

Product Information Packet

November 8, 2016

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

Model Number:	5KS449XAA144C
Catalog Number:	M9372
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG20
Outline Drawing:	239C6800ZC

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

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Marks:

MODEL NUMBER:	5KS449XAA144C	Estimated Weight:	2820 Lbs
Outline Drawing:	239C6800ZC	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG20	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	841
Design Code:	49BD0089A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	449TS	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	2	Nominal Efficiency:	95.8 %
Output Power:	300HP 222KW	Guaranteed Efficiency:	95.4
RPM:	3580	3/4 Load Efficiency:	96.3
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	46.6
Amps - FL:	317.0	Power Factor:	92.5
Service Factor:	1.00	Bearing - DE:	6314ZC3
Alt Service Factor:	--	Bearing - ODE:	6314ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

FOR DIRECT COUPLED LOAD ONLY
 DE BRG 70BC03JP30, ODE BRG 70BC03JP30
 ROT CW FACING ODE LEAD/PH SEQ 1-2-3/1-2-3
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KS449XAA144C S/N: XXX
 CSA CERTIFIED CSA09.2216219 FOR EX NA IIC 215 C GC
 CL 1 ZONE2 AEX NA IIC ---C;CL 1 DIV2 GRP ABCD 215C
 IN -25C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR
 SURF TEMP ---C AT 1.00SF ON SINE-WAVE PWR
 OR --- C VT OR --- C CT OR --- C CHP PWM CONTROL
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB
 VT 0-60 HZ, CT --- HZ, CHP --- HZ.
 EXCEPTIONS TO IEEE-STD-841-2009: 215 DEG C AIT
 SOUND POWER 94 DBA; WINDING RISE 86 C

Additional Information:

2P - TS EXTN - SPLIT LEAD
 PAINTED FRAME ID & SHAFT,
 FAN COVER INSIDE & ODE E/S OUTSIDE
 1260 CU IN - 2(4.00" NPT) WITH DRAIN HOLES
 C/B GRD PLATE
 INPRO SEAL BOTH ENDS
 OIL RESISTANT SLEEVING ON LEADS
 .0015" TIR SHAFT RUNOUT
 ROUTINE TEST REPORT AND 5 POINT VIBRATION TEST
 REPORT INCLUDED IN C/B
 COPPER WASHER UNDER HEADS OF BEARING CAP BOLTS,

APPLY TITE-SEAL (A50CD427A) ON BEARING CAP SCREWS,
RABBETS AND PLUG THREADS.
GROUND PAD
F1 MOUNTING

Performance Characteristics

1st Winding 1st Connection

Design: 49BD0089A

Marks:

