

Product Information Packet

April 27, 2017

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

Model Number:	5KS449DAJ6020A
Catalog Number:	V4534
Instruction Manual:	GEK-95352
Connection Diagram:	GEM2034E-FIG24
Outline Drawing:	148CB49VMJKFGLA0001

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:	5KS449DAJ6020A	Estimated Weight:	3630 Lbs
Outline Drawing:	148CB49VMJKFGLA0001	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG24	Enclosure:	WPI
Instruction Book:	GEK-95352	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:	96.8
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	108.9
Amps - FL:	503.0	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:

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 400 HP, 380V, 50 HZ WITH
 538.0 AMPS AND 1485 RPM AT 1.0 SF

Additional Information:

4 POLE, VERT HOLLOW SHAFT HIGH THRUST
 SPECIAL BALANCE
 2500 CU IN - 2(4.00" NPT)
 BEARING LIFE 8760 HRS AT 30000 LB THRUST
 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
 COUPLING NOT INCLUDED IN BOM, WILL BE
 ORDERED SEPERATELY
 PART WINDING START
 SPHERICAL ROLLER BEARING
 AEGIS GROUNDING RING MOUNTED ON LOWER END BEARING CAP
 GROUND PAD ON FRAME
 INSULATED LOWER HALF COUPLING

Performance Characteristics

1st Winding 1st Connection

Design: 49BD1254AC

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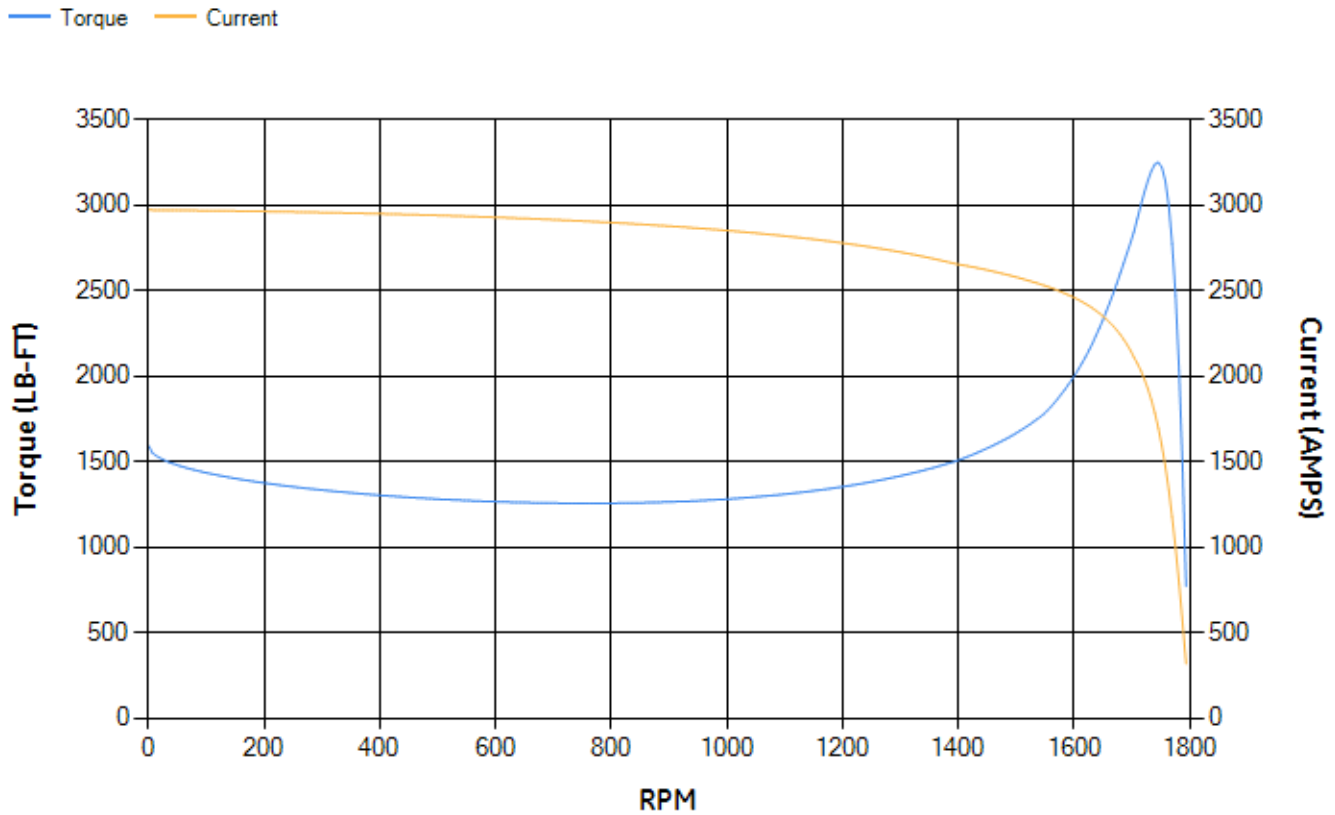
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.37	95.57	96.02	96.02	95.7	93.57	0.00
% PF	87.2	87.21	86.81	84.49	77.67	57.52	4.12
AMPS	633.04	581.09	505.25	389.39	283.29	195.65	151.82

