



GE INDUSTRIAL MOTORS
a **WOLONG** company

Product Technical Information

February 17, 2023

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

Model Number:	5KS511DAJ7027
Catalog Number:	V4613
Instruction Manual:	GEI-M1045
Connection Diagram:	GEM2034E-FIG20
Outline Drawing:	148CB51VMKKFGAA0001

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

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Marks:

MODEL NUMBER:	5KS511DAJ7027	Estimated Weight:	4415 Lbs
Outline Drawing:	148CB51VMKKFGAA0001	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG20	Enclosure:	WPI
Instruction Book:	GEI-M1045	Encl Construction:	OPEN
Design Code:	50ED3248A	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	B5011TP24	Insulation Class:	F
Phases:	3	NEMA Design:	-
Poles:	6	Nominal Efficiency:	95.0 %
Output Power:	400HP 296KW	Guaranteed Efficiency:	94.1 %
RPM:	1190	3/4 Load Efficiency:	--
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	116.8
Amps - FL:	475.0	Power Factor:	83.0
Service Factor:	1.15	Bearing - DE:	6219ZC3
Alt Service Factor:	--	Bearing - ODE:	7230

Enclosure is Weather Protected One

Stamped Nameplate Notes:

NEMA ENCLOSURE WP-I, CSA ENCL DP
HTR LDS HE1-HE2 115V 350W
UPPER OIL: 10.25 QTS
LOWER OIL: 2.5 QTS
0 DEG C TO 40 DEG C :ISO 32(MINERAL OR
SYNTHETIC)
-15 DEG C TO 0 DEG C : ISO 32 SYNTHETIC
ROT CCW FACING TOP LEAD/PH SEQ 1-2-3/1-2-3
INVERTER DUTY PER NEMA MG1 PART 31
ALTERNATE RATING FOR PWM CONTROL
1.0 SF. VAR TORQUE RANGE 7.5-60 HZ



Additional Information:

6 POLE, VERT HOLLOW SHAFT HIGH THRUST(2D)
NON-REVERSE COUPLING, BX=2.188
115V HEATER LEADS TO MAIN CONDUIT BOX
RCF=1466 CPM CG=32.1 IN STAT DEF=0.0164 IN
C/B GRD PLATE
BEARING LIFE 8760 HOURS AT 15850 LB THRUST
2500 Cu. In. CBOX



Performance Characteristics

1st Winding 1st Connection

Design: 50ED3248A

Marks:

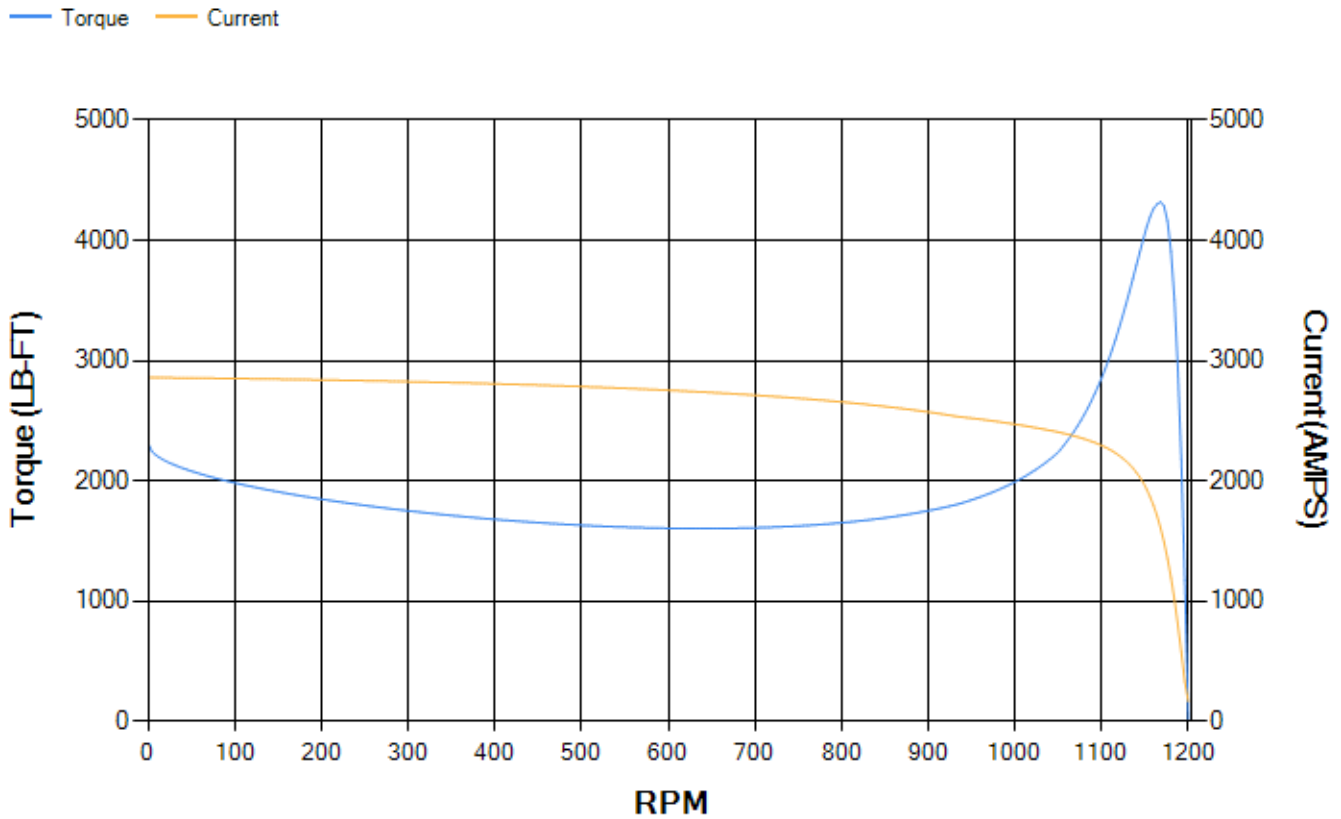
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	95.14	95.38	95.88	95.97	95.79	93.9	0.00
% PF	84.09	83.85	84.2	79.41	70.53	48.55	3.02
AMPS	584.96	538.36	463.01	368.41	277.08	205.29	162.95

