

Product Information Packet

April 28, 2017

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

Model Number:	5KS445XAJ6708A
Catalog Number:	V4814
Instruction Manual:	GEK-95351
Connection Diagram:	GEM2034E-FIG7
Outline Drawing:	148CB44IPHRCCLA0001

Accessory Connection Diagrams			
Bearing Thermocouple:	None	Heater:	None
RTD:	None	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	None		

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Marks:

MODEL NUMBER:	5KS445XAJ6708A	Estimated Weight:	1970 Lbs
Outline Drawing:	148CB44IPHRCCLA0001	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG7	Enclosure:	TEFC
Instruction Book:	GEK-95351	Encl Construction:	841
Design Code:	44BD1157AB	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	L445LP16	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	95.8 %
Output Power:	150HP 111KW	Guaranteed Efficiency:	95.4
RPM:	1780	3/4 Load Efficiency:	95.5
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	42.4
Amps - FL:	170.0	Power Factor:	86.5
Service Factor:	1.15	Bearing - DE:	6217C3
Alt Service Factor:	--	Bearing - ODE:	235A2523AD01

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

IEEE-STD-841-2009
 VERTICAL 841
 DE BRG 85BC02J30, 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:

4 POLE, VERT SOLID SHAFT INLINE (1U1D)
 PAINTED FRAME ID & SHAFT,
 FAN COVER INSIDE & ODE E/S OUTSIDE
 700 CU IN - 3.00" NPT
 BEARING LIFE 8760 HRS AT 4024 LB THRUST
 BEARING LIFE 26280 HRS AT 2530 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-DRAIN.

FRAME GROUND PAD

ACTUAL EFFICIENCY =95.4%

RCF: XXXX CPM AT C/BOX SIDE, XXXX CPM AT
90 DEG FROM C/ BOX SIDE

Performance Characteristics

1st Winding 1st Connection

Design: 44BD1157AB

Marks:

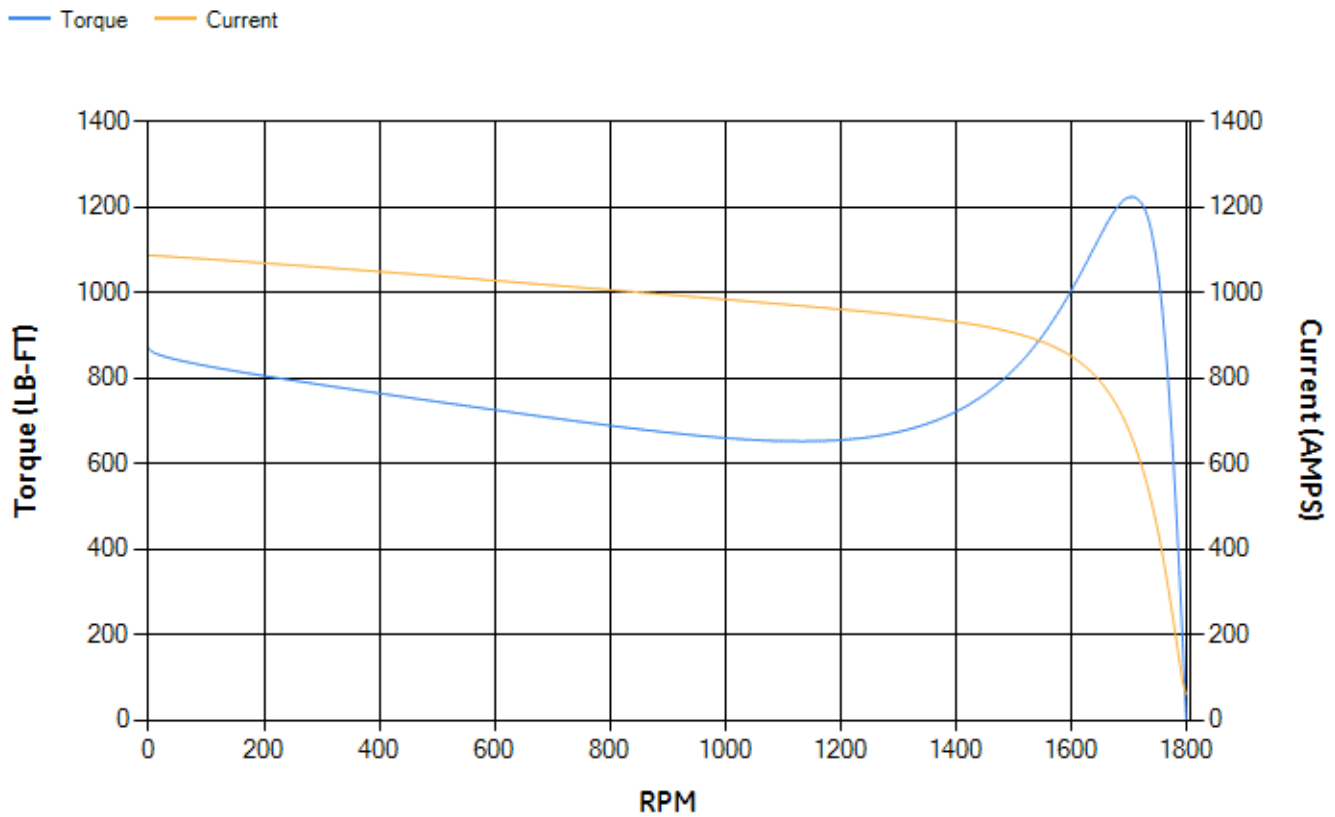
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.61	94.74	95.08	94.8	93.97	90.42	0.00
% PF	87.66	87.32	86.37	82.96	74.64	53.37	5.63
AMPS	211.6	195.16	170.98	133.89	100.07	72.74	59.15

