PROTECTION AYSTEM FOR BATTERY PACK FROM THERMAL RUN AWAY

AND HIGH CURRENT CIRCUIT

CIRCUIT DIAGRAM:



PRODUCT INFORMATION

Since we have lot of E-vehicles and other application of battery packs there is no such circuit to protect the battery pack from burning and flash OFF. Our circuit provides the protection of the battery pack by controlling the current passes through it. We have a PCB board circuit in which we have controller(16F877A) the code is dumped to the controller through the mikro C pro for pic software. It is controlling the current sensing module which sense the current and when the current value passes the relay in the circuit works which makes the circuit OFF. The service provided by the module is to protect the battery pack in the given system of E-Vehicle from burning. Though our system provides the protection we need to include the self cooling system which cools by itself we also have to include the system which provides in which sense the capacity of battery pack and tells the user about the distance he can travel and finally we have to include the system in which we tell the user of the vehicle about current status of the battery pack (hot or cold) to stop the usage of the vehicle and also tell the next charging point for the vehicle. The basic technique employed here is current limitaion and once it reaches the set current the battery pack gets turned off. Due to this current limiting we can make use of the battery to its highest.