



**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>5KS324DAJ6056</b>
<b>Catalog Number:</b>	<b>V4456</b>
<b>Instruction Manual:</b>	GEI-M1045
<b>Connection Diagram:</b>	GEM2034E-FIG9
<b>Outline Drawing:</b>	148CB32VMGKBCAA0001

## Accessory Connection Diagrams

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

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Marks:

<b>MODEL NUMBER:</b>	<b>5KS324DAJ6056</b>	<b>Estimated Weight:</b>	690 Lbs
<b>Outline Drawing:</b>	148CB32VMGKBCAA0001	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG9	<b>Enclosure:</b>	WPI
<b>Instruction Book:</b>	GEI-M1045	<b>Encl Construction:</b>	OPEN
<b>Design Code:</b>	32BD1310AA	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	L324TP12	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	94.1 %
<b>Output Power:</b>	40HP 29.6KW	<b>Guaranteed Efficiency:</b>	93.0 %
<b>RPM:</b>	1780	<b>3/4 Load Efficiency:</b>	--
<b>Voltage:</b>	200-230/460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	15.3
<b>Amps - FL:</b>	112-100/50	<b>Power Factor:</b>	80.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6212C3
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	235A2523AD01

Enclosure is Weather Protected One

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Stamped Nameplate Notes:

NEMA ENCLOSURE WP-I, CSA ENCL DP  
HTR LDS HE1-HE2 115V 100W  
ROT CCW FACING ODE LEAD/PH SEQ 1-2-3/1-2-3  
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: 2.1 QTS  
AMB 0 TO 40 DEG C : ISO 32(MINERAL OR SYNTHETIC)  
AMB -15 TO 0 DEG C : ISO 32 SYNTHETIC  
SUITABLE FOR 30 HP, 190/380V, 50 HZ WITH  
92.0/46.0 AMPS AND 1480 RPM AT 1.00 SF



**Additional Information:**

4P, VERT HOLLOW SHAFT HIGH THRUST (1D)  
C/BOX 346 CU IN - 3.00" NPT  
OIL RESISTANT SLEEVING ON LEADS  
115V HTR LDS TO MAIN CONDUIT BOX  
BEARING LIFE 8760 HRS AT 6324 LB THRUST  
CG:13.86 IN FROM P-BASE FACE, STAT DEF:0.0025 IN  
RCF:3600 CPM AT C/BOX SIDE, 3870 CPM AT  
90 DEG FROM C/ BOX SIDE  
NON-REVERSE BALL CARRIER,  
BOLTED COUPLING, BX = 1.501 IN, EW= 0.375 IN  
FIRE PUMP MOTOR  
ESTIMATED SOUND PRESSURE < 80 DBA AT 1 METER



**Performance Characteristics**

1st Winding 1st Connection

**Design: 32BD1310AA**

**Marks:**

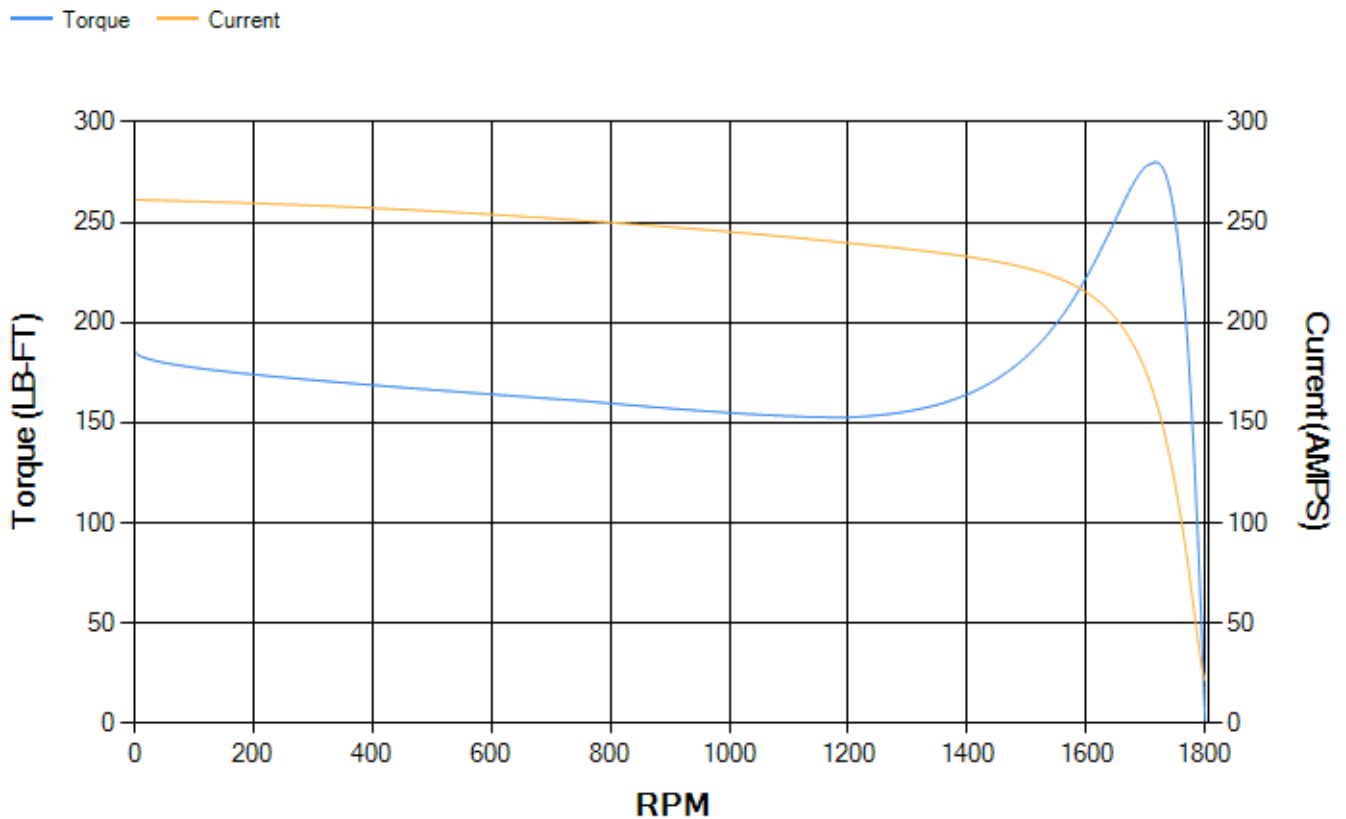
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	93.15	93.4	93.87	93.76	92.99	89.16	0.00
% PF	81.8	81.26	79.84	75.05	64.65	42.77	4.51
AMPS	61.41	56.73	49.84	39.9	31.14	24.54	21.35

