

LOAD TAP CHANGING AC VOLTAGE REGULATOR

The load tap changing AC voltage regulator of the present invention is a load tap changing AC voltage regulator 1 that transforms the input voltage from the AC power supply 2 with the main transformer 3 to supply it for the load, and changes taps by means of the semiconductor contacts for the auxiliary winding installed in the said main transformer 3 to change the output voltage to the load, and that features having a tap changing control means 5 which detects the variation in output voltage to the load that is caused by a variation in input voltage from the AC power supply 2 and changes the taps of the auxiliary winding Sa for appropriate taps to compensate for the variation in output voltage without causing instantaneous disconnection; a series transformer 4 adds to or subtracts from the output voltage a certain voltage for compensating for the variation in output voltage that results from the tap changeover for the auxiliary winding Sa provided by the tap changing control means 5; and a current limiting reactor 6 which suppresses the circulating current caused to flow through the auxiliary winding Sa by the tap changeover for the auxiliary winding Sa.

(Please note that Figure 1 should accompany the abstract when published)