



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:	5KS449XAA225D4
Catalog Number:	M8946
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG20
Outline Drawing:	239C6800VW

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:	5KS449XAA225D4	Estimated Weight:	3100 Lbs
Outline Drawing:	239C6800VW	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG20	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	841
Design Code:	49BD1180B	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	449T	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	96.5 %
Output Power:	250HP 185KW	Guaranteed Efficiency:	96.2 %
RPM:	1790	3/4 Load Efficiency:	--
Voltage:	575	KVA Code:	G
Hertz:	60	Max KVAR:	47.8
Amps - FL:	217.0	Power Factor:	89.5
Service Factor:	1.15	Bearing - DE:	6318ZC3
Alt Service Factor:	--	Bearing - ODE:	6318ZC3

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

IEEE-STD-841-2009

FOR DIRECT COUPLED LOAD ONLY

DE BRG 90BC03JP3, ODE BRG 90BC03JP3

STAMP NP249A5564P051 AS BELOW:

MODEL:5KS449XAA225D4 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 215 C VT OR 230 C CT OR 215 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.



Additional Information:

4P - T EXTN - SPLIT LEAD
PAINTED FRAME ID & SHAFT,
FAN COVER INSIDE & ODE E/S OUTSIDE
700 CU IN - 3.00" NPT WITH DRAIN HOLES
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: 49BD1180B

Marks:

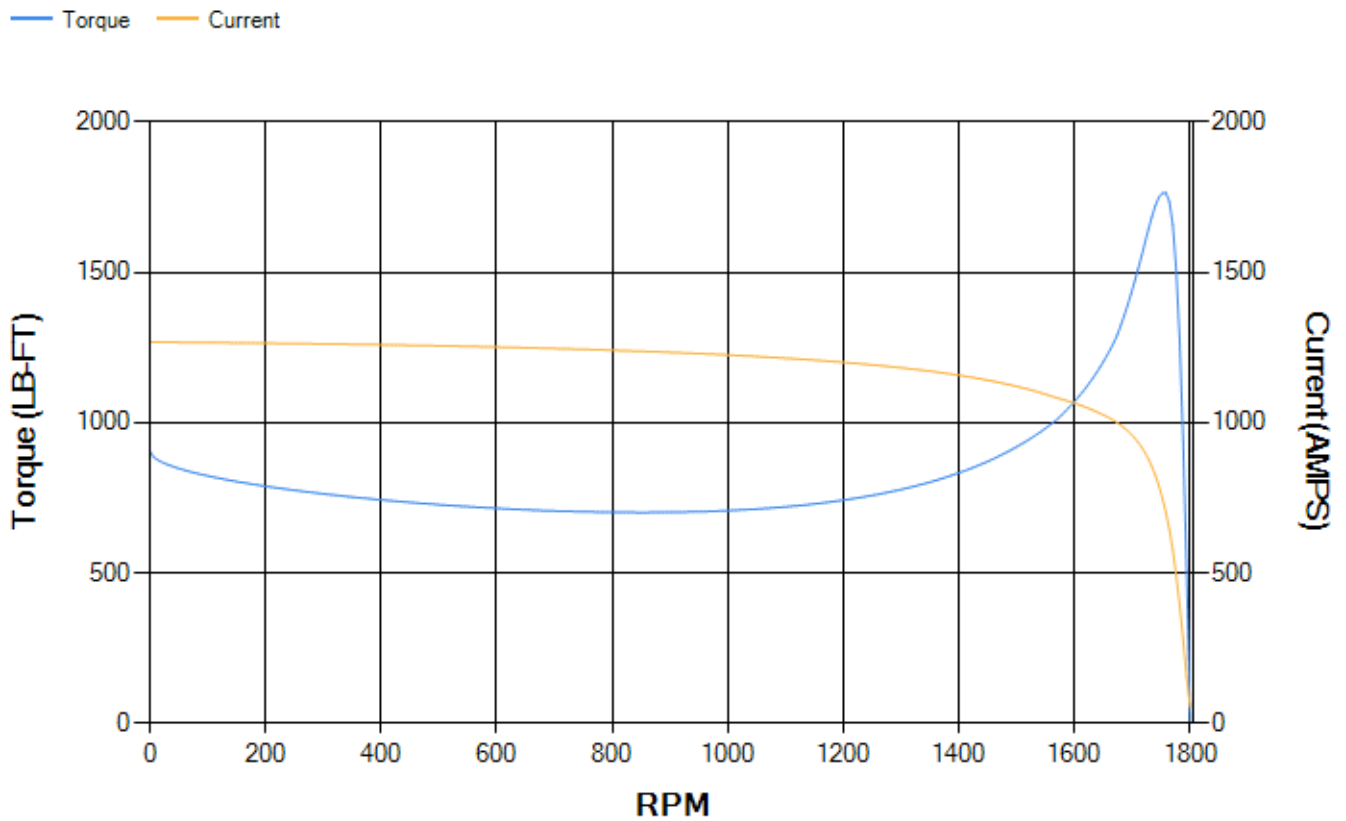
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.85	96.08	96.58	96.74	96.74	95.51	0.00
% PF	89.21	89.36	89.28	87.82	82.73	64.97	3.34
AMPS	273.66	250.71	217.1	165.26	116.95	75.41	53.39

