



Motors

Friday, June 08, 2018

Technical Data Center
PO Box 12118
Fort Wayne, IN 46862

Customer: MARCO ANTONIO RAMIREZ WO
BOULEVARD GARCIA MORALES
EL LLANO
HERMOSILLO, MX 00000

DataPack Document, Version: v18058660.01

| | | | |
|-------------------------------------|----------------------|----------------------------|---------------------|
| Inside Sales Representative: | PAUL. ALEXIS LUEVANO | Alternate Phone: | 260-439-2000 |
| Inside Sales Rep Phone: | +528181533507 | Customer Order: No: | PMTY-0511 |
| Model Number: | 5KS509DAE6068 | Customer Item No: | |
| Sales Order No: | 5200024380 | Customer Part No: | |
| Order Line No: | 2.1 | Outline Drawing: | 148CA59VMJKFGAA0002 |
| Instruction Manual: | GEK-95352-SP | | |
| Connection Diagram: | GEM2034E-FIG20 | | |

Accessory Connection Diagrams

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

Revision History

| <u>Version</u> | <u>Date</u> | <u>Comments</u> |
|----------------|-------------|-------------------|
| v18058660.01 | 06/08/2018 | BD changed to 20" |

Distribution Information

| <u>Quantity</u> | <u>Recipient</u> | <u>Quantity</u> | <u>Recipient</u> |
|-----------------|---|-----------------|--|
| 1 | tania.martinez@ge.com TANIA.MARTINEZ@GE.COM E-Mail Distribution | 1 | jaaziel.cruz@ge.com JAAZIEL.CRUIZ@GE.COM E-Mail Distribution |
| 1 | compras@mrdistel.com.mx COMPRAS@MRDISTEL.COM.MX E-Mail Distribution | 1 | katakamlakshmi.nancharaiah@ge.com KATAKAMLAKSHMI.NANCHARAIH@GE.COM E-Mail Distribution |



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| | | | |
|------------------------------------|---------------------|-------------------------------|--------------|
| Customer Order / Item: | PMTY-0511 | Sales Order No: | 5200024380 |
| Customer Part: | None | Order Line No: | 2.1 |
| MODEL NUMBER: 5KS509DAE6068 | | Estimated Weight: | 3620 Lbs |
| Outline Drawing: | 148CA59VMJKFGAA0002 | Time Rating: | CONT |
| Connection Diagram: | GEM2034E-FIG20 | Enclosure: | WPI |
| Instruction Book: | GEK-95352-SP | Encl Construction: | OPEN |
| Design Code: | 50ED1309AC | Ambient Max(°C): | 40 |
| Type: | KS | Insulation Class: | F |
| Frame: | L509TP20 | NEMA Design: | B |
| Phases: | 3 | Nominal Efficiency: | 96.2% |
| Poles: | 4 | Guaranteed Efficiency: | 95.4% |
| Output Power: | 500HP 372.8KW | 3/4 Load Efficiency: | 94.8% |
| RPM: | 1785 | KVA Code: | G |
| Voltage: | 460 | Max KVAR: | 91.4 |
| Hertz: | 60 | Power Factor: | 89.0 |
| Amps - FL: | 553.0 | Bearing - DE: | 6219ZC3 |
| Service Factor: | 1.15 | Bearing - ODE: | 235A2535AA01 |

Enclosure is Weather Protected One

Stamped Nameplate Notes:

CC009A
ENCLAUSTRAMIENTO NEMA WP-I, CSA ENCL DP
LIMITE DE VIBRACION=0.150 PULG/SEG
CALENTADOR LLEVA HE1-HE2 115V 350W
ACEITE PARTE SUPERIOR 12.0 QTS ISO 32
ACEITE PARTE INFERIOR: 2.5 QTS ISO 32
ROTACION CCW VISTO DEL LADO OPUESTO
A CARGA SECUENCIA DE FASES 1-2-3/1-2-3
MOTOR EFICIENTE PREMIUM
GRADO INVERSOR POR NEMA MG1 PARTE 31
CLASIFICACION ALTERNA PARA CONTROL PWM 1.0
FS ; RANGO TORQUE VAR 20-60 HZ
STAMP NP249A5563P017 AS FOLLOWS
POLOS 4,MIN ABM -4;EFICIENCIA MINIMA 95.65
VIBRACION 3.81 MM/SEG : MASA 1642 KG
CONEXION:DELTA; POTENCIA NOM: 373 KW

