



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

# Product Technical Information

July 17, 2020

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

<b>Model Number:</b>	<b>5KE447DAJ6020B</b>
<b>Catalog Number:</b>	<b>VF114</b>
<b>Instruction Manual:</b>	GEI-M1045
<b>Connection Diagram:</b>	GEM2034E-FIG261
<b>Outline Drawing:</b>	148CB49VMHKLGA0001

## Accessory Connection Diagrams

<b>Bearing Thermocouple:</b>	None	<b>Heater:</b>	None
<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>5KE447DAJ6020B</b>	<b>Estimated Weight:</b>	2730 Lbs
<b>Outline Drawing:</b>	148CB49VMHKLGA0001	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG261	<b>Enclosure:</b>	WPI
<b>Instruction Book:</b>	GEI-M1045	<b>Encl Construction:</b>	OPEN
<b>Design Code:</b>	49BD1367A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KE	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	L447TP16	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	95.4 %
<b>Output Power:</b>	300HP 222KW	<b>Guaranteed Efficiency:</b>	94.5 %
<b>RPM:</b>	1780	<b>3/4 Load Efficiency:</b>	--
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	77.5
<b>Amps - FL:</b>	340.0	<b>Power Factor:</b>	87.0
<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  
 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: 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 1260 CU IN - 2(4.00" NPT)  
C/B GRD PLATE  
SLINGER DE  
OIL RESISTANT SLEEVING ON LEADS  
PART WINDING START  
BEARING LIFE 8760 HRS AT 14188 LB THRUST  
WYE START DELTA RUN  
CG:25.10 IN FROM P-BASE FACE,STAT DEF:= 0.006 IN  
RCF: 2456 CPM  
NON-REVERSE BALL CARRIER,  
BOLTED COUPLING, BX = 1.688, KEY = 0.375"  
FIRE PUMP MOTOR



**Performance Characteristics**

1st Winding 1st Connection

**Design: 49BD1367A**

**Marks:**

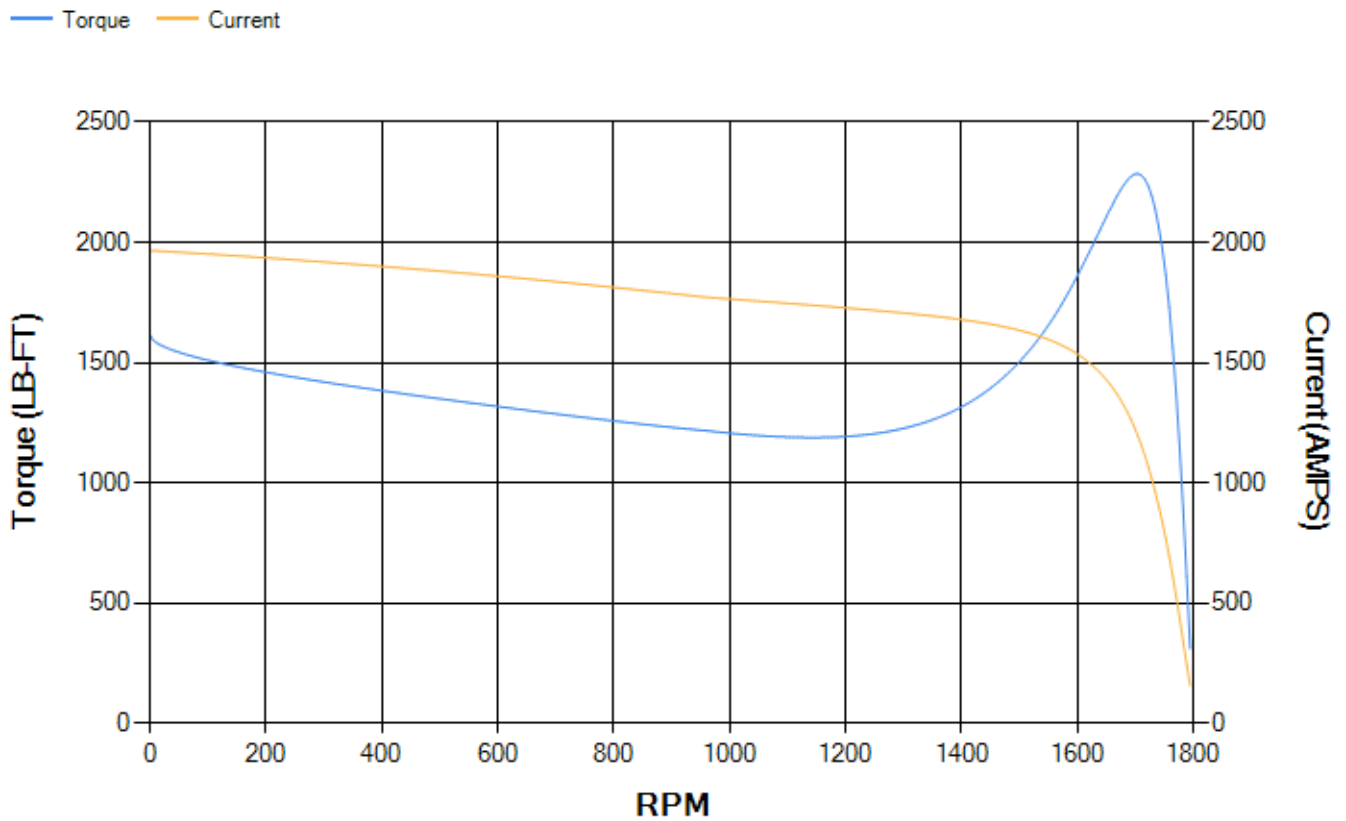
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.47	94.74	95.28	95.4	95.18	93.01	0.00
% PF	87.68	87.54	86.91	84.12	76.59	55.58	4.13
AMPS	423.71	389.33	339.08	262.41	192.58	135.78	108.2

