GE
Power Conversion

# Product Information Packet

**November 7, 2016**

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

| | |
|---|---|
| **Model Number:** | **5CD203NA039A054** |
| **Catalog Number:** | **D659** |
| **Instruction Manual:** | GEH-3967N |
| **Connection Diagram:** | 36A167910CA502 |
| **Outline Drawing:** | 36A167937AA002 |

## Accessory Connection Diagrams

| | | | |
|---|---|---|---|
| **Bearing Thermocouple:** | None | **Heater:** | None |
| **RTD:** | None | **Thermistor:** | None |
| **Thermostat:** | None | **Winding Thermocouple:** | None |
| **Bearing RTD:** | None | | |

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imagination at work

**Marks**:

| | | | |
|---|---|---|---|
| **MODEL NUMBER:** | **5CD203NA039A054** | **Enclosure Mtg Assem:** | 36A167775AC001 |
| **Outline Drawing:** | 36A167937AA002 | **Instruction Book:** | GEH-3967N |
| **Connection Diagram:** | 36A167910CA502 | **RPM:** | 1150/2000 |
| **Horsepower:** | 100 | **Armature Amps:** | 162 |
| **Armature Volts:** | 500 | **Type:** | CD407AT |
| **Wound:** | SHUNT | **Power Supply Code:** | C |
| **Enclosure:** | DPFG-BV | **Insulation Class:** | F |
| **Duty:** | CONT | **Ambient Max (°C):** | 40 C |
| **Rating Code:** | 203N1360-10 | **Field Volts:** | 300/150 |
| **K(V):** | 3.94 Cemf volts/Radian/Sec | **WK2:** | 35.00Lb Ft2 |
| **K(T):** | 2.82 Ft/Amp | **Year of Manufacture:** | 2016 |
| **Minimum Ambient:** | 0 C | **Max Altitude:** | 3300 Ft |

| **Resistances at 25 Degrees C :** | | **Inductances:** | |
|---|---|---|---|
| **Shunt Field:** | 28.5 OHMS | **Armature Circuit Total:** | 3.290 mH Saturated |
| **Armature:** | .0831 OHMS | **Shunt Field:** | 24.0 Henries Unsaturated |
| **Commutator Field:** | .0320 OHMS | | |

**Shunt Field Data:**

Shunt Field Current(1): 7.1 AMPS at Rated Load and 1150 RPM
Shunt Field Current(2): 4.84 AMPS at Rated Load and 1433 RPM
Shunt Field Current(3): 2.96 AMPS at Rated Load and 2000 RPM

