

General Electric 250Hp Motor

Detailed Specifications for Furnishing and Delivery of

One (1) GE Motor – 250HP Model #5KAF509SN350 or current equivalent GE Motor with identical specs and dimensions

I. General

This bid is for the purchase of One (1) GE Motor – 250HP Model #5KAF509SN350 or current equivalent GE Motor with identical specs and dimensions as listed below and within the attached documentation.

TYPE	KAF	Model No	5KAF509SN350
HP	250	Frame	509LL
Phase	3	RPM-FL	1190
Hz	60	Volts	460
Timer Rating	CONT	Service Factor	1.15
Insul Class	F	AMP-Max (C)	40
Code	G	NEMA Design	B
Nema Eff Nom	95.4	Amps-FL	275
Max KVAR	47.5	NEMA EFF Guar	95
Bearing - DE	6318ZC3	Power Factor	89
Design Number	50DS3333D	Bearing -ODE	6315ZC3
		Enclosure is	Severe Duty Cast Iron

List of attachments:

- Motor Characteristics
- Performance Characteristics
- Dimensional Drawing

All specified equipment must be "factory new" and not used, rebuilt or reconditioned.

Bid price should include freight delivered to the Elmira Water Board's Filter Plant at 1 Fountain Drive, Elmira, NY.

II. Exceptions

Installation will be at the discretion of the Elmira Water Board and is not to be included in the bid price.

Bids shall not include sales tax.

III. Contact

All bid inquires and site visits should be coordinated with:

Tim Hazlett

607-737-8847

thazlett@elmirawaterboard.org

MOTOR CHARACTERISTICS
AND
MEMO OF
DATA TRANSMITTAL

GENERAL ELECTRIC CO.
MOTOR TECHNOLOGY DEPARTMENT
C&I ENGINEERING
PO BOX 2205
FORT WAYNE IND 46802-2205

DATE 08-12-94

CUSTOMER: GOULDS PUMPS INC
MUNICIPAL BUSINESS UNIT
E GENESEE ST
BALDWINVILLE NY
13027

MARKS: GOULDS REF # M94061C04-C06
FINISHED WATER PUMPS
ELMIRA WATER TREATMENT
PO # 021481, JOB # 1129

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*****
CUST. ORDER NO. 60026                GE REQ. NO.        69604403
CUST. PART NO.  M94061C04-C06        GE JOB NO.         940809133
*****
ITEM NO.           1                MODEL NO.          5KAF509SN350
TYPE               KAF              FRAME              509LL
HP                 250              RPM-FL             1190
PHASE              3                VOLTS              460
HZ                 60              SERVICE FACTOR     1.15
TIME RATING        CONT             AMB-MAX (C)       40
INSUL CLASS        F                NEMA DESIGN        B
CODE               G                AMPS-FL            275
NEMA EFF NOM       95.4             NEMA EFF GUAR      95.0
MAX KVAR           47.5             POWER FACTOR       89
BEARING-DE         6318ZC3          BEARING-ODE        6315ZC3
DESIGN NUMBER      50DS3333D        ENCLOSURE IS       SEVERE DUTY CAST
                                                           IRON
*****
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ADDITIONAL MOTOR DATA:

GREASE RYKON PREM #2
STAMP NP136809 AS FOLLOWS:
SUITABLE FOR VAR TORQ PWM OPERATION
880-1190 RPM; 340-460 V; 44-60 HZ; 100-250
HP
6P-RANDOM WD-PAR FAN

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*****
235A2514AG01                DRIVE END BEARING RENEWAL PART
235A2513AG01                OPPOSITE DRIVE END BEARING RENEWAL PART
*****
50DP2200G001L              OUTLINE
NP211179                   CONNECTION DIAGRAM
GEH-4962                    INSTALLATION & MAINTENANCE MANUAL
*****
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DISTRIBUTION INFORMATION:

DATA PAK TO CONNIE DIDOMENICO
DATA PAK TO JACK SCHWARTZ, 4-6

PREPARED BY ENGINEERING DATA UNIT
CONTACT: GLADYS ANDERSON @ 8*380-4829

08/12/94 13:43

PERFORMANCE CHARACTERISTICS FOR

MODEL: 5KAF509SN350 DESIGN NUMBER: 50DS3333D
 HP 250.00 VOLTS 460 FREQ 60

INDUCTION MOTOR TIME CONSTANTS:

