



GE INDUSTRIAL MOTORS
a **WOLONG** company

Product Technical Information

October 20, 2020

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

Model Number:	5KS449DAJ6020C
Catalog Number:	V4534
Instruction Manual:	GEI-M1045
Connection Diagram:	GEM2034E-FIG24
Outline Drawing:	148CB49VMJKFGLA0004

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:	5KS449DAJ6020C	Estimated Weight:	3270 Lbs
Outline Drawing:	148CB49VMJKFGLA0004	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG24	Enclosure:	WPI
Instruction Book:	GEI-M1045	Encl Construction:	OPEN
Design Code:	49BD1254AC	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	L449TP20	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	96.2 %
Output Power:	450HP 333KW	Guaranteed Efficiency:	95.4 %
RPM:	1790	3/4 Load Efficiency:	--
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	109.0
Amps - FL:	505.0	Power Factor:	87.0
Service Factor:	1.15	Bearing - DE:	6217C3
Alt Service Factor:	--	Bearing - ODE:	235A2536AA01

Enclosure is Weather Protected One

Stamped Nameplate Notes:

NEMA ENCLOSURE WP-I, CSA ENCL DP
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
UPPER BRG LUBE OIL: 10.2 QTS
6 DEG C TO 40 DEG C :ISO 150(MINERAL OR SYNTHETIC)
-15 DEG C TO 6 DEG C : ISO 68 SYNTHETIC
SUITABLE FOR 400 HP, 380V, 50 HZ WITH
543.0 AMPS AND 1485 RPM AT 1.0 SF



Additional Information:

4P, VERT HOLLOW SHAFT HIGH THRUST (SPHROLLER)
C/BOX 2500 CU IN - 2(4.00" NPT)
C/B GRD PLATE
OIL RESISTANT SLEEVING ON LEADS
(3)N.C. CLASS F TRIP TSTAT LDS TO MAIN CONDUIT BOX
115V HTR LDS TO MAIN CONDUIT BOX
GROUND PAD
INSULATED UPPER BEARING CARRIER
SHAFT GROUNDING RING MOUNTED ON DE BRG CAP
BEARING LIFE 8760 HRS AT 30000 LB THRUST
PART WINDING START
CG:25.10 IN FROM P-BASE FACE, STAT DEF:= 0.006 IN
RCF: 2417 CPM
NON-REVERSE BALL CARRIER,
BOLTED COUPLING, BX = 1.938 IN, EW= 0.5 IN



Performance Characteristics

1st Winding 1st Connection

Design: 49BD1254AC

Marks:

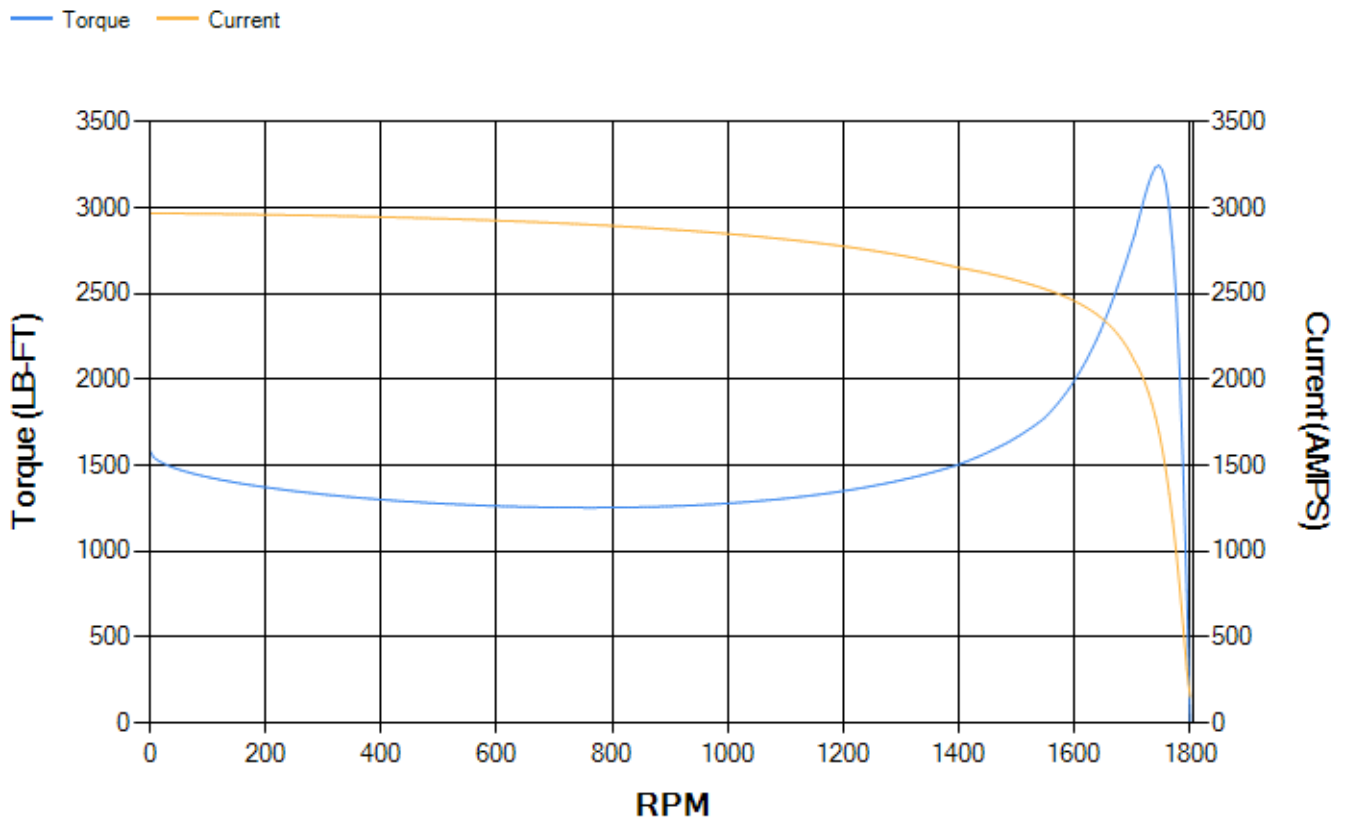
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.37	95.57	96.02	96.02	95.7	93.57	0.00
% PF	87.19	87.2	86.8	84.47	77.65	57.49	4.11
AMPS	633.1	581.15	505.32	389.46	283.37	195.76	151.94

