



GE INDUSTRIAL MOTORS
a **WOLONG** company

Product Technical Information

June 25, 2020

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

Model Number:	5KS445XAA2083C
Catalog Number:	M9599
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG1
Outline Drawing:	239C6600ZC

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:	5KS445XAA2083C	Estimated Weight:	1970 Lbs
Outline Drawing:	239C6600ZC	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG1	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	841
Design Code:	44BD1157B	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	445T	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	95.8 %
Output Power:	150HP 111KW	Guaranteed Efficiency:	95.4 %
RPM:	1780	3/4 Load Efficiency:	96.0 %
Voltage:	575	KVA Code:	G
Hertz:	60	Max KVAR:	42.3
Amps - FL:	136.0	Power Factor:	86.5
Service Factor:	1.15	Bearing - DE:	NU 318
Alt Service Factor:	--	Bearing - ODE:	6318ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

IEEE-STD-841-2009
 ROLLER BEARING - FOR BELTED LOAD ONLY
 DE BRG 90RU03M, ODE BRG 90BC03JP3
 STAMP NP249A5564P051 AS BELOW:
 MODEL:5KS445XAA2083C 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 200C AT 1.15SF ON SINE-WAVE PWR
 OR 200 C VT OR 230 C CT OR 200 C CHP PWM CONTROL
 ALTERNATE RATING FOR PWM CONTROL 1.0SF 40C AMB
 VT 0-60 HZ, CT 15-60 HZ, CHP 60-90 HZ.



Additional Information:

4P - T EXTN
PAINTED FRAME ID & SHAFT,
FAN COVER INSIDE & ODE E/S OUTSIDE
700 CU IN - 3.00" NPT
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: 44BD1157B

Marks:

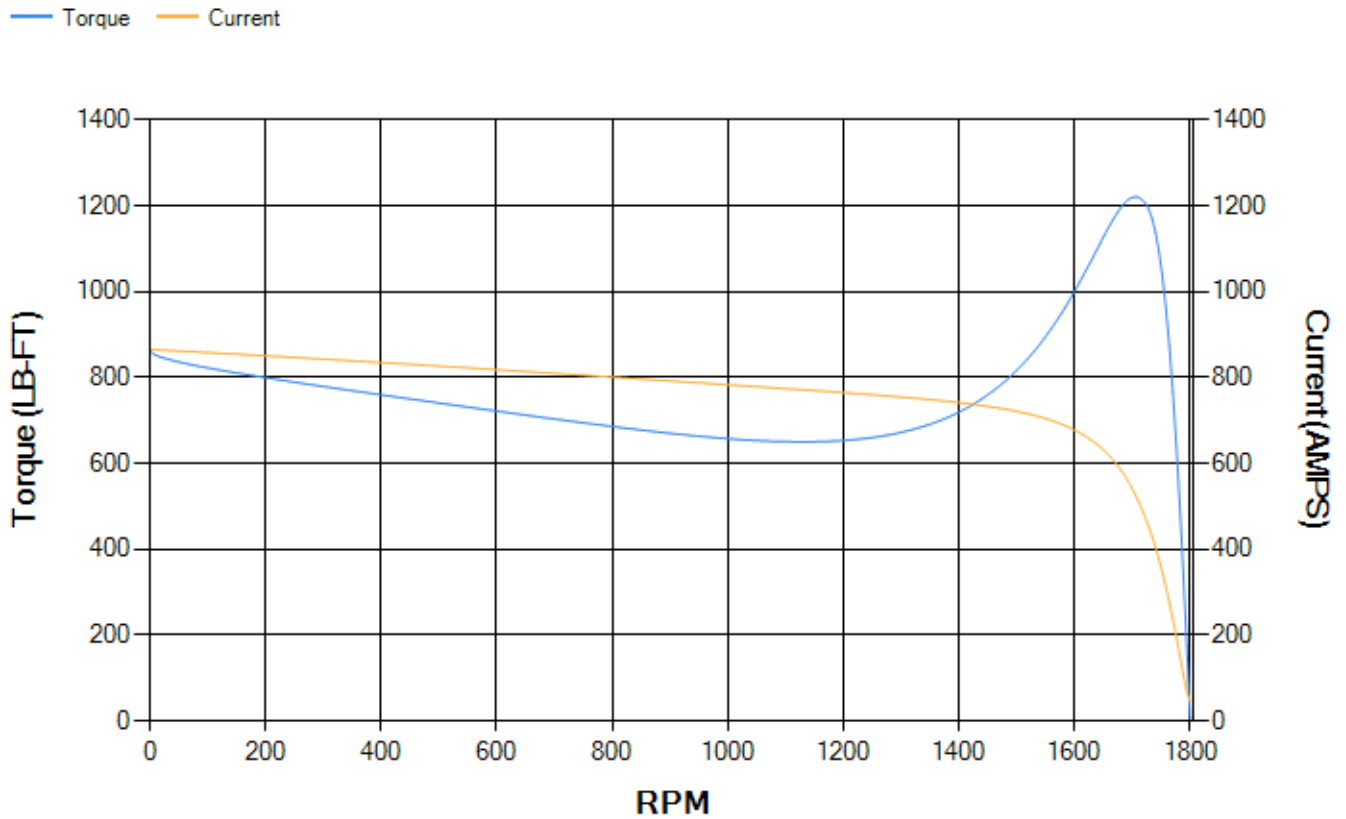
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.33	95.54	95.99	96.03	95.78	93.8	0.00
% PF	87.63	87.27	86.29	82.77	74.18	52.11	3.3
AMPS	168.05	154.91	135.6	105.97	79.04	57.44	47.25

