

EV Power DC-DC Converters

DC-DC Converter Specification

(600W)

1. General

600W series isolated DC/DC converter applies advanced technology and is configured specifically for electric vehicles. It is very suitable to supply power to the lamp and audio system as it is very stable and clean. The advantages of high efficiency, stability and compact size, are achieved by adopting the advanced high frequency technology. It is sealed by silica glue to get water and vibration proof, which ensures the stability of the vehicle in atrocious condition. It also can be used as a charger to charge the 12V battery in the electric automobile according to the customer's requirement. Current equalizer is built in, which makes converters work in parallel in order to enlarge the capability.

2. Main Specification

Item Code	Battery Voltage	Output Voltage	Output Current
DC-3612	36V	12V	50A Max
DC-4812	48V	12V	50A Max
DC-6012	60V	12V	50A Max
DC-7212	72V	12V	50A Max
DC-9612	96V	12V	50A Max
DC-12012	120V	12V	50A Max
DC-14412	144V	12V	50A Max
DC-22012	220V	12V	50A Max

- ① Input Voltage: 36V, 48V, 60V, 72V, 96V, 120V, 144V, 220V.
- ② Output Voltage: Can be used to charge battery 12V
- ③ Max Output Current: 50A
- ④ Maximum Efficiency: $\geq 88\%$
- ⑤ Environmental Enclosure: IP66
- ⑥ Shock and Vibration: SAEJ1378
- ⑦ Operating Temperature: $-20^{\circ}\text{C} \sim 50^{\circ}\text{C}$ (-22-122)

3. Protection Characteristics

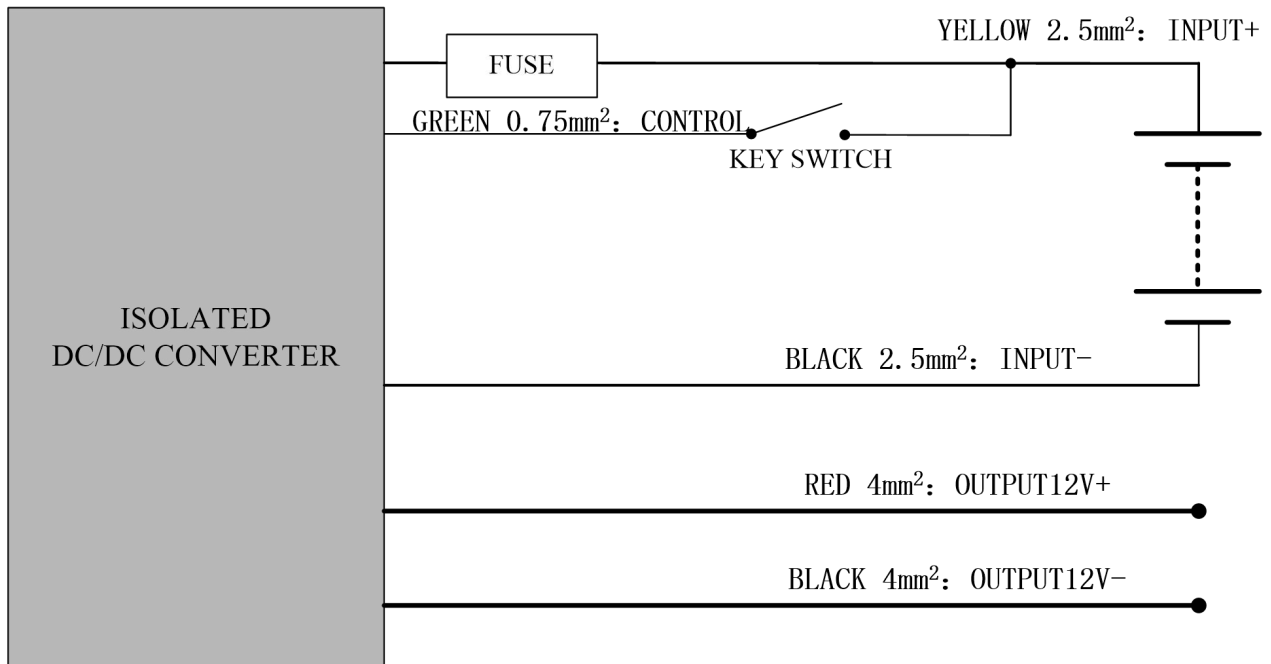
- ① Water and Vibration Proofed: All sealed by silica glue to get water and vibration proof, which is suitable for all kinds of condition.
- ② Input reverse polarity protection: Shut down, auto-reset.
- ③ Water Proofed Fuse: Input or output fuse, simple wiring.
- ④ No Arc: Input with no arc, can be controlled by key switch directly, without contactor.
- ⑤ Short Circuit: Shut down with little pulse current, auto-reset, ensure the wire safety.