TORQ(FL)#FT	733.46	TORQ(LR)%FL	123.67	TORQ(BD)%FL	240.63
AMPS(LR)	1268.16	PF AT START	0.23		

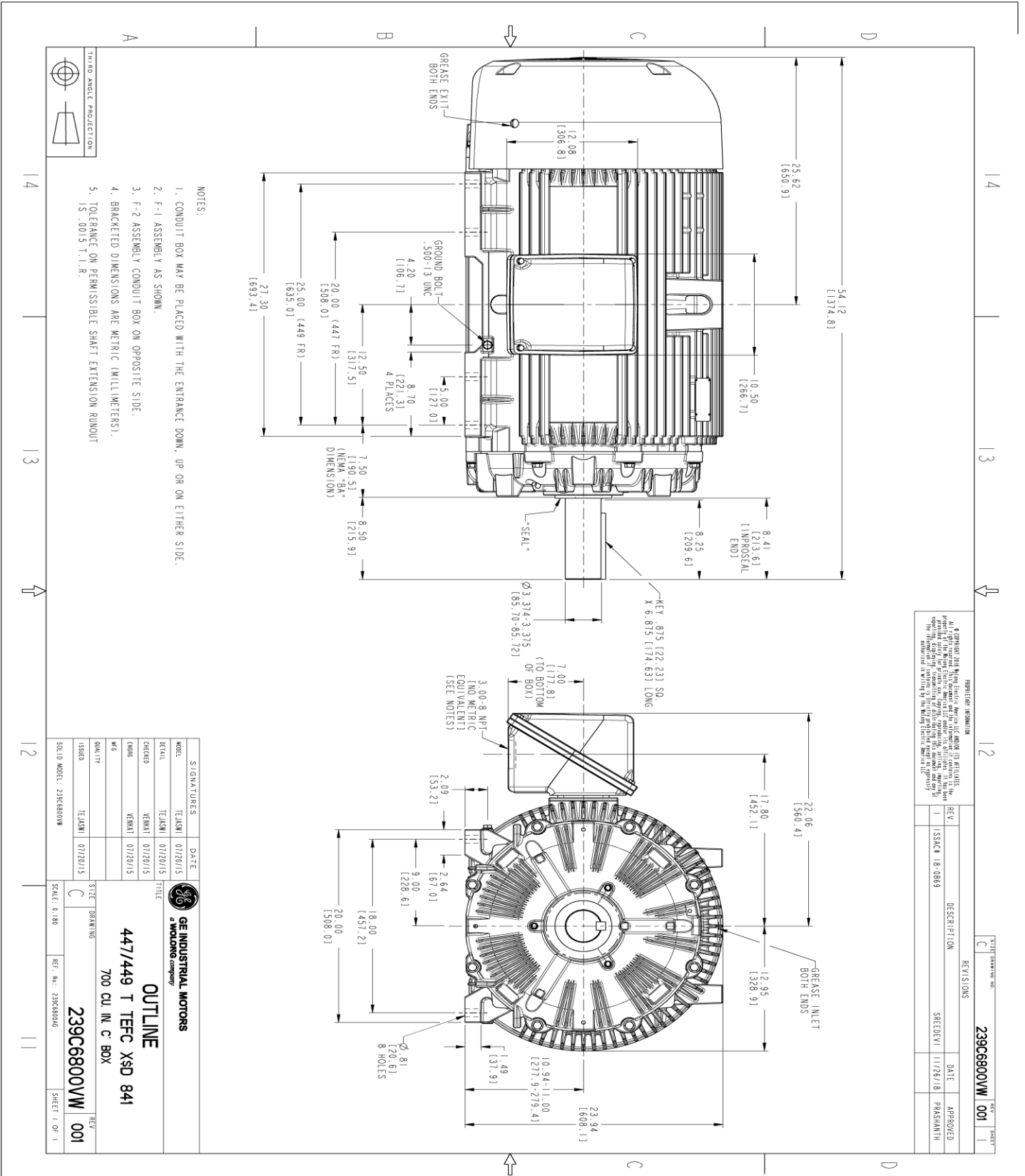
This motor is capable of two cold or one hot start with a maximum connected load inertia of 7447 Lb-Ft Sq (313.52 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 75 seconds. Safe stall time at 100% voltage is 190 seconds cold, 90 seconds hot. Rotor inertia is 137.24 Lb-Ft Sq (5.78 Kg-meter Sq).

