



GE INDUSTRIAL MOTORS
a **WOLONG** company

Product Technical Information

December 11, 2020

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

Model Number:	5KS511DAJ6023A
Catalog Number:	V958
Instruction Manual:	GEI-M1045
Connection Diagram:	GEM2034E-FIG19
Outline Drawing:	148CB51VMKKGPA0001

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:	5KS511DAJ6023A	Estimated Weight:	4205 Lbs
Outline Drawing:	148CB51VMKKGPA0001	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG19	Enclosure:	WPI
Instruction Book:	GEI-M1045	Encl Construction:	OPEN
Design Code:	50ED1310AD	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	B5011TP24	Insulation Class:	F
Phases:	3	NEMA Design:	-
Poles:	4	Nominal Efficiency:	95.4 %
Output Power:	600HP 444KW	Guaranteed Efficiency:	94.5 %
RPM:	1780	3/4 Load Efficiency:	--
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	92.4
Amps - FL:	654.0	Power Factor:	90.0
Service Factor:	1.15	Bearing - DE:	6219ZC3
Alt Service Factor:	--	Bearing - ODE:	29430

Enclosure is Weather Protected One

Stamped Nameplate Notes:

NEMA ENCLOSURE WP-I, CSA ENCL DP
 THERMOSTAT LEADS TB1-TB2:TRIP
 HTR LDS HE1-HE2 115V 350W
 UPPER BRG LUBE OIL: 12.68 QTS
 6 DEG C TO 40 DEG C :ISO 150(MINERAL OR SYNTHETIC)
 -15 DEG C TO 5 DEG C : ISO 68 SYNTHETIC
 LOWER BRG LUBE 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
 5600 LBS MIN CONTINUOUS DOWNTHRUST REQ"D
 STAMP NP249A5564P009 AS FOLLOWS:
 REQUIRED COOLING WATER:2.0 GPM
 MAXIMUM COOLING WATER:3.5 GPM
 MAXIMUM PRESSURE:100 PSI
 MAXIMUM WATER INLET TEMP :95 DEG F
 INVERTER DUTY PER NEMA MG1 PART 31
 ALTERNATE RATING FOR PWM CONTROL

Additional Information:

1.0 SF. VAR TORQUE RANGE 5-60 HZ
SUITABLE FOR 500 HP, 380V, 50 HZ WITH
658 AMPS AND 1470 RPM AT 1.0 S.F
4 POLE, VERT HOLLOW SHAFT HIGH THRUST
NON-REVERSE COUPLING, BX=2.188
PART WINDING START
VIBRATION LIMIT-GRADE B
(3) NC THERMOSTAT LEADS TO MAIN C/BOX
115V HEATER LEADS TO MAIN C/BOX
RCF=1481 CPM CG=32.4 IN STAT DEF=0.0161 IN
C/B GRD PLATE
BEARING LIFE 8760 HOURS AT 42250 LB THRUST
5700 Cu. In. CBOX
AEGIS SHAFT GROUNDING RING ON LOWER END
INSULATED LOWER HALF COUPLING FOR TOP BRG
SELF RELEASE PINS 235A4557AF1 AS KIT IN
IN BAG 235A4786AA5 SHIP LOOSE ALONG WITH
THIS MOTOR;



Performance Characteristics

1st Winding 1st Connection

Design: 50ED1310AD

Marks:

LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	93.9	94.19	94.74	94.82	94.44	91.71	0.00
% PF	89.16	89.66	90.87	89.63	86.26	72.08	8.31
AMPS	838.42	764.71	651.31	495.56	344.7	212.37	128.92

