



**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.

<b>Model Number:</b>	<b>5KS444DAJ7035</b>
<b>Catalog Number:</b>	<b>V4560</b>
<b>Instruction Manual:</b>	GEI-M1045
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	148CB44VMHKCCAC0003

## Accessory Connection Diagrams

<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	3027JE-1C
<b>RTD:</b>	None	<b>Thermistor:</b>	None
<b>Thermostat:</b>	3027JE-2A	<b>Winding Thermocouple:</b>	None
<b>Bearing RTD:</b>	None		

## Table of Contents

Specification	01
Performance Characteristics	02
Outline Drawing	03
Connection Drawing(s)	04
Spare parts	05

Marks:

<b>MODEL NUMBER:</b>	<b>5KS444DAJ7035</b>	<b>Estimated Weight:</b>	2370 Lbs
<b>Outline Drawing:</b>	148CB44VMHKCCAC0003	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG7	<b>Enclosure:</b>	WPI
<b>Instruction Book:</b>	GEI-M1045	<b>Encl Construction:</b>	OPEN
<b>Design Code:</b>	44BD3135A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	L444TP16	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	6	<b>Nominal Efficiency:</b>	95.0 %
<b>Output Power:</b>	100HP 74KW	<b>Guaranteed Efficiency:</b>	94.1 %
<b>RPM:</b>	1190	<b>3/4 Load Efficiency:</b>	--
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	34.7
<b>Amps - FL:</b>	122.0	<b>Power Factor:</b>	81.5
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6217C3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	235A2536AB01

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 7.5-60 HZ  
UPPER BRG LUBE OIL: 10.2 QTS  
AMB 0 TO 40 DEG C : ISO 32(MINERAL OR SYNTHETIC)  
AMB -15 TO 0 DEG C : ISO 32 SYNTHETIC  
DE BRG 85BC02J30, ODE BRG 130BT03MD00  
80 DEG C RISE AT 1.00 SF



**Additional Information:**

6P, VERT HOLLOW SHAFT HIGH THRUST (1D)  
C/BOX 700 CU IN - 3.00" NPT  
OIL RESISTANT SLEEVING ON LEADS  
(3)N.C. CLASS F TRIP TSTAT LDS TO ACCESSORY BOX  
115V HTR LDS TO ACCESSORY BOX  
INSULATED UPPER BEARING CARRIER  
SHAFT GROUNDING RING MOUNTED ON DE BRG CAP  
BEARING LIFE 8760 HRS AT 16082 LB THRUST  
BEARING LIFE 185403 HRS AT 7500 LB THRUST  
CG:22.60 IN FROM P-BASE FACE, STAT DEF:= 0.005 IN  
RCF: 2702 CPM  
NON-REVERSE BALL CARRIER,  
BOLTED COUPLING, BX = 1.501 IN, EW= 0.375 IN



