

Product Information Packet

April 28, 2017

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

Model Number:	5KS445XAJ6408A
Catalog Number:	V4828
Instruction Manual:	GEK-95351
Connection Diagram:	GEM2034E-FIG7
Outline Drawing:	148CB44INHRCCLA0001

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:	5KS445XAJ6408A	Estimated Weight:	2195 Lbs
Outline Drawing:	148CB44INHRCCCLA0001	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG7	Enclosure:	TEFC
Instruction Book:	GEK-95351	Encl Construction:	841
Design Code:	44BD1157AA	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	L445VP16	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:	95.6
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:	235A2536AB01

Enclosure is Totally Enclosed Fan-Cooled

Stamped Nameplate Notes:

IEEE-STD-841-2009
 VERTICAL 841
 DE BRG 85BC02J30, ODE BRG 130BT03MD00
 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 HIGH THRUST (1D)
 PAINTED FRAME ID & SHAFT,
 FAN COVER INSIDE & ODE E/S OUTSIDE
 700 CU IN - 3.00" NPT
 BEARING LIFE 8760 HRS AT 12856 LB THRUST
 BEARING LIFE 26280 HRS AT 9529 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 =
RCF: XXXX CPM AT C/BOX SIDE, XXXX CPM AT
90 DEG FROM C/ BOX SIDE

Performance Characteristics

1st Winding 1st Connection

Design: 44BD1157AA

Marks:

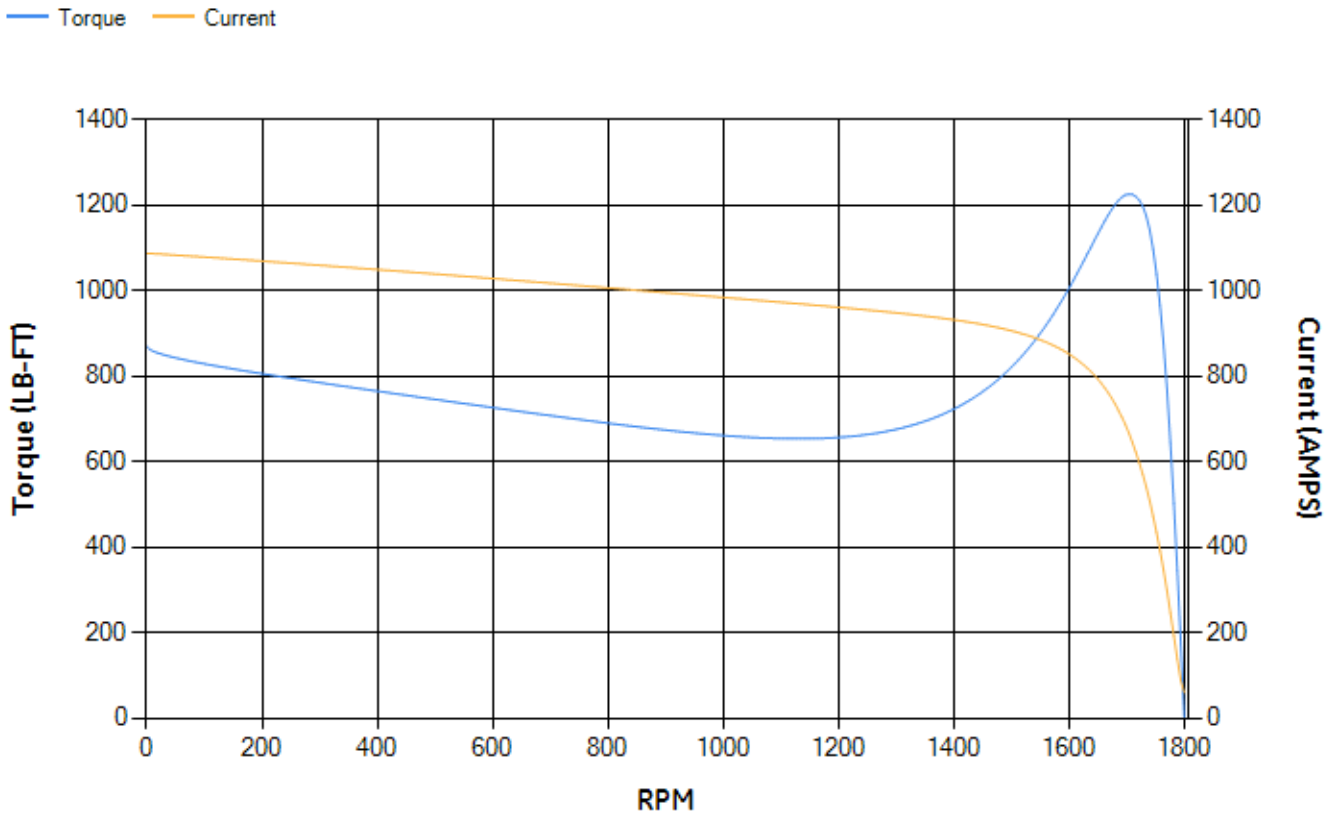
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.94	95.11	95.49	95.34	94.76	91.87	0.00
% PF	87.65	87.3	86.33	82.87	74.42	52.8	4.61
AMPS	210.88	194.46	170.31	133.27	99.53	72.36	59.15

