



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.

Model Number:	5KS445DAJ6086
Catalog Number:	V4454
Instruction Manual:	GEI-M1045
Connection Diagram:	GEM2034E-FIG19
Outline Drawing:	148CB44VMKKLGA0001

Accessory Connection Diagrams

Bearing Thermocouple:	None	Heater:	3027JE-1C
RTD:	None	Thermistor:	None
Thermostat:	None	Winding Thermocouple:	None
Bearing RTD:	None		

Table of Contents

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

Marks:

MODEL NUMBER:	5KS445DAJ6086	Estimated Weight:	2460 Lbs
Outline Drawing:	148CB44VMKKLGA0001	Time Rating:	CONT
Connection Diagram:	GEM2034E-FIG19	Enclosure:	WPI
Instruction Book:	GEI-M1045	Encl Construction:	OPEN
Design Code:	44BD1168AB	Ambient Max(°C):	40
Type:	KS	Alt Ambient Max(°C):	--
Frame:	L445TP24	Insulation Class:	H
Phases:	3	NEMA Design:	B
Poles:	4	Nominal Efficiency:	95.8 %
Output Power:	250HP 185KW	Guaranteed Efficiency:	95.0 %
RPM:	1780	3/4 Load Efficiency:	--
Voltage:	460	KVA Code:	G
Hertz:	60	Max KVAR:	83.1
Amps - FL:	294.0	Power Factor:	83.5
Service Factor:	1.15	Bearing - DE:	6217C3
Alt Service Factor:	--	Bearing - ODE:	235A2536AB01

Enclosure is Weather Protected One

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 200HP 400V 50HZ AT 280A



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 22551 LB THRUST
BEARING LIFE 9659 HRS AT 22000 LB THRUST
PART WINDING START
CG:22.60 IN FROM P-BASE FACE, STAT DEF:= 0.003 IN
RCF: 3391 CPM
NON-REVERSE BALL CARRIER,
BOLTED COUPLING, BX = 1.688 IN, EW= 0.375 IN
FIRE PUMP MOTOR



Performance Characteristics

1st Winding 1st Connection

Design: 44BD1168AB

Marks:

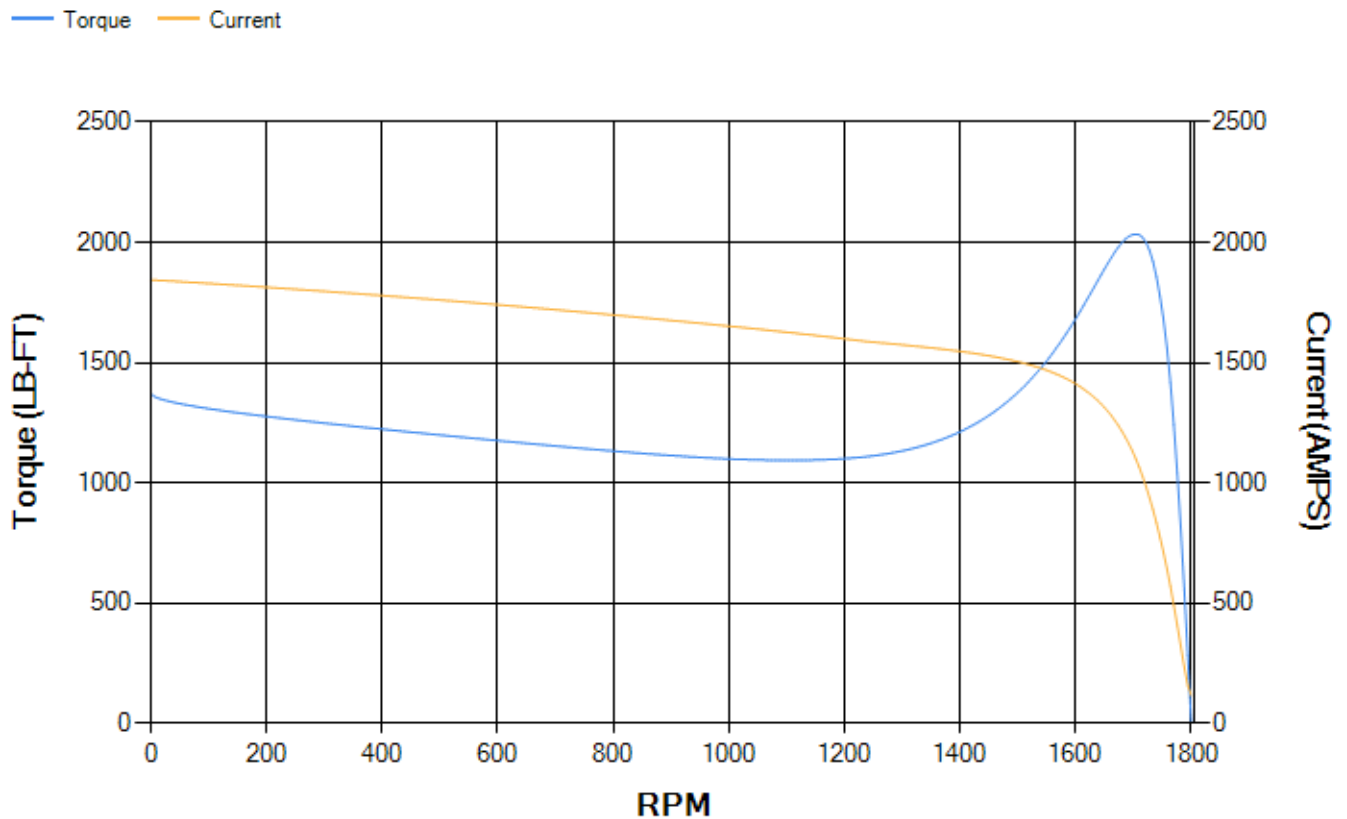
LOAD %	125.0	115.0	100.0	75.0	50.0	25.0	0.0
% EFF	94.83	95.02	95.43	95.34	94.83	92.07	0.00
% PF	85.57	85.05	83.74	79.39	69.54	46.99	3.76
AMPS	360.41	332.98	292.8	231.84	177.41	135.21	115.92