TORQ(FL)#FT 1769.24
AMPS(LR) 3642.56

TORQ(LR)%FL 87.58
PF AT START 0.21

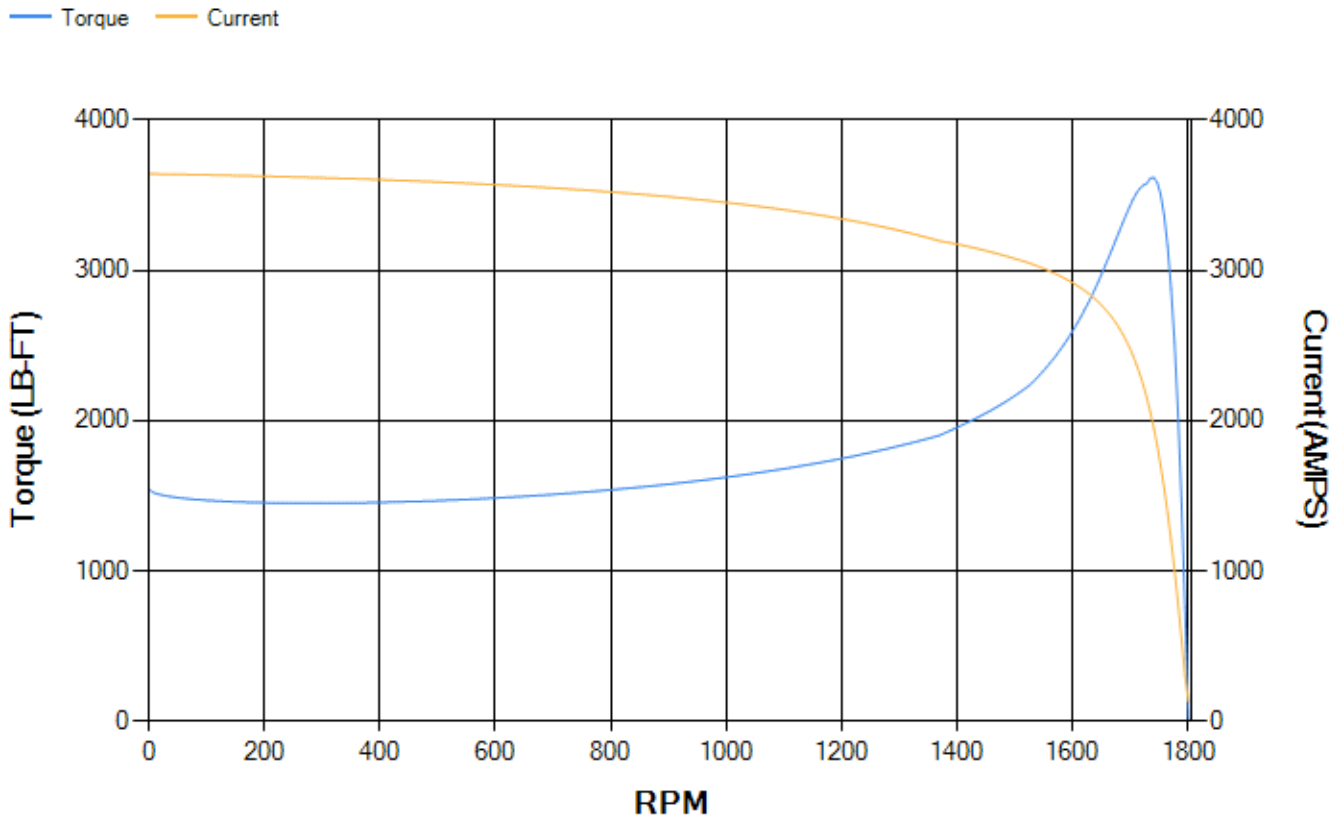
TORQ(BD)%FL 201.7

This motor is capable of two cold or one hot start with a maximum connected load inertia of 3736 Lb-Ft Sq (157.29 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 19 seconds. Safe stall time at 100% voltage is 52 seconds cold, 31 seconds hot. Rotor inertia is 158.31 Lb-Ft Sq (6.66 Kg-meter Sq).

