



GE INDUSTRIAL MOTORS
a **WOLONG** company

Product Technical Information

July 17, 2020

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

Model Number:	5KS449SAJ6020B
Catalog Number:	V4720
Instruction Manual:	GEI-M1045
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:	5KS449SAJ6020B	Estimated Weight:	3400 Lbs
Outline Drawing:	148CB49TMHKLGA0001	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG20	Enclosure:	TEFC
Instruction Book:	GEI-M1045	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:	95.4 %
RPM:	1790	3/4 Load Efficiency:	--
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 TOP 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
 UPPER BRG LUBE OIL: 17 QTS
 0 DEG C TO 40 DEG C : ISO 32(MINERAL OR SYNTHETIC)
 -15 DEG C TO 0 DEG C : ISO 32 SYNTHETIC
 SUITABLE FOR 250 HP, 380V, 50 HZ WITH
 336.0 AMPS AND 1490 RPM AT 1.00 SF



Additional Information:

4P, VERT HOLLOW SHAFT HIGH THRUST (1D)
C/BOX 1260 CU IN - 2(4.00" NPT)
C/B GRD PLATE
OIL RESISTANT SLEEVING ON LEADS
N.C. TRIP TSTAT LDS TO MAIN CONDUIT BOX
115V HTR LDS TO MAIN CONDUIT BOX
INSULATED UPPER BEARING CARRIER
SHAFT GROUNDING RING MOUNTED ON LOWER END BRG CAP
BEARING LIFE 8760 HRS AT 14188 LB THRUST
SPLIT LEAD
CG:26.90 IN FROM P-BASE FACE, STAT DEF:= 0.009 IN
RCF: 1998 CPM (+/- 10%)
NON-REVERSE BALL CARRIER,
BOLTED COUPLING, BX = 1.688", EW = .375"



Performance Characteristics

1st Winding 1st Connection

Design: 49BD1181AA

Marks:

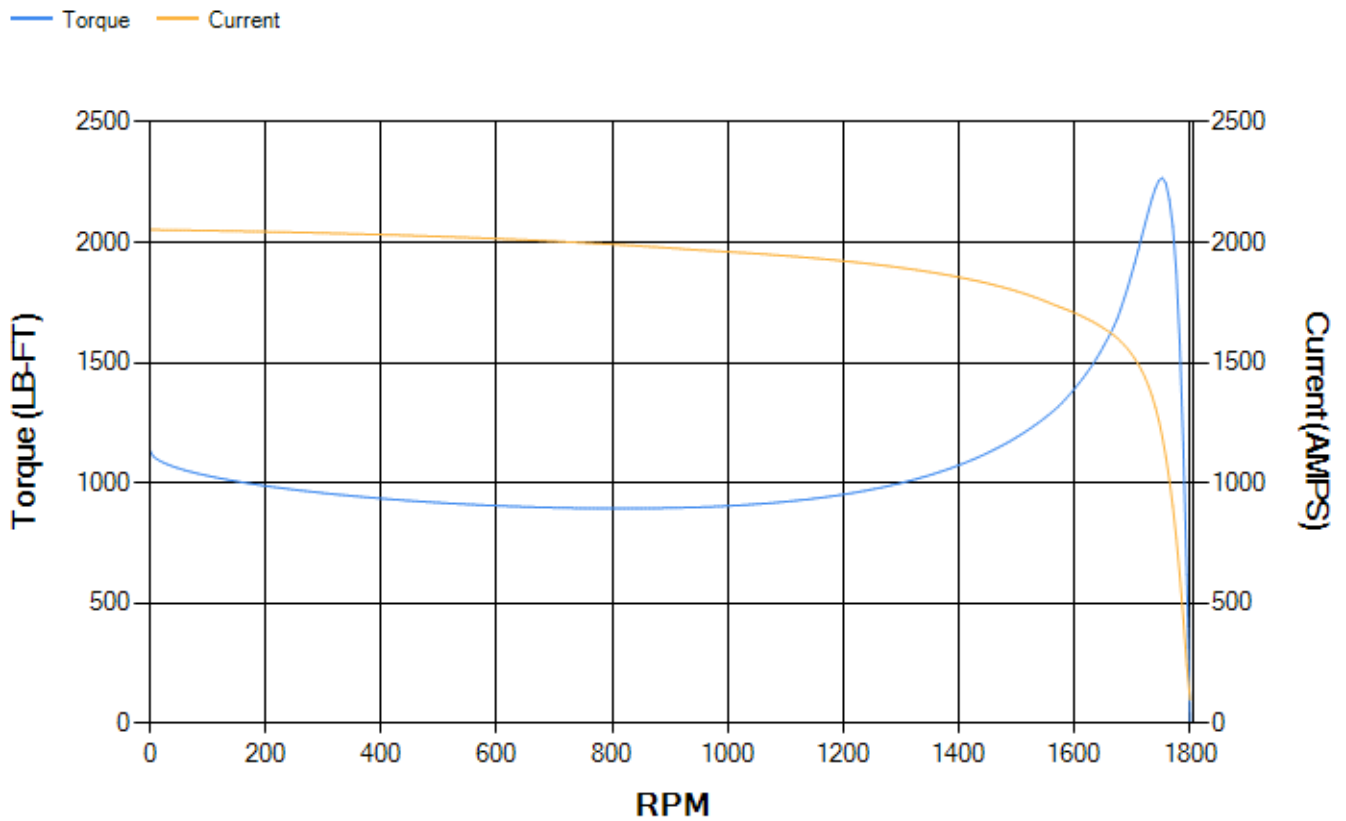
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.39	95.56	95.94	95.82	95.32	92.76	0.00
% PF	88.27	88.23	87.81	85.55	79.04	59.46	4.99
AMPS	416.82	382.97	333.32	256.89	186.33	127.26	96.75