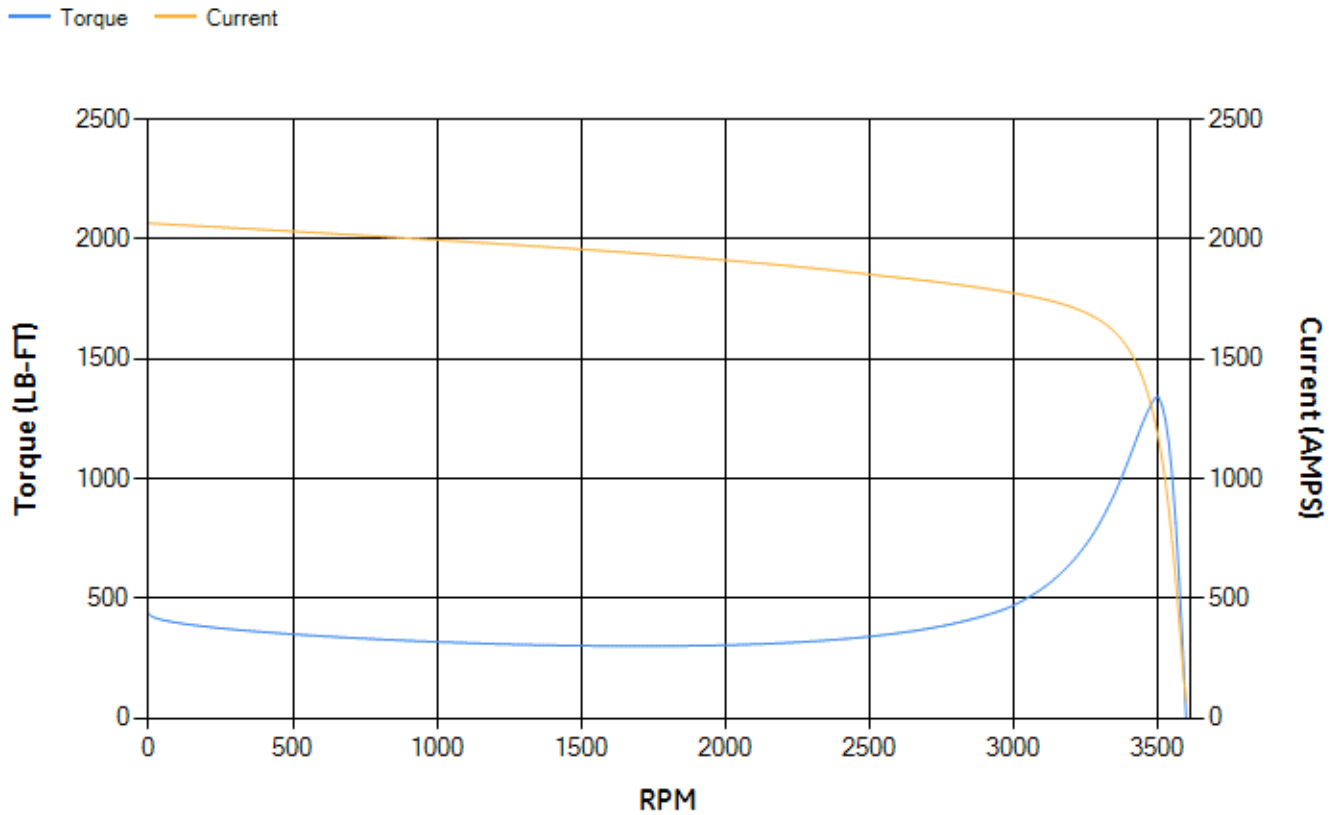
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.53	95.74	96.22	96.31	96.17	94.52	0.00
% PF	92.23	92.38	92.38	91.42	87.71	73.02	5.27
AMPS	398.35	365.06	315.88	239.18	166.43	101.71	64.99

TORQ(FL)#FT	440.19	TORQ(LR)%FL	99.03	TORQ(BD)%FL	304.94
AMPS(LR)	2066.12	PF AT START	0.18		

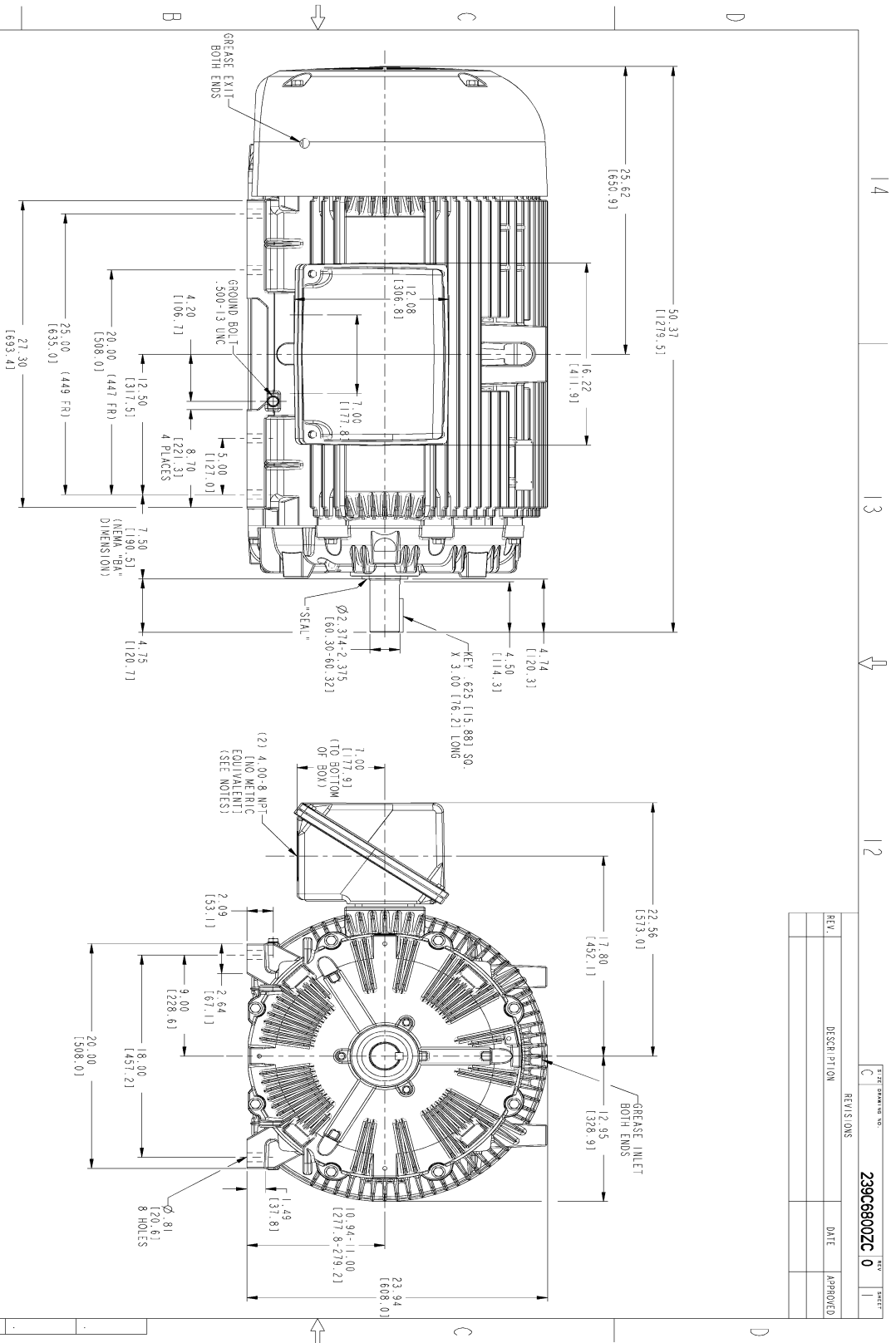
This motor is capable of two cold or one hot start with a maximum connected load inertia of 650 Lb-Ft Sq (27.36 Kg-meter Sq) at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 30 seconds. Safe stall time at 100% voltage is 83 seconds cold, 36 seconds hot. Rotor inertia is 50.9 Lb-Ft Sq (2.14 Kg-meter Sq).

