

Welder relates to electrotechnology, in particular - to the sources of power of the electric arc and plasma welding processes, cutting, spraying and padding of metals. The welder includes arc welding transformer, adjusting unit of welding current and voltage which is connected in series with the primary winding of arc welding transformer to the power system, current-sensing device which together with the first secondary winding of transformer, adjusting unit of welding current and voltage and welding space forms the first welding circuit, signal shaper of current-sensing device, input of which is connected to the current-sensing device, and output - to the first input of the unit of temporary displacement, second input of which is connected to the power system, and output - to the control input of the adjusting unit of welding current and voltage. Current-sensing device consists of a set of capacitors. The adjusting unit of welding current and voltage is connected in series with the first welding circuit. The second secondary winding is added to the transformer. The source is equipped with key and capacitive reactor which are connected in series and together with the welding space and secondary winding of the transformer will form the second welding circuit which is connected in parallel to the first welding circuit, in this case the control input of key is connected to the output of the signal shaper of current-sensing device. The invention allows to guarantee the generation of the voltage on the current-sensing device and capacitive reactor and to increase the degree of ionization of arc gap during the passage of the current through zero and in the moments of adjustment, and also regulating a maximal possible voltage of source, without requiring a change in the number of turns of the winding of transformer.