



**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>5KE364DAJ6020B</b>
<b>Catalog Number:</b>	<b>VF107</b>
<b>Instruction Manual:</b>	GEI-M1045
<b>Connection Diagram:</b>	GEM2034E-FIG254
<b>Outline Drawing:</b>	148CB36VMHKBCAA0001

## 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		

## Table of Contents

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

Marks:

<b>MODEL NUMBER:</b>	<b>5KE364DAJ6020B</b>	<b>Estimated Weight:</b>	820 Lbs
<b>Outline Drawing:</b>	148CB36VMHKBCAA0001	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG254	<b>Enclosure:</b>	WPI
<b>Instruction Book:</b>	GEI-M1045	<b>Encl Construction:</b>	OPEN
<b>Design Code:</b>	36BD1274A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KE	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	L364TP16	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	4	<b>Nominal Efficiency:</b>	93.6 %
<b>Output Power:</b>	60HP 44.4KW	<b>Guaranteed Efficiency:</b>	92.4 %
<b>RPM:</b>	1785	<b>3/4 Load Efficiency:</b>	94.6 %
<b>Voltage:</b>	230/460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	20.9
<b>Amps - FL:</b>	144.0/72.0	<b>Power Factor:</b>	82.5
<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  
 ROT CCW FACING TOP 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: 3.7 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 346 CU IN - 3.00" NPT  
OIL RESISTANT SLEEVING ON LEADS  
BEARING LIFE 8760 HRS AT 6244 LB THRUST  
CG:15.23 IN FROM P-BASE FACE, STAT DEF:0.0033 IN  
RCF:3300 CPM AT C/BOX SIDE, 3270 CPM AT  
90 DEG FROM C/ BOX SIDE  
NON-REVERSE BALL CARRIER  
BOLTED COUPLING, BX = 1.251, EW= 0.25  
FIRE PUMP MOTOR, UL FILE # 47088, VOL 22  
WYE START DELTA RUN AT BOTH VOLTAGES  
PART WINDING START AT LOW VOLTAGE ONLY  
"CONNECTIONS TO BE VERIFIED BEFORE USING THIS MODEL"



**Performance Characteristics**

1st Winding 1st Connection

**Design: 36BD1274A**

**Marks:**

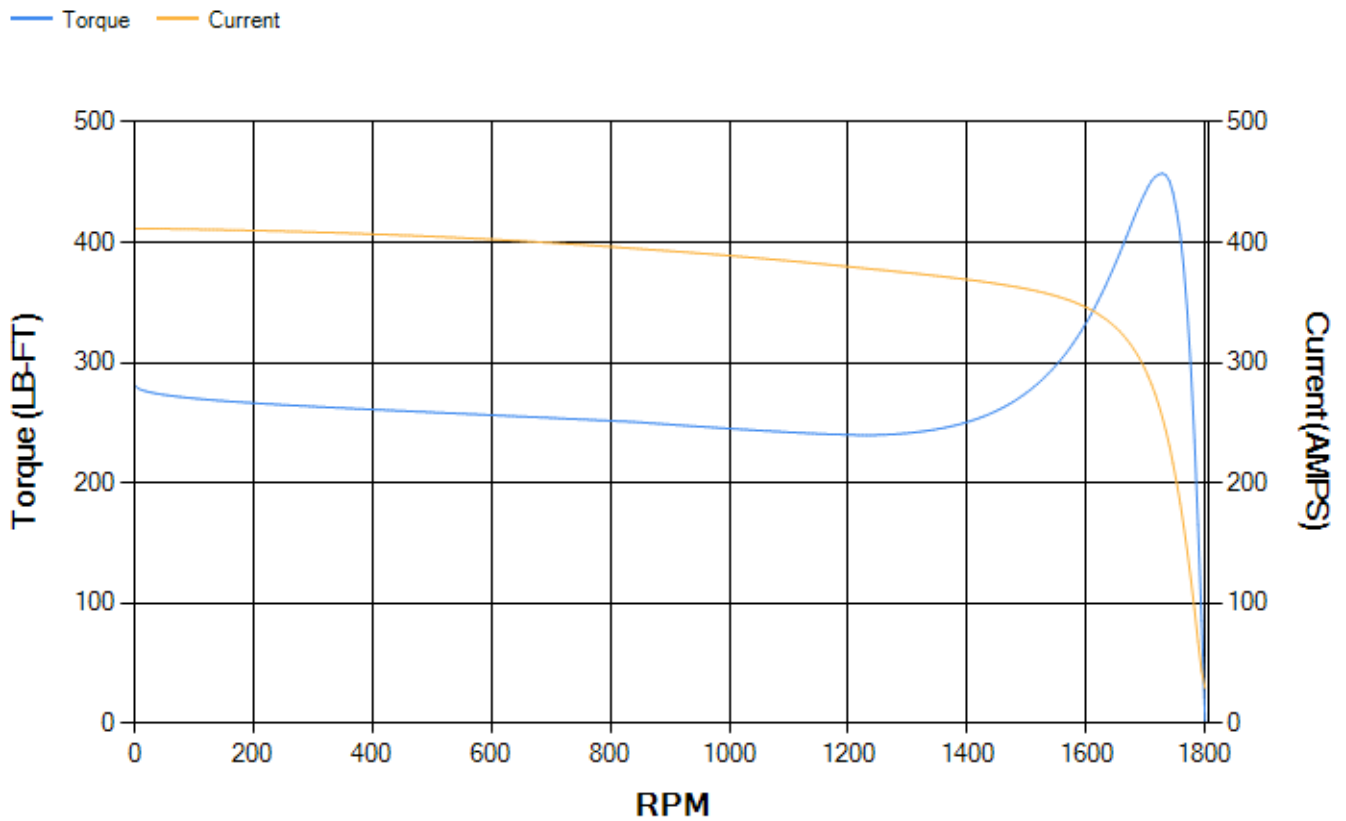
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.11	94.3	94.72	94.59	93.92	90.57	0.00
% PF	84.35	83.79	82.42	77.88	67.81	45.53	4.2
AMPS	88.43	81.73	71.75	57.17	44.09	34.04	29.19

