

The invention relates to electrical engineering and electrical power engineering, namely to alternating-current voltage-to-direct-current voltage converters in electrical and power systems.

The converter, according to the invention, comprises an alternating-current source (1); connected in parallel to the source (1) a higher harmonic filter, consisting of an inductance (2) and a capacitor (17), connected in series; connected in parallel to the capacitor (17) two arms, connected in series and formed of three branches, connected in parallel; the first branch of the first arm, formed by a diode (3) and a transistor (9), connected in series; the second branch of the first arm, formed by a transistor (5) and a diode (11), connected in series; the third branch of the first arm, formed by a capacitor (13); the first branch of the second arm, formed by a diode (4) and a transistor (10), connected in series; the second branch of the second arm, formed by a transistor (6) and a diode (12), connected in series; the third branch of the second arm, formed by a capacitor (14); an inductance (7), connected to the common junction points of the components of the first and second branches of the first arm; an inductance (8), connected to the common junction points of the components of the first and second branches of the second arm; a primary winding (15) of a high-frequency transformer, made with an air gap, connected to the common junction points of the components of both branches of different arms; three branches, connected in parallel, where the first branch is formed by transistors (18 and 19), the second branch is formed by capacitors (20 and 21), and the third branch is formed by an inductance (22) and a traction accumulator (23); a secondary winding (16) of the high-frequency transformer, connected to the common junction points of the transistors (18 and 19) of the first branch and of the capacitors (20 and 21) of the second branch.

Claims: 1

Fig.: 3