TORQ(FL)#FT	736.65	TORQ(LR)%FL	186.37	TORQ(BD)%FL	275.63
AMPS(LR)	1844.1	PF AT START	0.32		

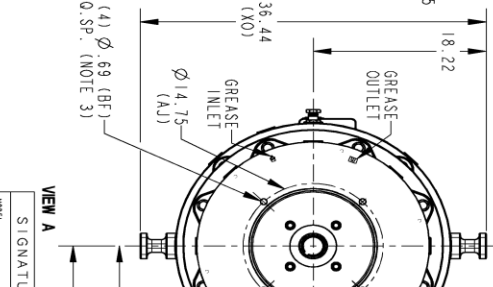
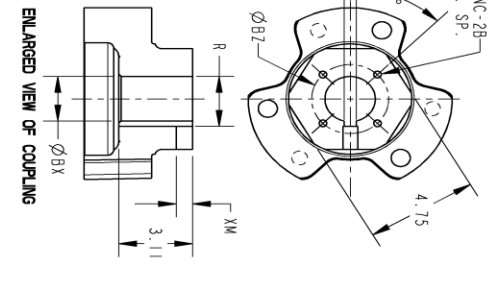
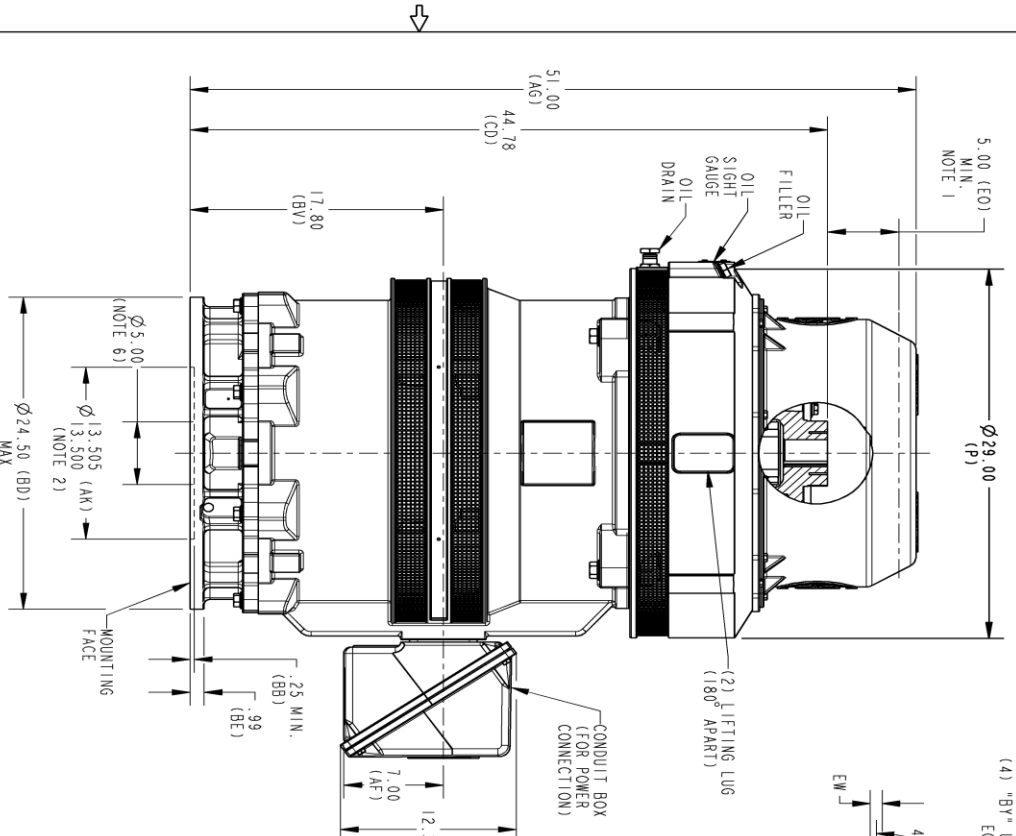
This motor is capable of two cold or one hot start with a maximum connected load inertia of 2498 Lb-Ft Sq (105.17 Kg-meter Sq)at 100% voltage, where the load torque varies with the square of the speed. Acceleration time with maximum inertia and the above load type is 15 seconds. Safe stall time at 100% voltage is 35 seconds cold, 18 seconds hot. Rotor inertia is 61 Lb-Ft Sq (2.57 Kg-meter Sq).

Open Circuit A-C:	0.626	Short Circuit D-C:	0.029
Short Circuit A-C:	0.036	X/R Ratio:	10.914
Stator Slots:	72	Rotor Slots:	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.1.R
 3. CENTRE OF MOUNTING BOLTS 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

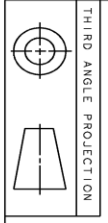
COUPLING DIMENSIONS				KEY WAY			
BX	BY	BZ	EW	R	XM		
1.501	1/4-20	2.125	.315	1.559	.562		
1.588	1/4-20	2.500	.315	1.559	.562		
