

Product Information Packet

December 16, 2016

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		

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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:

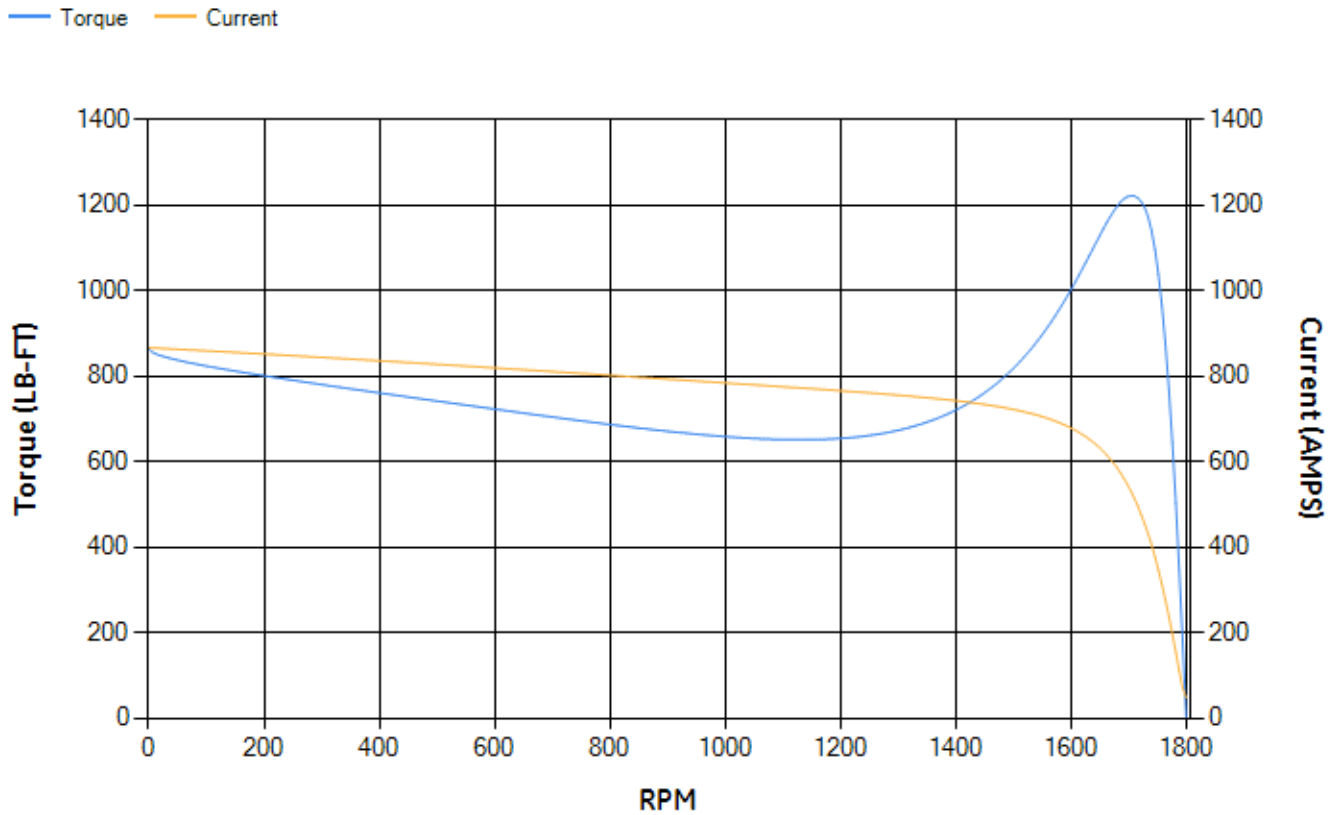
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.34	95.54	95.99	96.03	95.78	93.8	0.00
% PF	87.64	87.28	86.31	82.8	74.21	52.15	3.31
AMPS	168.02	154.88	135.57	105.94	79	57.4	47.19

TORQ(FL)#FT	441.83	TORQ(LR)%FL	195.45	TORQ(BD)%FL	275.98
AMPS(LR)	865.79	PF AT START	0.33		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 2340 Lb-Ft Sq (98.51 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 63.32 Lb-Ft Sq (2.67 Kg-meter Sq).

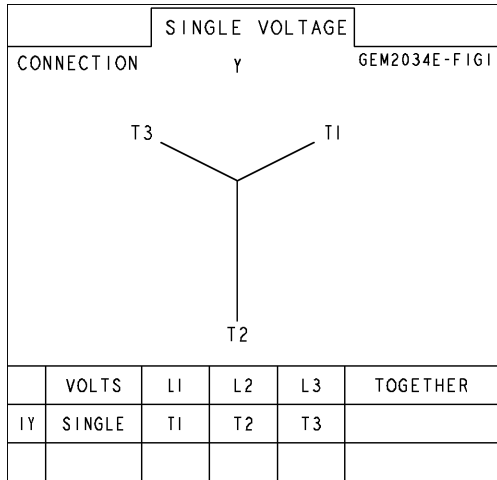
Open Circuit A-C:	0.753	Short Circuit D-C:	0.03
Short Circuit A-C:	0.037	X/R Ratio:	11.236
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)



Marks:

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	