<b>TORQ(FL)#FT</b>	118.01	<b>TORQ(LR)%FL</b>	157.38	<b>TORQ(BD)%FL</b>	236.32
<b>AMPS(LR)</b>	261.24	<b>PF AT START</b>	0.33		

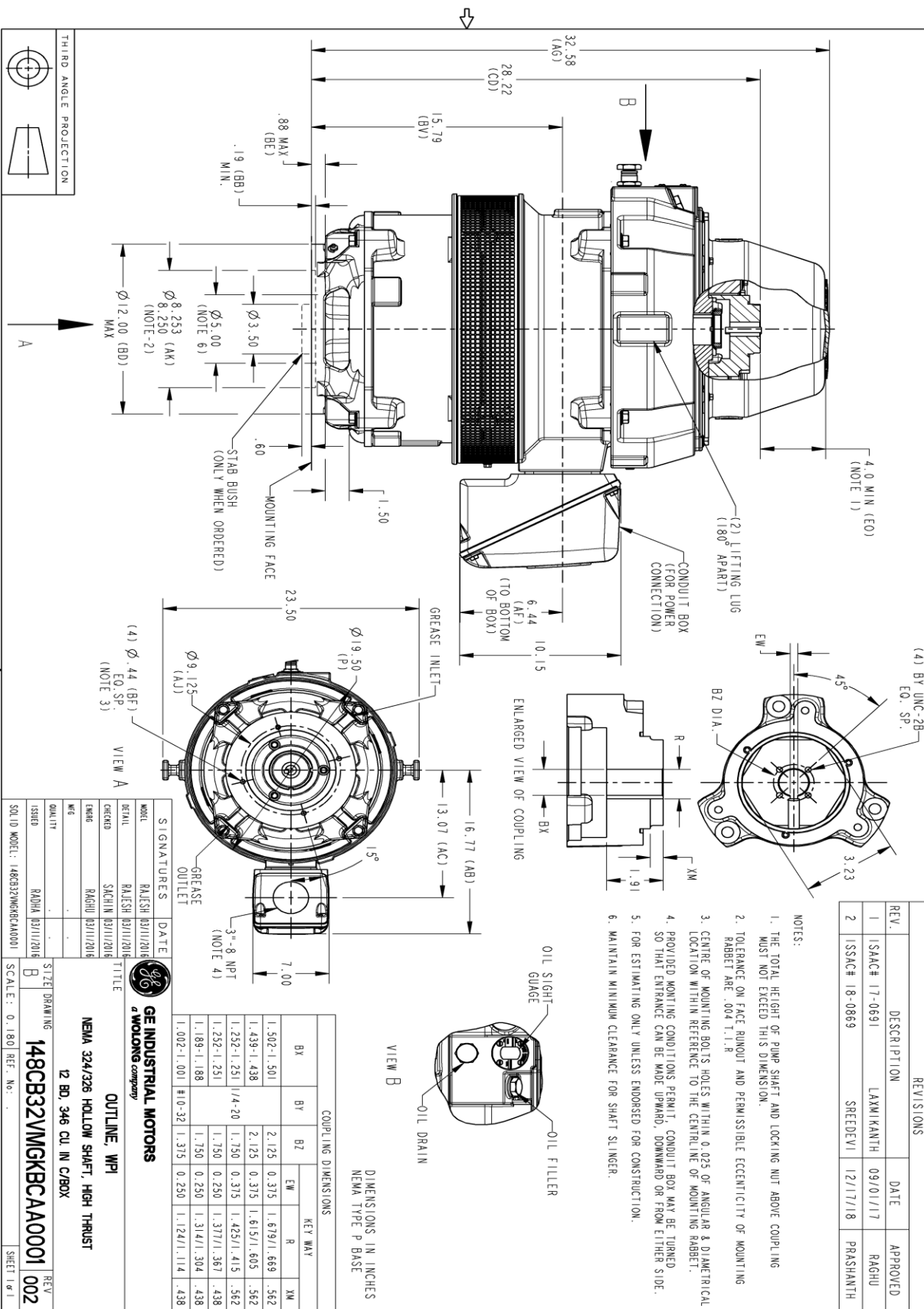
This motor is capable of two cold or one hot start with a maximum connected load inertia of 1174 Lb-Ft Sq (49.43 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 51 seconds. Safe stall time at 100% voltage is 87 seconds cold, 61 seconds hot. Rotor inertia is 6.63 Lb-Ft Sq (0.28 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.514	<b>Short Circuit D-C:</b>	0.024
<b>Short Circuit A-C:</b>	0.035	<b>X/R Ratio:</b>	8.887
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	38