TORQ(FL)#FT	441.84	TORQ(LR)%FL	196.73	TORQ(BD)%FL	276.88
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 2339 Lb-Ft Sq (98.47 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).

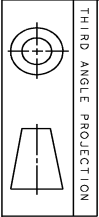
Open Circuit A-C:	0.753	Short Circuit D-C:	0.03
Short Circuit A-C:	0.037	X/R Ratio:	11.435
Stator Slots:	72	Rotor Slots:	58

Speed Torque Current Curve (First Connection, First Speed)

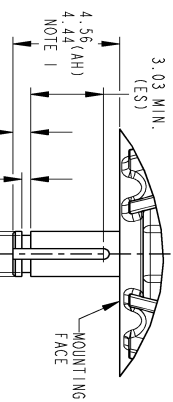
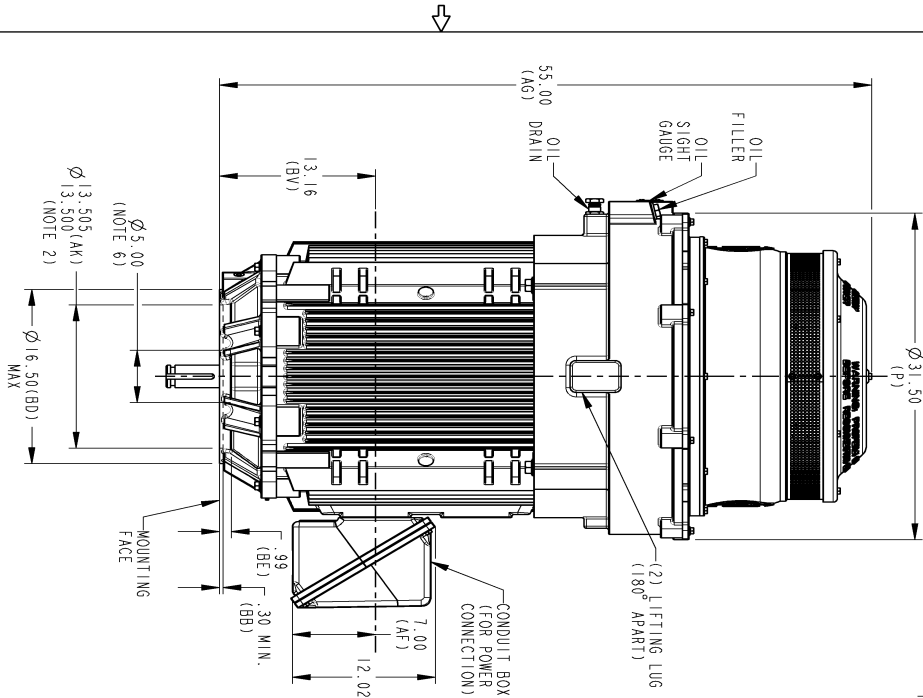