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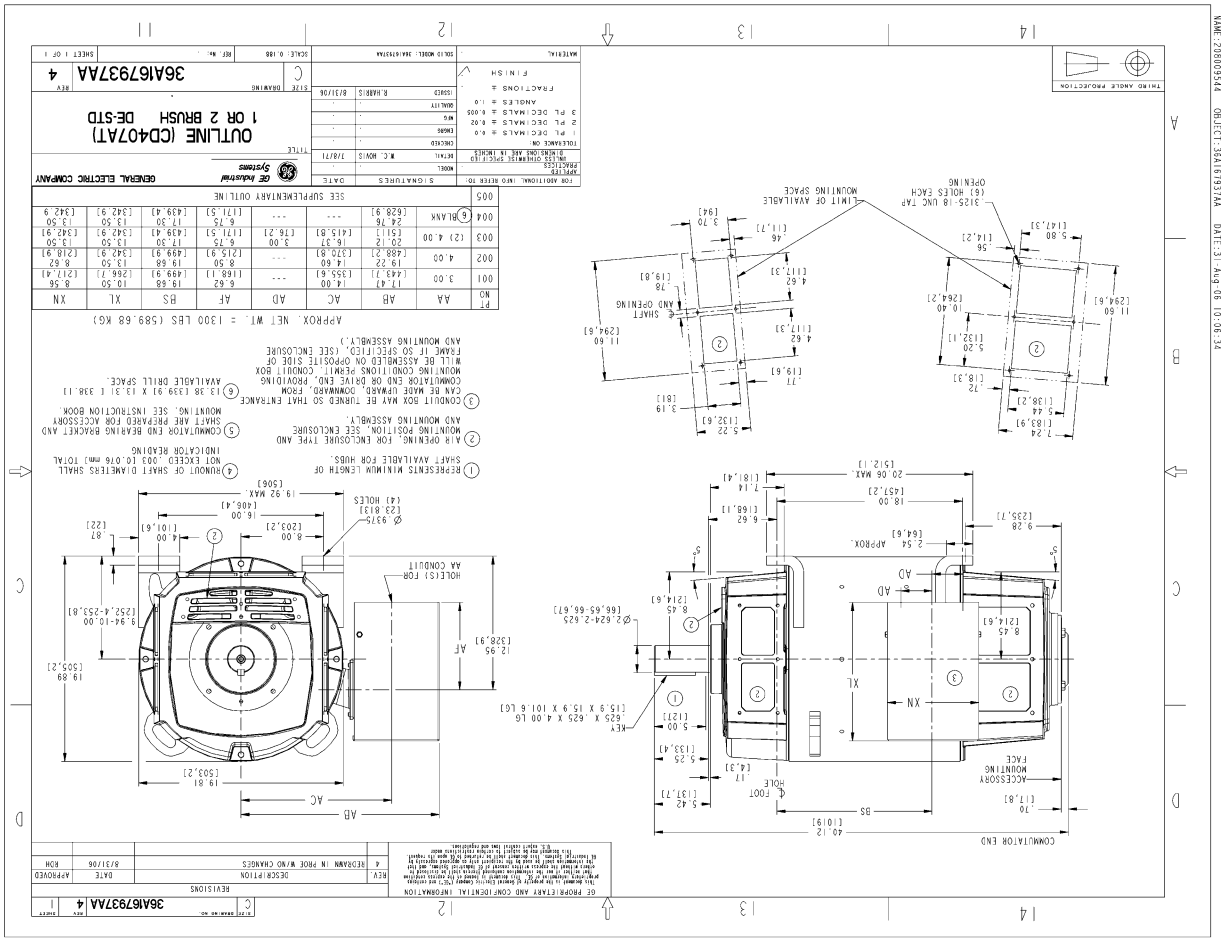
**Additional Machine Notes:**
DRIPPROOF FULLY GUARDED, BLOWER VENTILATED - BALL BEARINGS
CONDUIT BOX ON RIGHT HAND SIDE FACING COMMUTATOR END
STANDARD SHAFT DRIVE END ONLY - WITH FEET
WITH:
CSA STAMP
THERMOSTAT- NORMALLY CLOSED, AC RATING- 600V MAX-
.5A, 250V-1.5A, OR 125V-3A- DC RATING- 30V MAX-
1.5A. MAXIMUM CURRENT BASED ON INDUCTIVE LOADS UP
TO AND INCLUDING NEMA NO. 5 CONTACTOR.




Marks:

| Model Number: 5CD203NA039A054 | November 7, 2016 |
|---|---|

**Marks**:

NO S.O.

# GENERAL ELECTRIC

36A167910CA502
CONT ON SHEET SH NO.

REV 1

36A167910CA502
CONT ON SHEET SH NO.

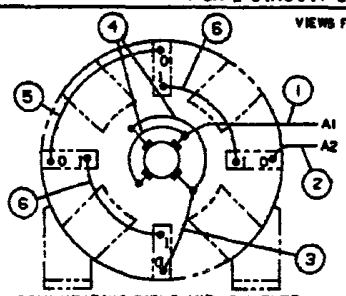
TITLE

# DIAGRAM, CONNECTION

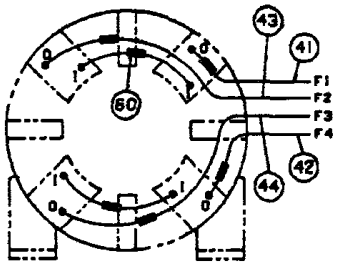
FIRST MADE FOR 4 POLE (EW)

