

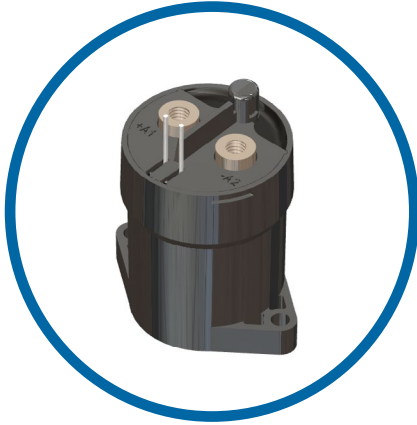


| GV210 Series

SPST-NO 900 VDC CONTACTOR

Introduction

Sensata | GIGAVAC GV210 Series contactors are hermetically sealed, gas filled contactors suitable for use in harsh environments. With contact voltage ratings from 12Vdc to 900Vdc and a hot switchable continuous carry current of 100A, the compact GV210 Series is ready to solve your next challenging application problem. Like all Sensata | GIGAVAC advanced switching solutions these contactors can be mounted in any axis or orientation and are sealed to withstand a variety of harsh environments. GV210 Series contactors meet RoHS and CE Conformance requirements and are built in accordance to IATF-16949.



Features

- Hermetically sealed and intrinsically safe. Not mounting position sensitive.
- Operates in explosive/harsh environments without oxidation or contamination of contacts.
- Eligible for use in hazardous/classified operating environments
- High voltage isolation between open contacts, inert gas filled contact chamber
- Designed and built in accordance to IATF-16949
- Flying leads for coil connections

Applications

- Battery electric vehicles
- DC motor controller protection
- DC fast charging
- Photovoltaic controls
- Energy Storage systems



SPECIFICATIONS

| | | |
|---|--|--------------------------------|
| Contact Arrangement | | Main Contacts SPST-NO (Form X) |
| Mechanical Life | | 1 million cycles |
| Contact Resistance | | 0.5mΩ (max) @ 100A |
| Shock, 11ms 1/2 sine (operating) | | 20G peak |
| Sine Vibration, 55-2,000 Hz. | | 20G peak |
| Weight | | 6.7 oz (190g) |
| Voltage Rating: Main Contacts (max) | | 900VDC |
| Current Rating: Main Contacts | Continuous (8.4 mm² / 8 AWG)¹ | 100A |
| | Continuous (21 mm² / 4 AWG)¹ | 150A |
| | Short Term -- 3 Minutes² | 200A |
| Maximum Short Circuit Current (1/2 cycle, 60 Hz) (through closed contacts) | | 1,250A |
| Dielectric Withstand Voltage (ASTM D149) | Between Open Contacts | >5,000Vrms |
| | Contacts to Coil | >3,000Vrms |
| Insulation Resistance, Terminal to Terminal / Terminals to Coil | When New | 500 MΩ, min. @ 500Vdc |
| | At End of Life | 50 MΩ, min. @ 500Vdc |
| Operating Temperature Range | | -40°C to +85°C |
| Environmental Seal | | Exceeds IP67 and IP69 |
| Salt Fog Spray | | MIL-STD-810G |

COIL RATINGS at 25°C

| | | | |
|------------------------------------|--------------|--------|--------|
| Nominal Voltage | 12Vdc | 24Vdc | 48Vdc |
| Maximum Voltage | 16Vdc | 28Vdc | 52Vdc |
| Pick Up Voltage | Up to 9.6Vdc | 16Vdc | 33Vdc |
| Drop Out Voltage | 1.2Vdc | 2.4Vdc | 4.8Vdc |
| Coil Current | 461mA | 250mA | 122mA |
| Coil Power | 5.5W | 6.0W | 6.0W |
| Coil Resistance ± 5% (ohms) | 26 | 96 | 392 |
| Operate Time | 25ms | | |
| Release Time | 10ms | | |



DIMENSIONS

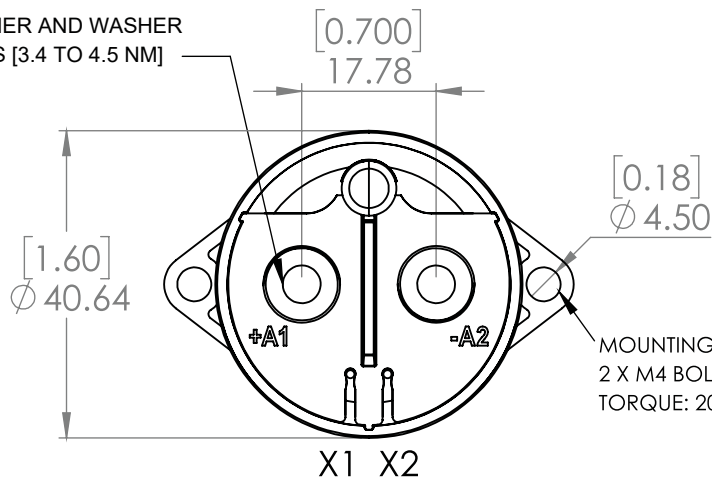
Dimensions are in millimeters [inches]
Coil terminal polarity is X1 (+) and X2 (-)

