

Product Information Packet

January 12, 2017

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

Model Number:	5KGS405SAA221D
Catalog Number:	M8994
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		

Table of Contents

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



imagination at work

Marks:

MODEL NUMBER:	5KGS405SAA221D	Estimated Weight:	1500 Lbs
Outline Drawing:	239C6400AA	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG7	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	X\$D
Design Code:	40BD1018A	Ambient Max(°C):	40
Type:	KGS	Alt Ambient Max(°C):	--
Frame:	405T	Insulation Class:	H
Phases:	3	NEMA Design:	C
Poles:	4	Nominal Efficiency:	95.4 %
Output Power:	100HP 74KW	Guaranteed Efficiency:	95.0
RPM:	1775	3/4 Load Efficiency:	95.7
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	29.4
Amps - FL:	117.0	Power Factor:	84.0
Service Factor:	1.15	Bearing - DE:	NU 316
Alt Service Factor:	--	Bearing - ODE:	6316ZC3S0

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

400V, 50HZ 134.0 AMPS AT 1.0SF
 ROLLER BEARING - FOR BELTED LOAD ONLY
 THERMOSTAT LEADS TB1-TB2 TRIP
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KGS405SAA221D 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 280C AT 1.15SF ON SINE-WAVE PWR
 OR 215C VT OR 230C CT OR -- CHP PWM CONTROL
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB
 VT 0-60 HZ, CT 20-60 HZ, CHP -- HZ.

Additional Information:

4P - 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: 40BD1018A**Marks:**

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.66	94.95	95.5	95.67	95.54	93.62	0.00
% PF	85.14	84.95	84.17	80.85	72.32	50.48	3.23
AMPS	145.16	133.44	116.43	90.75	67.74	49.51	40.94

TORQ(FL)#FT 295.72
AMPS(LR) 655.01

TORQ(LR)%FL 236.54
PF AT START 0.41

TORQ(BD)%FL 229.82

This motor is capable of two cold or one hot start with a maximum connected load inertia of 1607 Lb-Ft Sq (67.65 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 19 seconds. Safe stall time at 100% voltage is 45 seconds cold, 22 seconds hot. Rotor inertia is 26.58 Lb-Ft Sq (1.12 Kg-meter Sq).

