



GE INDUSTRIAL MOTORS
a **WOLONG** company

Product Technical Information

July 28, 2023

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

Model Number:	5KS449XAA290C
Catalog Number:	M9376
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG20
Outline Drawing:	239C6800ZE

Accessory Connection Diagrams

Bearing Thermocouple:	None	Heater:	None
RTD:	None	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	None		

Table of Contents

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

Marks:

MODEL NUMBER:	5KS449XAA290C	Estimated Weight:	2990 Lbs
Outline Drawing:	239C6800ZE	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG20	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	841
Design Code:	49BD1181B	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	449T	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	96.2 %
Output Power:	300HP 222KW	Guaranteed Efficiency:	95.8 %
RPM:	1790	3/4 Load Efficiency:	--
Voltage:	575	KVA Code:	G
Hertz:	60	Max KVAR:	67.5
Amps - FL:	265.0	Power Factor:	88.0
Service Factor:	1.15	Bearing - DE:	NU 318
Alt Service Factor:	--	Bearing - ODE:	6318ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

ROLLER BEARING - FOR BELTED LOAD ONLY
 DE BRG 90RU03M, ODE BRG 90BC03JP3
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KS449XAA290C 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 -25C <= AMB <= 40C, 1.0 SF ON SINE-WAVE PWR
 SURF TEMP 260C AT 1.15SF ON SINE-WAVE PWR
 OR 200 C VT OR 215 C CT OR 200 C CHP PWM CONTROL
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB
 VT 0-60 HZ, CT 45-60 HZ, CHP 60-75 HZ.
 MAX RADIAL LOAD: 5800 LBF AT 4.25"
 FROM SHAFT SHOULDER
 EXCEPTION TO IEEE-STD-841-2009:SOUND POWER 99 DBA



Additional Information:

4P - T EXTN - SPLIT LEAD
PAINTED FRAME ID & SHAFT,
FAN COVER INSIDE & ODE E/S OUTSIDE
C/BOX 1260 CU IN - 2(4.00" NPT)
C/B GRD PLATE
INPRO SEAL BOTH ENDS
OIL RESISTANT SLEEVING ON LEADS
.002" 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.
B5F4C4 HIGH FATIGUE STEEL AISI 4142 SHAFT MATERIAL
GROUND PAD
F1 MOUNTING



Performance Characteristics

1st Winding 1st Connection

Design: 49BD1181B

Marks:

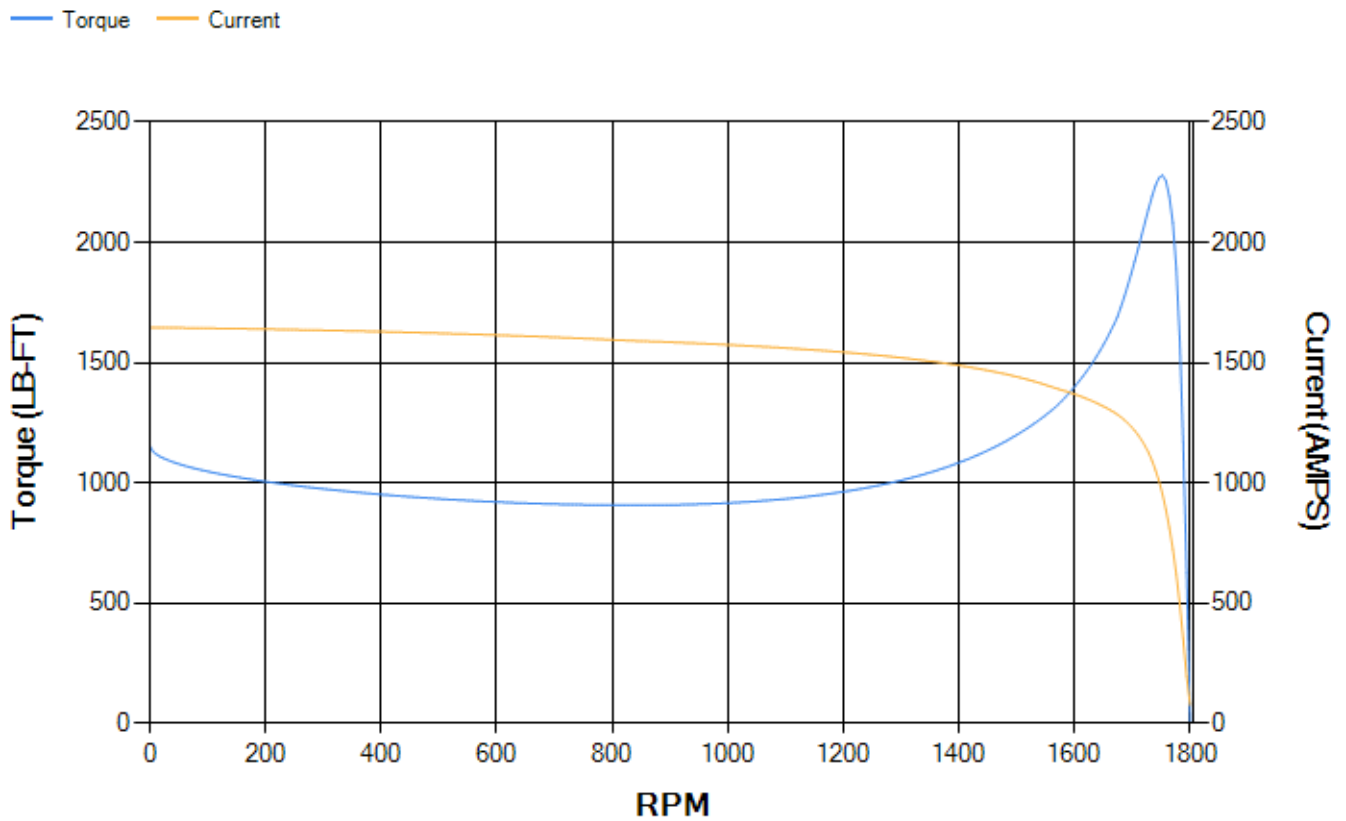
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.7	95.88	96.28	96.23	95.89	93.79	0.00
% PF	88.52	88.5	88.11	85.93	79.57	60.04	4.28
AMPS	331.42	304.43	264.81	203.72	147.2	99.72	75.33