<b>TORQ(FL)#FT</b>	176.57	<b>TORQ(LR)%FL</b>	159.38	<b>TORQ(BD)%FL</b>	258.33
<b>AMPS(LR)</b>	411.6	<b>PF AT START</b>	0.32		

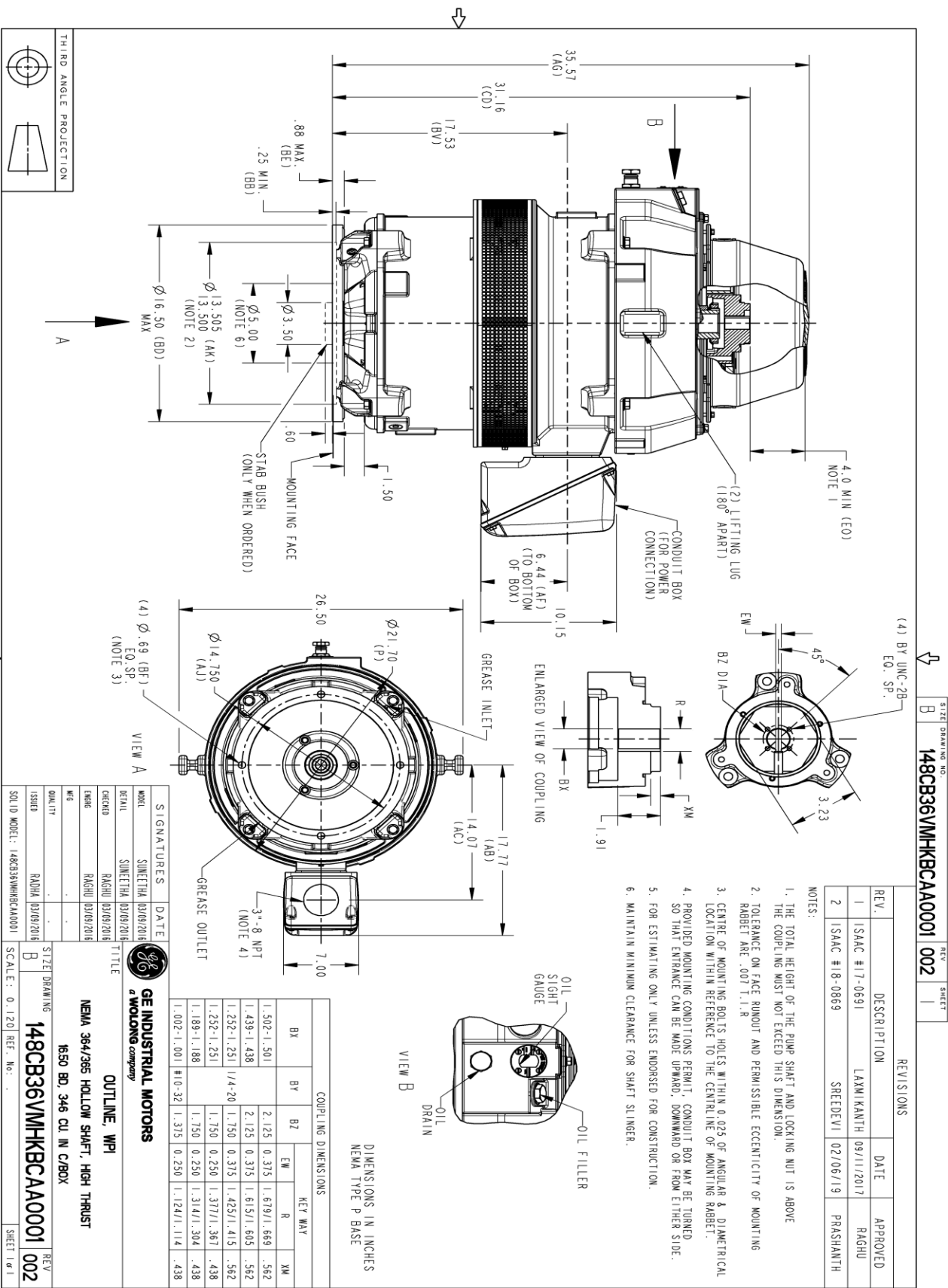
This motor is capable of two cold or one hot start with a maximum connected load inertia of 1618 Lb-Ft Sq (68.12 Kg-meter Sq) at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 45 seconds. Safe stall time at 100% voltage is 76 seconds cold, 56 seconds hot. Rotor inertia is 12.1 Lb-Ft Sq (0.51 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.695	<b>Short Circuit D-C:</b>	0.024
<b>Short Circuit A-C:</b>	0.041	<b>X/R Ratio:</b>	9.045
<b>Stator Slots:</b>	60	<b>Rotor Slots:</b>	50

