient Max(°C):	--
Frame:	405T	Insulation Class:	H
Phases:	3	NEMA Design:	C
Poles:	6	Nominal Efficiency:	94.5 %
Output Power:	75HP 55.5KW	Guaranteed Efficiency:	94.1 %
RPM:	1180	3/4 Load Efficiency:	94.7 %
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	25.0
Amps - FL:	89.5	Power Factor:	83.0
Service Factor:	1.15	Bearing - DE:	NU 316
Alt Service Factor:	--	Bearing - ODE:	6316ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

ROLLER BEARING - FOR BELTED LOAD ONLY
 THERMOSTAT LEADS TB1-TB2 TRIP
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KGS405SAA321D1 S/N: XXX
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 200 C 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 230C CT OR -- C CHP PWM CONTROL
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB
 VT 0 - 60 HZ, CT 7.6-60 HZ, CHP 60-90 HZ.
 400V, 50HZ 102.0 AMPS AT 1.0SF
 INVERTER DUTY CONSTANT TORQUE RANGE: 15-60HZ

Additional Information:

6P - T EXTN
 C/BOX 700 CU IN - 3.00" NPT
 OIL RESISTANT SLEEVING ON LEADS
 B5F4C4 HIGH FATIGUE STEEL AISI 4142 SHAFT MATERIAL
 N.C. TRIP TSTAT LDS TO MAIN CONDUIT BOX
 F1 MOUNTING

Performance Characteristics

1st Winding 1st Connection

Design: 40BD3074A

Marks:

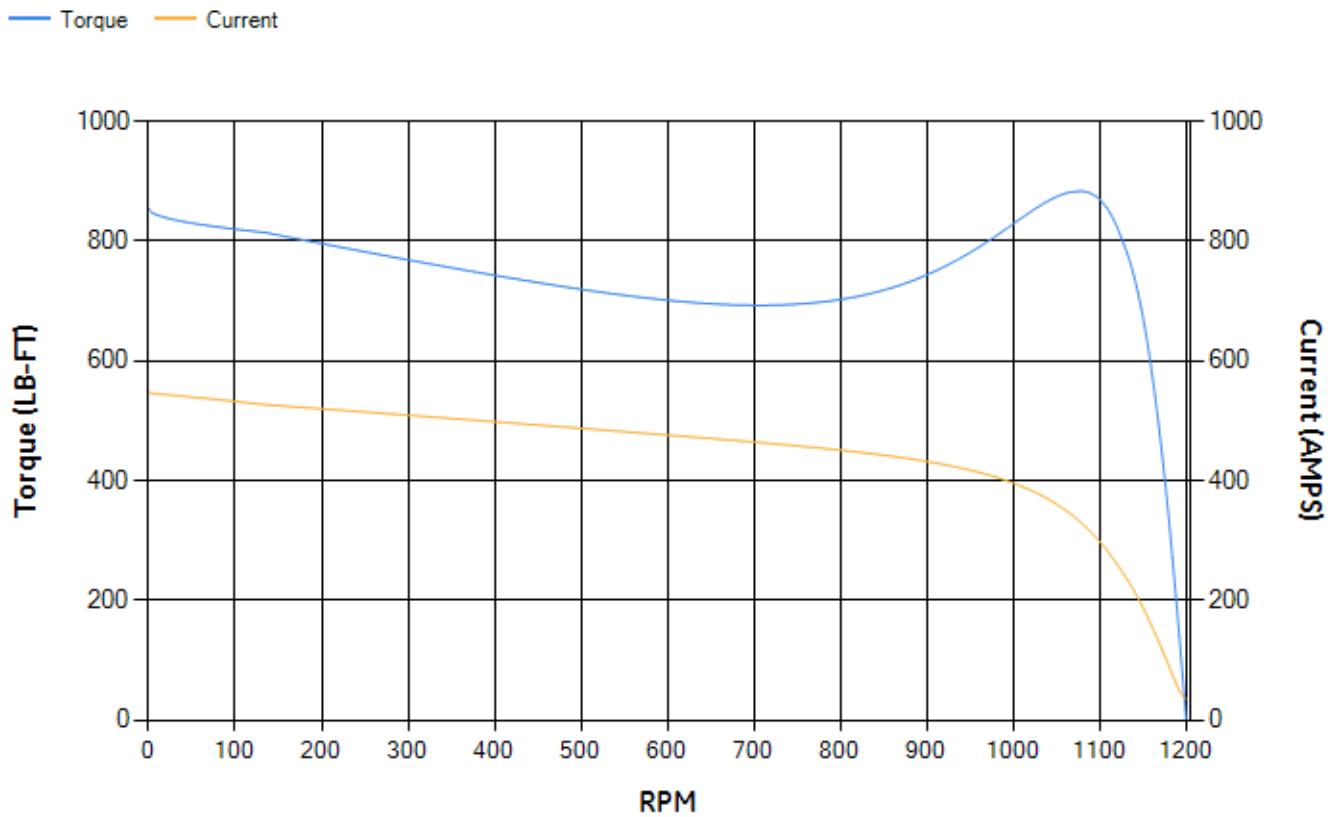
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	93.59	93.91	94.51	94.72	94.5	92.09	0.00
% PF	84.52	84.04	82.78	78.48	68.7	46.37	3.49
AMPS	110.91	102.28	89.53	70.82	54.06	41.09	34.85