TORQ(FL)#FT	441.87	TORQ(LR)%FL	196.71	TORQ(BD)%FL	276.47
AMPS(LR)	1086.94	PF AT START	0.33		

This motor is capable of two cold or one hot start with a maximum connected load inertia of 2318 Lb-Ft Sq (97.59 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 22 seconds. Safe stall time at 100% voltage is 53 seconds cold, 27 seconds hot. Rotor inertia is 63.32 Lb-Ft Sq (2.67 Kg-meter Sq).

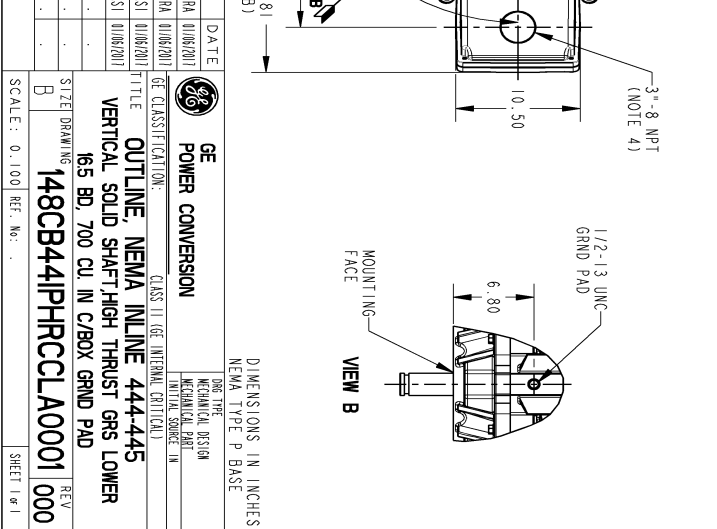
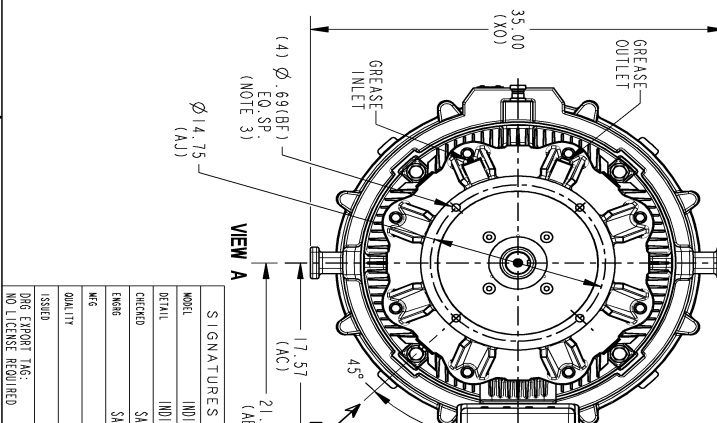
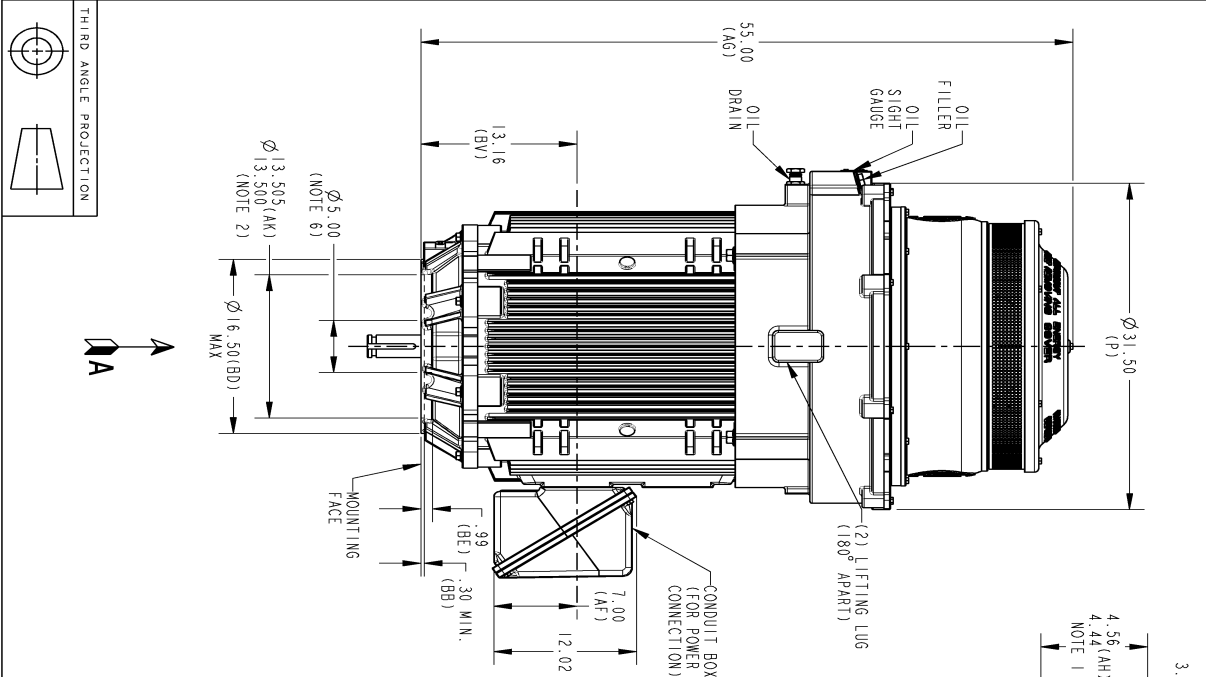
Open Circuit A-C:	0.751	Short Circuit D-C:	0.03
Short Circuit A-C:	0.037	X/R Ratio:	11.418
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)



