



**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>5KS445DAJ6087</b>
<b>Catalog Number:</b>	<b>V4483</b>
<b>Instruction Manual:</b>	GEI-M1045
<b>Connection Diagram:</b>	GEM2034E-FIG273
<b>Outline Drawing:</b>	148CB44VMJKLGAA0001

## 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>5KS445DAJ6087</b>	<b>Estimated Weight:</b>	2530 Lbs
<b>Outline Drawing:</b>	148CB44VMJKLGAA0001	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG273	<b>Enclosure:</b>	WPI
<b>Instruction Book:</b>	GEI-M1045	<b>Encl Construction:</b>	OPEN
<b>Design Code:</b>	44BD1343A	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	L445TP20	<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>	250HP 185KW	<b>Guaranteed Efficiency:</b>	95.0 %
<b>RPM:</b>	1775	<b>3/4 Load Efficiency:</b>	--
<b>Voltage:</b>	460/575	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	58.7
<b>Amps - FL:</b>	281.0/229.0	<b>Power Factor:</b>	87.5
<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

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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  
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  
AMB 0 TO 40 DEG C : ISO 32(MINERAL OR SYNTHETIC)  
AMB -15 TO 0 DEG C : ISO 32 SYNTHETIC  
SUITABLE FOR 200 HP, 380V, 50 HZ WITH  
274.0 AMPS AND 1480 RPM AT 1.00 SF



**Additional Information:**

4P, VERT HOLLOW SHAFT HIGH THRUST (2D)  
C/BOX 1260 CU IN - 2(4.00" NPT)  
C/B GRD PLATE  
OIL RESISTANT SLEEVING ON LEADS  
115V HTR LDS TO MAIN CONDUIT BOX  
BEARING LIFE 8760 HRS AT 22500 LB THRUST  
BEARING LIFE 9630 HRS AT 22000 LB THRUST  
CG:22.60 IN FROM P-BASE FACE, STAT DEF:= 0.004 IN  
RCF: 2923 CPM  
NON-REVERSE BALL CARRIER,  
BOLTED COUPLING, BX = 1.501 IN, EW= 0.375 IN  
FIRE PUMP MOTOR  
ESTIMATED SOUND PRESSURE 83 DBA AT 1 METER