**Performance Characteristics**

1st Winding 1st Connection

**Design: 44BD3135A**

**Marks:**

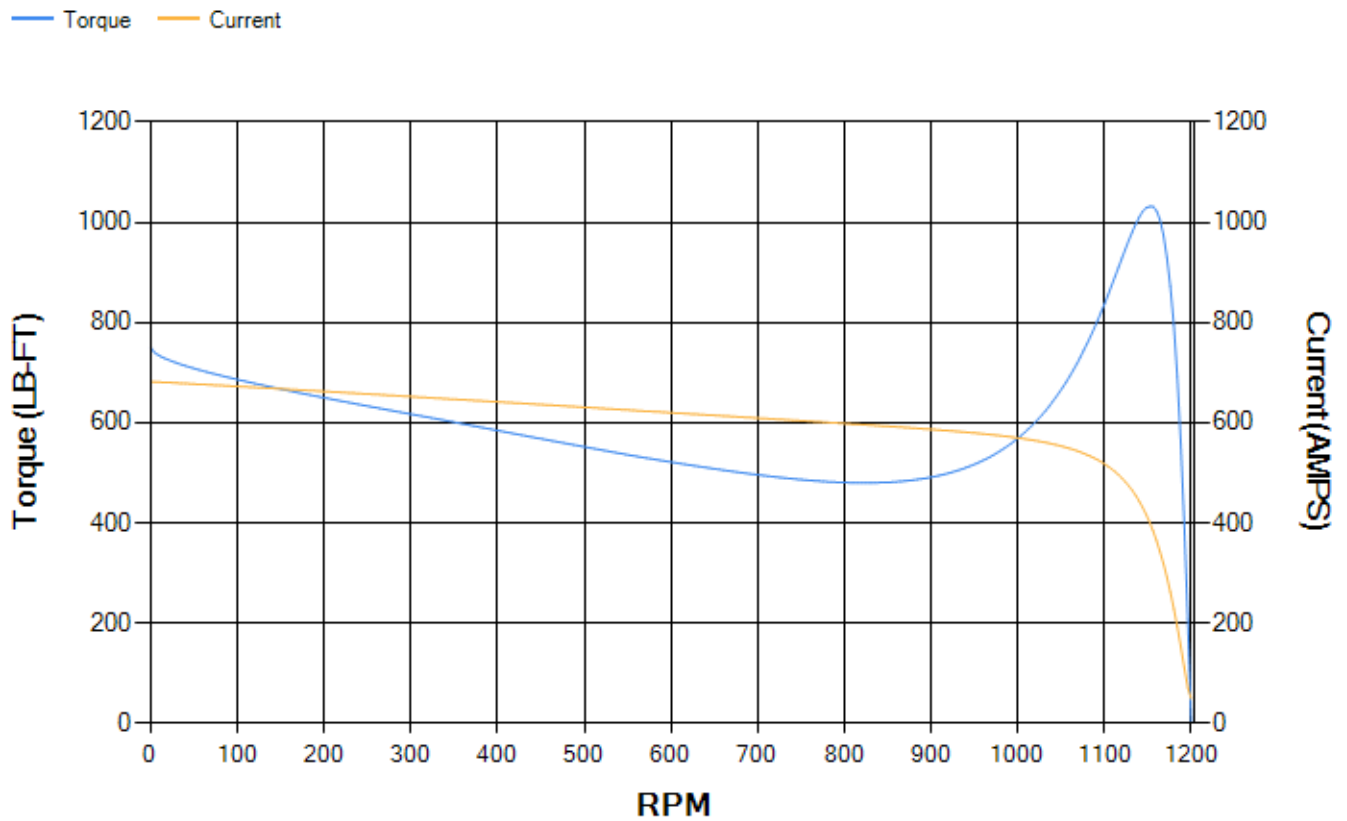
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	93.98	94.25	94.77	94.81	94.39	91.59	0.00
% PF	83.16	82.75	81.57	77.29	67.46	45.3	3.8
AMPS	149.68	138	121.08	95.78	73.5	56.39	48.46

<b>TORQ(FL)#FT</b>	440.72	<b>TORQ(LR)%FL</b>	170.4	<b>TORQ(BD)%FL</b>	233.74
<b>AMPS(LR)</b>	682.05	<b>PF AT START</b>	0.36		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 5736 Lb-Ft Sq (241.49 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 49 seconds. Safe stall time at 100% voltage is 84 seconds cold, 61 seconds hot. Rotor inertia is 75.52 Lb-Ft Sq (3.18 Kg-meter Sq).