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



Marks:



THIRD ANGLE PROJECTION

SIZE DRAWING NO. **B** REV. **002** SHEET **1**

**148CB32VMGKBCA0001**

REV. SHEET

REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
1	ISAC# 17-0691	09/01/17	RAGHU
2	ISSAC# 18-0869	12/17/18	PRAASHANTH

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 .004 T.I.R
3. CENTRE OF MOUNTING BOLTS HOLES WITHIN 0.025 OF ANGULAR & DIAMETRICAL LOCATION WITHIN REFERENCE TO THE CENTRLINE 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.

REVISIONS

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**GE INDUSTRIAL MOTORS**  
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**OUTLINE, WPI**

**NEMA 324/326 HOLLOW SHAFT, HIGH THRUST**

**12 BD, 346 CU IN C/BOX**

**148CB32VMGKBCA0001**

SCALE: 0.180 REF. NO. SHEET 1 OF 1

SIGNATURES

MODEL	DATE	TITLE
RAJESH	03/11/2016	DETAIL
SACHIN	03/11/2016	CHECKED
RAGHU	03/11/2016	ENGR
RAJESH	03/11/2016	ISSUED
RAJESH	03/11/2016	SHEET DRAWING

SOLID MODEL: 148CB32VMGKBCA0001

QUALITY: RAJESH

ISSUED: RAJESH

ENGR: RAJESH

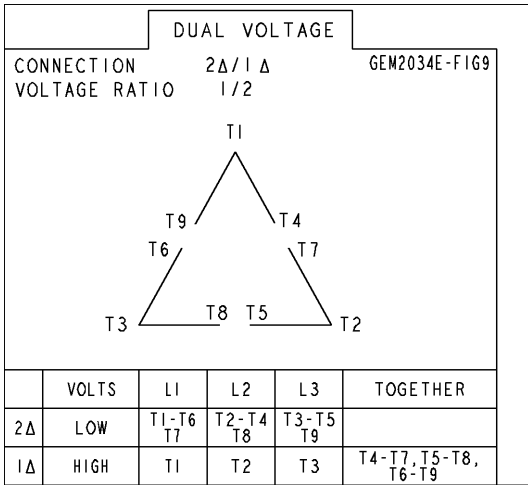
CHKD: RAJESH

DATE: 03/11/2016

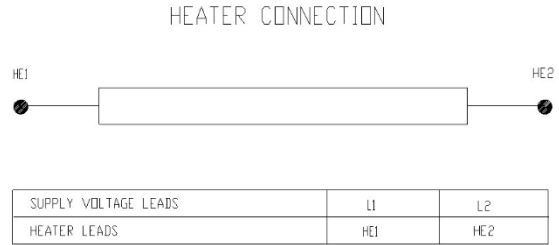
SCALE: 0.180 REF. NO. SHEET 1 OF 1

**Marks:**

**Connection Diagram**  
**GEM2034E-FIG9**



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



## End shield Assembly

Part Description	DE Side Part#	ODE Side Part#
End Shield	115E7204AC1	115E7208LK-G01
Bearing	235A2509BE01	235A2523AD01
Slinger/Inproseal	235A2300FM1	

## Fan &amp; Fan Cover Assembly

Part Description	Part#
Fan	
Fan Cover	161C1052AA1

## Conduit &amp; Accessories Box Assembly

Part Description	Part#
Conduit Box	149C4429AA2

## Mechanical Accessories

Part Description	Part#
Brake	
Tachometer	