**Performance Characteristics**

1st Winding 1st Connection

**Design: 44BD1343A**

**Marks:**

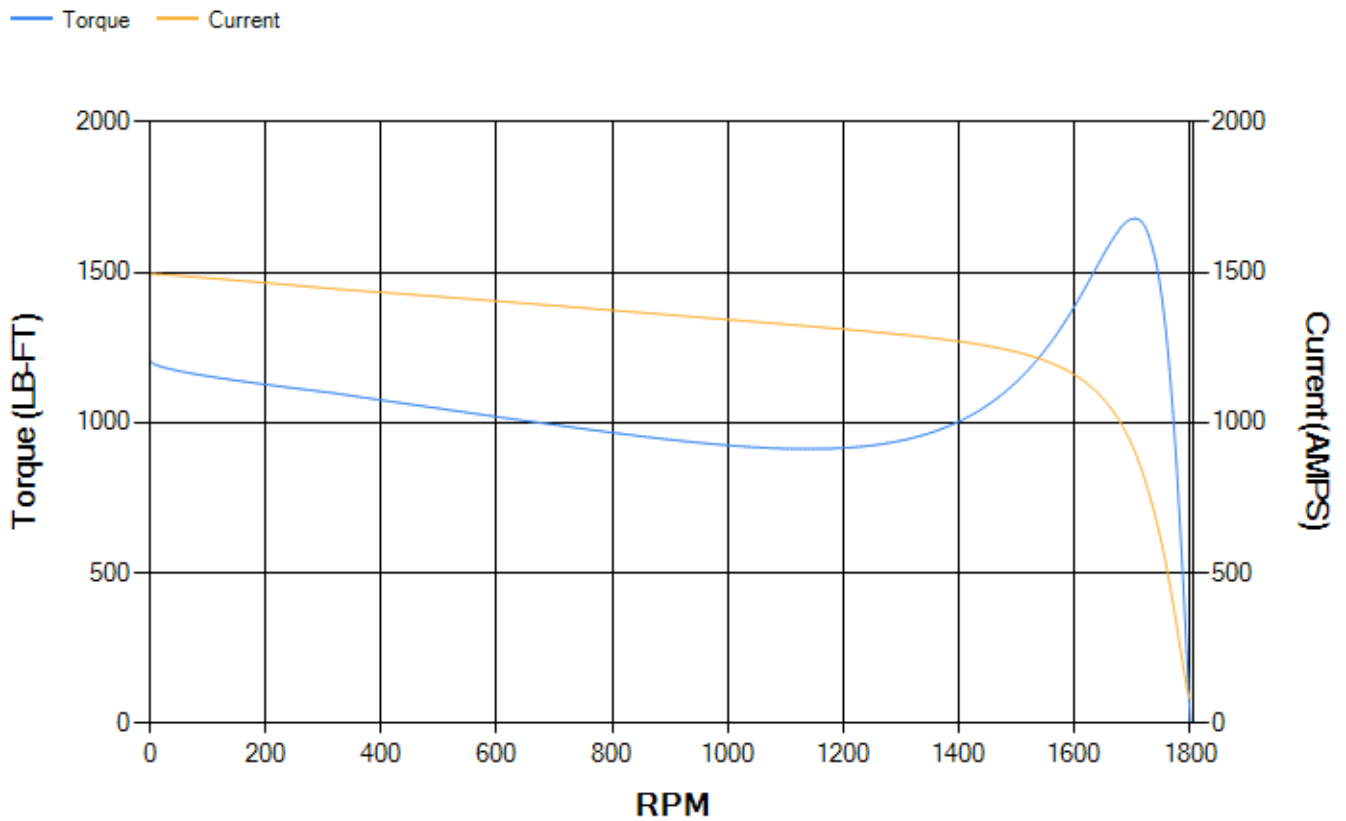
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.33	94.64	95.22	95.43	95.3	93.31	0.00
% PF	87.64	87.71	87.41	85.29	78.79	58.91	4.27
AMPS	353.78	324.16	281.1	215.6	155.81	106.41	81.82

<b>TORQ(FL)#FT</b>	738.43	<b>TORQ(LR)%FL</b>	163.57	<b>TORQ(BD)%FL</b>	227
<b>AMPS(LR)</b>	1496.2	<b>PF AT START</b>	0.33		