Open Circuit A-C: 0.537

Short Circuit D-C: 0.029

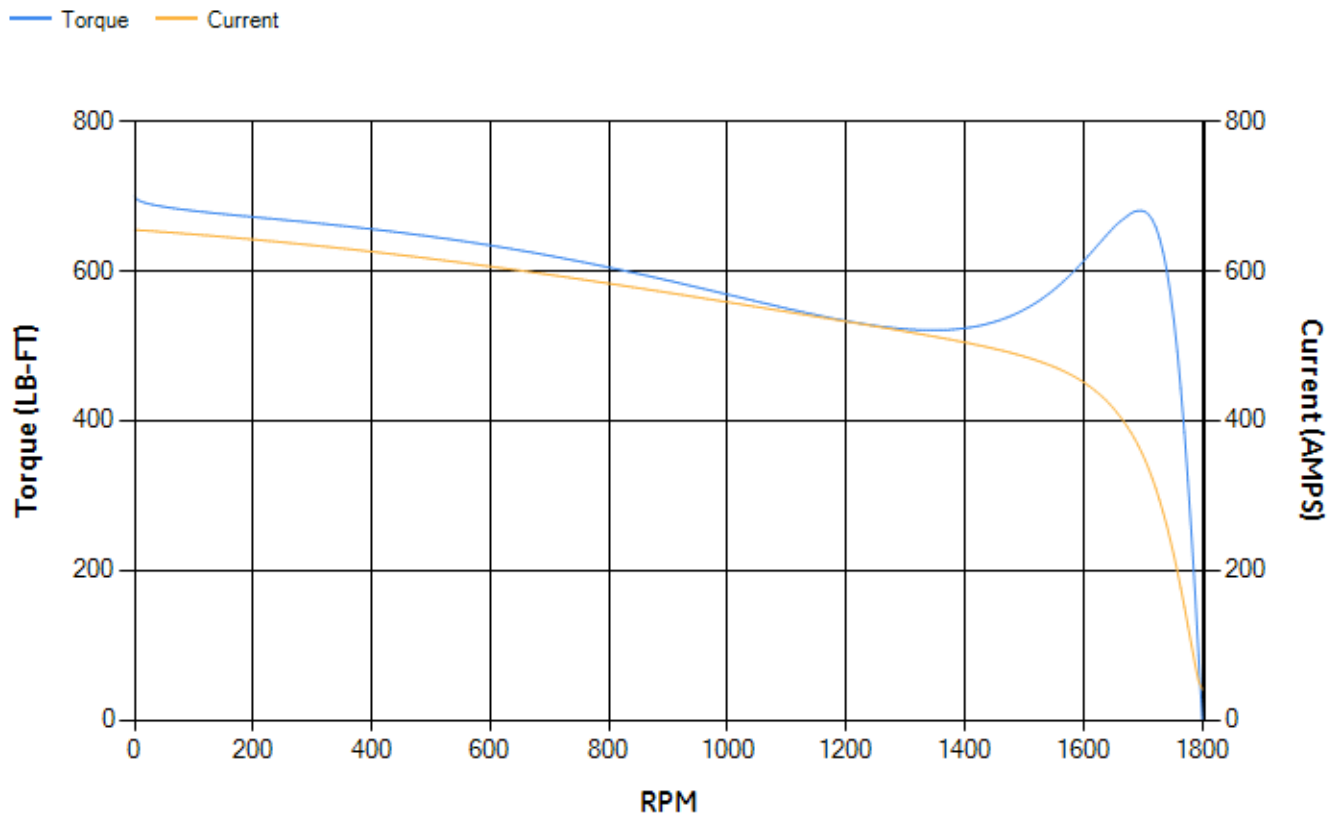
Short Circuit A-C: 0.027

X/R Ratio: 11.062

Stator Slots: 72

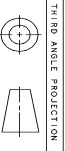
Rotor Slots: 58

Speed Torque Current Curve (First Connection, First Speed)



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

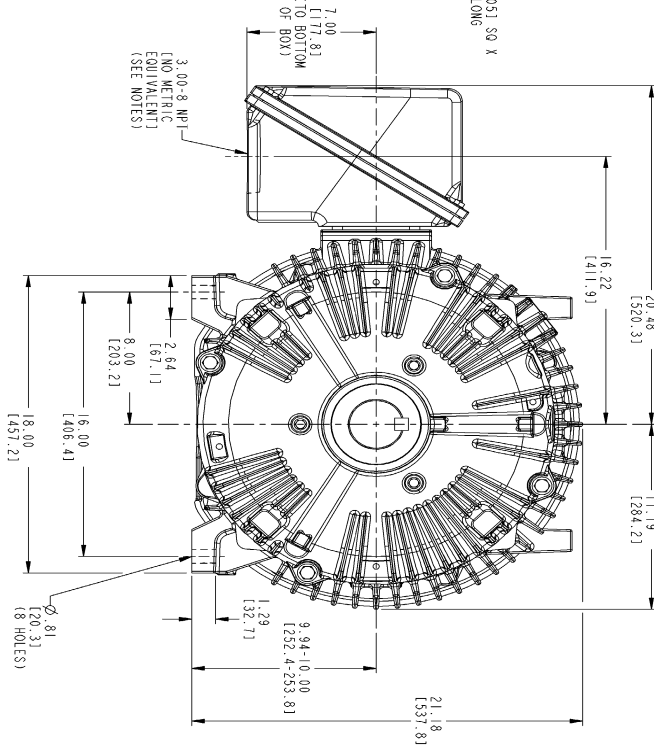
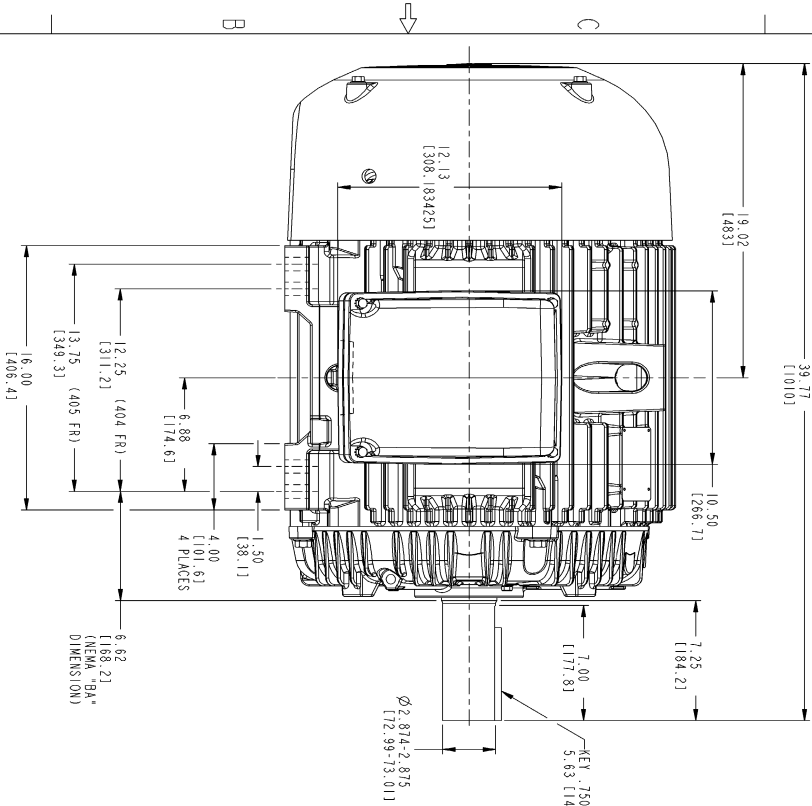
Marks:



