



**GE INDUSTRIAL MOTORS**  
a **WOLONG** company

# Product Technical Information

July 15, 2020

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

<b>Model Number:</b>	<b>5KS444DAJ6024C</b>
<b>Catalog Number:</b>	<b>V4557</b>
<b>Instruction Manual:</b>	GEI-M1045
<b>Connection Diagram:</b>	GEM2034E-FIG1
<b>Outline Drawing:</b>	148CB44VMJKCLA0001

## 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		

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**Marks:**

<b>MODEL NUMBER:</b>	<b>5KS444DAJ6024C</b>	<b>Estimated Weight:</b>	2390 Lbs
<b>Outline Drawing:</b>	148CB44VMJKCLA0001	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG1	<b>Enclosure:</b>	WPI
<b>Instruction Book:</b>	GEI-M1045	<b>Encl Construction:</b>	OPEN
<b>Design Code:</b>	44BD1167BA	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	L444TP20	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	95.8 %
<b>Output Power:</b>	200HP 148KW	<b>Guaranteed Efficiency:</b>	95.0 %
<b>RPM:</b>	1780	<b>3/4 Load Efficiency:</b>	95.6 %
<b>Voltage:</b>	575	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	59.5
<b>Amps - FL:</b>	185.0	<b>Power Factor:</b>	85.0
<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

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**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  
0 DEG C TO 40 DEG C : ISO 32(MINERAL OR SYNTHETIC)  
-15 DEG C TO 0 DEG C : ISO 32 SYNTHETIC



**Additional Information:**

4P, VERT HOLLOW SHAFT HIGH THRUST (1D)  
C/BOX 700 CU IN - 3.00" NPT  
OIL RESISTANT SLEEVING ON LEADS  
(3)N.C. CL.F TRIP TSTAT LDS TO MAIN CONDUIT BOX  
115V HTR LDS TO MAIN CONDUIT BOX  
GROUND PAD  
INSULATED LOWER HALF COUPLING AT UPPER END  
SHAFT GROUNDING RING MOUNTED ON LOWER END BRG CAP  
BEARING LIFE 8760 HRS AT 14460 LB THRUST  
CG:22.60 IN FROM P-BASE FACE, STAT DEF:= 0.004 IN  
RCF:3019 CPM (+/- 10%)  
NON-REVERSE BALL CARRIER,  
BOLTED COUPLING, BX = 1.688, KEY = 0.375