Open Circuit A-C:	2.138	Short Circuit D-C:	0.035
Short Circuit A-C:	0.07	X/R Ratio:	13.313
Stator Slots:	48	Rotor Slots:	38

Speed Torque Current Curve (First Connection, First Speed)



Marks:



NOTES:

- CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER SIDE.
- F-1 ASSEMBLY AS SHOWN.
- F-2 ASSEMBLY CONDUIT BOX ON OPPOSITE SIDE.
- ALL DIMENSIONS ARE IN INCHES. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).
- TOLERANCE ON PERMISSIBLE SHAFT EXTENSION RUNOUT IS .0015 T.I.R.

REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES	DATE	REV	SHEET
MODEL: 5KS449XAA144C	TEJSMI 08/10/15	0	1
SCALE: 1:1	TEJSMI 08/10/15		
CHECKED: ANIL 08/10/15			
DRAWN: ANIL 08/10/15			
QUALITY: TEJSMI 08/10/15			
ISSUED: TEJSMI 08/10/15			
SOLID MODEL: 239C68002C	SCALE: 0.180	REF. NO: 239C68002C	SHEET 1 OF 1

OUTLINE

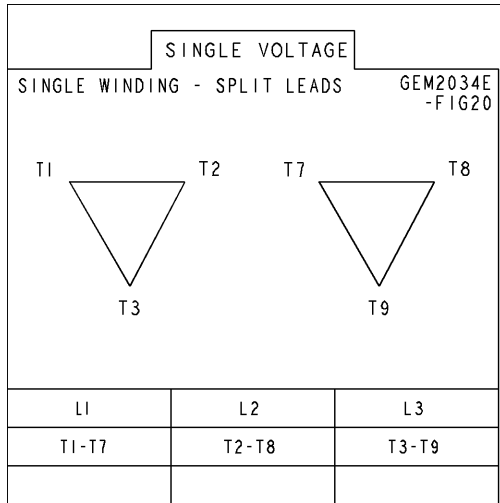
447/449 TS TEFC XSD 841
1260 CU. IN. C. BOX, GROUND PAD

239C68002C

DISTRIBUTION: MMP

Marks:

Connection Diagram
GEM2034E-FIG20



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4354AA1	115E4354LL1
Bearing	235A2616AA01	235A2616AA01
Slinger/Inproseal	235A4575GS3	235A4575GS3

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	149C4261AK2
Fan Cover	128D6841AC1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	179B9058AA-G02

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	