DIRECT CURRENT MOTOR AND GENERATOR - SHUNT WOUND
1 OR 2 CIRCUIT SHUNT FIELD - 1 CIRCUIT COMMUTATING FIELD

VIEWS FACING COMMUTATOR END - LEADS OUT RIGHT SIDE

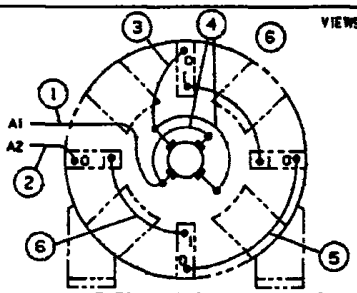



COMMUTATING FIELD AND ARMATURE

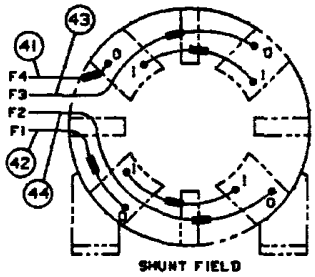



SHUNT FIELD

VIEWS FACING COMMUTATOR END - LEADS OUT LEFT SIDE




COMMUTATING FIELD AND ARMATURE




SHUNT FIELD

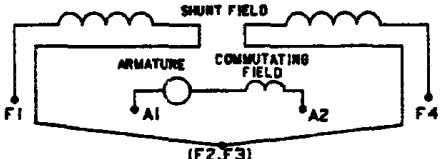
ALL EXTERNAL LEADS ARE MARKED. ALL CONNECTIONS AND TERMINATIONS EXTERNAL TO MAGNET FRAME MUST BE INSULATED PER NATIONAL ELECTRICAL CODE AND SOUND LOCAL PRACTICES.

SPACE HEATERS, WHEN SPECIFIED, WILL HAVE LEADS WITH TERMINAL MARKINGS H1 AND H2.

THERMOSTAT, WHEN SPECIFIED, WILL HAVE LEADS WITH TERMINAL MARKINGS P1 AND P2

ENCIRCLED NUMBERS MAY BE USED FOR PART IDENTIFICATION.

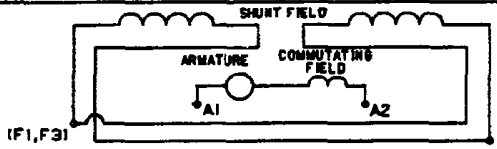
FOR
HIGH NAMEPLATE
EXCITATION VOLTAGE
CONNECT SHUNT FIELD
LEADS AS INDICATED




MOTOR CONNECTIONS:
FOR CCW ROTATION FACING COMMUTATOR END, MAKE LEADS F1 AND A1 THE SAME POLARITY.
FOR CW ROTATION FACING COMMUTATOR END, MAKE LEADS F1 AND A2 THE SAME POLARITY.

GENERATOR CONNECTIONS:
FOR CW ROTATION FACING COMMUTATOR END, F1 POSITIVE WILL MAKE A2 POSITIVE.
FOR CCW ROTATION FACING COMMUTATOR END, F1 POSITIVE WILL MAKE A1 POSITIVE.

FOR
LOW NAMEPLATE
EXCITATION VOLTAGE
CONNECT SHUNT FIELD
LEADS AS INDICATED




MOTOR CONNECTIONS:
FOR CCW ROTATION FACING COMMUTATOR END, MAKE LEADS (F1,F3) & A1 THE SAME POLARITY.
FOR CW ROTATION FACING COMMUTATOR END, MAKE LEADS (F1, F3) & A2 THE SAME POLARITY.

GENERATOR CONNECTIONS:
FOR CW ROTATION FACING COMMUTATOR END, (F1, F3) POSITIVE WILL MAKE A2 POSITIVE.
FOR CCW ROTATION FACING COMMUTATOR END, (F1, F3) POSITIVE WILL MAKE A1 POSITIVE

DC2-281 12-15-671

| REV | DATE | NO S.O. | CAD |
|---|---|---|---|
| 1 | 08-30-94 DC HILL | NO S.O. RETRACED | |

MADE BY WC HOVIS FEB. 16, 1972
RE-ISSUED CAD/ DC Hill 8-30-94

FILE KC13-1

GE MOTORS — DIV OR DEPT
ERIE — LOCATION

36A167910CA502
CONT ON SHEET SH NO.

C5X.A.36A167910CA502R01