**Performance Characteristics**

1st Winding 1st Connection

**Design: 44BD1167BA**

**Marks:**

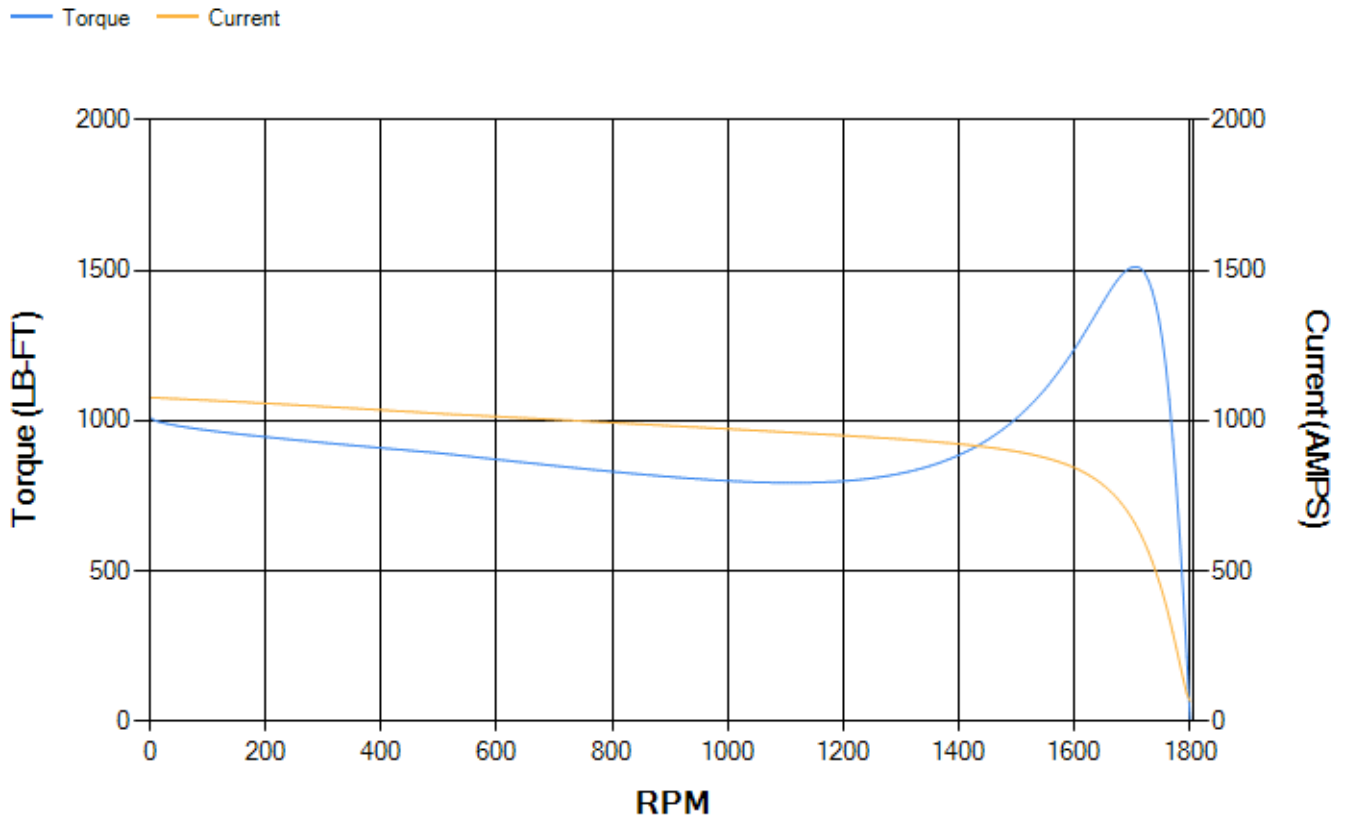
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.87	95.09	95.57	95.61	95.3	93.04	0.00
% PF	86.4	86.07	85.1	81.48	72.63	50.49	3.58
AMPS	228.38	210.41	184.13	144.17	108.17	79.69	66.46

<b>TORQ(FL)#FT</b>	589.36	<b>TORQ(LR)%FL</b>	171.86	<b>TORQ(BD)%FL</b>	256.15
<b>AMPS(LR)</b>	1077.04	<b>PF AT START</b>	0.32		