THIRD ANGLE PROJECTION

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).



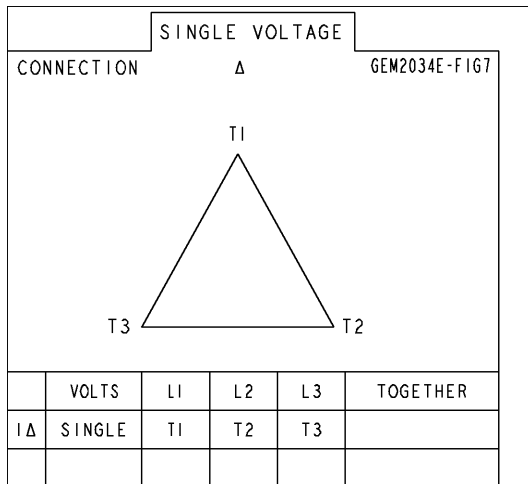
SIGNATURES		DATE	REVISIONS	
DESIGN	J. M. JENSEN	03/29/00	1	4
CHECKED	W. ELLISWORTH	05/11/00	2	
DRAWN	D. STARK	05/11/00	3	
APPROVED	W. ELLISWORTH	05/11/00	4	
APPLIED PRACTICES				
SIZE DRAWING				
C				
SCALE: 0.220				
REF. NO.				
SHEET 1 OF 1				

GENERAL ELECTRIC COMPANY	
Fort Wayne, Indiana	
404/405T TEFC	
700 CU. IN. CONDUIT BOX	
239C6400AA	
4	

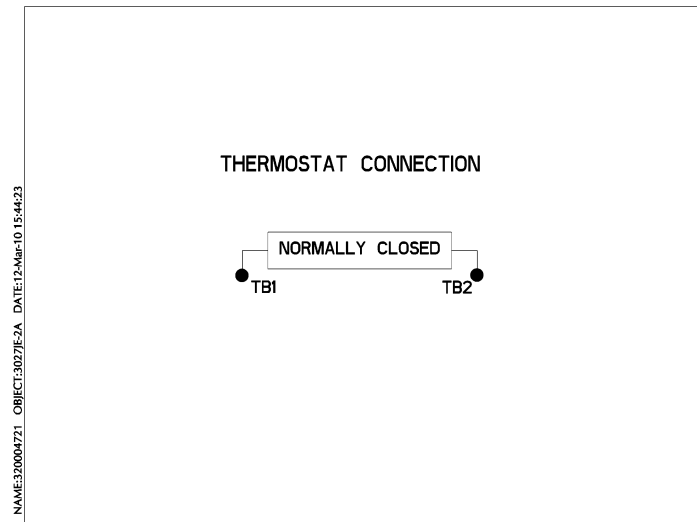
DISTRIBUTION: MMP

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	235A2618AA04
Slinger/Inproseal	149C4399G06	149C4399G06

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100AA1
Fan Cover	128D6832AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