M5 FEMALE LOAD TERMINALS - 2 PLACES

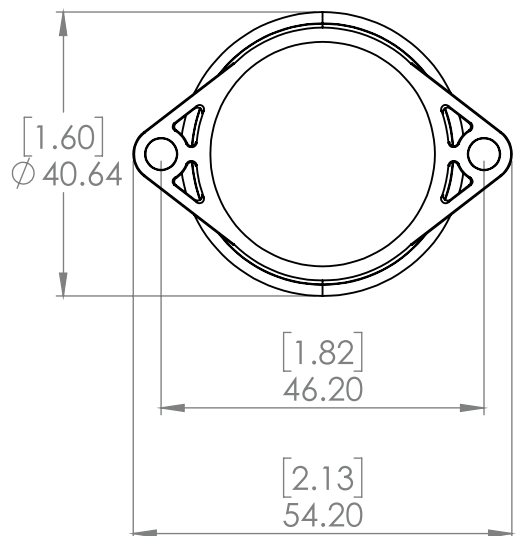
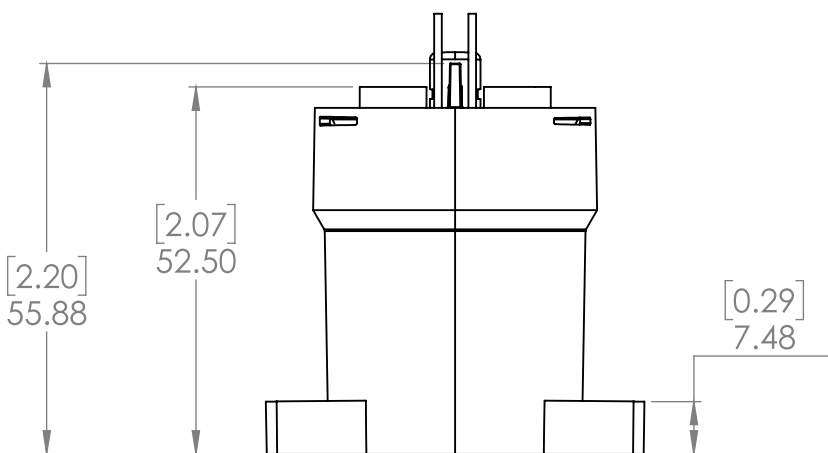
HARDWARE :

2 X M5 BOLT, LOCKWASHER AND WASHER

TORQUE: 30 TO 40 IN-LBS [3.4 TO 4.5 NM]



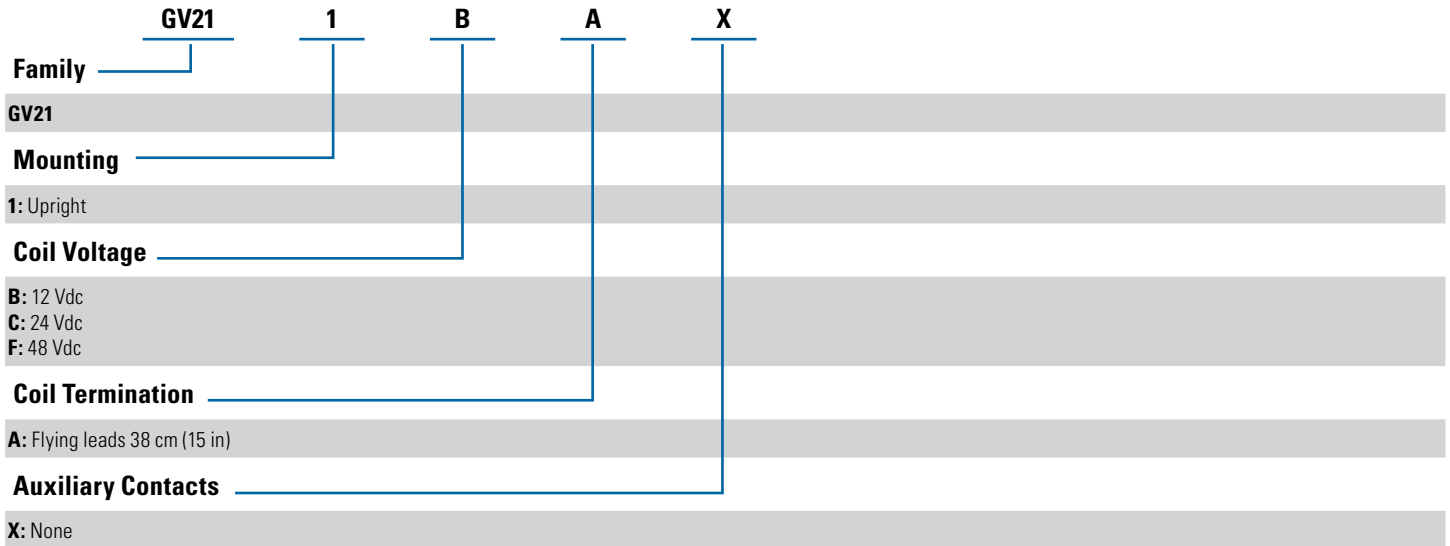
MOUNTING HARDWARE:
2 X M4 BOLT, LOCKWASHER AND WASHER
TORQUE: 20 IN-LBS MAX [2.3 NM MAX]





ORDERING OPTIONS

Example : GV211BAX



GENERAL NOTES

1. Current rating depends upon conductor size. Keep power terminals below 150°C (max).
2. 3 minutes at +40°C ambient with 8.4 mm² (#8 AWG) conductor.



WARNINGS



RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
 - Follow proper mounting instructions including torque values
 - Do not allow liquids or foreign objects to enter this product
- Failure to follow these instructions can result in serious injury, or equipment damage.**



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
 - Verify all connections and replace all covers before turning on power
- Failure to follow these instructions will result in death or serious injury.**

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