Additional Information:

4 POLE,VERT HOLLOW SHAFT HIGH THRUST (3D)
ACTUAL EFFICIENCY = 95.0
NON-REVERSE COUPLING,BX=1.938
115V HEATER LEADS TO CONDUIT BOX



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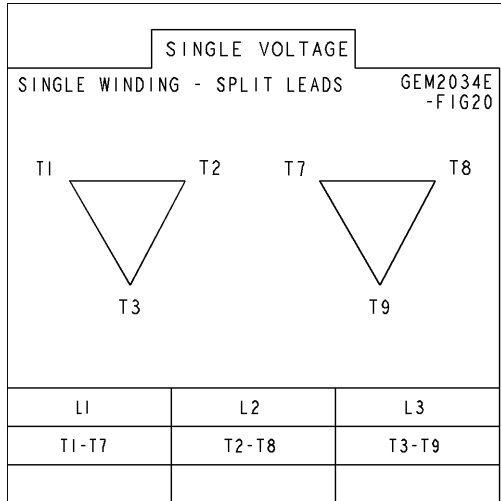
Customer: MARCO ANTONIO RAMIREZ WO
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DataPack Document, Version: v18058660.01

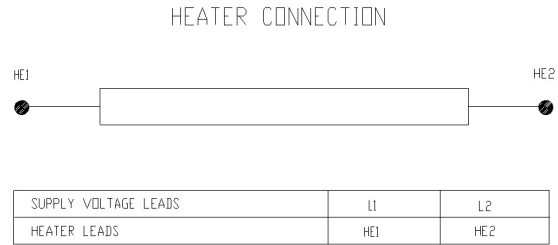
RCF=1950 CPM CG=27.0 IN STAT DEF=0.0082 IN
C/B GRD PLATE
BEARING LIFE 20148 HOURS AT 14807LB THRUST
BEARING LIFE 8760 HOURS AT 20020 LB THRUST
2500 Cu. In. CBOX
NOM CERTIFIED MOTOR (SPANISH STAMPINGS)

