

Alternating current welder relates to the field of electrotechnology, in particular, to the sources of power of electric arc and plasma processes. The source contains transformer, commutating element, control circuit, current-sensing device and key, the driving point of which is connected with the output of current-sensing device. The link of control of the commutating element is connected to the control circuit, the transformer is made on the three-leg core with additional second power winding connected directly to the network of alternating voltage. The first and second power windings are located on the end rods of magnetic core, secondary winding - on the middle rod. Current-sensing device is the unit of capacitors with rectifier bridge connected in parallel to its terminals, the output of said bridge is connected with the filter input, moreover the filter output is the output of current-sensing device. The invention allows to improve the operational and functional characteristics and to increase the electrical safety of alternating current welder.