Open Circuit A-C:	1.866	Short Circuit D-C:	0.037
Short Circuit A-C:	0.071	X/R Ratio:	13.937
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-1 ASSEMBLY AS SHOWN.
 3. F-2 ASSEMBLY CONDUIT BOX ON OPPOSITE SIDE.
 4. BRACKETED DIMENSIONS ARE METRIC (MILLIMETERS).
 5. TOLERANCE ON PERMISSIBLE SHAFT EXTENSION RUNOUT IS .0015 T.I.R.

SIGNATURES		DATE	
DESIGNER	TEJASNI	01/22/15	
CHECKED	TEJASNI	01/20/15	
DESIGNED	VENKAT	01/20/15	
DATE	VENKAT	01/20/15	
QUALITY	TEJASNI	01/20/15	
ISSUED			
SCALE: 0.180		REV: 001	

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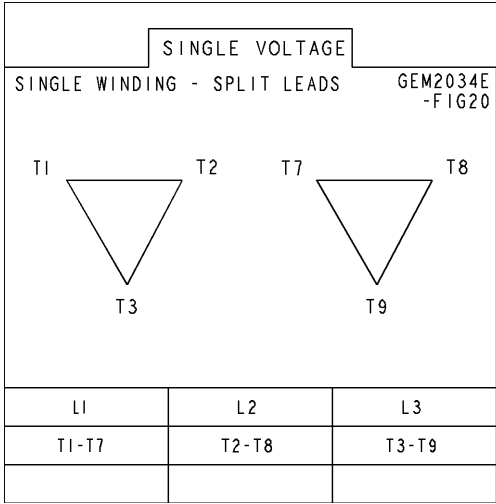
GE INDUSTRIAL MOTORS
WOLONG COMPANY
OUTLINE
447/449 T TEFC XSD 841
700 CU. IN. C BOX
239C6800VW
 REV: 001



THIRD ANGLE PROJECTION

Marks:

Connection Diagram
GEM2034E-FIG20



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E4355AA1	115E4355LM1
Bearing	235A2514AG01	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	118D4408DG2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

