## **HRC Triple Gang Fuse Holder**

The Triple Gang HRC fuse holder as the name suggest holds 3x HRC (High Rupture Capacity) fuses and allows quick isolation of your battery bank

HRC fuses are designed to open circuit under a high DC fault current, where a Circuit Breaker, under the same high DC fault current, may actually short circuit in which case wires designed to take 30A may have to take the batteries fault current which could be in the thousands of amps and this could cause the insulation to melt and burn.

House fires can be caused by wire insulation melting, active wires touching and the resulting sparks lighting flammable material inside the wall cavity.

On Rainbow Power Co. Stand Alone Installations we use the HRC Triple gang fuse holder for battery isolation and to protect batteries from faults of other wiring and equipment inside the installation. If an emergency happens i.e. a fire inside the dwelling and it seems wise to disconnect the electrical system quickly, then the Triple gang fuse holder will allow disconnection in one easy motion.

It is not recommended to open the HRC Triple gang fuse holder, with any appliance going, for any other reason than in an emergency. Because of the nature of DC electricity, opening the Triple fuse holder, under load i.e. with equipment connect and electricity flowing through the wires, an arc can be created between the terminals and could possibly overheat the terminals on the fuse holder, melting the holder The arc itself could also burn the user. Opening the HRC Triple gang fuse holder under load is only advised under emergency condition.

RPC's. 'SHUT DOWN PROCEDURE' states:

- 1. If time allows, turn off all lights and appliances (preferably at the power point).
- 2. Turn off the main isolating switch on the AC Distribution Box.
- 3. Turn off the inverter at the main switch or circuit breaker on the front panel of the inverter.
- 4. Disable or override generator auto start controller (if applicable).
- 5. Turn off all circuit breakers on the DC Distribution Box.
- 6. Pull out the main HRC battery fuse(s) located on the side of the battery enclosure. Make sure that the previous steps have been completed before the HRC fuse is pulled out.

These instructions are for general maintenance and isolation. They should be followed in any situation where time allows. But in an emergency and if there is no time to follow the 'SHUTDOWN PROCEDURE', then pull the handle on the Triple gang fuse holder down.

It may be necessary to link between two of the terminals on the supply side; i.e. the side connected to the battery terminals. If, on the load side, the side connected to equipment, you use the 3 terminals provided. Otherwise the equipment connected to the spare terminal may not have power provided.



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