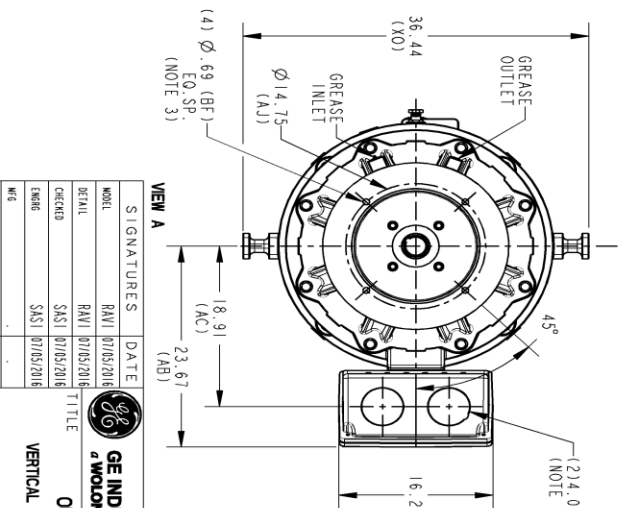
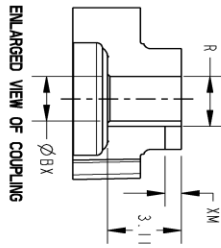
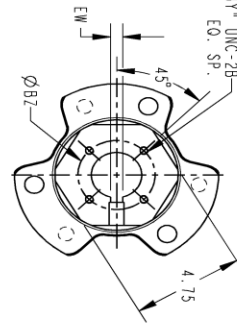
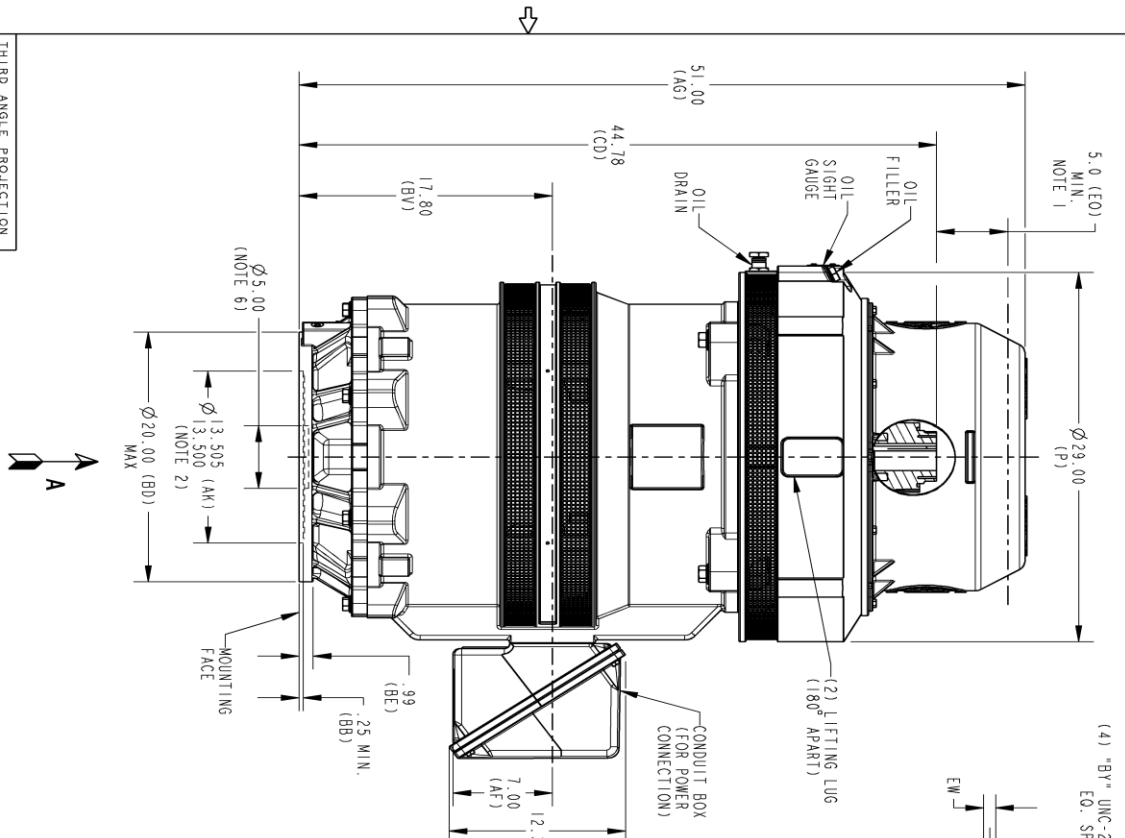
This motor is capable of two cold or one hot start with a maximum connected load inertia of 2277 Lb-Ft Sq (95.86 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 16 seconds. Safe stall time at 100% voltage is 40 seconds cold, 20 seconds hot. Rotor inertia is 67.77 Lb-Ft Sq (2.85 Kg-meter Sq).