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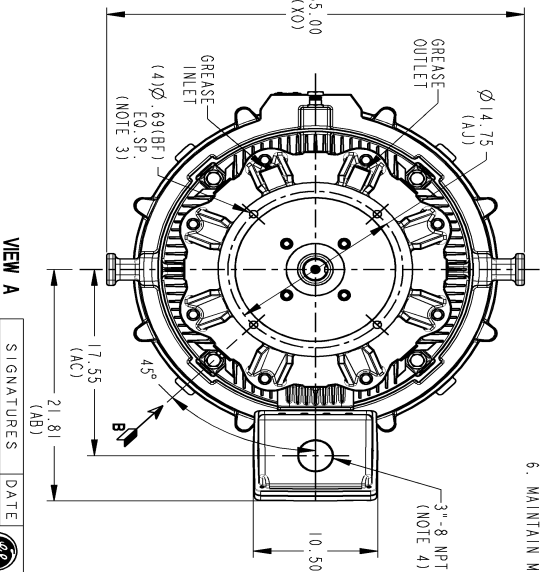
SOLID MODEL: 148CB441NHRCLA0001



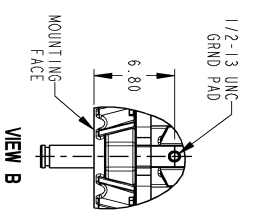
THIRD ANGLE PROJECTION



ENLARGED VIEW OF SHAFT EXTENSION
VERTICAL VIEW OF SOLID SHAFT



VIEW A



VIEW B

NOTES:

- *AH* DIMENSION IS MEASURED WITH MOTOR IN VERTICAL POSITION SHAFT DOWN.
- MEETS API 610 12TH EDITION SHAFT DIMENSIONS.
- CENTER OF MOUNTING BOLTS HOLES WITHIN .025 OF ANGULAR & DIAMETRICAL LOCATION WITHIN REFERENCE TO THE CENTERLINE OF MOUNTING RABBET.
- PROVIDED MOUNTING CONDITIONS PERMIT, CONDUIT BOX MAY BE TURNED SO THAT ENTRANCE CAN BE MADE UPWARD, DOWNWARD OR FROM EITHER SIDE.
- FOR ESTIMATING ONLY UNLESS ENDORSED FOR CONSTRUCTION.
- MAINTAIN MINIMUM CLEARANCE FOR SHAFT SLINGER.

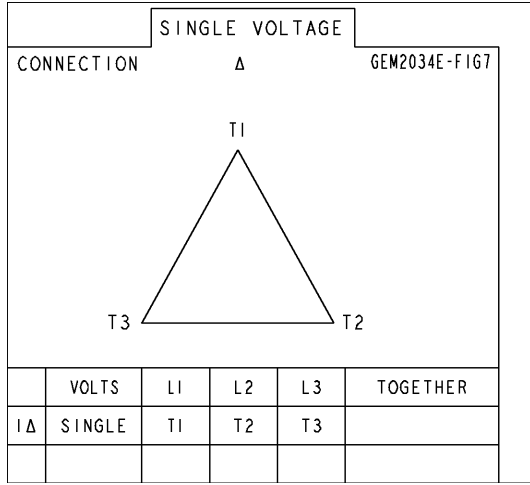
REVISIONS		
REV.	DESCRIPTION	DATE

SIZE DRAWING NO. **148CB441NHRCLA0001** 000

SIGNATURES	DATE	GE	DRG TITL
MODEL	IND RA	11/29/16	MECHANICAL DESIGN
DETAIL	IND RA	11/29/16	
CLASSIFICATION:	CLASS II, GE, INTERNAL, CRITICAL		
TITLE	OUTLINE, NEMA TEC 841		
ORDERED	SAS1	11/29/16	2P SOLID SHAFT HIGH THRUST GRS LOWER
ENGR	SAS1	11/29/16	
QC			165 BD, 700 CU IN C/BOX GRAND PAD, INPRO SEAL
ISSUED			
DRG 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	115E8670LA1
Bearing	235A2522AJ01	235A2536AB01
Slinger/Inproseal	235A4575GS4	

Fan & Fan Cover Assembly	
Part Description	Part#
Fan	159C7100AA2
Fan Cover	128D6847AA1

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

Mechanical Accessories	
Part Description	Part#
Brake	
Tachometer	