1.751	1/4-20	2.500	.315	1.922	.562		
1.813	1/4-20	2.500	.500	2.033	.688		
1.938	1/4-20	2.500	.500	2.160	.688		
2.001	3/8-16	3.250	.500	2.223	.688		
2.063	3/8-16	3.250	.500	2.287	.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	2.550	.688		
2.438	3/8-16	3.250	.625	2.715	.812		
2.501	3/8-16	3.250	.625	2.777	.812		

SIGNATURES

SIGNATURES	DATE
DIRECTOR	11/10/21
DESIGNER	11/10/21
ENGINEER	11/10/21
QUALITY	11/10/21
ISSUED	11/10/21
SOLID MODEL	148CB44VMKLGAA0001

GE INDUSTRIAL MOTORS
OUTLINE, NEMA WP1 444-445
VERTICAL HOLLOW SHAFT-HIGH THRUST GRS LOWER
245 BD 1260 OL IN C/BOX.

SCALE: 0.120 REF. No.: 148CB44VMKLGAA0001



PROPRIETARY INFORMATION
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REVISIONS

REV.	DESCRIPTION	DATE	APPROVED

SIZE DRAWING NO. B 148CB44VMKLGAA0001 000 REV. SHEET 1

Marks:

Connection Diagram
GEM2034E-FIG19



Heater Connection
3027JE-1C



End shield Assembly		
Part Description	DE Side Part#	ODE Side Part#
End Shield	115E7662AA1	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	