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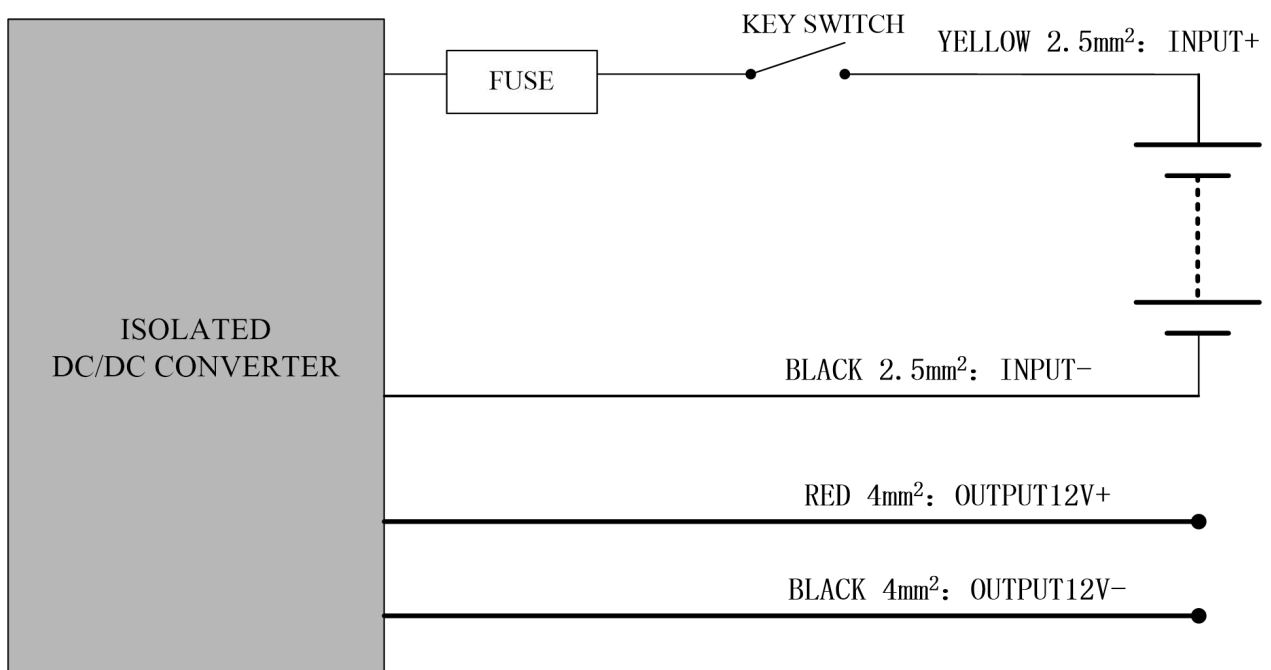
- ⑥ Overheating Cutback: Reduce output current if the temperature is over 65 °C, ensure the continuous power for your car.
- ⑦ Input Reverse Polarity: Electronic protection, auto-reset.
- ⑧ Input Low Protection: Shut down, auto-reset, prevent the battery from over discharging.

4. Installation Guidance

- ① The wiring diagram of isolated DC/DC converter without control wire

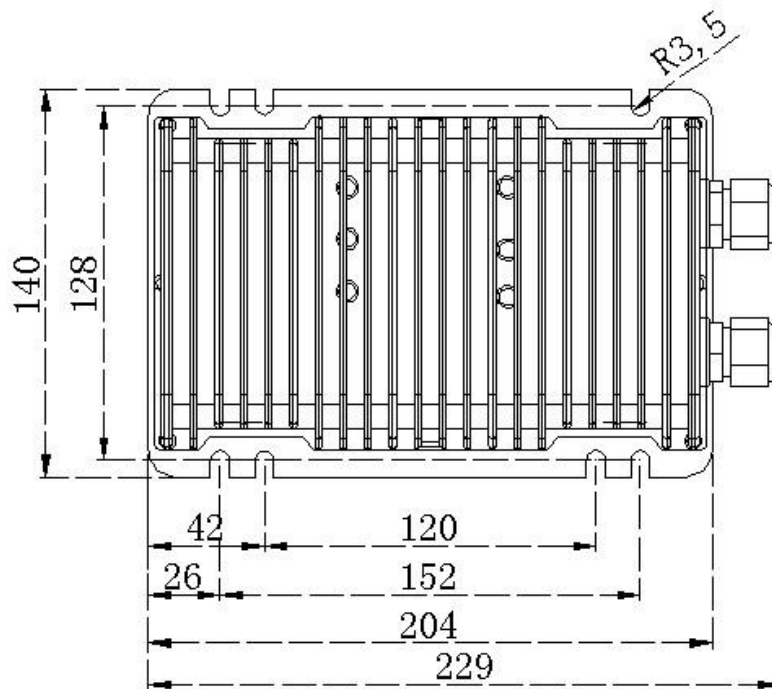


- ② The wiring diagram of isolated DC/DC converter with control wire



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5. Intallation Size:



Appendix :

Yellow wire: Input + (1.5mm²) Red wire: Output + (4.0mm²)
Black wire: Input- (1.5mm²) Black wire: Output - (4.0mm²)
Green wire: key switch (0.5mm²)

5. DC-DC converter picture