TORQ(FL)#FT	1320.98	TORQ(LR)%FL	120.43	TORQ(BD)%FL	245.68
AMPS(LR)	2969.95	PF AT START	0.22		

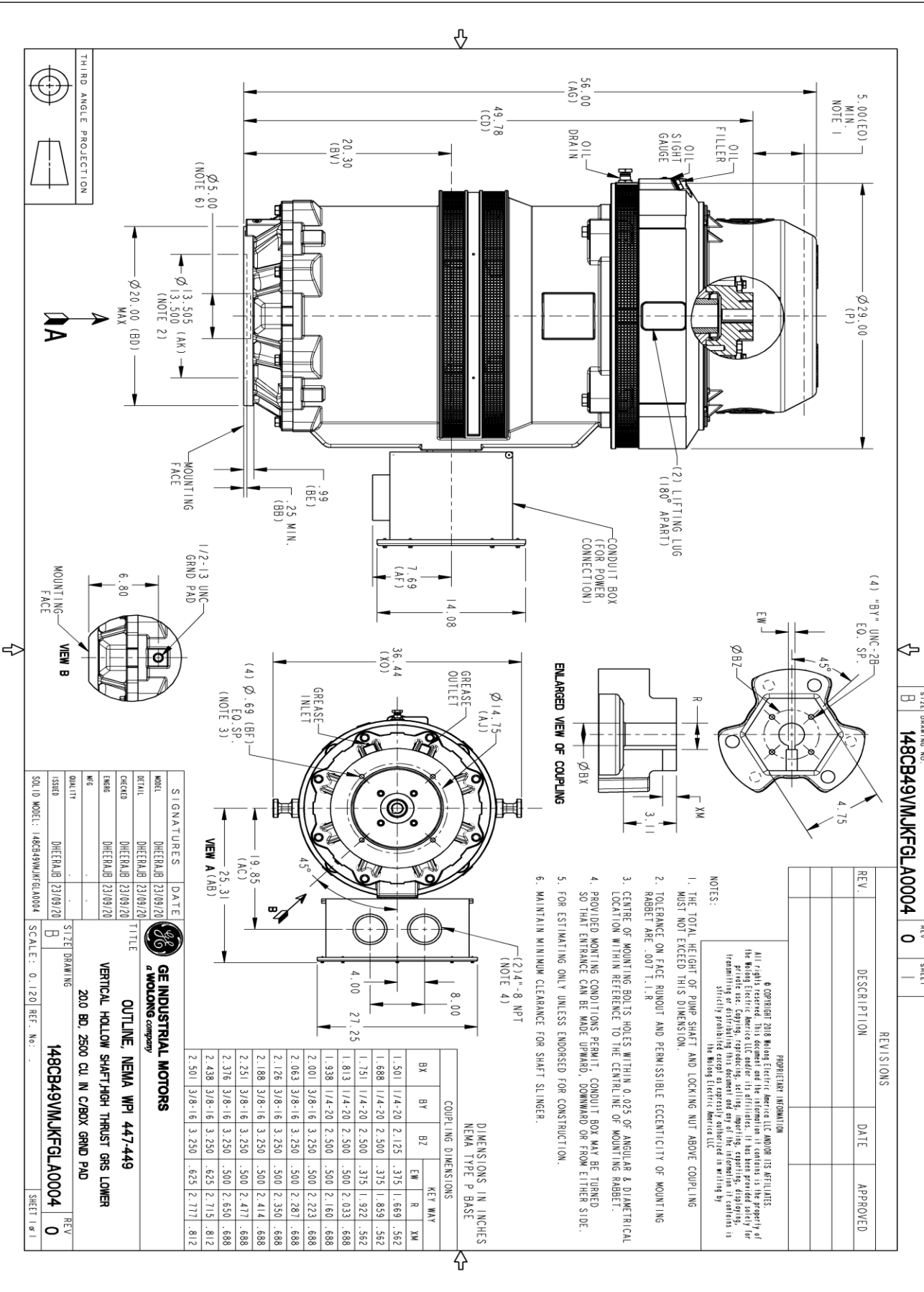
This motor is capable of two cold or one hot start with a maximum connected load inertia of 7588 Lb-Ft Sq (319.45 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 43 seconds. Safe stall time at 100% voltage is 88 seconds cold, 51 seconds hot. Rotor inertia is 130.47 Lb-Ft Sq (5.49 Kg-meter Sq).