Diagrams for Model: 5KS509DAE6068

**Connection Diagram
GEM2034E-FIG20**



**Heater Connection
3027JE-1C**



Performance Characteristics

1st Winding 1st Connection

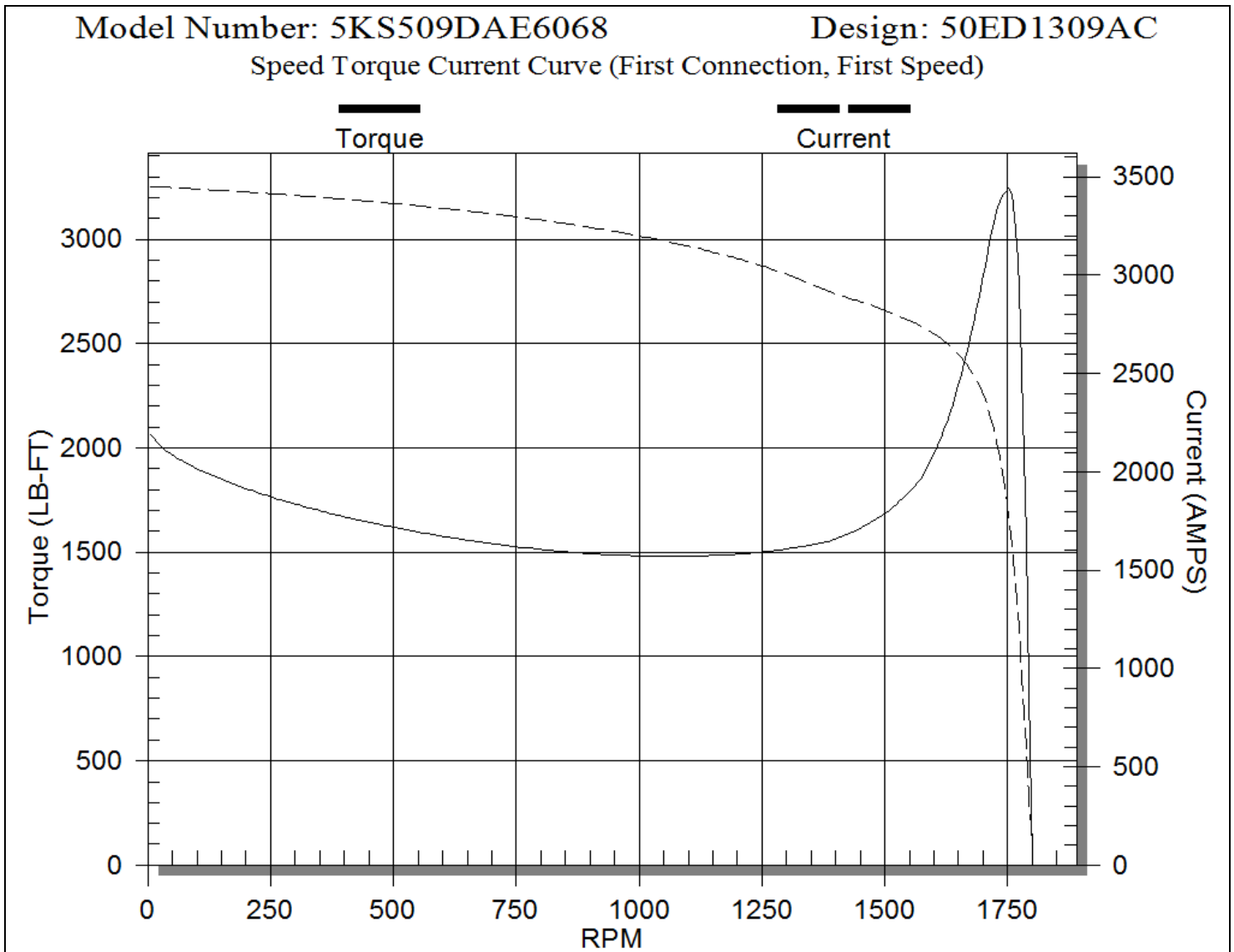
Design: 50ED1309AC

| LOAD % | 125.0 | 115.0 | 100.0 | 75.0 | 50.0 | 25.0 | 0.0 |
|--------|--------|--------|--------|--------|--------|--------|--------|
| % EFF | 94.61 | 94.75 | 96.20 | 94.77 | 93.87 | 90.15 | 0.00 |
| % PF | 88.73 | 89.01 | 89.00 | 87.96 | 83.39 | 67.07 | 8.88 |
| AMPS | 696.84 | 638.13 | 553.00 | 421.05 | 298.90 | 193.48 | 127.41 |

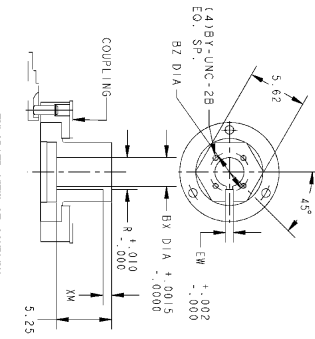
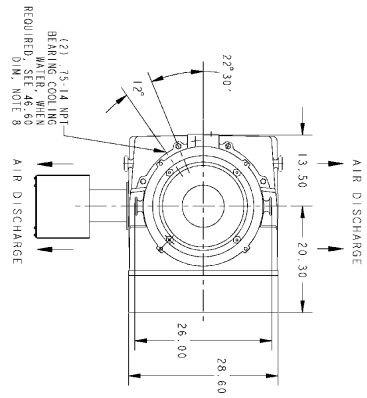
TORQ(FL)#FT 1469.82 TORQ(LR)%FL 143.68 TORQ(BD)%FL 218.30
 AMPS(LR) 3452.15 PF AT START 0.21

This motor is capable of two cold or one hot start with a maximum connected load inertia of 6110.0 Lb-Ft Sq (257.5 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 30 seconds. Safe stall time at 100% voltage is 56 seconds cold, 36 seconds hot. Rotor inertia is 156.72 Lb-Ft Sq (6.604 Kg-meter Sq).

