

Technical description, Illustrations etc. of the 220 V / 100A Dual Float cum Boost Charger

Float cum Boost Charger(FCBC)

FCBC as the name indicates, is a two in one functional combination of float charger and a boost charger. Under normal condition, FCBC works as a float charger. When the mains fail(both input1 and input2 as shown in Fig 1) battery takes over dc supply to the load. On resumption of power, FCBC switches to the boost mode, boost charges the discharged battery and returns to the float mode after the battery is restored to full charge.

Load Voltage Limiter

In order to protect the load against the voltage variation during the boost mode operation, a load voltage limiter in the form of diode voltage regulator is used.

Principle of operation

This system consists of two Float Cum Boost Charger (FCBC1& FCBC2).In this configuration both the chargers are designed to supply both Load and Battery Charging current. During normal operation FCBC-1 is in ON condition and FCBC -2 is OFF. This unit is designed in such a way that if FCBC-1 fails, FCBC -2 comes in line automatically and takes care of both load as well as battery charging currents. In case of manual mode one FCBC supplies to Load and another to battery, the FCBC connected to load will not go to boost mode.

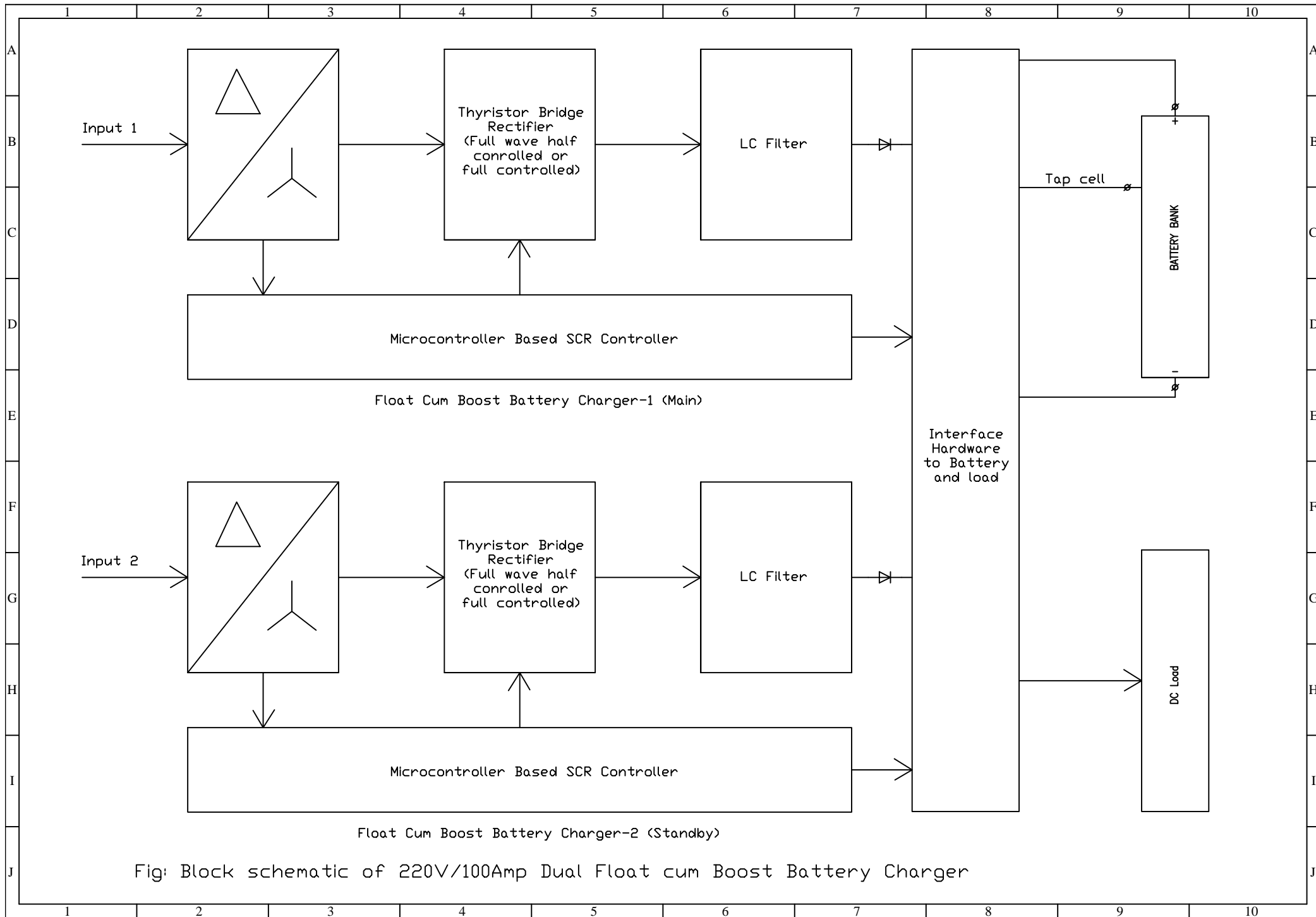


Fig: Block schematic of 220V/100Amp Dual Float cum Boost Battery Charger