Open Circuit A-C:	1.367	Short Circuit D-C:	0.038
Short Circuit A-C:	0.063	X/R Ratio:	14.299
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)

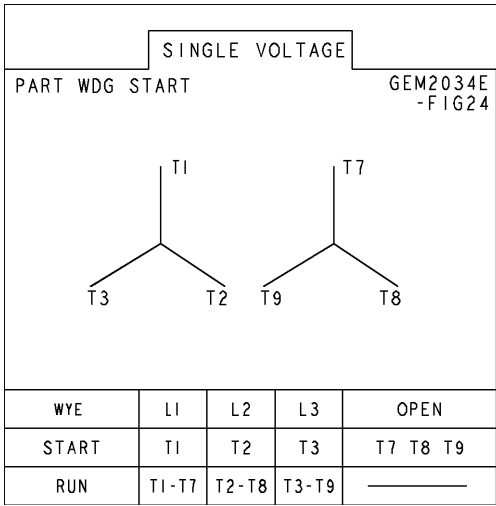


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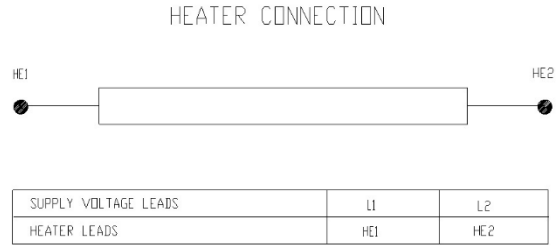


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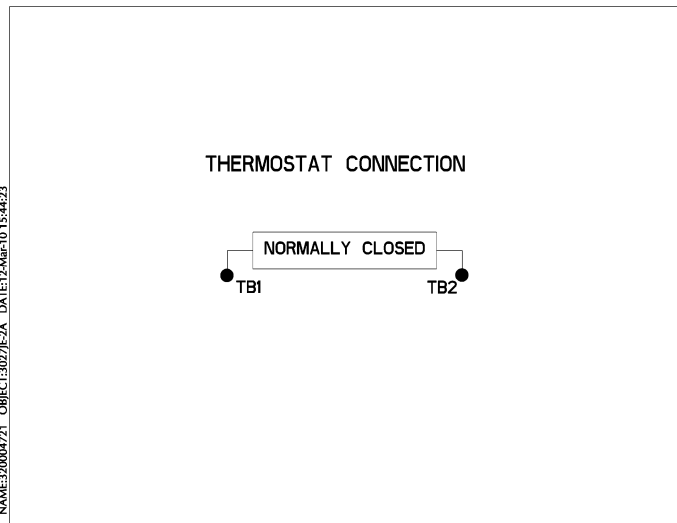
Connection Diagram
GEM2034E-FIG24



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	115E7661AA1	115E7670MD1
Bearing	235A2522AJ01	235A2536AA01
Slinger/Inproseal	149C4399G06	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	
Fan Cover	161C1050AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	179B9098BP-G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