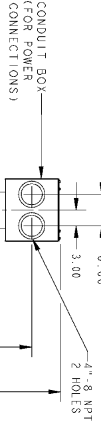
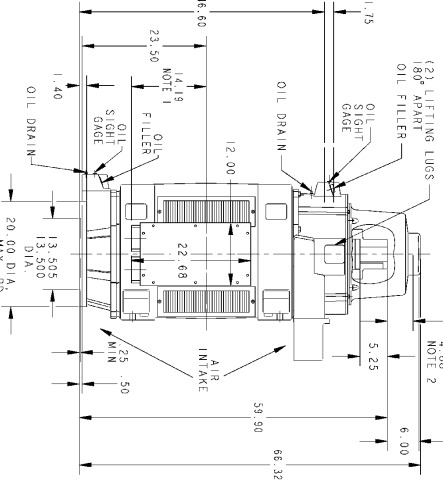
Open Circuit A-C: 1.473 Short Circuit D-C: 0.039
 Short Circuit A-C: 0.051 X/R Ratio: 14.728
 Stator Slots: 72 Rotor Slots: 56



| BX | BY | BZ | KEYWAY | | |
|-------------|--------|-------|--------|-------|-----|
| | | | EW | R | XM |
| 2.315 | 1/4-20 | 2.500 | 625 | 7.636 | .81 |
| 1.500/1.560 | 1/4-20 | 2.125 | 315 | 1.659 | .58 |
| 1.688 | 1/4-20 | 2.500 | 315 | 1.859 | .58 |
| 1.751 | 1/4-20 | 2.500 | 315 | 1.972 | .58 |
| 1.813 | 1/4-20 | 2.500 | 500 | 2.033 | .59 |
| 1.938 | 1/4-20 | 2.500 | 500 | 2.166 | .59 |
| 2.001 | 3/8-16 | 3.250 | 500 | 2.223 | .59 |
| 2.188 | 3/8-16 | 3.250 | 500 | 2.414 | .58 |
| 2.251 | 3/8-16 | 3.250 | 500 | 2.477 | .58 |
| 2.438 | 3/8-16 | 3.750 | 625 | 2.715 | .81 |
| 2.501 | 3/8-16 | 3.750 | 625 | 2.778 | .81 |
| 2.688 | 3/8-16 | 3.750 | 625 | 2.988 | .81 |
| 2.751 | 3/8-16 | 3.750 | 625 | 3.032 | .81 |



ENLARGED VIEW OF COUPLING



THIRD ANGLE PROJECTION

14

13

12

| REV | DESCRIPTION | DATE | APPROVED |
|-----|-----------------|----------|----------|
| 1 | ISSAC H 14-0282 | 04/08/14 | ADJ |

1480A59VMJKFGA0002 1

NOTES:

1. PROVIDED MOUNTING CONDITIONS PERMIT, CONDUIT BOX MAY BE TURNED SO THAT ENTRANCE CAN BE MADE UPWARD, DOWNWARD, OR FROM EITHER SIDE.
2. THE TOTAL HEIGHT OF PUMP SHAFT AND LOCKING NUT ABOVE COUPLING MUST NOT EXCEED THIS DIM
3. FOR ESTIMATING ONLY UNLESS ENDORSED FOR CONSTRUCTION.
4. FOR SHIPPING WEIGHTS ADD FIVE PER CENT TO THE NET WEIGHTS.
5. SMALL "BX" BORE GENERALLY NOT SUITABLE FOR 5011 FRAME RATINGS; CHECK SHAFT AND KEY STRESS BEFORE USING
6. CENTER OF MOUNTING BOLT HOLES WITHIN .025 OF ANGULAR & DIAMETRIC LOCATION WITH REFERENCE TO THE CENTERLINE OF MOUNTING RABBIT
7. UPPER THRUST & LOWER GUIDE BEARINGS ARE OIL LUBRICATED.
8. THRUST BEARING COOLING WATER (WHEN REQUIRED):
 2 GPM (REQUIRED) 3-5 GPM (MAX.) 100 PSI (INLET), 95 DEG F MAX (INLET), PRESSURE DROP ACROSS COLL-9 PSI FOR 2 GPM.

| MODEL | SIGNATURES | DATE |
|--------------------|------------|----------|
| 1480A59VMJKFGA0002 | HARI | 02/13/13 |
| | RAJGU | 02/13/13 |
| | RAJGU | 02/13/13 |
| | HARI | 02/13/13 |

GE Motors

GENERAL ELECTRIC COMPANY

OUTLINE
NEMA 509, VERTICAL HOLLOW SHAFT-HIGH THRUST, WPI
2500 CU IN COND BOX, 3D/WATER COOLING

1480A59VMJKFGA0002 1

SCALE: 1:6666 REF: 1480A59VMJKFGA0001 SHEET 1 OF 1