

# Product Information Packet

March 30, 2017

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

<b>Model Number:</b>	<b>5KS445XAJ5408A</b>
<b>Catalog Number:</b>	<b>V4827</b>
<b>Instruction Manual:</b>	GEK-95351
<b>Connection Diagram:</b>	GEM2034E-FIG7
<b>Outline Drawing:</b>	148CB44INHRCCLA0001

<b>Accessory Connection Diagrams</b>			
<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>5KS445XAJ5408A</b>	<b>Estimated Weight:</b>	2125 Lbs
<b>Outline Drawing:</b>	148CB44INHRCCLA0001	<b>Time Rating:</b>	CONT
<b>Connection Diagram:</b>	GEM2034E-FIG7	<b>Enclosure:</b>	TEFC
<b>Instruction Book:</b>	GEK-95351	<b>Encl Construction:</b>	841
<b>Design Code:</b>	44BD0131AA	<b>Ambient Max(°C):</b>	40
<b>Type:</b>	KS	<b>Alt Ambient Max(°C):</b>	--
<b>Frame:</b>	L445VP16	<b>Insulation Class:</b>	H
<b>Phases:</b>	3	<b>NEMA Design:</b>	B
<b>Poles:</b>	2	<b>Nominal Efficiency:</b>	95.0 %
<b>Output Power:</b>	150HP 111KW	<b>Guaranteed Efficiency:</b>	94.1
<b>RPM:</b>	3580	<b>3/4 Load Efficiency:</b>	94.1
<b>Voltage:</b>	460	<b>KVA Code:</b>	G
<b>Hertz:</b>	60	<b>Max KVAR:</b>	33.9
<b>Amps - FL:</b>	168.0	<b>Power Factor:</b>	89.0
<b>Service Factor:</b>	1.15	<b>Bearing - DE:</b>	6217C4
<b>Alt Service Factor:</b>	--	<b>Bearing - ODE:</b>	235A2523AD01

**Enclosure is Totally Enclosed Fan-Cooled**

**Stamped Nameplate Notes:**

EXCEPTIONS TO IEEE-STD-841-2009:  
ALUMINIUM FAN BACK PLATE  
VERTICAL 841  
DE BRG 85RU02M00, ODE BRG 100BT02MD00  
INVERTER DUTY PER NEMA MG1 PART 31  
ALTERNATE RATING FOR PWM CONTROL:1.0SF 40C AMBIENT  
VAR TORQUE RANGE 0-60 HZ  
GE SELF DECLARED CLASS I DIV 2 MOTOR  
MAX EXPOSED INTERNAL AND EXTERNAL SURFACE  
TEMPERATURES UNDER USUAL SERVICE CONDITIONS  
AT 1.00 S.F. DO NOT EXCEED 200 DEG C  
API 610 12TH EDITION SHAFT DIMENSIONS

**Additional Information:**

2 POLE, VERT SOLID SHAFT HIGH THRUST (2D)  
PAINTED FRAME ID & SHAFT,  
FAN COVER INSIDE & ODE E/S OUTSIDE  
700 CU IN - 3.00" NPT  
BEARING LIFE 8760 HRS AT 8298 LB THRUST  
BEARING LIFE 26280 HRS AT 5501 LB THRUST  
INPRO SEAL LOWER END  
OIL RESISTANT SLEEVING ON LEADS  
ROUTINE TEST REPORT AND 5 POINT VIBRATION TEST  
REPORT INCLUDED IN C/B  
COPPER WASHER UNDER HEADS OF BEARING CAP BOLTS,  
APPLY TITE-SEAL (A50CD427A) ON BEARING CAP SCREWS,  
RABBETS AND PLUG THREADS.

STAINLESS STEEL T-DRAINS  
FRAME GROUND PAD  
ACTUAL EFFICIENCY = XX.X%  
RCF: XXXX CPM AT C/BOX SIDE, XXXX CPM AT  
90 DEG FROM C/ BOX SIDE  
CG: XX.XX IN FROM P-BASE FACE