<b>TORQ(FL)#FT</b>	884.39	<b>TORQ(LR)%FL</b>	182.9	<b>TORQ(BD)%FL</b>	257.94
<b>AMPS(LR)</b>	1966.25	<b>PF AT START</b>	0.33		

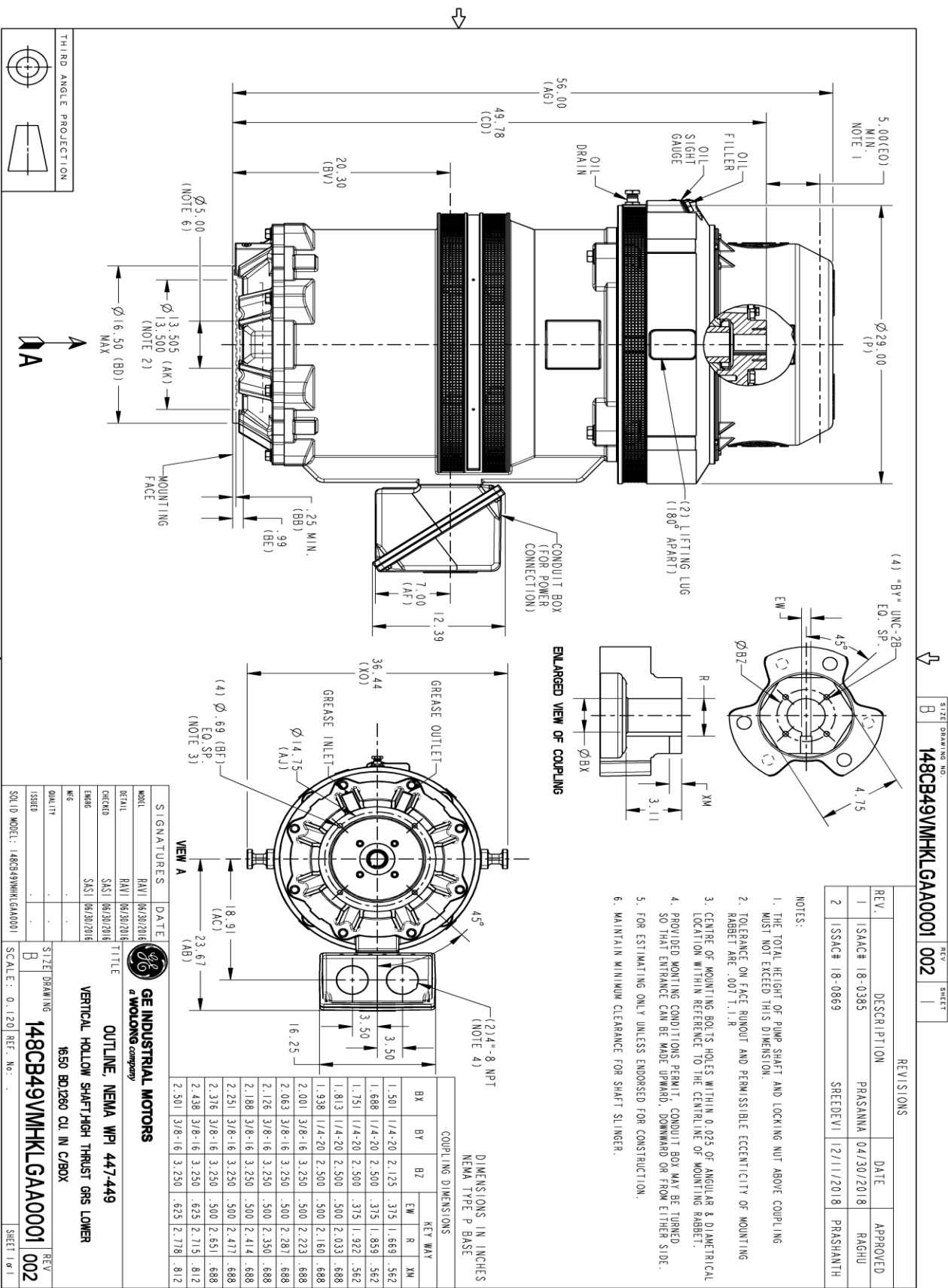
This motor is capable of two cold or one hot start with a maximum connected load inertia of 3406 Lb-Ft Sq (143.39 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 18 seconds. Safe stall time at 100% voltage is 37 seconds cold, 22 seconds hot. Rotor inertia is 77.94 Lb-Ft Sq (3.28 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.773	<b>Short Circuit D-C:</b>	0.029
<b>Short Circuit A-C:</b>	0.037	<b>X/R Ratio:</b>	10.976
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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