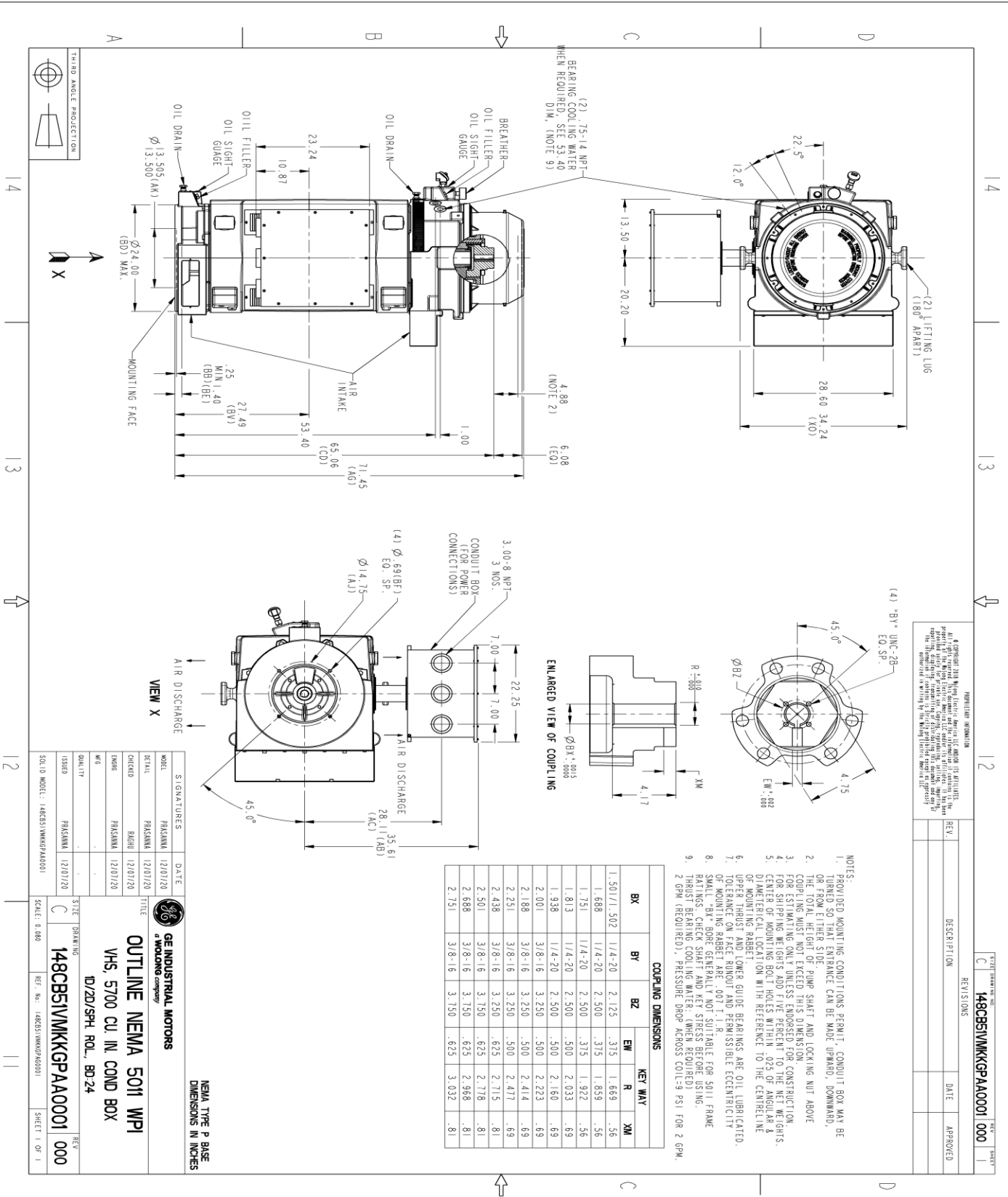
Open Circuit A-C: 1.271
Short Circuit A-C: 0.042
Stator Slots: 72

Short Circuit D-C: 0.026
X/R Ratio: 9.771
Rotor Slots: 58

Speed Torque Current Curve (First Connection, First Speed)



Marks:



REVISION INFORMATION

REV.	DESCRIPTION	DATE	APPROVED
C	148CB51VMKKGPPAA0001 000		

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

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OUTLINE NEMA 5011 WPI
VHS, 5700 CU IN COND BOX
D/20/SPH, ROL., BP-24

SIGNATURES	DATE
MODEL: PRASAKMA 12101720	
RETAIL: PRASAKMA 12101720	
CHECKED: RAGHU 12101720	
DESIGN: PRASAKMA 12101720	
W/E:	
QUALITY:	
ISSUED: PRASAKMA 12101720	
SOLD MODEL: 148CB51VMKKGPPAA0001	

SCALE: 0.680

148CB51VMKKGPPAA0001

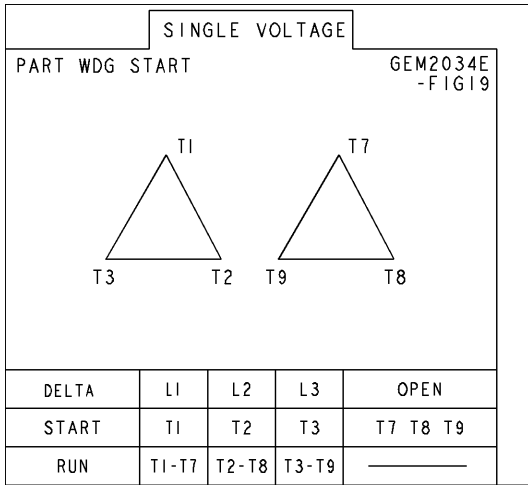
REV: 000

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Marks:

Connection Diagram
GEM2034E-FIG19



Heater Connection
3027JE-1C



SUPPLY VOLTAGE LEADS	L1	L2
HEATER LEADS	HE1	HE2