TORQ(FL)#FT	333.88	TORQ(LR)%FL	255.84	TORQ(BD)%FL	263.46
AMPS(LR)	546.18	PF AT START	0.45		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 4962 Lb-Ft Sq (208.9 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 30 seconds. Safe stall time at 100% voltage is 58 seconds cold, 36 seconds hot. Rotor inertia is 51.19 Lb-Ft Sq (2.16 Kg-meter Sq).

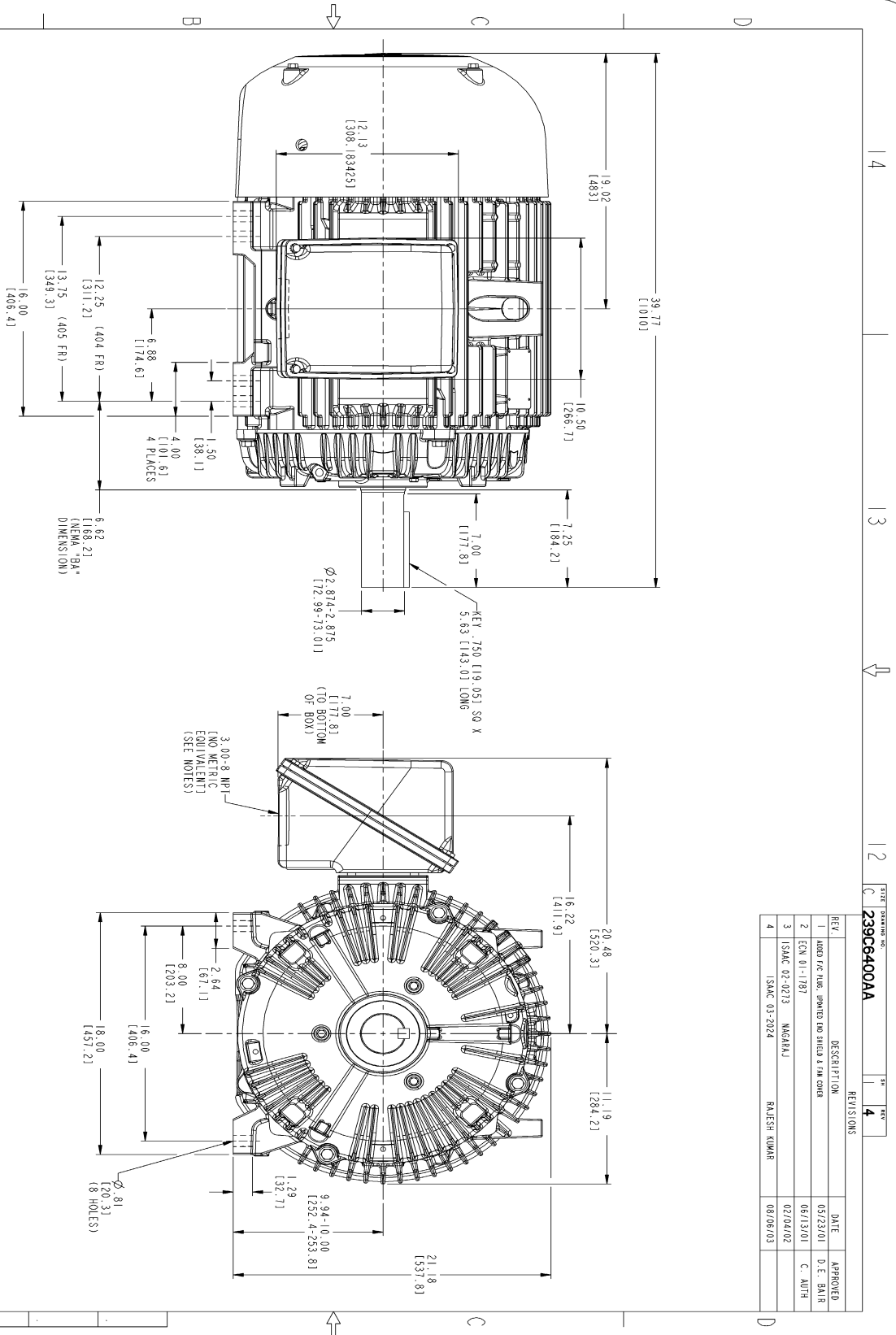
Open Circuit A-C:	0.379	Short Circuit D-C:	0.025
Short Circuit A-C:	0.02	X/R Ratio:	9.492
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)



