

The invention relates to the power engineering, namely to devices for input and output voltage phase-angle regulation in the three-phase transmission systems.

The installation contains an excitation transformer, including two three-phase high-voltage windings, the first of which is connected in a delta and the second one is coiled with midpoint and galvanically connected to the vertexes of the triangle of the first winding, a serial transformer and a unit of electronic switches. The excitation transformer is provided with three three-phase low-voltage windings, the number of turns into each of which being the same, at the same time the section of the second winding conductor is greater than the section of the first and third windings conductors, and the third winding is applied with a midpoint that divides it into two parts with an equal number of turns. The serial transformer includes two identical modules, each being equipped with two pairs of three-phase low-and high-voltage windings, the number of turns into each of which being the same, and the section of conductors is equal to the section of conductors of the first and third low-voltage windings of the excitation transformer. The unit of power electronic switches includes three pairs of electronic switches, the relationship of the installed powers of which is

$$\frac{4}{7} : \frac{2}{7} : \frac{1}{7}.$$

Claims: 2

Fig.: 9