TORQ(FL)#FT	1320.98	TORQ(LR)%FL	120.44	TORQ(BD)%FL	245.69
AMPS(LR)	2969.93	PF AT START	0.22		

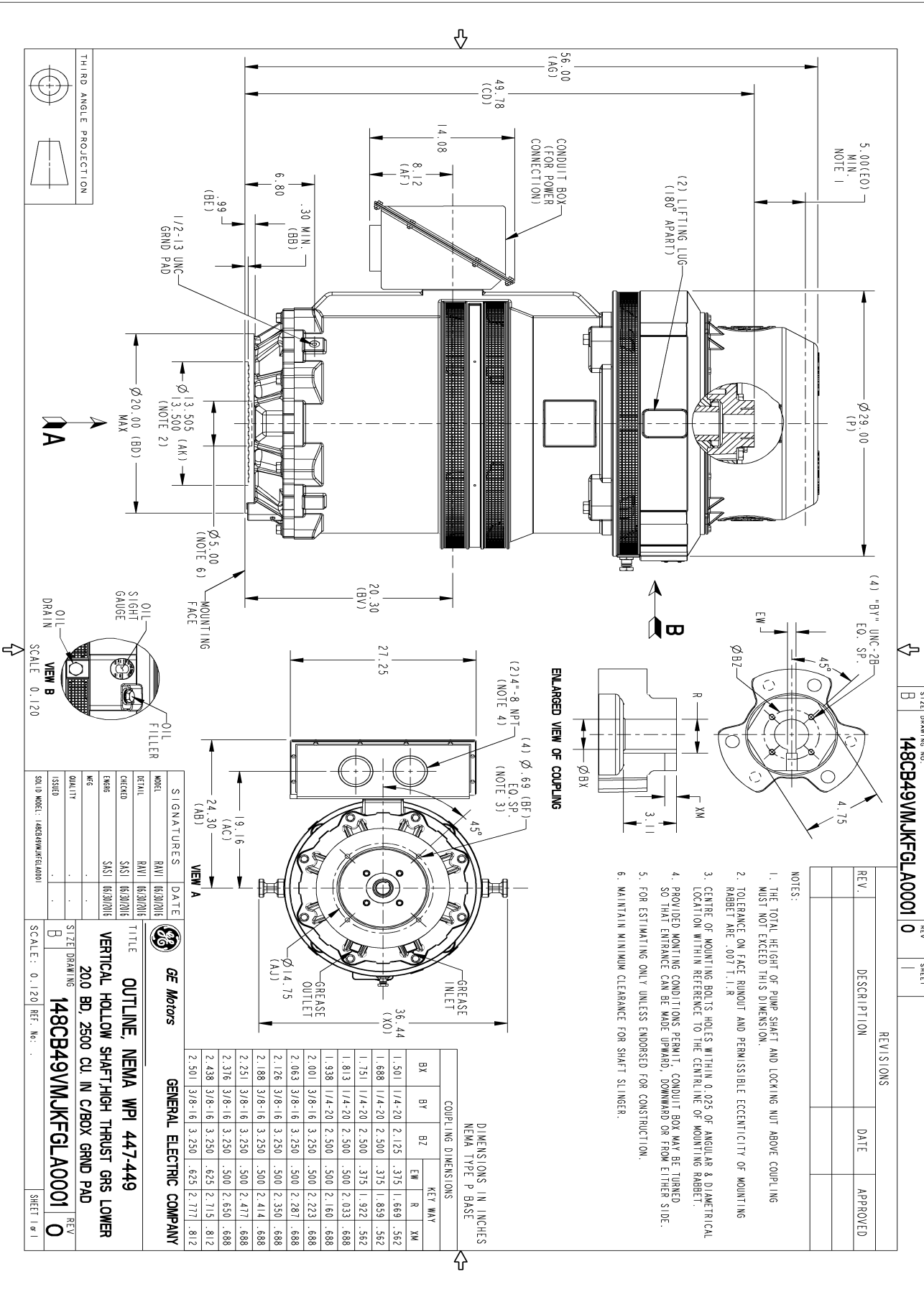
This motor is capable of two cold or one hot start with a maximum connected load inertia of 7586 Lb-Ft Sq (319.37 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 43 seconds. Safe stall time at 100% voltage is 88 seconds cold, 51 seconds hot. Rotor inertia is 131.78 Lb-Ft Sq (5.55 Kg-meter Sq).