TORQ(FL)#FT 879.73 **TORQ(LR)%FL** 131.39 **TORQ(BD)%FL** 258.8
AMPS(LR) 1646.11 **PF AT START** 0.23

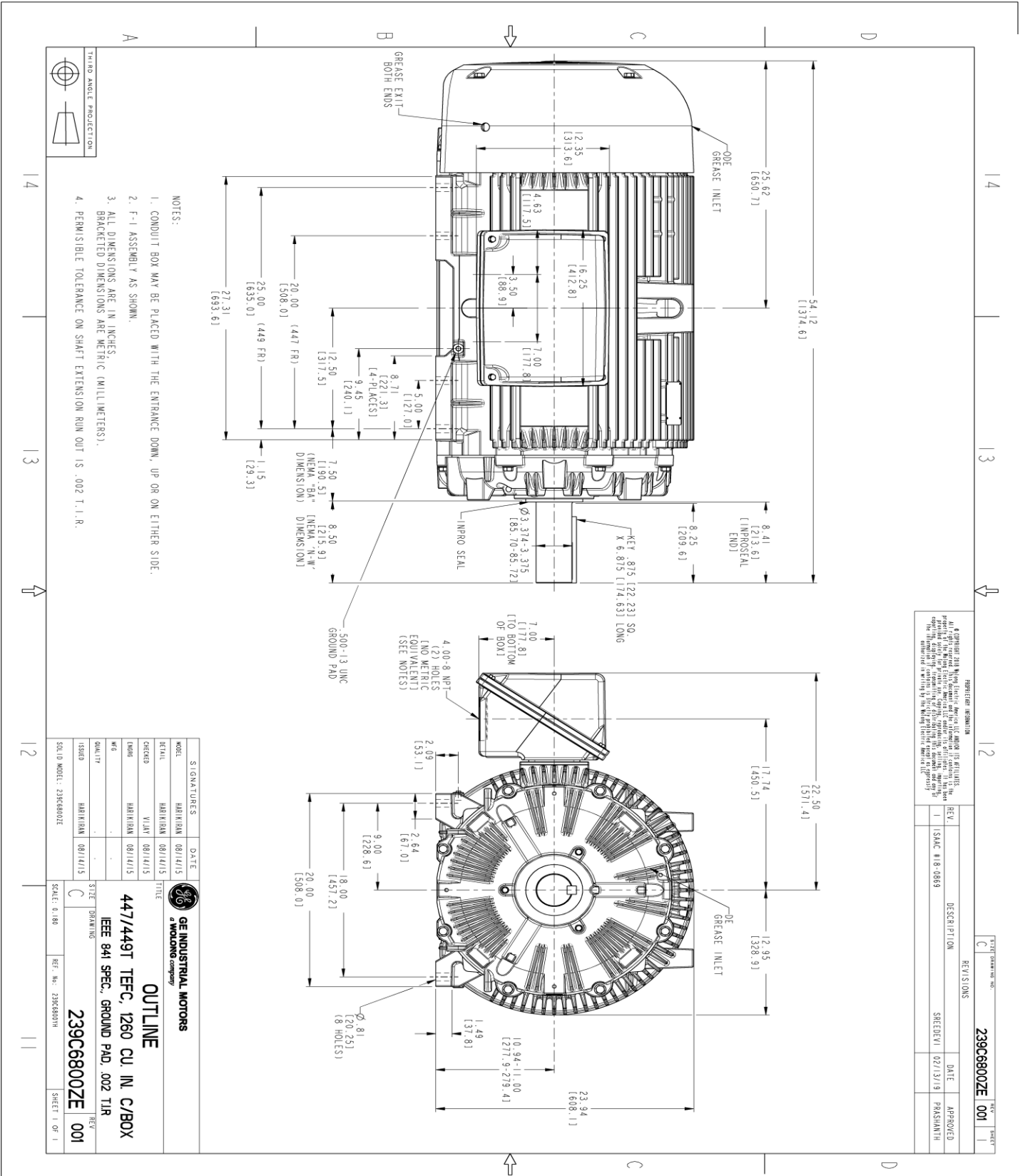
This motor is capable of two cold or one hot start with a maximum connected load inertia of 8350 Lb-Ft Sq (351.54 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 63 seconds. Safe stall time at 100% voltage is 142 seconds cold, 76 seconds hot. Rotor inertia is 127.08 Lb-Ft Sq (5.35 Kg-meter Sq).