**Performance Characteristics**

1st Winding 1st Connection

**Design: 44BD0131AA**

**Marks:**

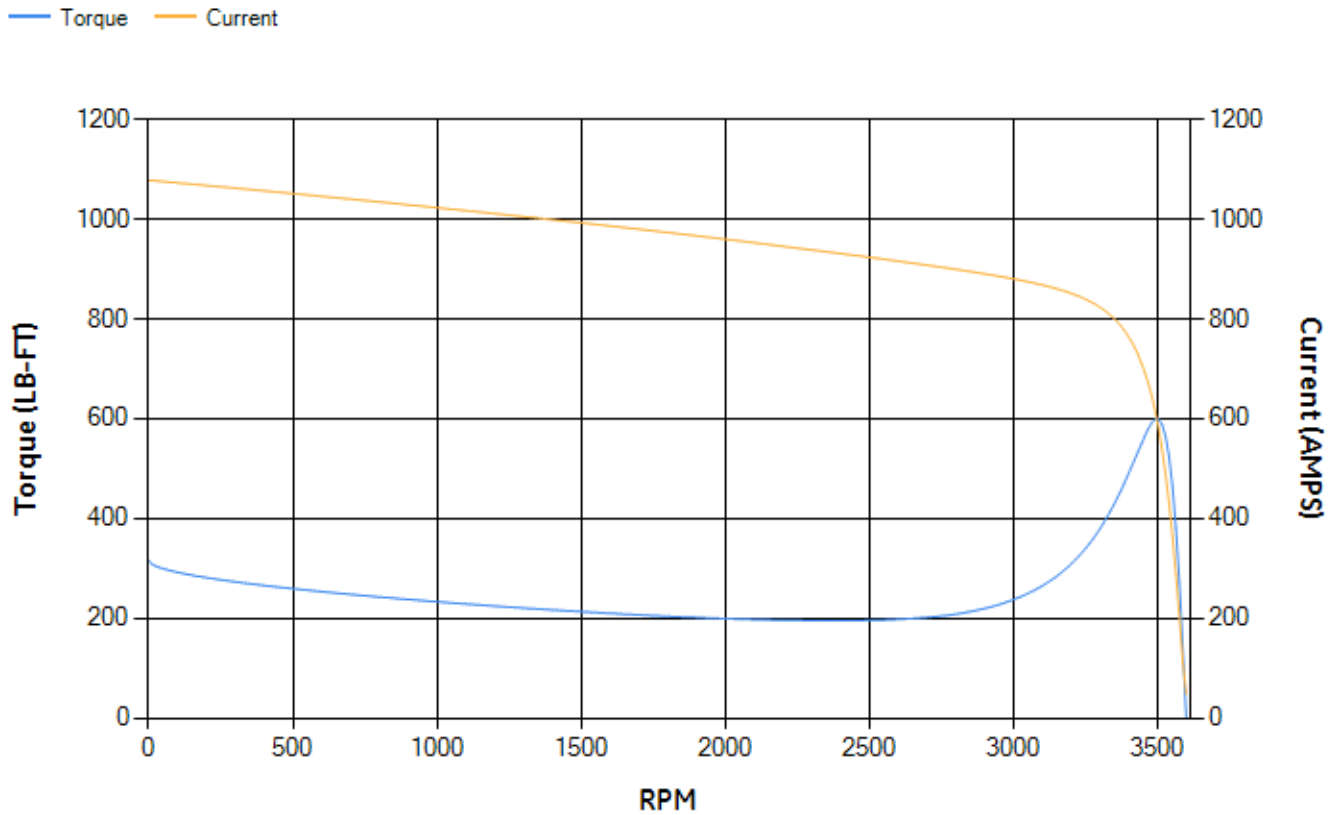
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.24	94.32	94.56	94.07	92.84	88.29	0.00
% PF	89.5	89.45	89.03	86.91	80.86	62.48	9.06
AMPS	208.05	191.35	166.76	128.79	93.51	63.62	47.28

<b>TORQ(FL)#FT</b>	220.1	<b>TORQ(LR)%FL</b>	143.47	<b>TORQ(BD)%FL</b>	272.52
<b>AMPS(LR)</b>	1078	<b>PF AT START</b>	0.2		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 393 Lb-Ft Sq (16.55 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 27 seconds. Safe stall time at 100% voltage is 66 seconds cold, 33 seconds hot. Rotor inertia is 24.28 Lb-Ft Sq (1.02 Kg-meter Sq).

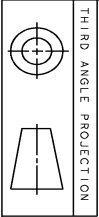
<b>Open Circuit A-C:</b>	1.51	<b>Short Circuit D-C:</b>	0.036
<b>Short Circuit A-C:</b>	0.07	<b>X/R Ratio:</b>	13.644
<b>Stator Slots:</b>	48	<b>Rotor Slots:</b>	38