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



Marks:



(4) BY IINC-2B EQ. SP.

148CB36VMHKBCAA0001 002

REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
1	ISAC #17-0691	09/11/2017	RAGHU
2	ISAC #18-0869	02/06/19	PRASHANTH

NOTES:

1. THE TOTAL HEIGHT OF THE PUMP SHAFT AND LOCKING NUT IS ABOVE THE COUPLING MUST NOT EXCEED THIS DIMENSION.
2. TOLERANCE ON FACE RUNOUT AND PERMISSIBLE ECCENTRICITY OF MOUNTING RABBIT ARE .001 1.1R
3. CENTRE OF MOUNTING BOLTS HOLES WITHIN 0.025 OF ANGULAR & DIAMETRICAL RABBIT ARE .001 1.1R
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						
BY	B2	EW	R	BY	B2	EW	XM			
1.502-1.501	2.125	0.315	1.619/1.669	.562	1.439-1.438	2.125	0.315	1.615/1.605	.562	
1.292-1.291	1/4-20	0.315	1.425/1.415	.562	1.252-1.251	1/4-20	0.315	1.377/1.367	.438	
1.189-1.188		1.750	0.250	1.314/1.304	.438	1.189-1.188	1.750	0.250	1.314/1.304	.438
1.002-1.001	#10-32	1.315	0.250	1.124/1.114	.438					



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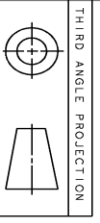
OUTLINE, WPI

NEMA 364/365 HOLLOW SHAFT, HIGH THRUST

6550 BD, 346 CL IN C/BOX

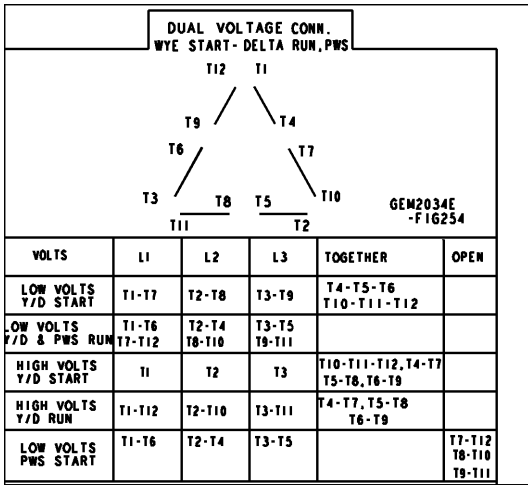
SIGNATURES	DATE	REV
DESIGN	SINETHA 03/09/2016	B
DETAIL	SINETHA 03/09/2016	B
CHECKED	RAGHU 03/09/2016	
ENGR	RAGHU 03/09/2016	
WGT		
QUALITY		
ISSUED	RADHA 03/09/2016	
SOLID MODEL	148CB36VMHKBCAA0001	

SCALE: 0.120 REF. No. 148CB36VMHKBCAA0001 002



Marks:

**Connection Diagram**  
**GEM2034E-FIG254**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E7255AA1	115E7259LJ1
Bearing	235A2509BE01	235A2523AD01
Slinger/Inproseal	235A2300FM1	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	
Fan Cover	161C1053AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	149C4429AA2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

