

Product Information Packet

November 8, 2016

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

Model Number:	5KS445LAA238A
Catalog Number:	M7696
Instruction Manual:	GEI-56128
Connection Diagram:	GEM2034E-FIG7
Outline Drawing:	239CC600AA

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

Marks:

MODEL NUMBER:	5KS445LAA238A	Estimated Weight:	1880 Lbs
Outline Drawing:	239CC600AA	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG7	Enclosure:	TEFC
Instruction Book:	GEI-56128	Encl Construction:	SD
Design Code:	44BD1117A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	445T	Insulation Class:	F
Phases:	3	NEMA Design:	A
Poles:	4	Nominal Efficiency:	95.8 %
Output Power:	150HP 111KW	Guaranteed Efficiency:	95.0
RPM:	1785	3/4 Load Efficiency:	95.9
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	48.6
Amps - FL:	173.0	Power Factor:	84.5
Service Factor:	1.15	Bearing - DE:	NU 318
Alt Service Factor:	--	Bearing - ODE:	6318ZC3S0

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

ROLLER BEARING - FOR BELTED LOAD ONLY
 INVERTER DUTY PER NEMA MG1 PART 31
 ALTERNATE RATING FOR PWM CONTROL:
 1.0 SF VAR TORQUE RANGE 0-60 HZ

Additional Information:

4P - T EXTN
 700 CU IN - 3.00" NPT
 OIL RESISTANT SLEEVING ON LEADS
 B5F4C4 HIGH FATIGUE STEEL AISI 4142 SHAFT MATERIAL
 F1 MOUNTING
 VIBRATION LIMIT 0.0016 INCH PEAK TO PEAK

Performance Characteristics

1st Winding 1st Connection

Design: 44BD1117A

Marks:

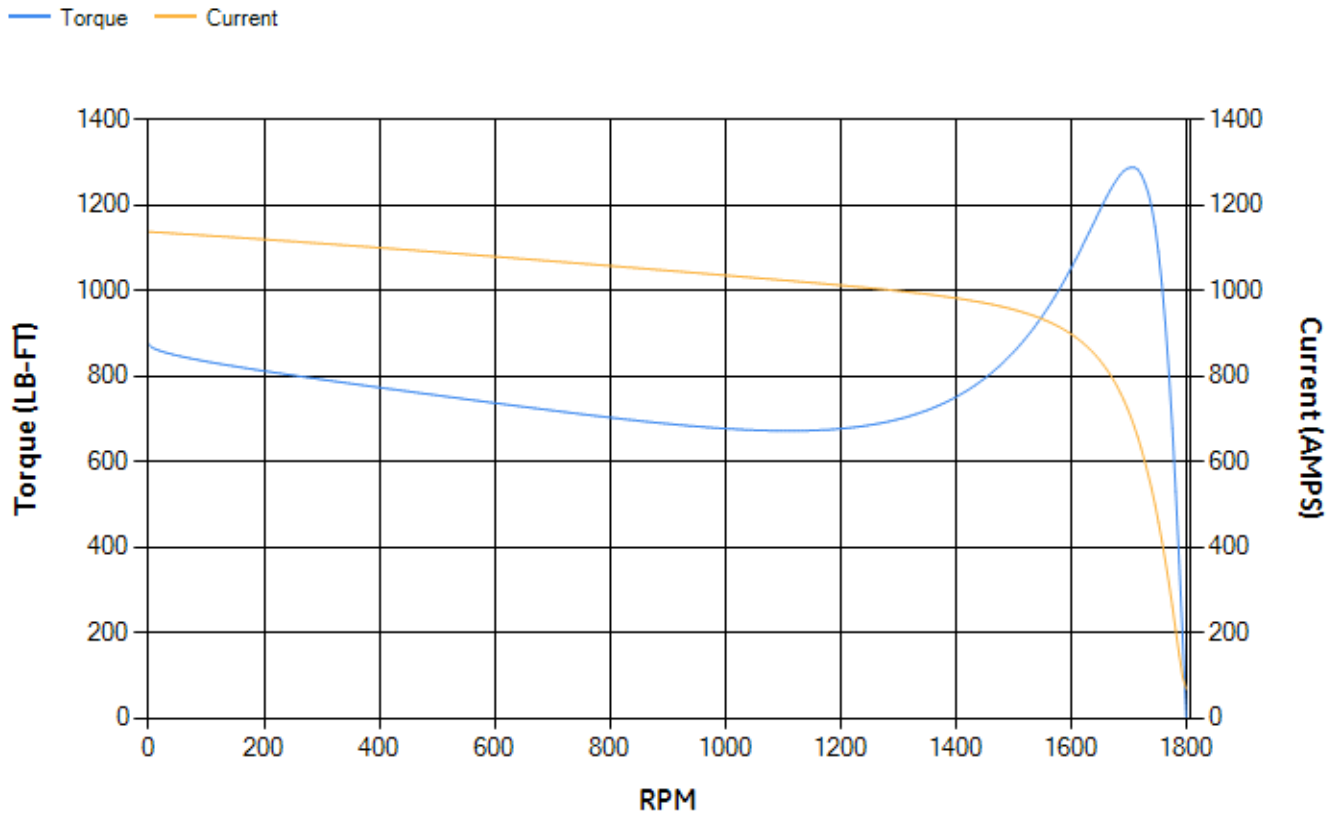
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.25	95.44	95.88	95.86	95.54	93.34	0.00
% PF	86.49	85.92	84.58	80.22	70.36	47.54	3.13
AMPS	213.02	196.87	173.12	136.93	104.43	79.1	67.56

TORQ(FL)#FT	441.7	TORQ(LR)%FL	198	TORQ(BD)%FL	291.08
AMPS(LR)	1137.13	PF AT START	0.32		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 1998 Lb-Ft Sq (84.12 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 19 seconds. Safe stall time at 100% voltage is 48 seconds cold, 22 seconds hot. Rotor inertia is 54.77 Lb-Ft Sq (2.31 Kg-meter Sq).

Open Circuit A-C:	0.678	Short Circuit D-C:	0.028
Short Circuit A-C:	0.037	X/R Ratio:	10.493
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)



Marks:

Connection Diagram
GEM2034E-FIG7