TORQ(FL)#FT	879.85	TORQ(LR)%FL	129.23	TORQ(BD)%FL	257.56
AMPS(LR)	2052.64	PF AT START	0.23		

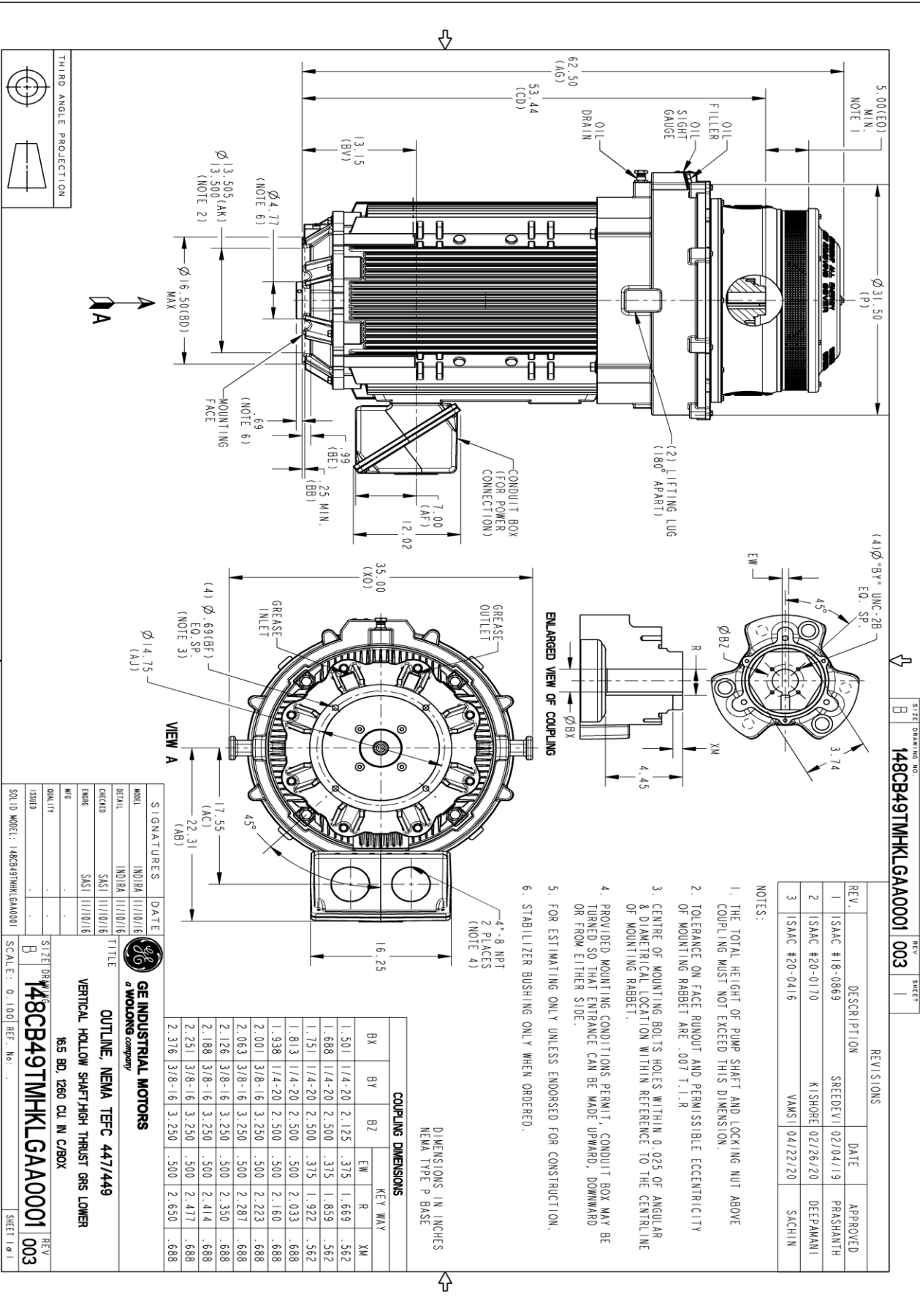
This motor is capable of two cold or one hot start with a maximum connected load inertia of 7782 Lb-Ft Sq (327.62 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 60 seconds. Safe stall time at 100% voltage is 140 seconds cold, 72 seconds hot. Rotor inertia is 121.99 Lb-Ft Sq (5.14 Kg-meter Sq).