OPEN CIRCUIT A-C = 1.318 SHORT CIRCUIT D-C = 0.028
 SHORT CIRCUIT A-C = 0.045 X/R RATIO 10.7 RADIANS

MOTOR IS CAPABLE OF 2 COLD OR 1 HOT STARTS WITH A MAXIMUM OF
 14612.1 LB-FT SQ OF CONNECTED LOAD INERTIA FAN LOAD AT 100% V.
 ACCELERATION TIME WITH MAXIMUM INERTIA IS 40.3 SEC.
 MAXIMUM NUMBER OF REPEAT STARTS PER HOUR WITH REDUCED INERTIA IS 2744/LOAD
 LB-FT SQ NOT TO EXCEED 4.2 PER HR INCLUDING 440 SEC REST BETWEEN STARTS.
 COLD STALL TIME 20 SEC - HOT STALL TIME 12 SEC
 ROTOR INERTIA 215.007 LB-FT SQ APPR MOTOR WEIGHT 3620 LBS

CONNECTION	D						
LOAD%	125	115	*100*	75	50	25	0
%EFF.	94.8	95.0	95.4	95.5	95.2	92.7	0.0
%P.F.	88.5	89.0	89.0	87.5	82.5	65.0	6.0
AMPS	348.6	319.1	275.0	210.1	149.1	96.9	67.0

TQ (FL) #FT 1103.13 TQ (LR) %FL 159.67 TQ (BD) %FL 235.07
 AMPS (LR) 1835.7 PF @ START 0.293
 TEMP RISE 88 DEG C @ 3300 FT MAXIMUM HEIGHT ABOVE SEA LEVEL

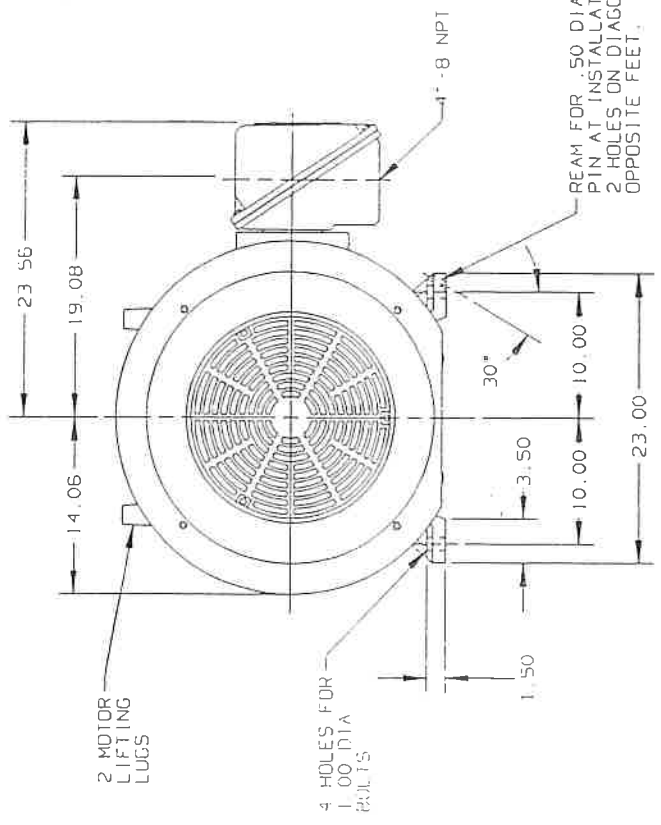
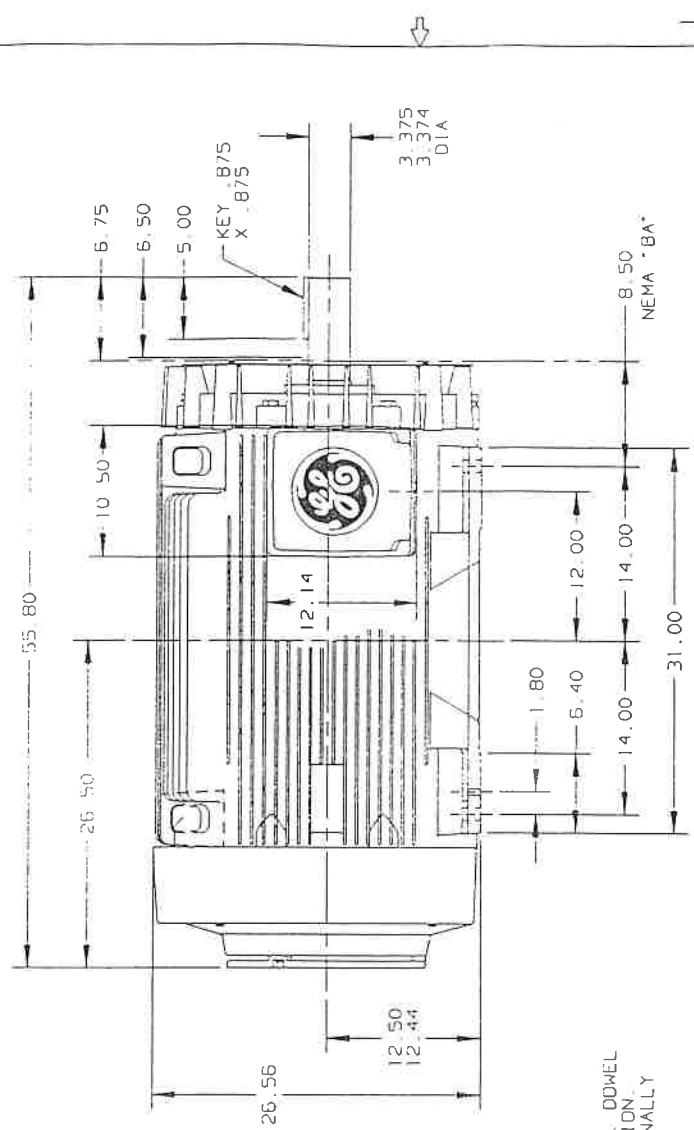
SPEED TORQUE CALCULATIONS

