

Transformer converter that converts a three-phase current system into a six-phase system consists of a symmetrical spatial magnetic circuit with core and yoke sections and hexagonal symmetrical elements composed of electrical steel laminations, as well as a system of winding coils. The core and yoke sections are formed from identical plates, the planes of which in the hexagonal elements are oriented orthogonally to the central axis of the magnetic circuit and form the core and yoke, creating a magnetic circuit with flat end faces and faceted side surfaces, wherein the faces of the elements are aligned and arranged at an angle of  $60^\circ$ , and their other faces form an equilateral hexagonal inner contour and a polyhedral outer contour of the magnetic circuit.