Open Circuit A-C:	1.369	Short Circuit D-C:	0.038
Short Circuit A-C:	0.063	X/R Ratio:	14.298
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)

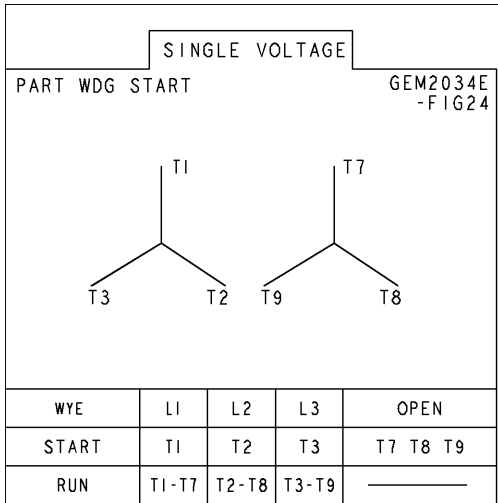


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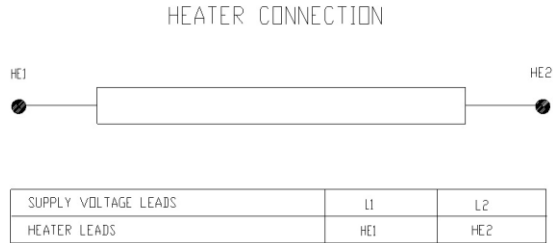


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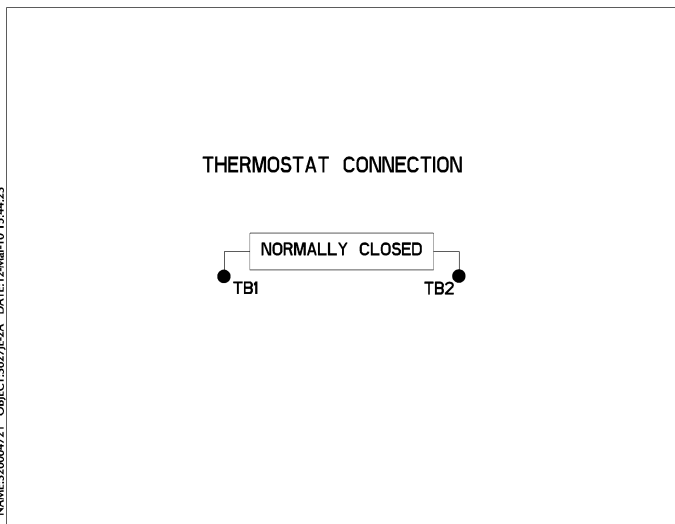
Connection Diagram
GEM2034E-FIG24



Heater Connection
3027JE-1C



Thermostat Connection
3027JE-2A



NAME:32000471 OBJECT:3027JE-2A DATE:12-Mar-10 15:44:23

End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E7661AA1	115E7670MA1
Bearing	235A2522AJ01	235A2536AA01
Slinger/Inproseal		

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	
Fan Cover	149C4050AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	179B9052G01

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	