s 2020 0114

The invention relates to electrical engineering, and can be used, for example, for interconnection of three-phase alternating current power systems.

The transformer device for interconnection of power systems, according to the invention, consists of a main threephase transformer, with windings (1-18) connected in a ring circuit with twelve taps distributed over the windings (1-18) of the ring circuit, three of which are connected to the first power system (A1, B1, C1), and to each tap are connected the inputs of three electronic switches, numbered in a circle, which are connected to each tap, which are connected in three separate identical blocks of switches (20-22), to the outputs of each block of switches (20-22) are connected, respectively, the windings (23-25) of an additional three-phase transformer. In each block (20-22), the outputs of the odd-numbered switches are electrically connected together and connected to the first terminal of the winding (23-25) of each phase of the additional three-phase transformer, and the outputs of the even-numbered switches are also electrically connected together and connected to the second terminal of the winding (23-25) of each phase of the additional three-phase transformer. Each winding (23-25) of the additional three-phase transformer comprises seven taps, to each of which being connected the input of one output electronic switch (26-31), which form three separate identical groups. In each group, the outputs of these switches are electrically connected together and connected to the phases of the second power system (A2, B2, C2).

Claims: 1

Fig.: 3