Marks:

SOLID MODEL: 148CB441PHRCCLA0001



ENLARGED VIEW OF SHAFT EXTENSION
VERTICAL VIEW OF SOLID SHAFT

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 RABBIT.
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.

NOTES:

1. "AH" DIMENSION IS MEASURED WITH MOTOR IN VERTICAL POSITION SHAFT DOWN.
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SIZE DRAWING NO. B 148CB441PHRCCLA0001 000

REV.	DESCRIPTION	DATE	APPROVED

SIGNATURES	DATE	GE
DESIGNED: SASI 01/06/2017	01/06/2017	MECHANICAL DESIGN
CHECKED: SASI 01/06/2017	01/06/2017	MECHANICAL DESIGN
ISSUED: .	.	MECHANICAL DESIGN
DWG EXPORT TAG: NO LICENSE REQUIRED		

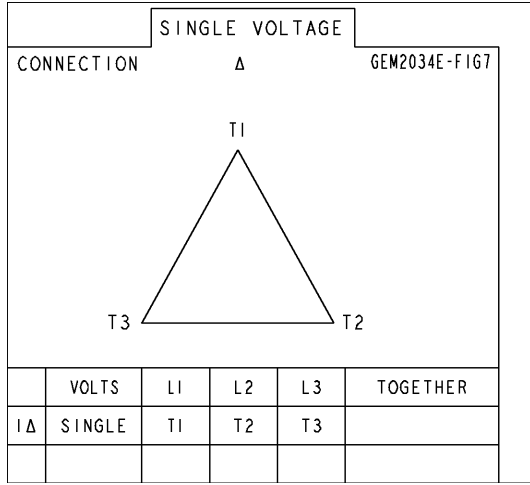
GE POWER CONVERSION
CLASS II, GE INTERNAL CATALOG
OUTLINE, NEMA INLINE 444-445
VERTICAL SOLID SHAFT/HIGH THRUST GRS LOWER
165 BD, 700 CU IN C/BOX GRND PAD
DIMENSIONS IN INCHES
NEMA TYPE P BASE

SCALE:	REV
0.100	B

SIZE DRAWING 148CB441PHRCCLA0001 000
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	235A2522AH01	235A2523AD01
Slinger/Inproseal	235A4575GS4	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	153B1886G06
Fan Cover	128D6847AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	