NAME: 103016807 OBJECT: 239C6400AA DATE: 08-Aug-03 09:32:41

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

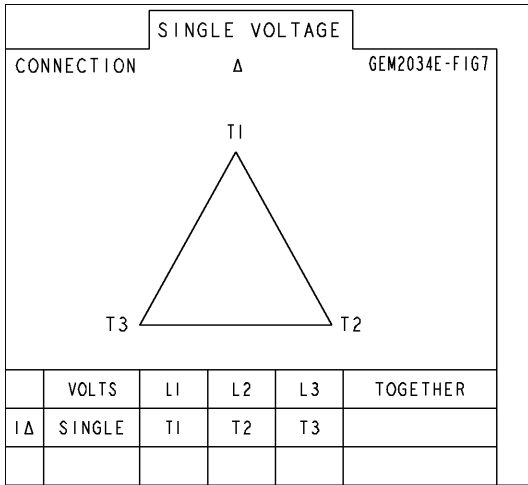
REV.	DESCRIPTION	DATE	APPROVED
1	ADDED FFC RING, IMPROVED END SHIELD & FAN COVER	05/23/01	D. E. BAIR
2	ECN 01-1181	06/13/01	C. ALTH
3	ISMAC 02-0213 MARGRAJ	02/04/02	
4	ISMAC 03-2024 RAJESH KUMAR	08/06/03	

SIGNATURES	DATE	GENERAL ELECTRIC COMPANY
DAVE J.M. JUREN	03/29/00	Fort Wayne, Indiana
checked W. ELLISWORTH	05/11/00	
Drawn D. STARK	05/11/00	
APPLIED PRACTICES		
SCALE: 0.220 REF. NO.:		
SHEET DRAWING: 239C6400AA		
REV: 4		
DISTRIBUTION: MMP		

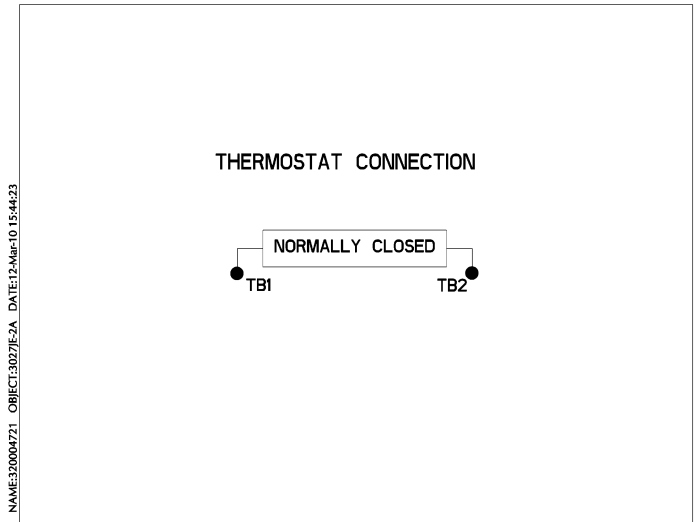
OUTLINE
404/405T TEFC
700 CU. IN. CONDUIT BOX

Marks:

Connection Diagram
GEM2034E-FIG7



Thermostat Connection
3027JE-2A



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4304AA1	115E4304LK1
Bearing	235A2526AA01	235A2518AC01
Slinger/Inproseal	149C4399G06	149C4399G06

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100G02
Fan Cover	128D6832AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	118D4408AD2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

