A three-phase filter of zero-phase-sequence current of autotransformer type is executed based on two single-phase double-winding autotransformers. Windings with the identical number of turns of each of identical autotransformers are wound in one direction of spiral line and are connected so that first winding start of a first autotransformer is connected to first phase conductor, for example A, first winding finish of the first autotransformer is connected to the neutral conductor, second winding finish of the first autotransformer is connected to the neutral conductor, for example C, second winding start of the first autotransformer is connected to second winding finish of a second autotransformer according to the open delta connection, second winding start of the second autotransformer is connected to the neutral conductor, first winding start of the second autotransformer is connected to second phase conductor, for example B, and first winding finish of the second autotransformer is connected to the neutral conductor.