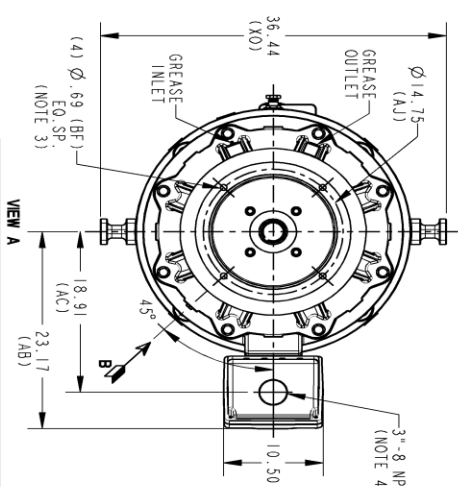
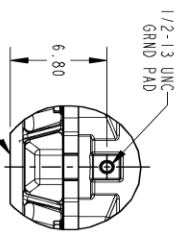
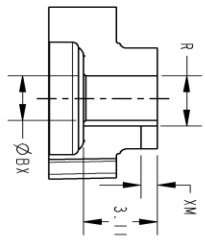
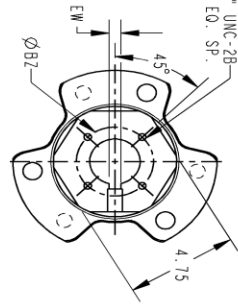
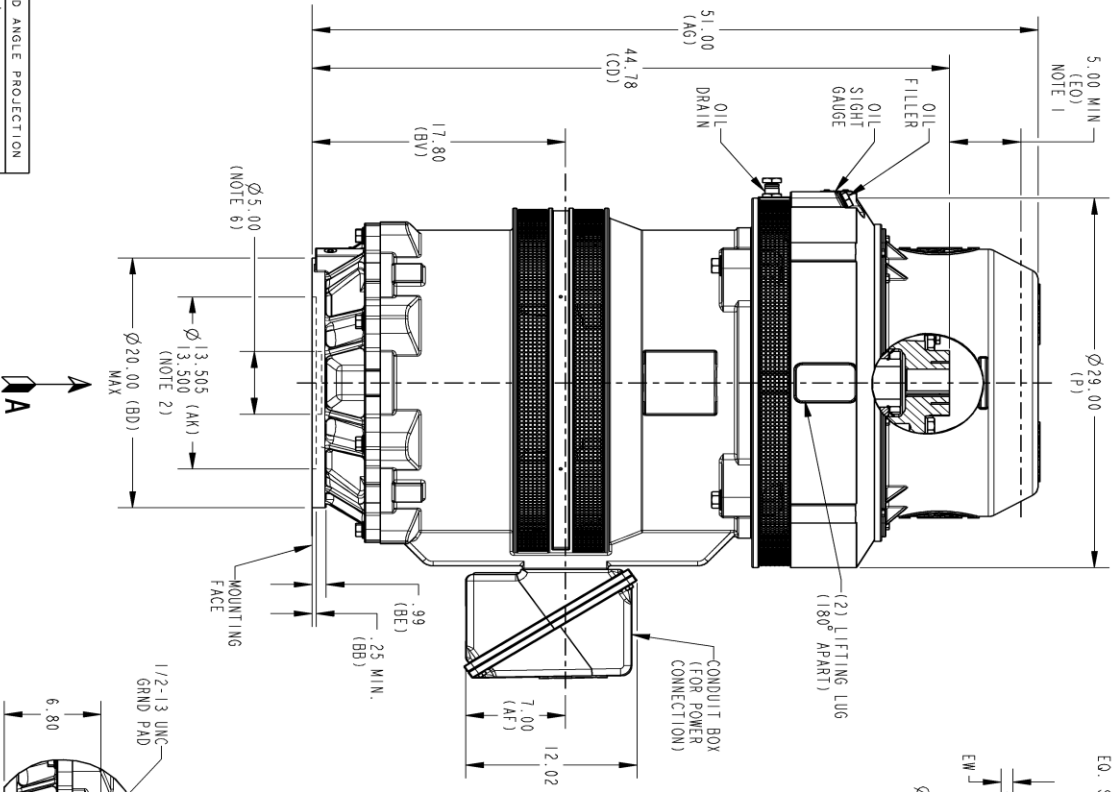
This motor is capable of two cold or one hot start with a maximum connected load inertia of 2405 Lb-Ft Sq (101.25 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 19 seconds. Safe stall time at 100% voltage is 40 seconds cold, 23 seconds hot. Rotor inertia is 54.22 Lb-Ft Sq (2.28 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.696	<b>Short Circuit D-C:</b>	0.029
<b>Short Circuit A-C:</b>	0.039	<b>X/R Ratio:</b>	11.036
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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



Marks:



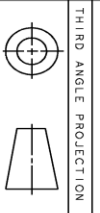
- NOTES:
1. THE TOTAL HEIGHT OF PUMP SHAFT AND LOCKING NUT ABOVE COUPLING MUST NOT EXCEED THIS DIMENSION.
  2. TOLERANCE ON FACE RUNOUT AND PERMISSIBLE ECCENTRICITY OF MOUNTING RABBET ARE .007 T.I.R
  3. CENTRE OF MOUNTING BOLTS WITHIN 0.025 OF ANGULAR & DIAMETRICAL LOCATION WITHIN REFERENCE TO THE CENTRELINE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