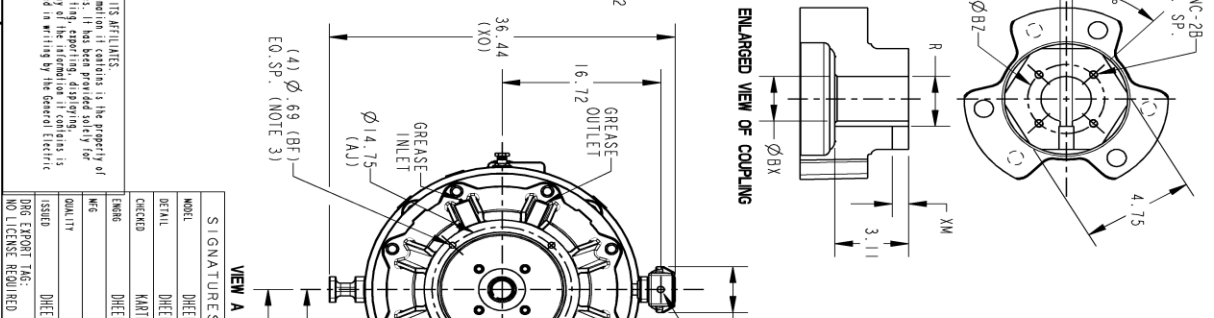
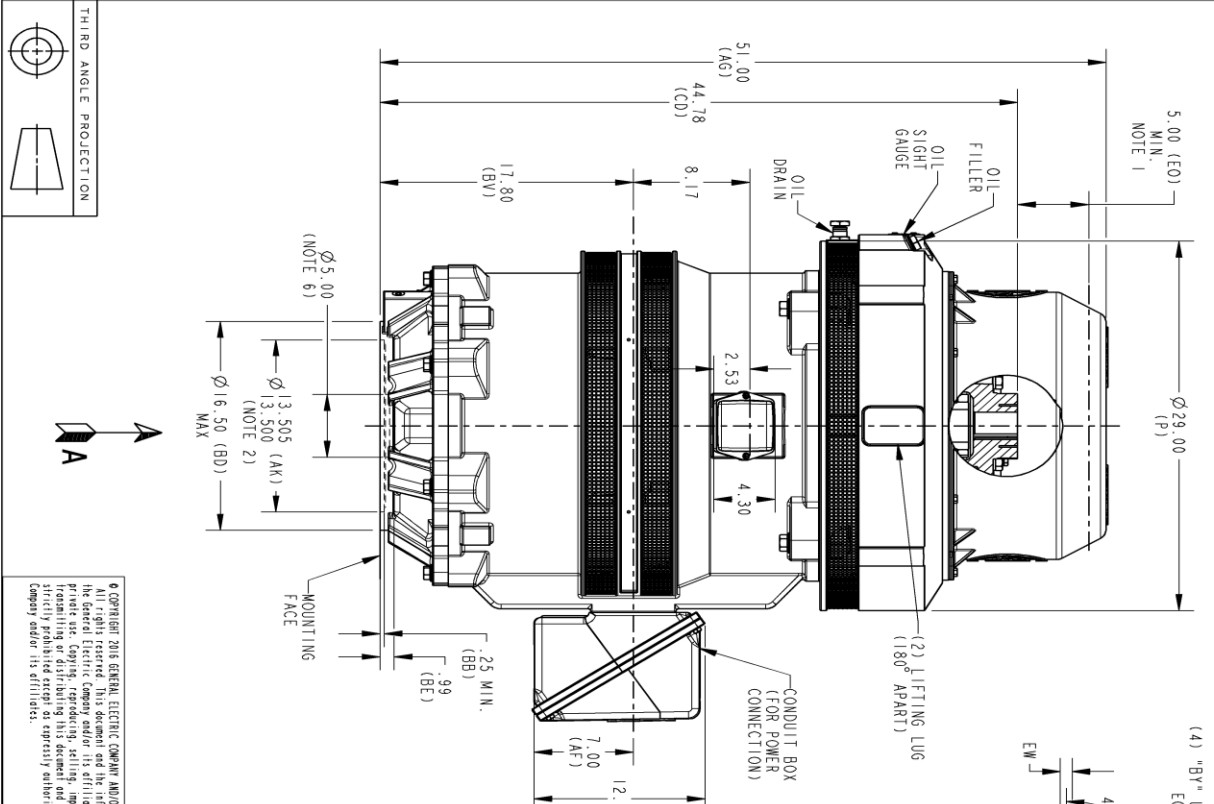
<b>Open Circuit A-C:</b>	0.876	<b>Short Circuit D-C:</b>	0.023
<b>Short Circuit A-C:</b>	0.057	<b>X/R Ratio:</b>	8.507
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

**Speed Torque Current Curve (First Connection, First Speed)**



Marks:

SOLID MODEL: 148CB44VMHKCCAC0003



REV.	DESCRIPTION	DATE	APPROVED

REV.	DESCRIPTION	DATE	APPROVED

NOTES:

- THE TOTAL HEIGHT OF PUMP SHAFT AND LOCKING NUT ABOVE COUPLING MUST NOT EXCEED THIS DIMENSION.
- TOLERANCE ON FACE ROUNDOFF AND PERMISSIBLE ECCENTRICITY OF MOUNTING RABBET ARE .007 T.1.R
- CENTRE OF MOUNTING BOLTS WITHIN 0.025 OF ANGULAR & DIAMETRICAL LOCATION WITHIN REFERENCE TO THE CENTRELINE OF MOUNTING RABBET.
- PROVIDED MOUNTING CONDITIONS PERMIT, CONDUIT BOX MAY BE TURNED SO THAT ENTRANCE CAN BE MADE UPWARD, DOWNWARD OR FROM EITHER SIDE.
- FOR ESTIMATING ONLY UNLESS ENDORSED FOR CONSTRUCTION.
- MAINTAIN MINIMUM CLEARANCE FOR SHAFT SLINGER.

