

Product Information Packet

November 8, 2016

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:	96.7
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:

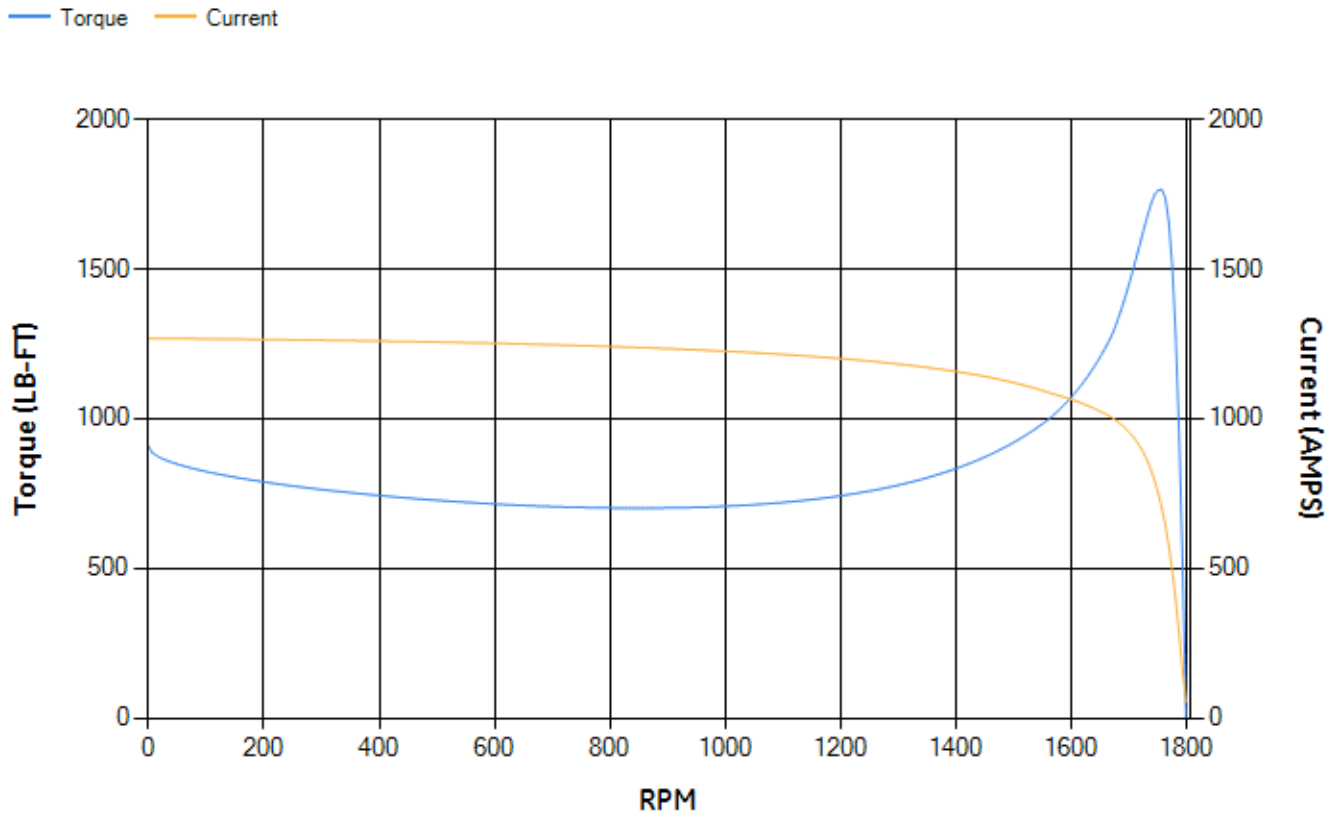
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.85	96.08	96.58	96.74	96.74	95.51	0.00
% PF	89.22	89.37	89.29	87.83	82.75	65.01	3.35
AMPS	273.63	250.69	217.07	165.23	116.92	75.37	53.33