TORQ(FL)#FT	1761.79	TORQ(LR)%FL	130.79	TORQ(BD)%FL	243.88
AMPS(LR)	2858.82	PF AT START	0.22		

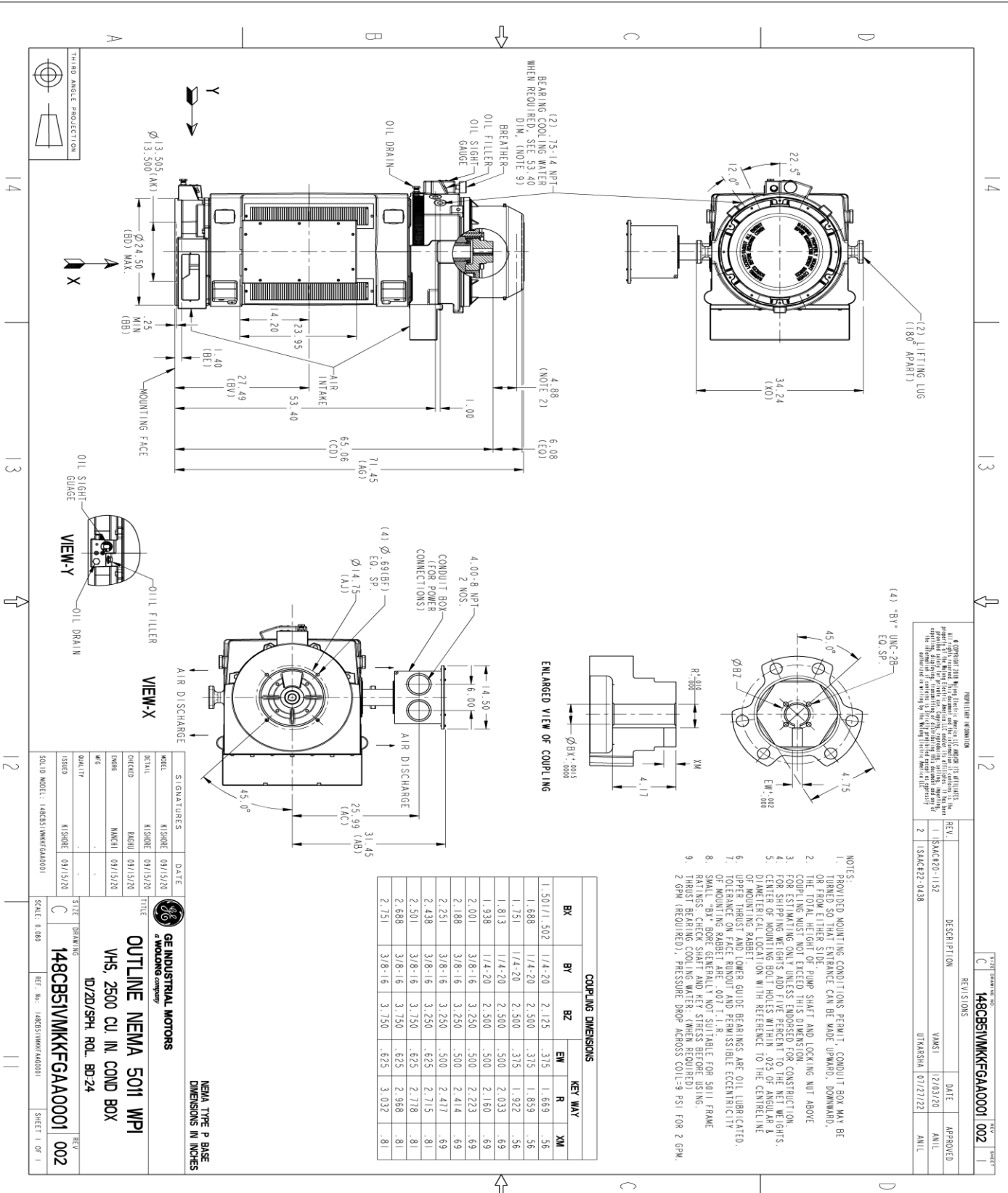
This motor is capable of two cold or one hot start with a maximum connected load inertia of 14336 Lb-Ft Sq (603.55 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 42 seconds. Safe stall time at 100% voltage is 86 seconds cold, 55 seconds hot. Rotor inertia is 231.67 Lb-Ft Sq (9.75 Kg-meter Sq).