DIMENSIONS IN INCHES  
NEMA TYPE P BASE

COUPLING DIMENSIONS		KEY WAY	
BX	BY	BZ	EW
1.501	1/4-20	2.125	.315
1.588	1/4-20	2.500	.375
1.751	1/4-20	2.500	.375
1.813	1/4-20	2.500	.500
1.938	1/4-20	2.500	.500
2.001	3/8-16	3.250	.500
2.063	3/8-16	3.250	.500
2.126	3/8-16	3.250	.500
2.188	3/8-16	3.250	.500
2.251	3/8-16	3.250	.500
2.316	3/8-16	3.250	.500
2.438	3/8-16	3.250	.625
2.501	3/8-16	3.250	.625

© COPYRIGHT 2015 GENERAL ELECTRIC COMPANY AND/OR ITS AFFILIATES. All rights reserved. This document and the information it contains is the property of The General Electric Company and/or its affiliates. It has been provided solely for your private use, copying, reproducing, selling, importing, exporting, distributing, or otherwise making available to third parties is strictly prohibited except as expressly authorized in writing by the General Electric Company and/or its affiliates.

GE POWER CONVERSION

CLASS II (GE) INTERNAL CATALOG

MODEL: 148CB44VMHKCCAC0003

DESCRIPTION: OUTLINE, NEMA WP1 444/445 VERTICAL HOLLOW SHAFT, MIGHT THR 165 BD, 700 CUIN C/BOX ACC B

SCALE: 0.120 REF. No. 148CB44VMHKCCAC0001

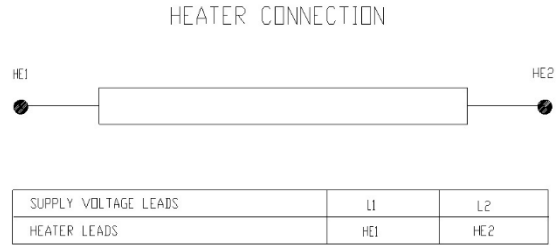
SHEET 1 of 1

**Marks:**

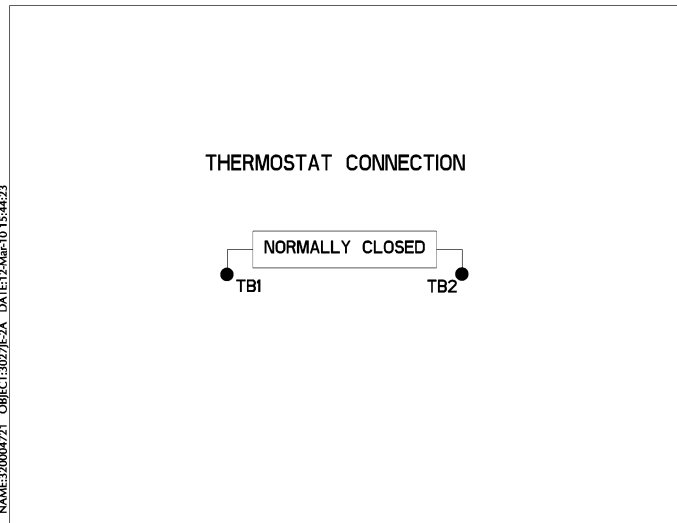
**Connection Diagram**  
**GEM2034E-FIG7**



**Heater Connection**  
**3027JE-1C**



**Thermostat Connection**  
**3027JE-2A**



NAME:320004721 - OBJECT:3027JE-2A - DATE:12-Mar-10 15:44:23



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E7660AA1	115E7670LM1
Bearing	235A2622AA01	235A2536AB01
Slinger/Inproseal	149C4399G06	

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

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	118D4408AD2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