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

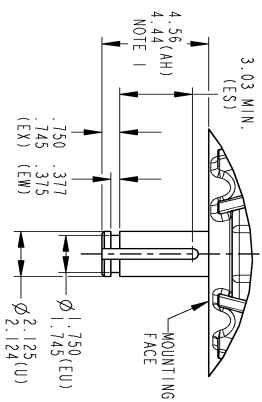
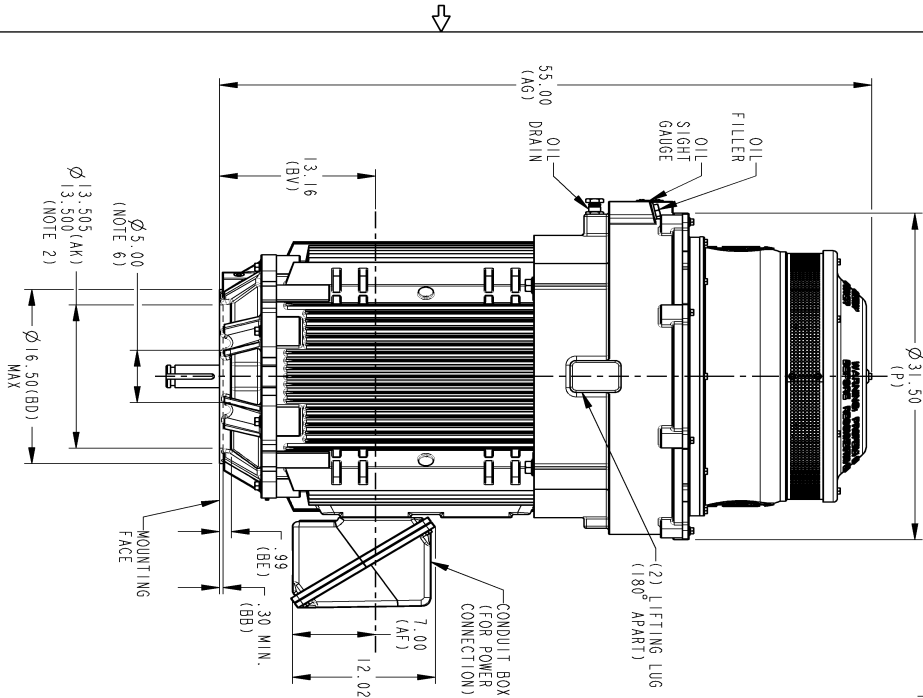


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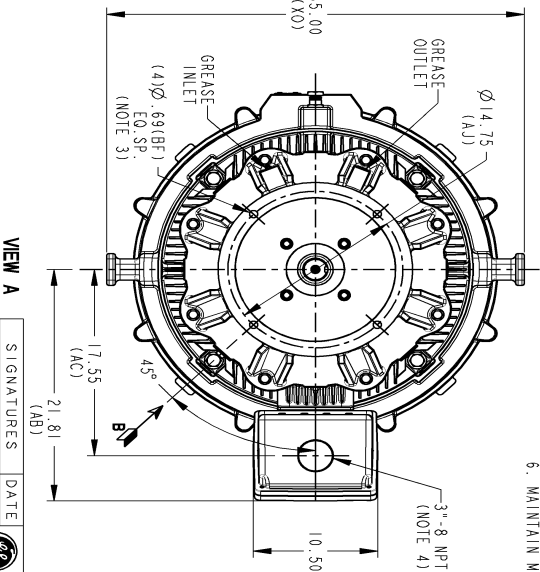
SOLID MODEL: 148CB441NHRCLA0001



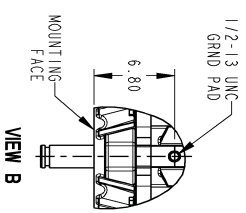
THIRD ANGLE PROJECTION



ENLARGED VIEW OF SHAFT EXTENSION  
VERTICAL VIEW OF SOLID SHAFT



VIEW A



VIEW B

NOTES:

1. "AH" DIMENSION IS MEASURED WITH MOTOR IN VERTICAL POSITION SHAFT DOWN.
2. MEETS API 610 12TH EDITION SHAFT DIMENSIONS.
3. CENTER OF MOUNTING BOLTS HOLES WITHIN .025 OF ANGULAR & DIAMETRICAL LOCATION WITHIN REFERENCE TO THE CENTERLINE 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.

REV.	DESCRIPTION	DATE	APPROVED

SIZE DRAWING NO. 148CB441NHRCLA0001 000

VIEW A

SIGNATURES	DATE	REV	SHEET

MODEL	IND 1A	11/29/16		GE POWER CONVERSION
DETAIL	IND 1A	11/29/16		
CHGCD	SAS1	11/29/16	GE CLASSIFICATION: CLASS 11.06 INTERNAL CRITICAL	
TITLE	444/445 OUTLINE, NEMA TEC 84T			
ENGR	SAS1	11/29/16	2P SOLID SHAFT HIGH THRUST GRS LOWER	
WGT	165 BD, 700 CU IN C/BOX GRAND PAD, INPRO SEAL			
QUALITY	SIZE DRAWING			
ISSUED	148CB441NHRCLA0001 000			
DWG EXPORT TAG: NO LICENSE REQUIRED		SCALE: 0.100	REF. No.:	SHEET 1 of 1

Marks:

**Connection Diagram**  
**GEM2034E-FIG7**



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E8660AA1	115E8671LA1
Bearing	235A2522AJ04	235A2523AD01
Slinger/Inproseal	235A4575GS4	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	153B1886G01
Fan Cover	128D6847AA1

Conduit & Accessories Box Assembly	
Part Description	Part#
Conduit Box	118D4408AD2

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	