Marks:



REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
1	ISAAC# 18-0385	04/30/2018	RAHJU
2	ISSAC# 18-0869	12/11/2018	PRAZHANTH

- NOTES:
1. THE TOTAL HEIGHT OF PUMP SHAFT AND LOCKING NUT ABOVE COUPLING MUST NOT EXCEED THIS DIMENSION.
  2. TOLERANCE ON FACE ROUNDT AND PERMISSIBLE ECCENTRICITY OF MOUNTING RABDET ARE .001 1.1R
  3. CENTRE OF MOUNTING BOLTS WITHIN 0.025 OF ANGULAR & DIAMETRICAL LOCATION WITHIN REFERENCE TO THE CENTRILINE OF MOUNTING RABDET.
  4. PROVIDED MONTING 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.

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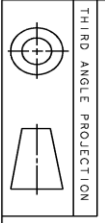
OUTLINE, NEMA WP1 447-449  
VERTICAL HOLLOW SHAFT-HIGH THRUST GRS LOWER  
1650 BD1260 CU IN C/BOX

SIGNATURES

MODEL	DATE	DATE
RAWI	06/30/2016	06/30/2016
DETAIL	06/30/2016	06/30/2016
DESIGN	SASI	06/30/2016
ENGR	SASI	06/30/2016
CHK		
QUALITY		
ISSUED		

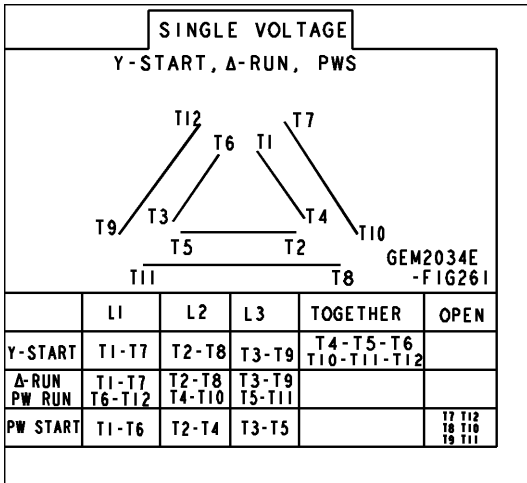
SHEET DRAWING  
148CB49VMHKLGA0001 002

SCALE: 0.120 REF. NO. SHEET 1 OF 1



Marks:

**Connection Diagram**  
**GEM2034E-FIG261**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E7660AA1	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	179B9058G03

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