TORQ(FL)#FT	733.45	TORQ(LR)%FL	123.67	TORQ(BD)%FL	240.63
AMPS(LR)	1268.14	PF AT START	0.23		

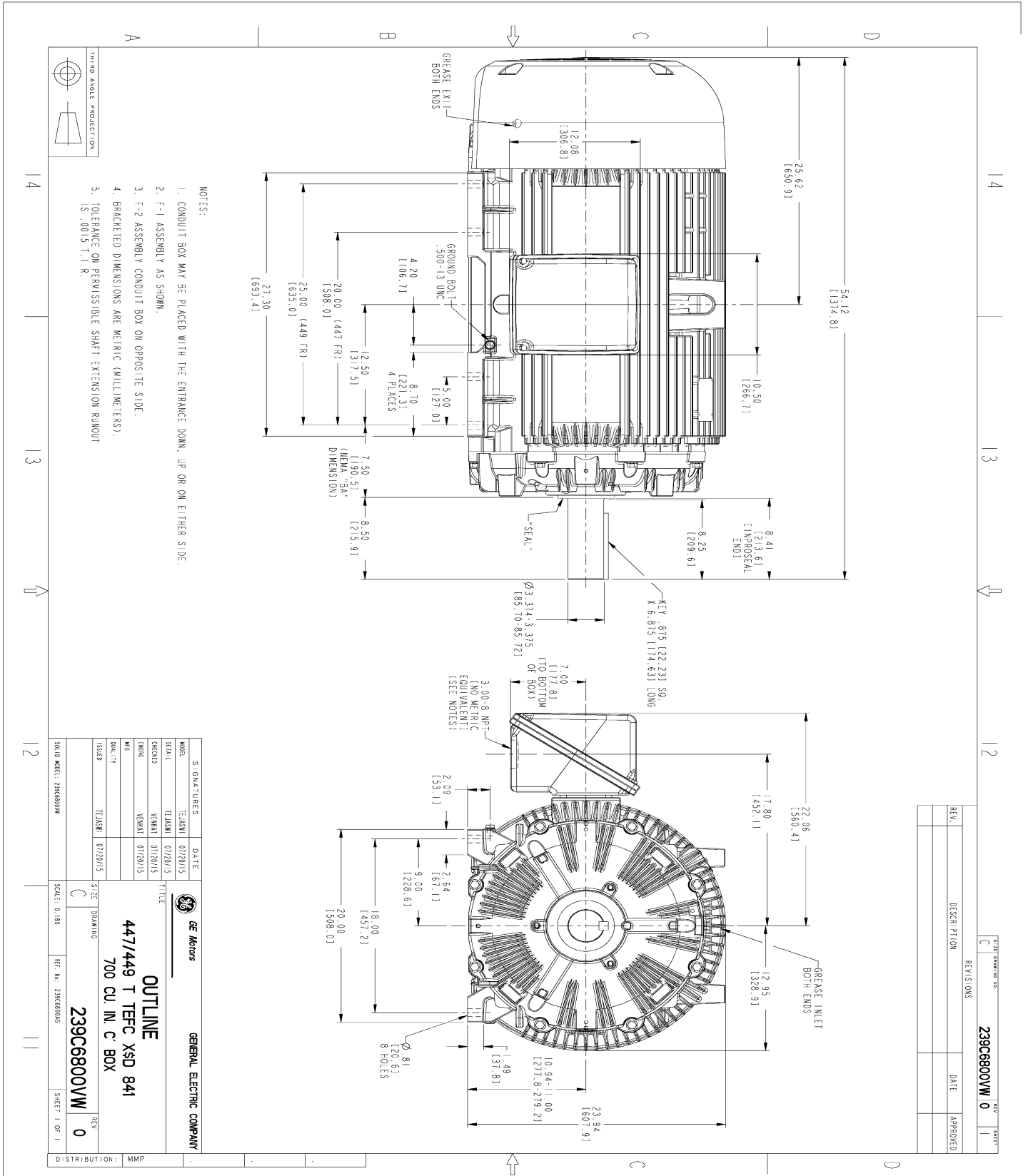
This motor is capable of two cold or one hot start with a maximum connected load inertia of 7445 Lb-Ft Sq (313.43 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 75 seconds. Safe stall time at 100% voltage is 190 seconds cold, 90 seconds hot. Rotor inertia is 138.63 Lb-Ft Sq (5.84 Kg-meter Sq).

Open Circuit A-C:	1.868	Short Circuit D-C:	0.037
Short Circuit A-C:	0.071	X/R Ratio:	13.936
Stator Slots:	72	Rotor Slots:	58

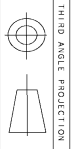
Speed Torque Current Curve (First Connection, First Speed)



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 ROUNDOFF IS .0015 T.I.R.



REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES		DATE	
DESIGNER	TEJASNI	DATE	01/20/15
CHECKED	TEJASNI	DATE	01/20/15
DESIGN	VENKAT	DATE	01/20/15
DRAWN	TEJASNI	DATE	01/20/15
ISSUED	TEJASNI	DATE	01/20/15
SCALE: 0.180		SCALE: 0.180	
REF. NO. 239C6800VW		REF. NO. 239C6800VW	
SHEET 1 OF 1		SHEET 1 OF 1	

GENERAL ELECTRIC COMPANY

OUTLINE

447/449 T TFC XSD 841

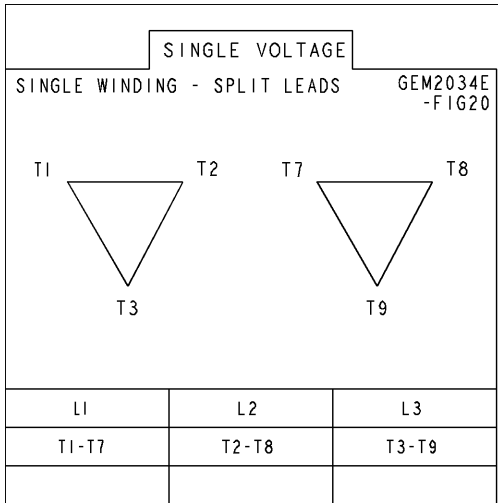
700 CU. IN. C. BOX

239C6800VW

DISTRIBUTION: MMP

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	