Open Circuit A-C:	1.649	Short Circuit D-C:	0.036
Short Circuit A-C:	0.07	X/R Ratio:	13.541
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)

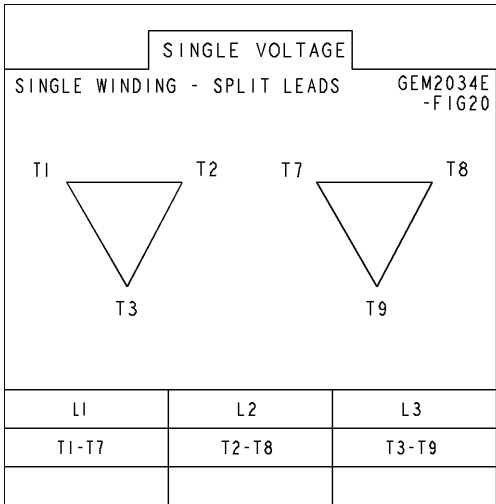


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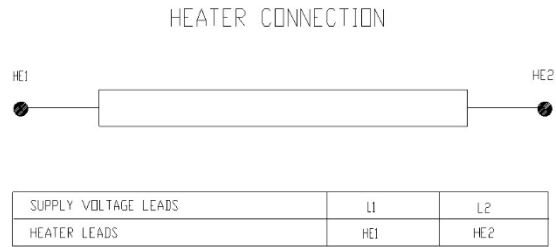


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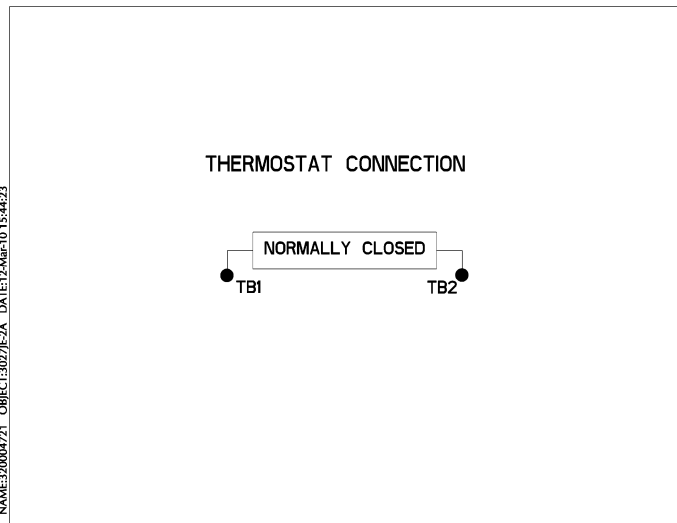
Connection Diagram
GEM2034E-FIG20



Heater Connection
3027JE-1C



Thermostat Connection
3027JE-2A



NAME:30004721 OBJECT:3027JE-2A DATE:12-Mar-10 15:44:23



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	153B1890G02
Fan Cover	128D6847AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