TORQ(FL)#FT	441.83	TORQ(LR)%FL	195.45	TORQ(BD)%FL	275.97
AMPS(LR)	865.8	PF AT START	0.33		

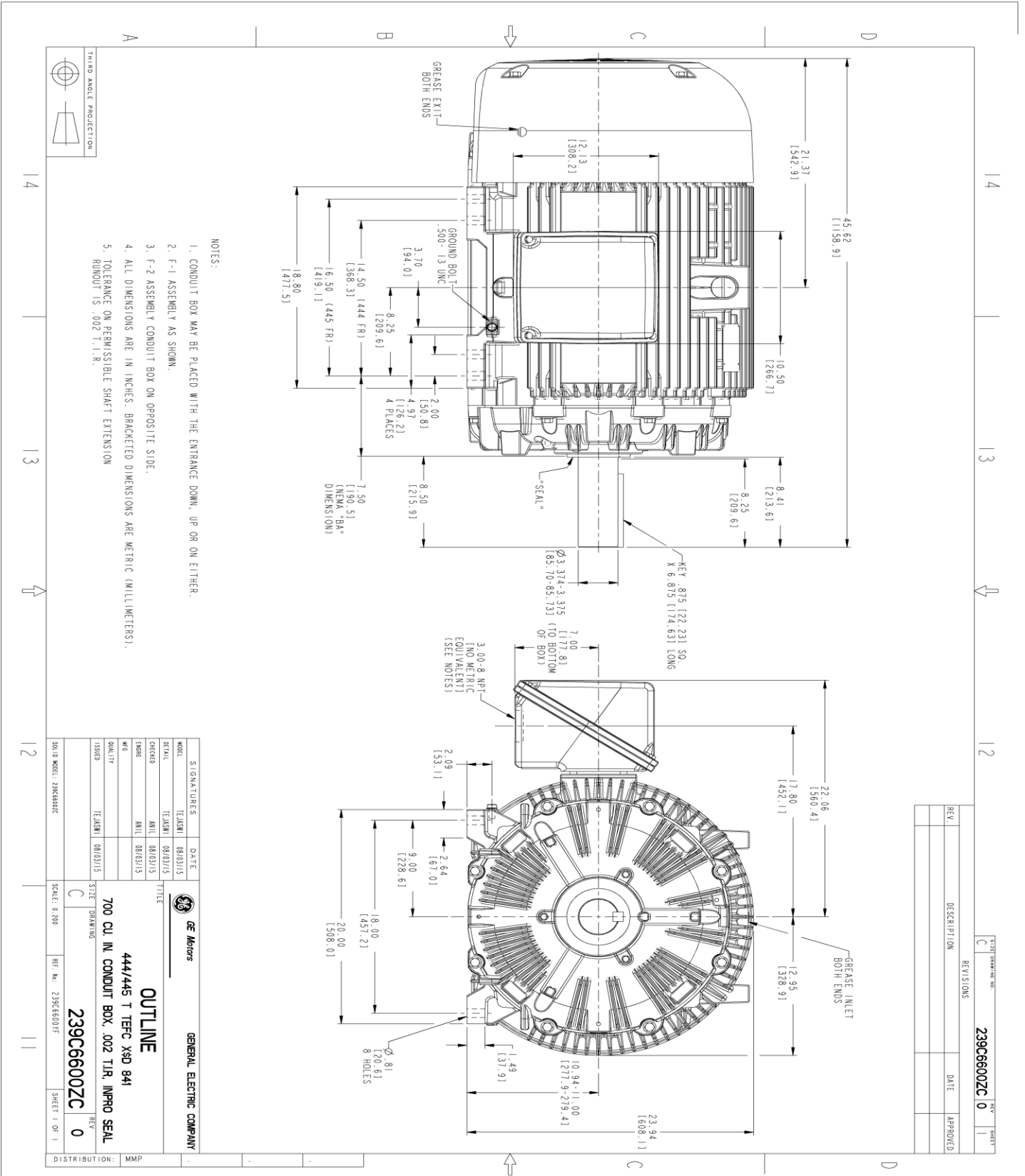
This motor is capable of two cold or one hot start with a maximum connected load inertia of 2341 Lb-Ft Sq (98.56 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 22 seconds. Safe stall time at 100% voltage is 54 seconds cold, 27 seconds hot. Rotor inertia is 62.69 Lb-Ft Sq (2.64 Kg-meter Sq).

Open Circuit A-C:	0.752	Short Circuit D-C:	0.03
Short Circuit A-C:	0.037	X/R Ratio:	11.236
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)



Marks:



NOTES:

- CONDUIT BOX MAY BE PLACED WITH THE ENTRANCE DOWN, UP OR ON EITHER.
- 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 MINIMUM IS .002 T.I.R.



REV.	DESCRIPTION	DATE	APPROVED

MODEL	TEKANI	DATE	08/03/15
DRAWN	TEKANI	DATE	08/03/15
CHECKED	ANIL	DATE	08/03/15
ENG'G	ANIL	DATE	08/03/15
QUALITY	TEKANI	DATE	08/03/15
ISSUED	TEKANI	DATE	08/03/15
TITLE		GENERAL ELECTRIC COMPANY	
OUTLINE		444/445 T TEFC XSD 841	
700 CU. IN. CONDUIT BOX, .002 T.I.R. INPRO SEAL		REV. 0	
239C66002C		REV. 0	
SCALE: 0.200		REF. No.: 239C66001F	
SOLID MODEL: 239C66002C		SHEET 1 OF 1	
DISTRIBUTION: MMP			

Marks:

Connection Diagram
GEM2034E-FIG1



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4355AA1	115E4355LL1
Bearing	235A2519AA01	235A2514AG01
Slinger/Inproseal	235A4575GS5	235A4575GS5

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100AA2
Fan Cover	128D6841AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

