

The invention relates to the field of electrical engineering, namely to electric energy-transfer facilities, and can be used in the systems for power supply of consumers with electric energy.

The electric energy-transfer facility comprises the first and second three-phase step-down voltage transformers connected in series by a three-phase power line through current relays with the drop-out current less than the operating current of at least 2.5 times, and the first and second additional three-phase step-down voltage transformers, at the same time the outputs of the secondary winding of the first transformer and the outputs of the primary winding of the second transformer are connected to the inputs of the secondary winding of the first additional transformer and the primary winding of the second additional transformer. The inputs of the secondary winding of the first transformer are connected to the power line cables. The primary winding of the first additional transformer is connected in parallel to the primary winding of the first transformer by a couple of normally open contacts of the first high-voltage switch, and the secondary – to the corresponding normally closed contacts of the first high-voltage switch. The outputs of the secondary windings of the first additional transformer and the outputs of the primary windings of the second additional transformer are interconnected by the power line. Between the power line phase wires is connected a high-voltage divider, to the output of each of which are connected in series a digital voltmeter, an analog-to-digital converter and a relay. The additional transformers are connected to the power line by two high-voltage switches.

Claims: 1

Fig.: 1