Open Circuit A-C: 1.726 **Short Circuit D-C:** 0.037
Short Circuit A-C: 0.072 **X/R Ratio:** 14.079
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-I ASSEMBLY AS SHOWN.
 3. ALL DIMENSIONS ARE IN INCHES. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).
 4. PERMISSIBLE TOLERANCE ON SHAFT EXTENSION RUN OUT IS .002 I. I. R.

REVISION INFORMATION

REV.	DESCRIPTION	DATE	APPROVED
1	ISAC #18-0869	02/13/19	PARSHANTH

239C6800ZE 001

THIRD ANGLE PROJECTION

SIGNATURES	DATE
MODEL: HARIHARAN 08/14/15	
DESIGN: HARIHARAN 08/14/15	
CHECKED: VIJAY 08/14/15	
DRAWN: HARIHARAN 08/14/15	
QUALITY: HARIHARAN 08/14/15	
ISSUED: HARIHARAN 08/14/15	

GE INDUSTRIAL MOTORS
A WOLONG COMPANY

OUTLINE

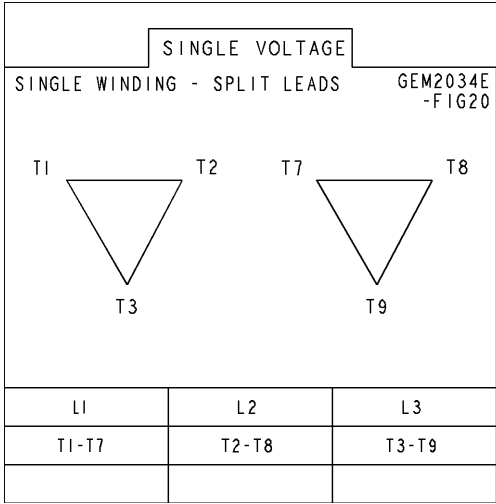
447/449T TECFC, 1260 CU. IN. C/BOX
IEEE 841 SPEC., GROUND PAD, .002 TIR

239C6800ZE
SCALE: 0.180 REF. NO: 239C6800TH

SHEET 1 OF 1

Marks:

Connection Diagram
GEM2034E-FIG20



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4355AA1	115E4355LF1
Bearing	235A2519AA01	235A2514AG01
Slinger/Inproseal	235A4575GS5	235A4575GS5

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100G03
Fan Cover	128D6841AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	179B9058G03

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

