Vector Controlled Voltage Optimizer - Three phase delta IGBT PWM type

MEDI has designed and developed three phase three-wire input, three-wire output (delta in delta out) Static voltage optimizer. The main advantage of this development is it works without neutral. Because the unit does not require neutral it is not dependent on the availability or the quality of the neutral line. But single phase loads can be connected from any of the phase output to the existing neutral.

This is an IGBT based delta PWM topology - 100A to 500A each phase.

{youtube}PgR3V9046ww{/youtube}

Advantages of delta PWM are:

PWM is made between phase to phase instead of neutral to phase. Because of this neutral is not required for the working of unit. And the output has potential with existing neutral. Three phase load can directly be connected across three wire output. Single phase load can be connected from any one of the output to existing neutral.

Other advantage of delta PWM is only three half bridge IGBT modules are needed for three phase voltage regulation.