

Product Information Packet

April 28, 2017

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

Model Number:	5KS449SAJ6020A
Catalog Number:	V4720
Instruction Manual:	GEK-95351
Connection Diagram:	GEM2034E-FIG20
Outline Drawing:	148CB49TMHKLGA0001

Accessory Connection Diagrams			
Bearing Thermocouple:	None	Heater:	3027JE-1C
RTD:	None	Thermistor:	None
Thermostat:	3027JE-2A	Winding Thermocouple:	None
Bearing RTD:	None		

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Marks:

MODEL NUMBER:	5KS449SAJ6020A	Estimated Weight:	2800 Lbs
Outline Drawing:	148CB49TMHKLGA0001	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG20	Enclosure:	TEFC
Instruction Book:	GEK-95351	Encl Construction:	X\$D
Design Code:	49BD1181AA	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	L449TP16	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	96.2 %
Output Power:	300HP 222KW	Guaranteed Efficiency:	95.8
RPM:	1790	3/4 Load Efficiency:	95.9
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	69.3
Amps - FL:	333.0	Power Factor:	88.0
Service Factor:	1.15	Bearing - DE:	6217C3
Alt Service Factor:	--	Bearing - ODE:	235A2536AB01

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

HTR LDS HE1-HE2 115V 145W
 ROT CCW FACING ODE LEAD/PH SEQ 1-2-3/1-2-3
 THERMOSTAT LEADS TB1-TB2 TRIP
 INVERTER DUTY PER NEMA MG1 PART 31
 ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT
 VAR TORQUE RANGE 5-60 HZ
 SUITABLE FOR 250 HP, 380V, 50 HZ WITH
 336.0 AMPS AND 1490 RPM AT 1.00 SF

Additional Information:

4 POLE, VERT HOLLOW SHAFT HIGH THRUST (1D) - SPLIT LEAD
 1260 CU IN - 2(4.00" NPT)
 BEARING LIFE 8760 HRS AT 13200 LB THRUST
 OIL RESISTANT SLEEVING ON LEADS
 N.C. TRIP TSTAT LDS TO MAIN CONDUIT BOX
 115V HTR LDS TO MAIN CONDUIT BOX
 COUPLING NOT INCLUDED IN BOM, WILL BE
 ORDERED SEPERATELY
 SHAFT GROUNDING RING MOUNTED ON DE BRG CAP
 INSULATED LOWER HALF COUPLING
 CG:26.9 IN FROM P-BASE FACE, STAT DEF:0.0073 IN
 ESTIMATED RCF: 2185CPM (+/-10%)

Performance Characteristics

1st Winding 1st Connection

Design: 49BD1181AA

Marks:

