

The invention relates to electrical engineering, in particular to low-voltage apparatuses for electrical equipment protection. The proposed protection apparatus allows automatic switch for electrical equipment to be chosen, nominal current of which reaches to power circuit current that allows increasing protection sensitivity to overcurrents. The apparatus for electrical equipment protection comprises a power unit and a control unit. The power unit is presented as a parallel connection of branches each of which consists of in series connected a protection apparatus satisfying the conditions $I_H = kI_p$ (I_H - nominal current of the protection apparatus, I_p - design current of electrical equipment being protected, $k=1,05-2,0$ - factor of safety), a semistor. Protection apparatuses have different nominal currents ($I_{1H}=kI_p$, $I_{2H}=I_{1H}/k_2$, $I_{3H}=I_{2H}/k_3$, where k_2, k_3 etc. proportionality constants from 2 to 7, I_{1H}, I_{2H}, I_{3H} - nominal current of the protection apparatus correspondingly first, second and third branches). The control unit comprises a power supply source, input of which is connected to the neutral wire and a phase of electrical equipment in the input of the protection apparatus, a measuring element comprising pulse generators and a current transformer, which is input of a multichannel comparator based on operational amplifiers, non-inverting input of one of which and inverting inputs of the rest ones are connected to a reference voltage divider, inputs of every operational amplifier are connected to current transformer output. Output of every operational amplifier is connected to input of its own pulse generator, output of each of which is connected to control circuit of its own semistor, quantity of operational amplifiers, pulse generators and comparator channels is equal to quantity of protection apparatuses incorporated in the power unit.