Open Circuit A-C:	1.102	Short Circuit D-C:	0.032
Short Circuit A-C:	0.058	X/R Ratio:	12.197
Stator Slots:	72	Rotor Slots:	86

Speed Torque Current Curve (First Connection, First Speed)



Marks:



REVISION INFORMATION

REV.	DESCRIPTION	DATE	APPROVED
1	ISAC#20-1152	12/03/20	ANIL
2	ISAC#22-0438	07/27/22	ANIL

STANDARD NO. C 148CB51WKKFGAA001 002

REV. ISONS

DATE

APPROVED

YANXI 12/03/20

UPARISHA 07/27/22

- NOTES:
1. PROVIDED MOUNTING CONDITIONS PERMIT, CONDUIT BOX MAY BE TURNED SO THAT ENTRANCE CAN BE MADE UPWARD, DOWNWARD, OR FROM EITHER SIDE.
 2. THE TOTAL HEIGHT OF PUMP SHAFT AND LOCKING NUT ABOVE COUPLING MUST NOT EXCEED THIS DIMENSION.
 3. COUPLING MUST NOT EXCEED THIS DIMENSION CONSTRUCTION.
 4. FOR SHIPPING WEIGHTS AND 2% TOLERANCE TO THE NET WEIGHTS.
 5. CENTER OF MOUNTING BOLT HOLES WITHIN .025 OF ANGULAR & DIAMETRICAL LOCATION WITH REFERENCE TO THE CENTERLINE OF MOUNTING RABBIT.
 6. UPPER THRUST AND LOWER GUIDE BEARINGS ARE OIL LUBRICATED.
 7. TOLERANCE ON FACE ROUNDOFF AND PERMISSIBLE ECCENTRICITY SMALLER THAN GENERAL TOLERANCES.
 8. SMALL RABBIT GENERAL TOLERANCE IS SUITABLE FOR 5011 FRAME RATINGS. CHECK SHAFT AND KEY STRESS BEFORE USING.
 9. THRUST BEARING COOLING WATER: (WHEN REQUIRED) 2 GPM (REQUIRED), PRESSURE DROP ACROSS COIL-9 PSI FOR 2 GPM.

COUPLING DIMENSIONS

BY	BY	BZ	EW	R	R	XM
1.50/1.502	1/4-20	2.125	.375	1.659	.56	
1.688	1/4-20	2.500	.375	1.859	.56	
1.751	1/4-20	2.500	.922	1.922	.56	
1.813	1/4-20	2.500	.500	2.033	.69	
1.938	1/4-20	2.500	.500	2.160	.69	
2.001	3/8-16	3.250	.500	2.223	.69	
2.188	3/8-16	3.250	2.414	2.477	.69	
2.251	3/8-16	3.250	.500	2.477	.69	
2.438	3/8-16	3.250	.625	2.715	.81	
2.501	3/8-16	3.750	.625	2.718	.81	
2.688	3/8-16	3.750	.625	2.968	.81	
2.751	3/8-16	3.750	.625	3.032	.81	

GE INDUSTRIAL MOTORS
A WOLONG company

OUTLINE NEMA 5011 WPI
VHS, 2500 CU IN COND BOX
D/20/SPH. ROL. BD-24

148CB51WKKFGAA001

SCALE: 0.680

REV. ISONS

DATE

APPROVED

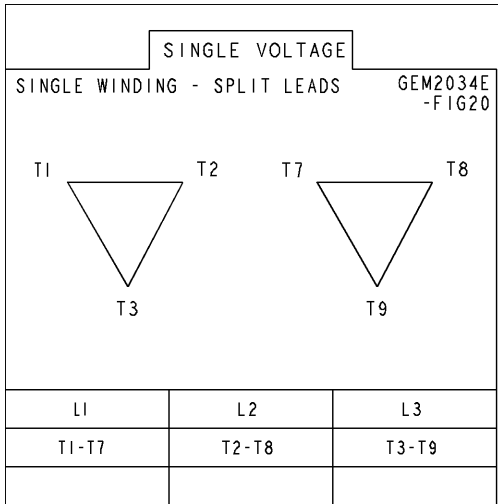
YANXI 12/03/20

UPARISHA 07/27/22

SHEET 1 OF 1

Marks:

Connection Diagram
GEM2034E-FIG20



Heater Connection
3027JE-1C