DIMENSIONS IN INCHES  
NEMA TYPE P BASE  
COUPLING DIMENSIONS

KEY WAY	R	XM
BX	BZ	EW
1.501	1/4-20	2.125
1.588	1/4-20	2.500
1.751	1/4-20	2.500
1.813	1/4-20	2.500
1.938	1/4-20	2.500
2.001	3/8-16	3.250
2.063	3/8-16	3.250
2.126	3/8-16	3.250
2.188	3/8-16	3.250
2.251	3/8-16	3.250
2.316	3/8-16	3.250
2.438	3/8-16	3.250
2.501	3/8-16	3.250

REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
1	ISAC #16-0728	07/21/16	SASI
2	ISAC #18-0869	02/07/19	PRASHANTH
3	ISAC #19-0326	04/03/19	DEEPA MANI



**GE INDUSTRIAL MOTORS**  
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**OUTLINE, NEMA WP1 444-445**  
**VERTICAL HOLLOW SHAFT-HIGH THRUST GRS LOWER**  
200 BD, 700 CU IN C/BOX GRND PAD

SCALE: 0.120 REF. No. . . . .

**148CB44VMJKCCLA0001 003**

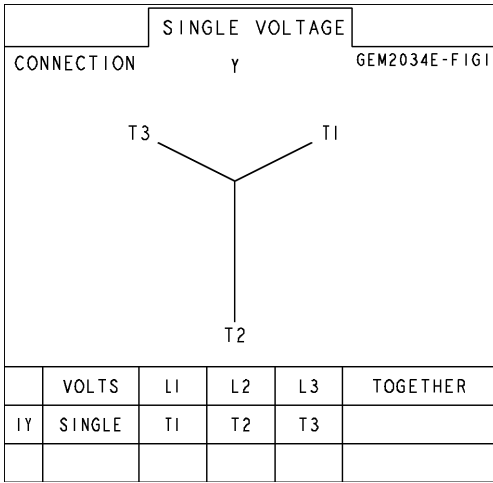
SHEET 1 OF 1

SIGNATURES	DATE
RAVI	07/01/2016
SASI	07/01/2016
SASI	07/01/2016
WIC	
ISSUED	
SOLID MODEL: 148CB44VMJKCCLA0001	

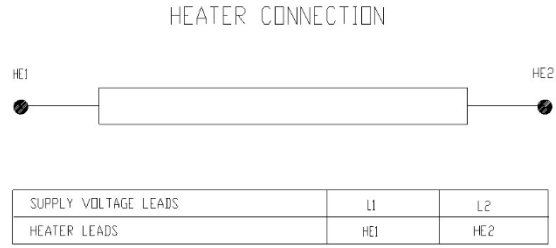
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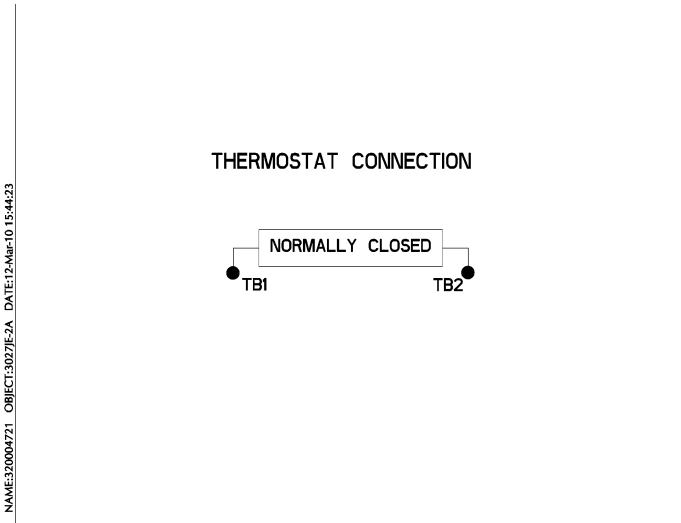
**Connection Diagram**  
**GEM2034E-FIG1**



**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	115E7670LM1
Bearing	235A2522AJ01	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	