SPEED	TORQUE	AMPS	POWER FACTOR	
0.0	1761.	1835.677	0.293	STARTING TORQUE
48.0	1673.	1823.307	0.295	
96.0	1643.	1810.449	0.297	
144.0	1622.	1797.069	0.298	
192.0	1606.	1783.126	0.300	
240.0	1595.	1768.576	0.302	
288.0	1586.	1753.365	0.304	
336.0	1579.	1737.430	0.307	
384.0	1574.	1720.698	0.309	
432.0	1571.	1703.082	0.311	PULL UP TORQUE
480.0	1570.	1684.474	0.314	
528.0	1569.	1664.744	0.317	
576.0	1572.	1643.729	0.320	
624.0	1575.	1621.222	0.324	
672.0	1579.	1596.046	0.327	
720.0	1589.	1569.865	0.332	
768.0	1602.	1541.106	0.337	
816.0	1617.	1509.110	0.344	
864.0	1639.	1478.977	0.351	
912.0	1654.	1444.153	0.358	
960.0	1725.	1405.782	0.374	
1008.0	1842.	1359.559	0.401	
1056.0	2047.	1295.874	0.448	
1104.0	2386.	1180.973	0.540	
1149.9	2594.	911.890		BREAKDOWN TORQUE
1152.0	2579.	884.592	0.722	
1200.0	0.	67.000	0.060	NO LOAD TORQUE

THE VALUES SHOWN ARE CALCULATED DATA AND ARE
 NOT TO BE USED TO GUARANTEE PERFORMANCE!

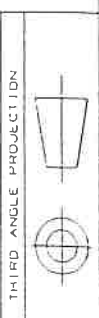
50DP2200G001L

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



		Fort Wayne, Indiana	
OUTLINE		509 - LL TEFC 700 CU. IN BOX	
SIZE	FSCM NO	DWG NO	SHEET 1 OF 1
B	50DP2200G001L	50DP2200G001L	50DP2200G001L
APPLICABLE PRACTICES	NONE	NONE	NONE
ISSUED	02/17/94	NONE	NONE
CHECKED	D.C.	NONE	NONE
DRAWN	D.C.	NONE	NONE
DATE	02/17/94	NONE	NONE
SIGNATURES	DATE	NONE	NONE

- NOTES
- CONDUIT BOX MAY BE TURNED SO THAT ENTRANCE CAN BE MADE UPWARD, DOWNWARD, OR EITHER SIDE.
 - CONFIGURATION SHOWN IS F-1 ASSEMBLY. F-2 ASSEMBLY HAS CONDUIT BOX LOCATED DIAGONALLY OPPOSITE.



ELMIRA WATER BOARD – GE Motor 250 HP

Bid Opening Date: Wednesday, April 24, 2019 @ 10:00 AM

The Bidder named below, for the consideration stated below, will deliver to the Elmira Water Board at the Elmira Water Board's address of 1 Fountain Drive, Elmira, New York, on or before Friday, July 5, 2019, one new General Electric 250 HP motor meeting the specifications as written in the bid specifications.

Contract Item: One (1) GE Motor – 250HP Model #5KAF509SN350 or current equivalent GE Motor meeting the specifications listed in bid packet.

Bids must be in sealed envelopes with the quoted material designated on the outside of the envelope. Bids must be delivered no later than Time and Date of Bid Opening to be considered. Standard Non-Collusive Bidding Certificate, Waiver or Immunity and Certificate of Bidder regarding Equal Employment Opportunity must be signed and submitted with the bid.

Send Completed Bid to: Elmira Water Board
261 W. Water Street
Elmira, NY 14901

The Board has the right to reject any or all bids and to re-advertise for new bids at its discretion.

ELMIRA WATER BOARD – GE 250 HP Motor

Bidder Name: _____
Address: _____

Phone: _____
Fax: _____
e-mail: _____

Bid Price in \$: _____

Bid Price in Words: _____