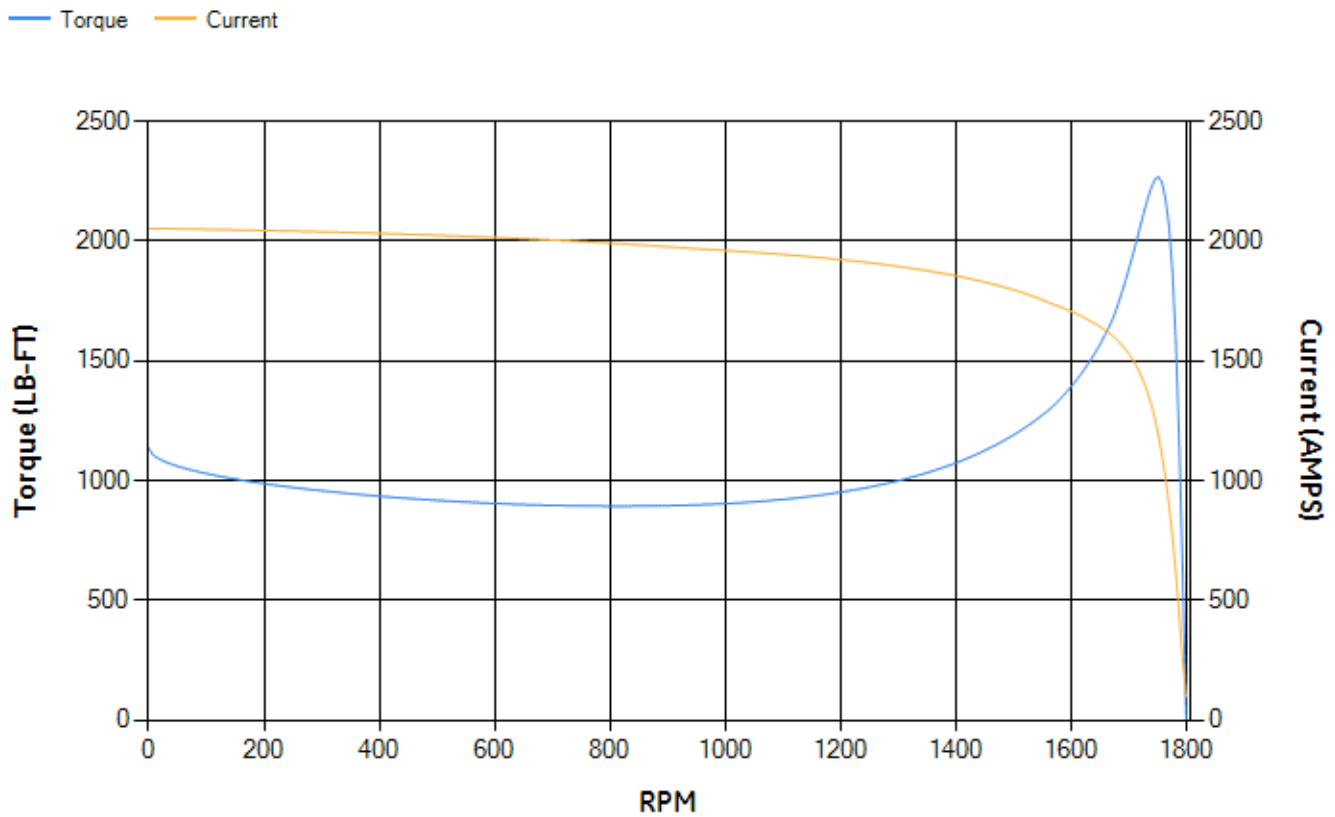
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.39	95.56	95.94	95.82	95.32	92.76	0.00
% PF	88.28	88.24	87.82	85.57	79.07	59.5	5
AMPS	416.77	382.93	333.27	256.84	186.27	127.19	96.66

TORQ(FL)#FT	879.85	TORQ(LR)%FL	129.23	TORQ(BD)%FL	257.57
AMPS(LR)	2052.62	PF AT START	0.23		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 7780 Lb-Ft Sq (327.54 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 60 seconds. Safe stall time at 100% voltage is 140 seconds cold, 72 seconds hot. Rotor inertia is 123.23 Lb-Ft Sq (5.19 Kg-meter Sq).

Open Circuit A-C:	1.651	Short Circuit D-C:	0.036
Short Circuit A-C:	0.07	X/R Ratio:	13.54
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)

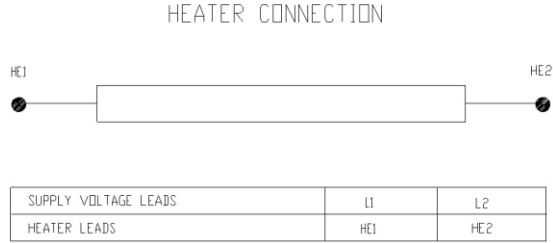


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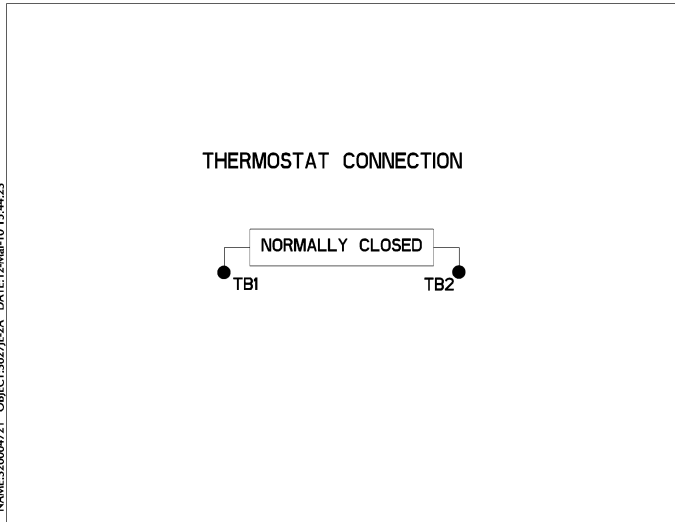
Connection Diagram
GEM2034E-FIG20



Heater Connection
3027JE-1C



Thermostat Connection
3027JE-2A



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E8660AA1	115E8670LA1
Bearing	235A2522AJ01	235A2536AB01
Slinger/Inproseal	149C4399G06	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100AE1
Fan Cover	128D6847AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	179B9058G03

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

