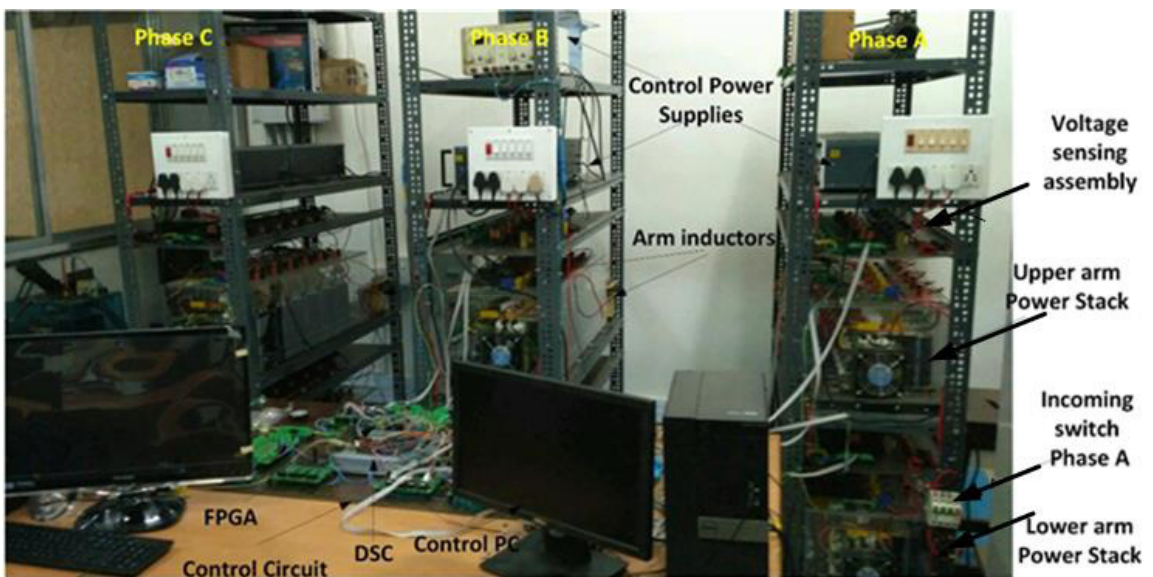


Three phase seven level modular multilevel converter

Three phase modular multilevel converter (MMC) shown below is a laboratory model of a system used at the transmitting and receiving end of high voltage DC transmission (HVDC) system. It is capable of converting three phase AC power to DC power or vice versa. The photograph shows the power circuit in three racks for phases A, B and C. Each phase consists of two arms made of a power stack, an arm inductance, voltage and current sensing circuit and power supplies. Control is developed using a PC and field programmable gate array (FPGA) for each phase and a common digital signal controller (DSC) for all three phases.



Three phase seven level modular multilevel converter (MMC)