<b>Open Circuit A-C:</b>	0.727	<b>Short Circuit D-C:</b>	0.029
<b>Short Circuit A-C:</b>	0.036	<b>X/R Ratio:</b>	11.031
<b>Stator Slots:</b>	72	<b>Rotor Slots:</b>	58

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



Marks:



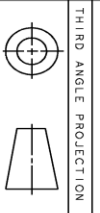
- NOTES:
1. THE TOTAL HEIGHT OF PUMP SHAFT AND LOCKING NUT ABOVE COUPLING MUST NOT EXCEED THIS DIMENSION.
  2. TOLERANCE ON FACE ROUNDOFF AND PERMISSIBLE ECCENTRICITY OF MOUNTING RABBET ARE .007 T. I. R
  3. CENTRE OF MOUNTING BOLTS HOLES WITHIN 0.025 OF ANGULAR & DIAMETRICAL LOCATION WITHIN REFERENCE 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			
BX	BY	BZ	EW	R	XM
1.501	1/4-20	2.125	.315	1.669	.562
1.688	1/4-20	2.500	.315	1.859	.562
1.751	1/4-20	2.500	.315	1.922	.562
1.813	1/4-20	2.500	.500	2.033	.688
1.938	1/4-20	2.500	.500	2.160	.688
2.001	3/8-16	3.250	.500	2.223	.688
2.063	3/8-16	3.250	.500	2.287	.688
2.126	3/8-16	3.250	.500	2.350	.688
2.188	3/8-16	3.250	.500	2.414	.688
2.251	3/8-16	3.250	.500	2.477	.688
2.316	3/8-16	3.250	.500	2.541	.688
2.438	3/8-16	3.250	.625	2.715	.812
2.501	3/8-16	3.250	.625	2.778	.812

SIZE DRAWING NO. **B** REV. **1** SHEET **1**  
**148CB44VMJKLGA0001 002**

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	ISSAC# 18-0869	12/28/18	PRASHANTH
2	ISSAC# 19-0280	03/20/19	ANIL



THIRD ANGLE PROJECTION

SIGNATURES		DATE
MODEL	RAVI	07/05/2016
DETAIL	RAVI	07/05/2016
CHECKED	SASI	07/05/2016
ENGR	SASI	07/05/2016
WEC		
QUALITY		
ISSUED		
SOLID MODEL:	148CB44VMJKLGA0001	

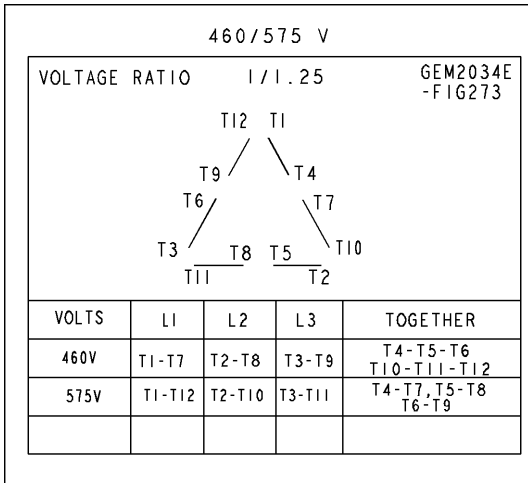


**GE INDUSTRIAL MOTORS**  
OUTLINE, NEMA WPI 444/445  
VERTICAL HOLLOW SHAFT, HIGH THRUST GR5 LOWER  
200 BD, 1260 CL IN C/BOX

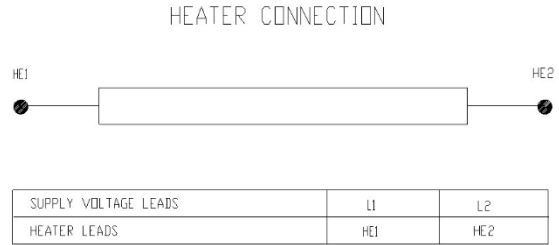
SCALE: 0.120 REF. NO.:  
SHEET DRAWING **148CB44VMJKLGA0001 002**  
SHEET 1 OF 1

**Marks:**

**Connection Diagram**  
**GEM2034E-FIG273**



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



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E7661AA1	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	179B9058G03

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

